



COMMUNITY OVERVIEW

COMMUNITY OVERVIEW

I. LAND USE

Existing land use patterns play an important role in the comprehensive planning process. The location, type and amount of residential, commercial, industrial, institutional and park/open space uses, as well as vacant land, present both opportunities and constraints in guiding future change. An accurate inventory of current land use and vacant land, combined with other data such as land suitability, provides a sound basis for identifying areas likely to accommodate future growth.

A detailed land use survey of the Chugiak-Eagle River area was completed in 1987. The following description of land use characteristics for the entire area and its sub-areas is based on the 1987 data. Information on vacant suitable land is based on detailed computer analyses undertaken in 1991. (The Sub-Areas map identifies areas upon which the land use and vacant land analyses were based. These sub-area boundaries differ somewhat from community council boundaries.)

A. OVERALL PATTERNS AND TRENDS

The Chugiak-Eagle River area encompasses an area of 41,537 acres, or about 65 square miles. Less than a third (30 percent) of that area is currently developed or committed to use.

Land use patterns in Chugiak-Eagle River have, for the most part, been established through construction of the Alaska Railroad and the Glenn Highway (and later the New Glenn Highway), homesteading, and the subsequent subdivision of many of the homesteads. Development has basically followed a linear pattern along the Old and New Glenn Highways and, to some extent, up major river valleys. Expansion has generally been limited by Chugach State Park to the east and Fort Richardson Military Reservation and Knik Arm to the west.

Chugiak-Eagle River has changed from a predominantly rural area to a community with a mixture of rural and suburban development. At the time the 1979 Eagle River-Chugiak-Eklutna Comprehensive Plan was prepared, basic land use patterns had established the area as a bedroom suburb of Anchorage. General development patterns and trends since that time have continued to reflect the area's status as a residential community. However, while land use patterns have remained essentially the same since 1980, the actual use of land has expanded substantially (see Table 6.)

As a result of municipal population growth, economic expansion and the increased availability of utility services, residential land use in Chugiak-Eagle River underwent a major expansion during the early to mid-1980's. Except for Birchwood, all Chugiak-Eagle River areas saw dramatic increases in housing stock and population during that period, well above municipal averages. (Birchwood had increases below municipal averages, mainly because relatively few large tracts of unsubdivided land were available for development.) Commercial and, to a lesser extent, industrial activities in the area also increased, primarily to serve a growing local population.

TABLE 6
EXISTING LAND USE
CHUGIAK-EAGLE RIVER AREA
1987

Land Use	Acreage	Percent of Total
Residential	5,666	44.8
Commercial	265	2.1
Industrial	165	1.3
Institutional*	1,077	8.5
Parks	2,303	18.2
Transportation	3,181	25.1
TOTAL	12,657	100.0

* Includes airport use.

Source: Department of Community Planning and Development.

B. RESIDENTIAL DEVELOPMENT

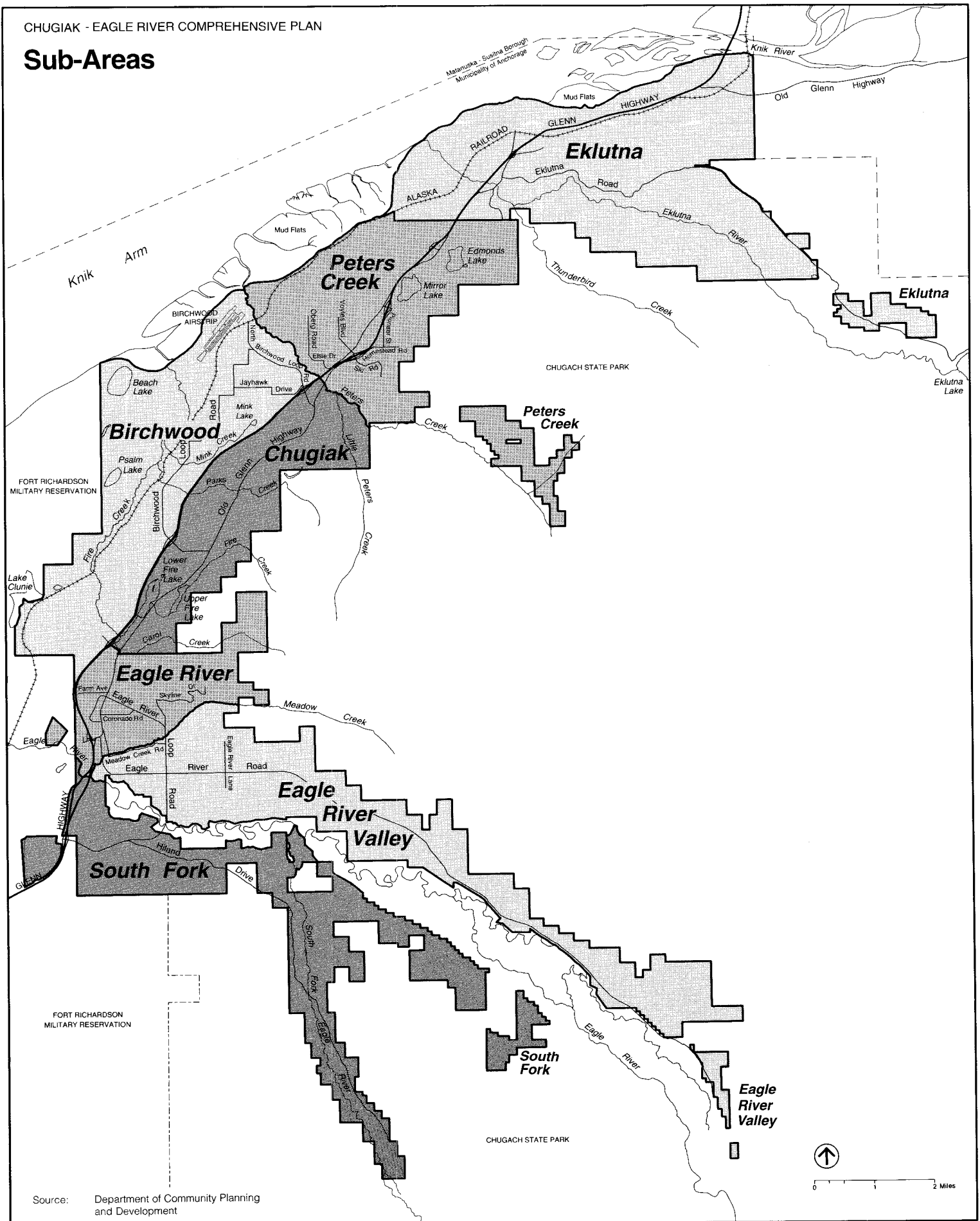
As in 1980, residential land use continues to predominate in the Chugiak-Eagle River area, accounting for almost 45 percent of developed land here in 1987. Except for the Eklutna area (which has seen limited overall development to date) and Birchwood (where park use consumes more land), most of the committed acreage in each community sub-area is currently devoted to residential development.

Residential lot sizes vary from 6,000 square feet to more than 5 acres, with some original homesteads of over one hundred acres still remaining. Most residential use is in the form of single-family homes, with very little acreage committed to multi-family housing.

Residential development patterns in the various sub-areas vary, largely because of differences in location and in land availability and suitability. Eagle River generally has more dense residential development, with lot sizes averaging from 8,000 to 18,000 square feet. South of Eagle River Road, in Eagle River Valley, some single family and zero lot line housing has been built on smaller lots of between 6,000 and 8,400 square feet. By contrast, residential development in upper Eagle River Valley and South Fork has typically taken place on lots varying from one to five acres in size.

Most development in the Birchwood area is on 2.5 acre homesites or subdivided 1.25 acre lots. In Chugiak and Peters Creek, residential development has taken place on lots ranging from 10,000 square feet up to several acres, although one to 5 acre lots predominate. In the

Sub-Areas



Eklutna village area, limited residential development has occurred on half-acre lots, while a small number of residences on homesites of 5 acres or more are located in Eklutna Valley.

C. COMMERCIAL DEVELOPMENT

Commercial development in Chugiak-Eagle River has grown since 1980, but it still accounts for a relatively small area, just 2 percent of the total developed acreage in 1987. Commercial activity continues to be primarily local serving, with retail trade the dominant component.

Most commercial development is located in Eagle River which essentially functions as the area's trade center. Here, commercial activity, consisting largely of retail and service-oriented enterprises, is concentrated along both sides of the Old Glenn Highway and west of the Old Glenn Highway in the Regional Park subdivision.

Outside Eagle River, most commercial development is scattered along the Old Glenn Highway in Chugiak, west of the New Glenn Highway in the vicinity of North Birchwood Loop Road, or is clustered east and west of the New Glenn Highway at the Peters Creek exit. Some commercial development has taken place on several large parcels in Eagle River Valley and a small amount of commercial activity is located in Eklutna. There is no commercial development in South Fork.

Aside from formal commercial development, a number of businesses are operated out of homes throughout Chugiak-Eagle River.

D. INDUSTRIAL DEVELOPMENT

Like commercial development, industrial development in Chugiak-Eagle River is limited, accounting for only 1 percent of the area's developed land in 1987. Most industrial uses are in Chugiak, where natural resource extraction operations are located. Limited amounts of other industrial activities, such as warehousing and storage, are scattered throughout Birchwood, Eagle River and Peters Creek. There are currently no industrial uses in Eklutna or South Fork.

E. PUBLIC AND INSTITUTIONAL USES

Public and quasi-public (institutional, park/open space and transportation) uses occupied more than half of all developed land in Chugiak-Eagle River in 1987. This is a much higher proportion than most communities of a similar size. However, a major share of this type of use is taken up by the area's two large regional parks, Edmonds Lake and Beach Lake, plus lands taken up by the Glenn Highway and Alaska Railroad transportation corridors.

Institutional uses accounted for 8.5 percent of developed land in Chugiak-Eagle River in 1987. This land use category includes educational facilities, power, communication and sanitary amenities,

public safety facilities, a recreation center, religious institutions and government facilities. The largest share of institutional uses is located in Birchwood, which includes land committed to airport, school, recreation and church-related activities. (Note: Airport use was included in the institutional category in the 1987 land use inventory. In the land use plan, it has been classified as transportation-related.)

After Birchwood, Peters Creek had the largest amount of land occupied by institutional uses in 1987, most of it associated with a church camp and a scout retreat. Chugiak's institutional land includes large parcels used for a senior citizens' center, a community center, a recreation center and an elementary school.

Transportation uses consumed 25 percent of land developed for public use in 1987. This acreage includes only transportation corridors, i.e. road and railroad rights-of-way.

After transportation, parks and open space accounted for the largest share of developed land devoted to public use (18 percent) in 1987. Most park/open space areas are located in Birchwood (65 percent), followed by Peters Creek (24 percent.) Large regional parks are located in both of these areas. Community and neighborhood parks and campgrounds make up the remainder of the area's park/open space acreage.

F. VACANT LAND

Almost 29,000 acres of land in Chugiak-Eagle River was undeveloped in 1987, or about 70 percent of the total area. However, not all vacant land is suitable for development. Limiting factors include difficult access, steep slopes, poor soils, a lack of public water and sewer, and management/ownership restrictions. An assessment of land suitability has indicated a total of 9,181 acres of vacant suitable land in the Chugiak-Eagle River area, plus another 12,280 acres determined to be marginally developable. A total of 7,419 acres was deemed to be unsuitable for development.

G. FUTURE LAND USE NEEDS

Established land use patterns in the Chugiak-Eagle River area will continue to affect community development in the future. The large amounts of vacant land available for development will also be a major factor in shaping future growth. With a dwindling supply of vacant residential land in the Anchorage Bowl, especially for single-family detached homes, and with further expansion of public facilities and services in Chugiak-Eagle River, a greater share of residential development can be expected to take place in this area.

As Chugiak-Eagle River's population continues to grow, there will be a corresponding increase in demand for commercial services, particularly in downtown Eagle River. Because some land in Eagle River originally zoned for residential and professional office use (R-O) has developed largely as residential, additional areas for offices and other commercial uses may be required. However, there are sizeable amounts of underdeveloped commercial property in Eagle River.

A 1991 field survey indicated significant amounts of available or under-used commercial space that could accommodate a large share of the area's near-term commercial requirements.

Industrial space demands in the Chugiak-Eagle River area can also be expected to increase in the future. Although there appears to be sufficient vacant land suitable for industrial purposes, most of this land is a single large, unsubdivided parcel located adjacent to Birchwood airport. In the future, there may be a need for additional parcels of land which are more centrally located and more suitable for smaller industrial operations.

To consider these and other future needs, an extensive analysis of existing land use patterns based on sub-areas (see Sub-Areas map), recent trends and vacant land suitable for development was undertaken as part of the comprehensive planning process. This analysis was used to help determine which future growth options are most appropriate and compatible with community needs and desires.

II. HOUSING

Housing is a basic community need. It is also a key element in a community's appearance and its ability to accommodate growth. As Chugiak-Eagle River experiences population and economic growth during the next twenty years, a greater variety of housing needs will have to be satisfied. A housing supply that meets those needs is one of the major concerns of the Comprehensive Plan.

A. HOUSING TRENDS AND CHARACTERISTICS

During the early to mid-1980's, the pressures of a rapidly growing population severely taxed the Municipality's existing housing supply and greatly increased the demand for new housing. While the Anchorage housing inventory expanded to meet those new demands, Chugiak-Eagle River's housing inventory grew even faster.

Between 1980 and 1990, almost 4,300 dwelling units were added in the Chugiak-Eagle River area, almost doubling the supply (see Figure 6.) During the same period, the overall municipal inventory increased by less than 40 percent. In 1990, the 8,793 dwelling units in Chugiak-Eagle River represented about 10 percent of the entire municipal housing stock inventory, up from 7 percent in 1980.

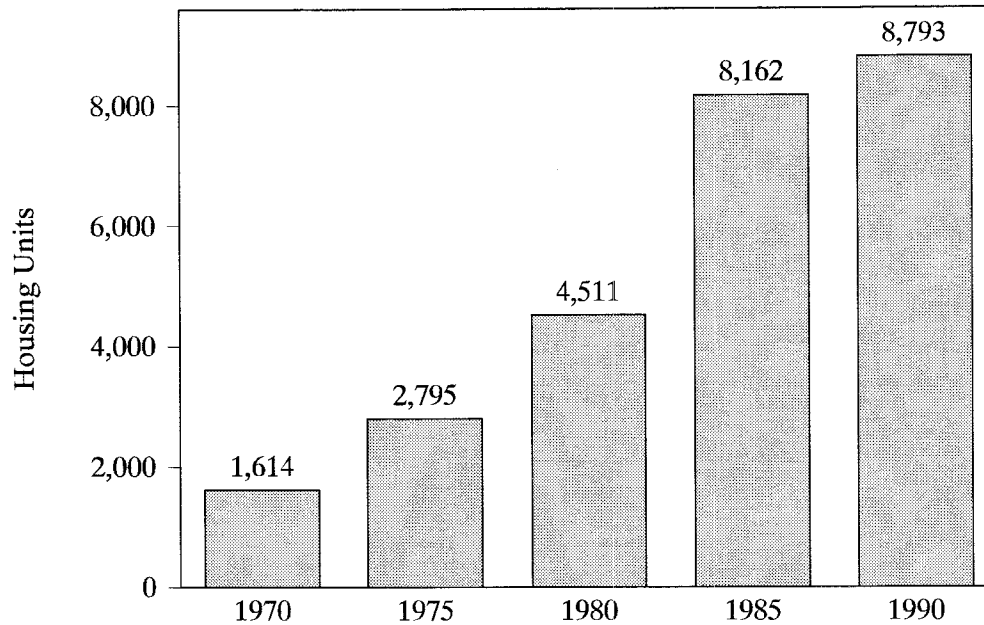
Almost half of the new housing added in Chugiak-Eagle River between 1980 and 1989 was concentrated in the Eagle River Valley community council area, mainly in the lower part of the Valley where developable land and public infrastructure were readily available. Although housing numbers rose in all areas of Chugiak-Eagle River during this period, only Eagle River Valley showed an increase in its share of the overall municipal housing inventory.

Chugiak-Eagle River's share of new housing in the Municipality is expected to increase in the future. As the municipal population continues to grow, land for detached, single family

FIGURE 6

Housing Stock Trends

Chugiak-Eagle River - 1970 to 1990

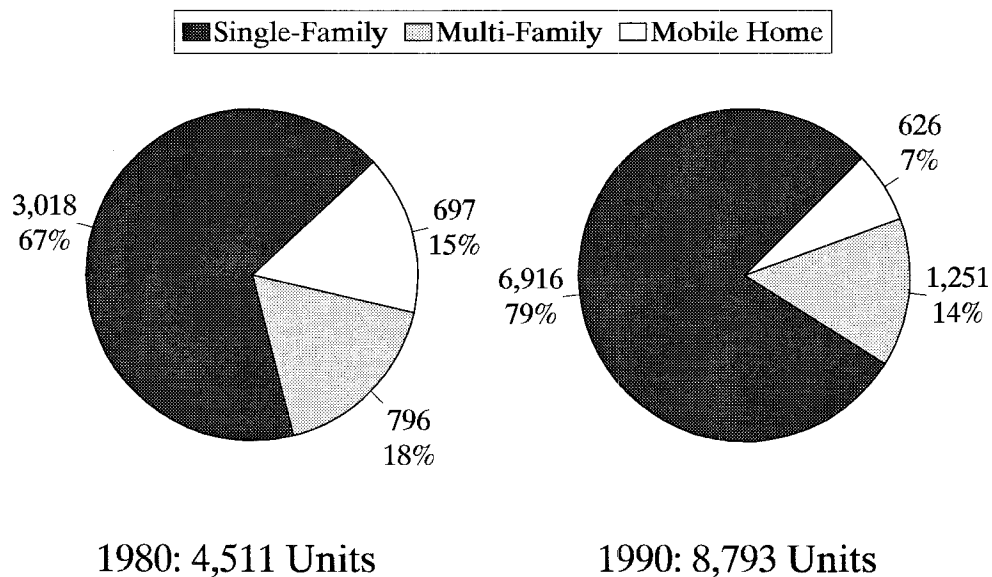


Sources: U.S. Bureau of the Census and MOA Community Planning & Development Department.

FIGURE 7

Housing Stock By Structure Type

Chugiak-Eagle River - 1980 & 1990



Source: U.S. Bureau of the Census.

homes will become increasingly scarce in the Anchorage Bowl. Chugiak-Eagle River, which still has large amounts of vacant residential land, will therefore attract more of this type of development.

As the area has grown, Chugiak-Eagle River's housing stock has remained predominantly single family (see Figure 7.) (Single family housing includes both detached and attached units.) This is typical of a developing, low density, suburban community. In 1990, almost 80 percent of all housing units in Chugiak-Eagle River were single family, versus about half for the Municipality as a whole. The greatest number of new single family homes in Chugiak-Eagle River were built in the Eagle River Valley area during the 1980 to 1990 period.

The number of multi-family units in Chugiak-Eagle River has also grown since 1980. (Multi-family housing includes duplexes and buildings with three or more units.) However, while the number of units increased, the ratio of multi-family to single family housing actually declined by 4 percent between 1980 and 1990. In 1990, 14 percent of the Chugiak-Eagle River housing inventory was in multi-family units, compared with 40 percent for the Municipality as a whole. Some multi-family housing (less than 25 percent) is located in Chugiak, but the majority (over 60 percent) is in Eagle River.

The number of mobile homes in Chugiak-Eagle River decreased by 8 percent between 1980 and 1990. A similar trend was apparent for the Municipality as a whole. Many mobile homes were shipped out of the Anchorage area during the economic recession. In 1990, mobile homes represented about 7 percent of the housing inventory in both Chugiak-Eagle River and the entire Municipality. In 1989, over half of the mobile homes in Chugiak-Eagle River were located in the Chugiak Community Council (including Peters Creek) area.

In 1989, almost 70 percent of all housing units in Chugiak-Eagle River were owner-occupied, compared with about 50 percent for the entire Municipality. Renter-occupied units accounted for 20 percent of housing in Chugiak-Eagle River in 1989 versus 37 percent for the Municipality as a whole. The ratios of owner-occupied to renter-occupied housing in Chugiak-Eagle River and Anchorage overall have not changed significantly since 1980.

Vacancy rates in Anchorage fluctuated drastically during the 1980's. A combination of overbuilding in the first half of the decade and the economic downturn of the second half of the decade resulted in a dramatic increase in the overall municipal vacancy rate, driving it from 8 percent in 1985 to a peak of 17 percent in 1988. (Generally, a 5 percent vacancy rate is considered healthy.)

The Chugiak-Eagle River housing market also felt the impact of the economic downturn. In 1989, the area recorded a 12 percent vacancy rate. However, vacancy rates in Chugiak-Eagle River during the downturn were consistently lower than those for Anchorage as a whole. This was largely because Chugiak-Eagle River has a higher percentage of single family, detached housing and this type of housing had the lowest vacancy rates throughout the recession.

Vacancy rates have dropped significantly since 1989 and, in 1991, Chugiak-Eagle River had the lowest overall vacancy rate (3 percent) of any area in Anchorage. The overall municipal rate dropped to 5 percent in 1991. Declining vacancy rates have largely been due to population growth.

B. HOUSING VARIETY

As Chugiak-Eagle River grows, the demand for more diverse housing opportunities will also increase. For example, there will be a greater demand for housing that serves the needs of limited income residents. The special needs of residents requiring supervised housing situations because of age, or mental or physical conditions must also be met.

Another element of housing variety is the provision of sufficient numbers of rental units. Chugiak-Eagle River currently has a high proportion of single family, owner-occupied homes. This situation limits the area's ability to house residents such as single persons or young families, whose choice of housing may be influenced by lifestyle preferences or financial constraints.

It is important that affordable single family, multi-family and mobile home housing options be provided where the need exists, so that housing types and/or groups of people are not excluded from the community. For example, with the rising cost of single family housing, manufactured homes have become a source of affordable housing for some lower and middle-income families. With more affordable housing options, opportunities for renters to become home owners are also provided.

A supply of affordable housing options in Chugiak-Eagle River will be particularly important as local trade and service industries expand, accompanied by an increased demand for low and moderate-income workers. The area's economic development prospects will be improved and employment growth will be more likely when such workers can be housed in the community.

C. HOUSING QUALITY

The condition of the housing inventory is an important element. Inadequate, unsafe housing affects the health and welfare of residents and their community. A growing community should ensure the construction of safe, quality housing for its residents.

One way to upgrade housing quality is through the application of standardized building codes. Currently, Chugiak-Eagle River is outside the municipal building safety code service area. Despite the absence of municipal building code requirements, much of the residential construction in recent years has been built to code in order to satisfy more restrictive financing requirements. However, this practice does not resolve the issue of applying a standardized building code to all new construction in the area.

While the implementation of building codes could facilitate the goal of establishing and maintaining a sound housing supply, it should be noted that a properly enforced building code could

also create economic hardship for people living in substandard housing. The high cost of rehabilitating homes to meet code requirements could also lead to the abandonment of some structures.

Because most of Chugiak-Eagle River's housing stock is relatively new (less than 20 years old), substandard housing may not be a critical issue at this time. However, there is no current information specific to this area to allow a complete assessment of the age, physical condition, quality of construction, and need for rehabilitation or replacement of the existing housing stock. A municipal housing study that addresses Chugiak-Eagle River as a specific element would provide such an assessment.

D. FUTURE HOUSING NEEDS

Future housing needs were calculated by comparing projected population growth with the present housing stock inventory and, using an average of 3.0 persons per household, estimating how many additional units must be constructed by the year 2010. A 5 percent vacancy factor was applied to the forecasted number of units. However, rehabilitation or replacement of existing housing was not factored into projected housing needs because most of the area's housing has been constructed during the last twenty years. The resulting forecast of additional housing needs for a year 2010 population of 46,152 totaled about 7,300 units.

Criteria used for distributing new housing throughout the Chugiak-Eagle River area included:

- Location, availability, and development suitability of vacant land;
- Existing development patterns;
- Existing infrastructure; and
- Residential density considerations.

The methodology used for incorporating the projected demand for housing into development of the land use plan and residential density maps is outlined in Appendix B.

III. LAND OWNERSHIP AND MANAGEMENT STATUS

A. OWNERSHIP PATTERNS

Several major land owners will play important roles in determining future development patterns in the Chugiak-Eagle River area. These land owners include the federal, State and municipal governments and Native corporations (see Land Ownership and Management Status map.)

1. Public Lands

A striking feature of the land ownership pattern in the Chugiak-Eagle River area is the huge blocks of public land which squeeze the community from the west and south (Fort Richardson Military Reservation) and the east (Chugach State Park.) The Fort Richardson withdrawal dates from the 1940's, while Chugach State Park was established by legislative action in 1970.

Several other major legislative actions have helped shape the present land ownership pattern in this area. The Statehood Act entitled the State to select up to 104 million acres of federal lands. In addition, the Alaska Native Claims Settlement Act (1971) established village and regional Native corporations and entitled them to select 44 million acres of federal land. The 1963 Mandatory Borough Act and the 1978 Municipal Entitlement Act gave municipalities the right to select up to 10 percent of the vacant, unappropriated and unreserved State lands within their boundaries.

As a result of these and other actions, land ownership patterns in the Chugiak-Eagle River area have solidified. Aside from Fort Richardson and Chugach State Park, public lands include several large municipal parks—Edmonds Lake and Beach Lake Park. In addition, the Municipality deposited most of its remaining municipal entitlement into the Heritage Land Bank, which has holdings around Edmonds Lake, south of Beach Lake Park and along Hiland Road, as well as parcels along the upper hillsides.

Beside Chugach State Park, the State holds several other parcels of land in the Chugiak-Eagle River area. These include the Birchwood airport, the Eagle River campground and the Hiland Mountain correctional facility. Through the Alaska Railroad, the State also owns a quarry near Eklutna, part of the old powder reserve (the proposed site of the new classification yard), and the railroad right-of-way itself.

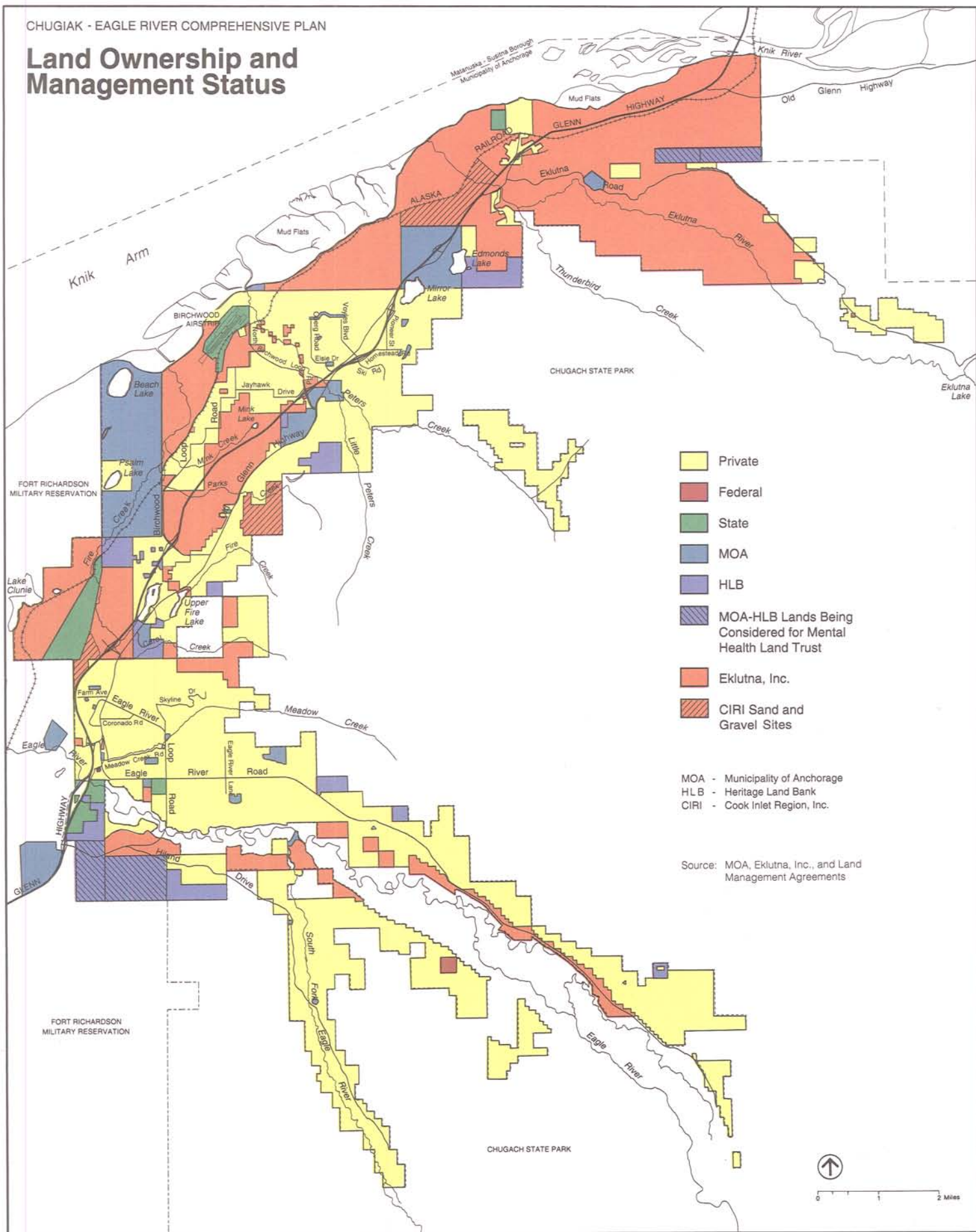
2. Native Lands

Eklutna, Inc., a Native village corporation organized under terms of the Alaska Native Claims Settlement Act (ANCSA), is the Chugiak-Eagle River area's largest private land owner, with conveyed property holdings totalling 23,848 acres. It owns most of the area north of Edmonds Lake and up the Eklutna Valley, and has major holdings near the Birchwood airport, along the Old and New Glenn Highways, in the powder reserve area, and up the Eagle River Valley. Under ANCSA, Cook Inlet Region, Inc. (CIRI), received title to the subsurface estate of Eklutna's lands.

B. LAND MANAGEMENT AGREEMENTS

Prior to the passage of legislation designed to resolve State, municipal and Native land claims, both Anchorage and Eagle River were already well established communities with significant proportions of private land. Furthermore, expansion of both communities was limited by committed

Land Ownership and Management Status



federal and State lands. As a result, there was not enough available federal and, in turn, State land to satisfy all of the legislatively mandated claims.

This land deficiency led to a series of legal agreements among the various players (the federal government, the State, the Municipality, Eklutna, Inc. and CIRI) to resolve the various claims and to settle related litigation. Most outstanding issues have now been settled.

The following agreements are important to an understanding of the current and future management and development options for the Chugiak-Eagle River area.

1. Agreement of Compromise and Settlement, 1979

Parties: Eklutna, Inc. and Municipality of Anchorage.

Purpose: To settle the Municipality of Anchorage and Eklutna Inc.'s overlapping and conflicting claims.

Significant Provisions:

- a. Eklutna, Inc. granted the Municipality of Anchorage long-term leases on 117 acres of land for school sites: Chugiak Senior High, Birchwood Elementary and adjoining lands; Eagle River Elementary; Gruening Junior High; and the Mirror Lake school site. Leases to continue as long as the properties are used as school sites.
- b. Eklutna, Inc. granted the Municipality certain open space and non-motorized trail easements on the north bank of Eagle River near Gruening Junior High, and along portions of Fire Creek and Peters Creek.

2. North Anchorage Land Agreement (NALA), 1982

Parties: State of Alaska, Municipality of Anchorage and Eklutna, Inc.

Purpose: To settle litigation between Eklutna, Inc. and the federal government (which the State would have had to join to protect its interests), and to establish the future interests of the State, the Municipality and Eklutna, Inc. in certain military lands if and when they are surplus. NALA affects more than 100,000 acres of land in the North Anchorage -Eklutna area.

Significant Provisions:

- a. Management of 27,000 acres of Eklutna, Inc. lands within Chugach State Park transferred to the State. The agreement identified the order in which title to these lands would be transferred to the State at such time as surplus military lands are conveyed to Eklutna,

Inc. in the future. CIRI maintained the subsurface rights, but may choose to trade them out for subsurface rights on surplus military lands as they become available.

- b. Mental health trust designations were lifted from certain lands, allowing Eklutna, Inc. to receive 12,990 acres around its village, in the lower Eklutna Valley and along the Knik River between the old and new Glenn Highways.
- c. Title to certain Eklutna, Inc. lands with public recreation and habitat values or existing homesteads went to the State (Palmer Hay Flats, Jim and Swan Lakes) and mental health trust land designations were lifted.
- d. The agreement established the future interests of the three parties to 42,300 acres of military land now withdrawn for Fort Richardson and Elmendorf Air Force Base. The State would get public interest lands such as Eagle River Flats, winter moose habitat, Eagle River Greenbelt, road rights-of-way and railroad lands. The Municipality would get 3,000 acres of public interest lands (schools, parks, etc.) Any remaining surplus lands would go to Eklutna, Inc. and the Municipality, as tenants in common, as development lands.

3. Greenbelt Exchange Agreement, 1986

Parties: State of Alaska and Eklutna, Inc.

Purpose: To protect the Eagle River corridor as a greenbelt.

Significant Provisions:

- a. The State received title to Eklutna Inc. lands (approximately 4,000 acres of surface estate) along Eagle River in exchange for two blocks in downtown Anchorage.

4. State - Municipality of Anchorage Agreement, 1986

Parties: State of Alaska and Municipality of Anchorage.

Purpose: To provide a final settlement of Anchorage's municipal entitlement claims.

Significant Provisions:

- a. The State agreed to convey certain parcels of land (approximately 4,000 acres) to the Municipality of Anchorage and agreed to consider application for other lands in the future if they were surplus to State needs. In addition, the State allowed the Municipality to select up to 1,000 acres of the State's entitlement from the Chugach National Forest.

5. Entitlement Facilitation Agreement, 1986

Parties: Municipality of Anchorage and Cook Inlet Region, Inc. (CIRI)

Purpose: To resolve various land ownership issues and further implement other land settlement agreements which affect municipal and CIRI lands.

Significant Provisions:

- a. CIRI consented to the Greenbelt Exchange Agreement between the State and Eklutna, Inc.
- b. CIRI agreed to give the State, without compensation, a non-development covenant for subsurface estate to a vertical depth of 250 feet on Eagle River Greenbelt lands. (Automatic revocation if the State uses land for other than "passive public park.")
- c. Various other agreements about the disposition to CIRI and the Municipality of various parcels around the Anchorage Bowl.

6. Agreement of Alaska Railroad Corp. and Eklutna, Inc., 1987

Parties: Alaska Railroad Corporation (ARRC) and Eklutna, Inc.

Purpose: To resolve conflicting claims by Eklutna, Inc. and ARRC to lands in the Chugiak-Eagle River area.

Significant Provisions:

- a. Eklutna, Inc. received the western and eastern thirds of the old powder reserve plus land on both sides of the North Eagle River Access Road. ARRC retained the middle third of the reserve for developing a new classification yard. ARRC lands are restricted to railroad-related uses.
- b. ARRC retained land at the Birchwood airport and Eklutna, Inc. received lands to the south and east for commercial and industrial purposes. ARRC will build a spur line to provide access from Eklutna, Inc. land to the main line.
- c. Eklutna, Inc. received title to Eklutna Gravel Reserves No. 1, 2 and 3, and to Parcel A of the Eklutna rock quarry; ARRC retained Parcel B of the quarry, but if ARRC stops using it for railroad purposes, it will go to Eklutna, Inc.
- d. CIRI received title to all subsurface estate of the lands conveyed to Eklutna, Inc.

7. Cook Inlet Region, Inc. and Eklutna, Inc., Gravel Agreement, 1989

Parties: CIRI and Eklutna, Inc.

Purpose: To resolve the issue of which areas CIRI would use for gravel extraction so that Eklutna, Inc. would be able to exercise its surface rights to other lands without conflicts over subsurface development.

Significant Provisions:

- a. After undertaking an evaluation of subsurface resources, CIRI identified four sites for future gravel extraction. Under the terms of the agreement, CIRI may use these sites for gravel extraction without further consent from Eklutna, Inc. However, in order to develop subsurface resources on other Eklutna, Inc. lands, CIRI must first obtain approval from Eklutna, Inc.
- b. Eklutna, Inc. agreed not to enter the gravel business, and is restricted to using its gravel for incidental, on-site uses only (i.e., no resale.)
- c. Approval authority for basements, water lines, etc. was transferred from CIRI to Eklutna, Inc. or other surface owners.

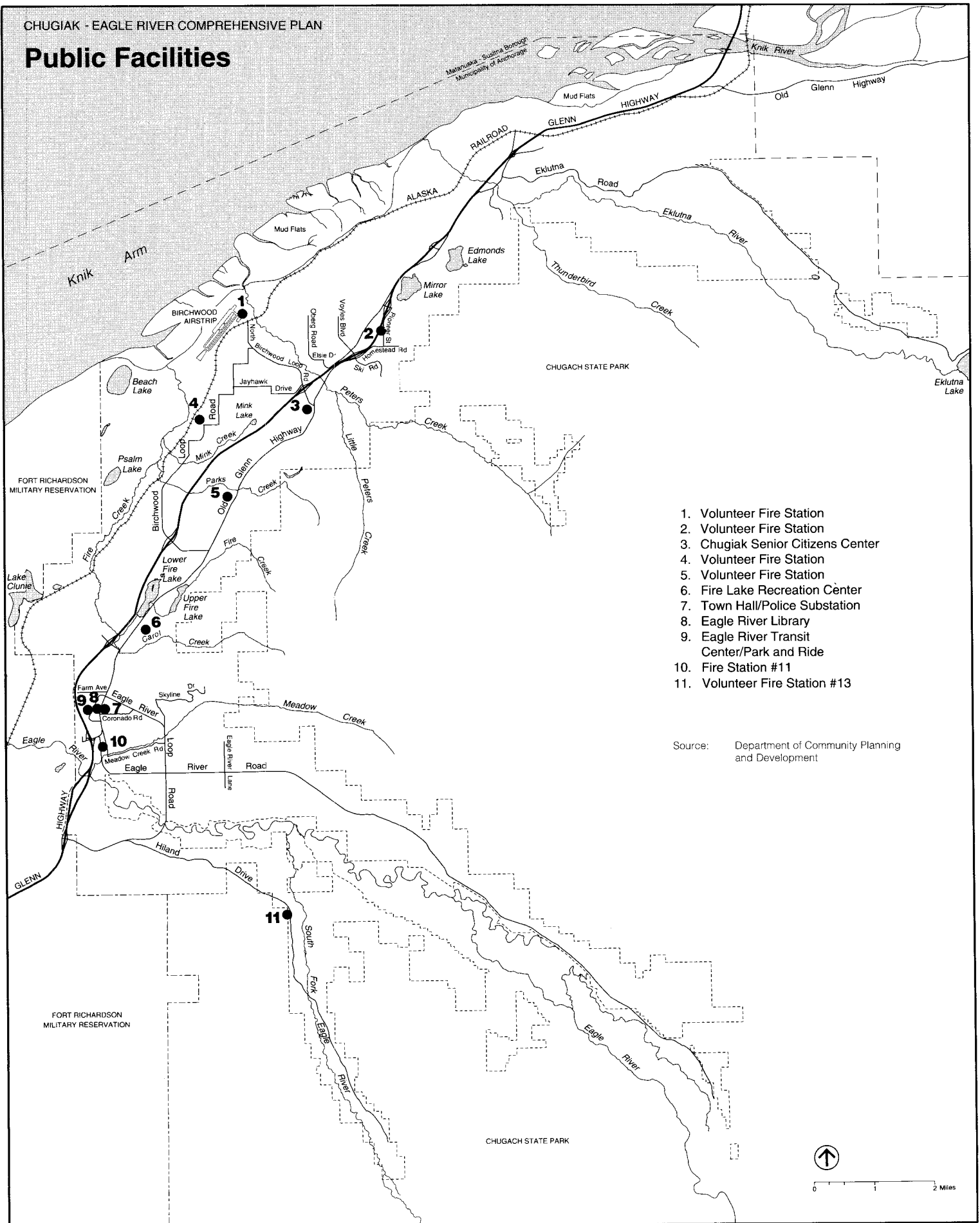
8. Mental Health Trust Lands

There are lands in the Chugiak-Eagle River area which were originally designated as Mental Health Trust lands. Some of these designations were removed by the North Anchorage Land Agreement. Remaining Mental Health lands include Heritage Land Bank land selections in the Hiland Road area. Mental Health lands are currently in litigation and the Legislature is attempting to reach a final settlement agreement which will make the Trust whole and remove the cloud of title from these lands.

IV. PUBLIC FACILITIES AND SERVICES

As the population grows over the next two decades, so too will the need for public services and facilities. Moreover, it is likely that, while wishing to maintain the rural character of the area, residents' expectations of the level and quality of services will increase in the future. (See the Public Facilities map for the location of existing public facilities.)

Public Facilities



1. Volunteer Fire Station
2. Volunteer Fire Station
3. Chugiak Senior Citizens Center
4. Volunteer Fire Station
5. Volunteer Fire Station
6. Fire Lake Recreation Center
7. Town Hall/Police Substation
8. Eagle River Library
9. Eagle River Transit Center/Park and Ride
10. Fire Station #11
11. Volunteer Fire Station #13

Source: Department of Community Planning and Development



0 1 2 Miles

A. PUBLIC SAFETY

1. Police

Before 1982, police protection in the Chugiak-Eagle River area was provided by the Alaska State Troopers. In 1982, local residents voted to extend municipal police service to the area and the Eagle River Neighborhood Police Substation was established.

In the Chugiak-Eagle River area, police services are provided on an around the clock basis, with three patrols per shift and three shifts per day, although that number is not always available at night. Each patrol consists of one officer and one patrol vehicle.

In addition to routinely assigned police patrols, the Anchorage Police Department has several specially trained teams which can respond to particular emergency situations as needed. These units include the K-9 Team, the Crisis Intervention Response Team, the Crisis Resolution Team, the Explosive Disposal Team, the Police Dive and Recovery Team and the Homicide Response Team. Besides specially trained teams, the Anchorage Police Department also offers community-based policing and crime prevention programs. Service is provided through the Anchorage Police Service Area.

In 1989, Chugiak-Eagle River calls amounted to 6.1 percent of all Anchorage area police calls. In 1990, calls increased by 33 percent and accounted for 7.2 percent of all police calls received.

There is no overall community police plan for the Chugiak-Eagle River area to determine an appropriate and acceptable level of police protection and crime prevention, and the means to achieve it. Such a plan would also determine criteria for the identification of patrol boundaries and the appropriate type of deployment by shift and by area.

The further a location is from the police substation, the longer the response time. If back-up is needed, depending on the location of the call, there could be an even longer response time. Ideally, there should be an assigned reserve patrol for back-up calls.

In 1989, the Anchorage Police Department noted that it was 51 officers short to meet its caseload. With population growth, there will be a concomitant need for more police personnel. Also accompanying population growth are increases in certain types of crime that now occur at a lower rate in Chugiak-Eagle River than in the Anchorage Bowl. This will require an increase in the level of local police service.

2. Fire Protection and Emergency Response

As Chugiak-Eagle River has grown, fire protection and emergency medical services have evolved from a purely volunteer effort to a combination of volunteers, auxiliaries and professional firefighters, plus emergency medical personnel.

The Chugiak-Birchwood-Peters Creek-Eklutna area is within the Chugiak Fire Service Area and is served by the Chugiak Volunteer Fire Department. The Department was organized in 1953. It is under contract to the Anchorage Fire Department to provide fire protection and emergency medical service from the North Eagle River Access Road to the Knik River Bridge. The upper Eklutna Valley is not within the service area, although the Department will respond to calls. Dispatchers, who are on call 24 hours a day, relay alarms to the volunteers and direct them to the nearest station where equipment is available.

The Eagle River community south of the North Eagle River Access Road (except for upper Eagle River Valley past Mile 6.2) is in the Anchorage Fire Service Area and is served primarily by Station 11 at .25 Mile Eagle River Road. There is also an unstaffed station (#13) at 4.2 Hiland Road (South Fork). South Fork still has a supplemental force of auxiliaries.

Between 1980 and 1990, the demand for fire protection services in the Chugiak-Eagle River area increased substantially. Total alarms increased 73 percent during this period, about the same rate as the Anchorage Fire Service Area as a whole. The number of responses by Station 11 in Eagle River was 361 in 1990, a 111 percent increase over 1980, compared with an average increase of 34 percent for all Anchorage Fire Service Area stations.

Fire flow capability in the Chugiak-Eagle River area varies and flow rates are not consistent between AWWU and private water systems. Most areas served by AWWU have sufficient flow, but some systems acquired by AWWU do not have hydrants. Other areas have hydrants, but inadequate flow because of undersized lines. Some of the private community systems have similar problems. Standards for future development, especially in areas with piped water systems, need to be more consistent to ensure adequate fire protection.

The Eagle River Fire Station has an Emergency Paramedical Service unit available seven days per week, 24-hours per day. This unit serves the Eagle River area, but will also respond to requests north of Eagle River made via the telephone emergency number, 911.

In addition to emergency medical services provided by the fire service areas, there is an areawide system of emergency planning and response in the event of a natural or other disaster. Concern has been expressed that disaster planning may not have adequately considered the specific, and perhaps unique, needs of the Chugiak-Eagle River area.

Chugiak-Eagle River residents recognize that a uniform level of fire protection cannot be provided throughout the area, given the varying population densities, difficult access to some neighborhoods, and prohibitive costs. Generally, facilities and services can be more efficiently provided where development is more concentrated.

As areas develop, demands for services increases and expectations about the quality of service rise. In the future, not only will there be greater demand for fire protection services from additional areas of intense development, but there will be an increasing demand for service in the community's outlying rural areas. It is important to provide opportunities for self-determination to decide the level of fire protection desired, i.e. either on a service area or areawide basis.

Because of Chugiak-Eagle River's physical setting and its attractiveness to people who prefer rural lifestyles, development will continue in locations where the provision of adequate fire protection is difficult. Response time is affected not only by distance from the nearest fire station, but also by the design and condition of access roads. Winter access can be especially difficult.

As the population of Eagle River grows, another station located about five or six miles out Eagle River Road may be needed to serve the upper Valley area.

B. HEALTH AND SOCIAL SERVICES

The provision and availability of present levels of health care and social services in the Chugiak-Eagle River area evolved from modest beginnings. Beginning in the late 1940's or early 1950's, a public health nurse and an occasional social worker traveled from Palmer to Chugiak and Eagle River. Private health care was limited to a single physician until the mid-1960's. Since 1964, the availability, level and staffing of public health services in the area have fluctuated with the local economy.

A range of general primary health care and social services are currently available to Chugiak-Eagle River residents. These services are offered by both public and private sector providers. Medical services available in the area are limited to ambulatory, outpatient, primary health care.

No State or federal health or social service agencies are located in Chugiak-Eagle River, although funds from these sources are provided to the Municipality for certain government-sponsored programs. The Municipality delivers two categories of health care services in Chugiak-Eagle River: maternal/child health services and emergency medical services.

The Municipality supports social services offered at the Chugiak Senior Center, plus library services. It also maintains a directory of municipally-licensed child care providers for Chugiak-Eagle River. In addition, the Municipality maintains animal control services in the area under contract.

Day care for children is provided by two public sector agencies, Chugiak Children's Services and Camp Fire-Chugach Council. There are also five private sector child care programs which are licensed by the Municipality.

ARCH-Volunteers of America, provides a residential substance abuse program for youths aged from 12 to 16. The program provides diagnosis, counseling, educational training, independent living skills training, after-care and follow-up. The program is supported by State and local grant funds.

Because of rising health care costs and decreasing access to the health care system by those who are most in need, it is likely that greater demands will be placed on government-sponsored

primary medical care programs in the future. Vulnerable groups include single heads of household with dependents, the unemployed, the under-employed and persons living on fixed incomes, such as the elderly and high risk populations.

As Chugiak-Eagle River's population grows, there will be an increase in the number of people needing services and in the types of services needed. In turn, this will require increases in the number of health care personnel, services and, probably, facilities.

C. EDUCATION

Public education in the Chugiak-Eagle River area is the responsibility of the Municipality of Anchorage and is managed by the Anchorage School District. The School District is governed by a seven-member School Board which is elected at large.

Existing school facilities in the Chugiak-Eagle River area include six elementary schools, one junior high school and one senior high school (see Existing and Projected Schools map.) Four elementary schools are located in the urban/suburban sphere of the Eagle River community (Ravenwood, Homestead, Eagle River and Fire Lake.) The remaining two elementary schools are located further north in the rural areas of Birchwood and Chugiak (Birchwood ABC and Chugiak Elementary.)

Gruening Junior High School and Chugiak High School serve the entire Chugiak-Eagle River area. Gruening Junior High School is located on the south side of the Eagle River community, while Chugiak High School is located in South Birchwood, just west of the Glenn Highway.

Historically, increases in student enrollment have accompanied the area's overall population growth. Periods of significant increases in population, such as during the mid-1970's and early 1980's, were also periods of rapid student enrollment growth.

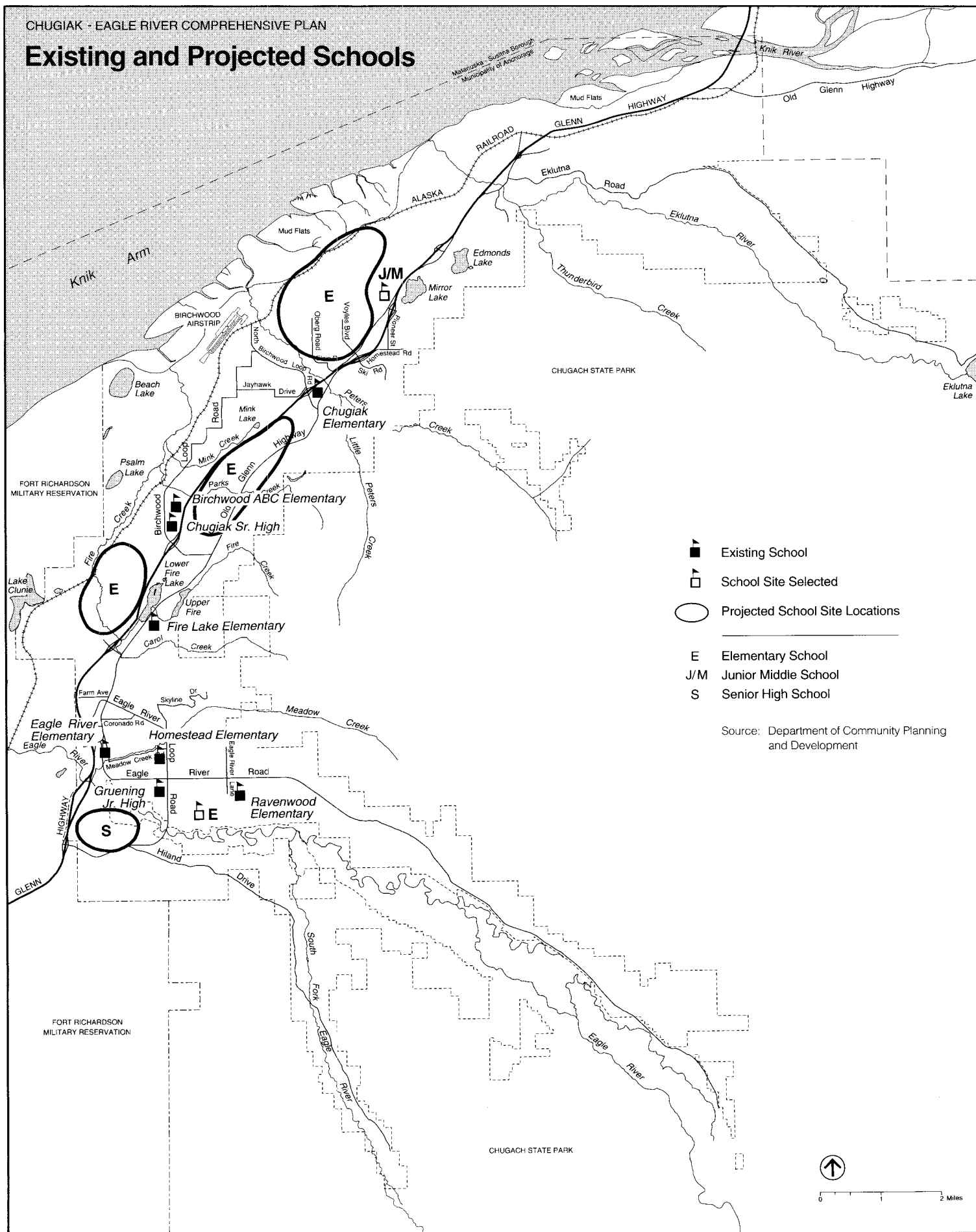
Data on current and projected school enrollments reveal some serious problems that must be addressed if the Municipality is to continue to provide the high standard of public education desired by area residents. Table 7 indicates the current level of utilization of the area's existing schools and the projected shortfall in classrooms through 1996.

The current School District capital improvement program calls for construction of a new elementary school in Eagle River Valley and a new middle/junior high school at Peters Creek. It also calls for further classroom additions at Chugiak and Birchwood ABC elementary schools, and at Chugiak High School.

Funding is currently available to construct the a elementary school in Eagle River Valley. However, the site selected in 1986 was not well located to serve the area of greatest need and a new study has been undertaken to select and acquire a new site in the lower Eagle River Valley.

Through a previously negotiated agreement between Eklutna, Inc. and the Municipality of Anchorage, 14.9 acres of land are reserved for a school site in Peters Creek, just west of Mirror

Existing and Projected Schools



Lake. Funding is available to acquire additional acreage to make the site large enough for a middle/junior high school. However, construction funds are not yet available.

TABLE 7
CURRENT AND PROJECTED SCHOOL ENROLLMENT CAPACITY
CHUGIAK-EAGLE RIVER AREA
1990/91 - 1996/97

School	% Capacity 1990	% Capacity 9/30/91	% Projected Capacity 1997	Available (Needed) Classrooms 1996
Birchwood ABC	85%	92%	93%	1
Chugiak Elementary	111%	128%	145%	(11)
Eagle River	131%	133%	137%	(9)
Fire Lake	109%	114%	123%	(5)
Homestead	89%	99%	106%	1
Ravenwood	111%	115%	125%	(6)
TOTAL ELEMENTARY	106%	114%	122%	(31)
Gruening Jr. High	102%	111%	136%	(13)
Chugiak Sr. High	89%	95%	122%	(16)

Source: Anchorage School District.

The Anchorage School District has established several capital improvement goals that are intended to guide decision-making for local school facilities. They include the following:

- To achieve and maintain the established standard school criteria for each elementary and secondary school (504 students for elementary schools, 1,058 students for junior high schools, and 1,840 students for senior high schools); and
- To implement the 20-year Site Selection Master Plan for the School District through the identification and/or purchase of all school sites projected to be needed within the next two decades.

During the next twenty years, the Anchorage School District must be able to respond effectively to demographic changes, as well as to provide an educational program that reflects current and evolving knowledge and practice in education.

Based on a projected population of 46,152 by the year 2010, it is estimated that the Chugiak-Eagle River area will see student enrollment (K-12) rise to approximately 9,700 students, a 74 percent increase over 1990 (see Table 8.) This forecast assumes that student enrollment will account for only a slightly lower percentage of the total population than it does today.

TABLE 8
PROJECTED STUDENT ENROLLMENT
CHUGIAK-EAGLE RIVER AREA
1990 - 2010

Year	Population	Enrollment K-12	% Enrollment Increase Since 1990
1990 (actual)	25,153	5,578	---
2000	33,815	7,100	27%
2010	46,152	9,700	74%

Source: Anchorage School District.

Forecasted enrollment will probably require the addition of three or four new elementary schools, one new junior high or two new, smaller middle schools, and another high school by the year 2010. (See Existing and Projected Schools map.) The timing of construction of these new facilities will be affected by the interaction of many factors, including the overall economy, oil and gas development and prices, the future of Anchorage military bases and development plans of major land owners.

The location and density of future development will be the most important factors in the siting of future schools. In turn, the location of water, sewer and other public services and facilities will have a bearing on future development patterns.

Major school facilities issues and concerns in the future will focus on optimum utilization of existing facilities, the timing and location of new schools, and funds for their acquisition, construction and operation. Funding for new schools is likely to be an issue of particular concern in the future. In the past, capital funds have come primarily from the State. With less State money expected for school construction, it is likely that urban school districts, such as the Municipality, will either have to demonstrate great need or rely more heavily on funding capital costs through the sale of general obligation bonds. Thus, the Chugiak-Eagle River area may be forced to

compete for priority funding with other areas of the Municipality where overcrowding of schools is just as acute.

D. PARKS, GREENWAYS, OPEN SPACE AND RECREATION FACILITIES

Parks, greenways and open space are important community resources. They are important for their role in developing and maintaining the character of a community, in preserving the connection with nature, and in providing stress-relieving and recreational opportunities. Parks, greenways and open space are also being increasingly viewed as economic assets because they attract tourists and recreational visitors, such as sports fishing enthusiasts.

A new form of tourism is ecotourism. Ecotourism is defined as tourism that is planned and carried out in an environmentally and socially protected way. There are two basic types of ecotourism: low-impact, such as guided hiking trips in the mountains or horseback riding tours; and high-impact, such as a hotel serving a new ski resort. Both types have been considered for the Chugiak-Eagle River area.

The Chugiak-Eagle River area is blessed with an abundance of scenic and natural resources in the form of lakes, rivers, ridges, wetlands and mountains. In the early days when there were few people, there was little need for designated parks. However, as land was transferred from public to private ownership and the population of the area grew, so did the need for public parks and recreational facilities.

In 1990, there were twenty-five municipal parks in Chugiak-Eagle River. These parks range in size from 1/3 acre up to 1,612 acres. They include two regional parks, five community parks, five neighborhood parks, eight mini-parks, five open space parks and eight school playground/playfield facilities. There are also six State facilities, some within and some outside Chugach State Park and some outside. (See Parks, Open Spaces, and Recreational Facilities map for a list of park facilities.)

In addition, as a result of the Agreement of Compromise and Settlement between the Municipality and Eklutna, Inc., lands along Fire Creek and Peters Creek which are within the 100-year flood boundary are reserved as open space easements.

Developed bike paths run from Fire Lake Ice Arena to Spenard Builders Supply, from Meadow Creek to Eagle River Elementary School, and along the Glenn Highway. Numerous other trails are used by equestrians, cross-country skiers, snowmachiners and dog mushers. However, many of these trails are on private property and have not been dedicated for public use. Such trails are available for use only at the discretion of private land owners.

In 1985, the Anchorage Trails Plan was approved by the Assembly. It contains recommendations for major greenway corridors in the section entitled "Eagle River, Chugiak and Eklutna Trails System." Also in 1985, Volume 2: "Eagle River-Chugiak-Eklutna" of the Anchorage Park, Greenbelt and Recreation Facility Plan was approved by the Assembly. These two plans establish the

basic planning framework for parks and greenways in the Chugiak-Eagle River area. The 1985 Anchorage Trails Plan, or any subsequent plan adopted by the Assembly, shall be incorporated as part of this Comprehensive Plan. (See Existing Dedicated Trails map and Assembly-Adopted Planned Trails map. Conceptual trails maps prepared by a local trails committee during the course of this Plan are included in Appendix C.)

There are several issues relating to parks, greenways, and open space of concern to Chugiak-Eagle River residents. Interest in retaining the northwest quarter of Section 25 for park purposes has been expressed over the years by the Birchwood Community Council, the Eagle River Community Council and the Eagle River/Chugiak Parks and Recreation Board of Supervisors. There are presently extensive ski and equestrian trails located in this area. The property is owned by the Municipality and is managed by the Heritage Land Bank.

Eklutna, Inc., has requested that consideration be given to consolidating municipal park land for Edmonds Park on the east side of the Glenn Highway. The portion of the park presently on the west side of the highway would be traded to Eklutna, Inc. The Eagle River-Chugiak Park and Recreation Board of Supervisors found that the land proposed for consolidation was too steep for a park. The Board of Supervisors also noted that the tract proposed by Eklutna, Inc. is separated from Edmonds Park by a subdivision, so that Eklutna's proposal would yield two separate tracts on the same side of the freeway, with one of those tracts being unusable.

Access to Chugach State Park is of concern. The need for better access will increase as the population grows. In addition, there is a need to create a adequate access to the Big and Little Peters Creek valleys and to create a Fire Lake hillside trail.

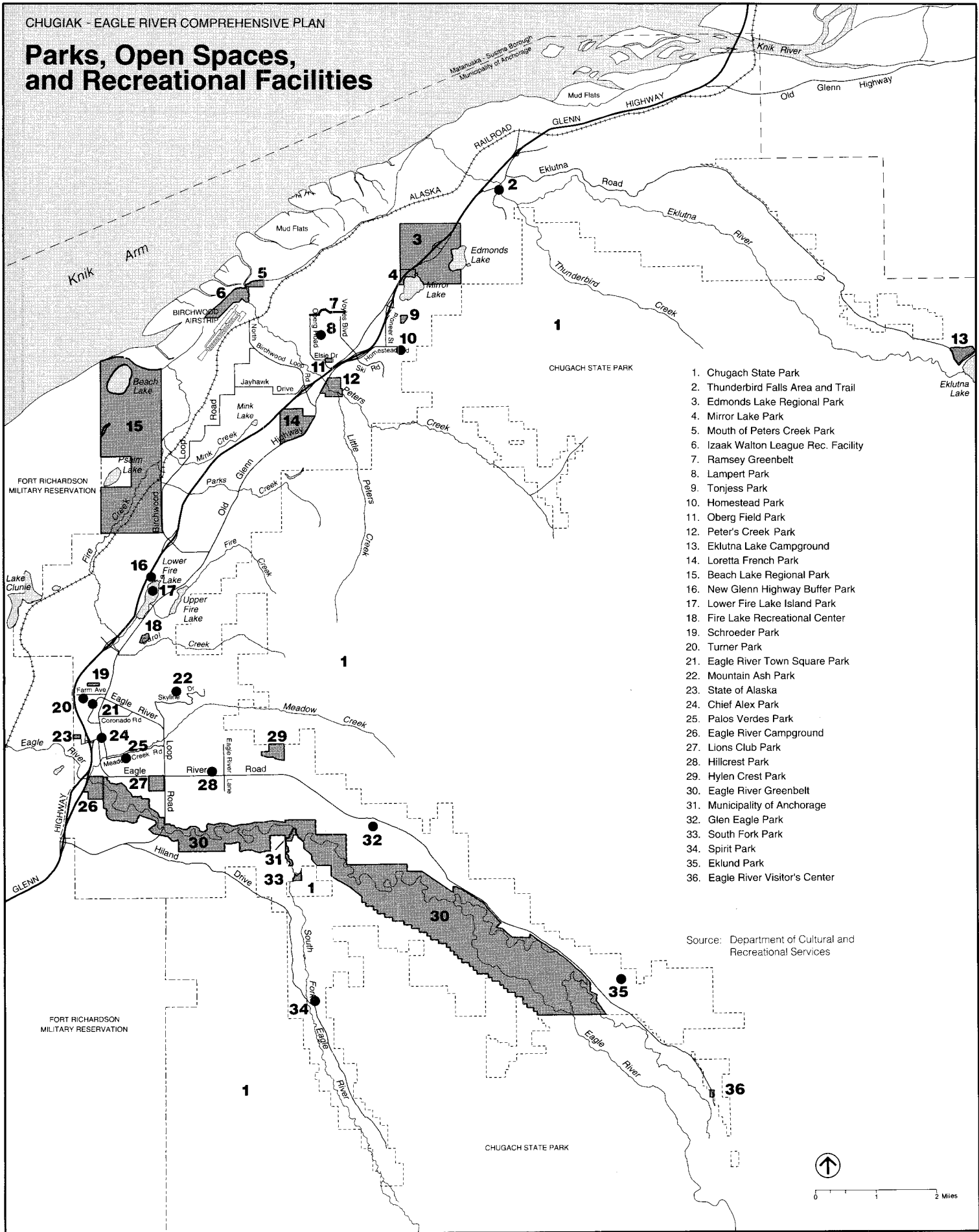
Development of sport fisheries use of Eagle River, while at the same time maintaining the resource, is another concern. There is currently a lack of road access to the South Fork of Eagle River. While trail connections from Eagle River Road to the trail along the north side of Eagle River have been proposed, none have yet been dedicated. This Plan recognizes that the opportunity to develop a variety of commercial recreation amenities in other locations, such as the South Fork confluence with Eagle River and the Eklutna River area, could also be of major economic benefit.

There is presently a need for acquisition and development of smaller neighborhood and mini-parks. Also, there is a need to ensure that parks are adequately operated and maintained.

Snowmachiners have indicated a desire for more trails on the flatlands of the Chugiak-Eagle River area and for trails connecting to those in Chugach State Park. Municipal ordinances presently prohibit the use of snowmachines "upon a sidewalk, alley or street, roadway, shoulder or median." In addition, snowmachines may only be ridden on municipal land in areas so designated for their use, or on private land by the written permission of a private property owner. The snowmachiners have requested that the portion of Edmonds Park west of the highway be designated for snowmachine use.

Cross-country skiers desire to use the northern half of Beach Lake Park which currently contains dog mushing trails. There is no agreement as to whether both uses would be feasible from

Parks, Open Spaces, and Recreational Facilities



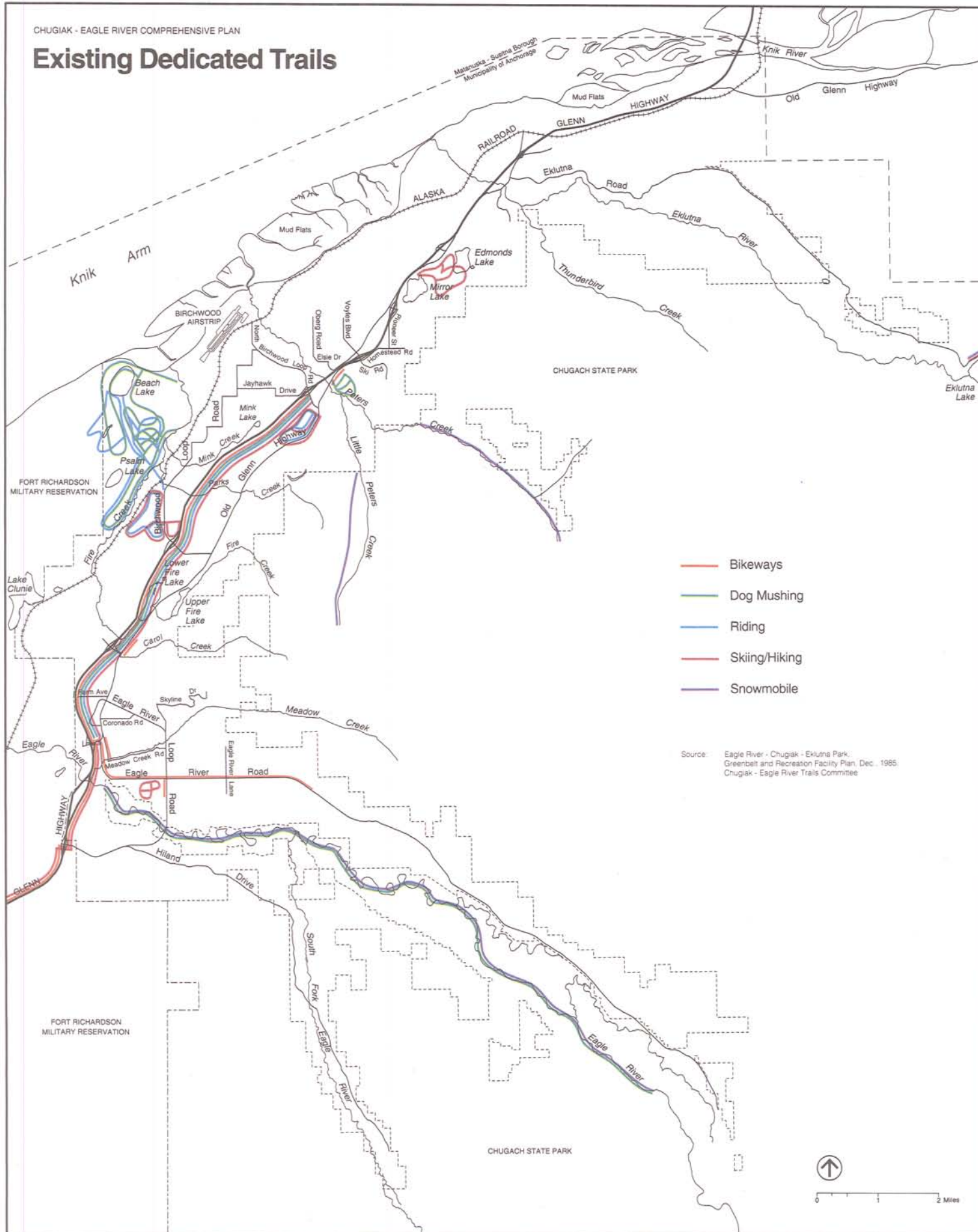
1. Chugach State Park
2. Thunderbird Falls Area and Trail
3. Edmonds Lake Regional Park
4. Mirror Lake Park
5. Mouth of Peters Creek Park
6. Izaak Walton League Rec. Facility
7. Ramsey Greenbelt
8. Lampert Park
9. Tonjess Park
10. Homestead Park
11. Oberg Field Park
12. Peter's Creek Park
13. Eklutna Lake Campground
14. Loretta French Park
15. Beach Lake Regional Park
16. New Glenn Highway Buffer Park
17. Lower Fire Lake Island Park
18. Fire Lake Recreational Center
19. Schroeder Park
20. Turner Park
21. Eagle River Town Square Park
22. Mountain Ash Park
23. State of Alaska
24. Chief Alex Park
25. Palos Verdes Park
26. Eagle River Campground
27. Lions Club Park
28. Hillcrest Park
29. Hylen Crest Park
30. Eagle River Greenbelt
31. Municipality of Anchorage
32. Glen Eagle Park
33. South Fork Park
34. Spirit Park
35. Eklund Park
36. Eagle River Visitor's Center

Source: Department of Cultural and Recreational Services

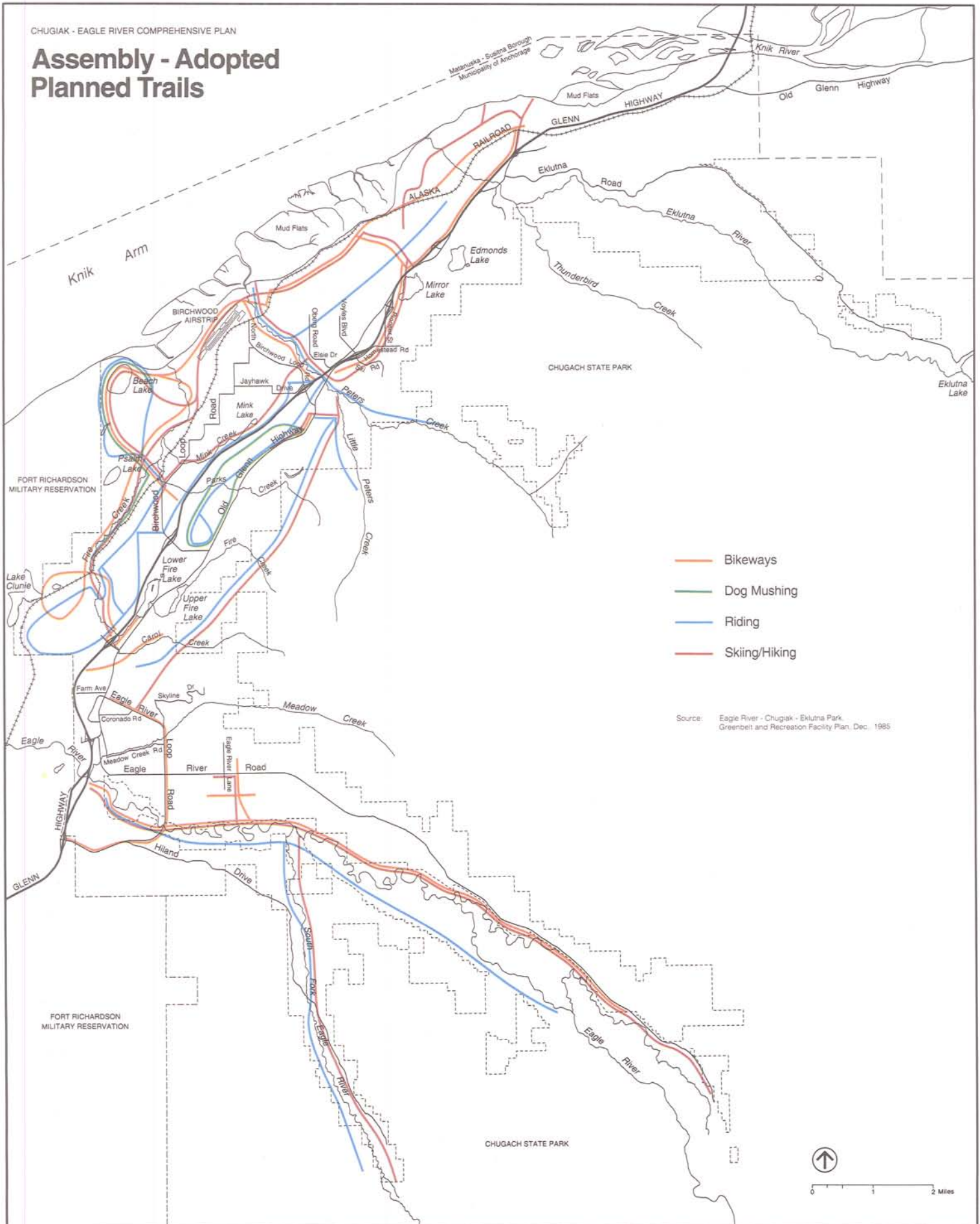


0 1 2 Miles

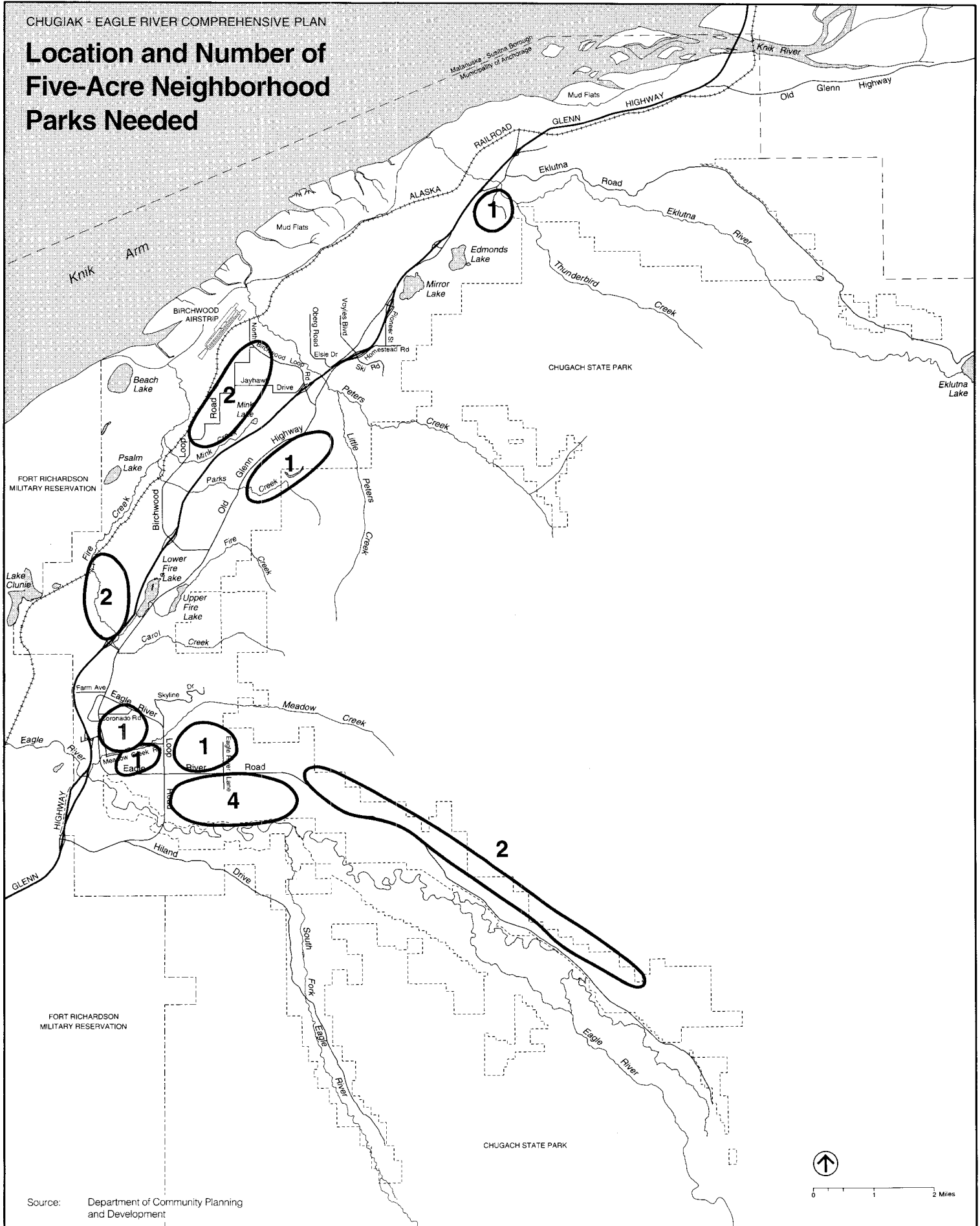
Existing Dedicated Trails



Assembly - Adopted Planned Trails



Location and Number of Five-Acre Neighborhood Parks Needed



a safety standpoint. The Beach Lake Park Master Plan needs to be updated to determine whether or not such ski trails might be accommodated.

As the Chugiak-Eagle River area grows, it is important to reserve the parks, greenways and open space necessary to preserve the character of the area and to provide a variety of open space and recreational experiences. Assuming a population of over 46,000 people by the year 2010, Eklutna and South Fork will each need a community park, while Eklutna, Birchwood, Chugiak, Eagle River (Sunny Slopes) and Eagle River Valley will need neighborhood parks. (See Location and Number of Five-Acre Neighborhood Parks Needed map.) Mini-parks are needed throughout the area.

According to national standards, an 18-hole daily fee golf course is recommended per 50,000 people. Planning for a public golf course should begin when that population threshold is reached.

There are several other use needs. For example, there are not enough large field areas for soccer, while additional facilities are needed for the recreation center.

Many pathways in the Chugiak-Eagle River area are being used for horses, bicycles, snowmachines and cross-country skiers. However, there are few protected greenways. The need for trails is based on the needs of different trail users, rather than being proportional to the population.

Finally, there is a need to update both the presently adopted trails plan and the parks and recreation plan. Detailed studies are needed to determine greenway locations and implementation methods.

E. UTILITIES

1. Water

Water facilities in the Chugiak-Eagle River area include private individual wells, small community wells, and services provided by certified public utilities. (See Areas Served by Water and Wastewater map.) Roughly half of all residences and a small number of businesses rely on individual on-site wells. Most, but not all, of these are located in less densely developed areas. In addition, a few community wells are scattered throughout the area and serve small groups of residences and businesses.

Six certified public water utilities currently serve about half of Chugiak-Eagle River's population. Five are privately owned, while the sixth and largest is owned by the Municipality of Anchorage.

- a. Anchorage Water Utility (AWU). In 1982, municipal water service was initiated in Eagle River through the acquisition of three small, privately owned systems. The systems were subsequently interconnected with an extensive transmission system tied into the Eklutna Water Project. More recently, in 1991, the Eagle River Utility system was donated

to AWU. AWU currently serves approximately 8,000 residents, most of whom are located within the urban/suburban area of Eagle River.

- b. Norfolk Utilities. Norfolk Utilities serves about 2,300 people in the lower Eagle River Valley area, east of Eagle River Loop Road, and on both the north and south sides of Eagle River Road. The water supply comes from two wells and a reservoir.
- c. Eklutna Utilities. Eklutna Utilities, Inc. (EUI) serves approximately 1,900 people. Its service areas are split between the north and south ends of the Chugiak-Eagle River area. Most customers are located at the south end, in Eagle River Valley. In 1991, Eklutna Utilities, Inc. received approval from the Alaska Public Utilities Commission to expand its service area to a portion of the south side of Eagle River in the vicinity of Hiland Road.
- d. Chugiak Utilities, Dawn Development Corporation, and McKinley Utilities. These three small utilities provide water to portions of Peters Creek. Together, they serve approximately 1,100 people.

The level of service provided by these six utilities varies substantially. Some systems have been built to national water works standards, while others have not. Some have adequate water pressure throughout their systems. Others do not, especially during the summer months when water usage is higher. Few areas served by the certified utilities have adequate fire flow, due either to a lack of hydrants or adequate water volume and pressure. Generally, the more recently developed areas have better facilities than the older areas.

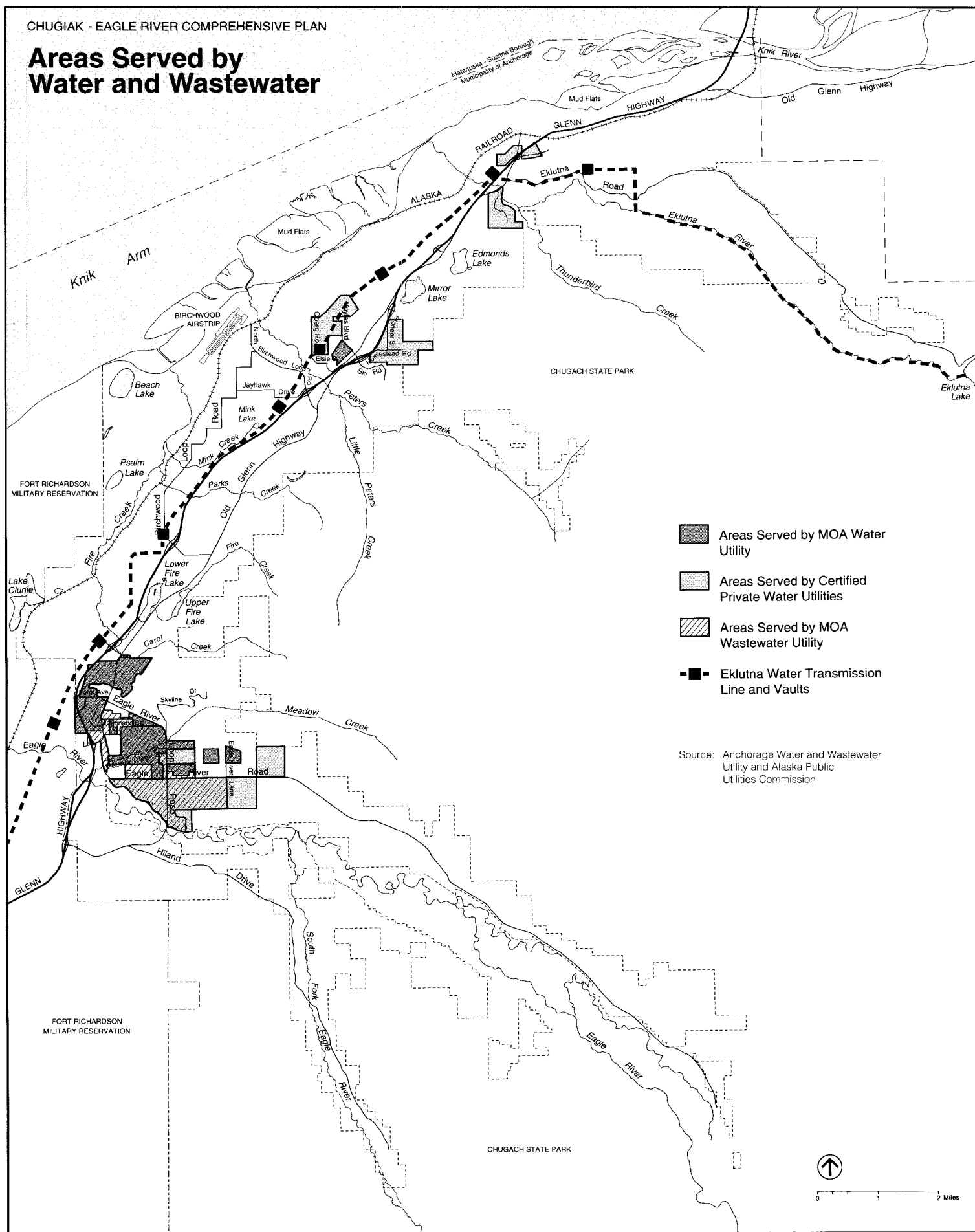
The most significant change in water service in Chugiak-Eagle River since adoption of the 1979 Plan was the construction of the Eklutna Water Project. Completed in 1988, the Eklutna Water Project is the major water supply source for both the Chugiak-Eagle River and Anchorage areas. The Project takes water from Eklutna Lake, carries it downstream to the Eklutna Water Treatment Plant, and then transports it through a 48-inch diameter transmission line to Anchorage.

The Eklutna Water Project line runs nearly the length of Chugiak-Eagle River. Vaults were installed at periodic locations so that local lines could tap into the water supply. As a result of the Eklutna Water Project, most of the Chugiak-Eagle River area will have an adequate source of water available for residential, commercial, industrial and institutional use.

There are a number of significant water issues that will require attention as the Chugiak-Eagle River area continues to grow. For rural areas relying on individual on-site wells, the major issue will continue to be the provision of safe and adequate water supplies. This will require proper consideration of land use, density, and water and wastewater facilities policies.

Another water-related issue affecting future community development is the expansion of water service areas. With the Eklutna Water Project, the supply of water is not expected to be a constraint on projected growth and development. However, additional distribution and storage facility improvements will be necessary.

Areas Served by Water and Wastewater



Ideally, master planning for water facilities in Chugiak-Eagle River should be done on an areawide basis. This would promote optimum utilization of facilities, maximize the level and efficiency of service, and reduce costs by avoiding redundancy. The major drawback to such master planning and development, however, could be a continued or expanded patchwork of separate certified utility areas.

The Anchorage Water Utility (AWU) was recently certified by the Alaska Public Utilities Commission to expand its service area to cover the major growth areas in Chugiak-Eagle River. As a result, AWU should provide comprehensive water service, including fire flow, for future community development in these areas.

2. Wastewater

Anchorage Water and Wastewater Utility (AWWU), a municipally-owned, Alaska Public Utility Commission-regulated utility, operates wastewater collection and treatment facilities as an areawide service.

The first trunk and lateral improvement districts in Chugiak-Eagle River were created in 1970 and a treatment system was completed in 1971. At that time, the system served a population of 1,250. The system was expanded during the 1970's to encompass an area stretching from the Fort Richardson boundary on the west, north to the North Eagle River Access Road, east to Crestview Lane and south to Eagle River itself. Not all development within this area was connected to the system but, over time, many older subdivisions were connected and most new development in the area is now part of the system.

During 1979-81, a new secondary treatment plant was constructed and portions of the existing collection system were expanded with new trunks extending north and south. During 1986-89, trunk lines were extended to the north side of Fire Lake and east to Eagle River Lane, bringing the treatment plant to the limits of its design capacity of 1 million gallons per day (MGD). In 1990, the average flow was 1.01 MGD.

The area currently served by AWWU is centered around the downtown Eagle River business district and surrounding residential areas. Most of Chugiak-Eagle River, including the Eklutna, Birchwood, Peters Creek and South Fork areas, as well as almost all of the Chugiak and the eastern Eagle River Valley community council areas, are served by individual on-site wastewater disposal systems.

In 1991, AWWU had approximately 4,400 sewer customers and served an estimated 9,400 people, about 35 percent of the Chugiak-Eagle River area's total population. The contribution of commercial and industrial uses to the overall amount of discharge is small; industrial discharge to the system in 1986 amounted to less than 1 percent. The commercial contribution is almost entirely sanitary sewage, contributing less than 10 percent of the total.

The treatment plant has recently been expanded to a 2.5 MGD capacity, which will be able to serve a population of approximately 23,150 (or 13,760 additional persons, assuming 108

gallons per day/person.) The expansion was designed so that plant capacity could be doubled to 5 MGD to support future community growth needs, if and when additional capacity is needed and if funding is available. The recently completed \$28 million expansion project was funded by a combination of federal grants (27 percent) and loans (36 percent), State grants (20 percent), and local (AWWU) matching funds (18 percent.)

The treatment plant provides tertiary treatment, a much higher standard than the Point Woronzof treatment plant in Anchorage. The treated effluent is released into Eagle River, a waterway which is used for water-contact recreation and sport fishing.

Almost two-thirds of the Chugiak-Eagle River area's population (approximately 15,800 people) is served by individual on-site wastewater disposal systems, primarily septic tank-leach field systems. Soil suitability varies, but much of the area has suitable soils, provided that lots are sufficiently large and the disposal systems are properly installed and maintained.

The septage collected from individual septic systems, estimated at approximately 1,200 gallons per residential customer (household) every three years, is hauled to the Point Woronzof facility or disposal points connected to the Anchorage Bowl sewer system.

It is anticipated that slightly more than half of the new development in the Chugiak-Eagle River area will require sewer service. Previous expansions of both the collection and treatment systems have been heavily subsidized by the federal and/or State governments. These two sources of funding are being drastically reduced, placing more of the cost burden on local residents. Consequently, it is important that existing systems are utilized to their optimum level, and new expansions are accomplished in the most cost-effective manner.

3. Solid Waste

The Chugiak-Eagle River area was served by the Hiland landfill, on the east side of the Glenn Highway, until 1977 and by the Peters Creek Landfill at Mile 17 of the Old Glenn Highway until November, 1987.

The area is now served by the 263-acre Anchorage Regional Landfill, located on the west side of the New Glenn Highway at Hiland Road. This landfill is expected to be able to serve the needs of the entire Municipality for another sixty years, or until the year 2050. The landfill accepts all types of materials for disposal. However, organic overburden, such as peat, trees and wood chips, is not defined as solid waste by State law and, as such, is not accepted for disposal. An area for disposal of overburden therefore needs to be identified.

Landfill leachate from the Anchorage Regional Landfill is pumped and transferred by truck to the Point Woronzof Wastewater Treatment Facility. There are no plans to connect the landfill by sewer to either the Eagle River or Point Woronzof treatment facilities.

Hazardous waste materials are brought to the Regional Landfill where they are stored and then sealed in 50-gallon drums for shipment Outside to hazardous waste receiving sites. In

1990, 592,700 pounds of hazardous wastes were received and disposed of in this manner. Refuse collection in the Chugiak-Eagle River area is undertaken by Eagle River Refuse, which is certificated by the Alaska Public Utilities Commission.

Individual recycling efforts are undertaken on a voluntary basis within the Municipality. Separated glass, aluminum and newspapers are accepted for collection at all solid waste facilities. Private recycling firms pick up the separated materials, and package and ship them to various recycling firms Outside. In the long term, there should be recycling deposit boxes or dumpsters in most neighborhoods to make recycling easier.

Several options for reuse of an old landfill on Hiland Road have been suggested, including residential and recreational uses. A study of the physical characteristics of the landfill should be undertaken to determine the most suitable long term use for this property.

F. TRANSPORTATION

The road system in the Chugiak-Eagle River area originated with the Old Glenn Highway traversing the area from Anchorage to Palmer. The system has expanded with development of the area and is now made up of a combination of State, local and private routes. (See Official Streets and Highways Plan map.) However, levels of road maintenance, sources of maintenance funding and roadway responsibilities vary, depending upon the responsible agency. Many of the current roads were built prior to modern standards, resulting in the following typical maintenance and design problems:

- Inadequate drainage;
- Lack of street curbs and gutters;
- Lack of sidewalks, paths and bicycle trails;
- Sub-standard roadway surface conditions (resulting in excessive maintenance costs and contributing to air quality problems); and
- Sub-standard roadway lighting and signage.

The Alaska Department of Transportation and Public Facilities is primarily responsible for the design, construction and maintenance of major highways within the area, while local roads are handled on a service area or private basis. Approximately 168 miles of local roads are under the Eagle River Road Service Area (ERRSA) control. The ERRSA Board has the power to expend monies for both construction and maintenance.

Additional transportation service is provided by the Anchorage Transit System. Through a combination of three local routes and an express route serving four park and ride lots, the system accommodated 169,300 riders in 1990. (See Transit Routes map.)

The Alaska Railroad Corporation provides main line freight and passenger service through Chugiak-Eagle River but there are currently no formal train stops within the area. Future Railroad plans include the possible movement of its maintenance and classification yard from

Anchorage to the Birchwood area. However, no firm schedule for the move has yet been established, nor has a decision been made as to what portions of the yard, if any, would be included. Funding difficulties and the need to remove extensive amounts of gravel make it difficult to predict the time of any move.

The area is also served by the Birchwood airstrip, which is owned and operated by the State as a general aviation facility. The airstrip is located near Knik Arm in Birchwood and is primarily used by local residents.

Funding for local road maintenance is the responsibility of the ERRSA through a mill levy. Funding for the local share of matching grants from the Municipality or the State for road construction is also provided through a mill levy. In addition, federal funds are available through the Intermodal Surface Transportation Efficiency Act (ISTEA.)

Costs for road maintenance and improvement projects are increasing, while funds available from the State and the Municipality are declining. The proposed transfer of third class State roads to the Municipality would further impact the local ability to pay for road maintenance and improvements.

Many existing roads have serious maintenance needs that must be addressed in a comprehensive manner. For example, substandard roads need upgrading to correct drainage and safety problems and to provide standard amenities. In addition, dirt roads require additional surfacing to help minimize dust pollution problems.

With additional population, increased needs for transit and other transportation services and facilities will be experienced. This Plan provide the necessary guidelines necessary to develop the Eagle River Long Range Transportation Plan.

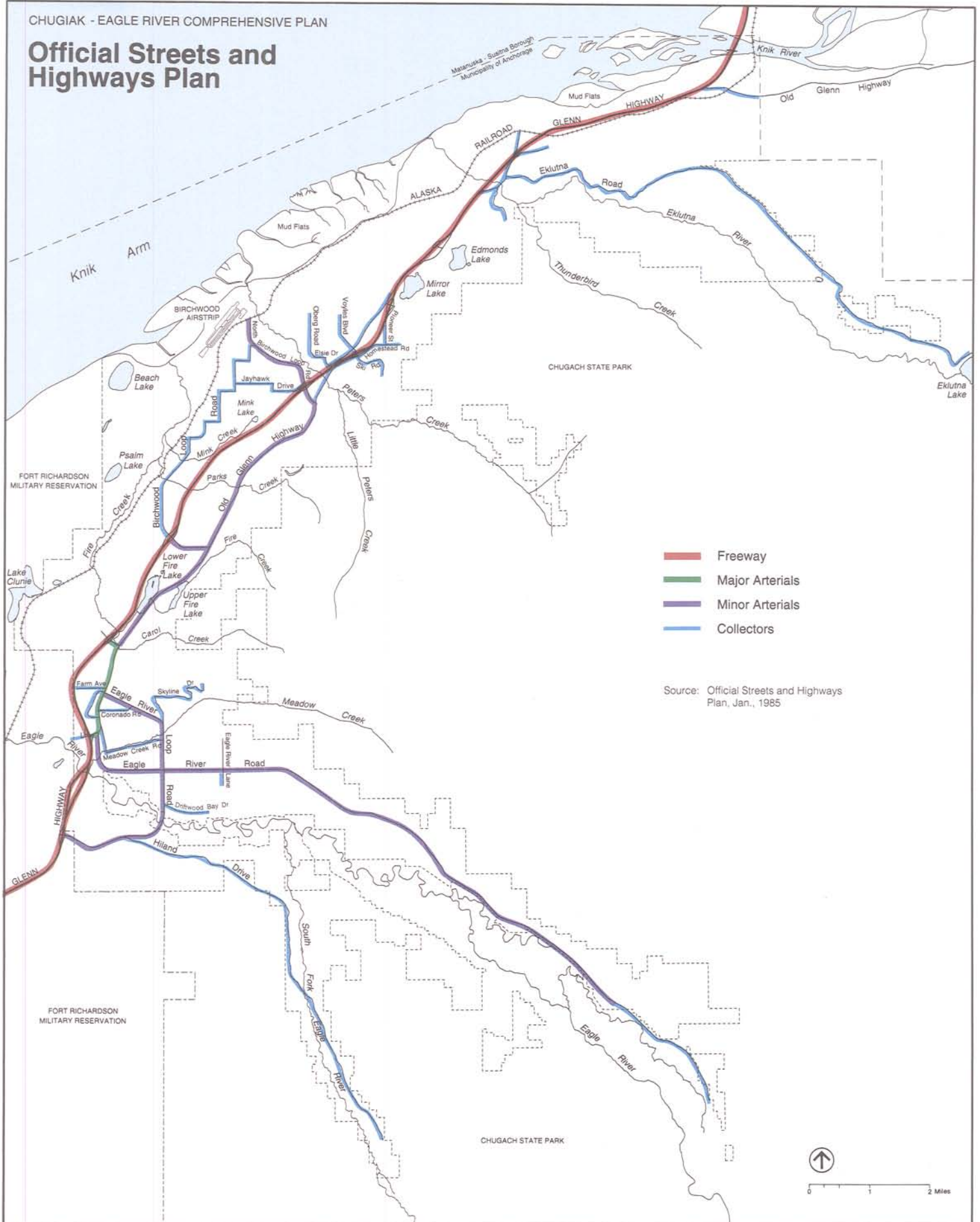
Developing the Eagle River Long Range Transportation Plan will involve several steps. First, projections of person trips through the year 2010 will be undertaken. Then, the various levels of transit service that would be viable will be ascertained. Finally, these elements will be blended together with a financial and implementation plan. The resulting Eagle River Long Range Transportation Plan will determine the need for transit and other transportation services and facilities and will provide guidelines for an adequate transportation system for the area.

V. HISTORIC AND ARCHAEOLOGICAL RESOURCES

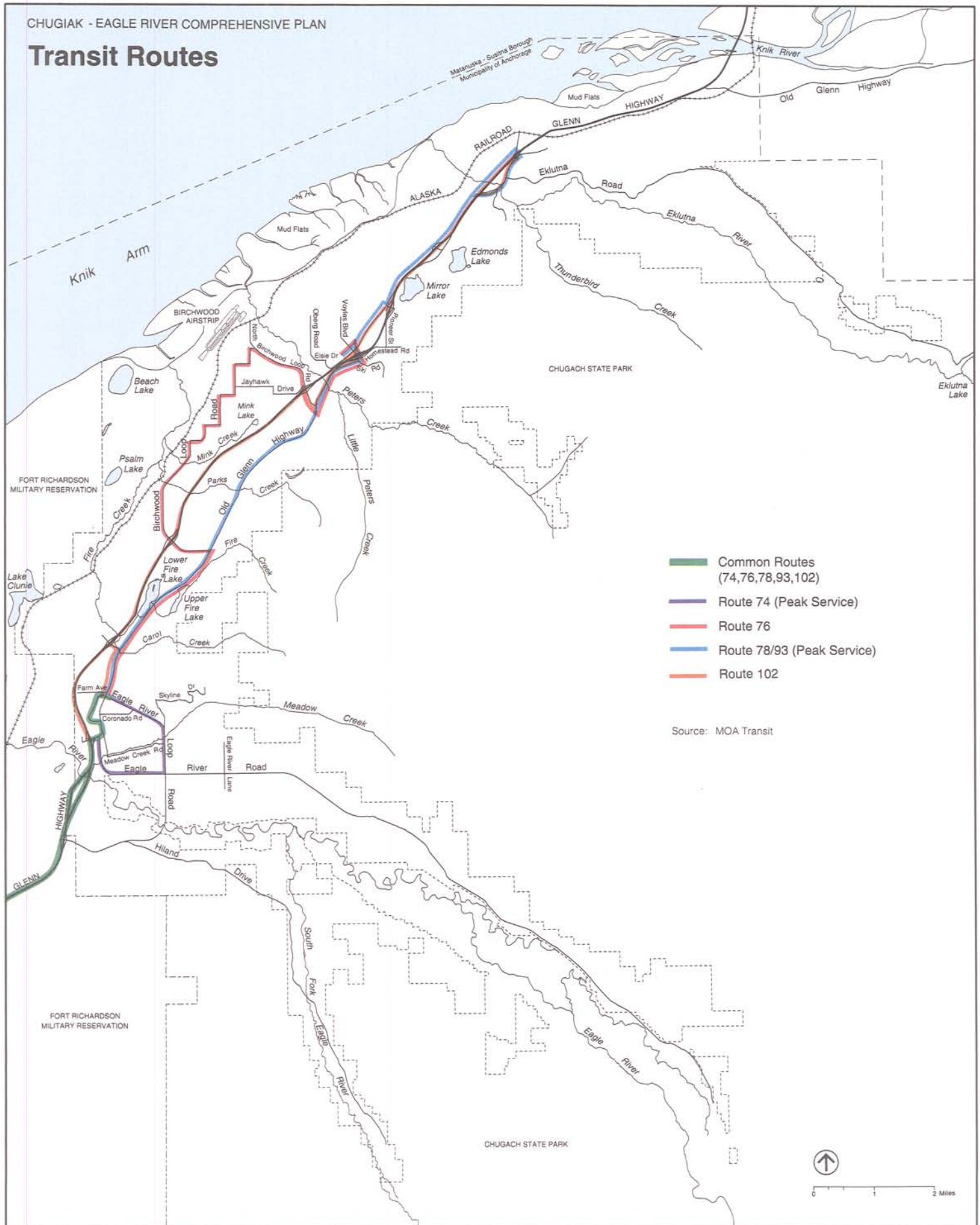
The history of the Chugiak-Eagle River area can be divided into two major periods. The most recent period dates generally from the latter part of the last century up to the present. It is marked by the exploration and settlement of the area by non-Natives. The earlier period can best be called the pre-mid 19th century period. It goes back several hundred years and is marked by Athabascan use and occupation of the area.

The Athabascan Indians were seasonally nomadic, with lifestyles centered around fishing, hunting and gathering. Eklutna is the oldest continually inhabited Athabascan site in the Chugiak-

Official Streets and Highways Plan



Transit Routes



Eagle River area. Initially, it was a winter settlement, but it later became a permanent year-round settlement for the Eklutnas, a Tanaina Athabascan group living in the Cook Inlet area. Eklutna Village Historical Park, located at the original village site, represents the early period of historical transition in the area from an Athabascan culture to a more dominant twentieth century white culture. Best known for its Russian Orthodox church and colorful spirit houses, the Eklutna Village Historical Park was recently created by Eklutna, Inc. to help preserve the heritage of the Eklutna people, and to portray the rapidly disappearing lifestyle of the Tanaina Natives. Included at the site are historical displays illustrating the rich blend of the Tanaina Indian and Russian missionary past.

Chugiak-Eagle River's transition to twentieth century culture began with early mining ventures and with construction of the Alaska Railroad through the area. It continued with the opening of the area to homesteading, construction of the Glenn Highway and the establishment of Fort Richardson. More recent decades have seen further population growth and suburbanization.

No formal steps have been taken to preserve any of the old structures which played a key role in Chugiak-Eagle River's early development. Many people may not think of these structures as being significant. However, while they may not have the age or grandeur of other more well-known historical monuments, these structures are nevertheless important elements in the area's social fabric.

Most of the early structures have gone, while those which remain are becoming old and dilapidated. Few American communities can claim to have preserved any of their earliest structures. Chugiak-Eagle River still has a chance.

An inventory of Anchorage's historic resources, including those in the Chugiak-Eagle River area, was undertaken in the mid-1980's. The following local structures were included in that inventory:

- Old St. Nicholas church and graveyard at Eklutna;
- Eklutna Alex and Mike Alex cabins at Eklutna;
- Old Eklutna power plant;
- Old Eklutna River bridge;
- Nyberg-Pippel home; and
- Brink and Braendel homesteads.

Of these structures, the old St. Nicholas church, the Mike Alex cabin and the old Eklutna power plant have been placed on the National Register of Historic Places. The National Register is a federal program which gives recognition to structures or places of historical significance. Although being on the National Register offers little more protection than non-registered sites, it does make restoration efforts eligible for tax credits.

The mid-1980's inventory of Anchorage historic resources was not comprehensive in the Chugiak-Eagle River area. For example, there are other early homesteads which may be appropriate for historic recognition and preservation. An inventory which identifies and accurately describes local historic resources and their significance would be useful.

Recent interest has also been expressed in establishing a local museum where artifacts and memorabilia representative of the community's early settlement history could be displayed. An adequate facility and establishment of an organization to manage the effort would be needed.

Understanding the history of the local area provides a broader perspective on individuals' place in the community. It also helps to establish a strong community identity. Thus, recognition and preservation of important historical resources in Chugiak-Eagle River will help create long lasting enrichment for the area as a whole.