CITY OF HOUSTON COMPREHENSIVE PLAN

APRIL 1999 AMENDED JULY 2003

ACKNOWLEDGMENTS

MATANUSKA-SUSITNABOROUGH ASSEMBLY

Tim Anderson, Mayor

Bill Allen Bruce Bush Talis Colberg Jim Colver Mary Kvalheim Kelly Lankford-Ladere Jody Simpson

MATANUSKA-SUSITNABOROUGH PLANNING COMMISSION

Helga Larson, Chair Chris Rose, Vice Chair Rose Jenne Faye Palin Lee Sharp David Webster Gary Wolf

MATANUSKA-SUSITNABOROUGH

John Duffy, Manager

Susan Dickenson, Planning Director M. Murph O'Brien, Chief of Planning Eileen Probasco, Project Manager Priscilla Goff, Secretary Pamela Graham, Secretary

MATANUSKA-SUSITNABOROUGH TABLE OF CONTENTS

Chapter I	
Introduction/Methodology	1
History of Planning In Houston	1
How This Plan is Organized	2
Community Goals and Objectives	
Inventory of Existing Conditions	2
Implementation Strategies	
Purpose Of This Study	
Methodology	4
Chapter II	
Community Goals and Objectives	6
Primary Goal	
Economic Goal	
Community Objectives	
Land Use Goal	
Residential Land Use Objectives	
Commercial Land Use Objectives	
Industrial Land Use Objectives	
Recreational Goal	
Community Objectives	
Governmental Organization Goals	
Community Governmental Objectives	
Environmental Goal	
Community Environmental Objectives	
Public Services Goal	
Chapter III	
Inventory of Existing Condition	14
Physical Characteristics	
Socio-Economic Baseline Data	
Population	
Growth projections	
Population Characteristics	
Housing	
Baseline Economic Activity/Potential Development	
Retail Sales and Services	
Small Business Enterprises	
Commercial and Residential Real Estate Development	
Development of Recreational Lands and Amenities	
Tourism Industry Enhancement	
Paving of Hatcher Pass Road	
Highway Signage	
Mat-Su Visitors Center at Intersection of Glenn & Parks Hwy	

Hatcher Pass/Independence Mine	22
Nancy Lake	22
Houston-Willow Creek Trail	22
Bike Trails Along parks Highway	22
Big Lake	
Youth Hostels	22
Natural Resource Exploration, Extraction and/or Development	24
Public Services and Facilities	25
Public Safety Facilities and Services	27
Parks and Recreation	28
Hatcher Pass Area	29
Big Lake	29
Nancy Lake	
Community Service Organizations	
Mid-Valley Seniors, Inc.	30
Homesteaders Community Center	30
Chapter IV	
Implementation Strategies	
Proposed Land Use Plan	
Residential Land Use	
Commercial Land Use	
Light Industrial Land Use	
Public Land Use	
Economic Development	
Small Business Enterprise	
Commercial, Residential, and Recreational Real Estate Development	
Tourism Industry Enhancement	
Natural Resource Development	
Parks and Recreation	
Waysides	37
Campgrounds	37
Group Camps	
Hunting	37
Fishing	
Winter Recreation	
Guiding Services for Adventure Travel	
Environmental Goal Implementation	
Public Services Implementation Strategy	
Education	
Police Protection	
Fire Protection	
Emergency Medical Services	
911 Emergency Response System	
Emergency Management Committee	41

CHAPTER I

Introduction/Methodology

History of Planning in Houston

In June of 1982, the Matanuska-Susitna Borough Assembly, on behalf of the City of Houston, officially adopted the city's first Comprehensive Development Plan. In 1987 the City updated and revised the comprehensive plan to more accurately reflect changing economic conditions. In keeping with this community's commitment to being prepared in the face of future development pressures, the Houston City Council initiated this revision in 1996.

The original plan was based on several proposed developments that appear to be much less likely to occur today. These developments, such as the Knik Arm Crossing and the state Capital move to Willow, would have wielded significant impacts on the City of Houston. The 1987 Comprehensive Plan was developed when it appeared these projects would not soon materialize. None-the-less the 1987 Comprehensive Plan anticipated an extremely high rate of growth based on the population increases that existed in the early to mid eighties.

This revision may be the city's first plan whereby there currently exists a fairly steady growth trend that can be anticipated to continue. The City is not reliant upon dramatic development proposals or unusual economic conditions to produce growth. The State of Alaska has reached a more stabilized economy, less dependant on exceptionally high oil prices. The slow natural expansion of the population in south central Alaska is causing individuals to seek alternatives to more expensive and densely developed areas. The city is also seeing more sophisticated land buyers seeking undeveloped lakefront property and property adjacent to public recreation lands, qualities that are hard to find and more expensive in more urbanized areas such as Anchorage and the Core Area of the borough.

Any disruption from the current steady growth is more likely to be an increased rate of growth resulting from successful smaller projects or economic trends. The types of potential economic activities facing Houston today include:

- The possibility of industrial development at Point MacKenzie.
- The continuing growth and suburbanization of the Wasilla/Palmer area.
- Enhancement efforts of the tourism and recreation industry in the Susitna Valley.
- Expansion of retail trade within the city.
- The potential for local natural gas production and residential distribution.
- The potential for additional natural resource development in the area.

Given the slower rate of growth than was anticipated by the 1987 Comprehensive Plan, many of the policies proposed during the previous planning effort are still valid. This current planning process has been a relatively minor revision of the previous planning effort.

How This Plan is Organized

In addition to providing an inventory of current conditions affecting Houston's development, this plan presents a view of how Houston residents would like to see their community develop and, finally, a series of strategies that the community can follow in their efforts to achieve their collective goals. The plan is organized as follows:

Community Goals and Objectives

This section summarizes the desires of Houston residents as to how they visualize the future of their community in terms of residential, commercial and industrial development, among other areas.

Inventory of Existing Conditions

This section provides decision-makers with a picture of what currently composes the community of Houston, in terms of the people who live here, the physical improvements on the land, levels of economic activity and services available locally.

Implementation Strategies

Finally, this section combines the first two sections by looking at where the community is (inventory), where it wants to be in five years (goals and objectives), and comes up with a plan (a series of implementation strategies) that elected officials can follow in an effort to assist the community in meeting its goals.

Each section addresses the same nine areas of concern:

- residential development
- economic development
- commercial development
- recreational goals
- industrial development
- local and regional government
- public facilities and services
- environmental concerns
- transportation concerns

Purpose Of This Study

This study is intended as a tool to help the public and the elected and appointed decision-makers in the City of Houston, Alaska and the Matanuska-Susitna Borough address questions and issues concerning the future growth and development of the City of Houston. Houston is in a unique situation, both geographically and historically. It is located within the sphere of influence of a number of activities and proposed projects that could have significant impact on its future development and the character of the community. Depending upon how and when these activities and/or projects occur, the result could be a significant change in the growth patterns and growth rates in Houston. Without proper planning based upon sound information and subjective tools, all the disadvantages of a "boom/bust" cycle could impact Houston. At the same time, the option for a healthy, uniform growth rate is possible, given diligence and good planning on the part of local decision-makers. Without baseline data, community goals, and an indication of how the community would like to progress in the future, it would be difficult for city and borough decision-makers to act on development proposals that are brought before the council and assembly. By preparing a plan now that outlines the desires of the community and details the existing situation, the community can predict the impacts of some of these potential activities and projects, make appropriate adjustments in their plan, and thereby keep abreast of the changes affecting the community.

Decisions concerning Houston's future development patterns should be based upon a knowledge of what local residents want as the shape and character of their community changes. If decisions are made by governmental agencies and industry without benefit of a strong planning statement by Houston, the identity of Houston as a viable community will suffer. A strong comprehensive plan for Houston expressing its needs, desires and plans for the future will establish the viability of the community for elected and appointed decision-makers.

At this time, the City of Houston is the only established city government within the Big Lake/Nancy Lake/Willow portion of the Matanuska-Susitna Borough. Currently, several communities surrounding Houston are working toward incorporation, including the Big Lake and Meadow Lakes areas. As such, Houston has the opportunity to take a leadership role in establishing development trends, community characteristics and the economic base for this entire area of the Matanuska-Susitna Borough. This comprehensive plan can help accomplish that task. The plan will also assure the decisions made by the City of Houston and the Matanuska-Susitna Borough are made as a result of knowledge and understanding of the events that affect them.

The importance of this plan can be emphasized by experiences that have occurred in other communities, in the Matanuska-Susitna Borough as well as other parts of Alaska and the United States. Unplanned development creates a number of socioeconomic and governmental problems, which include overburdened public services, a shortfall of public facilities, deteriorating and over utilized transportation systems, and undesirable land use and growth trends which create adverse economic as well as aesthetic conditions. In short, unplanned growth makes public services expensive to provide, and can result in a general deterioration of the living environment.

A comprehensive plan is not a cure-all. It provides guidelines for future community development. It does not, by its existence, predetermine the future of the community. It takes diligence to make the plan work. The plan will provide a basis for decision-makers to use in monitoring the development process. In order for those land use decisions to be effective, they must be based on sound background information. As the information affecting the community changes, as new land uses develop, as governmental programs change, or as other changes occur in the elements that make up the character of the community, the impacts on the comprehensive plan must be assessed. Planning is an on-going process rather than a process with an end product. This planning process will require the time and attention of the City of Houston and the Matanuska-Susitna Borough. By keeping background information up-to-date and by utilizing the recommendations and implementation strategies included in the plan, the goals and objectives set forth in the plan can be expected to be accomplished.

<u>Methodology</u>

For any comprehensive plan to be effective it has to be based upon accurate information and the desires and needs of the community. This plan is based on these things.

Because the economic conditions had not changed dramatically, much of the background data from the previous planning effort was still valid. During the previous planning effort a variety of reports and studies were gathered, reviewed and analyzed to determine their applicability to the Houston area and factors affecting the growth of Houston. Information was also obtained from on-going studies by the State Department of Natural Resources, the Matanuska-Susitna Borough and other sources. A number of studies are being done, or have recently been completed, that have developed information and date bases concerning Houston and the immediately surrounding area. These studies are being used by the decision-makers at all levels of government and industry, as well as the general public. Many of the decisions that are based upon the information gathered by these studies have been and will continue to be a major determining factor in the character of the Houston community. A partial list of these studies includes:

- Willow Subbasin Area Plan: A Land Use Plan for Public Lands
- The (DOW/Shell) Alaska Petrochemical Feasibility Study
- The Matanuska-Susitna Borough Overall Economic Development Plan
- The Matanuska-Susitna Borough Regional Transportation Study
- The Susitna Basin Study and Susitna Area Plan
- The Matanuska-Susitna Borough Coastal Management Plan
- The Matanuska-Susitna Borough Transportation, Public Facilities & Trails Plan
- The Matanuska-Susitna Borough Tourism Development Program
- The Matanuska-Susitna Borough Summary of Mineral Resources
- The Index and Bibliography of Mineral Occurrences within the Matanuska-Susitna Borough
- The Surface Water Date Report for the City of Houston
- Hatcher Pass Management Plan

Additionally, the following plans and studies assisted in updating pertinent information:

- The Matanuska-Susitna Borough Long Range Transportation Plan
- The 1990 Federal Decennial Census
- The (Draft) Matanuska-Susitna Borough Recreational Trail Plan
- Interviews with various borough and city officials
- All of this information was combined to develop a picture of Houston as it exists today from both a socio-economic and a physical standpoint.

The City Council identified several issues and concerns it had desired be addressed in the comprehensive plan. A Community Attitude Survey was initially sent out to gauge public sentiment regarding planning issues in the City. Response to the survey was fairly minimal and at the recommendation of borough planning staff, a group of dedicated local residents guided the planning process during a series of planning workshops.

Revised background and demographic data was presented to the citizens group. The City of Houston planning participants followed by reviewing and modifying the goals and objectives within the 1987 comprehensive plan. Central to this review was the subject of the pattern of commercial development. At that time planning participants did not recommend alterations to the basic zoning/development pattern within the previous comprehensive plan. Rather it was suggested that this pattern seemed to generally best accommodate growth within the City and modifications to this general pattern could be made via the process identified within the Houston Land Use Ordinance. Once this decision was made, the planning process centered on addressing specific types of land uses within the Houston Comprehensive Plan Citizens Group wished to address within the land use ordinance.

More than any other one element, the Houston Comprehensive Plan is a policy plan. Most often comprehensive plans are policy plans, definitive physical land use plans or a combination of both. At this point in Houston's development, the city's decision makers elected to place an emphasis on the development of a good, sound policy tool. They expressed an interest in retaining a considerable amount of flexibility in the administration of the city's planning tools and yet they wanted an articulate expression of intent that would help guide the land use decisions that will shape the future character of the community. A policy plan that accurately reflects residents' goals for the future of Houston will serve local decision-makers well as they are faced with the work of implementing (using) the city's land use ordinance.

The City Council of Houston will review the comprehensive plan, as will the Matanuska-Susitna Borough Planning Commission and Borough Assembly. This review process will include public hearings at all three levels. These last several review should provide an opportunity to insure that the comprehensive plan accurately reflects the needs and desires of the community.

CHAPTER II

Community Goals and Objectives

The foundation of any comprehensive planning effort should be a series of statements, often called goals and objectives, that are generated by local residents in an effort to present vision of how they would like to see their community grow or not grow in the future. These statements are important in that they form the foundation upon which a community=s land use ordinance and other implementation tools are built. Community goal statements also offer guidance to elected and appointed officials as they attempt to set policy according to community wide sentiment on development issues.

A variety of subject should be addressed as a community addresses its future. These include:

- Residential development
- Commercial development
- Industrial development
- Public facilities and services
- Transportation concerns
- Economic development
- Recreational goals
- Local and regional government
- Environmental concerns

Collectively, these things define the character of the community.

As residents consider these issues and their interdependencies, community wide development priorities begin to emerge. It becomes clearer to policy makers and developers alike how local officials will govern potential development proposals. This provision of a clear direction is critical to sound planning and governing practice.

The goals and objectives presented on the following pages are general guidelines to be used by the City of Houston to direct their implementation efforts as they strive to maintain the quality of life in this community.

Primary Goal:

• To maintain the high quality residential living environment that currently exists in Houston and to continue to take advantage of the characteristics of the community's rural setting. The community should work toward encouraging a moderate level of growth which will provide an economic base in Houston adequate to allow provision of employment opportunities in the area and to avoid becoming dependent upon external governmental or economic factors and activities. The primary goal is a general expression of the direction that the community should take. It is a brief summary of the community's feelings toward future development and growth. The basis of this goal is an expression of a desire to plan for expected population growth with the intent of maintaining Houston's physical and environmental setting while promoting a more independent economic base. It is difficult to determine the exact population that the Houston area will see through the next 20 to 30 years. The variety of industrial and governmental proposals that are currently being considered make anything other than baseline predictions very difficult. Consequently, the community must be prepared for a variety of potential scenarios.

Regardless of the level of growth and economic activity, it is clear (after public hearings and the community attitudes survey) that the people who live in Houston live there because they like the lifestyle. A number of factors make up the variety of lifestyles and the primary goal should be to preserve them. It is also clear that, in order to more fully appreciate and participate in that lifestyle, the resident and property owners in Houston need to have more opportunities for employment within the area so that commuting to employment centers such as Anchorage and other parts of the Matanuska-Susitna Borough is not always a necessity. However, the impact that the presence of industry or other local employment opportunities would wield on the present rural lifestyle must also be considered before measures are taken to meet this goal.

Economic Goal:

• To help develop a broadly-based economy that is responsive to the requirements of the community by providing opportunities for employment, commercial service and economic growth while maintaining an economical, aesthetically-high standard of living not in conflict with established residential, commercial and light industrial development goals.

In 1997, residents want to accommodate economic growth but not at the expense of threatening the rural lifestyle. In particular, there has been concern over excessive commercial strip development of the Parks Highway through Houston, strip development typically being commercial or retail uses, usually one-story high and on-story deep, that front a major street with street frontage parking and a lack of pedestrian provisions for access between individual uses.

Community Objectives

- Strengthen and broaden the economic base of Houston by encouraging the continued growth and development of the tourism industry, service industries, transportation-related industries, and natural resource development industries in the Houston area.
- Participate in the decision-making process for borough-wide economic development projects affecting the City of Houston.
- Discourage costly and burdensome development regulations in an effort to encourage future economic growth.
- Encourage the designation of land for commercial and industrial development within the community that will be attractive to potential new businesses and meet community needs.
- Encourage cooperative efforts with governmental and other public and private entities for economic development within the Matanuska-Susitna Borough.

The majority of Houston residents feel that some constraints on growth should be applied which would help to avoid a "boom/bust" syndrome and, in general avoid growth rates that are so rapid that the community cannot keep pace in terms of providing basic community services.

Houston residents are supportive of economic development and willing to promote industries, including natural resource development, which yields a potential for localized negative impacts. The potential adverse impacts of the latter in terms of quality of rural lifestyle are widely recognized. Residents are willing to accommodate this industry and others if appropriate safeguards are applied which will protect existing local lifestyles at the same time (stated later in this section).

Further testimony to this attitude is evident in a new economic objective, which encourages the City of Houston to cooperate with other governmental and private organizations promoting borough wide economic development. Houston residents are quick to acknowledge that their economic fate is closely linked to that of the rest of the Matanuska-Susitna Borough. Large-scale development projects, such as:

- Development of tourism and recreational opportunities throughout the Matanuska-Susitna Valley,
- Continued development of the valley's real estate market,

will all require cooperation on the part of all local governments in the borough. Houston residents want to take an active, supportive role in these efforts in order to (1) encourage the development of a healthy, broad-based, local economy which is not forced to rely on the volatile oil industry, and (2) ensure that safeguards are placed on future development which will protect existing rural lifestyles.

Land Use Goal:

• To develop a realistic and responsive land-use plan for Houston based upon the goals and objectives of the community as well as the economic, environmental and social characteristics of the area.

This goal provides a broad-based guideline for the development of a plan for future land use patterns in Houston. It is clear from its content that residents understand the need to consider and accommodate the economic, environmental and social characteristics of the community. This approach mandates that land use decisions in Houston not be based upon a single issue or a single set of facts, but rather upon a consideration of the interrelationship of all of the aspects of the community. The land use goal indicates a willingness on the part of the residents and property owners in Houston to grow, but also a recognition of the need to be cognizant of the physical and human characteristics of the lifestyle that they are determined to preserve.

This goal has been translated into more specific "objectives" statements in an effort to provide city council members with guidance as they make decisions affecting residential, commercial and industrial land uses.

Residential Land Use Objectives

- Encourage residential development only in areas zoned for residential use and, to the extent possible, not adjacent to conflicting commercial and industrial uses, except in areas identified for mixed use development.
- Encourage low density, large-lot residential development that does not require a full range of public utilities, such as off-site water and sewer services.
- Set aside land for rural and/or agricultural residential development where appropriate and desirable.
- Set aside specific areas for medium density, affordable housing and rental property. Such areas should be planned carefully to avoid land use conflicts and to assure that appropriate public utilities and services are available.
- Maintain rural residential atmosphere by disallowing large-scale condominium, townhouse, high-density, multi-family and similar high-density residential complexes.
- Improve and maintain the value of residential areas through governmental action, like improvement of public services such as road maintenance, law enforcement, and recreation facilities. Such actions would include eliminating existing, and prohibiting future, intrusions of commercial and industrial uses within residential areas by administration and enforcement of the Comprehensive Plan and zoning ordinance, respectively.
- Encourage the development of parks and green belts as a part of the residential development process.
- Discourage constant ongoing noise that is contrary to residential quality of life within residential area.

Commercial Land Use Objectives

- Encourage the development of convenient business services in designated commercial zones to provide goods and services to the residents of the Houston area.
- Avoid mixing commercial land uses with residential land uses, except in areas identified for mixed use development, and for convenience services as allowed in the Neighborhood Commercial zone.
- Avoid strip development by directing new commercial growth in a non-linear pattern around existing commercially zoned land uses and by encouraging development adjacent to major thoroughfares to utilize frontage roads, vegetative buffering and pedestrian facilities.
- Assure that commercial areas have adequate access and public utilities and services where necessary.
- Identify the need for new commercial centers as existing commercially-zoned areas change and develop.
- Allow small-scale commercial developments in residential areas that are isolated from major commercial zones, which will primarily serve the frequent convenience shopping and personal services needs of neighborhood residents.

Industrial Land Use Objectives

• Assure that land is available for industrial development within Houston.

- Avoid locating industrial development adjacent to residential development to minimize potential conflicts between industrial and residential land uses.
- Design transportation routes to and from industrial areas to avoid mixing residential and industrial vehicular traffic. No industrial traffic should flow through residential areas.
- Concentrate industrial development in specific areas near the Alaska Railroad and with access to the Parks Highway rather than allowing industrial development at random throughout the community.
- Place industrial land uses in areas which complement business and commercial services.
- Minimize the effect of existing industrial land uses on adjacent residential land uses by requiring industrial land owners to create substantial natural or manmade buffers between industrial and adjacent, in compatible land uses, including along major transportation corridors.
- Industrial uses must provide a minimum of 10% open space and create little or no impacts on the environment, including but not limited to air and water quality.

Recreational Goal:

• To provide a broad spectrum of recreational opportunities for all segments of the community and for visitors who come to the community for recreational purposes; at the same time develop and maintain a neighborhood-scale recreational facilities system.

The development of community- and tourist-oriented recreational facilities is one of the top (development) priorities of Houston residents. In fact, the original impetus behind the incorporation of the City of Houston in 1966 was to form a governmental body that would be eligible to receive funds Afor the construction of a park near the Little Susitna River.@

The authority to develop and maintain parks and recreational facilities within Houston lies with the Matanuska-Susitna Borough. However, operations and maintenance of these, while funded by the borough, is carried out by the city. The borough solicits local input on recreational development in Houston.

Community Objectives

- Develop or adopt existing community park and recreational facility standards based upon balanced consideration of the need for recreational facilities and the ability of the community/borough to pay for such facilities.
- Attempt to identify local, borough, state, and/or federal funding to facilitate the acquisition and development of active recreational facilities within residential areas in the community.
- Identify areas where existing development would justify neighborhood parks based upon standards indicated in Objective 1 and where new development trends indicate a future need for additional park facilities.
- Target geological hazard areas and marginal lands such as flood plains, fault areas, swamps and peat bogs for positive recreational and open-space programs with little

or no structural development such as a 10K competitive ski trail surrounding the junior/senior high school in the southwest quadrant of the City.

- Encourage land exchange between the federal, state, and/or borough governments for the purpose of establishing park lands within the City of Houston.
- Fully develop the Houston School complex recreational potential as a community wide resource.

Governmental Organization Goals:

- To assure that the local, borough, state and federal government agencies with jurisdiction in and around Houston are directed in a positive, creative and responsive manner in providing governmental services and facilities needed by the residents of Houston.
- To ensure responsiveness to public concerns by providing for citizen participation in the planning process at all levels of government.

Houston was incorporated as a second-class city in 1966. Participation by local residents in the governing process is actively encouraged and successfully solicited on local and regional issues.

To date, Houston's local government officials have been very successful in taking residents' concerns to the band state government levels and in securing the desired results.

The purpose of this goal is to ensure that the city's past record of success is continued by encouraging citizen participation in the government process and then responding to the expressed concerns of the local electorate.

Community Governmental Objectives

- To analyze the internal functioning of the City of Houston government to determine what can be done to assure its continued effective provisions of public service.
- To encourage the continued cross-representation on various boards and commissions between the city and borough or other governmental agencies to assure continuity and coordination in their activities.
- To work to effectively provide community services within the existing boundaries of the City of Houston and annexations.
- To continue to solicit public input on matters affecting the entire community in order that the city can maintain a responsive attitude with respect to the desires of its residents.

Environmental Goal:

• To actively work toward ensuring that the natural environment of Houston, including but not limited to air and water quality, fish and wildlife habitat and natural vegetation, is enhanced and maintained by encouraging land uses and development that are consistent with the natural characteristics of the community.

The high quality environment found in Houston is the primary reason that most local residents have chosen to live in this area.

The purpose of having an environmental goal is to assert a commitment on the part of the community to help future generations enjoy the lifestyle and environmental qualities that currently make Houston a pleasant and desirable place to live and retain land values. The environmental goal is not intended as a vehicle to limit development or growth. It is intended as a policy statement to guide growth and development in a manner that will help preserve the qualities of the community that are important to its residents. If rapid growth and development are allowed to damage them it will be difficult to regain those qualities. This goal simply expresses a commitment to maintaining the high quality environment currently found in Houston.

Maintaining the naturally good water quality of the local lake and streams is of primary importance to preserving the City of Houston's environmental quality. Land development and the use of gasoline products on lakes are the primary sources of water quality deterioration. Development includes road construction and the filling of wetlands, which increase pollutant runoff to lakes in the form of nitrogens, sediment, road salts, grease, oils, and coliforms. In addition, this can increase stream flows by threatening their natural discharge. Discharge of improperly handled sewage and grey water can also have deleterious effects on a lake.

In certain areas of Houston, there is a serious problem with a high water table associated with springs and poor draining soils. These need to be carefully mapped and evaluated when considering building foundations, culvert icing problems, and on-site sewage disposal.

Soils mapping is of great value-especially the delineation of well-drained and poorly drained areas. Poorly drained soils may require the development of a community sewerage system. Even in well-drained soils, however, care must be taken when installing septic systems to prevent contamination of the subsurface aquifer as well as surface water quality.

Community Environmental Objectives

- Encourage an understanding of the relationship between human well-being and environmental quality.
- Encourage the establishment of policies by the borough and the state that will help Houston identify and then protect the quality of existing water resources.
- Encourage the development of accurate flood plain information with federal, state and borough regulatory agencies.
- Establish and implement engineering standards (including accurate flood plain maps) for drainage planning and improvements and flood plain management.
- Encourage the establishment of policies by the borough and the state that will help Houston prevent damage caused by flooding.
- Increase awareness of land within the Castle Mountain Fault region.
- Encourage activities and development practices that promote preservation of as much vegetation within the community as possible, including revegetation programs as

necessary.

Public Services Goal:

To take whatever actions are necessary to provide or encourage the provision of a broad variety of community services within the community on a quality rather than a quantity basis that will improve and enhance the already desirable living environment.

Attempt to upgrade the road system through the use of local, state and/or federal funding, and the establishments of local improvement districts.

Encourage public/private development of library facilities, civic center and other public facilities within the community as needed.

Explore the feasibility of using the septage treatment facility as a training project for the Job Corps students.

Encourage increased presence and utilization of law enforcement and fire protection services.

Work with the borough to develop uniform house numbering, marking and signage throughout the City of Houston to assist emergency response personnel.

Expand postal services as needed to serve the community, both in terms of facilities and rural delivery.

Actively pursue increased educational opportunities and facilities now to accommodate future development in Houston.

Work with the borough to develop a swimming pool and aquatic recreation area at the Houston High School.

Plan for the development of park facilities in all zones to meet public needs.

Monitor the need for piped water and sewage disposal services as the community grows.

Monitor the needs and plan for provision of health and social services to meet community requirements.

Evaluate the feasibility of developing some of Houston's natural resources especially a public/private natural gas facility.

CHAPTER III

Inventory of Existing Condition

Physical characteristics

Location

The City of Houston is located within the Willow Subbasin of the Susitna River Basin. The center of the community lies near the junction of the Little Susitna River and Mile 57.2 of the Parks Highway. The apparent small size of this business district is deceiving in that Houston's city limits encompass 23 square miles, ranging from Mile 61 of the Parks Highway at the northern boundary to Mile 52 at the southern boundary. The commercial and residential development along the first mile of Big Lake Road lies within the Houston city limits.

Houston is located near the western edge of the most populous portion of the Matanuska-Susitna Borough. It is 15 miles northwest of Wasilla and adjacent to the Big Lake area. North of Houston, along the Parks Highway, population densities tend to decrease substantially. Houston's position is significant from a transportation standpoint not only in terms of its location on the Parks Highway, but also because the Alaska Railroad traverses the Parks Highway within the city limits. Houston businesses provide transportation services to highway travelers.

<u>Soils</u>

Soils in Houston range from well-drained, well-sorted gravel to wetlands. In the central and southern portions of the City of Houston several lakes trending from the northeast to the southwest occur. These lakes are bordered by glacial moraines. The moraines consist of non sorted glacial till. In general, the majority of the soils in the east-central portion of Houston, south of the Little Susitna River and east of the Parks Highway are well drained sand and gravels of pitted outwash, and till material. To the west of the Parks Highway, there are large scattered areas of poorly drained soils and peat bogs.

North of the Little Susitna River and northeast of the Parks Highway, topography is controlled by rolling hills with perched silty areas. The soils are fine grained with poor drainage characteristics. Development within the area is sparse.

Several gravel pits are located within the Houston area. These pits are generally cut in glacial moraine and esker/kame complexes.

Soils in the central portion of Houston are suitable for cultivated crops. The area currently developed south of King Arthur Road consists of the type of soil that would be ideal for agricultural development. This area extends through the central portion of Houston on both sides of the Parks Highway.

Land Forms

One of the most prominent physical features of Houston is the Little Susitna River. It traverses the community from east to west near the center of town. It is a meandering salmon stream in a shallow valley, with its flood plain relatively confined by the surrounding topography. The Army Corps of Engineers reported the Little Susitna River flooded 10 Houston homes, a store and a restaurant in 1971. Flood plain studies and maps are available at the Houston City Offices. Permits for construction within the flood plain are available from the Matanuska-Susitna Borough.

Topography within the City of Houston is varied. In general, elevation tends to rise from south to north within the city limits. The northeastern portion of the city, north and east of the Little Susitna River and the Parks Highway, is on an elevated plateau that marks the beginning of the foothills of the Talkeetna Mountains. To the south of the Little Susitna River, the topography is undulating and the series of lakes and glacial moraines trend in a northeast-southwest direction through the community. The western portion of the community is relatively flat. In general, the topography of Houston is developable. Only a small portion of the total land area contains slopes in excess of 25 percent.

The Castle Mountain fault line trends just south of the Little Susitna River. Additional seismic lines scattered throughout the Houston area have also been identified by aerial photography.

Vegetation

The vegetation within the Houston area is comprised of three broad vegetation categories: bottomland spruce-poplar forest, lowland spruce-hardwood forest, and low brush bog. Vegetation types within these broad categories also vary. The bottomland spruce-poplar forest includes mixed forest, cottonwood, alder and willow. The lowland spruce-hardwood forest includes the birch forest found in the Houston area.

Vegetation species found in bottomland spruce-poplar forest includes white spruce, balsam poplar, black cottonwood, paper birch, quaking aspen, and black spruce. Typical understory include alder, willow, rose, labrador tea, several berry bushes, grasses, ferns and moss. These vegetation types are found on level to nearly level terrain - the cottonwood, alder and willow invade the flood plains and grow rapidly. These species are replaced by white spruce and aspen on some sites.

The lowland spruce-hardwood forest is dense to open lowland forest which includes pure stands of black spruce. It usually occurs in areas of shallow peat, glacial deposits, outwash plains and on north-facing slopes. The predominant vegetation species include black spruce, white spruce, paper birch, quaking aspen, balsam poplar and black cottonwood, with an understory of willow, dwarf arctic birch, and several berry bushes.

Lowbrush bog and muskeg areas are dominated by dwarf shrubs over mats of sedges, mosses and lichens. This vegetation type is found in wet, flat basins where conditions are too moist for tree growth. Dominant species include black spruce, Labrador tea, bog cranberry, willow, dwarf arctic birch, crowberry, and bog rosemary. A wide variety of grasses, mosses and lichen are also found in these regions.

<u>Hydrology</u>

In the mid-eighties the City of Houston cooperated with the State of Alaska Division of Geological and Geophysical Surveys (DGGS) to collect data on hydrology in the city. The information established as a result of the inventory and field work is contained in two reports. They are entitled "Water-WellData for the Houston Area, Matanuska-Susitna Borough, Alaska," by Danita L. Maynard, and "Surface Water Data Report, City of Houston, Alaska," by E. J. Collazzi, M. A. Mauer and S. J. Carrick.

The information will also be useful in monitoring water quality degradation and developing criteria for drainage planning.

The Groundwater Report of Investigations collected information on location, depth, yield and water quality for 217 wells within the City of Houston. Local water supplies are generally obtained from the gravel and sand layers of the near-surface glacial or stream deposits.

The 217 wells for which DGGS has information range from 12 to nearly 300 feet in depth. Approximately half of these (125) are 30 to 90 feet deep. Depths of wells can vary substantially, even when wells are in proximity. The percentage of wells drilled deeper than 100 feet is higher north of Loon Lake (TI8N). Estimated well yields (as recorded on well logs or reported by homeowners) range from 2-3 gallons per minute (gpm) from domestic bedrock wells to 150-250 gpm from the institutional wells at the Houston Junior-Senior High School and the Alaska Department of Fish and Game Big Lake Fish Hatchery. Private supply wells in the study area are commonly unscreened, non-perforated wells finished in sand and gravel aquifers which yield ample water for typical domestic use. Seventy percent (70%) of the wells indicated a yield of 5-20 gpm. These wells are typically domestic and have not been screened and developed to the aquifers' full capacity.

The water-quality analyses showed ground water in the Houston area to be fairly typical of areas where principle aquifers are within glacial deposits derived from granitic sources (Freeze and Cherry, 1979). The water is generally very fresh, with total dissolved solids (TDS) values less than 100 mg/L (DEC/U.S. Environmental Protection Agency public drinking water standards recommend a limit of 500 mg/L TDS). Field iron tests indicated 85% of the wells tested to have less than I mg/L of iron present. Trace and nuisance metals for which tests were made are present in small amounts, often below instrument detection limits. The wells north of the Little Susitna River exhibit characteristics of high Total Dissolved Solids, probably as a result of high levels of sodium and bicarbonate. Poor yields and water quality were found in Section 21, T18N, R3W, which is an area of sandstone bedrock.

Indications at this time are that the local groundwater supplies could support a community water system. However, the pattern of development within the City of Houston effectively precludes development of such a system in areas already subdivided. For community water systems to be economically comparable to individual well systems the density needs to be dramatically higher

than exists within Houston. A community water system generally would not be economically feasible unless the densities approached one residence per half acre. Subdivisions with a lower density than this will generally find it cheaper to rely on individual wells. State regulations prohibit subdividing to less than an acre in size unless the developer provides a community water or sewer system. Hence, any community water system is unlikely in most developing areas of Houston that have already been subdivided to residentially sized lots.

Socio-Economic Baseline Data

Population

The 1990 U.S. Census estimated the population of Houston to be 697. The City of Houston conducted another census on October 24, 1991 and estimated the municipal population to be 815. The more recent Alaska Department of Labor (DOL) estimate for 1997 is 994. The 1997 estimate represents an annual average growth rate of approximately 5% over the 1990 Federal Census count.

Houston's rate of growth according to the difference between the 1980 and the 1990 U.S. Census' was an average of 6% over the last decade. During this same time the rate of growth for the entire Matanuska-Susitna Borough averaged 9%.

The borough's annual average rate of growth for the period from 1990 to 1997 is approximately 3.5% annually based on DOL population estimates.

The relationship between the borough-wide rate of growth and the city's growth rate appears to have changed from the previous decade. Borough staff projected that the majority of growth being within the area approximately an hour drive from Anchorage and having access to natural gas in its recently developed Matanuska-Susitna Borough Long Range Transportation Plan. Because the city of Houston is outside of the one hour commuting distance and only a limited area has natural gas extensions, the growth rate was projected to be lower than that of the main population center of the borough located in and around Palmer and Wasilla.

DOL population estimates have indicated that the areas surrounding the core area of the borough are actually receiving a slightly higher growth rate than the core area itself. This could be because the increase in employment within the borough has allowed locally employed residents more flexibility in their housing locations.

Growth Projections

Growth projections based on such a small population are nebulous at best, more so in an area lacking a diversified economy such as Houston and to a lesser degree the borough as a whole and Anchorage.

If Houston grows at the borough rate of 3.5% the doubling time will be 20 years. If the Houston area incurs a growth rate of 5% the doubling time for the population will be 14 years.

Population Characteristics

The 1990 U.S. Census is currently the most detailed demographic information on the city of Houston's population. The City of Houston's population is very racially homogenous. Ninety-five percent of the population is listed as being of white origin. Of the 1990 population of 697, 375 (53.8%) were male and 322 (46.2%) female. This differs slightly from the borough, with 52% male and 48% female.

Average per capita income in 1989 was \$13,840 and 9.8% of the population was determined to have federal poverty status. Statewide, the average per capita income is \$17,610 with a poverty rate of 9%.

Housing

The 1990 U.S. Census estimated the total number of housing units in the City of Houston to be 484, with 255 housing units vacant. The high vacancy rate stems from two factors; the slow recovery from the downturn in the state economy in the mid-eighties and the seasonal occupancy of some of the recreational homes and cabins. The average persons per household amongst occupied households is 2.73, only slightly lower than the borough average of 2.92 persons per household. Of the 255 occupied housing units 181 (71%) were occupied by the owner(s), the remaining occupied units being rentals.

One of the attractions of the Houston area is the affordability of land including waterfront property for housing. Housing costs that exceed 30% of an individual's annual income are generally deemed unaffordable. The median selected monthly owner expense as a percentage of household income in 1989 was 11.9 percent for those without a mortgage and 19.8 percent for those with a mortgage. The smaller percentage cost of housing for those without a mortgage includes a significant number of homeowners that have constructed their homes out of pocket. The median value of an owner occupied housing unit was \$66,300 slightly lower than the borough median value of \$71,700. The median gross rent in 1989 was \$467 and the median gross rent as a percentage of household income was 17%.

Of the population that was 5 years old or older in 1990, 315 persons (50%) were living in the same house in 1985. This level of transience is very similar to the data for the borough (46%), indicating that many of the same factors affecting population fluctuations in the eighties had essentially the same pronounced effect on both the borough and the city.

Baseline Economic Activity\Potential Development

The 2003 City of Houston Comprehensive Plan and Land Use Ordinance encourage a wide range of development to complement the natural advantages of the city's location and terrain.

Houston's location on the Parks Highway and the Little Susitna River provides an economic base and source of income to the community. Commercial and residential development along the first mile of Big Lake Road is also within city limits. One of the major contributors to the city's revenues are several fireworks vendors located at the southern entrance. Other enterprises include a lodge/motel, a grocery and several retail stores, metal fabrication, millwork and cabinet shop, crafts manufacturing, business and personal services, a health practitioner's office and a private RV park. Current economic development activity and prospects for future development can be divided into six primary categories:

retail sales and services, serving the greater Wasilla area, Big Lake, Willow and Houston; small business enterprises either located in or conducting business in Houston; commercial and residential real estate development; development of recreational lands and amenities; enhancement of the local and regional tourism industry; and natural resource exploration, extraction and/or development.

In this subsection the prospects for development in each of these industries will be reviewed.

Retail Sales and Services

The expanding population in the vicinity of Houston has established a customer base for a number of highway oriented retail outlets. The largest of the retail outlets is Homesteaders Lumber and Hardware located near the junction of Big Lake Road and the Parks Highway adjacent to other businesses in Meadowood Mall. The majority of commercial activity in Houston is located near this junction including the five separate fireworks stands operating within the city. Traffic volumes on the Parks Highway drop off dramatically north of Big Lake Road with approximately half the traffic turning at Big Lake Road.

Near the center of the city is another area that has concentrated commercial development. Adjacent to the Little Susitna River in Bryant Subdivisions Number 2 and 3, Riverside Camper Park, Millers Market and several other businesses are located.

The city population alone is probably not sufficient to attract significant retail development; growth in surrounding areas has been dramatic, enhancing the city's prospect for attracting retail businesses to the area. DOL estimates indicate Big Lake Census Designated Place is growing at approximately the same rate as Houston. However, the population in Meadow Lakes Census Designated Place, immediately east of the city, nearly doubled over the last seven years, growing at an average annual growth rate of 9.1%. The population of these surrounding areas, located within approximately 20 minutes drive from the Big Lake Road/Parks Highway intersection is greater than seven times the population within the city and hence is an essential and growing customer base.

Small Business Enterprises

A significant volume of economic activity in Houston falls under the category of small, privately-held businesses. Of the businesses actually located in Houston, over 50% are operated out of residents' homes. The nature of these home occupations ranges from construction to plumbing and heating services, to arts and crafts production and retail sales. Most of these

businesses are seasonally dependent on warm weather, fishing season and/or tourist traffic from the Parks Highway. In addition, it is important to note that many of these home occupations provide only supplemental income to the household.

Commercial and Residential Real Estate Development

The Matanuska-Susitna Valley experienced a phenomenal development surge from 1982 to 1985. Real estate speculators throughout the borough, including Houston, attempted, often successfully, to capitalize on a perceived development surge by subdividing their land holdings and making individual lots available for sale. However, recent declines in statewide resource development activity and subsequent declines in support industry activity and state revenues have resulted in a sharp decline in the valley's real estate market.

Based on the number of bank closing transactions, the most active period for real estate sales activity boroughwide was 1983 and 1984. Since that time, sales have slowed drastically. Much of this decline can be attributed to the decrease in investment housing sales.

One way to quantify land development activity for analytical purposes is to trace subdivision activity. Data collected by the Matanuska-Susitna Borough's Platting Division of the Planning Department and the State Recorder's office yields the following information for the 1982-1996 planning period.

YEAR	ACREAGE SUBDIVIDED	NEWLY CREATED LOTS
		OR PARCELS
1982	-0-	
1983	242.25 ACRES	23 LOTS/PARCELS
1984	126.22 ACRES	30 LOTS/PARCELS
1985	109.46 ACRES	36 LOTS/PARCELS
1986	84.23 ACRES	7 LOTS/PARCELS
1987	-0-	
1988	485.73 ACRES	26 LOTS/PARCELS
1989	63.03 ACRES	11 LOTS/PARCELS
1990	-0-	
1991	-0-	
1992	5.13 ACRES	2 LOTS/PARCELS
1993	-0-	
1994	2.05 ACRES	3 LOTS/PARCELS
1995	69.85 ACRES	35 LOTS/PARCELS
1996	48.84 ACRES	2 LOTS/PARCELS

Subdivision Activity for the 1982-1996 Planning Period

To summarize, subdivision activity was heaviest in 1984 and 1985 in keeping with boroughwide trends, but 1986 activity apparently slowed to reflect statewide development cutbacks.

Subdivision activity during this decade, the nineties, has been significantly less, although there has been an increasing level of subdivision activity most recently. For the year 1997 to date there are 2 tracts which are proposed to be subdivided into 12 separate lots or tracts.

It should be noted that the number of residential lots far exceed the demand anticipated in the next twenty years and hence residential subdivision activity can be expected to remain minimal in the near future.

Development of Recreational Lands and Amenities

To date, the City of Houston's record in this arena stands out as one of its most effective programs. The city's timely and conscientious development of the Little Susitna River Campground served to effectively further both its recreational and tourism goals. Future plans for recreational development (detailed on pages 52 through 54 of this plan document) will serve to further the community's economic goals by bringing more tourists' dollars through the city and into the hands of local entrepreneurs.

Tourism Industry Enhancement

The natural beauty and scenic viewsheds that characterize the 23 square miles that comprise the Houston city limits render the community a recreational haven. To date, Houston's potential as a recreational destination has not been realized beyond the development of the city's Little Susitna River Campground at Mile 57.3 of the Parks Highway and one private campground. However, the community's proximity to Big Lake, Nancy Lake, the Hatcher Pass area, the Susitna River and the Parks Highway corridor means that it receives a considerable number of travelers on their way to or from other nearby tourist destinations.

The Matanuska-Susitna Borough has targeted the tourism industry for enhancement through a variety of programs. A 1983 boroughwide enhancement effort resulted in a <u>Tourism</u> <u>Development Program</u> report prepared under contract to the Matanuska-Susitna Borough by a consulting consortium which included Peat, Marwick, Mitchell & Co./CCC Architects & Planners/Fawcett, McDermott, Cavanagh, Pozzi, Inc., and Social Engineering Technology. In addition to other objectives, this report identified 27 potential tourism development projects throughout the Matanuska-Susitna Borough. Ten of these potential projects have been evaluated as having a potential impact on Houston either in terms of increasing traffic passing through the community, increasing demand for locally-provided goods and/or services, or enhancing existing recreational opportunities and/or tourist attractions in Houston. Proposed projects that could potentially impact Houston in any of these ways are listed below.

Paving of Hatcher Pass Road

This project would permit year-round travel from Palmer through Hatcher Pass to Willow just 10 miles north of Houston.

Highway Signage

This boroughwide project would improve communication of the locations of commercial and noncommercial attractions and support services throughout the Matanuska-Susitna Borough.

Mat-Su Visitor's Center at Intersection of Glenn and Parks Highway

This facility has since been constructed and is located at the strategic southern gateway to the borough near the intersection of the Parks and Glenn Highways. The facility provides information to visitors on attractions, events, facilities, and services within Matanuska-Susitna Borough, including Houston.

Hatcher Pass/Independence Mine

This area has received much interest for ski area development. Recently, an Alaskan business gained a majority interest in the lease of state lands at Government Peak for the development of a ski resort. Eventually it is hoped that this area could become the focal point for an extensive and varied destination area complex. A resort with a conference center oriented toward the upscale market could be included. Year-round recreational activities would take place in conjunction with historical restoration/renovation/conversion of the existing mining buildings.

Nancy Lake

Improvements to this area could include a marina, expanded camper facilities, and improved cross-country trails.

Houston-Willow Creek Trail

The city has been working with the state and borough to develop a trailhead at the former landfill site. This trail should be improved and provided with appropriate signage and trail markings.

Bike Trails Along Parks Highway

This project is already in the construction stage as part of the Parks Highway renovation through the city. Eventually, the State of Alaska, Department of Transportation intends to construct a continuous paved trail from Wasilla to Willow Creek adjacent to the Parks Highway, additionally a spur trail will extend down Big Lake Road to the north and south state recreation sites. Between Big Lake Road and the Little Susitna River paved trails will be included on both sides of the Parks Highway. Bike trails provide a means of converting passive sightseeing into a participating recreational experience.

Big Lake

Opportunities exist for expanded and improved, outdoor recreational activities such as fishing derbies, water skiing contests, boat races, snowmachining, ice fishing, automobile racing on ice, etc.

Youth Hostels

These low-cost accommodations should be designed for the international youth market and positioned strategically throughout the borough.

In selecting which of these potential projects it would target first in its efforts to increase the role of tourism in the local economy, the Matanuska-Susitna Borough decided that initial investments would have to be made in the fundamental tourism support systems. The investment made in this support system will facilitate investment in other existing and potential tourism projects in

the borough. It was decided that a primary goal would be to promote the development of a primary tourist circuit. Given these criteria, four projects were targeted for enhancement:

a tourism information center at the intersection of the Glenn and Parks Highways; a boroughwide highway signage program;

the paving and development of waysides along the Fishhook-Willow (Hatcher Pass) Road; and

development of the Hatcher Pass recreation area.

Given Houston's long-term goals for development of the local tourism industry, the borough's selection of these four target projects is fortunate since each is likely to impact Houston favorably, either through:

dissemination of information about recreational opportunities in Houston; greater access to the Houston area; or

increased occasion for the casual traveler to frequent the Houston area.

The Matanuska-Susitna Borough affirmed its commitment to enhance the tourism industry in the Valley by several actions. The borough passed a resolution appropriating monies and borough lands the Matanuska-Susitna Convention and Visitor's Bureau (MSVCB) for the development of the visitor center. Much of the initial promotion efforts are aimed at the Anchorage market but will also focus on the broader market of independent tourists with such actions as advertising in Milepost Magazine.

The following efforts of the MSVCB, if successful, are likely to assist Houston in meeting its tourism goals.

Information Circulation

The Matanuska-Susitna Valley has only begun to effectively integrate with Alaska's tourism network as a vacation destination. Borough officials are working with several organizations to ensure that word of the Valley's virtues is spread in an effort to capture a greater share of both the out-of-state visitors market and the Anchorage-based market.

Matanuska-Susitna Convention and Visitor's Bureau: borough residents have organized to form the Matanuska-Susitna Convention and Visitor's Bureau (MSCVB). This organizations goal is to promote travel to and stops in the Matanuska-Susitna Valley. This organization is currently funded by a five-percent borough transient lodging (bed) tax and has established the Mat-Su Visitors Center near the junction of the Parks and Glenn highways. MSCVB has annually produced a visitor's guide for distribution in the valley, Anchorage and mailed directly to prospective visitors outside of the state.

Alaska Division of Tourism: This arm of the state government responds to requests by out-ofstate tourists for information on travel in Alaska. The Matanuska-Susitna Valley receives coverage in the official <u>Alaska State Vacation Planner</u> distributed to thousands of interested individuals annually.

Anchorage Convention and Visitors Bureau (ACVB): The ACVB publishes the Anchorage Visitors Guide each year to encourage tourists and residents alike to explore destinations in the

vicinity of Anchorage. The Matanuska-Susitna Borough is working with the ACVB to encourage them to expand the Matanuska-Susitna section of this publication that sees an annual distribution of 400,000.

Alaska Visitors Association: The Matanuska-Susitna Borough is beginning to work with this private sector organization which has an active presence in Juneau promoting statewide tourism enhancement efforts.

Boroughwide Highway Signage Program

The Matanuska-Susitna Borough is currently working with the Alaska State Department of Transportation and Public Facilities (DOT/PF) to identify locations in the Valley where roadside "tourist amenity" signs are needed. In addition, the borough, itself, is likely to design a Matanuska-Susitna Valley tourism symbol which will eventually be used on highway signs to identify points of interest along the highway.

Hatcher Pass Ski Area Development

The borough has funded a development feasibility study of the Hatcher Pass Ski Area. Results include baseline information on developable slopes, average annual snowfall, potential tourist market, etc. It is hoped that the ready availability of this baseline data will serve as an incentive to the private sector to develop this ski area in an effort to realize its recreational potential. The state issued a lease of state properties in 1990 for the construction of a ski resort facility. Although the leased lands have sat idle to date, the majority interest in this lease was recently purchased by an experienced Alaskan construction firm familiar with projects of this scale.

In all of its tourism industry enhancement efforts, the Matanuska-Susitna Borough is working to encourage private sector/public sector partnerships. Similarly, the City of Houston can benefit beyond their financial means by participating as citizen advisors on borough-wide enhancement efforts and encouraging investment of tourism industry enhancement dollars either within Houston's city limits or in areas which are likely to yield a positive spill-over effect in Houston.

Natural Resource Exploration, Extraction and/or Development

Coal

The Houston area contains a sub-bituminous coal deposit characterized by geologists as low to medium grade. The deposit is relatively small and this area's fault coal-related strata is shallow at less than 2,000 feet. In 1950, strip-mining was attempted in a small portion of the Houston field and extraction from this area proved very difficult with the equipment available.

Given current and projected coal market conditions, the cost of extraction of the Houston deposit is unlikely to be profitable in the next one to five years. This observation is supported by the current market for coal and the fact that there are no coal leases within or near Houston registered with the Alaska State Division of Mines at this time.

<u>Peat</u>

Areas of marketable peat do exist in and around Houston. A preliminary mapped survey by the United States Geological Survey (USGS) completed in 1981 identifies the location and quality

of peat in the Houston area. This map is available for reference at the City of Houston office.

<u>Gravel</u>

Houston is richly endowed with large quantities of gravel used for construction purposes. Four private gravel pits are currently operating within the city. Exportation of gravel from the Matanuska-Susitna area has increased over the past several years and gravel exportation via train to Anchorage is a potentially active market for Houston.

Minerals and Other Natural Resources

Though no base metals of commercial grade and quantity have been located within the city, interest has been expressed in exploring the possible development of the following natural resources presumed to exist in the Houston area:

natural gas geothermal potential oil hydroelectric resource gold

Whether or not any or all of these resources are present in commercial quantities within Houston remains in most cases as yet unproven. However, given improved market conditions, including:

an economically-viable transportation corridor for export of commercial quantities of mineral or vegetable resources, and

an economically-viable world market price for the resource itself,

Serious interest in development of some or all of these resources may be present. While the City of Houston can do little to influence the latter world market conditions, it can work toward encouraging the development of the transportation infrastructure critical to the development of a natural resource extraction industry. In addition, the city can work in an advisory capacity to the Matanuska-Susitna Borough and the State of Alaska to facilitate the design and implementation of a streamlined permitting system which might attract developers to the Houston area.

Methods by which the City of Houston can assist each of these industries in realizing their development potential are discussed in the "Implementation Strategies" chapter of this plan.

Public Services and Facilities

The Houston Junior-Senior High School facility on Hawk Lane West of the Parks Highway at Mile 53.5 opened their doors to Houston students in the 7th through 12th grades in the fall of 1986. The building and grounds (160 acres) provide the community with an extensive array of facilities and modern equipment, including the following:

computer lab home economics -- cooking and fabrics labs art studio interactive television lab photography lab and dark room equipment library/media center industrial arts labs -- small engine repair, metals and wood crafts labs, and drafting room

tiered music hall with soundproof practice rooms (70 piece band capacity)

indoor gymnasium -- basketball courts, bleachers, wrestling/gymnastic rooms, running track, and girls and boys locker rooms, (capacity 800)

cafeteria -- full kitchen facilities

commons area -- multi-use lunchroom (capacity 300)/theater (capacity 800) with stage, sound and lighting equipment.

The outdoor facilities at the school include:

tennis/basketball courts hockey/skating rink running track football field with bleachers (capacity 600) baseball and soccer fields lighted parking

The building contains over 45 classrooms; the number of actual learning centers ranges widely as many rooms can either be consolidated to form larger areas or broken down into smaller areas. Additionally, several classrooms contain auxiliary rooms used for specific activities.

The school's capacity is set at 600 with the opening 1986 enrollment numbering approximately 387 students. The Houston attendance area for the new junior-senior high school beings approximately 51/2 miles west of Wasilla where Stanley Road intersects with the Parks Highway, and encompasses everything north and west of Pittman Road including the Willow, Houston, Big Lake, and Meadow Lakes areas. An estimated 20 - 40 students from outside this defined attendance area are expected to attend the high school's opening session. Most of these students will be bussed from subdivisions along the Knik-Goose Bay Road.

In the first year of operation, the high school created 43-1/3 full and part-time jobs. This figure includes all paid employees: custodians, aides, teachers, administrators, cooks, summer maintenance workers and student help. The school's facilities are used by the area residents and incorporated into the existing Matanuska-Susitna Borough Community Schools Program, which conducts special education and extra-curricular activities for borough residents.

The elementary school age children residing in Houston continue to be bussed to either Big Lake or Willow Elementary Schools. No current total is calculated for Houston elementary age children. Forty acres near Loon Lake had been dedicated for the development of a Houston elementary school with a sunset clause that expired in 1992. The borough will be constructing a new elementary school in the Meadow Lakes area within the next two years. This school will reduce the immediate need for construction of an elementary school in the city.

Public Safety Facilities and Services

Police Protection

Houston does not maintain its own police protection. The only public patrols available to the

Houston community are Alaska State Troopers, headquartered in Palmer and the trooper substation in Big Lake. Their primary duties are to respond to accidents and monitor traffic. However, they also respond to other incidents on an on-call basis.

Fire Protection

At present the City of Houston provides fire protection while the Matanuska-Susitna Borough provides emergency medical services to the residents of Houston and its visitors. The 6-bay fire department facility is located in central Houston on the Parks Highway Mile 57.5. The four fire truck bays, office and storage area were completed in 1982. The training room, additional ice, storage and two ambulance bays were completed in 1986. The staff of volunteer firefighters and the fire chief participates in a continuous training program. The City Council passed an ordinance which established qualification criteria for the Houston City Fire Chief who is appointed as a Department Head by the City Council. An average of 15 volunteers are listed in the department records. The city/borough owns the following modern equipment and vehicles:

1000 gallon triple combination unit
1250 gallon tanker
250 gallon minipumper rescue/utility with Hearst Tool (Jaws of Life)
Support vehicle -- Dodge Crewcab for mutual aid and crew transport
Command vehicle -- Ford 4x4 Crewcab
1985 ambulance with winch

Under normal operation the fire station volunteers have a chief deputy assistant chief, lieutenant and 8 firefighters. They currently have turnout gear to clothe 20 people and a compressor to refill their MSA packs (oxygen tanks). Houston firefighters are required to train the prerequisite 48 hours and certify as Emergency Trauma Technicians (ETT).

Emergency Medical Services

The present ambulance service provided for the city by the borough is also headquartered in the Houston Fire Station and is equipped with an ambulance. The response team consists of 11 Emergency Medical Technicians (EMTs), one of whom serves as the Houston Ambulance Chief. The State of Alaska has approved three levels of EMT's that are classified by the number of hours of instruction in state approved courses and according to guidelines established by the U.S. Department of Transportation curriculum:

Emergency Medical Technician - I (EMT-I): A person who has completed a state approved course of instruction of at least 110 hours, which meets the guidelines of the U.S. DOT curriculum.

Emergency Medical Technician - II (EMT-II): A person who has completed an additional 50 hours of instruction approved by the state in intravenous therapy airway control, and medications.

Emergency Medical Technician - III (EMT-III): A person who has completed 40 additional hours of training in basic cardiac monitoring and defibrillation, and additional medications.

Mobile Intensive Care Paramedic (MICP): A person who has completed a DOT approved course of instruction of approximately 1000 hours and who is licensed by

the state medical board to practice. In addition, this person must also have completed a six month internship prior to being licensed.

Emergency Trauma Technician (ETT): A person who has completed a technically advanced 40 hour first aid course which covers such emergency care as bleeding, shock, first aid and CPR. The course emphasizes techniques for emergency care which can be performed in circumstances where a minimum of medical equipment is on hand.

The Houston response team currently contains four EMT-I, six EMT-II, and one EMT-III members. Another series of classes in progress as of this writing will provide additional qualified EMT's to the team. The current EMT's participate in ongoing training sessions four hours per month. No mobile Intensive Care Paramedics are stationed within Houston at this time. Emergency cases and accident victims are transported to Valley Hospital in Palmer for care.

The Houston ambulance service is one of nine within the Matanuska-Susitna Borough system. The primary response area for the Houston ambulance extends north from Parks Highway Mile 50 to Mile 64, including all of Big Lake, if requested, however, the unit responds to calls throughout the borough.

To date, most Houston residents have traveled to Valley Hospital for their chronic and acute care needs as well. However, in 1986, a new private family nursing clinic offering preventative health care opened in the Meadowood Mall at Parks Highway, Mile 51.5. This clinic attends to minor accidents as well.

Civil Defense

A damaging flood in the fall of 1986 illuminated the need for an organized emergency response structure. The City of Houston has established a Department of Disaster Emergency Services comprised of the civil defense director, the fire chief and the ambulance chief. The Committee's goal is to establish a preplanned course of action, individual's roles and responsibilities, and a communications network as an appropriate response to each potential manmade and natural emergency and disaster occurrence. The Matanuska-Susitna Borough is developing a similar task force. The Houston Junior/Senior High School is the area's designated Civil Defense shelter.

Parks and Recreation

Parks and recreational facilities within the community have recently expanded to meet the needs of residential and tourist activity. The Little Susitna River Campground, located on the east side of the Parks Highway at Mile 57.3, is the city's major facility developed to enhance tourism. This well-used camping area on the river's north shore is popular with people throughout South central Alaska and with national and international tourists. It provides easy access to the Little Susitna River, which is well known for its salmon fishing. The city has implemented a day use/camping facility that currently includes: off-road parking, more than 80 camping spaces with fire pits, a pavilion, a playground, trash barrels, firewood, two public water wells and four toilets. The campground is open 24 hours a day from May 1st to October 1st.

The construction of Houston Junior/senior High School complex west of Mile 53.5 of the Parks Highway on Hawk Lane added a number of recreational resources to the community. The school's outdoor sports facilities consist of a multi-use tennis/basketball/hockey and skating area, and football, soccer, and baseball fields. The school also offers a large indoor gym equipped with basketball courts, a running track, a wrestling/gymnastics room, and men's and women's locker rooms.

A substantial number of informal, undedicated trails run throughout the community. Most of these trails do not have clearly dedicated public access and may trespass across private property. The trails serve functionally and/or recreationally as transportation corridors for three wheelers, snow machines, dog sleds, bikers, horses, pedestrians, and skiers. The type and usage of the trails varies widely and many well used trails are as of yet undedicated. The Little Susitna River is a major boat transportation corridor in the summer and used as a winter trail when the river freezes over. Seismic lines which are typically straight and free of trees are also utilized as trails by Houston residents.

A private camper park is located adjacent to the Parks Highway in the core of Houston. The camping experience offered to tourists by this facility is different from that of the Little Susitna Campground due to its intended use by recreational vehicles and offerings of comfort and convenience features such as electricity and showers.

Houston provides a stopping point between the population centers of Anchorage and Fairbanks and many popular recreational areas which lie between the two cities. <u>The Matanuska-Susitna</u> <u>Borough Tourism Development Program Report</u> (Peat, Marwick, Mitchell & Co., 1983) provides a thorough overview of these destinations and the types of recreation available throughout the borough. Three of the nine tourist destinations identified in this report are important to the Houston recreational user market.

Hatcher Pass Area

This scenic road follows the drainage of Willow Creek between Hatcher Pass and the Parks Highway near Willow. There are many scenic viewpoints and waysides along the road. At the apex of the road, the state has designated 271 acres as Alaska's newest state park, Independence Mine Historical Park. This park, with its old and abandoned mine buildings attracts many visitors. The area is popular in all seasons and offers excellent skiing and snowmobiling in the winter, and hiking, blueberry picking, and hang gliding during the spring and summer months. The state has adopted a plan for the development and management of the Hatcher Pass area and developed a list of highway related improvements it is promoting to fund with federal highway funds.

Big Lake

The Big Lake recreation area offers swimming, camping, sailing, and fishing. Big Lake has experienced extensive development and serves as the major water recreation area in the borough. Development around the lake includes private cabins, public campgrounds, and private lodges and marinas.

Nancy Lake

The Nancy Lake Recreation Area, planned and programmed by the State Division of Parks, is a

modern recreational development. A major attraction of the 22,685 acre area is canoeing through the Lynx Lake Loop. Campsites and picnic areas are provided throughout the area. Cross-country skiing, dog mushing, and ice fishing are popular winter activities.

Community Service Organizations

Mid-ValleySeniors, Inc.

The Mid-Valley Seniors, Inc., is a nonprofit organization founded in 1983. The association provides fellowship and a nutritional program to member seniors in the Big Lake, Houston, Meadow Lakes, and Willow areas. In 1987 the Mid-Valley Senior Center opened. The center includes a cafeteria, recreation room and office.

Also, Mid-Valley Seniors, Inc., is planning an five-unit senior housing complex to be constructed adjacent to the Homesteaders Club.

Homesteaders Community Center

Since its inception in 1957, the Homesteaders Community Center (HCC) has provided a meeting place and fellowship for area residents. A nonprofit organization, HCC consists of over 50 members. Membership is open to any resident for a minimal yearly fee. The group organizes social gatherings and holiday parties as well as Wednesday night bingo, which is the HCC's major source of funding.

The Homesteaders building, located just west of Mile 53.5 of the Parks Highway on Community Drive, served as a City Hall and polling place until the city built a separate facility. A major improvement made possible by the Borough Parks Grant Funds is the ballfield adjacent to the HCC building which is operated by the club. Currently, reservations for use of the field are required but no user fee is charged. The Homesteaders' building contains a 24 x 34 foot main hall, kitchen facilities and a storage area. The building can be rented out for special functions. The HCC building has been made available midweek to the Mid-Valley Seniors for meal service. Local Cub Scouts also meet at the HCC.

The adjacent land is currently proposed for a low income senior housing project which is expected to be completed in 1998. This needed housing will be ideally situated near the other senior facilities providing a complementary service.



Implementation Strategies

Proposed Land Use Plan

The proposed land use plan is that portion of a comprehensive plan that pulls together all of the information that has been gathered regarding the community residents' goals in terms of residential, commercial, industrial, recreational and public land use, and charts these long-term goals on a map. The final land use plan map divides the city into a variety of land uses according to such criteria as:

residents' expressed desires for future development in their community, the land's ability to support different intensities of development, existing zoning, engineering and land use constraints on proposed transportation corridors, and public vs. private ownership patterns.

Once adopted by the Houston City Council and the Matanuska-Susitna Borough Planning Commission and Assembly, the land use plan will be used as a tool by the City Council to guide future development within the Houston city limits.

The Land Use Element section of the comprehensive plan document is intended to supplement the Land Use Plan map by briefly discussing the proposed land uses covered by the plan map.

Residential Land Use

Since the adoption of Houston's first comprehensive plan and zoning map in 1981, the City Council and the Matanuska-Susitna Borough Planning Commission and Assembly have allowed a total of eight residential rezones. In each of these cases, the rezone allowed for a more intense use of the land, most often from a five (5) acre minimum lot requirement down to a one (1) acre minimum lot requirement. Some of these rezones were associated with construction of a new junior/senior high school. The Council's pattern of approvals of denser residential land uses are seen as an expression of residents' willingness to accommodate more intense residential development in designated areas of the city.

It should also be noted that the Council's intent in originally designating most of the residential area in the city relatively unintense (at a five acre minimum lot size) was to allow for up-zoning at a later date to accommodate more intense residential development as Houston's population grew.

The updated land use plan reflects the above trends while still attempting to preserve the rural nature of most of the designated residential areas of the city.

Thus, most of the land in Houston that lies east of the Parks Highway and south of the Little

Susitna River has been designated for light density (1 acre minimum lot size) residential development. Three other areas in the city are targeted for light density residential land use:

the Zero Lake area,

most of Section 33 on the southwest boundary of the city; and

an area southwest of the Parks Highway at the southern boundary of the city which includes the Capitol Corridors, Long Lake, and Woody Lake South subdivisions.

Moderate density residential development has been targeted for the following areas of Houston: that area immediately north of and adjacent to the most centrally located commercial district in the city, including the Heath Heights and Bryant No. I subdivisions; a corridor area both north and south of the Parks Highway near the center of the city, including the Horizon West, Gaunt, Dodge, Rainey, Bear Paw Lake, and Tall Birch subdivisions; and a pocket at the southern end of the community that includes the Lakeway Woods and

Woody Lake subdivisions.

It is important to note that land targeted for moderate density be well suited for future service for public water and sewer systems.

Much of the remainder of the land within the city north of the Little Susitna River has been designated for rural residential/agricultural land uses. Similarly, much of the land southwest of the Alaska Railroad/Parks Highway corridor remains targeted for rural residential development according to residents' requests.

Commercial Land Use

One of the primary reasons that Houston residents chose to adopt a land use plan was to avoid strip commercial development along the Parks Highway corridor, strip development typically being commercial or retail uses, usually one-story high and one-store deep, that front a major street with street frontage parking and a lack of pedestrian provisions for access between individual uses. Residents and elected officials cited this as an official goal for two primary stated reasons:

to preserve the rural nature of the community, and

to protect local residents from the traffic hazards associated with the stop and go traffic generated by commercial development along a major highway.

To this end, in the plan: commercial development has been limited for the most part to two major areas:

the centrally located commercial area just west and south of City Hall which straddles the Parks Highway, including Bryant No. 2 and 3 subdivisions; and

the commercial area located on all sides of the Big Lake Road/Parks Highway intersection.

For technical reasons including poor site distance for stopping on the Parks Highway at the Big Lake intersection and poor soils, the city may want to adopt a policy encouraging in-fill at the more northern commercial district before additional commercial development occurs in this southern sector. Additionally, the use of frontage roads and shared access is to be encouraged, thus reducing the number of individual accesses to the Parks Highway.

Another tool that has been devised to assist the city in limiting strip commercial development on the Parks Highway is the "home occupancy" designation. By allowing some amount of commercial activity to occur within well prescribed limits it allows unobtrusive economic growth and development to occur without fostering strip development.

A third tool to aid in the prevention of strip commercial development is the creation of a mixed use district adjacent to the Parks Highway. Mixed use development is typically defined as development with a variety of complementary and integrated uses, such as, but not limited to, residential, office, light manufacturing, retail, public, or entertainment. Combining mixed use and restricted, or limited, access to the highway could be an effective method of avoiding strip commercial development adjacent to the Parks Highway.

If and when the time comes for expanding commercial districts in Houston, this activity should focus on a major transportation hub.

Light Industrial Land Use

Two primary sites have been designated for light industrial development within the City of Houston. For the most part, these sites are located near existing or proposed major transportation corridors with access to and from both the Parks Highway and the Alaska Railroad. The two largest light industrial development sites are located in the northwestern corner of the city. One site lies just north of the Little Susitna River and southwest of the Alaska Railroad/Parks Highway corridor. The northern-most industrial site is buffered on the south by a Public Lands and Institutions District designation and on the north by the Parks Highway. This site is bisected by the Alaska Railroad. Soils on both these sites will require considerable in-fill to be capable of supporting significant industrial development. These sites are buffered from existing or potential residential areas either by open space designations or by the Alaska Railroad/Parks Highway corridor thus limiting negative impacts on adjacent residential land uses. Houston's Land Use Ordinance, by virtue of the land uses it allows and does not allow outright in the Light Industrial District, already allows considerable protections for surrounding residential land uses.

Public Land Use

Also designated in the Land Use Plan are the public facilities currently in the city and those anticipated in the future. These include:

Solid Waste Disposal Site and Landfill Fire Station City Hall Campground Proposed Elementary School Site Proposed City Park Senior Citizen Housing Site Junior/Senior High School With the exception of the greenbelt along the Little Susitna River, lands shown as open space in the plan are for the most part publicly-owned lands, and should remain in open space use until such time as a more intense use is needed with Houston's future development. It is important to note that the Land Use Plan does not address land ownership. Rather, this plan will guide the city officials as they work with all land owners in the community, public or private, to coordinate development in an effort to preserve the rural characteristics that Houston's resident's value.

Economic Development

In this section of the plan, strategies that the City of Houston can elect to follow in an effort to assist target industries in realizing their economic potential locally are addressed. These strategies have been designed according to the community development goals and objectives expressed by Houston residents (see Chapter II of this plan document).

Small Business Enterprise

By maintaining a comprehensive listing of all businesses operating within Houston, the city will be better able to assess service sector needs and to direct community economic development efforts. It is suggested that the city construct and maintain a comprehensive list in two categories:

businesses located within Houston city limits; and businesses located outside of Houston but conducting business within the City of Houston.

This inventory will prove helpful if and when the city should elect to attract an industrial developer which could assist the community in meeting its local employment goals, etc. This information will help provide a thorough community profile, allowing the potential developers knowledge as to the extent support services are available locally.

In addition, in an effort to encourage the development of more small businesses in Houston, a "Neighborhood Commercial District" zoning designation was established within the context of the city's land use ordinance. Several small commercial zones could be designated in residential neighborhoods in an effort to encourage the development of convenience businesses in residential areas. This might also serve to minimize the growth of home occupations which, given their random integration throughout the community, could eventually threaten the integrity of the local rural residential neighborhoods.

Commercial, Residential, and Recreational Real Estate Development

One of the easiest methods by which Houston can (1) attract quality developers and (2) ensure the aesthetic quality of local developments, is to draft and adopt a comprehensive, concise, clearly-written land use ordinance. In order to meet the requirements of the community's residents as well as the developers, the ordinance should clearly spell out (preferably in checklist format) the developer's responsibilities should he choose to build in each zone.

In addition, a zoning brochure can be published by the Matanuska-Susitna Borough which will

clearly delineate which land uses are allowed on which parcels of land within the city. If this brochure is distributed to local realtors through the Valley Board of Realtors it is likely that the City of Houston will garner a "developer friendly" reputation when, at the same time, it is working to accomplish its own economic development goals and promoting aesthetic development by clearly communicating with the real estate community.

Tourism Industry Enhancement

Houston residents have targeted tourism as a clean and potentially viable industry that they would like to attract to their community. Much attention has been devoted to this goal in this plan because it is likely to be the most viable alternative of the five target industries, given present statewide economic conditions.

Given that this is a community priority, it is suggested that the Mayor appoint a Houston Tourism Committee which shall report regularly to the City Council. Initially, the Tourism Committee can work toward the accomplishment of the following primary goals:

To designate an appointed representative to the Matanuska-Susitna Borough Convention and Visitors Bureau;

To regularly submit ideas promoting Houston tourism to the Alaska State Division of Tourism; the Anchorage Convention and Visitors Bureau; the Alaska Visitors Association; and, the Matanuska-Susitna Valley Visitors Convention Bureau.

To work through the Matanuska-Susitna Borough or directly with the State Department of Transportation to identify areas within Houston in need of visitor amenity signs, e.g., fork and spoon, restrooms, overnight accommodations, etc.

To identify the areas of need for Matanuska-Susitna Borough tourism signs, (e.g., a separate program) stream access, lake access, historic site, hiking trail, etc., and then to work with the Matanuska-Susitna Borough Tourism program to secure the needed signs for Houston.

A Houston Tourism Committee could take an approach which would establish the city's individual long-term goals for tourism development while complementing the existing boroughwide objectives. The Alaska Department of Commerce and Economic Development's, <u>Alaska Tourism Handbook</u>, outlines the following steps toward developing tourism. (Some of the questions asked here would be answered in part or in whole by a tourism plan.)

Make an Assessment

- How does tourism fit into the local community?
- What tourist activities meet the needs of the community; i.e., number and types of jobs created?

Evaluate Community Attitudes

• What are the issues and goals most important to the community regarding tourism; i.e., economic, subsistence, social, cultural, environmental?

Conduct an Inventory

• What are the community's assets?

• What development is needed?

Create a Development Plan

Include markets, development needs, budgets and role assignments.

Control the Level of Tourism to Meet Community Quality of Life Standards

• Consider: capacity, access, traffic generation, regulations and zoning, placement of tourist facilities, focused tourist activities and locations, and land use.

Get Organized

• Form an association of the individuals, businesses and local government that have a positive interest in tourism to represent the community in promotional and informational aspects of local tourism development.

Develop Attraction Strategies

- Target tour companies and become established in the packaged tour market.
- Attract independent visitors through developing positive reputations, advertising, available brochures, special celebrations.
- Attract fellow Alaskans through festivals, special events, local radio, and newspapers.

This form of active participation at all levels of both government and the private sector will ensure that Houston will attract its share of tourism industry enhancement funds.

Natural Resource Development

Several world market conditions need to improve before it will be economically feasible to develop the resources present in Houston. While the City of Houston can do little to influence world market conditions, it can work toward encouraging the development of the transportation infrastructure critical to the development of a natural resource extraction industry.

However, Houston can encourage natural resource development within its boundaries by working in an advisory capacity to the Matanuska-Susitna Borough and the State of Alaska to facilitate the design and implementation of a streamlined permitting system which might attract developers to the Houston area. In addition, the city should take an active role in monitoring borough and statewide transportation infrastructure proposals and lend support to those affecting access to Houston.

Regardless of the commercial quantities of mineral resources present in Houston, whether or not they are ever developed will depend on some factors beyond resident's control, such as:

- market price of the resource in question,
- state or federal regulatory climates, and
- the level of unemployment.

Parks and Recreation

Parks and recreation have always been a priority to the residents of Houston and the need to expand on existing facilities has been strongly expressed. The following types of recreational

amenities and relatively passive recreational activities should continue to be promoted in Houston. An effort should be made by the community to serve local needs and meet tourism development goals while still maintaining the pristine rural character that residents have expressed a desire to preserve.

Waysides

Located along the borough's highways and roads, waysides range in size from several acres to several hundred acres. Waysides include such facilities as campgrounds, boat launching ramps, picnic areas, and trails.

Campgrounds

The majority of existing public recreational development in the borough is in the form of campgrounds. Campgrounds typically provide cleared spaces for tents and trailers, picnic tables, restrooms and trash barrels.

Group Camps

Many of these have been established in the borough and are ideal for youth camps, retreats, and other group recreation.

Hunting

The region's waterfowl, moose, and bear attract a large number of hunters from Anchorage during the fall hunting season. Duck and geese hunting is also popular in the area tidal flats.

Fishing

An abundance of good fishing opportunities are present throughout the year in the City of Houston. Removal of the fish weir from Burma Landing has rejuvenated sport fishing potential along the Little Susitna River in Houston.

Winter Recreation

Ice fishing, snowmachine racing, cross-country skiing, ice skating, hockey, and dog racing are common winter recreation activities throughout the Matanuska-Susitna Borough.

Guiding Services for Adventure Travel

Guiding services could be developed for unconventional travel into remote areas affording a variety of natural experiences, including:

- dogsled trips
- wildlife photographic safaris
- wilderness treks
- snowmachine adventures
- mountain expeditions
- horseback riding

The City of Houston is actively preserving some of these types of recreational development in the following actions:

• The City of Houston has continued to work with the State Department of Fish and Game regarding placement of the fish weir on the Little Susitna River. The placement of this

weir has been a source of controversy as the weir prevents easy upstream access for salmon. Its prior placement at Burma Landing dramatically limited sport fishing along the river through Houston.

- The city has opposed any placement of the fish weir west of the Parks Highway.
- The city manages the Little Susitna River Campground which includes tent pads, fire pits, tables and a toilet. Next year the borough, which owns the site, intends to install an RV dump station. City employees are contracted out by the borough to maintain the borough-owned recreational areas. This has proven to be a good working relationship and should be perpetuated.
- The city has requested funding from the borough to provide public recreational facilities at Prator Lake including parking and dock facilities on a lot fronting on Duke Drive at the south end of the lake. This is a priority of the community as the lake, partially surrounded by the Enchanted Forest Subdivision, is a popular fishing, boating, and ice fishing spot for residents.
- The city has been active in the promotion of primitive trails. The State Department of Transportation and Public Facilities has allocated funding to create a trailhead at the old dump site for access to the historic Willow Sled Trail. Another cooperative borough and city effort is to dedicate access along the existing, well-used trail which parallels the intertie power line. This trail could become a public use trail by gaining a letter of non-objection from the easement holder and by acquiring a public access easement from underlying landowners. More specific recommendations are included in the City of Houston Transportation Plan.
- Because parks and recreation continue to be a high community priority, it is recommended that the City of Houston appoint a Parks and Recreation Committee to monitor on-going planning and development activities and to pursue future recreational development opportunities.

Environmental Goal Implementation

Houston residents have designated the most important element of the environmental goal as the maintenance of the rural/natural characteristics of the community. This includes the protection of air and water quality within the community. Both the city and the borough must work with the regulatory agencies that are responsible for maintaining air and water quality levels throughout the community. Through development of a cooperative relationship with the State Department of Environmental Conservation and the U.S. Environmental Protection Agency, the city can determine how they are monitoring the air and water quality within the community and assure that the standards they have set for the maintenance of the air and water quality are adequate to meet the community's needs.

The environmental characteristics of the community can also be preserved by encouraging development that utilizes the natural topography and physical features of the land and that preserves vegetation to the maximum extent possible. The City of Houston coordinate efforts with surrounding communities to influence quality planning and development along common boundaries which would meet development criteria agreed upon by both communities.

Several environmental characteristics particular to Houston must be considered in the land use

and planning process. The fault trace trending along the south side of the Little Susitna River should be acknowledged as a potential hazard. Mitigating measures should be taken prior to future development along this fault zone.

Flood zones should also be a major consideration. Most of these areas border the Little Susitna as it winds through the city limits. The Federal Emergency Management Agency has compiled floodway maps for the Matanuska-Susitna Borough, effective May 1, 1985. Map panels 020021 8795, 020021 8815, 020021 9610, 020021 9630 detail the floodway and flood boundaries within the City of Houston.

The Matanuska-Susitna Borough ordinance pertaining to flood hazard areas (Chapter 17.29 of the Borough Code) is intended to comply with requirements for participation in the National Flood Insurance Program (NFIP). The provisions of the ordinance encourage development, which minimize damage within flood hazard areas. These regulations should be referenced in the Houston Land Use Ordinance. The city should consider including more stringent flood plain regulations as part of the Houston Land Use Ordinance if it finds the provisions of MSB 17.29 too lenient.

To initiate drainage planning, the first step would be to perform area wide topographic mapping. This will allow the establishment of critical drainage boundaries adjoining lakes. The next step would be to establish engineering standards that will provide guidelines for the handling of drainage. These standards could be required of all site development and subdivision improvements.

It is also recommended that the filling of wetlands be limited and subdivisions dedicate wetlands into tracts. Wetlands serve as natural water storage areas and are sources of nutrients for streams and lakes. The crossing of streams and wetlands for road construction should be limited. Special construction methods for culverts should be initiated to prevent icing and the damming of water during winter.

The suitability of soils in Houston for construction is generally good except in areas of peat bog, wetlands and areas of high water table associated with springs. Due to poor soil conditions and aquifers, especially north of the Little Susitna River, special attention must be paid to the construction of septic systems. The relatively low relief of Houston lends itself well to housing and agricultural development, as well as commercial development.

However, in those few areas where localized slopes are steep, erosion may be a problem, particularly when the organic matter is removed from the soils. In these areas care should be exercised to avoid any unnecessary clearing of natural vegetative cover. Appropriate engineering and subdivision design should be applied to minimize possible slope erosion where hilly areas are to be developed for housing or commercial uses.

Public Services Implementation Strategy

Education

The borough will be constructing a new elementary school in the Meadow Lakes area within the

next two years. This school will reduce the immediate need for construction of an elementary school in the city. Previously the city and borough had designated a 40 acre site near Loon Lake for future construction of a Houston elementary school. A sunset clause in this designation caused this land to be reverted back to city ownership in 1992 since construction had yet begun at that point. Because the city previously considered the property a desirable site for elementary school construction, and had made a public policy decision that the community would derive greater benefit from a borough-funded school than ownership of the land, the city may wish to continue to reserve this site in an undeveloped state for eventual school construction.

Police Protection

Currently police protection is spread very thin throughout Houston and the surrounding area. The recently established trooper substation in Big Lake has helped somewhat, however, the greater number of people, homes and recreationists in Big Lake consumes a disproportionate amount of the State Troopers time.

Private security companies offer patrol service within Houston. Neighborhood Watch organizations have been established as well. No substantial expansion of public police protection services by neighboring communities or the state is in sight.

Fire Protection

Constructed in 1982 with additions completed in 1986, the Houston Fire Hall is modern and well equipped. The 1996 forest fire in the Houston/Big Lake area was the largest fire in a rural suburban setting in the State of Alaska. Emergency mitigation funds available following the fire were used to construct several fire protection related improvements. A 20,000 gallon water tank near Meadowood Mall will provide a needed water replenishment site near the south side of the city. Truck access to Prator Lake and an enhanced parking pad capable of accommodating heavy fire equipment/tankers were created to provide another replenishment site for fire tankers close to residential subdivisions east of the Parks Highway. Other improvements still to be constructed include the creation of combination fire breaks and emergency access routes. There are two routes proposed to connect the City of Houston with outlying areas and to provide alternates to the Parks Highway should the highway be closed in the event of an emergency or natural disaster. One route leads from Houston High School east to eventually connect with the road system in the Meadow Lakes area.

Related evaluation of fire protection strategies resulted in several firebreaks and emergency access roads being created.

Emergency Medical Services

The Houston ambulance response rates have been very consistent over the past several years. During the time period of 1994 through 1997, the annual number of ambulance runs ranged between 96 and 101. Unless the community experiences rapid growth, the current ambulance response team should be adequate to serve the residents for several years.

911 Emergency Response System

The borough and Matanuska Telephone Association have been working to provide enhanced 911

services. Once on-line, these services can significantly improve emergency response time by preventing delays finding the emergency site. Many emergency vehicles are sufficiently large and heavy to be unable to easily turn around in the event of any wrong turn. Dead end streets without adequate turnarounds and soft shoulders can compound delay problems. The enhanced 911 system automatically identifies the location of the call and can print maps identifying the location for emergency vehicle drivers.

Emergency Management Committee

The City of Houston is in the process of developing an internal process for response to large scale emergency incidents insofar as the legal confines of the city's responsibility allows. The only legal responsibility assumed by the city to date is firefighting response. If an incident occurs within Houston city limits the delegated Emergency Management Team will be responsible for taking the initial action warranted by the emergency situation. If the response required by the city is beyond its capabilities, the Emergency Management Team then dictates that the Matanuska-Susitna Borough be contacted to respond. If the incident is beyond the borough's capabilities, it will contact the state. The borough is in the process of a complete evaluation of its emergency management structure.

Close coordination of response communication networks throughout all communities within the borough is a primary goal of the borough's emergency services, and will serve Houston's best interests as well.