Areawide Trails Plan

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Prepared by:

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Department of Community Planning and Development

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EXECUTIVE SUMMARY

PURPOSE AND ORGANIZATION

The Areawide Trails Plan is the primary planning and policy document used in the development of a trail system throughout the Municipality of Anchorage over the next 20 years. Its purpose is to guide local and state agencies, organizations, and private citizens in establishing trail facilities as part of an overall transportation system.

Serving as the implementation tool for trail improvements, the Areawide Trails Plan is a component of the Anchorage Bowl Comprehensive Development Plan, the Chugiak-Eagle River Comprehensive Plan, the Turnagain Arm Comprehensive Plan, the Girdwood Area Plan, the Anchorage Bowl Long-Range Transportation Plan, and the Chugiak-Eagle River Transportation Plan. This Plan, adopted by Anchorage Municipal Assembly Ordinance AO 96-140 on April 8, 1996, replaces both the 1985 Anchorage Trails Plan and the trails in the 1985 Anchorage Park, Greenbelt and Recreation Facility Plan. The Areawide Trails Plan has a dual focus: the development of integrated trails serving multiple recreational users and the creation of a trail system that facilitates alternative modes of transportation.

The eleven chapters that comprise this Plan establish the foundation, policies and recommendations for all trail improvements throughout the Municipality. Similar to the previously adopted 1985 Anchorage Trails Plan, this Plan begins with a discussion of the importance of trails to our transportation system based on history, public surveys and the input of numerous trail user groups, interested parties and agencies.

Formulation and discussion of key trail issues, existing conditions and recommendations for the Anchorage Bowl, the Chugiak/Eagle River areas and the Turnagain Arm are included in Chapters 2, 3 and 4, respectively. The Iditarod Trail, the Coastal Trail, and a trail connecting the Matanuska-Susitna Borough with the Kenai Peninsula are recognized in Chapter 5 for their regional significance.

Chapter 6 of the Areawide Trails Plan addresses areawide trail issues, such as user attitude, funding, right-of-way, compatibility, etiquette, enforcement, and education. Chapter 7 provides general guidance for design requirements when building trails within roadway rights-of-way and elsewhere. Chapter 8 contains important information about maintenance responsibilities and is based on extensive research.

Financing scenarios for trail improvements are outlined in Chapter 9. Chapter 10 discusses implementation of the recommendations of the Plan and specifically identifies right-of-way, the involvement of key agencies, implementation responsibilities of Municipal Departments, the creation of a Trails Plan Oversight Committee and other required studies. This chapter also includes a list, in alphabetical order, of the top 50 trail improvements to be considered in the future.

Chapter 11 concludes the Plan with three large-scale maps depicting the Anchorage Bowl, Chugiak/Eagle River and the Turnagain Arm. These maps illustrate all the primary trail types, including multi-use paved and unpaved trails, commuter bike routes, snowmobile trails and areas, ski-joring, cross country skiing, sled dog mushing, water, and interpretive trails. Many existing trails within parks or greenbelts are not shown in detail on these large-scale maps. In some cases, more detailed trail locations within parks are shown as separate figures within a chapter.

PLAN DEVELOPMENT AND PUBLIC PARTICIPATION

The Municipal Department of Community Planning and Development coordinated the development of this Plan, in cooperation with other local and state agencies. An important component of the public process was the creation of a Trails Plan Review Group, which was comprised of a balance of various trail users. The Group provided guidance, performed a critical review of information, and offered recommendations. Extensive public participation was critical to the development of this Plan. Early identification of trail issues was accomplished through a random telephone survey and a series of public workshops. The public participation process formed the basis of the organization and recommendations of the Plan. Key issues identified through the public process included the importance of trail safety, maintenance, usage, convenience, and priorities for implementation.

RECOMMENDATIONS AND IMPLEMENTATION

The Areawide Trails Plan recommends improvements for both motorized and non-motorized trails. A comprehensive set of goals, objectives, and policies were crafted and refined to set the direction for trail planning. The goals for the Areawide Trails Plan were developed based on identified issues and the basic principles of safety, mobility, efficiency, aesthetics, and pleasure. Using the set of goals, objectives, and policies set forth in this Plan, planning evaluation criteria were developed to help further shape the Plan and its recommendations. To assess trail priorities and identify the top 50 trail projects for the Plan, planning criteria, to include but not be limited to, trail connections, changes in users populations, cost effectiveness, trails for multiple uses, safety, and accessibility were used.

SUMMARY

Residents of the Municipality feel fortunate to have a well-developed trails system, particularly in the Anchorage Bowl. The Municipality's trail system was nationally recognized by the American Hiking Society as the one of the "Top Trail Towns" in 1996.

Expansion of the system is favored by most of those who participated in the Plan survey, with the recognized need to enhance safety, reduce user conflicts, and improve maintenance.

The Plan recommends continued trail development throughout the Municipality from Eklutna to Portage. The Plan does not duplicate efforts of state and federal management agencies for the planning of state and federal lands within the municipality, but complements these systems by providing trail linkages and trailheads.

When fully implemented, the Areawide Trails Plan is intended to provide the Municipality with an integrated system of trails that permit and encourage travel by modes other than the automobile, and that offer a variety of recreational opportunities.

Questions about the plan (text or maps) can be addressed by contacting the Municipality of Anchorage, Department of Community Planning and Development, Transportation Planning Division by phone at 907-343-4262, by fax at 907-343-4100, or by writing to the at P.O. Box 196650, Anchorage, AK 99519-6650.

CHAPTER 1 — INTRODUCTION

Trails have been important in Alaska throughout recorded history. Today there are more miles of trails in the state than roadways. As communities have developed, the need for all modes of transportation has increased. The trails upon which people first traveled by foot later became narrow dirt roadways that they shared with horses and then cars and trucks. Eventually, sidewalks and walkways were constructed to separate pedestrians and other trail users from faster traveling vehicles.

Trails are a basic part of the infrastructure in the Municipality and they serve many functions. They are an integral part of the total transportation system, providing mobility and accessibility to areas and facilities, and they also serve aesthetic and psychological functions. They are recreational facilities from which a variety of leisure time enjoyment is derived. Trails, also known to some as "greenways" and "linear parks", aim to bring the outdoors to the people. Beyond providing a physical connection, trails are a way of creating community. Sometimes the very speed that we travel through life disconnects us from our neighbors. Trails allow an opportunity for people to slow down, connect, and revitalize.

Trails also provide an important economic resource for the community. Economic benefits are found in the sale of equipment, private construction and maintenance of trails, conventions featuring trails in their entirety and specific trail user conventions. Trail races, such as the Fur Rondy and Iditarod races, bring tourism dollars into the community.

The residents of the Municipality of Anchorage have expressed their desire for trails shown in every public survey taken since the 1960s and was reconfirmed in the public survey done in 1993 as part of this Plan development. There is further evidence in the large number of residents and visitors alike use the existing trail system.

Trails, like other transportation facilities, have both associated benefits and costs. Costs for design, construction, operation, and maintenance are important factors in trail development. The majority of these costs are supported by municipal, state, and federal resources, as well as some private participation, such as volunteer efforts.

Some landowners may not want trails to cross their property or object to being required to provide trails as a part of the subdivision process. This impact has been addressed and mitigated, to an extent, by locating most trails in public lands along rivers and streams and along streets and highways. However, some necessary trails, such as those providing connections to the trail system, can only be provided through trail easements across private land.

This Plan evolved through a long and extensive two-year public participation process and it represents a compromise between competing interests. Although it is not possible to accommodate all the wishes of every interest, some of every interest groups' needs have been included. (See Appendix 1 for a discussion of the public participation process.)

I. PURPOSE AND SCOPE OF PLAN

A. PURPOSE

The Areawide Trails Plan is the basic planning and policy document for the development of trails in the Municipality. It serves as the trails implementation tool of the Anchorage Bowl Comprehensive Development Plan, the Chugiak-Eagle River Comprehensive Plan, the Turnagain Arm Comprehensive Plan, the Girdwood Area Plan, and the Long-Range Transportation Plans of the Anchorage Bowl and the Chugiak/Eagle River Area. This Plan replaces the 1985 Anchorage Trails Plan, as well as trails identified in the 1985 Anchorage Park, Greenbelt and Recreation Facility Plan, Volume IV "Eagle River-Chugiak-Eklutna."

This Plan, which is based on a 20-year planning period, will achieve an integrated trail system that encourages travel by many means and offers a variety of recreational opportunities. The plan will be reviewed periodically, allowing for modifications of preferences or priorities and for focused planning at a neighborhood scale.

B. NEED

The areas of Chugiak-Eagle River, Turnagain Arm, and the Anchorage Bowl are in different stages of growth. The Bowl has the greatest population and also the greatest number of developed trails. There are fewer developed trails in the Chugiak-Eagle River area, and even fewer in the Turnagain Arm area. Thus, the need for trails, and current users of trails, are different in each of the different areas.

C. SCOPE

1. Trail Uses

One of the major objectives of the Areawide Trails Plan is to identify the wide spectrum of trail user needs and to develop recommendations for each of these users. Anchorage's diverse population, climate, latitude, and heritage combine to provide a broad mix of trail needs and opportunities. The Areawide Trails Plan addresses the following trail users and activities:

- Pedestrians
- Bicyclists
- Interpretive Trail Users
- Running/Jogging/Physical Fitness
- Snowmobile and Other Motorized
- Cross-country Skiing
- Equestrians
- Sled Dog Mushing
- Skijoring
- Natural Trail Users
- Water Trails

Wherever possible, different types of uses should take place on a single trail. In the summer, hikers and joggers can use cross-country ski trails. In the winter, dog mushers and cross-country skiers can use summer hiking trails. Waterways can be used as winter dog mushing, cross-country skiing, or snowmobile trails.

2. Definition of Trail Types

Trails are intended to be multi-purpose facilities that allow for means of transportation other than automobile or bus. Trails may either complement or replace other modes of transportation. The primary function of trails is to provide for many users, including bicyclists, walkers, joggers, hikers, rollerbladers, dog mushers, snowmobilers, equestrians, and skiers. Trails may be surfaced with pavement, recycled asphalt pavement (RAP), or gravel, or left in a natural, unpaved state.

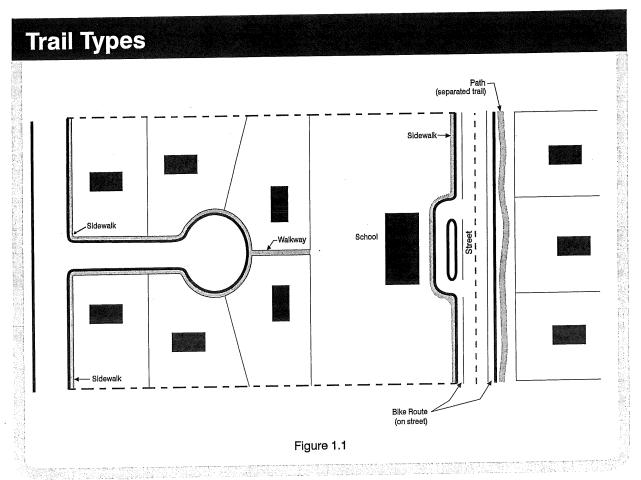
For the purposes of this plan, the different trail types are defined as follows:

- Multi-Use Paved Trails are for pedestrian type uses to include bicycling, jogging, skating, cross-country skiing and skijoring. These trails are not typically used by motorized vehicles, or sled dog mushers except when reserved for special events following appropriate public notice.
- Multi-Use Unpaved Trails are also used for pedestrian type activities to include bicycling, jogging, cross-country skiing, skijoring, and also equestrian, natural and interpretive types of uses.
- Bicycle Routes are facilities that provide for bicycles to share roadways. These routes are striped and/ or signed and are intended to serve commuters and cyclists. Note: Many of the existing multi-use paved trails are signed as "bike route" when located in a road right-of-way.
- Cross-Country Ski Trails are part of the Multi-use Paved and Multi-use Unpaved system. Those trails that are intended exclusively for cross-country skiing or are groomed for cross-country skiing are identified in Figures 2.2-2.6 and 3.1
- Snowmobile Trails are trails to be used by snowmobiles.
- Skijoring Trails are part of the multi-use paved and unpaved systems. Those trails that are groomed for skijoring (i.e. skiing while attached to a harnessed dog) are located primarily in Connors Lake Park/De la Vega Park, Far North Bicentennial Park and Edmonds Lake Park.
- Sled Dog Mushing Trails are trails used primarily by sled dog mushers. Trail that are groomed for dog mushing are primarily located in Far North Bicentennial Park and Beach Lake Park.
- Water Trails are streams or rivers designated for water based movement.
- Natural Trails are unpaved, unlighted, ungroomed trails in a natural setting.

Maps that illustrate the general location of trails for the Anchorage Bowl, Chugiak-Eagle River, and Turnagain Arm areas are to be found in the back. Trails are identified either as existing or as planned facilities. Existing trails are those that physically exist and are legally protected. Planned trails are trails that may or may not physically exist, but are not legally protected.

In addition to these primary types of trails, there are several other pedestrian or trail type facilities including sidewalks, walkways, and paths (see figure 1.1).

- Sidewalks are concrete surfaces or otherwise improved areas for pedestrian use. They are located within public street rights-of-way that also contain roadways for use by vehicular traffic.
- Walkways are rights-of-way, dedicated to public use, which cross within a block to facilitate pedestrian access to adjacent streets and properties.
- Paths are separated trails that may or may not be in a road right-of-way. These paths are traditionally and predominantly signed Bike Routes throughout the municipality. This Plan refers to these paths as multi-use paved trails when adjacent to roadways.



3. Intended Plan Users

Several agencies will implement the various aspects of the Plan. The Municipal Assembly, through its approval of the Areawide Trails Plan and through its approval of the budgeting process, is ultimately responsible for the overall planning and development of trails within the Municipality. The Planning and Zoning Commission is generally responsible for ensuring that areas designated for eventual park and trail developments are protected from other types of development.

If a proposed subdivision plat encompasses a trail officially adopted in the Plan, the Platting Authority shall, pursuant to Section 21.80.060 "Dedication—Trails" of the Anchorage Municipal Code, require that such land be dedicated as trail easements, unless the trails are demonstrated to be provided in the right-of-way.

The Parks and Recreation Commission, the Eagle River-Chugiak Park and Recreation Facility Advisory Board, and the Girdwood Board of Supervisors all make recommendations to the Municipal Assembly and the Planning and Zoning Commission regarding trail programs, policies, projects and budgets.

The Department of Cultural and Recreational Services (DCRS) assumes the primary role for implementation of trails in parks and greenbelts. Other municipal and state departments must work in close coordination with DCRS when reviewing and commenting on subdivision plats and site plans.

The Anchorage Metropolitan Area Transportation Study (AMATS) is an organization that brings together municipal and State the transportation-related agencies that develop projects, provides a forum for comprehensive and cooperative planning efforts. AMATS establishes the priorities for federally-funded transportation improvements in the Anchorage and Chugiak-Eagle River areas.

In addition, there are several other organizations that will be involved in implementing various aspects of the Plan:

- Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation
- Alaska Department of Transportation and Public Facilities
- Alaska Railroad Corporation
- Alaska State Department of Fish and Game
- Anchorage School District
- Bureau of Land Management
- MOA Department of Community Planning and Development
- MOA Department of Property and Facility Management
- MOA Department of Public Works
- MOA Department of Public Transportation
- MOA Heritage Land Bank
- Private consultants, contractors and developers
- Trail user and other advocacy groups
- Utility companies

4. Trail Priorities

The Plan contains recommended priorities for construction for each of the different types of trails, such as multi-use paved and unpaved trails, snowmobile trails, and others. While each of these trails is very important, funding for construction is limited. As a part of the process for determining funding priorities, the Trails Plan Review Group (see Chapter 10 for a discussion of the process and the list of priorities) developed a more limited number of funding priorities

II. STUDY AREA

The area covered by the Areawide Trails Plan includes the entire Municipality of Anchorage (see Figure 1.2). Portions of Chugach State Park and Chugach National Forest, both of which contain extensive recreational trail systems and are covered by their own master plans, are within the Municipality. The Areawide Trails Plan acknowledges these efforts and complements them by identifying important trail linkages.

This Plan does not attempt to fully address trail systems within individual park units such as Point Campbell/Kincaid Park, Beach Lake Park, Bird Creek Regional Park, or Far North Bicentennial Park. Planning of trails within those areas is done as an element of each area's overall park planning process. However, connections to these parks are shown on the maps, and maps of trails in some of these units are included in this Plan.

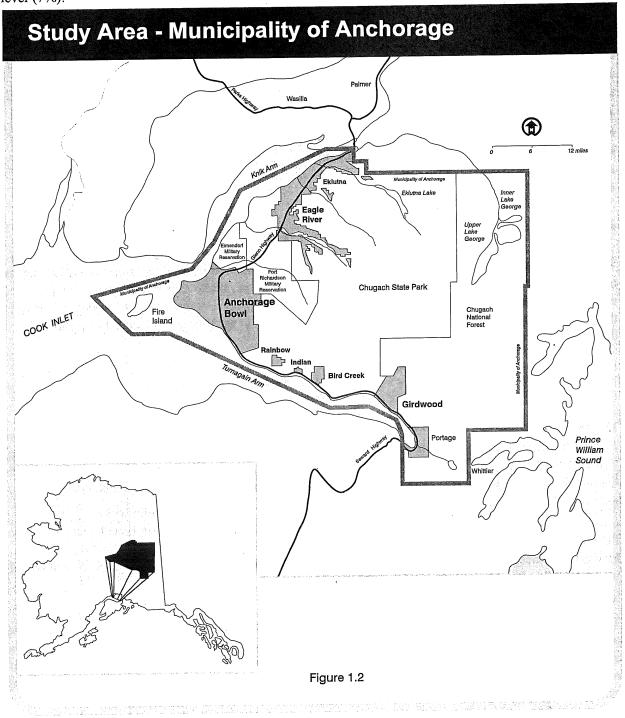
A. POPULATION OF THE STUDY AREA

The population of the Municipality of Anchorage has increased from 206,748 persons in 1983 to 250,006 persons in 1994 (MOA, 1994). The population of the study area in the year 2010 is projected to be approximately 265,439 persons (ISER, August 1994). This would represent an increase of almost 30 percent over 1983. A large percentage of this increase is projected to occur in areas of Anchorage where the existing trail system is inadequate, such as the southeast Bowl areas and Chugiak-Eagle River.

B. STUDY AREA CHARACTERISTICS

Anchorage trail needs of the 1990's vary greatly from those of Anchorage in the early 1900's. Anchorage trails must address the needs of a culturally diverse community and the problems and opportunities presented by this diversity.

Anchorage presents a broad spectrum of income levels. While Anchorage has a personal income level that is relatively high compared to the national average, it still has a sizable population that lives below the poverty level (7%).



Some households in parts of Anchorage lack automobiles. Lack of an automobile can make shopping, job commuting, and recreating difficult in a city with significant sprawl, as is exhibited by Anchorage. The number of households without automobiles has increased from 5.3 percent in 1980 to 6.2 percent in 1990.

In addition to this, the transit system in Anchorage is limited in both the areas that it serves and the number of buses that are available for use. However, there is a greater need for transit than is presently available due to the cost of provision of the service.

Anchorage has a generally young population compared to the rest of the United States. This may mean an increased interest in active recreation needs. The public opinion survey conducted as a part of this plan indicated that the largest segment of the population that pursued active recreational interests were between the ages 30 and 44. Also those between 20 and 29 tended to use alternative means of transportation. This may place added need for a trail system that connects to mass transit, provides for commuter needs, and addresses a diverse active recreation interest.

A large population in child-bearing years may also suggest a need to address the transportation needs of a growing youth population in the future. This places an emphasis on the need to address connections to schools and recreation areas.

III. PUBLIC SURVEY

As a part of the public participation process a random telephone survey of 409 households in the Anchorage Bowl, Chugiak-Eagle River and Turnagain Arm was conducted by an independent research firm in February of 1993. (See Appendix 2, Public Information Survey Form). The purpose of the survey was to determine public concerns and garner suggestions about trails in the Municipality of Anchorage. The survey included consideration of trail use within the Municipality of Anchorage, including lands within Chugach State Park.

The survey revealed that most residents feel very fortunate to have a well-developed trail system in the Anchorage Bowl. At the same time, respondents expressed serious concerns about safety, user conflicts, maintenance, unleashed dogs and crime. Most respondents favored expansion of the trail system and many listed specific projects for consideration by the city.

The majority of households surveyed thought the trails in the Anchorage bowl were "good" in terms of cleanliness and convenience of location. However, high negative responses were received regarding personal safety and the pavement condition of the trails.

Seventy-eight percent of the households surveyed included at least one member who had used trails in 1992, with most trips beginning in northeast and northwest Anchorage. Most of these trips were for recreation and fitness purposes, but 12 percent of those households surveyed included at least one member who had traveled to work on trails.

Walking for pleasure was by far the most frequent summer use of trails and 76 percent had biked on paved trails within the municipality. These groups voiced the highest concern for the quality of the trails. Cross-country skiing was the most frequent winter activity among the 43 percent of households surveyed that used trails in winter. Walking and jogging were the next most frequent type of winter trail use. Table 1 summarizes findings from the public survey.

Respondents also expressed concerns about safety related to user conflicts, such as collisions with other users, and crime. This was especially true in the north, south, and east Anchorage Bowl. Thirty-four percent of those surveyed said that they had experienced conflicts with other trail users, including bikers, rollerbladers, or unleashed dogs. There were many complaints about conflicts between motorized and non-motorized users. To a lesser degree, some were concerned about criminals or intoxicated persons.

Users in south Anchorage and, to a lesser degree, those in Chugiak-Eagle River rated convenient access to trails as high, indicating the need for better and more convenient access. Ninety-two percent of those polled have a trail within five miles of their home and 62 percent have a trail within one mile of their home.

Table 1.1 Participation in Trail Use by Household						
Summer Activity	%	Winter Activity	%			
Walking for Pleasure	78.7	Cross-country Skiing	43.0			
Biking (Paved Trails)	76.2	Walking for Pleasure	38.9			
Hiking	40.0	Jogging/Running	13.3			
Biking (Unpaved Trails)	39.1	Dog Walking	11.7			
Jogging/Running	30.8	Snowmobiles/ATV	9.5			
Dog Walking	24.4	Snowshoeing	5.7			
Interpretive	21.9	Ski-joring	2.5			
Rollerblading	18.1	Dog Mushing	1.0			
Off-Road Vehicle	8.9	Equestrian	0.9			
Canoeing/Kayaking	7.0	Roller Skiing	1.9			
Equestrian	1.6					

Of those surveyed, there was a slight preference for improving trails over expanding the trail system. Twenty-seven percent thought the trails should be expanded and/or connected to be closer to their homes or to enable them to make longer commuting trips around town. Sixty-seven percent indicated they were willing to pay higher taxes to expand the trail system.

IV. GOALS, OBJECTIVES, POLICIES AND PROCEDURES

A. GOAL

The goal of the Areawide Trails Plan is to establish a comprehensive trail system that has the following benefits:

- serves as a basic component of a comprehensive supplemental transportation system for use by all citizens;
- provides safe, convenient, year-round access to transit, schools, shops, major employment centers, historical facilities, and parks and recreational facilities;
- strengthens the sense of community and neighborhood by linking neighborhoods and increasing the opportunity for people to interact;
- provides recreation for people of all ages, abilities, and financial status;
- provides new opportunities for outdoor education;
- enhances the visual quality of the Municipality;
- improves air quality;
- reduces crime by bringing responsible recreationalists into an area; and
- preserves important wildlife habitats and migration corridors through public education efforts at trail heads or information kiosks.

B. OBJECTIVES

1. Administrative Objectives

- a. Establish a Trails Oversight Committee responsible for overall coordination and implementation of the Areawide Trails Plan. This group would review trail design documents, resolve policies and procedures for trail users, including use conflicts, and establish user fees, where appropriate.
- b. Re-evaluate the Areawide Trails Plan every three years. If there are no significant deviations from the assumptions or conditions anticipated in this Plan, a complete revision of the Plan is not required. However, if major changes are noted in this re-evaluation, a complete revision of the Plan is warranted.
- c. Establish a campaign to inform and educate the public on the benefits and uses of trails.

2. Policy Objectives

- a. Consider trails to be integral to the Municipality of Anchorage transportation network.
- b. Promote construction of trails coincident with the upgrade or construction of a roadway where a trail is required, provided that such construction or upgrade does not eliminate or materially denigrate the usability of improvements on adjoining private property designed to comply with or meet the requirements of standards of the American with Disabilities Act, unless agreed to by the private property owner or approved by court order.
- c. Accept trail activities as legitimate uses within a road right-of-way and include such use during the planning, budgeting, and design for future road projects, particularly during right-of-way acquisition.
- d. Require that a trail easement be dedicated if a proposed private or public subdivision plat includes a trail designated in the Areawide Trails Plan that trail and is not shown in a right-of-way.
- e. Recognize the legitimacy of all trail users and establish priorities of use if conflicts arise.

3. Land Use Objectives

- a. Provide for the location of trails designated in the Areawide Trails Plan when dedicating creek maintenance, sewer, drainage, and stream protection easements.
- b. Identify utility easements within which trails could be developed.

4. Design Objectives

- a. Design trails used for transportation to meet the Americans with Disabilities Act Accessibility Guidelines (ADAAG).
- b. Determine an appropriate "challenge level" for recreational lands throughout the municipality, based on the U.S. Forest Service "Recreation Opportunity Spectrum." Determine the design standard for disabilities appropriate to each challenge level.
- c. Examine and, if necessary, amend the minimum right-of-way widths recommended in the Design Criteria Manual to ensure they provide enough room for trails, sidewalks, slopes, snow storage, and setbacks.
- d. Provide trail lighting, except for natural trails.

C. POLICIES

The following policy statements are intended to supplement the goals and policies of the Anchorage Bowl Comprehensive Development Plan, the Chugiak-Eagle River Comprehensive Plan, the Turnagain Arm Comprehensive Plan, the Girdwood Area Plan, and the goals of the Areawide Trails Plan. They will help set a course of action to implement the recommendations in this Plan.

Policy Statement No. 1: The Department of Community Planning and Development, in cooperation with other municipal, state and federal departments, shall be the lead agency for trails planning. The Department of Cultural and Recreational Services shall be the lead agency for trail implementation in parks and greenbelts. The Department of Public Works shall be the lead agency for trail implementation in Municipal road rights-of-way. The State of Alaska Department of Transportation and Public Facilities shall be the lead agency for trail implementation in State rights-of-way.

Policy Statement No. 2: Trails shall be considered integral to the Municipality of Anchorage transportation network and shall be provided to encourage convenient, healthful means of transportation as an alternative to automobile use.

Policy Statement No. 3: The Municipality of Anchorage shall provide a wide range of trail opportunities to accommodate varying activities, abilities, and users.

Policy Statement No. 4: The trail system should be geographically distributed to provide safe and convenient access to a maximum number of municipal residents.

Policy Statement No. 5: Community involvement and input shall be actively solicited to ensure a responsive and representative trail program and to ensure that trails are sited to provide maximum user benefit with a minimum of community disturbance.

Policy Statement No. 6: The municipal park and greenbelt system should facilitate development of an integrated trail system where it is appropriate to provide trail linkages between neighborhoods, school and park sites, and major areas of public activity.

Policy Statement No. 7: The Municipality of Anchorage shall actively pursue the dedication of rights-of-way and easements to facilitate access to, and continuity within, the system of trails, parks, greenbelts, and open spaces.

Policy Statement No. 8: In the subdivision process the Municipality shall require provision for trails and walkways, including direct access to adjoining trails when those trails are a part of this Plan and are not located in a dedicated easement or right-of-way.

Policy Statement No. 9: The Municipality shall develop a safe, healthy environment for trail activities by:

- Requiring separation from motorized traffic on existing roadways for pedestrians where appropriate.
- Establishing maximum separation of un-interpretive trail segments from moving traffic within new roadway facilities or improvements.
- Encouraging internal pedestrian circulation systems that minimize street crossings.
- Encouraging internal pedestrian circulation systems in commercial-retail districts.
- Providing crosswalks with signals wherever warranted.
- Encouraging the development of grade-separated street crossings (for example, overpasses or underpasses) where warranted by high trail user flow or other safety considerations.

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• Providing artificial lighting along high use and poorly lit trail corridors and at hazardous street crossings where street lighting is inadequate.

- Accommodating those with disabilities by complying with the requirements of the Americans with Disabilities Act as a minimum.
- Giving special consideration to potential pedestrian and bicycle problems in school areas.
- Prohibiting road snow from being deposited on trails, except for temporary storage.
- Encouraging cooperation between bicyclists and drivers to share the roadways.

Policy Statement No. 10: Roadway planning and design shall, within reason, provide adequate rights-of-way to accommodate transit facilities, trail corridors, and landscaping, and to minimize air and noise pollution on adjacent properties.

Policy Statement No. 11: Park and Ride lots and other transit facilities shall be linked with adjacent neighborhoods and traffic generators by trails and/or pedestrian walkways.

Policy Statement No. 12: The Municipality shall provide secure bicycle racks at parks, Park and Ride lots, and other major public facilities, as funding permits.

Policy Statement No. 13: The Municipality shall encourage and assist in the provision of benches, drinking fountains, restrooms, litter receptacles, information kiosks, rain shelters, and patterned sidewalks in order to encourage pedestrian use. Arcades and passageways through buildings are particularly helpful in cold weather. The design of such facilities shall be compatible with adjacent land uses.

Policy Statement No. 14: Ramp curbing with minimal lips shall be provided at street crossings in order to facilitate the use of wheelchairs, bicycles and strollers.

Policy Statement No. 15: The Municipality shall eliminate or minimize obstructions within trail corridors.

Policy Statement No. 16: Designated, existing trails that are lost to development or other uses shall be replaced with similar quality trails to maintain the diversity and accessibility of the trail system.

Policy Statement No. 17: The Municipality shall provide continuing trail maintenance to protect the personal security of all trail users.

Policy Statement No. 18: Rights-of-way and easements established by other government agencies for other purposes shall not be abandoned unless the responsible agency first consults with the Department of Community Planning and Development to determine that they are not useful as trail corridors.

Policy Statement No. 19: The Municipal Department of Community Planning and Development should develop and keep current a set of large scale maps that identify recommended trail corridors.

Policy Statement No. 20: Trails and walkways shall be included from the very beginning of a new road project, except for projects that strictly involve pavement overlay or rehabilitation, particularly when the right-of-way issue is being settled.

Policy Statement No. 21: Where a trail is to be provided along a roadway that is to be upgraded or constructed, the trail shall be considered as an integral part of the transportation improvement and shall be constructed at the same time as the upgrade or construction. Costs of acquisition of rights-of-way and trail construction shall be integral to the cost estimate of the roadway.

Policy Statement No. 22: Public partnerships with individuals and user groups for trail maintenance shall be encouraged to promote cost savings to the Municipality and to enhance public commitment to trails.

V. CRITERIA FOR PLANNING TRAILS

In support of these goals, objectives, policies and public survey results a set of criteria were examined in the development of this areawide trails planning effort. The criteria include the following and are discussed in detail in Appendix 3.

- Trail Connections trails need to be continuous to function as an adequate transportation system;
- Traffic Generators consider where trail uses begin and end;
- Road Development developed trails in conjunction with road improvements;
- Coordination and Cooperation link public, private and/or voluntary resources;
- Population Characteristics recognize that existing and projected uses are different throughout the community and are subject to changes;
- Different Skill Levels or Capabilities recognize the difference in trail use experience and age of users;
- Environmental Concerns evaluate the natural and man-made environments in trail corridor selection;
- Cost & Cost Effectiveness current and anticipated construction and operating costs and their funding sources are important;
- Multiple Use a single trail can accommodate multiple purpose and users;
- Non Dedicated Trails trails do not legally exist unless they are dedicated as part of a planning or platting process;
- Safety personnel safety and safety hazards should be anticipated and reduced;
- Land Use and Management Authority Conflicts recognize the potential for trail conflict with neighboring land uses and between managing authorities;
- Road and Railroad Crossings locate trails as to minimize road and railroad crossings;
- Accessibility trails should be designed to recognize the American with Disabilities Act and
 planned with the understanding that all trail need not be designed equal to address the need for
 different challenge levels; and
- Compatibility of Trail Uses compatibility between multiple uses on the same trail is another improvement criteria for trail planning.

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CHAPTER 2 — ANCHORAGE BOWL TRAILS

The Anchorage Bowl trail system consists of dedicated trails located within the area south of Fort Richardson and north of the Muldoon Road to Cook Inlet, Chugach State Park, and Potter Section House. This chapter will discuss each type of trail use as it is found within these boundaries. General trail use issues that are common throughout the entire Municipality are discussed in Chapter 6.

I. PEDESTRIAN AND RELATED USES

Pedestrian use of trails exceeds that of any other type of use. In the 1993 survey performed for this Plan, the greatest number of households indicated that they walk the trails for pleasure, to get to work, and to exercise the family pet.

"Walkable routes" are important components of Anchorage's transportation program. These routes are important as: (1) routes to and from schools; (2) ties within neighborhoods; (3) connections to transit stops and Park-and-Ride lots; (4) components of parks and greenbelts; (5) connections to commercial and retail centers; and (6) opportunities to walk for pleasure.

A. EXISTING TRAILS AND FACILITIES

Most pedestrian facilities are in the urban portion of the Anchorage Bowl. The Central Business District has an excellent system of sidewalks, as do many of Anchorage's newer subdivisions. These sidewalk systems provide linkages to transit, commercial areas, and institutions.

Though not specifically a trail, the "Downtown Anchorage Walking Tour" provides a documented and well-illustrated portrayal of Anchorage's past. The tour features photographs and anecdotes that are designed to bring the city's history to life.

The greenbelt trail system, comprised of the Chester Creek Greenbelt trail, the Tony Knowles Coastal Trail, the Campbell Creek Greenbelt trail, and the Fish Creek Greenbelt trail, provides important pedestrian linkages to schools, recreation areas, and areas of commerce. These trails are also used significantly as pleasurable walking routes.

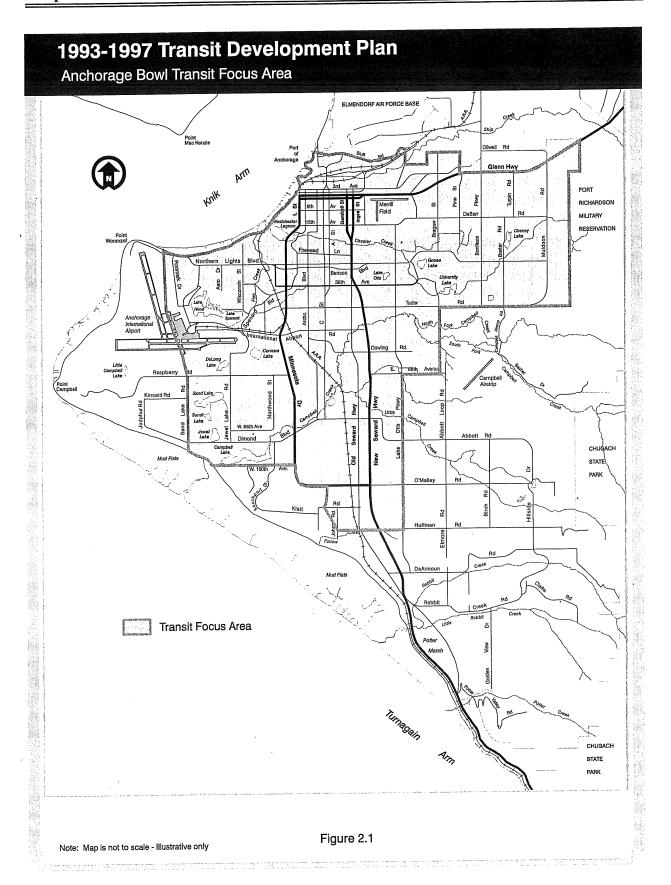
B. DEMAND ANALYSIS

Because there is intensive use of pedestrian trails, it is vital to provide for pedestrian safety. Over six percent of Anchorage households have no automobiles and must rely on other modes of transportation, including safe pedestrian facilities. Neighborhoods with the highest number of households without automobiles include Fairview, Downtown, Midtown, and East Anchorage.

The Department of Public Transportation defined a Transit Focus Area to determine needs for access to transit routes in the Bowl (see Figure 2.1). This study included an analysis of frequently used transit stops and areas where pedestrian or vehicular accidents occurred in 1991. As defined in the "Pedestrian Accessibility and Mobility Assessment" (draft, September 1992), the Transit Focus Area should include Downtown, Midtown, the primary transit corridors of the central portions of West and East Northern Lights Boulevard, and the "C" Street Corridor extending to South Anchorage. The study recommended concentrating transit system improvements in these corridors and in Carbon Monoxide (CO) Non-Attainment Areas.

C. ISSUES

Pedestrian trail use issues relative to the Anchorage Bowl are the same as those for pedestrian facilities throughout the Municipality. These issues, which include provision of pedestrian facilities, separation from street, lack of adequate rights-of-way, inadequate maintenance, and access to transit facilities are discussed in Chapter 6.



D. RECOMMENDATIONS

Priorities for construction of pedestrian facilities should include:

- Facilities for walking for pleasure
- Connections to bus stops
- · School walkways
- Walkways or sidewalks in areas in which greater than 10% of households are without automobiles, and residential areas with densities greater than eight dwelling units per acre. Areas meeting these criteria include parts of Spenard and the area of East Anchorage to the east of Muldoon Road and north of DeBarr Road
- · All commercial areas
- All other areas identified in the "Transit Focus Area"
- Midtown Anchorage
- Connecting the existing Potter Marsh boardwalk with the Old Seward Highway and extending it south

II. BICYCLE USES

Over the years, bicycle use has grown in popularity, not only as a form of recreation, but as a serious mode of transportation. In Anchorage, the enthusiasm for biking is evidenced by a large segment of the population utilizing bicycles for transportation, as well as recreation.

There are two broad types of bicycle trips, utilitarian and recreational. For the utilitarian cyclist, the primary objective is reaching a specific destination quickly with few interruptions. The bicycle is merely a vehicle for making the trip, although secondary objectives such as exercise and pleasure may influence the choice of vehicle. For these riders, bike routes are planned on many of the primary roadways. A noticeable portion of the implementation plan contained in the Anchorage Congestion Management Program, adopted in 1994, includes strategies to encourage bicycle commuter use of the Anchorage trail system and roadway network in the summer.

On the other hand, a bicyclist on a recreational trip is riding for pleasure and the destination may be of lesser importance. For the vast majority of trips, these purposes are not absolute or mutually exclusive.

Others bicyclists ride mountain bicycles on unpaved trails. Many of the natural trails, discussed below, are used for mountain bicycles.

A. EXISTING TRAILS AND FACILITIES

Prior to 1973, there were only 3 miles of paved trails available for biking in Anchorage. Today, there are approximately 180 miles of multi-use paved trails used for biking within the Anchorage Bowl. These trails are located within parks and greenbelts and along road rights-of-way.

B. DEMAND ANALYSIS

Bicycling has enjoyed high participation rates for many years in Anchorage. Of the households surveyed for this Plan, 76 percent indicated that they use Anchorage trails for bicycling. Twelve percent of those households surveyed in 1993 included a household member who commuted to work using trails in 1992.

C. ISSUES

A number of missing trail links makes commuting by bicycle difficult. This affects even those trying to connect to local routes. These missing links should be completed before new routes are developed. These links include the following:

- Campbell Creek Trail extensions
- Chester Creek Trail near Cheney Lake
- Chester Creek Trail Connections
- Coastal Trail extension from Kincaid to Potter Marsh
- Fish Creek from Minnesota to the Coastal Trail
- Ship Creek Trail

A new bike trail/greenway has been proposed, running north/south, through the center of the Anchorage Bowl. This trail would connect from Town Square in downtown, through Midtown to the Loussac Library and Midtown Park, connecting from there to the Dimond commercial district and then continuing south. This trail would link the Bowl's major commercial, workplace and civic districts with the existing primary greenway bicycle trails. The trail would make it possible for residents and visitors to ride comfortably and safely, walk, rollerblade or even ski to work, to restaurants, to the library, or to meet a friend for a cup of coffee.

Another proposed trail is the Urban Core Loop Trail, which would consist of the Chester Creek trail on the south, the Coastal Trail on the west, the planned Ship Creek trail on the north, and a new separated trail traversing through the heart of Fairview along Karluk Street. This trail would integrate the Fairview neighborhood with other parts of the urban core and reflects the neighborhood's desire for a higher quality of pedestrian infrastructure.

Many trail sections and, in some instances, entire routes are in need of improvement, which forces users onto the road. Examples include the "C" Street trail and portions of the Chester Creek trail. Maintenance of the "C" Street trail is currently the responsibility of the Municipality. The existing portions of the trail may need to be repaired prior to the reconstruction of "C" Street, which is several years away.

Trails must be cleaned frequently in order to encourage use. Broken glass and dirt from winter are disincentives to use. Additionally, snow is often deposited on trails and sidewalks adjacent to many arterial roadways until it can be hauled away. This temporary storage hinders the use of the trails and sidewalks until such time as the snow is removed. The ability to haul snow immediately after it is plowed is affected by maintenance budgets and the availability of snow haul operators.

Commuters find that trails are dangerously punctuated by driveways, require slow travel, are poorly maintained, and are often inappropriately designed, making commuter travel difficult.

Anchorage Municipal Code, Title 9, Chapter 9.38 contains regulations affecting bicycle travel. These include requiring a bicyclist to obey all official traffic control devices, stopping prior to entering a roadway or street and yielding to traffic, and not riding bicycles on a sidewalk within a business district.

High-speed bicycle commuter routes can be provided either by striping a bicycle lane on a roadway or by the use of signage indicating roadway use by bicyclists.

D. RECOMMENDATIONS

1. Priorities

Priorities for construction of trails primarily for bicycle use and other recreation should be:

- Campbell Creek Trail completion
- Chester Creek Trail completion
- Coastal Trail completion
- DeBarr Road to Chester Creek via Sitka Street Park
- Fish Creek from Minnesota to W. Northern Lights
- Ship Creek Trail
- North-South Trail (Town Square to Midtown to South Anchorage)

2. Commuter Routes

A system of "high speed" bicycle commuter routes located approximately one mile apart and traveling in parallel directions should be provided. The routes for traveling east to west should be:

- Glenn Highway from Eagle River to Boniface, then to Mountain View Drive, then to 5th avenue
- Northern Lights and Benson
- Raspberry Road
- Tudor Road from Muldoon to Fish Creek

The routes for traveling north to south should be:

- A-C couplet
- Arctic Boulevard
- Boniface Parkway

- Lake Otis Parkway
- Muldoon Road
- Seward Highway frontage road

3. Mountain Bikes

Mountain bicycling is a popular form of trail use and provides good commuting possibilities and recreation. However, mountain bicycling should be prohibited on unpaved trails during spring "break-up" and other periods of wet or muddy trail conditions in order to prevent damage to the trail surface. It should also be prohibited on cross-country ski trails and dog-mushing trails during the winter season to prevent damage to the maintained trail surface.

III. RUNNING/JOGGING/PHYSICAL FITNESS USES

Anchorage offers an excellent network of trails for running and jogging. This network includes paved trails in greenbelts and along roadways, and natural trails offering the full spectrum of challenge levels from easy jogs to strenuous hilly runs.

A. EXISTING TRAILS

Trails for running and jogging use can be described under the following broad categories:

1. Multi-Used Paved Trails

The Chester Creek Greenbelt Trail and the Coastal Trail probably attract more runners and joggers than any other paved trails in Anchorage. This is understandable as they are easily accessible to downtown, well separated from roadways, and have very pleasant environments. Other major trails that attract a number of runners and joggers include Campbell Creek Trail, Jewel Lake Road, "C" Street, Tudor Road, Lake Otis Parkway, Abbott Road, Birch Road, and the Tony Knowles Coastal Trail.

2. Natural Trail Users

This category includes any unpaved trail that is in a park, greenbelt, open space, or other undeveloped area within the Anchorage Bowl.

3. Road or Street Routes

Many runners and joggers use the local road system for their running routes. Some of this use is by choice while others use the roads due to the lack of a better alternative. Several roads seem to regularly attract runners. These include Campbell Airstrip Road (in Far North Bicentennial Park), West Northern Lights Boulevard to Point Woronzof and on to Clitheroe, and the Glenn Highway Frontage Road. Most roads in the Hillside area do not have sidewalks or shoulders, which forces many people to run along the edge of the paved roadway.

4. Fitness Trail Users

Existing fitness trails within the Anchorage Bowl include facilities at Arnold L. Muldoon Park, Huffman Park, Davis Park, Sand Lake Park, Forsythe Park, and Section 16 Park. Additionally, there are a fitness "courts" in Johns Park, along the Coastal Trail at Westchester Lagoon, and along Fish Creek, and Campbell Creek. There are also stations at Providence Hospital, British Petroleum, and the University of Alaska Anchorage campus, though the Municipality does not own these facilities. These trails are not lighted.

B. DEMAND ANALYSIS

Surveys conducted in Anchorage over the past 15 years reveal that running and jogging experience high participation rates. According to the latest survey (1993), approximately one household in every three includes one or more members who consider themselves to be joggers or runners and have used Anchorage trails for that purpose. One out of every six of those households surveyed reported trail use for jogging in the winter.

Anchorage also enjoys a very high level of resident participation in local running events. An event is scheduled almost every weekend from April through September with some events attracting over 3,000 participants.

C. ISSUES

There has always been a lack of safe, maintained winter running trails in the Anchorage area. In response to this need, the Municipality of Anchorage began in 1983 to maintain 21 miles of trail for winter running and pedestrian use. The Chester Creek Trail and the Coastal Trail receive a substantial amount of use and, while they are groomed for cross-country skiing, they are also packed for winter running.

D. RECOMMENDATIONS

Priorities for development of running and jogging trails should include the following:

Centennial Park

Midtown Park

Eastchester Park

Russian Jack Springs Park

Hillside Park

Storck Park

Kincaid Park

IV. INTERPRETIVE TRAILS

Interpretive trails educate the public about the natural world and can also display cultural and historical information. Interpretive trails help increase public sensitivity to the different habitats and ecosystems that support an array of wildlife within the Anchorage Bowl.

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A. EXISTING TRAILS AND FACILITIES

The Municipality of Anchorage completed an interpretive trail with a boardwalk at Baxter Bog Park in 1984, with supplemental work done in 1991.

Earthquake Park has interpretive displays relating to the 1964 earthquake in Anchorage. This area receives a substantial number of visitors, both tourists and residents, every year. There are plans to update and enlarge the interpretive facilities in Earthquake Park.

There are interpretive facilities at Northwood Park describing the function of wetlands, water quality, and storm water run-off control, such as sedimentation basins.

Between Valley of the Moon Park and Westchester Lagoon along Chester Creek are graphic displays that explain the plants and animals found along the creek and describe their life cycles.

The boardwalk located at Potter Marsh provides an excellent opportunity to view fish, birds and other marsh wildlife. There are several graphics displays along the boardwalk that feature interpretive material.

The Municipality of Anchorage, together with significant contributions from private individuals and corporations, purchased the Business Park wetlands. The wetlands provide a well-used waterfowl nesting area in Midtown and the area is signed to inform visitors about wetland functions.

B. DEMAND ANALYSIS

The Potter Marsh boardwalk receives approximately 68,000 visitors a year. While there have not been user counts on other areas with interpretive displays, the number of cars and tour buses seen in the parking lots on a nice summer day indicate that these areas are also receiving substantial use. In a community like Anchorage where the outdoors attracts large numbers of residents and out-of-state tourists, it is very important to offer facilities that highlight features of Anchorage's natural environment.

C. ISSUES

Interpretive displays should be designed and constructed for many of the more popular trails in the Bowl.

D. RECOMMENDATIONS

- 1. The Municipality of Anchorage, in conjunction with other local, state, and federal agencies, should establish a system of interpretive trails that provide access to natural features in a way that minimizes the adverse impacts of human presence.
- 2. Potential locations for interpretive displays should include the following:
 - Bentzen Lake Park wetland
 - Chester Creek Greenbelt riparian habitat (Tikishla Park)
 - Coastal Trail Coastal resources
 - Connors Bog bog
 - Johns Park riparian habitat

- Kincaid/Point Campbell Park ancient delta formation
- Little Rabbit Creek Bluff Park views, riparian habitat
- Oceanview Bluff Park views, tidal marsh, distant vistas, wetland interpretation
- Russian Jack Springs Park springs, riparian habitat
- Section 36 Mountain hemlock stand

V. SNOWMOBILES AND OTHER MOTORIZED TRAIL USERS

Snowmobiling and summer motorized recreation are important activities for many Anchorage residents.

A. EXISTING TRAILS AND FACILITIES

Both organized and unorganized summer ORV and ATV use are allowed at the southeast corner of Point Campbell/Kincaid Park. Snowmobile trails are available in the Powerline Pass area in Chugach State Park, accessed through the Upper Huffman corridor. Snowmobile trails are also available on Fort Richardson, however, these trails are open primarily to military members and their guests and dependents. Members of the general public may use the trails after attending training and upon signing in at the Post law enforcement desk.

B. DEMAND ANALYSIS

Of the households surveyed in 1993 for this Plan, 9.5 percent indicated they have used trails for snowmobiling. Surveys of snowmobile owners and dealers conducted by the Anchorage Snowmobile Club in 1993 and 1994 indicated that there are approximately 28,000 snowmobiles in Anchorage. The Anchorage Snowmobile Club has more than 600 members.

Approximately 8.9 percent of those households surveyed included members who had ridden motorized vehicles on trails during the summer.

C. ISSUES

There is currently no area in the urbanized portion of the Anchorage Bowl available for use by snowmobilers. To remedy this lack of family riding area in the Anchorage Bowl, the Anchorage Snowmobile Club has proposed the golf course or the 70 acre tract on the Minnesota-O'Malley curve as possible snowmobile riding sites. As such an area would possibly be adjacent to residential uses, the opinions of nearby residents would need to be addressed.

The present parking lot at Upper Huffman that serves snowmobilers using Powerline Pass in Chugach State Park is inadequate to hold the number of snowmobilers requiring access. A second parking lot needs to be added or the present parking lot enlarged to accommodate the snowmobilers wishing to access the open riding areas within Chugach State Park. Construction of additional parking would be a State project.

The lack of fencing or physical restrictions over much of Fort Richardson allows illegal access from Eagle River to Beach Lake Park, as well as to other non-designated trails, and jeopardizes continued use, even for authorized personnel.

Snowmobilers have requested the South Post area of Fort Richardson for snowmobile recreation purposes, should it become available. Such designation at this point would be premature. At such time as the disposition of this land at Fort Richardson is decided, the need for snowmobile routes and use areas in the south Post area should be addressed. Such action must be done in conformance with the North Anchorage Land Agreement (NALA) and should be negotiated with affected parties, including the State of Alaska, the Municipality of Anchorage, and Eklutna, Inc.

A snowmobile trail from the Anchorage Bowl to Eagle River has been proposed. This trail would start from Centennial Park in the Muldoon area and travel on the east side of the new Glenn Highway within the right-of-way or on military land. In order to create this trail, permission would needed from the State of Alaska Department of Transportation and Public Facilities and the Military. The Department of Cultural and Recreational Services has indicated that Centennial Park in the north Muldoon area may be available as a snowmobile trailhead for this potential trail from Centennial Park to Eagle River.

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Snowmobilers have stated a long-term goal for a trail between Anchorage and the Matanuska -Susitna Borough. This trail is proposed to continue from Eagle River, cross the Glenn Highway to the west side at Eagle River, and continue in the right-of-way of the Glenn Highway to the Matanuska-Susitna Borough.

The Anchorage Snowmobile Club has also proposed a snowmobile trail that would provide a continuous connection from the Glenn Highway area near Muldoon through Army land, connecting to the snowmobile trails in Chugach State Park located at the South Fork of Campbell Creek (Upper Huffman trailhead). This proposal would feature a trailhead connection in the Tudor/Muldoon area. This trail would provide a route for snowmobiles through portions of Far North Bicentennial Park or through the Middle Fork of Campbell Creek, connecting to Chugach State Park near Prospect Heights, and then continuing to the Upper Huffman/South Fork of Campbell Creek area. Issues associated with this proposal include the need for military permission, compliance with the North Anchorage Land Agreement (NALA), resolution of conflicts with other trail users, modification of the Chugach State Park Master Plan, and resolution of conflicts with homeowners living adjacent to any proposed route.

The designation of trails for motorized use within Far North Bicentennial Park would be a significant departure from past use within the park. The park has a multitude of competing interests and uses that would need to be carefully balanced to provide an appropriate and sensitive solution. For example, a trail through Far North Bicentennial Park would conflict with dog mushing trails in the northeast corner of the park. The dog mushing trails would require separated crossings or proper siting to facilitate proper sight distances necessary for the protection of mushers and dog teams. Resolution of such issues is outside the purview of this planning effort and should be addressed at the time an updated master plan is completed for the park.

If the proposed snowmobile trail were to cross Campbell Creek below the canyon in Far North Bicentennial Park, it would require realignment or elimination of a portion of the "Spencer Loop" of the Hillside cross-country ski trails. The affected trail segment currently offers the longest sustained trail climbs in the Anchorage area and is an important component of races held for competition. The Spencer Loop is presently being relocated to accommodate downhill skiing interests.

A snowmobile trail that would travel up the north side of the Campbell Creek Canyon before crossing Campbell Creek would enter Chugach State Park in an area that is closed to motorized uses. This area is one of only a few that are available for individuals looking for a quiet backcountry experience or for cross-country skiing that is not maintained with set track. It is also popular with snowshoers.

A trail from the Glenn Highway to Upper Huffman would have to pass relatively close to housing in the Muldoon area, possibly in the Stuckagain Heights area, and in the Prospect Heights area. Many residents and the Community Councils of the affected areas have voiced opposition to the creation of a snowmobile corridor near their homes.

D. RECOMMENDATIONS

- 1. Investigate creating a snowmobile trail from Centennial Park to the Eagle River on the east side of the Glenn Highway in the right-of-way or on military land.
- 2. Identify and designate, through the Planning and Zoning Commission site selection process, a suitable area in the urbanized section of Anchorage for family-type snowmobile use. The Anchorage golf course and the 70-acre tract on the Minnesota-O'Malley curve are possible sites.
- 3. The Anchorage Snowmobile Club should institute a program of user fees (public-private partnership) to construct and maintain trails. This program should be similar to the cooperative agreement between the Municipality and program instituted by the Anchorage Nordic Skiing Association.

- 4. Priorities for trailhead development should be at the following locations:
 - Centennial Park to Eagle River trail
 - A family and education snowmobile area, and
 - Improved access to Powerline Valley

VI. CROSS-COUNTRY SKI TRAIL USERS

Cross-country skiing is an important recreational activity for many people in Anchorage. Anchorage's cross-country ski trails are among the finest in the nation. The junior programs are highly regarded nationally and many students from Anchorage schools go on to compete successfully on national and international levels. The trails contribute significantly to the local economy by hosting state, national, and international competitions. National and world-class competitions have been held in Anchorage almost every year since the 1970's.

A. EXISTING TRAILS AND FACILITIES

For purposes of illustration, this Plan includes some key parks and their associated trails. This Plan does not address or make trail recommendations within parks unless they are major links to the trail network outside park boundaries. Trail recommendations within parks is the responsibility of the Department of Cultural and Recreational Services through a separate planning process.

The Anchorage Bowl currently has approximately 84 miles (111 km) of maintained cross-country ski trails, of which 13 miles (22.8 km) are lighted for night use (see Figures 2.2, 2.3, 2.4, 2.5, and 2.6). These trails are maintained by a cooperative effort between the Municipality and the Nordic Skiing Association of Anchorage. There are many more kilometers of cross-country ski trails located in parks, greenbelts, and open spaces that are not maintained. Most of the cross-country ski areas located within the Anchorage Bowl municipal park system or in association with educational institutions are identified in Table 2.

The Alaska Biathlon Association also uses the Kincaid ski trails on the west side for their activities. The Kimberly Berg Biathlon Range is approximately 800 feet south of the Kincaid Park Outdoor Center on the Andrew Lekisch trail system. The Association has requested the construction of a 5-kilometer paved training roller loop, for summer roller-ski use, in the vicinity of the range.

B. DEMAND ANALYSIS

The Anchorage population continues to exhibit a high rate of participation in cross-country skiing. Enrollment in youth ski programs has skyrocketed in recent years with the inception of the Junior Nordic League. Participation in this program has increased from 38 children in the 1986-87 season to 639 children in the 1992-93 season.

Participation rates in cross-country skiing remain the highest of all winter recreation activities. Almost half of the Anchorage Bowl households surveyed for this Plan indicated they used trails for skiing last year. According to the Department of Cultural and Recreational Services, visits to two major Anchorage ski areas, Kincaid Park and Russian Jack Springs Park, have risen from 11,588 visits in 1986 to 42,066 visits in 1991. Surveys completed in 1990 and 1991 by the University of Alaska Institute of Social and Economic Research and by Dittman Research indicated that at least 60,000 Anchorage residents cross-country ski at least three times per year on local trails.

C. ISSUES

Anchorage has experienced a significant increase in the use of cross-country ski trails since the advent of new skating techniques and the provision of lighting on a number of ski trails. Lighting of trails should be continued and expanded because of the short number of daylight hours in the winter. Important segments to light include the Hillside Park loops, more of the Chester Creek Greenbelt, and the Tony Knowles Coastal Trail.

Use of ski trails that threaten skiers and result in significant maintenance costs, such as motorized uses and dog sled use, need to be positively addressed. The maintenance of ski trails is heavily dependent upon volunteers and the contributions of the public. Positive separation of these uses from ski trails is important.

The proposed Chugach Mountain Rim Trail appears to have the capacity for considerable usefulness. This trail would traverse the edge of the Bowl area from a saddle below McHugh Peak to Arctic Valley Road at about the 1,500-foot elevation, contouring the entire Front Range of the Chugach in the trees just below timberline for a length of about 21 miles. Most of the southern part of the trail would lie on private land, while the middle section would lie within Chugach State Park. The northern trail section would be almost entirely on the Fort Richardson Military Reservation. Access would be available through existing and proposed trail heads at Upper O'Malley Road, Rabbit Creek Road, Little Rabbit Creek Road, Prospect Heights and Arctic Valley Road. The Chugach Rim Trail would provide the opportunity for an extended ski trip up to 21 miles in length without leaving the Anchorage Bowl.

Another ski trail of importance will be the extension of the Coastal Trail south from Kincaid Park and north from 2nd Avenue. These extensions of the Coastal Trail are discussed in Chapter 5.

Existing Maintained and Lighte	Table 2 d Cross-Coun		n the Anchorage	Bowl
Facility	Approximate Maintained Trail Length		Lighted	
	Miles	Kms.	Miles	Kms.
Kincaid/Point Campbell Park	43	69	6	9.7
Centennial Park	2	3.2	1	1.6
Far North Bicentennial/Hillside Park	11	17.7	3	4.8
Lanie Fleischer Chester Creek Trail	6	9.7	1	1.6
Bartlett High School	2	3.2	1	1.6
Alaska Pacific University	5	8.0	_	-
Tony Knowles Coastal Trail	7	11.3	_	_
University of Alaska, Anchorage	2	3.2	-	_
Russian Jack Park	4.2	6.7	1.8	2.9
TOTAL	82.2	132.0	13.8	22.2

Point Campbell/Kincaid Park Cross-Country Ski Trails

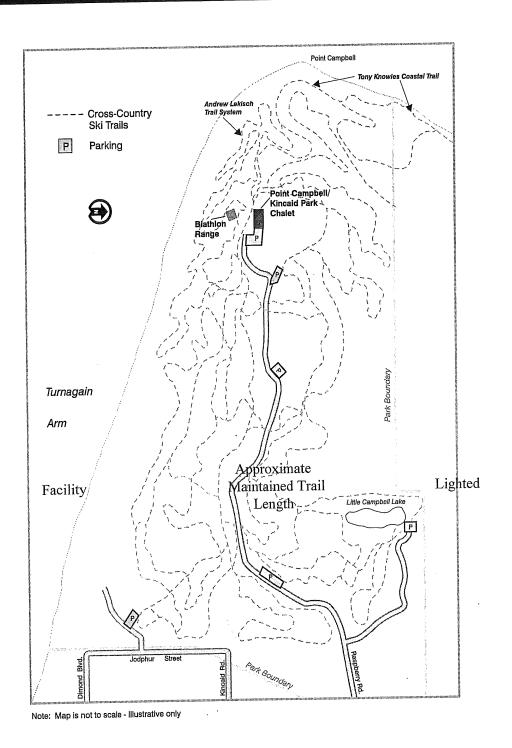
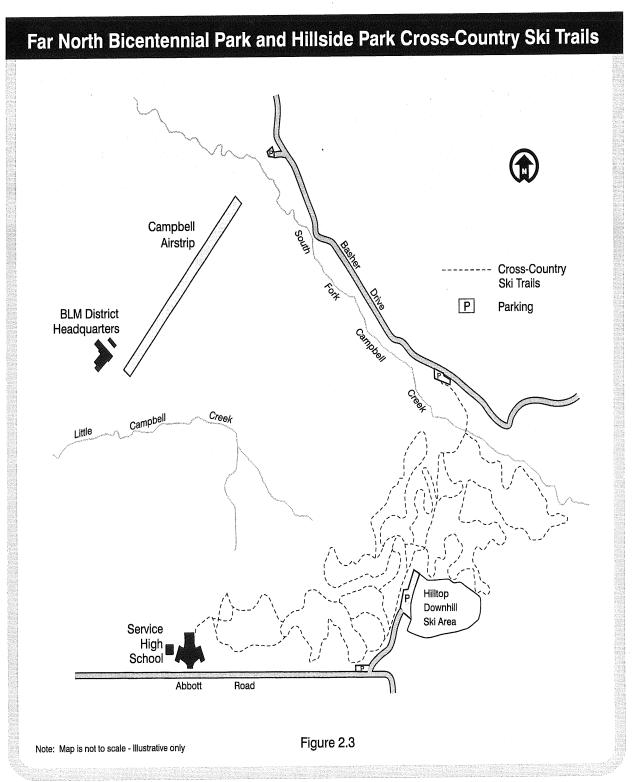


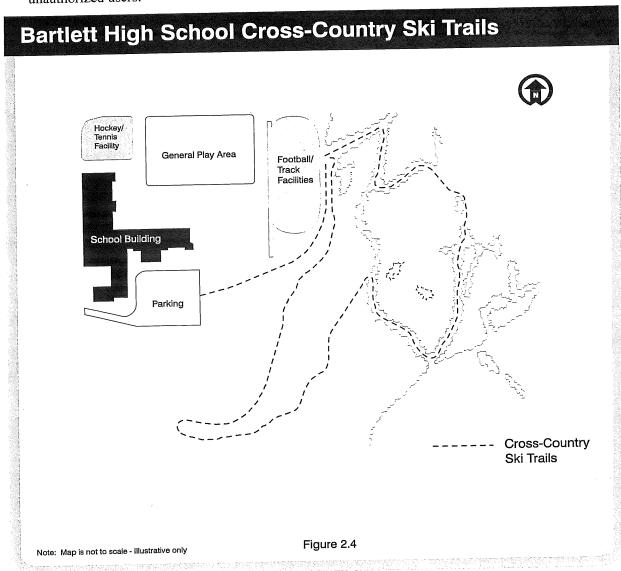
Figure 2.2

Designated cross country ski trails that are eliminated will need to be replaced with similar quality trails in order to maintain the diversity and accessibility of the system, as well as to accommodate increasing public demand. Trails of concern in this regard are those at Bartlett High School and the Alaska Pacific University.

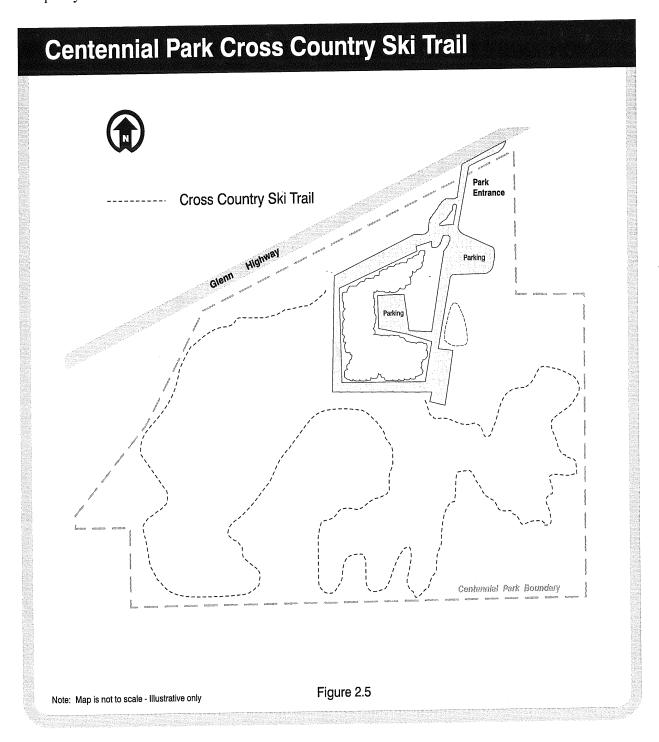


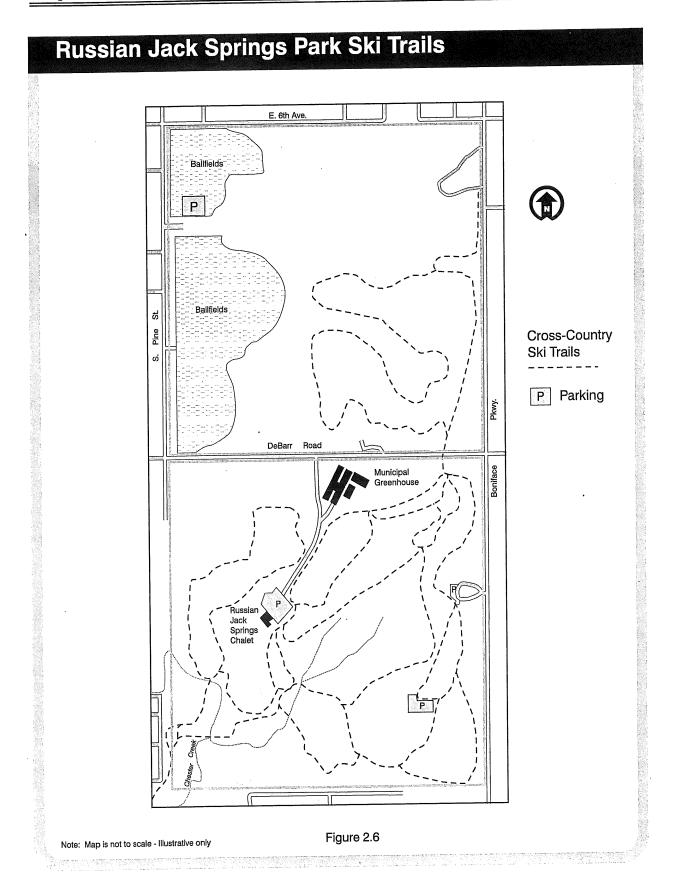
D. RECOMMENDATIONS

- 1. Trail lighting should be provided on additional cross-country ski trails in order to increase their usefulness during the winter months. Additional lighting and trail grooming on trails connecting residential areas to Midtown and Downtown Anchorage have the potential for encouraging commuter use.
- 2. The design and construction of the Chugach Mountain Rim Trail and the extension of the Tony Knowles Coastal Trail should be priorities.
- 3. A 5-kilometer paved training loop, so that roller-skis may be used for summer training, should be provided near the biathlon range.
- 4. No motorized vehicles, sled dog teams, family pets, mountain bikes or people on foot should be allowed on groomed and designated cross-country ski trails in order to maintain their quality during winter months and to avoid unnecessary safety hazards and grooming costs. Acceptable uses of the cross-country ski trails should be indicated through signing at the trail entrances. Groomed cross-country ski trails require permanent physical barriers at trailheads and junctions to prevent trespass by unauthorized users.



- 5. The acquisition of easements across public and private lands should be pursued so that a groomed cross-country ski connection linking the Hillside trail system and the University trail system, through Far North Bicentennial Park to the Tudor overpass, could be completed.
- 6. If existing, designated cross-country ski trails are eliminated, they should be replaced with similar quality trails.





VII. EQUESTRIAN USERS

Historically, horses were used as a major means of transportation to and from settled areas in Alaska. While the use of horses for transportation has decreased, the sport of riding, like many other outdoor participation activities, continues to climb. However, the rapid development and growth of Anchorage have eliminated many of the open spaces that once contained horse trails so that only remnants of the original trails remain. To preserve this traditional activity, efforts should be made to provide unpaved trails for equestrian use so that horseback riding may continue to be a recreational pursuit in Anchorage.

A. EXISTING TRAILS AND FACILITIES

Among the trails most widely used by equestrians in the Hillside area are roadside trails, which are usually located within the road right-of-way along the ditch line. These trails have evolved over time as transportation corridors have developed and alternate trail riding opportunities have been lost as a result of residential development.

A considerable amount of riding takes place along many of the unpaved, residential streets in the Hillside area, with horseback riders weaving their way through the residential areas and subdivisions. Many riders use these smaller, unpaved streets to make a connection with one of the major trail corridors. These corridors must be protected and improved as part of multi-use trail development along major roadways on the Hillside.

Ruth Arcand Park is an important recreational asset to equestrians and it serves as a center for Hillside equestrian activities (see Figure 2.7). This park provides trail riding, a show arena, and other arena facilities.

Additionally, Far North Bicentennial Park is an important component of the Anchorage equestrian trail use system. The park connects to many of the roadside trails mentioned earlier, including the Birch Road trail that is specifically dedicated to equestrian travel. This component of the trail system is used for competitive events, some nationally sanctioned, held by the Alaska Club, Chugach Range Riders, Arctic Fox Trotters, and Alaska Endurance Horse Association.

B. DEMAND ANALYSIS

Equestrian activity is growing in the Bowl, however, most use is concentrated in the Hillside area where zoning allows equestrian facilities and where many private boarding stables exist. Higher participation rates on the Hillside are also a consequence of boarding stables and horse activity being phased out of other areas of the Anchorage Bowl through zoning regulations and development pressures.

C. ISSUES

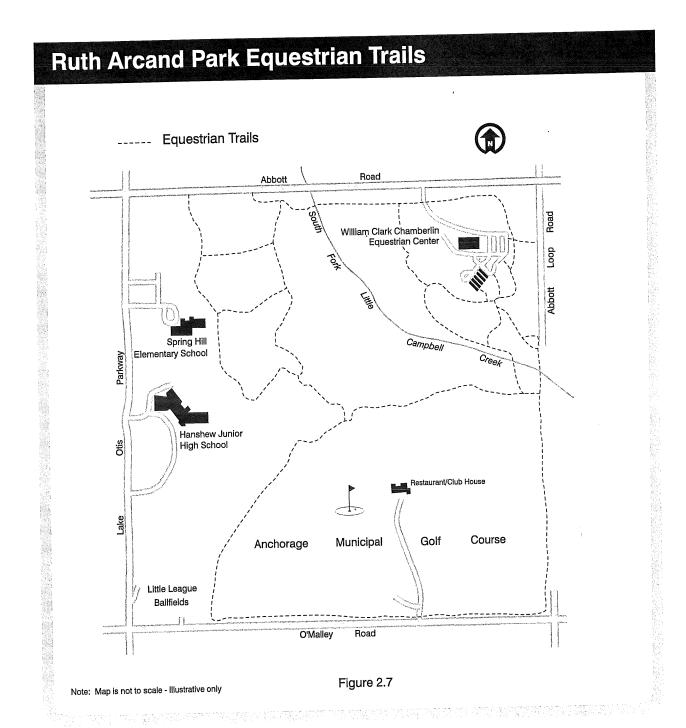
A critical concern to equestrians is a safe connection from Ruth Arcand Park to Far North Bicentennial Park at the corner of Abbott Road and Abbott Loop Road. Far North Bicentennial Park is an important component of the equestrian use network and an updated master plan must be prepared that provides for equestrians within the park.

As the city has grown, equestrian use has been compressed into the Hillside area. This area is developing to the point that primarily road rights-of-way are available to provide for a continuous trail network. This sometimes requires riding in difficult circumstances. Roads in the Hillside area should be developed recognizing the need to accommodate equestrians within the right-of-way. In some circumstances, this may require acquiring additional right-of-way or adjusting the road centerline relative to the right-of-way centerline. In addition, horse trails could be established under overhead or above underground utility easements as there would be no impact to the ability to maintain the utility lines.

D. RECOMMENDATIONS

Priorities for equestrian use development should include:

- safe crossing at Abbott Road and Abbott Loop Road;
- network of trails along major roads in the Hillside area (see the trails maps);
- inclusion of equestrian trails in the Far North Bicentennial Park Master Plan; and
- inclusion of equestrian trails in the Campbell Tract (BLM).



VIII. SLED DOG MUSHING TRAILS

Anchorage citizens cherish their historical tie to Alaska's truly indigenous sport of sled dog mushing. Symbolic of Alaska's heritage, dog mushing offers a great deal of appeal to the public. The importance of sled dog teams to the development of Alaska prompted the 1971 Alaska State Legislature to designate sled dog mushing as the official state sport.

In the early days of Anchorage, settlers, trappers, and miners used sled dog teams as a common means of transportation. In those days, sled dog trails boasted a more substantial mileage in Anchorage than did roads.

The rapid growth of development in Anchorage during the intervening years has eliminated many of the open areas that once contained sled dog trails. Now only remnants of the original trails remain. Every effort should be made to protect sled dog trails so that dog mushing can continue to be a recreational pursuit in the Anchorage Bowl.

Virtually all programs and events in sled dog mushing in the Anchorage Bowl relate to competitive racing. Tudor Track and the Alaska Sled Dog and Racing Association host weekly senior and junior races from January through April. Some of the major races each year include the Women's Championship Race and the Fur Rendezvous World Championship Open. The Fur Rendezvous and the start of the Iditarod Trail Sled Dog Race are the only events that do not originate at the Tudor Track.

A. EXISTING TRAILS AND FACILITIES

There are few opportunities for sled dog mushing in the Anchorage Bowl. Most of the sled dog mushing trails originate from the Alaska Sled Dog and Racing Association Headquarters located on Tudor Road between Lake Otis Boulevard and Bragaw Street. This 10-acre site serves as a "trailhead" access to some 16 miles of sled dog mushing trails in Far North Bicentennial Park.

The Anchorage Fur Rendezvous sled dog racing trail is a 25-mile loop that begins on Fourth Avenue in the Downtown area, follows Cordova Street to the Chester Creek Greenbelt, continues to Alaska Pacific University property, then traverses along a power line easement and a public use easement to Tudor Road where it crosses into Far North Bicentennial Park. Far North Bicentennial Park contains the major portion of this trail, as well as the most natural and scenic segment. Anchorage Assembly Resolution No. 54-76, passed in May of 1976, recommends the dedication of the Anchorage Fur Rendezvous Sled Dog Racing Trail in its present location. It also confirms the Municipality's intent to keep this trail open and usable. The Tudor Road Crossing at Bragaw is part of the sled dog racing trail.

B. DEMAND ANALYSIS

Sled Dog mushing is the Alaska State sport. Throughout the community, mushing is popular as a spectator sport. The Fur Rendezvous race is the most widely attended spectator event in Anchorage with approximately 100,000 persons watching the race annually.

C. ISSUES

The major problems facing sled dog mushing in the Anchorage Bowl are further encroachments on existing trails and conflicts with incompatible uses.

Far North Bicentennial Park is the single most important location for dog mushing in the Anchorage Bowl. The protection of the trails within the park is important for the survival of the sport in Anchorage. Although the trails are adopted by Assembly ordinance, ensuring there are adequate bridges, crossings, and intact, dedicated trail easements is important for the continuance of safe dog mushing. There are currently many conflicts between competing mushers and other users on the bridge over Campbell Creek.

D. RECOMMENDATIONS

- 1. All sled dog trails in Bicentennial Park should have a base of packed dirt or frozen ground.
- 2. The existing 16-mile sled dog mushing trails within Far North Bicentennial Park, in addition to the section used for the Fur Rendezvous World Championship, should be dedicated for future use in their entirety.
- 3. Any rerouting of the existing trails shall only be undertaken after a revision of the Areawide Trails Plan and an update of the *Far North Bicentennial Park Plan*.
- 4. Grade-separated crossings should be built at all road crossings and at any high-use trail intersection to increase safety to trail users. In particular, this applies to Campbell Airstrip Road.
- 5. Priorities for development of sled dog mushing trails should include:
 - Campbell Creek bridge to provide separation from other users
 - Fur Rendezvous Sled Dog Mushing Trail to connect with the Tudor Road Crossing.

IX. SKIJORING USES

Skijoring involves skiing with harnessed dogs, providing skill enhancement and conditioning for both skier and dog. Several years ago, very few people were aware of skijoring; today it is a recognized winter sport that is growing in popularity. The North American Skijoring and Ski Pull Association (NASSPA) maintains trails for skijoring and conducts educational clinics and organized tours and races.

A. EXISTING TRAILS

Existing trails used by skijors include segments at Far North Bicentennial Park known as Run Rover, Moose Meadows and the Moose Ridge trails. These trails are about seven to eight kilometers in length, respectively. The Far North Bicentennial trail includes a segment aligned with the "Spencer Loop" that then travels down the Campbell Creek corridor. Approximately six to seven kilometers of maintained trails are also found in the Connors Bog area with connections to Dela Vega Park (see Figure 2.8). In addition, the Chester Creek Trail and the Tony Knowles Coastal Trail are popular with skijors.

B. DEMAND ANALYSIS

Skijoring is a rapidly growing sport in the Anchorage Bowl. The demand for lighted trails for training and races is increasing as the sport grows. Most recent polling information indicates that 2.5 percent of the households surveyed include a member that participated in skijoring in 1992. There are currently 135 Anchorage members in the North American Skijoring and Ski Pull Association (NASSPA).

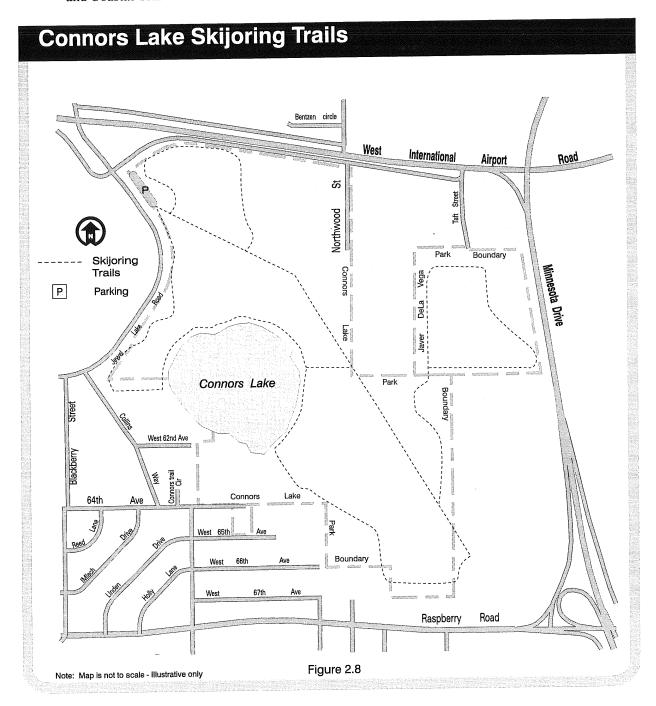
C. ISSUES

The issues relating to skijoring in the Anchorage Bowl are centered on available sites and compatibilities with other trail user groups. Skijors see the need for more groomed, technically challenging trails. They also desire a shared-use plan that would provide for use of the groomed, designated cross-country ski trails, however, this use would degrade the track quality and compromised safety when dogs use the groomed trails. Separation of these uses would seem to be a better solution.

Multi-use trail development, usage and maintenance in Far North Bicentennial Park will continue to be an issue with skijors, as well as cross-country skiers, equestrians and other users. Continuing cooperative planning and maintenance is important, as noted from past meetings of members from the Anchorage Nordic Ski Association and NASSPA. The dedication of a skijoring trail should be addressed through future planning of Far North Bicentennial Park. Scheduling skijoring access to lighted trails the night before trails are groomed, provided that trails are cleaned of all dog droppings, was discussed during the public review of this Plan. The issue is to provide skijors with challenging lighted trails on which to practice and train.

D. RECOMMENDATIONS

- Skijoring trails should be dedicated in Connors Bog
- Trails improvements and possible dedication within Far North Bicentennial Park either through cooperative agreements between users or as part of a more formal trail development through a park plan
- Investigate the potential for more lighted segments of the multi-use trails, such as Chester Creek and Coastal Trails



X. NATURAL TRAILS

Natural trails are unpaved, unlighted, ungroomed, non-motorized, generally narrow, relatively lightly used trails that occur in a natural setting enjoyed by non-competitive walkers, bird watchers, outdoor educators, skiers, etc. There is no clearing done to either side of these trails. This category includes unpaved trails that are in parks, greenbelts, open spaces, and other undeveloped areas within the Anchorage Bowl.

A. EXISTING TRAILS AND FACILITIES

Major areas in the Bowl that include many miles of natural trails are Far North Bicentennial/Hillside Park, Kincaid/Point Campbell Park, Russian Jack Springs Park, the University area, and Chugach State Park. There are also natural trails around Baxter Bog and at Potter Marsh.

XI. WATER TRAILS

Water-based activities usually do not come to mind when traditional land-based trail activities are considered. Historically, waterways have been transportation corridors and recreational facilities. Water naturally attracts people, especially the free-flowing water of rivers, streams, and creeks. Water "trails" provide similar opportunities for transportation and recreation, and the benefits from these activities, as the more familiar land-based trails.

The Anchorage Bowl has several major creeks flowing through it including Ship Creek, Chester Creek, Fish Creek, Campbell Creek, Little Campbell Creek, Furrow Creek, Rabbit Creek, Little Rabbit Creek, and Potter Creek. Numerous studies and greenbelt master plans have identified many of these waterways. These creeks are very important and have potential to offer excellent water "trail" opportunities.

Ship Creek used to get canoe and kayak use between the hatchery and the dam until toxins (lead and PCB's) were found along the creek in mid-80's.

A. EXISTING TRAILS AND FACILITIES

There are two creeks within the Anchorage Bowl that offer the best opportunities for canoeing, kayaking, and rafting: Campbell Creek and Ship Creek.

Campbell Creek originates in the Chugach Mountains, enters the Municipality of Anchorage through Far North Bicentennial Park, and flows through the Anchorage Bowl until it reaches Turnagain Arm. The creek is within the Campbell Creek Greenbelt from Piper Street to Dimond Boulevard, except for a short section between Harper Drive and Cache Drive. The Municipality has identified the area between Piper Street and Far North Bicentennial Park through the State of Alaska land selection process as the final link in the greenbelt. The meandering course of the creek provides the opportunity for local residents to experience a "wilderness" environment within an urban setting.

Most people who float Campbell Creek put in at Campbell Park, located east of Lake Otis Parkway. The most popular take-out points are Taku Lake Park, located at "C" Street, and Emerald Hills Park, located between Dimond Boulevard and Minnesota Drive. There are several other parks and open spaces along the creek where people could stop and enjoy a picnic lunch or a brief rest.

B. DEMAND ANALYSIS

It is not possible to quantify the actual number natural trail users, however, one only has to look at history or any naturally vegetated area in an urban setting to see myriad natural trails created by local residents.

Natural trails should be designated in a variety of ecosystems and geographic locations in the Anchorage Bowl.

The main issue for these trails is that they be formally designated and protected so that they are not lostin response to requests for "improvements" by other types of users. Natural trails should be designated in a variety of ecosystems and geographic locaitons in the Anchorage Bowl.

C. ISSUES

The University Lake Community Council has requested that the trails in University Lake Park be designated as natural trails. Their goal is to rehabilitate University Lake Park into a natural wildlife habitat and plant preserve.

The primary issue relating to these trails is that they be formally designated and protected so they are not lost in response to requests for "improvements" by other types of users. Natural trails should be designated in a variety of ecosystems and geographic locations in the Anchorage Bowl.

D. RECOMMENDATIONS

Natural trails should be established and maintained in:

- Anchorage Coastal Wildlife Refuge
- Cheney Lake Park
- Far North Bicentennial Park
- Goose Lake Park
- Hillside Park

- Johns Park
- Kincaid
- Russian Jack Springs Park
- Section 36 park lands
- University Lake Park

CHAPTER 3 — CHUGIAK-EAGLE RIVER TRAILS

Chugiak-Eagle River covers the area from Muldoon Road north to the Matanuska-Susitna Borough boundary and from Knik Arm to Chugach State Park. The main road through the area is the New Glenn Highway.

I. PEDESTRIAN AND RELATED USES

The rural character of much of Chugiak-Eagle River has resulted in development that is largely without pedestrian facilities. However, sidewalks and walkways have been and are being required in the urban areas through the subdivision process. Urban areas have a planned residential density of 3-6 dwelling units per acre and are zoned R-1, R-2, R-3, or R-4, or are in areas zoned for commercial or industrial uses.

A. EXISTING FACILITIES

Many of the available pedestrian facilities are within the developed areas of Eagle River. However, many of the older portions of the urban core of Eagle River do not have sidewalks. There is a trail along portions of the Old Glenn Highway in Eagle River that can be used by pedestrians.

Almost all rural neighborhoods are devoid of any pedestrian facilities. Pedestrians must walk down roadways to get to bus stops or other destinations.

B. ISSUES

Sidewalks are needed along all commercial core areas where they do not currently exist. While much of the urban area in Eagle River is in a strip configuration, portions of the town center, especially in the Business Boulevard area, need sidewalks. A 1993 survey showed that pedestrian safety was the greatest concern of citizens in this area.

A system of trails, including sidewalks, should be established along collectors in the Chugiak-Eagle River area. These would provide pedestrian access to streets that are served by transit, as well as provide better access to schools, recreation areas, and the urban area. Homestead and Ravenwood Elementary Schools, in particular, have problems with pedestrian access.

There is the need for a separated multi-use paved trail along the Old Glenn Highway from Eagle River to Peters Creek. This trail would tie into with existing trail along the New Glenn Highway at South Birchwood and North Birchwood Loops. There is also a need for safe pedestrian crossings of the Old Glenn Highway in Eagle River and Chugiak, especially at the intersection of North Eagle River Loop Road and at Chugiak Elementary School.

A separated multi-use paved trail along the segment of Eagle River Loop Road from the Old Glenn Highway to Eagle River Road is needed. The grade of Eagle River Loop Road from Eagle River Road to the Briggs Bridge is approximately seven percent, which is too steep to meet accessibility guidelines. For this reason, it is not possible to safely accommodate a continuous trail to the Briggs Bridge on both sides of the road. Trail improvements were developed as part of the Eagle River Loop Road to Hiland Road Connection project. On the east side of the road, a sidewalk extends south of Eagle River Road to the new over-crossing near Hidden Falls Avenue. In addition, there is a pedestrian undercrossing provided at Mills Bay Drive. Due to the steep grade, the trail on the east side forks, directing users either to the over-crossing or through the neighborhood.

A continuous trail extends from Eagle River Loop Road to the Briggs Bridge on the west side of the road. The 12-foot sidewalk along the bridge connects to a 10-foot shoulder that extends to the Hiland Road interchange at the Glenn Highway. The Hiland Road interchange includes a trail on the north side.

Birchwood Loop Road serves as a bus transit route. It would be appropriate and safer to provide a separated trail along this roadway that is suitable for use by pedestrians disembarking from buses, rather than the current practice of walking within the roadway.

There are some large areas in the Chugiak-Eagle River that are designated as Mixed Development in the *Chugiak-Eagle River Comprehensive Plan*. Trails will be needed, but where the trails should be located can not be determined at this time. Guidelines are necessary to ensure that trails are provided for future residents.

C. RECOMMENDATIONS

- 1. Sidewalks should be provided in all core commercial areas where they do not now exist, including along Business Blvd. in Eagle River and Oberg Road/Old Glenn Highway in Peters Creek.
- 2. It is preferred that trails along collectors be separated. However, separated trails should be provided along all streets classified arterial and above and along all transit routes. Recommended routes include:
 - Eagle River Loop Road,
 - Eagle River Road extended to the Visitor Center,
 - · North and South Birchwood Loops,
 - · Old Glenn Highway.
- 3. Priorities for pedestrian facilities should include the following:
 - Connections from Eagle River Road to the Eagle River Greenbelt;
 - Pedestrian access to schools including Homestead, Ravenwood, Mirror Lake, Birchwood, and Alpenglow/Parkview Terrace
 - Pedestrian connections from residential areas northeast of Business Boulevard to the commercial area:
 - Pedestrian connections in downtown Eagle River between the Old Glenn Highway and Business Blvd.;
 - · Pedestrian crossings of the Old Glenn Highway with reduced speed signs and flashing lights
 - Sidewalks in the Eagle River business district, especially along Business Blvd.
 - Trails along collectors and arterials; and,
 - Trails along transit routes.
- 4. In the Mixed Development areas, as designated in the *Chugiak-Eagle River Comprehensive Plan*, the following guidelines shall be followed:
 - A separated multi-use paved trail shall be constructed adjacent to every road of collector status or greater.
 - A non-motorized trail, in addition to the stream protection setback, shall be established along every stream where stream protection setbacks are required.
 - When major existing trails are eliminated through development of the surrounding area, they shall be replaced by equivalent trails *in the same area* and be located in protected parks or greenbelts or new subdivisions, with connections as close to school sites as possible. These trails must be integrated through design so that pedestrian access is maintained and enhanced.
- 5. An unpaved multi-use trail should be constructed from Alpenglow Elementary School to Ravenwood Elementary School and from Golden Eagle Drive to Mount Baldy.

II. BICYCLE USE

The number of persons now residing and projected to reside in Chugiak-Eagle River warrants the development of an areawide bike trail system to serve both transportation and recreational purposes. The needs of the commuter and the racer should be incorporated to create an effective and usable bike trail system.

A. EXISTING TRAILS

The New Glenn Highway trail that parallels the New Glenn Highway from Anchorage to North Birchwood and the Eagle River Road trail from the Old Glenn Highway to Preuss Road are the two trails that currently exist in Eagle River.

Another trail winds through the Eaglewood Subdivision just south of Eagle River Road, but does not connect to the Eagle River Road trail. A trail connects Gruening Junior High School with the Eagle River Road trail, and provides a link to residential neighborhoods north of Eagle River Road. A trail connects the Fire Lake Recreation Center to the Old Glenn Highway and down to Northgate Drive in Eagle River. Also, there is a trail from Meadow Creek to the Eagle River Elementary School.

The southern portion of the New Glenn Highway trail, from the North Eagle River Access Road to Anchorage, was constructed in 1982. It provides a valuable link between Eagle River and Anchorage, as well as a beautiful open space corridor for recreational riders.

B. ISSUES

The section of the New Glenn Highway trail between the north Eagle River Road Access and Peters Creek is in very poor condition. There are breaks in the pavement, as well as an insufficient width. Additionally, insufficient separation from the New Glenn Highway at points between South Birchwood and North Birchwood causes significant maintenance, safety and enjoyment problems. These problems should be corrected when the highway is resurfaced.

The trail along the New Glenn Highway experiences problems at the entrance to the landfill due to conflicts between trail users, automobiles, and trucks, including those vehicles leaving the landfill and those turning left to use the southbound on-ramp.

The Eagle River Road trail leaves the Old Glenn Highway in downtown Eagle River and terminates at its intersection with Preuss Road. It crosses private driveways along its entire length, posing a potential hazard as bicyclists are confronted with automobiles making turns across the bike trail. To minimize this existing safety problem, signs should be posted warning motorists of the cyclists' right-of-way, and lines should be painted on either side of the bike trail so that the trail itself will become more visually apparent.

Construction of the coastal trail would link Beach Lake and Edmonds Lake Regional Parks and local neighborhood parks, residential neighborhoods, Chugiak High School, Birchwood Elementary School, and Mirror Lake Middle/Junior High School.

C. RECOMMENDATIONS

- 1. The New Glenn Highway trail from the north Eagle River access to North Birchwood should be upgraded and maintained to accommodate all types of non-motorized uses.
- 2. As sites for new elementary and junior high schools are chosen, bicycle trail access from the school sites to adjacent residential areas must be identified.
- 3. Priorities for planned trails include the following:
 - extension of the Glenn Highway trail to the Matanuska-Susitna Borough along the east side of the highway
 - extension of the Eagle River Road trail to the Visitors Center
 - separated trail along the Old Glenn Highway
 - trail connection from the New Glenn Highway to the transit park-and-ride facility in downtown Eagle River
 - trail along Fire Creek connecting to the planned coastal trail

- trail system along the Eagle River Greenbelt with connections to Hiland Drive, Eagle River Loop Road and Eagle River Road
- connection from Briggs Bridge to the existing Glenn Highway trail
- gravel multi-purpose trail along the mountain contours from Little Peters trailhead to the Fire Lake Recreation Center
- separated trail along Birchwood Loop Road
- separated trails along streets of classification collector or above

III. RUNNING/JOGGING/PHYSICAL FITNESS USERS

Lack of extensive trails or pedestrian facilities limits the availability to runners in Chugiak-Eagle River.

A. EXISTING TRAILS

Paved mutli-use trails and unpaved trails used by cross-country skiers and equestrians serve as jogging trails. Such trails include the New Glenn Highway trail, the Eagle River Road trail, and Beach Lake Park trails.

There is a physical fitness trail at Birchwood Elementary School.

B. ISSUES

The planned Coastal Trail from Ship Creek to the Matanuska-Susitna Borough boundary will provide runners with views of the Knik Arm and Alaska Range. Care should be taken to incorporate runners' desires into the trail location process. Connections to the Chugiak High and Birchwood Elementary Schools will provide access to these school running facilities.

The planned trail along the Eagle River Greenbelt corridor will offer a running trail in summer, with connections to Ravenwood Elementary School and unpaved trails at the Chugach State Park Visitors Center.

Meadow Creek offers some hiking and cross-country running potential with access into Chugach State Park. However Meadow Creek valley is very damp for many months of the year. This trail would need a trailhead in the proximity of the water tanks on Eagle River Loop Road. Additionally agreements for access through private property must be obtained.

C. RECOMMENDATIONS

- 1. Some trails should be packed for walkers and runners during the winter. Locations for this type of trail would include the New Glenn Highway trail, the Eagle River Road trail, and the planned Eagle River Loop Road trail.
- 2. Milepost signs should be placed along designated bike and running trails. Trails that would be appropriate for such signing would include the New Glenn Highway trail and Eagle River Road trail. These signs should be relevant for either direction of travel. The New Glenn Highway trail should have a mileage count beginning in Anchorage and another that begins at the Eagle River Interchange.
- 3. A trailhead should be provided to allow access to Meadow Creek as a hiking/jogging trail.
- 4. Priorities for running/jogging/fitness trails should include:
 - Signing of New Glenn Highway trail
 - Packing of New Glenn Highway trail for winter use

IV. INTERPRETIVE TRAIL USERS

Chugiak-Eagle River provides opportunities to interpret local geologic and other natural events. The area provides markedly different topographic features from that of Anchorage.

A. EXISTING TRAILS AND FACILITIES:

The Eagle River Visitor's Center operated by the State of Alaska Division of Parks and Outdoor Recreation is one of the best-known interpretive facilities in the Municipality of Anchorage. This facility offers opportunities to interpret a full range of natural features in a dramatic setting. The Albert Loop Geology Trail is a particularly interesting example of an interpretive trail.

B. ISSUES

While the Eagle River Visitor Center provides a well-used facility, additional opportunities for interpretation of natural features are needed along other trails.

C. RECOMMENDATIONS

- 1. Interpretive trails should be signed, when possible and where appropriate, to interpret natural features.
- 2. All community or regional parks should be considered for construction of interpretive trails.
- 3. Potential locations for interpretive displays include:
 - Eagle River, at the campground glacial river
 - Eagle River Center wetlands habitat
 - Coastal Trail coastal habitats
 - Edmonds Lake Park wetland bog and upland vegetation
 - Eklutna Lake alpine lake
 - Peters Creek Park riparian vegetation

V. SNOWMOBILES AND OTHER MOTORIZED USERS

The Chugiak-Eagle River area has several extensive areas open for snowmobiling and one area open to motorized users.

A. EXISTING TRAILS

Off-road vehicles and all-terrain vehicles use the Eklutna Lake trail in the Chugiak-Eagle River area.

In Chugach State Park, all but one of the valley bottoms are open to some degree of snowmobiling. Restrictions exist in terms of operating times, area restrictions, or limitations imposed by the lack of trailheads in some valleys.

Eagle River is open to snowmobiling between the banks of the river from the Glenn Highway to Icicle Creek.

Peters Creek is open to snowmobiling to the wilderness boundary across the top third of the valley. The present access trail traverses private property. There is no developed trailhead.

Little Peters Creek, also known as Ptarmigan Valley, is open and is well suited to snowmobiling. The open area is well defined by the ridgelines. Snowmobilers feel it is an excellent location for family rides or for a short outing, as space there is limited. There is presently no developed trailhead.

Eklutna Lake is open to snowmobiling on certain days of the week, alternating with non-motorized uses.

B. ISSUES

Peters Creek is open and a trailhead is planned, but is not developed. There is legal parking for only a few vehicles towing trailers and this causes problems for residents. State Park officials are working toward acquisition of private property to build a parking area.

Little Peters Creek has virtually no parking, so users must park on the roadway, sometimes blocking access for residents and making turnarounds difficult. The Heritage Land Bank owns land adjacent to the park on Jasmine Road and has issued a permit to develop a trailhead, but the Department of Natural Resources has yet to secure funding. Part of the current access trail traverses private property, which has become a point of contention. A survey in 1994 by the Chugach State Park Citizens Advisory Board identified a new route that may be used to access the valley once a parking lot and trailhead are developed on municipal land.

Eagle River itself provides snowmoboling opportunities. Users are restricted to the area east of Icicle Creek on the riverbed. The new parking area at the Hiland/Briggs Bridge will provide safe access to the river. The new State Park parking area at mile 7.5 Eagle River Road can also provide access to the river.

The Eklutna lake Trail provides for mixed use with limitations on motorized use imposed on certain days of the week. This has worked satisfactorily for the most part.

The Eklutna River bottom downhill from Eklutna Lake could provide snowmobiling all the way to the Eklutna Water Treatment Plant. At that point it is possible to follow a switchback road to the Eklutna Valley Road and travel on the intersection of an old roadbed with the Old Glenn Highway. This could be the route for a multi-use, all season trail in the Eklutna River Valley.

A snowmobile trail has been proposed on the west side of the highway in the right-of-way from Eagle River to the Matanuska-Susitna Boundary. This trail would require approval by the Alaska Department of Transportation/Public Facilities. There may be some difficulties in establishing such a route because there is adjacent residential use and, especially in the Peters Creek area, there may not be sufficient right-of-way. Additionally, the Glenn Highway corridor in the Palmer Hay Flats State Game Refuge is closed to snowmachines.

There are many trails in the Chugiak-Eagle River areas that are used illegally. Current ordinances prohibit the operation of snowmobiles in other designated areas.

Summer motorized riders often follow the Old Glenn Highway or other local roads from residences. Motorized riders have requested an area dedicated to recreational and competitive use. Possible sites include old gravel pits. A motor-sports park might be located on Fort Richardson land, should land become available.

C. RECOMMENDATIONS

- The Municipality should assist the Alaska Department of Natural Resources with planning and possible dedication or acquisition of a trailhead for Peters Creek.
- 2. The Municipality should fund and develop the Little Peters Creek trailhead on the municipal land adjacent to Jasmine Road.
- 3. The Municipality should work with the Alaska Department of Transportation and Public Facilities, the Army, and the Anchorage Snowmobile Club to investigate the feasibility of a snowmobile route within the right-of-way of the Glenn Highway or on military land on the east side of the highway from Centennial Park to Eagle River.
- 4. The Anchorage Snowmobile Club should work with the Trails Oversite Committee to develop a schedule for use of the Eklutna River bottom trail when that trail is designated.

5. The Anchorage Snowmobile Club should work with affected citizens, Chugiak-Eagle River Community Councils, and the Department of Cultural and Recreational Services to investigate the feasibility of designating local "traditional" trails for snowmobile use.

6. The possibility of creating a recreation and competition area for summer motorized use should be investigated.

VI. CROSS-COUNTRY SKI USERS

There are few groomed trails in the Chugiak-Eagle River area, however, there is an abundance of backcountry trails, including river bottoms, creek corridors and alpine and sub-alpine skiing.

A. EXISTING TRAILS

Beach Lake provides the most developed system of trails for cross-country skiers in the Chugiak-Eagle River area (see Figure 3.1). Beach Lake provides approximately 15 kilometers of groomed trail with loops of 1, 2, 4, 6, and 11 kilometers. The 4-kilometer loop is currently lighted.

Edmonds Lake Park provides 14.5 kilometers of cross-country ski trail with loops of 2, 5, and 7.5 kilometers.

There is cross-country skiing on the trail along Eklutna Lake. Cross-country skiers alternate days of use with motorized users.

The New Glenn Highway and Eagle River Road trails can be used for cross-country skiing. The Alaska State Division of Parks and Outdoor Recreation has trails that begin at the Eagle River Visitors Center and lead into the park; these trails are used by cross-country skiers in winter. Cross-country ski trails also exist in Loretta French Park.

B. ISSUES

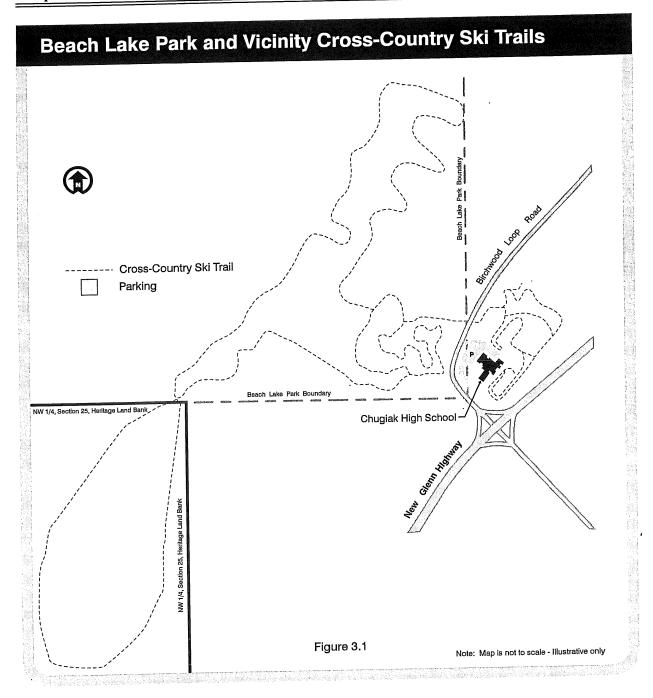
The potential for cross-country skiing exists within Chugach State Park. Trails leading into the park should include an Eklutna River trail, a Meadow Creek trail, a South Fork trail, the Eagle River Greenbelt corridor, and the Hillside trail.

The Eagle River Greenbelt, the Hillside Corridor, the Fire Creek trail, and the coastal trail have the potential to be exceptional non-motorized trail systems with spectacular views of Knik Arm and the Alaska Range. These trails would provide a skiing experience that would satisfy all ability levels.

With the selection of the new junior high school site adjacent to Edmonds Lake Park, the cutting and development of a ski trail system within the park suitable for grooming and lighting would enhance the physical education program of that school, in addition to providing alternative ski trails for the community. Development and use of this trail system by students participating in cross-country ski programs, in addition to anticipated increase in public use, warrants designation of these ski trails for cross-country skiing only during the winter months.

The Eagle River Greenbelt will be in demand for multi-use in the winter months. Due to the incompatibility between snowmobiles, dog sleds, and skiers, it is important that trails for these uses remain separate and distinct and designated only for their specific use.

The Mental Health Trust land on the south side of Hiland Road, across the Eagle River Loop Road from the old dump site, is an ideal location for cross-country ski trails with the potential to be developed to the same caliber as Kincaid or Hillside park, according to the Chugiak-Eagle River Nordic Ski Club. A section of this area was selected in the past during Anchorage's bid for the Winter Olympics as an ideal site for a Nordic ski jump. Acquisition of this land by the Municipality for future development as a Nordic ski center would benefit the Chugiak-Eagle River Greenbelt and will be in demand for multi-use in the winter months.



Mount Baldy has been traditionally used as a hiking area during the summer and fall seasons and for ski touring during the winter months. Access to this area is through private land along Golden Eagle Drive and, at this time, access has not been a problem since most of the land is still undeveloped. Future development of these lands could restrict access to trails on Baldy connecting to potential ski touring areas.

Undeveloped land exists between Alpenglow Elementary and Ravenwood Elementary School that could potentially be developed with a trail physically linking the two schools. This trail could be used in the winter as a groomed ski trail. Continuation of this trail to the Eagle River Greenbelt would link both schools to the Eagle River ski trail.

C. RECOMMENDATIONS

- 1. Paved trails should be designated for cross-country ski use in winter. Existing trails include the New Glenn Highway trail and Eagle River Road trail.
- 2. The integrity of the ski trails at Beach Lake and Edmonds Lake Park should be protected. Easements should be established if trails are not currently dedicated and protected, especially for those trails extending into the Heritage Land Bank lands in the northwest quarter of Section 25.
- 3. There should be additional lighting at the Beach Lake trails to provide at least a 10 kilometer lighted trail. Lighting should also be provided for the existing 5-kilometer loop at Edmonds Lake Park.
- 4. Priorities for construction of ski trails include the following:
 - · Coastal Trail
 - Alpenglow to Ravenwood trail
 - · Fire Creek Trail
 - · Eagle River Greenbelt trail
 - Hillside Corridor Trail
 - · Beach Lake ski trails to Fire Creek trail
 - · Junior High/Edmonds Lake Park trail system

VII. EQUESTRIAN USERS

Today's residential development is rapidly consuming the space available for equestrian use. Because of the current rate of growth, it is critical that corridors for equestrian use be identified and preserved now. All equestrian trails are to be unpaved trails. Equestrian trails are available for other uses.

A. EXISTING TRAILS

Equestrians in the Chugiak-Eagle River area currently ride in the following areas: the power line north of Fire Lake and south of Peters Creek between the New and Old Glenn Highways, a trail from Birchwood Airstrip to Beach Lake (also used as a dog sledding trail in winter), on the dog sledding and ski trails in Beach Lake Park in the summer, Peters Creek from Peters Creek Park to Chugach State Park, along Eagle River, and on trails originating at the Chugach State Park Visitors Center. Loretta French Park on the Old Glenn Highway provides an arena and riding trails for equestrians.

B. ISSUES

Equestrians currently ride on trails that are shown in the adopted Anchorage Park, Greenbelt and Recreation Facility Plan, Volume 2 of 4: "Eagle River-Chugiak-Eklutna." Many of these trails are on unsubdivided parcels that are owned by private individuals and corporations. It is intended that these trails or replacement trails be incorporated into subdivision layout at the time of subdivision. Such action would provide appropriate trails within subdivided residential lands and provide for historical use.

The Hillside Corridor is a proposed unpaved trail along the foothills of the Chugach Mountains from the Fire Lake Recreation Center to the Little Peters Creek trailhead with a connection to Edmonds Lake Park. Most portions of the trail could be located on Municipal and Chugach State Park land. The Hillside Corridor would serve as an equestrian and hiking trail in summer and a cross-country skiing trail in winter.

The Eklutna waterline provides a potential equestrian corridor along much of its length. Efforts should be made to provide a continuous corridor for horseback riding along the length of the utility. Some jogs will be necessary along roads in order to provide a continuous route.

An unpaved trail within the Eagle River Greenbelt will provide equestrian opportunities in the corridor.

C. RECOMMENDATIONS

- Trails along Eklutna River, Little Peters Creek, Peters Creek, Fire Creek, and Eagle River should be formally designated for equestrian use in the summer and trailheads should be established for equestrians.
- 2. Easements should be acquired to accommodate existing equestrian trails near the Birchwood Airport and along utility easements west of the New Glenn Highway.
- 3. Unpaved cross-country ski trails and dog mushing trails that are dry and well drained should be designated for equestrian use from June 1 to November 1. Trails belonging in this category include the Hillside Corridor, Fire Creek, the Peters Creek Greenbelt east of the New Glenn Highway, the unpaved portions of the coastal trail, the South Fork of Eagle River, and the dog mushing/equestrian trail within the Eagle River Greenbelt Corridor. However, in Beach Lake Park, equestrian use should be discontinued by August 1.
- 4. Agreements with utilities and landowners should be acquired to provide equestrian use of the Eklutna Water Line utility corridor.
- 5. Priorities for equestrian facilities include:
 - · Access and trails into Chugach State Park
 - Dedication of trails in the Eklutna waterline easement
 - · Dedication of trails in the Birchwood area
 - Connections to Loretta French Park
 - Hillside Corridor

VIII. SLED DOG MUSHING TRAIL USERS

Dog mushing is an important activity to many people in Chugiak-Eagle River. The large lot sizes predominant in the area and the rural character of development provide opportunities to keep dog teams. Dog mushing is also an important commercial activity to many people in Eagle River. Dog mushing is a component of the tourism market and area merchants enjoy secondary effects through the sale of food and gear.

A. EXISTING TRAILS

Regularly used mushing areas include Eagle River, Birchwood Airstrip to South Birchwood Loop, Beach Lake Park, Eklutna Lake and Clunie Lake.

The Chugiak Sled Dog Mushers Association has constructed over 20 miles of trail in the Beach Lake area. In addition to these 20 miles of trail, loops of trail extend into Fort Richardson where the military controls permission for their utilization. As part of these 20 miles, loops extend south out of Beach Lake Park to Clunie Lake and east out of Beach Lake Park to the mouth of Fire Creek.

The Beach Lake sled dog trails extending from Beach Lake Park to the south end of Clunie Lake are groomed with non-profit grant fund (see Figure 3.2). In addition to daily winter use by mushers and weekend use for organized races, these trails support the annual Eagle River Classic Sled Dog Race, the run operated in conjunction with Eagle River's Bear Paw Festival, and will support the Arctic Winter Games.

B. ISSUES

Snowmobiles are not permitted on Beach Lake trails. Their use creates moguls that injure the shoulders and wrists of dogs. Also, snowmobiles have collided with dog teams. Snowmobiles must be restricted from traveling onto Beach Lake trails.

Beach Lake Park and Vicinity Sled Dog Trails

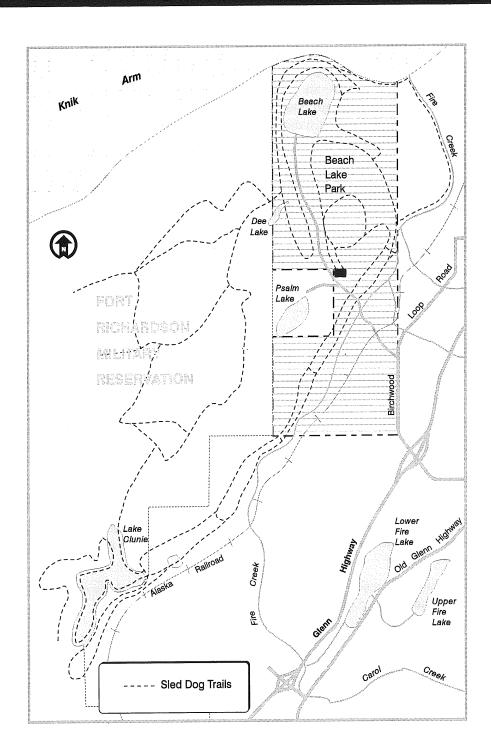


Figure 3.2

Note: Map is not to scale - Illustrative only

Conflicts within Beach Lake Park between cross-country skiers and dog mushers have been an issue for a long period of time. Skiers wish to use portions of the park north of the Alaska Railroad track. The 'Use Agreement' for Beach Lake Park currently held with the Chugiak Dog Mushers Association and the Municipality of Anchorage, Chugiak-Eagle River Division of Parks and Recreation states: "Use of the facility is for existing sled dog trails and the future expansion of sled dog trails in Beach Lake Park. Use includes summer and fall cart training on a portion of the sled dog trails and use of the entire network in winter months. Summer and fall use are compatible with other non-motorized uses. Winter use is not compatible with any other use. This agreement includes the undeveloped wetlands along Fire Creek. This area will be used for future routing of sled dog trails."

While joint use of an area may be possible where sight distance would allow visibility, the topography and vegetation prevent adequate sight distance in Beach Lake Park. The railroad provides a strong demarcation between the users and should be maintained as the separation between skiers and mushers within the park.

The planned Fire Creek Greenbelt would provide a ski trail that passes close to the railroad tracks within the northern portion of Beach Lake Park currently being used exclusively by mushers in the winter. Such a trail will require careful siting to avoid possible conflicts with dog teams.

The Beach Lake sled dog trail system that extends from Beach Lake Park to the south end of Clunie Lake and back into the Park should be dedicated in its entirety. This is a priority for dog mushers in the Chugiak-Eagle River area.

C. RECOMMENDATIONS

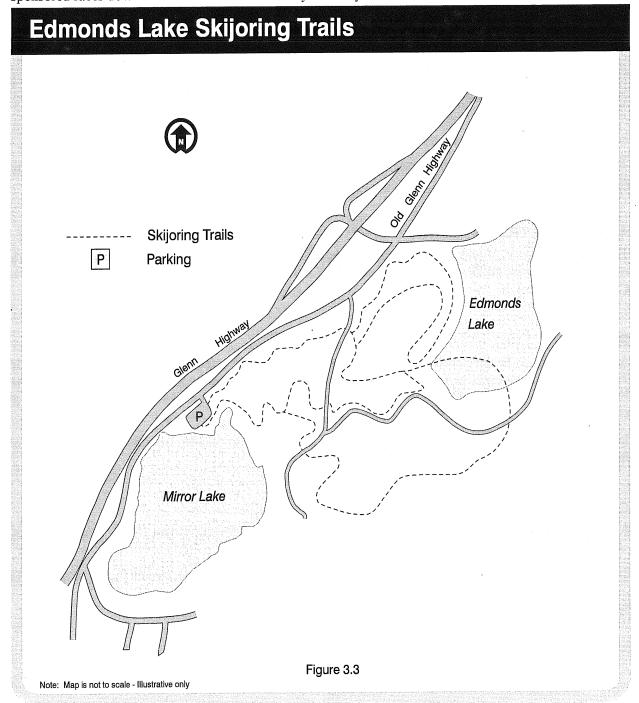
- 1. The trail system and visitors' center and staging area within Beach Lake Park should continue to be designated by the Municipal Department of Cultural and Recreational Services for dog mushing.
- 2. Signs should be added along the west boundary of Beach Lake Park to let snowmobilers know that they are no longer on Fort Richardson. Signs must also be maintained in Beach Lake Park indicating that motorized use is prohibited.
- 3. Until underground culverts are installed, the organization sponsoring dog sled events is responsible for providing road guards to stop traffic when teams are present during dog mushing races.
- 4. Sufficient interests in land should be acquired to accommodate the dog-mushing trail from the South Birchwood Loop to Birchwood Airport. Eklutna, Inc. and the Alaska Railroad presently own most of the land in this vicinity.
- 5. The loops of trail that extend out of Beach Lake Park south to Clunie Lake and northeast to Fire Creek should be dedicated for sled dog use.
- 6. Priorities for sled dog mushing improvements include:
 - Grade-separated crossings in Beach Lake Park
 - Staging facilities in the Eagle River area.

IX. SKIJORING

Skijoring has enjoyed rapid growth in Chugiak-Eagle River, as it has in the rest of the municipality. Addressing incompatibilities of this sport with other trail users will require close coordination.

A. EXISTING TRAILS

Skijors use the eastern portions of Edmonds Lake Park (see Figure 3.3). Some trails have been constructed. Though Edmonds Lake Park has great potential for skijoring, the lack of safe road crossings has led to diminished use of its trail system in recent years. Skijors also use the Eagle River multi-use corridors for sponsored races down the river that are held nearly annually.



B. ISSUES

Skijors desire a safe and secure area. This is made more difficult because of the number of other users who present varying levels of compatibility. Skijors are compatible with many non-motorized uses, such as cross-country skiing, but require passing room to avoid conflict. Skijoring is not compatible with motorized uses except in areas with outstanding visibility. Safety at existing road crossings must be addressed.

C. RECOMMENDATIONS

Priorities for skijoring facilities include:

- Additional trails in Edmonds Lake Park
- Signing of existing trails to inform users of skijoring use
- Trails such as the New Glenn Highway trail should be packed to allow skijoring use.

X. NATURAL TRAILS

The Chugiak-Eagle River area has many natural trails that provide the opportunity for hiking, orienteering and other "trail-like" activities.

A. EXISTING TRAILS

There are large areas of undeveloped land throughout Chugiak-Eagle River that currently contain natural trails. Some of these trails cross private land, some are on Heritage Land Bank land, and many are in Chugach State Park.

B. ISSUES

A process needs to be developed whereby some of these pre-existing trails are retained as natural trails. These trails can most easily be retained in areas along streams and wetlands and in steep topographic areas. Examples of areas that would accommodate natural trails include Peters Creek, Mirror Creek, Edmonds Creek, Meadow Creek, and the Eklutna River.

In the Eagle River Greenbelt, an approximately 14 mile natural trail is planned from the South Fork Park on the south side of the river.

C. RECOMMENDATIONS

- Natural trails should be provided and maintained along Peters Creek, Mirror Creek, Edmunds Creek, Meadow Creek, South Fork, and the Eklutna Creek.
- 2. The trail on the south side of Eagle River from South Fork to the Visitors Center should be designated a natural trail.

XI. WATER TRAILS

Water trails are popular in the Chugiak-Eagle River area. Eagle River is likely the most used water trail in the Muncipality. The Knik Kanoers and Kayackers who represent a large organized user group have reccognized the river as one of the most heavly used whitewater rivers in Alaska. Its proximity and access make ideal for organized races, guided raft trips and individual enjoyment.

A. EXISTING TRAILS

Eagle River is extensively used as a water trail for canoeing, kayaking, and rafting. The river is about 25 miles in lenght from Eagle Glacier to Knik Arm. The primary use is between the Eagle River Visitors Center and the Glenn Highway. Four access points to the sports fishery that are being developed on Eagle River are

also available for put-in and take-out points. An important take-out point is at the Eagle River campground, just above the rapids.

The Knik River between the Old Glenn Highway and the New Glenn Highway is also used for kayaking and rafting. The Knik River is also feed by a glacier and is wider and navaitable by power boats. This river is heavly influenced by tidal actions in its lower reaches.

B. ISSUES

As with other water trails throughout the Municipality, the primary issues of concern are the levels of water quality and the access points. Without adequate access points, people may trespass on private property and erode the stream bank.

C. RECOMMENDATIONS

Access points to Eagle River should be limited to those access points being provided for the sports fishery's program.

CHAPTER 4 — TURNAGAIN ARM TRAILS

Trails in the Turnagain Arm area are widely used by residents of this portion of the Municipality. The general philosophy concerning trails in Girdwood at the present time is that most trails should be a part of greenbelt systems along the major creeks. This will provide more attractive settings for the trails and result in less traffic interference for trail users. The preference in Girdwood is that trails are unpaved initially, until such time as the community preference dictates that they should be paved (see Appendix 2 for a description of Girdwood trails.)

According to the State Department of Natural Resources, trails of regional or statewide significance that are located on state land will be protected by publicly owned corridors that have a minimum width of 100 feet. Corridor widths may be increased in order to: 1) minimize land use and ownership conflicts; 2) protect the privacy of adjacent landowners; 3) separate motorized from non-motorized uses; 4) allow future siting of public facilities; 5) allow flexibility for rerouting; or 6) adapt a trail to allow specific public uses or aesthetic or environmental concerns.

Each trail not associated with a roadway should be accommodated within a trail easement and should include a buffer area. The buffer area should be configured to protect the quality of the experience of the trail user and to minimize negative impacts from adjacent land uses. The dimensions of the buffer should be determined by the following factors:

- · location and proposed use of the trail
- type and density of vegetation
- · characteristics of terrain and other adjoining natural features
- · patent notes and restrictions

Prior to the disposal of any public land containing a trail corridor identified in this Trails Plan, the location of the trail and buffer area should be located in the field, and recorded as an easement for such use. The easements should be noted on any subdivision plat made of the area.

I. PEDESTRIAN AND RELATED USERS

Communities in the Turnagain Arm developed primarily along roadways. Sidewalks do not generally exist as a means of pedestrian transportation, though a few trails running parallel to roadways have recently been constructed in some Turnagain Arm communities.

A. EXISTING TRAILS AND FACILITIES

Trails are important to the Girdwood community for transportaiton, but primarily for recreational purposes. Paved trails include one parallel to the Alyeska Highway that extends from the Seward Highway to the ski base facilities, one that provides access from Alyeska Road to Girdwood Elementary School, and one parallel to Arlberg Road that continues to the site of the Alyeska Prince Hotel.

Some of the unpaved trails include:

- Beaver Pond Trail
- · Virgin Creek Trail
- Glacier Creek Trail
- · Winner Creek Trail
- Tiny Creek Trails

A portion of the Iditarod Trail (see Chapter 5) runs through from the Kenai Boundary through the Girdwood Valley to Crow Pass. Another segment leaves Girdwood and travels through the communities of Bird and Indian, continuing to Ship Creek and to the Anchorage Bowl.

A paved trail on the south side of the Seward Highway connects the communities of Bird and Indian. This trail provides access to the shoreline and recreation areas in Bird. There are additional trails located throughout the communities of Bird and Indian. These trails provide access within the community and recreation opportunities along creeks and through the woodlands.

In Portage Valley there are several pedestrian, natural trails that are discussed below in the section on Natural Trails.

B. DEMAND ANALYSIS

Trails along Bird Creek and connections to the parking areas are very well used. Bird Creek is experiencing a significant increase in use as a fishing spot. Automobiles parked along the roadway often clog the highway. The Bird Creek campground is well used during fishing season and pedestrians often cross the road to fish the creek.

C. ISSUES

Residents of the Girdwood Valley are seeking to identify, designate and develop the Iditarod Trail as it travels through their area. Such a designated and developed trail would be an enhancement to the community and should prove to be a draw for visitors and residents alike. A complete description of the Iditarod Trail is found in Chapter 5.

The roadway-oriented nature of the Turnagain Arm communities places pedestrians at risk in some situations, necessitating safe trails for pedestrian use. Pedestrian facilities are needed along arterial and collector roads in Turnagain Arm, as well as in commercial areas. Also, a trail is needed on the north side of Seward Highway to provide access between Bird and Indian.

Important existing trails need a protective designation to ensure they are preserved in the development process. The Resort and the community are working to protect the integrity of the Winner Creek trail along those portions of the trail that are impacted by the ongoing development of Seibu-owned parcels. Similar attention and protection need to be provided for other existing trails throughout Turnagain Arm.

The Forest Service is planning a new system of trails in Portage Valley, including a six-mile trail that will be built parallel to the Portage Valley Highway from Alder Pond to the Visitor Center. In addition, another trail will be built to access Explorer Glacier and to travel round-trip from the Visitor Center to the Williwaw Campground.

New parking improvements and a pedestrian walkway to view Dall sheep are needed at Windy Corner, Mile 106.6, of the Seward Highway. These facilities are needed to provide new opportunities for the traveling public to see Dall sheep safely at close range.

A separated trail needs to be planned and built from Potter Marsh to Portage on the seaward side of the highway. This trail would connect with the parking areas along the Seward Highway north of Girdwood, the new pedestrian walkway at Windy Corner, the proposed Girdwood Coastal Interpretive Center, and the commercial development at Portage.

D. RECOMMENDATIONS

Priorities for pedestrian facilities include the following:

- development of the Iditarod Trail through the Girdwood Valley
- underpass/overpass near Indian Creek
- sidewalks along all commercial developments and along arterials and collectors
- underpass/overpass near Bird
- separated trails along all arterials and collectors in Turnagain Arm

- · pedestrian walkway at Windy Corner
- · a paved trail on the north side of the Seward Highway between Bird and Indian
- a separated trail along the Seward Highway

II. BICYCLE USERS

A majority of the trails in the Turnagain Arm area lie along primary roadways. The Seward Highway has become an important bike route for many Anchorage residents. The increase in ownership and use of mountain bikes has also resulted in significant travel on unpaved trails in Turnagain Arm communities.

A. EXISTING TRAILS AND FACILITIES

There are not extensive opportunities for bicycling in Turnagain Arm.

The Seward Highway provides a wide paved shoulder lane that offers opportunities for connections to the many recreation opportunities along Turnagain Arm. With completion of the last section of the highway upgrade project, bicyclists will eventually be able to bicycle from Potter Marsh to Turnagain Pass using a combination of roadway shoulder and trails. This availability is important to residents and to tourists, many of whom visit Alaska to bicycle.

The paved trails in Bird, Indian, and Girdwood offer opportunities for bicycling on surfaces that are separated from roadways. There is a paved trail along the Alyeska Highway extending from the Resort to the Seward Highway. A trail link is planned to connect the Girdwood area with the Seward Highway trail being built from Bird Point.

B. ISSUES

In the near term, the Seward Highway should be signed to indicate bicycle use along its entire length from Potter Marsh to the municipal southern boundary. In the longer term, a separated trail should be constructed along this roadway. Bicycle racks should be provided at scenic turnoffs and parks along the roadway.

Separated crossings are needed to connect the bike trail on the south side of the Seward Highway to Bird and Indian. The Bird crossing may be handled by a trail located under the Bird Creek Bridge.

After the road is moved to tidewater, at least eight feet of asphalt from the existing Seward Highway between Bird and Girdwood should be maintained to allow bicycle use.

C. RECOMMENDATIONS

- 1. Where possible, a separated trail should be provided from Potter Marsh to Portage to encourage use of the Seward Highway corridor by bicyclists.
- 2. Separated crossings at Bird and Indian should be provided.
- 3. A separated trail on the north side of the Seward Highway from Bird to Indian should be provided.
- 4. Any new roadways that are classified as a collector or greater should be designed to include a separated multi-use trail.
- 5. After the road is moved to tidewater, at least eight feet of asphalt from the existing Seward Highway between Bird and Girdwood should be maintained to allow bicycle use.

III. RUNNING/JOGGING/PHYSICAL FITNESS TRAIL USERS

A. EXISTING TRAILS AND FACILITIES

Paved trails provide some opportunities for running in Turnagain Arm communities. The predominant trail-associated physical fitness activity involves hiking on the number of natural trails that are available. Except for Girdwood, most of these trails are on State Park or national forestland. Many trails in Girdwood are located on land held by federal, state, or local government (Heritage Land Bank) and are not dedicated. Many runners and joggers also use Crow Creek Road.

B. ISSUES

Lack of an extensive trail system or pedestrian sidewalk system limits the availability of running trails in · Turnagain Arm.

C. RECOMMENDATIONS

- Residential connections should be provided to existing trails as Turnagain Arm grows. 1.
- Priorities for running/fitness trails include: 2.
 - · dedication of existing trails before or at the time private development occurs
 - · maintenance of trails along major creeks

IV. INTERPRETIVE TRAILS

Turnagain Arm affords excellent opportunities for interpretive displays relating to a great variety of climates, from semi-arid to rainforest. Turnagain Arm also provides for a dramatic focus on nature through interpretive efforts.

A. EXISTING TRAILS AND FACILITIES

The State of Alaska has constructed most of the existing interpretive facilities, including those at Potter Marsh and Beluga Point. Two interpretive trails are located in the Portage Valley. The first, the Moraine Nature Trail, has a number of signs depicting the process of glacial advance and recession. The second, the Williwaw Nature Trail, helps the user understand the vegetation and natural features of the trail.

B. ISSUES

Excellent opportunities are present in the Girdwood coastal wetland area and the Portage area for providing interpretive displays. In particular, these areas, provide striking illustrations of the effects of the 1964 earthquake.

The Winner Creek Trail provides an excellent opportunity to interpret a rainforest environment within driving distance of Anchorage.

C. RECOMMENDATIONS

Priorities for interpretive facilities include:

- Bird Ridge early spring flora
- Portage earthquake impacts
- Girdwood Beaver Pond beaver pond
- Winner Creek rain forest
- Girdwood Coastal Wetlands tidal wetlands

V. SNOWMOBILE AND OTHER MOTORIZED USERS

There is snowmobile use at the Placer River, at Twenty-Mile River, at the Portage River, and in Bird Creek Regional Park. There is also off-road vehicle and all-terrain vehicle use in Bird Creek Regional Park.

A. EXISTING TRAILS AND FACILITIES

Bird Creek Valley contains several thousand acres of forest consisting primarily of large spruce and some Western and Mountain Hemlock. Over twenty miles of trails cut through the valley. Many additional miles of spurs emanate from these former logging roads, offering the potential for motorized use. Alaska State Parks and the Municipality, each of which own land in the valley, jointly administer this area.

Bird Creek Regional Park, located on property owned by the Municipality of Anchorage, provides an extensive snowmobile riding area in the Penguin and Bird Creek valleys. A cooperative agreement between the Municipality and the State provides for State management of Bird Creek Regional Park as a part of Chugach State Park. It would seem advisable to transfer Bird Creek Regional Park to Chugach State Park. The Placer River, Twenty-Mile River, and Portage River also offer opportunities for snowmobile use.

B. ISSUES

There is a need to improve access to Bird Creek Regional Park. Because the physical roadway is not located within the platted easement, this upgrade will require the acquisition of easements from affected landowners. Another access alternative to the park would be from Mile 100 of the Seward Highway. This would bypass the community entirely via a new park road around the periphery of the park extending to a future campground and trails that are planned for up-valley.

An improved trailhead is needed in Bird Creek Regional Park in the existing gravel pit north of the community. Restroom facilities, a concession stand for food, and off-loading facilities would be appropriate. The construction of these improvements should include volunteer efforts.

Currently the trails are difficult to ride, as they are thickly overgrown. Volunteer efforts for trail improvement and a maintenance program is needed.

Bird Creek is not currently in a Parks and Recreation Service Area, nor is the remainder of Turnagain Arm, except for Girdwood. Municipal tax dollars may not be spent in these areas until they are included in a Parks and Recreation Service Area. State dollars may be used, if the area is transferred to Chugach State Park.

Many residents of the Turnagain Arm area feel, at this point in time, that there is little conflict between motorized and non-motorized users and that they can co-exist. There is currently a low level of either type of use and both users extend courtesies to the other. Snowmobile use is actually prohibited by Municipal ordinance, but the ordinance is largely ignored. As development occurs in Turnagain Arm, especially in Girdwood, conflicts may arise between these users, as they have throughout the rest of the Municipality.

C. RECOMMENDATIONS

- 1. The Girdwood Board of Supervisors should undertake discussion and development of a management plan for multiple use of Girdwood trails.
- 2. The Turnagain Arm Community Council, Portage Community Council, and Girdwood Board of Supervisors should investigate the creation of a Turnagain Arm Parks and Recreation Service Area.

VI. CROSS-COUNTRY SKI USERS

All cross-country skiing in the Turnagain Arm area occurs on ungroomed trails. There is no competitive skiing along Turnagain Arm.

A. EXISTING TRAILS AND FACILITIES

Girdwood offers a lengthy ungroomed trail system along almost of the valley. The largest level of use occurs in the Moose Meadows area, which is used extensively by mushers, skijors, skiers, and occasionally by snowmobilers.

Cross-country skiing occurs in Bird Creek Regional Park. Cross-country skiers also use the lower portion of the Powerline Pass Trail in Indian and travel from Indian, through Ship Creek Valley, to Arctic Valley.

Most other trails used for cross-country skiing along Turnagain Arm would be considered as "back country" trails. Trails are not prepared for use, other than that provided by snowmobiles. The main valleys offer excellent access to valleys and hillsides and are used extensively by skiers. All users must acknowledge avalanche hazard.

Guided cross-country ski tours are led through Crow Creek Pass and Winner Creek trails.

B. ISSUES

As the downhill ski resort facilities grow in the Girdwood and Winner Creek valleys, there may be an increasing demand for cross-country ski facilities. Large resorts, such as Sun Valley in Idaho, also have well developed, groomed, cross-country ski trail systems.

Moose Meadows, which contains cross-country skiing, is recommended for park dedication in the Girdwood Area Plan (1993).

Cross-country skiers have requested development of a designated cross-country ski trail area that would provide groomed trails that are also available for competitive events.

C. RECOMMENDATIONS

- Ski trails in the Moose Meadows should be protected as recommended in the Girdwood Area Plan. 1.
- An area should be provided in the Girdwood area for competitive cross-country skiing. 2.
- Groomed trails should be provided in Turnagain Arm. 3.

VII. EQUESTRIAN USERS

There is a very small amount of equestrian use in the Turnagain Arm area as horses must be trailered to most locations. Equestrian uses will most like occur on multi-use unpaved trails which are available for other usage.

A. EXISTING TRAILS AND FACILITIES

There is some limited equestrian use of the Beaver Pond Trail and the California Creek Trail in Girdwood. There is equestrian use in Bird Creek Regional Park and on other trails in the Bird and Indian area.

The Johnson Trail is closed to equestrian use from Potter Marsh to Indian. The Winner Creek Gorge and Upper Winner Creek trails are entirely closed to equestrian use.

B. ISSUES

Existing trails easily accommodate current equestrian use, with the most suitable trails for equestrian use being located within Bird Creek Valley. Little conflict exists between any of the user groups in the Turnagain Arm area.

The wet conditions in much of Girdwood make equestrian use inappropriate and only limited riding opportunities are available.

C. RECOMMENDATIONS

- 1. Existing equestrian use in Turnagain Arm should be protected.
- 2. Equestrian use within Girdwood should be confined to those areas where soils and drainage allows.

VIII. SLED DOG MUSHING TRAIL USERS

Dog mushing is a recreational and commercial activity in Girdwood.

A. EXISTING TRAILS AND FACILITIES

The Moose Meadows Trails and their connections to other trails north of Girdwood are important to mushers and the survival of the small business operated by Chugach Express.

B. ISSUES

The Moose Meadow Trails should be kept available for dog mushing. This currently is not a problem because of the courtesies extended between the many users of the Moose Meadows.

C. RECOMMENDATIONS

- 1. Any management plan for Moose Meadows should provide for the protection of mushing.
- 2. As development proceeds, protection of sled dog trails should be incorporated into the planning process.

IX. SKIJORING USERS

Skijoring has enjoyed rapid growth in Girdwood. The Moose Meadows area provides a trail that suits the needs of skijors.

A. EXISTING TRAILS AND FACILITIES

Skijors use the Moose Meadows trails extensively because of the lack of significant hills and provision of ready access to the community of Girdwood.

Trails in Bird Creek Regional Park are used occasionally, though the presence of motorized vehicles is a conflict.

B. ISSUES

The potential threat of increased use of snowmobiles within the community of Girdwood is a concern to skijors. Local citizens who extend necessary courtesies generally accept existing snowmobile use. Increased use of Girdwood trails by snowmobilers may change the current level of acceptance of co-existing motorized and non-motorized uses and require designation of appropriate motorized riding areas. Potential use by riders from outside the Girdwood community could drastically change the current level of acceptance of motorized use.

C. RECOMMENDATIONS

Priorities for skijoring include:

- · Signing the Moose Meadows area to recognize the presence of skijors
- Develop a management plan for the Moose Meadows trail system to ensure that the interests of skijors are protected

X. NATURAL TRAILS

Natural trails are unpaved, unlighted, ungroomed, non-motorized, generally narrow, relatively lightly used trails in a natural setting that are enjoyed by non-competitive walkers and skiers, bird watchers, and outdoor educators.

A. EXISTING TRAILS AND FACILITIES

At the present time, there are three natural trails in the Portage Valley, including the Moraine Nature Trail, the Byron Glacier Trail, and the Williwaw National Recreation Trail. There is also a trail extending from the end of the Portage Pass viewpoint trail to an unnamed ledge overlooking Portage Glacier and Portage Lake. Chugach National Forest personnel are preparing to add 7 miles of recreational trails in the Portage Valley.

There are numerous natural trails in Chugach State Park and in Chugach National Forest. The Chugach State Park Master Plan calls for a new trailhead in the Girdwood area in the vicinity of California Creek.

All of the trails in the greenbelts and along the streams in Turnagain Arm are natural trails.

Guided llama pack trips are led along the Crow Pass Trail.

B. ISSUES

Maintenance of natural trails in the face of increasing usage will be a difficult issue.

C. RECOMMENDATIONS

- 1. As Turnagain Arm develops, some trails should be designated to remain as natural trails, rather than being slated for upgrading and paving.
- 2. Natural trails should be left unimproved. Exceptions may be considered for clearing and brushing of downed timber, and to improve drainage that may be causing trail damage.

XI. WATER TRAILS

There are several rivers in the Turnagain Arm that are available for potential water trails.

A. EXISTING TRAILS AND FACILITIES

Watercrafts use both the Placer River and Twenty-Mile River at the present time. Additional creeks that might be used include Glacier Creek in Girdwood and Bird Creek from the falls to the mouth.

Guided whitewater river float trips are conducted on Portage Creek. The Knik Canoers and Kayakers use Glacier and Portage Creeks for classes.

B. ISSUES

Access and public put-in and take-out points are an issue that will need to be addressed as more and more of the land adjacent to waterways are developed. Water quality of the streams is also an important issue to be addressed as use continues and may increase.

C. RECOMMENDATIONS

The Anchorage Waterways Council, in conjunction with the Turnagain Community Council and the Girdwood Board of Supervisors, should investigate the potential use of Glacier Creek and Bird Creek by water crafts.

CHAPTER 5 — REGIONAL TRAILS

There are three regional trails in the Anchorage area: the Coastal Trail, the Iditarod Trail and a trail from the Matanuska-Susitna border to the Kenai Peninsula border using the Glenn and Seward Highways. The Coastal Trail and the Seward and Glenn Highways multi-use trail are only partially constructed and the Iditarod Trail is only partly reconstructed.

I. IDITAROD TRAIL

The Iditarod Trail was once one of Alaska's most famous gold rush trails. It is now the site of the nationally famous Iditarod Trail Sled Dog Race that commemorates dog mushers' historic race to deliver diphtheria serum to Nome in 1925 (see Figure 5.1). However, the original trail was much more than the Anchorage-to-Nome route. The Iditarod was actually a series of routes that have been described under a number of related names, including the Nome-Seward Trail, the Iditarod-Seward Trail, the "Winter Mail Trail," and the "Seward Trail."

The Iditarod Trail entered what is now the Municipality of Anchorage by way of Turnagain Pass. The trail skirted the end of Turnagain Arm and continued onward toward Girdwood. This trail split at Girdwood with one branch traveling over Crow Pass, down through Eagle River, and on to Knik and Nome. In times of good weather, this route was preferred because it was more direct, though steeper, than the others.

Another branch of the Iditarod Trail followed Turnagain Arm from Girdwood to Indian and over Indian Pass to Ship Creek where it followed Knik Arm until it joined the main trail near Eagle River. The Indian-Eagle River branch was used when stormy weather made travel in Crow Pass dangerous or impossible.

From Portage and Girdwood to Indian, the Trail followed the flat areas along Turnagain Arm in an area now largely covered by the Seward Highway. Reconstruction of the trail through this area should be accomplished. This portion of the trail would provide the link needed to connect with the statewide trail system, Chugach National Forest trails, and Kenai National Moose Range trails. It would also connect with general State land trails that connect Homer and Seward with Anchorage and points along the Iditarod Trail north of Anchorage.

The Territorial government cleared and maintained the Iditarod Trail around 1910, however, there are few distinct remnants of the trail remaining today.

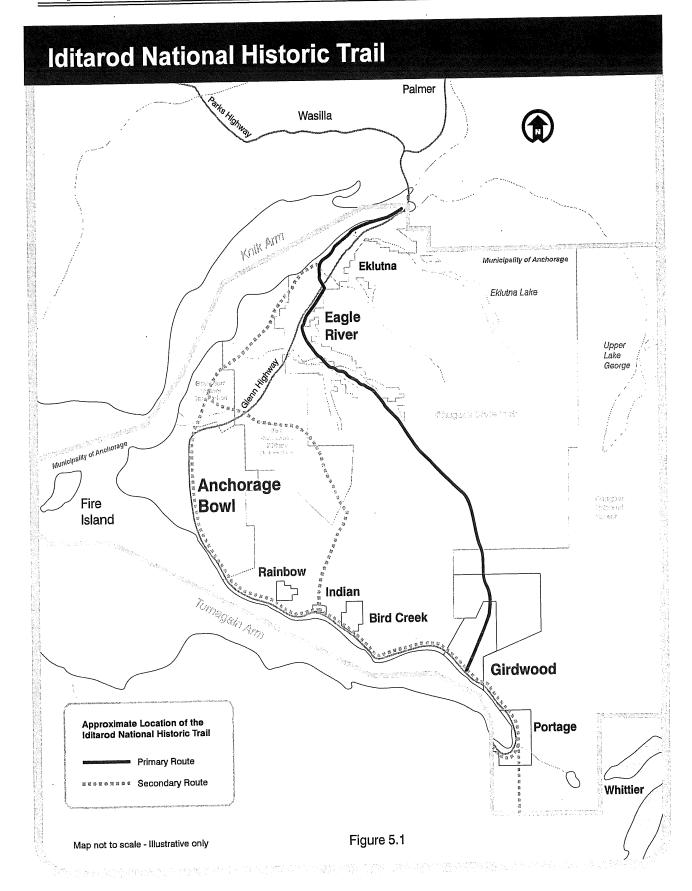
In 1978, Congress established the Iditarod National Historic Trail System (INHTS). The Bureau of Land Management (BLM) has been designated as the federal agency responsible for coordination of trail administration and management. BLM will manage the INHTS consistent with the Memorandum of Agreement between the State of Alaska and BLM. The State Office of History and Archaeology is consulted for permits and leases along the INHTS.

A. IDITAROD TRAILS DESCRIPTION

The trail can be described in terms of separate segments lying within the Municipality of Anchorage as follows:

1. Crow Pass Trail

The Crow Pass Trail went from the Kenai Boundary, through Girdwood Valley, and over Crow Pass. From there it traveled along Raven Glacier and Eagle Glacier down the Eagle River and then on to Knik and Nome. The use of Crow Pass as an Iditarod branch was brief, lasting only a season or two because of avalanche danger. The most clearly visible segments of the trail are in the vicinity of Monarch Mine near Crow Pass. Recent field work has identified some portions in the Girdwood Valley.



2. Indian Creek Trail

Whereas the Crow Creek route skipped north from Girdwood, the alignment of the Indian Creek Trail dictated that the traveler continue along Turnagain Arm from Girdwood, past Bird Creek, to Indian Creek. There the trail meandered up Indian Creek Valley to Indian Creek Pass and beyond to the headwaters of Ship Creek.

3. Upper Ship Creek Trail

The Ship Creek trail or route is a continuation of the Indian Creek Trail. Once over the Indian Creek Pass, Iditarod travelers would continue down out of the mountains, heading northeast to travel around Knik Arm. After 1915, many more travelers journeyed down Ship Creek to Anchorage. This route winds out of the present Arctic Valley area, runs through the military reservation, and emerges in the lower Ship Creek basin. When the Ship Creek greenbelt becomes a reality, the majority of the Indian Creek-Ship Creek route will be intact.

4. Turnagain Arm/Old Johnson Trail

Another branch of the Iditarod Trail, known as the Turnagain Arm Trail and commonly referred to as the "Old Johnson Trail," was cut into the mountainside along Turnagain Arm between Indian and Potter. The Alaska Engineering Commission built the Old Johnson Trail for the railroad in 1916. In addition to being called the Old Johnson Trail, this trail has been referred to as the Great Northern Trail, the Turnagain Trail and the Telegraph Trail. Alaska State Parks has used the name of the Turnagain Arm Trail/Old Johnson Trail in more recent years.

Chugach State Park staff and volunteers maintain 7.5 miles of the Turnagain Arm Trail/Old Johnson Trail between Potter and Rainbow. Chugach State Park personnel estimate that 8,000 visitors per year use portions of this trail.

Between Rainbow and Indian, there is approximately 4.5 miles of unmaintained trail, although visitors have access to portions of the trail at Falls Creek. The trailhead is in generally good condition, although a major brushing project is needed along most of the route.

Between Indian and Girdwood, the original trail followed the flatter areas along Turnagain Arm. The Seward Highway overlays most of this old route. Several state and municipal management plans for Turnagain have recommended reconstruction of the Old Johnson Trail.

Many old cabin remains are visible along the trail. Some of these were roadhouses associated with travel along this branch of the Iditarod Trail, while others were cabins occupied by woodsmen and prospectors. The remains of several cabins have been found near the trail between Potter and Indian. At one time, the largest hospital in Southcentral Alaska was at the present site of McHugh Creek Picnic area. Use of the trail continued until about 1915-1917 when the completion of major portions of the Alaska Railroad caused use of the trail to nearly cease.

5. Potter Creek Trail

The Potter Trail, also known as the Potter Creek Trail, traveled from Potter and followed what was to become the Alaska Railroad for a length of about 4 miles. The trail crossed the Hillside area of the Anchorage Bowl in a northeasterly direction, across what are now Far North Bicentennial Park and Fort Richardson, extending to Ship Creek where it rejoined the Indian-Ship Creek Trail. Mushers with heavily weighted freight sleds preferred this route when there was adequate snow along Turnagain Arm because it features more gentle grades and is less subject to whiteouts and storm conditions, which frequently occur in the mountain passes.

6. Eagle River-Eklutna

The primary Iditarod Trail entered Eagle River from Crow Pass, traveling down along the north bank of Eagle River, cutting away from the river, and heading north crossing Meadow Creek, the Old Glenn Highway and the New Glenn Highway. The trail then paralleled the coast of Knik Arm to a point just northeast of the Eklutna River where it crosses the Knik River slough. From there, it wound around Knik Arm and headed toward Nome.

B. RECOMMENDATIONS

- The Municipality, in cooperation with other federal, state, local, and private agencies, should pursue the development of the Ship Creek Greenbelt in order to preserve part of the Indian Creek-Ship Creek Trail.
- The Municipality, in cooperation with other federal and state agencies, should pursue additional research into the general alignment of all segments of the Iditarod Trail that are known to have passed through 2. Anchorage. The Municipality should acquire easements to enable the reconstruction of the trail.
- Where the Iditarod Trail has been identified, signs should be posted indicating its location and historical 3. significance.

II. COASTAL TRAIL

Much as the Iditarod Trail runs from the Kenai boundary to the Matanuska-Susitna boundary, though inland and in the mountains, a Coastal Trail has been planned that would run along the coast from the Kenai boundary to the Matanuska-Susitna boundary. A comprehensive study should be done to determine what existing undeveloped land is essential to maintaining an aesthetically pleasing Coastal Trail. A portion of the Coastal Trail has been constructed in the Anchorage Bowl from Second Avenue to Kincaid Park and has been named the Tony Knowles Coastal Trail.

A. COASTAL TRAIL DESCRIPTION

Like the Iditarod Trail, the Coastal Trail can be described in separate segments lying within the Municipality of Anchorage as follows:

1. Tony Knowles Coastal Trail - Second Avenue to Kincaid Park

The Tony Knowles portion of the Coastal Trail, which has won a national award, has proved to be very popular, far more popular than was ever envisioned. However, the very popularity of this trail has led to increasing conflicts between users. This is partly due to the numbers of people using the trail, but also to changing technologies in sporting equipment and the fact that various user groups have differing needs.

As users have increased, so too has the demand for space. Whereas an eight foot trail was sufficient before, the trail is now too narrow in places to simultaneously accommodate the various types of users. There is also a need for different types of surfaces to serve the various users. Runners and walkers and mountain bikers can be off the pavement, while use of roller blades and regular bicycles requires pavement.

As technologies of sporting goods have changed, a number of new user groups, including roller bladers and roller skiers, are using Anchorage trails. Roller bladers are a new user group that is increasing in size. Many trail users are using ski poles as a part of their training regimen, which increases trail hazards and requires considerably more room.

It has been suggested that the Coastal Trail system would be improved if it were divided into two separate lanes, each supporting one-way traffic, rather than just widening the existing lane. A wide single lane, developed to accommodate the various users, would create an unsightly swath of asphalt more akin to a roadway than a trail. It has also been suggested that a dirt trail separated from, but essentially parallel to, the paved trail be created. This could support two-way traffic in winter, or be divided among different user groups so as not to damage the groomed ski trail, which currently happens.

2. Kincaid Park to Potter Marsh

A trail is planned from Kincaid Park south to Potter Marsh. This part of the Coastal Trail would improve the travel options in presently under-served south Anchorage. A portion of this section would go through the Anchorage Coastal Wildlife Refuge (ACWR). The ACWR Management Plan states that:

"Coastal Trail access may be allowed within the refuge where disturbance to fish and wildlife populations and their habitat is avoided; where safety considerations and conflicts to existing refuge uses including waterfowl hunting and rifle range use allow; and where compatible with management of refuge public access points and the goals of this management plan."

The siting, design, and construction of a trail within the ACWR will require a Special Area Permit from the Alaska Department of Fish and Game (ADF&G).

3. Potter Marsh to the Kenai Borough

The Municipality of Anchorage District Coastal Management Program designates the Seward Highway from the coastal bluff above Potter Marsh to the Kenai Peninsula Borough as an "Area Meriting Special Attention." This designation is based on the natural values of the corridor. The Seward Highway has been designated a scenic corridor. This portion of the Coastal Trail may be coincident with many portions of the Iditarod Trail.

4. Second Avenue to the Matanuska - Susitna Boundary

The section of the Coastal Trail from Second Avenue north to Eklutna has been studied as a part of the Ship Creek Land Use Plan and the Coastal Trail Plan: Ship Creek to Eklutna. The Coastal Trail Plan envisions the trail in two components. The first component, from Ship Creek to the Eagle River area, would run across public land managed by the Alaska Railroad, Elmendorf Air Force Base, and Fort Richardson. The second component, from Eagle River to Eklutna, would cross municipal park land and tracts of private land. From the coast at Eklutna, the trail would skirt land owned by the National Bank of Alaska and travel from there to the planned trail along the New Glenn Highway to the Matanuska-Susitna boundary.

As a shorter term priority, a gravel trail could be constructed from a trailhead to be established in the mouth of Peters Creek Park to run northward along the coast to the north side of the Eklutna River. This trail should be designed to connect with the state land along the Knik River, with the possibility of someday connecting to a Glenn Highway trail. As a gravel trail, similar to the state park trail along Eklutna Lake, the design would help reduce maintenance costs to the local service area.

B. RECOMMENDATIONS

- The Tony Knowles Coastal Trail from Second Avenue to Kincaid Park should have a paved width of ten feet and three feet wide unpaved shoulders on each side. This would provide a place for runners and walkers on the unpaved shoulders and bicyclists and roller bladers on the pavement.
- 2. The trail segment from Kincaid Park to Potter Marsh should receive a high priority for funding as it would serve south Anchorage, which is presently under-served in terms of constructed trails. Because of the many problems associated with a trail running below the bluff, plans for a trail south of DeArmoun Road should consider alternatives on top of the bluff.
- 3. To implement the Potter Marsh to the Kenai Borough segment of the Coastal Trail, provisions for a continuous trail corridor should be a part of any plans for upgrading the Seward Highway. The Municipality, in cooperation with the Alaska Department of Transportation and Public Facilities, should establish by ordinance a Seward Highway Scenic Corridor with the incorporation of a coastal trail.

4. The first section of the trail segment from Second Avenue to the Matanuska-Susitna Boundary should be constructed from the mouth of Peters Creek Park to the north side of the Eklutna River.

III. MULTI-USE TRAIL FROM MAT-SU TO KENAI

This regional trail would utilize the Glenn and Seward Highways to traverse the area from the Matanuska-Susitna boundary to the Kenai Peninsula boundary. Portions of this trail have already been constructed, such as along the Glenn Highway from Muldoon to Peters Creek and separated trails and bike lanes along the Seward Highway. The remaining sections should be constructed utilizing frontage roads, separated bicycle trails, or bicycle lanes. This trail should be connected to the trails in the Statewide Transportation Plan, trails section.

CHAPTER 6 — AREAWIDE TRAIL ISSUES

While some trail issues are specific to a portion of the Municipality, such as Chugiak-Eagle River, others issues are areawide. This chapter discusses these more generic trail issues, first as general issues, and then by specific trail type.

I. GENERAL TRAIL ISSUES

There are several issues that must be considered in the development of roadway improvements and trail projects. These issues include the right-of-way constraints of existing roadway facilities, impacts to utilities and to adjacent property owners from the construction of trails or separated crossings, steep topography that may prohibit the construction of a trail to meet design standards or ADA guidelines, and the ability to accommodate recommended improvements within a financially constrained program.

A. ATTITUDES TOWARDS TRAILS

The most important trail issue is the need for recognition by planners, designers, engineers, and policymakers that trails are an essential component of transportation solutions and need to be incorporated into transportation routes. For planning and budgeting purposes, "roads" should be considered as "transportation corridors" that incorporate all elements including trails, and which integrate travel into the fabric of the neighborhoods and areas through which they pass.

B. FUNDING

Provisions for pedestrians and bicyclists are integral components of the transportation system. Realistic funding of transportation corridors must recognize the need to include trails. This funding must consider the costs of acquiring property and relocating businesses, residences and utilities; costs for maintenance; and the ability to accommodate recommended improvements within a financially constrained program.

Capital funds for the design and construction of new, or the reconstruction of existing, trails and sidewalks are provided by a number of sources. These include federal highway funds, Municipal bonds, and State general funds.

ISTEA funds are used for maintenance of Interstates that involve major pavement overlays. Usually, however, funds for maintenance must come from operating budgets. As new trails are constructed, additional funds must be provided for maintenance.

C. RIGHT-OF-WAY ISSUES

Trail needs are often a problem in the development of transportation systems because of a lack of adequate right-of-way to accommodate a trail. Trails must be considered an integral element of the transportation system commensurate to roadways. During the dedication and/or design process, adequate right-of-way should be provided to ensure provision of trails. To partially address this concern, the amount of right-ofway dedicated by a developer should be increased and prescribed in Title 21. All proposed trail routes should be evaluated to ensure there is adequate right-of-way.

D. COMPATIBILITY

Compatibilities between activities vary greatly. Since multiple use of trails is encouraged, there must be careful consideration of compatibilities. Planners and designers must consider environmental impacts of the various users, different travel speeds, sight distances, safety, and the overall objectives of individual trail linkages and park and greenbelt systems.

Environmental impacts must be evaluated for each user group based on type of user, expected user trips, and trail surface. Adequate snow cover must be available for snowmobile use. Summer motorized, equestrian, and mountain bike users must not be allowed in areas with fragile vegetation or wet soils. In fragile vegetation areas, all uses should be restricted to established trails so as to not destroy the area. This is true for both summer and winter use, as even compaction on frozen ground can negatively impact these delicate ecosystems.

Travel speeds are critical where sight distances are limited. This can be a problem where users travel at different speeds, such as commuter bicyclists and walkers, dog mushers and skiers, and snowmobiles and cross-country skiers.

The overall objectives of an area must also be considered in determining compatibilities. Where the retention of natural features is intended, such as in Far North Bicentennial Park, it is important to determine what kinds of users are allowed. The dog mushing trails, for example, are very important to people in Anchorage. Care must be taken to ensure that no incompatible use is allowed on these trails.

The physical layout of the trails, i.e. width, surface type, and line of sight, can allow compatibility where some types of incompatibility might exist. For example, parallel paved and gravel trails could be constructed and could diverge, where there is room. There should be a slight separation between uses in every case. Where there is a sharp difference in the speed of use, such as high-speed bicycling and ambling, trails must be kept separate regardless of surface.

E. AMERICANS WITH DISABILITIES ACT GUIDELINES

All trail systems must contain trails designed for universal accessibility by the disabled, whether they be sidewalks, walkways, or separated trails. In these trail systems, only the multi-use paved trails must be designed for universal accessibility. Many persons will experience a disability at some time in their life that will limit their ability to access trails to some degree. All trails must be designed to recognize the requirements of the Americans with Disabilities Act (ADA), however, not all trails must be designed to meet ADA standards.

Recreationalists look for challenge in their activities, particularly those in non-urban settings. Users demand a setting that offers physical and mental challenges that are not found in their routine situations. This is particularly true with respect to recreation in the Municipality, where non-urban settings are found throughout the area.

The ADA Guidelines must be considered with respect to location and design of trail projects. For example, adequate right-of-way must be provided to ensure that grade criteria can be met for development of accessible trails, where accessible trails are required. Topography may not allow conformance with design standards or with ADA requirements, thereby precluding the construction of accessible trails. Also, all ADA requirements for signage, trailheads, curb requirements, clearances, grades, and surfacing must be met on those trails that are built to meet ADA requirements.

Not all trails must be constructed for all disabilities. Challenge levels should be determined for Anchorage recreational trails. This philosophy has been embraced by the U.S. Forest Service in the development of their Recreation Opportunity Spectrum (ROS) system. This system respects the character of trails based on function, setting, and expectations of accessibility.

The ROS system analyzes activities, settings, and experiences in terms of urban, rural, roaded natural, semiprimitive, and primitive. Within each are different levels of development and expectations of accessibility. A full spectra of activities, settings, and experiences occur in Anchorage.

F. TURNOUTS

Trails should have turnouts for those that desire to linger or rest. Turnouts encourage multiple use and enjoyment of trails and provide rest opportunities for the physically challenged. Turnouts also provide opportunities for interpretive facilities.

G. PROTECTION OF EXISTING TRAILS

Existing trails designated in this Plan need protective designations to ensure that they will either be preserved or relocated during any development process. Throughout the Municipality, existing trails have been demolished without any replacement, because there has been no responsibility assigned for replacing existing trails. Replacement of trails can be accomplished through the platting process or by requiring site plan review.

Table 6.1 — Compatibility of Trail Uses Summer Activities:

	Motorized ORV	Road Bicycles	Mountain Bikes	Walk for Pleasure	Hıkıng	Roller Blading	Equestrian .	Roller Skiing	Jogging/ Running
Motorized ORV	+	-	-	•	1	-	-	-	-
Road Bicycles	-	+	+	1	+	+	-	+	+
Mountain Bikes	+	+	+	1	+	+	+		+
Walking for pleasure	-	1	1	+	+	1	+	11	+
Hiking	-	+	+	+	+	-	+	-	+
Roller Blading	-	+	-	1	-	+	-	+	+
Equestrian	-	-	+	+	+	-	+	_	+
Roller Skiing	-	+	-	1		+	-	. +	+
Jogging/Running	-	+	+	+	+	+	+	+	+

Winter Activities:

	Snow-	Cross-	Cross-	Equestrian	Skijoring	Walking	Jogging/	Dog	Snow
	mobiling	Country	Country				Running	Mushing	shoeing
	_	Skiing	Skiing Un-						
		Groomed	Groomed	,					
Snowmobiles	+	•	1	-	-	-	-	-	-
Cross-country Skiing Groomed	-	+	-	1	1	1	1	-	1
Cross-country Skiing Ungroomed	1	-	+	1	1	+	+	1	+
Equestrian	_	-	1	+	1	+	+	-	+
Skijoring	-	1	1	+	+	+	1	1	
Walking	1	1	+	+	+	+	+	1	+
Jogging/ Running	1	1	+	+		+	+	-	+
Dog Mushing	-	-	1	-	1	1	-	+	1
Snowshoeing	1	-	+	+	1	+	+	1	+

KEY: + = Compatible

- = Not compatible

1 = Generally compatible. Walking, jogging, horse-back riding and snow shoeing are only compatible with groomed cross-country ski trails when the ski trails are not heavily used or used for training or racing. Cross-country ski trails and skijoring trails are compatible only where there is flat terrain, long sight lines, one-way travel, and an enforceable requirement that dog owners clean up after their dogs. Equestrian and Skijoring uses area compatible in the winter, depending on snow conditions, such as the case if the snow is very hard packed. Where snowmobile use is light and there are good sight lines, snowmobiles and equestrians can share trails.

H. SAFETY

Safety is a serious concern among trail users. With the wide variety of trails and routes available, people can find themselves in traffic along a road, going through a secluded area along a greenbelt, or traveling on an isolated trail in a park. In any of these situations, the personal security of the user, especially if alone, could be jeopardized. These situations can be alleviated somewhat by providing alternate running routes, increasing safety patrols on trails, lighting trails, promoting trail visibility from adjacent roadways, and educating the public to be more aware of their own personal safety. Increased use, which comes with time, will also provide a form of safety for individual users.

The safety of the trail itself is also a concern. The design of a trail must take into account the user, the steepness of the grade, and visibility at trail and road intersections.

I. EDUCATION AND ETIQUETTE

Many trail issues could be resolved with education of the users as to the rights of other users and the need to stay on identified user group trails. Also, simple trail etiquette and courtesy should be practiced by all users of the trails.

J. SEPARATED TRAIL CROSSINGS

A system of overpasses and underpasses are important components of a continuous trail system. These facilities reconnect neighborhoods with schools, parks, and shopping areas, increase user safety, and reduce some of the negative impacts busy streets have on a community. The need for overpasses and underpasses should be analyzed as a part of each roadway improvement project in order to determine the need to acquire additional rights-of-way. Wherever a grade-separated crossing is provided, it should also be constructed to accommodate bicycles, disabled persons, and other trail users.

Underpasses should be lighted at all times and the approaches should be designed to provide adequate sight distance through the underpass for safety purposes. Underpasses and overpasses must also be designed to permit safe passage of maintenance equipment.

K. PEDESTRIAN AND BICYCLE FRIENDLY INTERSECTIONS

Vehicle capacity improvements at intersections, such as double turn lanes, must take into account the movement of pedestrians and bicycles through the intersection. Consideration should be given to provisions for continuing those uses. Thought must also be given to traffic signalization timing, safety, and the actual benefit to pedestrians and bicycles.

II. PEDESTRIAN ISSUES

A. PROVISION OF PEDESTRIAN FACILITIES

Sidewalk construction requirements through the subdivision process are established in Anchorage Municipal Code (AMC) 21.85.090 and 21.85.100. Where the average daily traffic is less than 300, no sidewalks are required. Where the average daily traffic is between 300 and 1,000, a sidewalk is required on one side of the street. Streets carrying more than 1,000 average daily trips shall have sidewalks on both sides of the street. This standard is currently sufficient to provide for the needs of pedestrians, however, changing patterns of development often change the characteristics of traffic flow. These standards are minimum standards and can be increased at the discretion of the Platting Board.

In the past, pedestrian facilities have been omitted as a component of road improvement projects when funding for acquisition of right-of-way was inadequate. This has resulted in discontinuous trail systems. The question arises whether the overseeing agency should either not proceed with a project until a trail can be accommodated or proceed without the right-of-way to accommodate a trail. Pedestrian facilities should be part of the overall transportation system and, as such, they should be integral to the planning and development process.

Larger amounts of rights-of-way may be needed for pedestrian and trail amenities. The Official Streets and Highways Plan (OS&HP), adopted January 1996, sets minimum right-of-way widths. These widths may require 40 feet from the centerline to the edge of the right-of-way, however, there is a maximum dedication through the subdivision process of 35 feet from the centerline from a developer. These requirements should be made to be consistent.

Several areas of the municipality pose problems for pedestrians. In Midtown, pedestrian facilities are narrow and directly adjacent to the road along Northern Lights Boulevard. This is also true for much of downtown where pedestrian access to adjoining stores and businesses is not readily available. The same problem is found in central Eagle River.

Problem also exist in terms of retrofitting sidewalks in older established subdivisions that did not originally require sidewalks.

B. SEPARATION FROM THE STREET

Preferably, pedestrian facilities should be separated from the street for user safety. However, attached sidewalks may be preferable where the only maintenance is that by road crews, as the blade can also clear the sidewalk.

C. ACCESS TO TRANSIT FACILITIES

To provide better accommodations for transit passengers, the appearance of bus stops should be enhanced. In order to comply with the Americans with Disabilities guidelines, bus stops should be constructed with a minimum pad of 5-feet by 8-feet. Boarding pads that are 8 feet deep by 28 feet along the curb are preferred as they accommodate passenger boarding and de-boarding on a firm surface (Transit Facilities Design Guidelines-TFDG). This pad should receive first priority for snow clearing, just as is the case for snow routes.

A sidewalk should be provided for at least the entire block length face on which each transit facility is located. This exceeds the standards adopted in the TFDG and would provide a continuous trail network. Transit facilities should have adequate pedestrian connections for users. The Capital Improvement Program (CIP) should be updated to provide appropriate construction projects to address deficiencies to this requirement as they are identified.

D. RECOMMENDATIONS

- 1. Sidewalks should be constructed as part of the building permit approval process for any new construction in commercial areas.
- 2. AMC 24.80.050 (prohibits placing of debris on sidewalks and trails) and AMC 24.80.090 (requires the removal of snow and ice by the public on sidewalks in commercial, and industrial areas) should be enforced for the maintenance of walkways during the winter.
- 3. Capital improvements to roads should include bringing trail facilities up to standard.
- 4. Streets without sidewalks should be retrofitted with sidewalks.
- 5. The Anchorage Municipal Code should be amended to require plowing of bus stops in the same manner as the Municipality plows walkways.

III. BICYCLE ISSUES

A. ATTITUDES

Skeptics of bicycle and pedestrian programs often point to Anchorage's severe weather and snow accumulation as reasons why facilities should not be constructed. However, summer automobile traffic volumes are much higher than winter volumes. Thus, bicycle and pedestrian programs may contribute enough to congestion reduction to justify themselves, even if they produce measurable results only during the warmer, drier, lighter months.

B. ABILITIES AND PREFERENCES

Bicyclists differ in their abilities and in their preferences for riding environments. Bicyclists commuting to work place high importance on the directness of a route and they have the ability to ride safely and confidently in heavy traffic. These bicyclists will often choose to travel on arterial streets instead of quieter, more aesthetically pleasing alternate routes because arterial streets are more direct and result in actual or perceived time savings. Other bicyclists place more importance on the quality of the trip and are willing to go out of their way to ride on neighborhood streets or designated bike trails. Multi-use trails are also used by young children and inexperienced cyclists. The needs and abilities of all bicyclists must be considered in the location and design of multi-use facilities that serve these users, as well as pedestrians and other users.

C. COMMUTER BIKE ROUTES

Motorists often do not recognize that bicycles are legitimate forms of transportation on roadways. There should be a system of arterials that facilitate commuting by bicycle and these routes must be signed to legitimize their use by bicycles. In most instances, the routes should include painted bicycle lanes. Most of the automobile/bicycle accidents that occurred in 1992 were in the Midtown area of the Bowl.

Locating commuter bicycle routes within the roadway offers an added advantage of allowing snow to be plowed from the trail concurrent with the plowing of the roadway. This approach allows much earlier use of the route than generally is possible on off-street trails and would encourage more commuter bicycle use.

Commuters find that trails are often punctuated by driveways, require slow travel, and have uneven maintenance, all of which make commuter travel difficult. Trails are generally set back from the roadway, causing people who are trying to enter the roadway by automobile to pull into the bicycle trail in order to view oncoming traffic. Trail users must constantly be on guard for automobiles pulling onto the trail and, conversely, automobile drivers must constantly watch for trail users crossing the driveways. Driveways and other roadways cause bicyclists to travel over a series of tight angles, curb lips, and grade changes that require slow travel. Lack of maintenance and poor design also contribute to commuter difficulties.

D. PROBLEMS WITH OTHER USERS

Cyclists traveling at high speed on existing trails are often in danger and also present a hazard. There must be room for the slower users and other types of users who can be accommodated on soft trails. Trails that experience high use should have three foot shoulders for use by walkers and runners.

E. WINTER BICYCLE USE

The increasing popularity of mountain bikes increase winter use of trails. More separated trails should be packed, similar to the effort on Chester Creek. Routes on the roadways should not be used by mountain bikes in the winter.

F. INTERSECTIONS

Intersections should be designed to be more convenient to bicyclists, such as including crossings for cyclists. Pedestrian-activated signal buttons should be made larger and more convenient to bicycle users, such as placing them to face traffic. Provision should be made in the design of overpasses and underpasses for safe bicycle use.

G. SIDEWALKS AND BICYCLE TRAFFIC

1. Bicycles in Business Zones

Potential conflicts exist wherever vehicle traffic intersects with pedestrian traffic in business zones. While motorists are generally aware of pedestrians on sidewalks, motorists often do not have sight distances that allow them to see bicyclists who may be traveling at higher rates of speed on sidewalks. This has led to accidents and near-collisions in many instances. The Anchorage Municipal Code currently prohibits the use of sidewalks by bicyclists in business zones.

Motorists are accustomed to the speed that pedestrians move on sidewalks. In general, this provides enough safety margin to prevent collisions between pedestrians and automobiles. However, motorists are not accustomed to bicyclists using sidewalks and often do not slow down prior to entering the sidewalk area. This problem is compounded by short or no setback distances in the business districts, large volumes of parking, and wrong-way travel on sidewalks.

Setbacks in business districts vary from 20 feet in the B-1 zoning district to none in the B-2 zoning district. Where buildings are located at corners, as allowed in the B-3 districts, these limited sight distances create dangerous situations when bicyclists use sidewalks. In many instances, bicyclists cannot see traffic at corners and drivers cannot see bicyclists on sidewalks. Often drivers must pull slightly into the intersection in order to see around buildings. In some cases, this may be exacerbated when bicyclists assume they have the right-of-way and continue across intersections without slowing. This may not allow sufficient time for motorists to avoid accidents.

Parking in business districts often causes additional problems. Similar to the problem with shallow setbacks, parking often requires motorists to pull onto the sidewalks in order to see around automobiles. This again causes potential accidents with bicyclists that use sidewalks.

Business districts are typically developed with a number of driveways that feed onto the street. The sheer number of driveways, coupled with the above mentioned problems, increase the opportunity for accidents. Also, the speeds that bicyclists would need to maintain in order to provide safe travel are not conducive to commuting by bicycle.

While sidewalks do not offer safe travel to bicyclists in business districts, the same is true for streets. Travel lanes in roadways are generally small due to limited right-of-way. Also, motorists are not accustomed to sharing the travel lane with bicyclists and are often surprised to see bicyclists in the lane. Rain and break-up conditions can also create conditions that are undesirable for on-street travel by bicycle.

2. Bicycles Traveling Two-way On the Same Side Of The Street

Often, bicyclists will travel both ways on either side of a street or on sidewalks. While drivers may be accustomed to slow-moving pedestrian traffic, they generally look only to the left if they are turning right. Thus, there may not be sufficient time to avoid an accident with a bicyclist traveling south on a sidewalk that abuts a north moving lane, increasing the chances of an accident.

H. ON-STREET BICYCLISTS AND TRANSIT

On-street bicyclists present a conflict with transit when both share a lane at the far right side of the road and when transit vehicles are trying to pull out into traffic.

Lack of adequate right-of-way may require transit and bicyclists to share space at the curb. This may cause buses to pull into the bike route, forcing bicyclists into the curb.

On-street bicyclists cut through the turning pattern of buses and, likewise, buses cross the bicycle lane in order to stop at the transit stops. This requires the bus to slow in the traffic lane or in the bicycle lane, if such a designation exists. This may present a significant problem if the bicyclist overtakes the bus while the bus slows, and if the bus driver does not see the bicyclist.

Drivers may not readily see bicyclists, particularly if the turnout is in the bike lane. As a bicyclist maneuvers around a bus, the bus may pull into the rider forcing the rider into traffic or causing a direct collision with the rider. These conflicts do not exist for bicycles traveling on a separated trail.

I. RECOMMENDATIONS

- Trail design should take into consideration the adjacent land uses and the possibility of intrusion into the bike trail space by utilities, mailboxes, and other ancillary uses.
- Private construction activities affecting bike trails should be coordinated with the Department of Cultural and Recreational Services. Appropriate notifications should be provided to users through signage prior 2. to the planned action. All potential impacts should be resolved before construction in order to mitigate any possible safety hazard or inconvenience to the public. Agencies whose construction activities damage trails must repair and/or reconstruct trails to municipal standards.
- A system of bicycle routes that allow commuting by bicycles throughout the Municipality should be provided. Roadways with routes should be aggressively signed in order to inform motorists that bicycles are an appropriate use on the specified roadway surface.
- A training and education program for bicyclists should be instituted to encourage commuters to be educated users of the road system and to make them aware of the potential problems and conflicts with transit.
- Despite the hazards associated with road travel by bicycle, the road is still a safer travel route for bicyclists than is the sidewalk. As is currently provided by code, bicycles should not be allowed on sidewalks in business districts. Roads in business districts should be designed to accommodate bicycle routes. The curb lane in business districts should be widened to allow shared use by bicyclists, where right-of-way allows.
- If a transit stop is in a pull-out, both drivers and cyclists must exercise caution. If the transit stop is on the street, striping should be placed in the bicycle lane within 250 feet of the transit stop to highlight to bicyclists that a transit stop is ahead.
- A bicycle promotion campaign should be prepared for the media.

IV. RUNNING/JOGGING/FITNESS ISSUES

A. WINTER RUNNING ROUTES

Runners need safe, maintained, winter running trails. Currently, the Municipality maintains 22.6 miles of trail for winter running and pedestrian use. Runners and joggers have requested that trails be available in all parts of the Municipality for winter use.

B. LOCATIONS FOR PHYSICAL FITNESS TRAILS

Specialized physical fitness trails combine running or brisk walking with specially designed exercises that provide a complete workout for the entire body. The purpose of a physical fitness trail is to provide a means of non-competitive physical exercise in an aesthetically pleasing environment that is accessible to community members of all ages.

The sequence of exercises and distance between stations are planned to loosen up the participant, provide a good workout, and cool the participant down near the completion. The course should be a one- to two-mile loop trail. The topography of the trail area must be considered during layout so that exertion during running portions will be relatively balanced. Exercise station areas should be large enough to allow several people to exercise simultaneously without interfering with each other.

C. RECOMMENDATIONS:

1. The Municipality of Anchorage should continue to provide and publicize a system of paved and unpaved trails for running and jogging.

2. The Municipality of Anchorage should expand its system of winter running routes.

V. INTERPRETIVE TRAIL ISSUES

A. ROUTE OR SITE SELECTION CRITERIA

Location is the most critical aspect of an interpretive trail since it must not disturb or infringe upon the unique character of an area or the attraction, yet it should provide sufficient access in order to accommodate observations. Wetlands, marshes, bogs, forests, natural springs, and seismic or geologic features are examples of appropriate and interesting subjects for an interpretive trail.

Interpretive trails should be winding and of low profile in order to blend well with the natural terrain. When the trail travels over a bog or wetland, it may be necessary to construct a boardwalk to accommodate persons in wheelchairs, periods of high water, and to minimize damage to the fragile environment.

B. MAINSTREAMING

Often it is assumed that interpretive trails must be small intimate trails located away from the more popular trails used by larger numbers of people. However, benefits can be obtained by locating interpretive trails in areas where there are already large concentrations of people. Many of the more popular trails in Anchorage should be considered for design and construction of interpretive displays.

C. RECOMMENDATIONS:

- 1. All interpretive trails should be non-motorized and limited to those uses that do not conflict with the features being interpreted.
- 2. Interpretive trails should be considered for construction at the time of planning and design of all parks.

VI. SNOWMOBILE AND OTHER MOTORIZED USER ISSUES

A. TECHNOLOGIES

Changing technologies in engines, suspension, and drive mechanisms have changed the characteristics of snowmobiles. Twenty years ago, most snowmobiles traveled at relatively low speeds, seldom over 20 mph. Snowmobiles can now travel at speeds exceeding 60 mph. This high speed, coupled with noise, a helmet, and wind, creates an environment where many operators may not be fully aware of other users around them. However, snowmobiles are safer now, have better brakes and suspensions that make them significantly quieter, and are much more reliable. Additionally, snowmobiles do not damage terrain or vegetation when adequate snow cover exists.

B. ENFORCEMENT PROBLEMS

There are problems associated with enforcement of regulations involving motorized vehicles. Enforcement powers reside in Alaska State Parks Rangers. Much of the area legally used by motorized vehicles, as well as much of the area used illegally, lacks police powers. When infractions occur in these areas, the Alaska State Troopers must be called since the Anchorage Police Department has jurisdiction only on municipal land. Coverage is thin and response time can be slow. When an infraction occurs, identification of the driver can be difficult. A comparison of the numbers of snowmobiles sold with the number of registrants indicates that, since motorized vehicles travel much faster than other users, escape is quite easy unless the corridor is physically restricted. Additionally, once an offender is stopped or an infraction is identified, it may prove difficult to identify the driver. There is not full compliance with registration requirements and there is no easily identified marking of vehicles. In an effort to increase compliance, the Anchorage Snowmobile Club has persuaded Anchorage dealers to voluntarily register all snowmobiles that are sold.

C. NOISE AND EXHAUST FUMES

Use of noisy, motorized vehicles near residential areas is an issue of concern since many homeowners place a high value on the quiet they enjoy in their neighborhoods. Also, many non-motorized users value the quiet of wilderness areas and find the noise associated with motorized use to be incompatible. However, the smell and noise associated with the recreation activity of snowmobiling is not offensive to the snowmobiler.

D. POSSIBLE GREATER ACCIDENT IMPACT

If an accident does occur between a motorized vehicle and with a skier, skijorer, walker, equestrian, or dog musher, the potential for a greater impact is present. Motorized vehicles are powerful, speeds are high, and the damage done in an accident can be significant.

E. RECOMMENDATIONS

- The Municipality should work with ACVB and AVA to identify tourism demands and to identify the Municipality of Anchorage as destination for snowmobilers looking for a high-quality snowmobiling experience.
- The Municipality should urge the State Legislature to pass point-of-sale registration legislation. 2.
- A means of visible identification, such as large identification numbers, should be required. This identification could be similar to a license plate that is used for cars and motorcycles and would be 3. prominently displayed on motorized vehicles, allowing easier identification of rule or law offenders. The feasibility of requiring an identifying mark or registration that would be integral to the tread of these vehicles should also be investigated in order to identify offenders.
- The Trails Oversight Committee should engage with organized motorized interests to initiate a public 4. education program for the development of responsible use of motorized vehicles.
- Organized snowmobile interests should institute a program of user fees to construct trailheads and trails, similar to the program instituted by the Anchorage Nordic Skiing Association. 5.

VII. CROSS-COUNTRY SKI TRAIL ISSUES

A. INCREASE IN LIGHTED TRAILS

There has been a significant increase in the use of cross-country ski trails related to the advent of new skating techniques and the provision of lighting on a number of trails. Trail lighting should be provided on additional cross-country ski trails in order to increase their usefulness during the winter months.

B. PROTECTION OF GROOMED SKI TRAILS FROM INCOMPATIBLE USE OTHER USERS

Some of the cross-country ski trails have track set and are groomed. Groomed cross-country ski trails must be protected from motorized vehicles, horses, sled dog teams, family pets, and people on foot in order to avoid safety hazards, trail degradation, and extra expense from re-grooming.

C. RECOMMENDATIONS

- Motorized vehicles, horses, sled dog teams, family pets, or people on foot should not be allowed on groomed cross-country ski trails, except for those groomed trails that are designated as available for multiple use, such as the Chester Creek trail and the Tony Knowles Coastal Trail.
- Trail lighting should be provided on additional cross-country ski trails in order to increase their usefulness during the winter months.
- Where possible, links should be dedicated between existing cross-country ski trail systems to enhance 3. their potential for recreation and commuting use.

- 4. The cooperative efforts of the Municipality and the Nordic Skiing Association of Anchorage, Inc. should be actively supported.
- 5. Standardized signage should be used throughout the Municipality to designate acceptable trail uses.

VIII. EQUESTRIAN ISSUES

A. RIGHT-OF-WAY NEEDS

As urban areas have spread, equestrian use has been compressed into smaller and smaller areas. In these areas, there is a need to allow equestrian use in the rights-of-way.

B. SAFETY

Safety is a major concern to a horseback rider. Horses can slowly become accustomed to the noise of automobiles and trucks, but sudden confrontations with dog teams, snowmobiles, ATV's, or trail bikes could pose a safety problem for the horse, as well as the rider. If a horse trail is too close to a bike trail, a quiet, fast traveling cyclist may surprise or startle a horse. Planning for trails that have little sight distance should include provision of a greater separation between horse riders and other users.

C. MANURE

Many non-equestrians have concerns with horse manure on trails, both from the standpoint of inhibiting enjoyable use of the trail and from a concern for water quality in streams located adjacent to trails. There is no data on the significance, if any, of the water quality issue in Anchorage. However, negative comments have been received relative to horse manure on trails.

D. RECOMMENDATIONS

- 1. Equestrian trails should be located and administered to avoid conflicts with other incompatible uses and to prevent motorized use, except as necessary to patrol or maintain the trail.
- 2. All future equestrian trail development should, to the extent possible, reflect traditional equestrian usage.
- 3. The Municipality should pursue acquisition of alternative easements and rights-of-way, separate from road rights-of-way, for equestrian trail development.
- 4. Equestrian trails that are lost to paving must be replaced with other equestrian trails in the same area.

IX. SLED DOG MUSHING ISSUES

A. INCOMPATIBLE USES

A major issue for sled dog mushers is the elimination of conflicts with other trail users. Teams are very slow to turn, however, teams can travel at speeds of up to 25 miles per hour on a straight trail. It is often difficult for mushers to see oncoming problems and conditions often prevent other users from moving out of the way of danger.

Problems exist between sled dog mushers and non-motorized trail users such as skiers, skijorers, and equestrians. There is an even greater conflict with motorized users since encounters can cause extensive damage to sled dog teams, including maining the dogs. Also, motorized users may cause extensive damage to trails if they are uneven or moguled, potentially causing damage to the wrists and shoulders of dogs.

B. SPECTATOR CONSIDERATIONS

Dog mushing is a spectator sport relatively unique to Alaska. The public's desire to watch these events should be accommodated without detracting from the satisfaction of the participating dog mushers. Access points should be identified along trails, in addition to the start-finish area, in order to allow the public to participate without interfering with the musher and the team of dogs.

C. RECOMMENDATIONS

- Grade-separated crossings should be built at road crossings, where possible, to increase safety to trail users and motorists.
- Motorized uses should be restricted from all sled-dog mushing trails, except as necessary to patrol or 2. maintain the trail.

X. SKIJORING ISSUES

A. CONFLICTING USES

Skijorers currently must contend with a number of users who present varying levels of compatibility. Skijorers are compatible with many non-motorized uses, such as cross-country skiers, but require passing room to avoid conflict. Skijoring is not compatible with motorized users except in areas with outstanding visibility.

B. LIGHTING

Lighting is important for allowing the extended use of trails in the winter. Most lighted trails are dedicated to skiing. Where a lighted trail is also a groomed trail, skijoring is not a compatible use. Lighting of multi-purpose trails is needed.

C. TUNNELS

Skijorers need tunnels with a direct approach and that have good visibility.

D. COMPETITIVE SKIJORING

Competitive skijorers travel at high speeds and can encounter conflicts similar to those experienced by dog mushers. For these serious skijorers, dedicated trail easements are the best alternative.

E. RECOMMENDATIONS

- Trails should be signed to legitimize use by skijorers of multipurpose trails. 1.
- More trails should be packed in winter to allow use by skijorers.

XI. NATURAL TRAIL ISSUES

Natural trails involve the least cost by far for establishment and maintenance, require the least space or width of any other trail, and have the least environmental impact. Natural trails are an efficient contribution to the overall trail system. Where space is limited, but a trail is desirable, such as at Cheney Lake or at Rabbit Creek, a natural trail may solve conflicts between homeowners and trail users.

A. IMPACTS OF DEVELOPMENT

As land is developed, existing natural trails are often lost to the development process and are not replaced. A process should begin to identify existing, important natural trails and promote their retention.

Also, as parks are more intensively used there is a tendency to pave trails located in parks, open spaces, and greenway areas. Paving of trails should only occur where there is a necessity for paving based on the intensity of use or change in type of use. Where trails are intended for walking, hiking, cross-country skiing, dog sledding, or equestrian use, there is no necessity for paving.

B. RECOMMENDATIONS

- The Municipality should prepare an inventory of natural trails that should be designated or dedicated in order to protect their status.
- The Trails Oversight Committee should prepare a list of specific natural trails in the Municipality that 2. should be given top priority for designation or dedication.

XII. WATER TRAIL ISSUES

A. ACCESS

An important consideration in developing or protecting a water trail is preserving and providing public access points. Even though the water in a creek or river is available to the public for recreational purposes, the waterway could be "locked up" through adjacent land restrictions, ownership, or development.

B. WATER QUALITY

One of the most important considerations in developing or protecting a water trail is the attainment and preservation of good water quality. The loss of Campbell Creek as a water trail, for example, was significant in terms of its use as a recreation amenity and in terms of damage to the image of Anchorage as a city with a pristine environment. Small creeks can serve as excellent places for novices and children to learn and practice canoeing skills.

Waterways within the Municipality are important fish and wildlife habitats. When water quality is degraded, recreational uses, such as wildlife viewing and fishing, are compromised.

C. RECOMMENDATIONS

- 1. The Municipality, in cooperation with the Anchorage Waterways Council, should investigate the feasibility of creating new water trails throughout the Municipality.
- 2. The Department of Cultural and Recreational Services, in conjunction with the Anchorage Waterways Council, should do a study that would address access issues and standards for put-in and take-out areas.

CHAPTER 7 — DESIGN OF TRAILS

I. DESIGN STANDARDS

The objective of this chapter is to provide municipal guidelines for the design of trails. All trails shall be designed, located and signed to prevent incompatible use and to ensure safe, enjoyable, and year-round use. These design standards will protect the Municipality against liabilities. High volume trails are trails with more than 1000 users per day, per the FHWA (see Figures 7.1, 7.2, 7.3, and 7.4.)

The criteria for trail development and design include paving, alignment, stopping sight distance, intersections, grades, cross slopes, clearances, road separation, bicycle routes, widths, traffic control and signage, lighting, drainage, surfacing, and trail structure. Additionally, specific attention should be placed on the landscaping of trails including trees, shrubs, topsoil and seeding.

A. PAVING

Trails in road rights-of-way shall be paved, except those that are:

- identified as multi-use unpaved trails on a Plan map
- located in Girdwood that the Girdwood Board of Supervisors elects to waive
- in the Anchorage Bowl and Chugiak-Eagle River areas that the Planning and Zoning Commission elects to waive

B. ALIGNMENT

The significance of proper alignment, or design radii, varies with the use of the facility. For example, sidewalks and walkways are predominantly used for slow moving pedestrian traffic, however, bike and equestrian trails shall be designed to accommodate movement at greater speeds, volumes of users, and user types. Therefore, alignment concerns, such as sight distance and horizontal curve radii, are more critical on bike and equestrian trails (see Table 4).

Table 7.1—Typical Design Radii	
Activity	Design Radii
Walking, hiking, equestrians, jogging	N/A
Bicycles, rollerblading, x-co skiing, dog mushing (design speed = 20 mph)	95 feet

Snowmobiles (design speed = 40 mph)

565 feet

C. STOPPING SIGHT DISTANCE

The standard required stopping sight distance on flat surfaces shall be 125 feet for pedestrian or bicycle trails. This standard is the same as the adopted Oregon standard that is based on the speed of the fastest bicycle. This shall be increased, as necessary, to accommodate the factor of slope, in that speed is a factor of gravity acting on mass. Trails for equestrians may include shorter stopping distances, and dog mushers may require up to twice the stopping distance (250 feet). Snowmobile trails shall be designed with a stopping distance of 225 feet.

Standards for Paved Trails Along Roads with Curb and Gutter

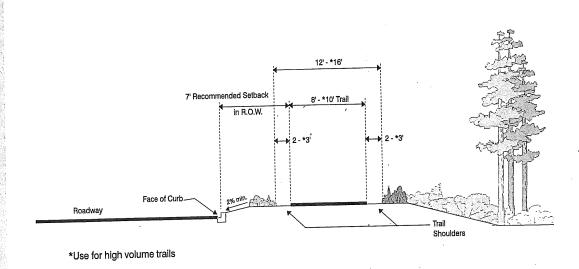


Figure 7.1

Standards for Paved Trails Along Roads without Curb and Gutter

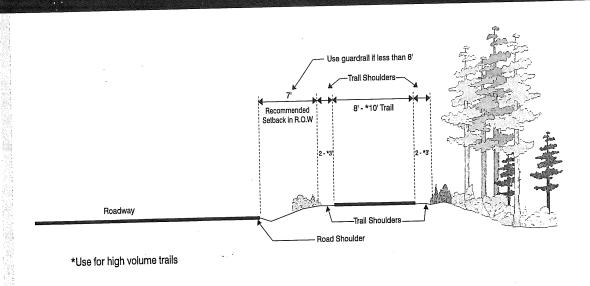
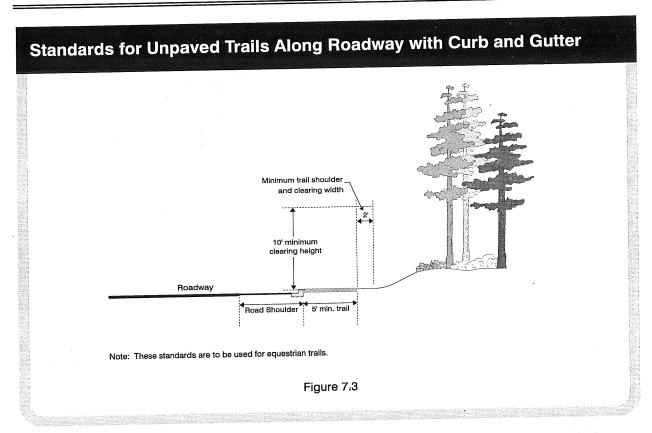
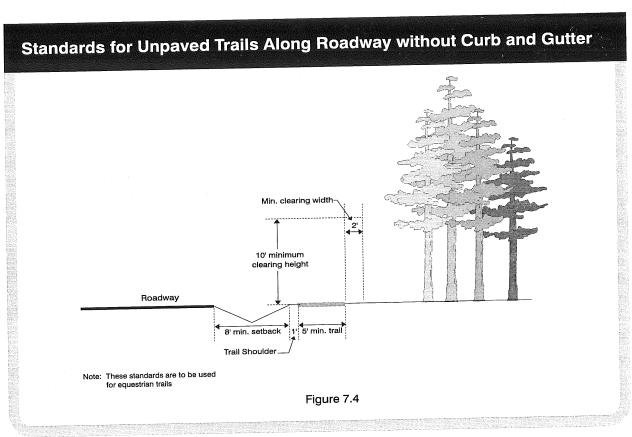


Figure 7.2





Intersections shall be a horn configuration (at right angles) for almost all trail types. This shall be especially true where conflicting trail types intersect. Due to design constraints, it may not always be possible to have a 90-degree intersection. The American Association of State Highway and Transportation Officials (AASHTO) allows a 10 to 20 degree latitude, however, all intersections of dog sled trails with other user groups shall be at 90-degree intersections. Where trails of compatible activities merge, signing shall indicate the convergence of trails.

The AASHTO standards for grades for paved bicycle trails is as follows: "Grades on bicycle trails should be kept to a minimum, especially on long inclines. Grades greater than 5 percent are undesirable because the ascents are different for many bicyclists to climb and the descents cause some bicyclists to exceed the speeds at which they are competent. Where terrain dictates, grades over 5 percent and less than 500 feet (150 m.) long are acceptable when a higher design speed is used and additional width is provided." Thus, a paved bicycle trail may not exceed a grade of 5 percent for over 500 feet. An unpaved trail is not subject to the same

Trails dedicated to cross-country skiing, off-road vehicle, snowmobile, hiking, jogging, dog mushing, and equestrian use may have grades that exceed this standard. Grades for equestrian trails should not typically exceed 10 percent.

Cross slopes should be approximately 1 percent. Multi-use trails should never exceed 2 percent cross slope, F. CROSS SLOPES in accordance with American with Disabilities Advisory Act Guidelines (ADAAG). Where driveways cross paved trails, the 2 percent maximum cross slope also applies. Trails dedicated to bicycles, ORV's, snowmobiles, or cross-country skiing could have steeper cross slopes (super elevation), if needed. This would enhance the ability of the trail to accommodate high-speed travel. Trails that are strictly recreational in nature may have steeper cross slopes (super elevation), if challenge levels for the area allows.

Horizontal and vertical clearances are important safety considerations. The greater the speed traveled on the trail, the greater the tendency for users to "shy" or steer away from nearby obstructions such as trees, fences, light poles, and retaining walls. This creates a safety hazard by moving the user toward the center of the facility and/or distracting attention from other users. Clearances should be 10 feet vertical for most trail users. Minimum tunnel and bridge clearances should be 12' x 12'. Bridge and tunnel clearances should be 12 feet where equestrian activity is permitted. Horizontal clearances shall be 2-3 feet for all trails measured

There may be a 10-foot selective thinning zone along all trails, except for trails designated for cross-country skiing, equestrian, dog mushing use, or to interpretive use, and any trails where preservation of the existing flora is important. Selective thinning shall only include limbing of trees to the eight-foot height and removal of shrubs above three feet if they significantly restrict vision. There shall be no selective thinning within any 25-foot stream protection setback.

When trails are located adjacent to a road of collector or greater status, consideration must be given to the H. ROAD SEPARATION need for horizontal and vertical separation between vehicles on the road and users on the trail. Separating these two uses provides time for each to react to potential conflicts before they occur. Trail separation from roadways also allows area for snow storage and drainage channels, separating trail users from splash back.

Trails shall have a 7-foot separation from the roadway, providing for safety. When distance must be reduced below 7-feet, specific waivers for Municipal projects must be granted by the Planning and Zoning Commission during the site plan review process. The federally approved ADOT&PF Pre-construction Manual guides the development of trails within State right-of-way.

The AASHTO standards state that when the distance between the edge of the roadway and the bicycle trail is less than 5 feet a suitable physical divider may be considered. Such dividers serve both to prevent bicyclists from making unwanted movements between the trail and the highway and to reinforce the concept that the bicycle path is an independent facility. Where used, the divider should be a minimum of 4.5 feet high in order to prevent bicyclists from toppling over it, and it should be designed so that it does not become an obstruction in itself.

Shoulders are to be equally divided on each side of the trail.

I. WIDTH OF TRAILS

The desired width of a trail is directly related to the volume and type of use it receives. Paved multi-use trails are typically 8-10 feet wide and unpaved trails should have a minimum width of five feet.

Because of increased speeds and joint use by bicyclists, walkers and joggers on paved trails, the minimum width is 8 feet. Two-foot wide "flat" shoulders are required on each side of the trail. Shoulders should slope away from the trail at 3-5 percent in order to maintain positive drainage. In some cases, high use, steep grades, and sharp turns may dictate larger widths. The designer shall carefully evaluate these locations to see if safety hazards exist that dictate the need for wider trails.

Where traffic volumes are expected to exceed 1,000 users per day (Transportation Planning for Livable Communities, Conference Proceedings, FHWA), the paved trail width should be 10-feet and an additional unpaved three foot shoulder shall be provided on each side of the trail. This will accommodate multiple use characteristics and users that travel at greatly differing speeds.

AASHTO standards state that, under certain conditions, it may be necessary or desirable to increase the width of a bicycle trail to 12 feet. Such conditions would include trails that receive substantial bicycle volume, have probable shared use by joggers and other pedestrians, are used by large maintenance vehicles, have steep grades, and where bicyclists will be likely to ride two abreast.

J. STRIPING AND SIGNAGE

The majority of trails are designed and constructed to minimize safety hazards. Therefore, signage and pavement markings are not significant concerns. However, the designer shall closely evaluate the proposed grades, sight distances, and types of intersections for potential safety hazards. Trails that experience as much as 1000 users per day or have restricted sight distance shall have a 3-inch yellow centerline. Trails that do not fully meet American Disabilities Advisory Act Guidelines (ADAAG) requirements should be signed to denote level of accessibility and challenge. Trails that do meet ADAAG requirements must also meet ADAAG sign requirements.

Trails shall be signed at the time of construction to indicate uses appropriate to the trail. Significant misunderstanding exists in the community over the compatibility of various uses on the many Anchorage trails. Signage is an important component in the resolution of many conflict issues, but is also a maintenance expense.

All trail signage placed in the right-of-way must conform to the Federal Manual on Uniform Traffic Control Devices and be approved by the Municipal or State Traffic Engineer.

K. LIGHTING

Most trails located adjacent to existing roads will have adequate illumination from existing streetlights. However, in the design process, the intensity and uniformity of lighting on the trail should be evaluated. Illumination on trails and in tunnels within the right-of-way shall be in accordance with the Municipality of Anchorage Department of Public Works <u>Design Criteria Manual</u>. Illumination on trails and in tunnels not located in the right-of-way shall be in accordance with the Department of Cultural and Recreational Services standards.

L. DRAINAGE

Trail designs shall give careful considerations to potential drainage impacts. Trails should be built above nearby roadways unless existing conditions prevent such placement. Particular attention shall be given to ponding along property lines and the possibility of trail fill blocking drainage. Trails should be designed so that no adverse drainage impacts result from construction. Trails should not be constructed by filling existing roadway ditches, which may result in water ponding on the roadway and trail and in deterioration of the road and trail.

M. SURFACING

Several conditions must be considered when evaluating the appropriate surface to accommodate a particular trail use. While Table 7.7 is a guide, consideration must be given to environmental conditions, environmental impacts, accessibility needs, and the desirable challenge levels of each trail. While off-road vehicles and equestrians may both use trails built of native material, the environmental impacts of each varies greatly. Gravel and native earth trails pose significant restrictions to the disabled.

Winter activities are generally compatible on any trail surface type, though other problems with compatibility may exist. Consideration must be given to snowpack in determining when particular activities are allowable. Packed trails, such as the Chester Creek Greenbelt Trail, can serve multiple winter uses when width allows. Trails groomed specifically for cross-country skiing are generally not compatible with other activities.

N. TRAIL STRUCTURE

Required trail structure is related to surface material. All trails with paved surface shall be engineered in accordance with Municipal and State criteria for roadway structural fill. Surfaces must be able to hold up under snow removal practices and wear from maintenance equipment. The impacts of each use shall be considered when determining trail structure. For example, while equestrians prefer a native surface material, locating an equestrian trail in wetland conditions may require an engineered gravel structural section. Proper planning and design should attempt to locate trails such that expensive engineering solutions are not needed for their construction.

Table 7.2 — Compatibility of Surface Type To Summer Trail Use							
	Paved	RAP	Gravel	Natural			
Biking (Mountain)	X	X	X	X			
Biking (Non-Mt.)	X	X					
Dog Walking	X	X	X	X			
Equestrian		+	X	X			
Hiking		X	X	X			
Interpretive	X	X	X	X			
Jogging/Running	X	X	X	X			
Motorized Vehicles			X	X			
Natural				X			
Roller Skiing	X						
Rollerblading	X						
Walking	X	X	X	X			

Key: RAP = recycled asphalt pavement

x = compatible

+ = may be compatible if not oiled or compacted

II. DESIGN FOR MAINTENANCE

Trails and walkways paralleling roadways should be physically separated by a combination of distance, barrier, or elevation in order to reduce maintenance problems. Where the recommended horizontal distance cannot be achieved, a physical barrier should be placed between the trail and roadway so as to protect trail users from errant vehicles, protect the trail from road splash, and reduce the amount of dirt and debris that comes onto the trail. The trail should be constructed at a higher elevation than the roadway in order to prevent runoff onto the trail, to allow the trail to drain into the street gutters, and to increase the safety and enjoyable use of the trail.

Trail shoulders should be constructed of a porous material that will not wash or be scattered onto hard surfaced trails. These shoulders should be maintained for walking or running and should not be allowed to settle below the elevation of the trail surface, which could cause bicycle tires to drop off the edge or a pedestrian to be injured.

All utilities, traffic control pedestals, hydrants, signs, and utility poles should be placed between the back of the curb and the trail. In no instance should they be placed within 18 inches of the edge of a trail.

III. DESIGN OF SPECIFIC KINDS OF TRAILS

A. TRAILS FOR EQUESTRIAN USES

The design of an equestrian trail should be based upon a careful evaluation of the location of the planned trail. It should include provisions for protection of the adjoining resources, as well as the safety and enjoyment of the users, and consideration should be given to the volume and type of traffic, and economies of construction. The design should incorporate features that mitigate adverse impacts upon the environment and result in a trail of high quality that is permanent and inexpensive to maintain.

B. COMMUTER BICYCLE ROUTES (On-Street Facilities)

The design of on-street bike routes is determined by the speed and volume of cars, as well as the type of user, whether it be a local user (typically a less adept cyclist) or a commuter (those comfortable traveling alongside moving vehicular traffic). Designers shall determine the design criteria for the route based upon the <u>Design Criteria Manual</u>. The first step in design is to determine whether the street has a curb and gutter (see Figure 7.5).

It is also important to determine the type of user anticipated on a route. Routes that serve only as major transportation routes, such as "C" Street north of 36th Avenue, should be considered as serving "commuter" traffic. Routes that are anticipated to include use by a numbers of novices, children, or people not comfortable riding in traffic situations should be considered as serving "local" users. The designer should design to the most restrictive criteria dependent on the anticipated user.

Design of bike routes must consider the relationship of the bike route with transit facilities. Where the bike route crosses a transit pull-out, there is a possibility of conflicts between the bicycle rider and the transit vehicle while pulling into and out of the pull-out. Where buses and bikes must share the same travel lane or pull-out, there is a possibility that the bus driver may not be able to see bicyclists coming upon the bus. Bus turnouts should be striped 250 feet before the turnout to remind the bicyclists that transit shares the lane.

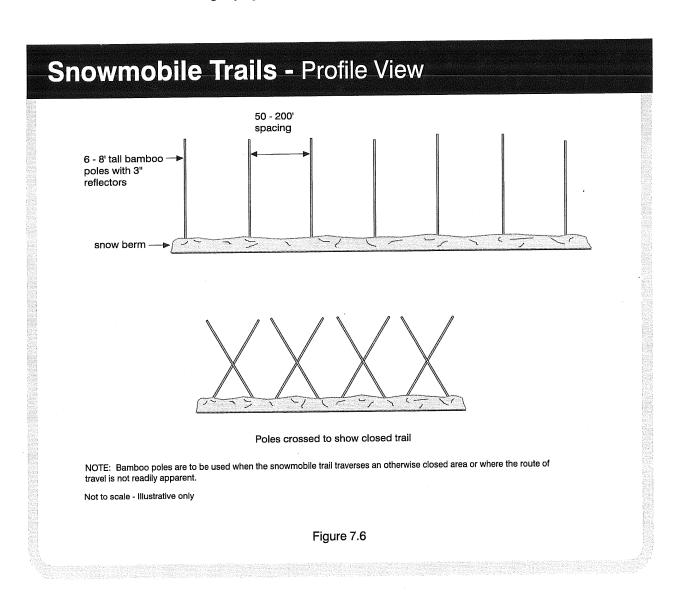
Standards for Bicycle Routes Center line Bike Route **Driving Lane Driving Lane** Route Sign Face of Curb Roadway Road Shoulder Face of Curb These routes use part of the roadway with signing and striping to alert motorists of bicycle activities. Bikes are legal road vehicles. 3 No parking is allowed in the bike route. Figure 7.5

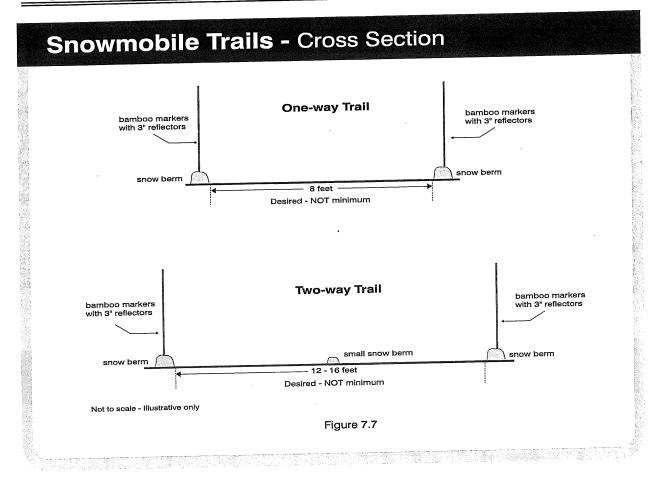
Under no circumstance shall a bike route be provided on the same side of the street as on-street parking. Also, under no circumstance shall a bike route be located on-street such that a user is traveling in a direction opposite to the travel of the adjacent vehicular lane.

In most cases, the streets that require separated bike routes already use all the available right-of-way for the street section itself. Therefore, the costs of additional acquisition and impact on adjacent properties to create bike routes can be substantial. The design of these routes shall carefully balance funding limitations with safety needs. When trail construction is associated with construction of a collector or greater status street, assistance in determining appropriate design should be provided in the review process. The street and highway designs are reviewed and approved by the Planning and Zoning Commission because these streets are classified as "public facilities." The designer should be prepared to present the pros and cons of various design options to the Commission.

C. SNOWMOBILE TRAILS

Snowmobile corridors may need to be indicated in areas where the trail is at a distance from the snowmobile area. Bamboo can be used to signify open and closed areas. (See Figure 7.6 and 7.7).





IV. REGULATORY AUTHORITY

The following are other sources that should be consulted when designing trails:

TITLE 21

- AMC 21.05.030 identifies the Anchorage Trails Plan as an element of the Comprehensive Plan. It is a guide for the construction of a trail and walkway network within the Municipality of Anchorage.
- <u>AMC 21.080.030</u> gives the Platting Authority direction to require walkway dedication as part of subdivisions. This may be done when walkways or trails are necessary for adequate pedestrian circulation or safety.
- AMC 21.80.060 directs the Platting Authority to require trail dedication when the trail is designated on an adopted municipal plan and cannot be located in an existing dedicated easement or right-of-way.
- AMC 21 85.090 establishes sidewalk needs for land development based on the Average Daily Traffic (ADT).
- AMC 21.85.100 requires walkways and trails that are not part of required trail dedications to be improved in accordance with AMC 21.85 Table E.
- ullet AMC 21.85.Table ${f E}$ establishes minimum widths and surfaces for trails and

OTHER SOURCES

In addition to Title 21, designers of sidewalks, walkways, trails and routes should be familiar with the following:

- Department of Public Works <u>Design Criteria Manual</u>. This document provides engineering criteria for non-motorized trails within a road right-of-way.
- Guide for Development of New Bicycle Facilities, August, 1991 American Association of State Highway and Transportation Officials. This document establishes criteria for design of bicycle facilities and serves as one of the guiding documents for all construction funded by the Federal Highway Administration.
- <u>ADA Accessibility Guidelines for Buildings and Facilities</u>, Appendix A to 28 CFR Part 36 provides standards for accessibility. Section 14 contains the most important information for purposes of trail construction.
- Alaska Department of Transportation and Public Facilities, <u>Preconstruction Manual</u>, Chapter 11, Design, Special design elements.

CHAPTER 8 — MAINTENANCE

Trail maintenance is a crucial factor in providing for the continued usefulness of all types of trails. The quality of maintenance is most demanding with bicycle trails and groomed trails, and least demanding with natural trails.

The problems with trail maintenance now are:

- Trails are often a repository for side-cast road snow,
- · Often there is little to no maintenance,
- Where trail maintenance exists, it is often not known who is responsible, and
- Implementation is often patchy.

I. REQUIRED MAINTENANCE

The periodic clipping of brush is necessary with most trails. User groups are generally willing to do this and save the Municipality many dollars in maintenance money. Under no circumstances should herbicides be used to control brush along trails. Herbicides leave dead standing shrubs that are an eyesore and a fire hazard, and do little to clear the trail. Many herbicides could endanger the water supply. where domestic sources are drawn from wells.

A. SIDEWALKS

Proper maintenance of sidewalks is an essential ingredient for pedestrian trails. Maintenance includes keeping sidewalks free of dirt, gravel, rubbish, ice, and snow. It also includes keeping breaks in the sidewalk surface from construction and utility projects to a minimum and requiring that they be repaired as soon as possible. In those situations where sidewalks are going to be impassable for any length of time, pedestrians should be given proper notification and safe, alternate travel routes should be provided.

Winter maintenance of sidewalks is of particular concern in Anchorage. In many instances, high snow berms are piled on the sidewalks when streets are plowed, forcing people to walk directly in the vehicle lane of travel. At some transit stops pedestrians are forced to wait in the roadway or in deep snow. There is insufficient right-of-way to accommodate separated sidewalks along many of the existing major roadways in Anchorage (i.e., 15th Avenue, Fireweed Lane, Dimond Boulevard). Separated sidewalks could be maintained in the winter with small snow blower/plow equipment, with the space between the sidewalks and the road being used for snow storage. However, the lack of right-of-way for snow storage requires that snow be stored on the sidewalks until it can be hauled away. The benefit to having sidewalks attached along roadways is that it can be removed by the same equipment used to plow the road.

Section 24.80.090 of the Anchorage Municipal Code states that maintenance of sidewalks adjacent to private property in the Residential-Office, commercial, industrial, and Public Lands and Institutions zoning districts, where ever located in the Municipality, is the responsibility of the owner or occupant of the premises. Snow and ice shall not be allowed to accumulate or be cast onto any sidewalk, street, avenue, alley, or public place. This section is enforceable by any police officer or employee of the Municipality who is a peace officer.

Furthermore, pursuant to Section 24.80.050 the Director of Public Works may have a sidewalk cleaned if the sidewalk has had debris or other material placed upon it and is inconvenient or dangerous to the public. The Director will bill the appropriate property owner, occupant, or manager for the services.

As the ordinance is currently written, the Municipality has the burden of the expense rather than the property owner. Penalties should be established commensurate with the personnel requirement entailed in enforcement. Anchorage would be a significantly more pedestrian-friendly city if maintenance requirements were imposed.

It is possible that this section could be expanded to include the occupants of land adjacent to sidewalks in all zoning districts, including residential districts. The Trails Oversight Committee should discuss this issue.

There should be a hierarchy of maintained walkways in Anchorage, just as there is for maintained roadways. There should be a goal of clearing significant hard surface walkways within 72 hours. Significant walkways include the following:

- · transit stops and stations;
- trails from transit stops to schools, hospitals, government institutions, major commercial centers, elderly housing centers; and
- · walking routes to schools.

All other hard-surfaced walkways should be cleared within one week of a major snowfall.

B. MULTI-USE PAVED TRAILS

Trails next to the roadway accumulate large quantities of gravel, salt, and other road debris after a winter of snow removal. After spring snow melt, it can be difficult to find the trail under the accumulated debris. It is at this time, usually late in April, that a thorough sweeping of the trail is necessary before it can be used for that year. When a trail is well separated from the roadway, usually one sweeping during the spring is enough to clear gravel and debris. However, broken glass may accumulate all summer.

Another disadvantage of paved trails immediately adjacent to the roadway is that road debris may continue to accumulate on them all summer. This happens principally because gravel and debris from heavy construction spill onto the roadway and are eventually swept on to the trail by traffic. This is also true of broken glass. Broken glass is a particular deterrent to bicycle users.

Vegetative screening between a trail and the roadway serves to reduce the amount of snow on the trail that is plowed or blown from the roadway. However, vegetation placed between a trail and a roadway becomes loaded with snow from the road, and as a result, is difficult and expensive to maintain.

C. CROSS-COUNTRY SKIING, DOG MUSHING AND SNOWMOBILE TRAIL MAINTE-NANCE

Maintenance for cross-country ski trails, dog mushing trails, and snowmobile trails has primarily been taken on by the affected user group. The Nordic Skiing Association through the voluntary "Trail Pin" program begun in 1984 obtains money for maintenance of the ski trails. This effort collects significant amounts of money for the maintenance of trails throughout Anchorage.

D. EQUESTRIAN TRAIL MAINTENANCE

Trails used by equestrians, unless they are on firm dry soils, may develop mud pockets that require filling with gravel or crushed rock. This would partly depend on the volume of use.

E. INTERPRETIVE TRAIL MAINTENANCE

Interpretive trails may require fencing of principal attractions if they are being damaged by unregulated walking. It is unfortunate when such measures have to be taken, yet the alternative would be to sacrifice the attraction. Closer regulation is the consequence of density.

II. TRAIL MAINTENANCE RESPONSIBILITY

The following agencies are responsible for trail maintenance. However, operational/administrative responsibilities may be delegated to or assumed by other municipal agencies. For example, in the Anchorage Bowl, while the Department of Public Works has the responsibility for maintenance of separated trails in the road right-of-way, the Department of Cultural and Recreational Services actually performs the maintenance.

Assigned service area responsibilities reflect their legally authorized services for which the service area, except as otherwise noted, is the sole, legal source of maintenance funding appropriated from municipal tax revenues. Service area maintenance responsibilities do not necessarily dictate administrative or operational responsibility for managing or performing the maintenance. Service area tax revenues could be appropriated to whatever municipal department is assigned management and performance of the maintenance pursuant to AMC 3.20 or 25.10.050 through 25.10.060.

A. ANCHORAGE ROADS AND DRAINAGE SERVICE AREA (ARDSA), GIRDWOOD VALLEY SERVICE AREA (GVSA) and GLEN ALPS SERVICE AREA (GASA)

Except for predominantly recreational trails and walkways, ARDSA, GVSA and GASA are the sole, legal source of funding appropriated from municipal tax revenues for maintenance of trails and walkways within all municipally maintained, vehicle and pedestrian rights-of-way in ARDSA, GVSA and GASA respectively. Areawide tax revenues are the legal source of municipal funding for municipally maintained transit stops and pads unique to and for mass transit

Except as otherwise assigned, it shall be the responsibility of the Department of Public Works, Street Maintenance, to maintain all trails and walkways, including transit stops and pads, within all municipally maintained vehicle and pedestrian rights-of-way in ARDSA, GVSA and GASA. Some or all of these maintenance responsibilities could be delegated to other municipal Departments. At the present time, snow removal and sweeping of trails and walkways is accomplished by the Department of Cultural and Recreational Services. Transit stops and pads are maintained by the Public Transportation Department.

B. CHUGIAK-EAGLE RIVER RURAL ROAD SERVICE AREA (CBERRRSA)

Except for predominantly recreational trails and walkways, CBERRRSA is the sole, legal source of funding appropriated from municipal tax revenues for maintenance of trails and walkways within all municipally maintained, automotive road rights-of-way in CBERRRSA. Areawide tax revenues are the legal source of municipal funding for maintenance of municipally maintained transit stops and pads unique to and for mass transit.

Except as otherwise assigned, it shall be the responsibility of the Department of Public Works, Street Maintenance, to maintain all trails and walkways, including transit stops and pads, within all municipally maintained, automotive road rights-of-way in CBERRRSA. Some or all of these maintenance responsibilities could be delegated to other municipal departments.

C. ANCHORAGE AND EAGLE RIVER-CHUGIAK PARKS AND RECREATION SERVICE AREAS (APRSA and ERCPRSA) and GIRDWOOD VALLEY SERVICE AREA (GVSA)

APRSA, ERCPRSA and GVSA are the sole, legal source of funding appropriated from municipal tax revenues for maintenance of all municipally maintained, predominantly recreational trails and walkways in APRSA, ERCPRSA and GVSA respectively.

In APRSA, ERCPRSA, and GVSA, it shall be the responsibility of the Department of Cultural and Recreational Services, Parks and Recreation Division, to maintain all municipally maintained, predominantly recreational trails and walkways. Some or all of these maintenance responsibilities could be delegated to other municipal Departments.

Within the Chugiak-Eagle River and Girdwood parks and recreation service area, the service area will be responsible for trail and walkway maintenance in parks and greenbelts.

D. ANCHORAGE SCHOOL DISTRICT

It shall be the responsibility of the Anchorage School District to maintain all municipally maintained trails, sidewalks, and walkways on municipally maintained property which has been delegated to the School District for management, except those located in municipally maintained, vehicle and pedestrian rights-of-way in ARDSA or automotive road rights-of-way in CBERRRSA.

E. STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

Trails within State rights-of-way fall within the administrative jurisdiction of the Department of Transportation and Public Facilities (DOT&PF). DOT&PF maintenance activities are generally limited to summer use of the trails, and include:

- annual inspection of the trails,
- · removal of debris and obstructions, and
- · occasional sweeping.

DOT&PF often enters into agreements with other governmental units for trail maintenance, and is working towards a policy to require such agreements with local governments before constructing new facilities. Thus, the Municipality generally maintains trails in Anchorage in State rights-of-way. Additional funding must be provided from other sources if there is to be winter maintenance or improved summer maintenance of trails by DOT&PF within State rights-of-way that are not maintained by another governmental unit.

F. FEDERAL LANDS

On Federal lands it is the responsibility of the concerned agency, such as the Bureau of Land Management at the Campbell Tract, or the military on the bases to maintain their trails, sidewalks, and walkways.

G. INDIVIDUAL PROPERTY OWNERS

It is the responsibility of occupants of land abutting sidewalks in R-0, all Business (B-) and Industrial (I—) and PLI zoning districts to clear accumulations of snow and ice from such sidewalks.

III. MAINTENANCE EQUIPMENT

All equipment used for trail maintenance should be designed for trail and walkway use. For example, the weight of the equipment must not exceed the surface bearing capacity of the trail or walkway surface. Maintenance equipment tires or tracks must fit fully upon the trail so as not to damage the trail shoulders.

IV. USE OF VOLUNTEERS

The Municipality has instituted an Adopt-A-Trail Program in the same manner as the Adopt-A-Park program. Volunteers are responsible for light maintenance and litter removal along designated sections of trails and walkways.

The Municipality could develop a new program that employs volunteers to operate mechanized trail maintenance equipment if a training program were established and risk liability was ensured. The Municipality would purchase, maintain and store the equipment. The Municipality would have to train volunteers in the proper operation of the equipment. and be responsible for transportation between the storage facility and the job site. This program could be modified or supplemented by contracting with private non-profit organizations.

The Municipality could enlist volunteers in a Trail Watch program, much like the Neighborhood Watch program. They would routinely patrol designated sections of trails and walkways. Thus, trained volunteers, equipped with hand-held radios, would be on the trails to assist people in trouble and to report illegal or dangerous activities.

There are also opportunities for public-private partnerships for trail maintenance.

Chapter 8

V. RECOMMENDATIONS

- 1. The Trail Oversight Committee (See Chapter 10.), should execute a maintenance implementation plan. The plan would involve a study of maintenance techniques in presently maintained areas, identification of what the problems and are, what are solutions, and location of needed maintenance where maintenance is needed. The oversight committee could also adopt incentive programs for trail maintenance.
- 2. Snow removed from roads should not be deposited on trails or walkways, except where necessary for temporary storage.
- 3. Street maintenance techniques for removing snow from driving lanes should be conducted such that a minimum amount of snow goes onto adjacent trails and walkways.
- 4. There should be no herbicides used in brush removal.

CHAPTER 9 — FINANCIAL PLAN

Funding is necessary for trail planning, design, right-of-way easement acquisition, construction, operation, maintenance, and management. The Parks and Recreation Division of the Municipality of Anchorage Department of Cultural and Recreational Services will oversee the efforts to accomplish the tasks necessary to implement the trail program.

Those agencies having responsibility for trail development are as follows:

- Trail Planning MOA, Department of Community Planning and Development areawide trails planning; MOA Department of Cultural and Recreational Services - park specific trail planning
- Trail Design MOA Department of Cultural and Recreational Services and Department of Public Works; and Alaska Department of Transportation and Public Facilities
- Trail Right-of-Way and Easement Acquisition MOA Department of Cultural and Recreational Services, Department of Public Works, and Property and Facilities Management; and State of Alaska Department of Transportation and Public Facilities
- Trail Construction MOA Department of Cultural and Recreational Services and Department of Public Works; and State of Alaska Department of Transportation and Public Facilities

I. METHODS OF ACQUISITION

Most of the methods described here are traditionally used to purchase parcels for parks. These methods are not usually examined to acquire a desired trail corridor. However limited their use might be for trail rights-of-way, they do represent alternatives that deserve discussion and consideration. Condemnation is at least potentially a method of acquisition, but is not discussed here as it lacks feasibility.

A. LAND DONATIONS

Some private property owners may desire to donate all or part of their land for a trail right-of-way. The Municipality could assist in determining the value of such a right-of-way and work with the property owner in establishing that value as a charitable donation. Such donations generally have favorable tax advantages. The Municipality would take the necessary legal action to formally dedicate the trail right-of-way.

B. LIFE ESTATES

Under this mechanism the land, or trail right-of-way, is purchased at its current fair market value. Present property owners are given the right to continue to use or inhabit the site until they decide to move. At that time the Municipality assumes full control. This procedure would provide long range protection for an important trail corridor.

C. FEE SIMPLE PURCHASE

The Municipal Capital Improvement Program can allocate money for acquisition. State grants or sale of general obligation funds are used for this type of purchase. In this process, the Municipality would identify the land appropriate to its trail needs and subsequently inform the owner of the Municipality's interest in the land. If the owner is willing to sell, then the property is appraised at fair market value and purchased.

D. RIGHT OF FIRST PURCHASES

Under this procedure, the Municipality would develop agreements with those property owners who so desire to have the right or opportunity to purchase a particular parcel when it comes up for sale. Such a right would protect the owner's current use of the land and would serve to provide the Municipality the opportunity to acquire an important trail right-of-way when the owner contemplates selling.

E. PERPETUAL EASEMENTS

The Municipality could purchase a perpetual trail easement. This would be a less than fee simple title in that it could be used only for the trail purposes specified in the deed. It, therefore, would cost less than full market value. The purpose of a perpetual easement would be to allow the Municipality to purchase the "right" to use a particular piece of land for a trail corridor. The terms of the arrangement, including liability responsibilities, would be set forth in a contract between the municipality and the landowner.

F. SUBDIVISION REVIEW PROCEDURES

In the subdivision approval process, trail access, from or through the subdivision to the areawide trail system, should be provided. It would be the responsibility of the developer to install it, subject to approval by the Platting Board.

The creation of a mandatory park-land dedication ordinance is one way the Municipality could reserve land for parks, greenbelts, and trails. Such an ordinance would require mandatory dedication of land for park and trail purposes, or fees-in-lieu thereof, at the time that new subdivision plats come before the Municipality for approval.

II. SOURCES OF FUNDS

The financing of trail acquisition, construction, and maintenance is possible through a variety of local, state and federal sources. These sources provide varying levels of funding, and are often intended for purposes other than trail development. The amounts of revenue available are also somewhat limited.

Trail funding can be broken into two activity areas, including 1.) the development of the trail system and 2.) the management of the trail system. Funding expectations must address both of these areas.

A. FUNDING FOR TRAIL SYSTEM DEVELOPMENT

A comprehensive package of funding for trail development needs to be provided. This package should generate \$3,000,000 — \$4,000,000 per year for trail projects in order to provide for the orderly development of the trail system. The package would include the following sources:

1. Approved Transportation Projects

State and local transportation projects that follow along adopted Trails Plan routes should include project funding to implement the recommended trails.

However, there are several different types of federally funded roadway projects developed by the Municipality and the Department of Transportation & Public Facilities through the Anchorage Metropolitan Area Transportation Study (AMATS) process. Some projects are intended to only extend the pavement life of established roadways, while others are developed to correct a demonstrated traffic safety problem.

Portions of sidewalks or trails may be improved or constructed as part of these types of projects if right-of-way is available and there are no utility conflicts. However, it is not always possible to provide separated trails as part of pavement rehabilitation, interstate maintenance or highway safety improvement projects.

2. Intermodal Surface Transportation Efficiency Act (ISTEA)

ISTEA is a federal transportation act approved in 1991 that is the current authorization for federal funding of transportation projects until 1997. It gives States the opportunity to replace the emphasis on highway construction with an emphasis on an intermodal transportation system. This provides Anchorage an opportunity to develop transportation systems with broad cultural, social, environmental, and energy-saving benefits. In particular this provides an opportunity to develop facilities that build the community's trails.

The ISTEA program requires a documented program of public involvement and the consideration of transportation options. This must form the basis for the development of Anchorage's Transportation Improvement Program (TIP). This then feeds into the Statewide Transportation Improvement Program (STIP). Projects must have a matching contribution from the state or the originating body, which varies by the type of project.

In order to meet ISTEA criteria, the trail should be located in a suburban or urban environment; provide a reasonably direct connection for bicyclists or pedestrians to schools, employment centers, or transit transfer stations; and serve as an alternative means to the automobile.

The program has several components that offer opportunities for the development of trails. These include the National Highway System (NHS), the Surface Transportation Program (STP), Congestion Management and Air Quality (CMAQ) fund, Federal Lands Highway Funds, Scenic Byways Program Funds and National Recreational Trails Fund (Symms Act) funding.

a. National Highway Ssytem Funds (Section 1006)

The purpose of the National Highway System is to provide an interconnected system of principal arterial routes that will serve major population centers, international border crossings, ports, airports, public transportation facilities, and other major travel destinations; meet national defense requirements; and serve interstate and inter-regional travel.

The National Highway System in Anchorage includes the Glenn and Seward Highways, Muldoon and Tudor Roads, Minnesota Drive, International Airport Road west of Minnesota Drive, and Boniface Parkway north of the Glenn Highway. National Highway System funds can be used to implement trails adjacent to the NHS routes as part of on-going roadway projects. This would be an excellent source of funds for projects along these routes.

b. Surface Transportation Program (STP) F unds (Section 1007)

The Surface Transportation Program funds transportation improvements on the non-National Highway System. These funds may be used for bicycle or pedestrian construction projects, acquiring abandoned railroad corridors, or for education and safety programs. Facilities must be principally transportation related. The federal share is 88.5%. A total of \$23.9 billion is available nationally until 1997. The STP funds currently provide about 50% of the funding for the Alaska state transportation program.

A minimum of ten percent of the STP funds must be allocated to Transportation Enhancements. Enhancements, as defined by the Federal Highway Administration (FHWA), include:

- acquisition of scenic easements and scenic or historical sites,
- archaeological planning and research,
- control and removal of outdoor advertising,
- historic preservation,
- landscaping and other scenic beautification,
- mitigation of water pollution due to highway runoff,
- preservation of abandoned railroad corridors (including the conversion and use thereof for pedestrian or bicycle trails),
- provision of facilities for pedestrians and bicycles,

- rehabilitation and operation of historic transportation buildings, structures or facilities (including historic railroad facilities and canals),
- scenic or historic highway programs

The provision of facilities for pedestrians and bicycles, as one of the ten eligible enhancement activities, can support bicycle, pedestrian, and ski modes of travel. The purpose of the project must be for transportation. Examples of projects include bicycle lockers, bicycle or ski racks on public transit vehicles, bike lanes, trails, or routes, and pedestrian over- and underpasses.

While 10% of the funds must be spent on enhancements, more of the STP funds can be spent on activities or projects that would be considered within that category. For example, if the municipality felt that trails were of sufficient importance, more of the STP program funds going to the Municipality could be used for trail projects. None of the monies may be spent on maintenance activities, however. The ISTEA enhancement monies are an average of \$900,000 per year.

C. Congestion Mititation and Air Quality Improvement (CMAQ) Program Funds (Section 1008)

These funds are essentially the same as the STP funding, except that the project must be in an air quality non-attainment area according to the 1990 Clean Air Act. The federal share is 80% with a 20% state match. A total of \$6 billion is available nationwide until 1997. These funds must be spent on projects that are primarily transportation related and that would reduce congestion and improve air quality. These funds are generally used on transit related projects, but could be used on trail development if the projects met the intent of the funding.

D. Federal Lands Highway Funds (Section 1032)

This program provides funding for pedestrian or bicycle facilities in conjunction with roads, highways and parkways located on Federal land management agency lands, such as the National Park Service, U.S. Forest Service, and Bureau of Land Management at the discretion of the Alaska Department of Transportation and Public Facilities. Projects must be principally transportation oriented. The Federal share is 100 percent. The Federal Lands Highway Funds come out of the ISTEA funds allocated for Alaska, and do not represent a separate funding source for trail improvements.

E. Scenic Byways Program Funds (Section 1047)

These funds are for bicycle or pedestrian facilities along scenic highways. The Federal share is 80 percent. The national appropriation is \$10 million annually. Alaska has only one state-designated scenic byway, the Seward Highway. Alaska applied for, and received, grants for a project at McHugh Creek and at Bird Point.

F. National Recreational Trails Fund (Section 1302)

The National Recreational Trails Fund, also known as the Symms Act, was enacted to provide a source of funds for trail projects with the monies generated from the collection of taxes on gasoline related to recreation use. The fund allows for percent of the funds must go for motorized use, 30% for non-motorized use, and 40% for a combination of shared use. None is available in 1994.

3. Federal Transit Act

Projects such as shelters, parking, and lockers that provide access for bicycles to mass transportation facilities, or to install racks or other equipment for transporting bicycles on mass transportation vehicles are eligible for Federal Transit Administration funding (USC 5309, 5307, 5310).

4. Highway Safety Program

The Highway Safety Planning Agency in the State Department of Public Safety administers the "Section 402" highway safety program. The highway safety program is a non-capital safety project grant program for certain approved safety activities. Bicycle and pedestrian education and safety programs are eligible to use Section 402 funds.

5. State Legislative Grants

State legislative grants, funded from state revenues, are the primary source of funding for the Municipal Capital Improvement Program (CIP). The CIP can identify trail development projects. The state should apply the same matching procedures to trail improvements that it does to other state grants. Currently the state provides 70% of the project costs when the local area provides the 30% matching funding.

6. Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) was established in 1965 to increase outdoor recreation opportunities in the United States. LWCF provides funds for (1) the acquisition of federal parks, wildlife refuges, and recreation areas, and (2) matching grants for state recreation planning and state and local development and acquisition projects. Recreational trails are eligible for LWCF funding. The Alaska Division of Parks and Outdoor Recreation, through the U.S. Department of the Interior, administers the LWCF. Applicants for funding are usually required to match at least 50% of the project costs.

7. General Obligation Bonds

This source of funding is subject to municipal-wide voter approval. The election ballot would clearly state the purpose of the funding request, such as trail development. The voters would have to authorize additional bonds in subsequent years.

8. Community Development Block Grants

Community Development Block Grant (CDBG) funds are available on an annual basis for a variety of projects. The fund is a 100% grant administered by the Department of Housing and Urban Development (HUD). Projects requesting CDBG funding are examined on a case-by-case basis. In order to qualify, projects have to benefit low or moderate income neighborhoods and they have to be on HUD's eligibility list (trail projects are eligible). The Municipal Capital Improvement Program is examined to determine which projects might qualify. In addition, affected neighborhoods are also consulted.

B. FUNDING FOR TRAIL SYSTEM MAINTENANCE

Funding is necessary for maintenance and operation of the trail system. Funding needs include normal surface maintenance (snow-plowing, surface cleaning and sweeping, minor repair and brush removal) and trail amenity maintenance (signs, pull-outs, benches, etc.).

1. Parks and Recreation Operating Budgets

The Alaska Bicycle and Pedestrian Plan prepared by the state Department of Transportation and Public Facilities in 1995 states that with a few exceptions, federal funds may not be used to maintain or operate the state transportation system. "It falls upon the state to fully fund maintenance and operation of the facilities under its jurisdiction. ... DOT&PF has adopted the policy of requiring local governments or organizations to agree to maintain new facilities before they are constructed. Declining State revenues make it difficult for DOT&PF to take on new maintenance responsibilities."

Thus, funding for maintenance of trails in the Anchorage Bowl falls to the budget of the Parks and Recreation Division in the Department of Cultural and Recreational Services, in the Chugiak-Eagle River area to the Chugiak-Eagle River Parks Board budget, and in the Girdwood Valley to the Girdwood Board of Supervisors budget. Additional monies must be budgeted to these agencies to maintain trails.

2. Federal Transit Authority Funding for Transportation Trail Maintenance Equipment

Since many of the adopted trails serve as access to the transit routes, it is important to ensure that the trails are maintained throughout the year. Federal Transportation Act (FTA) funding can provide monies to purchase trail maintenance equipment with a 20% local match. The 1994 season will see a total of \$132,000 used in this manner to purchase trail maintenance equipment.

3. Private Sources

Private sources can be instrumental in the development and maintenance of trail systems. The Anchorage Nordic Skiing Association has been instrumental in the development and maintenance of trails that serve not only the interests of their club, but the larger recreational and transportation needs of the entire community. This method of development becomes of increasing importance as monies for trail development and maintenance become more limited. Private fund raising should be encouraged for all trail uses.

4. Mil Levy

Voters could be offered the chance to vote on a 1 mil property tax levy to go for street and walkway maintenance. Residents agree on the need for better street maintenance, and many people would support better trail maintenance, particularly during the winter.

C. CURRENTLY UNFUNDED SOURCES OF FUNDING

While the following sources are currently unfunded, they remain as possible sources of funding should these programs be funded in the future. The enabling legislation remains in place.

1. Trails and Footpaths Grant Program

The State Division of Parks and Outdoor Recreation administers the Trails and Footpaths Grant Program. However, this program has not been funded since the 1979-80 fiscal year. The enabling legislation is still on the books. Should the legislature fund this program, it could provide a direct grant for right-of-way acquisition, development and maintenance of trails and footpaths.

2. Local Service Roads and Trails (LSR&T) Funds

The purpose of the LSR&T program is to provide state assistance in the development of roads and trails on routes that are not eligible for federal-aid matching funds. The fund is a 100% grant administered by the Department of Transportation and Public Facilities, State of Alaska. Local governments may use the funds to develop trails but not to acquire right-of-way.

3. Outdoor Recreational, Open Space and Historic Properties Development Fund Grant Program

The State Department of Natural Resources administers this program and pays up to 5% of the local share to acquire, develop and/or preserve recreation sites and facilities, historic sites, buildings and monuments. However, the State has not funded this program for 15 years. This source of money must be used to provide the 50% matching funds with the Land and Water Conservation Funds.

D. POTENTIAL NEW SOURCES OF FUNDING FOR TRAIL DEVELOPMENT OR MAINTENANCE

1. Transportation Project Gas Tax

The Municipality of Anchorage could establish a local gas tax to pay for the costs of design, construction, operation, and maintenance of the transportation system, including the trail system. The tax funds would be used to provide system management funding. This effort would need to raise about \$600,000 per year. Under the current gasoline consumption rate, that would require an increase of about 0.6 cents per gallon for trail development.

If \$600,000 were raised, \$300,000 of the gas tax could be used as a match to state legislative grants. This could generate an additional \$700,000 per year. Of the gas tax money \$300,000 could be used as a match to the Land and Water Conservation Funds. This could generate another \$300,000. The total would add up to \$1,600,000 a year for trails.

The Assembly may ear-mark funds such as these for a special use if the Assembly is the originator of the proposal.

2. Trail Improvement District

It is possible for portions of the community to decide to assess themselves for trail development and maintenance, in the same manner as a road improvement district or a street lighting district.

3. Other

Other revenue source could be developed to provide funding for trails, especially operation and maintenance. These methods might include a mill levy increase on local property taxes, user fees, a personal property tax, sales tax or surcharge on bicycles, cross-country skis, or related equipment. All of these methods would require administration, voter, and assembly approval.

CHAPTER 10 — IMPLEMENTATION

For the Areawide Trails Plan to be effective, its recommendations must be carried out throughout the municipality. This chapter includes a discussion of:

- identification of trail rights-of-way
- the AMATS planning process in relation to trails
- enforcement
- trail implementation responsibilities
- other required studies
- plan revision process, and
- priority projects for funding

I. TRAILS RIGHT-OF-WAYS

A dedicated right-of-way is probably the most critical feature for any trail because without it the trail is subject to elimination by other land uses. A majority of the trails in the Municipality have no formal dedication and therefore are potentially subject to being lost. These existing non-dedicated trail easements and many potential trails will require the protection of some form of dedication that will vary according to the status of the land.

Trails located within municipal parks, greenbelts, open spaces, and recreation areas are usually as safe as the area itself. Trails located on public lands, however, are subject to a variety of threats. Dedicated parkland can be turned to another public use by a vote of the Assembly and this new use may eliminate the existing trails. Land use can interrupt or eliminate trails on public land designated for specific functions, such as school sites, airports, railroads, streets and highways, watersheds, and military bases. A change in recreation use may affect a designated trail such as the relocation of the Spencer Loop (cross country ski trail) to accommodate more down hill skiing. Greater protection would be afforded by incorporation of trail locations in master plans with changes to these trail locations possible only in accord with a revised master plan approved by the Planning and Zoning Commission.

With the continued development of the Anchorage area, the possibilities for expanding the system of open space and greenbelt trail corridors are diminishing. Consequently, many of our future trails will need to be identified in conjunction with our roadway system. In many parts of the Municipality, street and highway rights-of-way are already being used for transportation and recreation purposes by a variety of trail users. These include pedestrians, bicyclists, equestrians, runners, sled-dog mushers, and cross-country skiers. Non-motorized trail activities should be accepted as legitimate uses on a trail within a road right-of-way. A comprehensive trail system is an integral part of a multi-modal transportation system and should be included during planning and budgeting for future road projects.

Right-of-way constraints may make constructing separated trails along existing roadways difficult and present a challenge to winter maintenance needs for keeping snow off sidewalks and trails.

All planned trail routes should be evaluated to ensure there is adequate right-of-way available for construction.

A. TRAIL RIGHT-OF-WAYS IN UTILITY AND CREEK MAINTENANCE EASE MENTS

The following agencies are responsible for trail maintenance. However, operational/administrative responsibilities may be delegated to or assumed by other municipal agencies. For example, in the Anchorage Bowl, while the Department of Public Works has the responsibility for maintenance of separated trails in the road right-of-way, the Department of Cultural and Recreational Services actually performs the maintenance.

Public utilities such as natural gas, electric power, telephone, and sewer, occupy easements for the purpose of providing and maintaining essential services within the community. These easements cross both private and public properties and require the signed permission of the landowner or administrator, for other than the intended easement use.

Generally, the landowner grants the easement for the specific purpose that was intended and no other. Pedestrian or other forms of trail access are usually not permitted, although they often occur where there is either no physical impediment or attempt by landowners to restrict access.

Easements can be dedicated for trail or related purposes, but require the permission of the land-owner and the utility for such use. This might require financial compensation. Other leaseholders of easements must also be consulted for their approval, to avoid conflicting uses that could damage either the utility or trail.

Nevertheless, there are many utility easements that could provide trails where it otherwise would not be possible to achieve them, and where no significant conflict would result. Large lot subdivisions or other large tracts represent areas in which many landowners continue to allow trail access in easements designated for other purposes.

Utility easements would seem to provide a logical means of providing for trail access. They frequently provide the only open area for a trail system not tied to roadways, and the width of the easement is often adequate. They have the added advantage of linking neighborhoods with other neighborhoods, and with schools, commercial centers, parks and open spaces. It is important to realize that the primary purpose of the utility easement is to provide for the utility. All efforts should be made to work with the utility to ensure that the utilities do not incur undue expense or maintenance problems.

Trails should not be assumed to be appropriate for all utility easements. Trails in easements often pose threats to adjacent property owners. Siting of trails in utility easements should be closely coordinated with the community. The following types of easements could be developed to accommodate potential trail systems.

· 1. Trunk Sewer Lines

These are among the widest of utility easements and usually follow very gentle terrain with uniform grades. Such clearings are well suited for several well-separated trail types, such as walking trails, cross-country ski trails, equestrian trails, running trails, and bicycle trails. An agreement with the responsible agency is necessary in locating, constructing, and maintaining trails using trunk sewer easements.

2. Lateral Sewer Lines

These easements are narrower than trunk sewer lines, but the grade of lateral sewer lines is generally quite flat along the ground surface, making them suitable for trail corridors. Lateral sewer lines, in performing their function, follow the back lot lines through subdivisions or sometimes, subdivision streets. These easements can be developed for trail use if the back lot line is not used as an alley and if all property owners agree to alter their easement to include trail access.

3. Natural Gas Lines

These easements generally follow road right-of-ways within and between subdivisions. It would be possible to develop easements for trail access in those instances where they follow back lot lines or lines between subdivisions. The development of trail access in these corridors would require the agreement of both the utility company and the affected property owners.

4. Telephone and Power Lines

These utilities generally follow road right-of-ways between subdivisions. The development of trail access in these corridors would require the agreement of both the utility companies and affected property owners. Design and construction of trails near these utilities must recognize the burial requirement that must be maintained for the utility. Also, excessive fill over the utility and the surfacing type may make maintenance costly.

Location of trails under overhead lines has several considerations. Guys and poles increase liability and safety considerations. Also, clearances must be adhered to for all potential trail users. Equestrians in particular may not meet the clearance needs in some situations.

5. Eklutna Waterline

The Eklutna Waterline provides an excellent opportunity to site trails along much of its length. In some areas the width of the available easement may accommodate numerous user groups. It is important however to recognize that land ownership resides with private property owners, not the utility. Arrangements must be worked out with the property owner before use can be permitted. Also, it is necessary to consider the impacts of trail use to private property owners. Some Many will be opposed to the use of the waterline corridor for to all trail users. However, many homeowners may object to motorized use, but not to non-motorized use. Noise and air pollution are major factors.

B. TRAIL RIGHT-OF-WAYS IN ALASKA RAILROAD CORPORATION RIGHT-OF-WAY

The Alaska Railroad right-of-way travels the Anchorage Bowl from north to south, and extends farther, connecting Palmer with Portage and points beyond. The right-of-way is generally 200 feet wide, although only a small amount of the width is actually occupied. Liability, safety, and space for future expansion were used as criteria in establishing the right-of-way width by the Alaska Railroad.

It is recommended that a trail corridor be established in cooperation with the Alaska Railroad Corporation within the railroad right-of-way. The 1983 Coastal Trail Route Study details some of the concerns that need to be resolved to eliminate user conflicts on Alaska Railroad right-of-way and recommends the following guidelines to help ameliorate these concerns:

- Tunnel crossings should be used instead of other types of crossings wherever possible.
- On-grade crossings should have automatic gates that provide for gate arm closure whenever a train approaches, and pre-formed panels should be installed to eliminate the possibility of people being caught in the tracks.
- A signing system must be installed warning trail users to stay off tracks.
- A minimum distance of 75-feet between trail and track is appropriate in those areas where the train is traveling at high rates of speed and a minimum of 35-feet at low speeds.
- The municipal attorney and legal counsel for the Alaska Railroad should negotiate an agreement wherein the Municipality of Anchorage agrees to hold the Alaska Railroad harmless in the event of accidents within the trail easement on the railroad right-of-way.

Congress passed an important amendment of the National Trails System Act on March 28, 1983. It is intended to turn "rails into trails." Abandoned railroad rights-of-way can make enjoyable trails, especially since the reason for earlier conflicts, the railroad itself, has been removed. Usually by the time a right-of-way has been abandoned, there is often nothing left for a trail. The amendment addresses this problem by getting the track turned into a trail before it is even abandoned.

When a railroad wants to abandon a section of track, it must file a request with the Interstate Commerce Commission. The ICC and the Department of Transportation must then publicize the request. If a state or local government, or even local private organization, willing to manage the trail comes forward during the process, it can "take custody" of the corridor. The organization need only pay the taxes on the land and secure liability insurance. The new law directs that the ICC consider this use a "non-abandonment" of the right-of-way, which gets first priority over other potential uses of the land.

In this way the public gets a trail corridor, and the railroad's right-of-way is protected in case service on the line ever becomes practicable again. The railroad is also free of any responsibility or liability while the corridor is in use as a trail. For local jurisdictions, the provision eliminates the main road blocks to turning rails to trails by providing an easy way to get title to the land and removing the need to find large sums of money to pay for it.

C. TRAIL RIGHT-OF-WAY ACROSS PRIVATE PROPERTY

The purchase of trail rights-of-way from private owners is usually expensive. However, much of the land in the Anchorage area is privately owned. This situation results in the need to acquire trail rights-of-way from private property owners in some instances.

D. TRAILS IN STATE SECTION LINE EASEMENTS

State section line easements fall under the joint jurisdiction of the State Department of Transportation and Public Facilities and the Department of Natural Resources. The State DOT&PF Right-of-Way Office has indicated that section line easements could be used for trail development. A written proposal describing the proposed trail project and section line easement to be developed would have to be submitted to the two state agencies for review. Each project would be reviewed on a case-by-case basis. The decision would weigh input from adjacent property owners.

E. RECOMMENDATIONS

- Trail rights-of-way shall be dedicated on public lands if the trail is shown in the Areawide Trails Plan. 1.
- The Municipality, in cooperation with the utility companies, other governmental agencies, and underlying property owners shall identify current utility easements on which trails could be developed and areas 2. of future utility easements that should have eventual trail access.
- The Municipality shall pursue an agreement with the Alaska Railroad to establish a trail corridor within their right-of-way.
- The Municipality shall pursue acquisition of private property where necessary to complete a greenbelt 4. system or a planned link in the overall trail system.
- The Municipality of Anchorage shall "take custody" of the railroad right-of-way for a trail corridor should any of the right-of-way be abandoned.
- Before rights-of-way or section line easements are vacated, their potential for trail development shall be investigated.

II. ANCHORAGE METROPOLITAN AREA TRANSPORTATION STUDY (AMATS)

The Intermodal Surface Transportation Efficiency Act of 1991 requires each city over 50,000 population to develop a comprehensive and continuing transportation planning process in cooperation with the state government.

The State of Alaska and the Municipality of Anchorage jointly and cooperatively participate in the Anchorage Metropolitan Area Transportation Study (AMATS). Through the AMATS process, the two agencies cooperatively plan the improvement of Anchorage's roadway, transit, and trail systems. Participation in the AMATS process fulfills a federal requirement that enables the Municipality of Anchorage to receive, in 1996, approximately \$45 — \$50 million each year from the U.S. Department of Transportation for all types of transportation projects.

The Policy Committee (PC) guides the AMATS process, formulates planning policy and objectives, and monitors the implementation of transportation plans. The Policy Committee has five voting members. These are the Mayor of Anchorage, two Municipal Assembly members, the Regional Director of the Alaska Department of Transportation and Public Facilities (DOT&PF), and the Regional Administrator of the Alaska Department of Environmental Conservation.

The AMATS Technical Advisory Committee (TAC), consists of seven voting members: the Municipal Director of Community Planning and Development, the Municipal Director of Public Transportation Director, the Municipal Director of Public Works, Municipality's Environmental Services Manager, a representative from the Alaska Department of Environmental Conservation Air Quality section, the DOT&PF's Central Region Chief of Planning. and a member of the Citizens' Air Quality Advisory Committee. Together, they advise the Policy Committee on technical aspects of planning issues and procedures and supervise the preparation of planning documents.

The third AMATS committee, the Citizens Advisory Committee (CAC), is a public body that advises the Policy Committee on transportation issues and sponsors certain AMATS public meetings. In Anchorage the CAC is the Planning and Zoning Commission.

A multi-year program of transportation improvements must be prepared and reviewed at least bi-annually so that the Anchorage area can qualify to receive funding from the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Trails are eligible for federal funding and must be considered on all federal-aid highway projects.

AMATS staff are responsible for developing the Transportation Improvement Program (TIP). The purpose of the TIP is to provide the basis for the State and Municipality's capital improvement programs for transportation. Its function is to ensure a closer relationship between the urban transportation planning process and the program of projects advanced for implementation with federal assistance. The TIP represents a comprehensive multi-modal plan of development over a three-year period. It is developed from the AMATS Long-Range Transportation Plan for the Anchorage Bowl, the Highway Safety Improvement Program (HSIP), the Areawide Trails Plan, and others.

The AMATS Long-Range Transportation Plan and the Transportation Improvement Program should include trails as important elements, both as stand-alone and integrated projects. The Areawide Trails Plan considers trails to be important modes of transportation that should be included in the Municipal Capital Improvement Program, as well as in all major AMATS plans and programs. Many of the recommendations for trails in this Plan took into account recommended roadway projects in the Long-Range Transportation Plan and the Transportation Improvement Program. By doing so, both roadway and trail improvements can be effectively integrated at the time of project design, funding, and construction.

A. RECOMMENDATIONS

- 1. The Anchorage Metropolitan Area Transportation Study (AMATS) Policy Committee should adopt the Areawide Trails Plan as an integral part of the Anchorage Bowl and the Chugiak/Eagle River Long-Range Transportation Plan.
- 2. The implementation of the transportation trail recommendations in this Areawide Trails Plan should be coordinated with the development of the AMATS Transportation Improvement Program (TIP).

III. ENFORCEMENT

The implementation of the Areawide Trails Plan must not only focus on the physical trail system, but must also consider the personal security of the trail users. Design and locational criteria can affect trail safety, and public awareness and involvement. These passive techniques are usually very effective and should be the cornerstone of a trail safety program.

Security of trails is generally the responsibility of trail users. Anchorage police and Alaska State Troopers have difficulty responding to problems on or involving trails, placing increased emphasis on the need for citizen involvement. Citizen volunteer policing has become very popular in many park management areas, most notably with Alaska State Parks trailheads in the Anchorage area (Park Watch). A 'trail watch' program for Municipal trails could be instituted by the Department of Cultural and Recreational Services.

The remoteness of many situations, and the recurrence of vandalism and violence in some of Anchorage's larger parks has raised the issue of law enforcement capabilities in these parks. While volunteers can be helpful, many areas need law enforcement officers. Specific areas of problems and times that incidents occur should be evaluated and the areas patrolled during those periods of time. Officers should have access to the means of patrolling these areas, including snowmobiles and motorbikes.

Another area that receives little enforcement relative to the need is in the realm of maintenance of pedestrian ways. The Anchorage Municipal Code, Sections 24.80.050 and 24.80.090, require property owners to maintain pedestrian ways. Enforcement of this code is required to ensure safe and necessary movement of pedestrians.

A. RECOMMENDATIONS

- 1. The Department of Cultural and Recreational Services should develop a "Trail Watch" program.
- 2. The Municipality of Anchorage Police Department and the Alaska State Troopers should work with the Department of Cultural and Recreational Services for the development of a program for patrolling trails during identified times. Vehicles appropriate to the work should be provided.

IV. TRAIL IMPLEMENTATION RESPONSIBILITY

A. THE DEPARTMENT OF CULTURAL AND RECREATIONAL SERVICES (DCRS)

The Department of Cultural and Recreational Services presently has a trails function which includes have all of the following:

- promote trails and trail related facilities;
- be the contact body, within the Municipality, for all matters involving trail uses, including complaints;
- coordinate volunteer labor with agencies, groups and citizens to plan, develop, improve, and maintain trails;
- secure financial assistance to develop and maintain trails;
- keep abreast of literature in trail design, development, and maintenance;
- develop a standard technical manual for the development and maintenance of trails;
- analyze and study existing trails;
- develop and conduct user surveys;
- establish a public information campaign. on trails and trail safety;
- help establish priorities for funding and construction of trails;
- help start a program of trail right-of-way acquisition;
- work for trail dedications on private lands;
- coordinate and conduct safety programs and classes, including bicycle safety, with the Anchorage Police Department, the Anchorage School District, and private organizations;
- review subdivision plans, planned unit developments, rezoning requests, and other Title 21 requests for compliance with the Trails Plan;
- serve as support staff for a Trails Oversight Committee.

B. THE DEPARTMENT OF PUBLIC WORKS

The Department of Public Works should have the following trail functions:

- promote trails in road right-of-ways;
- ensure that all trails in road right-of-ways indicated on the Trails Plan are constructed;
- maintain all trails within road right-of-ways;
- keep abreast of literature in trail design, development, and maintenance;
- help establish priorities for funding and construction of trails;
- ensure that the Design Criteria Manual reflects design criteria for trails that are consonant with the Areawide Trails Plan.

C. THE DEPARTMENT OF COMMUNITY PLANNING AND DEVELOPMENT

The Department of Community Planning and Development should have the following trail functions:

- plan for areawide trail networks;
- revise the Areawide Trails Plan as needed;
- maintain a set of trail maps of a large scale;
- assist the Trails Oversight Committee;
- coordinate trails planning with the AMATS process;
- provide staff for review of trails in site plan reviews of collectors and greater;
- compile and analyze trail data on an on-going basis.

D. THE PLANNING AND ZONING COMMISSION

No trails in parks of greater than 1 1/2 acre are to be routed and re-routed unless they are in accordance with an approved park plan that has been reviewed and approved by the Planning and Zoning Commission.

E. TRAILS PLAN OVERSIGHT COMMITTEE

Proper coordination of trail issues requires a standing intergovernmental committee that can address the many areas of concern. The purview of this committee should be to:

- encourage balanced development of facilities to meet the demonstrated needs of all users;
- resolve user conflicts on Anchorage trails via arbitration, cooperation or compromise;
- provide education and procedures for trail users;
- provide guidance concerning user fees where appropriate;
- engage with organized motorized interests to initiate a public education program for the development of responsible use of motorized vehicles;
- encourage all trail development to take place within established plans, regulation, rules, ordinances, laws, and guidelines, whether or not it is paid for by public, private, or volunteer efforts;
- publish a trail book, including etiquette among users;
- review and recommend summer and winter maintenance in line with proposed summer and winter use and budgets;
- work with operating agencies and the public to find maintenance funds for all recommended trail projects;
- prepare a list of specific natural trails in the Municipality that should receive top priority for designation or dedication;

- review and revise the priority construction list, if necessary, yearly, including reviewing the inclusion of new trails such as the Urban Core Loop Trail, trails in Southport, a trail from Golden Eagle Drive to Mount Baldy, and extension of the Eagle River Greenbelt trails to the inlet; and
- work with volunteer organizations and non-profits to facilitate special events, such as fund raisers, races, competitions, training sessions, new development, and repair parties.

The committee members of this group would include at a minimum representatives from 1.) the Turnagain Arm area, 2.) the Anchorage Bowl, 3.) the Chugiak-Eagle River Area, 4. motorized trail users, 5.) non-motorized trail users, 6.) runner or pedestrian, 7.) nordic skier, 8.) bicyclist, 9.) the Department of Community Planning and Development, 10.) the Department of Public Works, 11.) the Anchorage School District, 12.) the State Department of Transportation & Public Facilities, and 13.) the State Division of Parks & Outdoor Recreation. The Department of Cultural and Recreational Services would provide staff for the committee. The Mayor would appoint the committee members with Assembly concurrence.

The Department of Community Planning and Development recommends that the establishment of the Trails Oversight Committee (TOC) or staff to a TOC be addressed as an operating budget issue by the administration.

V. OTHER REQUIRED STUDIES

Special studies are needed to further define trail requirements in particular areas of the community. They are also needed to evaluate policies that could lead to better coordination between trail development and transportation and land use planning activities. A number of studies are necessary to supplement and complement this plan. The following efforts are required to carry forward the intent of this plan:

A. FAR NORTH BOCENTENNIAL PARK MASTER PLAN UPDATE

A plan is needed to resolve numerous trail needs, concerns and conflicts in the Far North Bicentennial Park. Among the issues needing to be addressed are those needs of cross country skiers for a cross-park tie from Hillside Park to Tudor Road, interests of dog mushers for protection of existing trails, interests of skijorers for adequate trails for their activities, and the compatibility of all of these interests with each other and with other park users.

B. PEDESTRIAN ACCESSIBILITY AND MOBILITY ASSESSMENT

A study regarding pedestrian access throughout the Anchorage Bowl should be completed and adopted. Much work has been put into the identification of pedestrian issues for a comprehensive pedestrian network.

C. ALASKA RAILROAD RAILS WITH TRAILS STUDY

The possibility of an agreement with the Alaska Railroad should be investigated for the use of the Alaska Railroad right-of-way for trail use. "Rails with Trails: Sharing Corridors For Recreation and Transportanegotiations." by the Rails to Trails Conservancy should form the basis for the development of the study and

D. GIRDWOOD TRAIL MANAGEMENT PLAN

The Municipality should assist the Girdwood Board of Supervisors with the development of a trail management plan to address long-term trail usage within the Girdwood valley. While few conflicts currently exist, growth within the valley and increased recreation area demands of Anchorage will place pressure on the use of lands for motorized and non-motorized use. An overall plan is needed that addresses the needs of the Girdwood community as a whole.

E. CHUGIAK-EAGLE RIVER TRAILS

A field study of the trail alignments and trail heads needs to be performed for the Chugiak-Eagle River trails, including the Hillside Trail. Additional planning efforts are recommended within 2 years.

VI. PLAN REVISION PROCESS

The Areawide Trails Plan is a working document that needs to grow and adapt to the increasing changes taking place in the Anchorage community. The trails planning process must be on-going and dynamic. The Plan must be kept current through periodic review and close monitoring of changing needs and priorities.

In order to evaluate whether the various assumptions made in developing the trails plan are still valid, it will be necessary to compile and analyze data on an on-going basis. The types of data collected should include trail user counts, attitude surveys, recreational equipment sales, land use characteristics, transportation and land use planning activities, and Comprehensive Plan changes. Other data should include: trail incidents, trail accidents, trail damages, and trail maintenance requirements.

In order to maintain an effective planning process, the general public must also play an active role. The public can be involved through the Parks and Recreational Advisory Commission, the Eagle River-Chugiak Parks and Recreation Commission, and the Girdwood Board of Supervisors public meetings. Also, staff will attend meetings with Community Councils, trail-user groups, and various other interested organizations.

The Department of Community Planning and Development shall monitor the Areawide Trails Plan every 3 years and update as necessary.

VII. PRIORITY PROJECTS FOR FUNDING

Implementation of the Areawide Trails Plan through identification of agency responsibilities, funding and other resources is only part of the process. Establishing project priorities is also necessary. The prioritizing of all potential projects was done with assistance of the Trails Plan Review Group (TPRG). The TPRG prioritized the projects in the following manner. Approximately 300 projects shown on the Areawide Trails Plan maps and included in the recommendations in the text were considered, see appendix 3 for complete list of potential projects. Each member of the TPRG made a list of the trails they felt were most important to be constructed in the next 20 years. These individual lists were compiled into a "short" list, which comprised more than 130 trails. The TPRG then discussed and decided on criteria for prioritizing each of these trails. The project critera for prioritizing projects was based on similar critera used for planning trails. The project prioritization criteria used were as follows:

- the trail represents a link to other trails,
- the trail is a connection to another trail,
- the trail solves a safety concern,
- the project protects an established trail,
- the trail is a multi-use trail,
- the project is a trail head,
- the trail would be a new trail,
- the trail has significant scenic or aesthetic value, or
- the trail enhances the geographic mix of trails in Anchorage.

Each trail on was given a numerical ranking for each of the above criteria and the top 50 trail projects were determined. The projects listed below represent the top 50 trail projects in alphabetical order, that deserve priority consideration for implementation. The cost estimates are rough for planning purposes only, no or limited design / engineering work has been completed for most projects listed.

TABLE 10.1 - TOP 50 T	Area	1997 Cost Est. (\$,000)	Туре
A-C Couplet (North-South Trail)	NW	1,500	trail
Abbott Loop: Campbell Creek. to Abbott Rd. with grade separated crossing	SE	1,920	trail
ARR. Trail: Coastal Trail to Northern Lights	NW	800	trail
ARR Trail: Northern Lights to Tudor	NW	550	trail
ARR. Trail: O'Malley to Coastal Tr. (overpass at O'Malley) ARR. Trail: Dimond to O'Malley (overpass at Dimond) ARR. Trail: Tudor to Dimond	SW SW NW/SW	1,855 1,760 1,520	trail trail trail
Bird Creek Regional Park & Trailhead (completed)	TA	1000	trailhead
Business Park. Blvd. pedestrian improvements	C/ER	2,000	sidewalks
Campbell Creek Trail: Old Seward to Tudor	NE	3,500	trail
Coastal Trail Lighting	NW	1,500	lighting
Coastal Trail/Ship Creek Trail: 2 nd Ave. via Ship Creek to Glenn Highway at Boniface	NW	6,000	trail
Coastal Trail: Dimond Blvd. to Potter Marsh	SE	12,000	trail
Coastal Trail: through EAFB/Ft. Rich to Mouth of Peters Creek ParkBeach Lake	C/ER	2,200	trail
Coastal Trail: Kincaid to Dimond	SW	5,000	trail
Coastal Trail: Mouth of Peters Creek Beach Lake Park to Eklutna	C/ER	9,500	trail
Coastal Trail: Potter Marsh to Potter Section House	SE	2,700	trail
Coastal Trail: Widen shoulder 3 rd to Earthquake Park	NW	620	trail
DeArmoun Road: Seward Highway to Hillside (unp)	SE	У	trail
DeArmoun: E. 140th to Birch (unp)	SE	25	trail
Eagle River Greenbelt: connect to Hiland Drive	C/ER	90	trail
Eagle River Loop: Eagle River Rd. to Old Glenn	C/ER	950 or y	trail
Eklutna Waterline: Dedicate trail	C/ER	N/A	dedication
Elmore: Rabbit Creek. Rd. to DeArmoun, O'Malley to Abbott (unp)	SE	380	trail
Fire Creek Trail	C/ER	3,800	trail

		1997Cost		
Name of Trail	Area	Est. (\$,000)	Туре	
Glacier Creek: Dedicate trails	TA	N/A	dedication	
Glenn Highway: Boniface to Muldoon (completed)	NW	640	trail	
Glenn Highway: Peters Creek to Mat-Su	C/ER	4,200	trail	
Glenn Hwy.: Centennial Park to Eagle River Snowmobile	C/ER	у	trail	
Hillside Trail (Chugach Rim)	C/ER	1,000	trail	
Huffman Rd: Birch to Elmore (unp)	SE	20	trail	
Little Peters Creek Trailhead (completed)	C/ER	110	trailhead	
Minnesota Bypass: Old Seward to Tudor	SE	2,750	trail	
Moose Meadows: Dedicate trails	TA	N/A	dedication	
North Birchwood Loop/Old Glenn Highway: North Birchwood interchange to Loretta French Park	C/ER	1,890	trail	
O'Malley: Birch to Hillside (unp)	SE	500	trail	
O'Malley: Lake Otis to Birch (p and unp)	SE	1,000	trail	
Old Glenn Highway: Chugiak to Eagle River	C/ER ·	у	trail	
Penland Parkway south side	NW	210	sidewalk	
Peters Creek Safety Trail (completed)	C/ER	900	trail	
Potter Marsh Nature Trail Extension/Connection	SE	350	trail	
Rabbit Creek Road (paved)	SE	У	route	
Rabbit Creek Road: Old Seward to Goldenview (unp)	SE	55	trail	
Section 36 Interpretive Trails (unp)	SE	40	trail	
Seward Highway: Grade Separated Crossing at Bird	TA	450	crossing	
Seward Highway: Potter to Portage, non-motorized	TA	25,000	trail	
Tudor Road Crossing connections to Chester Creek southwest of University Lake and to Far North Bicentennial Park (i.e. Chester Creek Trail connect)	NE	1,500	trail	
University Drive: Providence to Northern Lights	NE	x	trail	
Upper Huffman Trailhead	SE	15	trailhead	
Windy Corner Dall Sheep viewing (completed)	TA	3,500	turnout	
KEY: SW = Southwest Anchorage Bowl NW = Northwest Anchorage Bowl C/ER = Chugiak/Eagle River TA = Turnagain Arm TA = Turnagain Arm The provide as a part of road upgrade or maintenance unp = unpaved Tosts are in thousands (completed) = project completed during plan approval				

CHAPTER 11

I. AREAWIDE TRAILS PLAN MAPS

- A. ANCHORAGE BOWL MULTI-USE TRAILS
- B. CHUGIAK EAGLE RIVER AND VICINITY MULTI-USE TRAILS
- C. TURNAGAIN ARM MULTI-USE TRAILS

The trail maps are attached to the back of this plan.