



# *Girdwood*

AREA PLAN



MUNICIPALITY OF ANCHORAGE

# Girdwood

## AREA PLAN

ADOPTED FEBRUARY 28, 1995  
(ASSEMBLY ORDINANCE 94-238 S)



PREPARED BY THE  
PHYSICAL PLANNING DIVISION  
DEPARTMENT OF COMMUNITY PLANNING & DEVELOPMENT



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*Tom Nelson, Project Manager*

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# Table of Contents

	Page
<i>Chapter 1. Introduction</i> .....	1
Plan Development Process .....	2
<i>Chapter 2. Location and History</i> .....	5
Location .....	5
History .....	6
<i>Chapter 3. Natural Environment</i> .....	11
Landform and Geology .....	11
Soils .....	12
Climate .....	13
Hydrology .....	15
Wetlands .....	16
Vegetation .....	17
Fish and Wildlife .....	18
Minerals .....	19
Natural Hazards .....	20
<i>Chapter 4. Population, Employment, and Housing</i> .....	23
Population .....	23
Employment .....	25
Housing .....	28
Projections for Employment, Population, and Housing .....	29
<i>Chapter 5. Community Attitudes and Aspirations</i> .....	33
<i>Chapter 6. Current Land Use Pattern, Ownership, and Suitability</i> .....	37
Existing Land Use Pattern .....	37
Land Ownership .....	40
Land Suitability .....	41
<i>Chapter 7. Land Use Plan</i> .....	43
General Land Use Themes .....	43
Land Use Plan .....	45
<i>Chapter 8. Public Facility Plan</i> .....	63
Administrative Building .....	63
Cultural Facilities .....	64
Public Safety Functions .....	65
Health Services .....	67
Education .....	68
Parks and Recreation .....	69
Utilities .....	74
<i>Chapter 9. Transportation Plan</i> .....	81
Roadways .....	82
Girdwood Airport .....	89
Railroad .....	90
<i>Chapter 10. Implementation</i> .....	93
Zoning .....	93
Subdivision Regulations .....	95
Public Land Disposals .....	95
Capital Facilities Programming .....	97
Functional Plans .....	97
Other .....	99
Plan Review Process .....	100
<i>Appendix</i> .....	101
Girdwood Area Survey .....	101
Girdwood Vision Consensus Building Forum Summary .....	110
Selected List of References .....	120

*Figures*

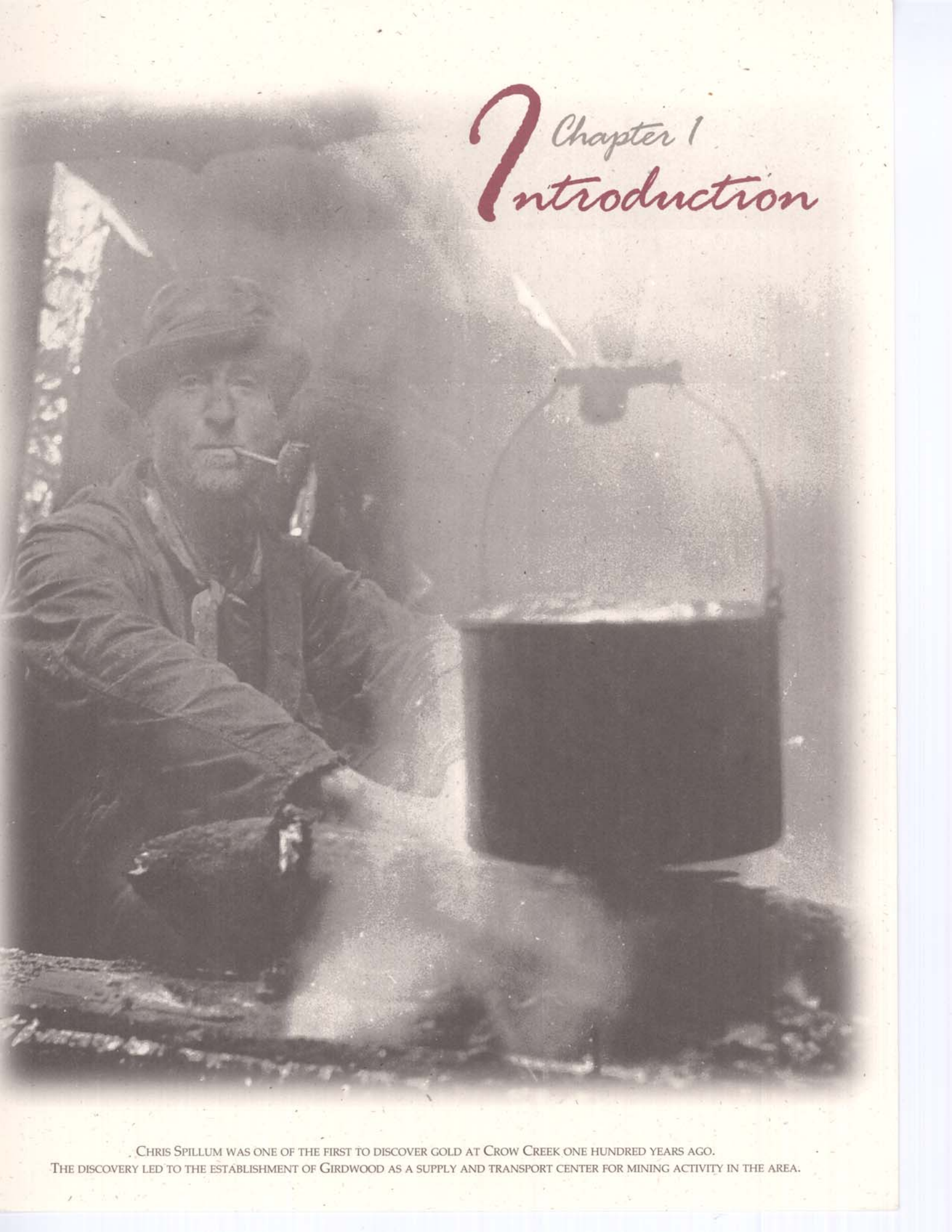
	Page
Figure 1 Plan Development Process .....	3
Figure 2 Population Distribution by Age and Sex Girdwood .....	24
Figure 3 Population Distribution by Age and Sex Anchorage .....	24
Figure 4 Seasonal Wage Employment .....	26
Figure 5 Quarterly Employment by Major Industry .....	26
Figure 6 Seward Highway Traffic Annual Average Daily Traffic at Potter .....	82
Figure 7 Seward Highway Traffic at Girdwood Weekend Vehicles Per Day, 1992 .....	82
Figure 8 Girdwood Valley Roads, Average Weekend Day Traffic Levels, 1992 .....	83

*Maps*

	After Page
Map 1 Vicinity .....	6
Map 2 Wetland Areas .....	16
Map 3 100 Year Floodplain .....	20
Map 4 Snow Avalanche Hazard Areas .....	20
Map 5 1990 Census Block Groups .....	28
Map 6 Girdwood Area Air Photo .....	38
Map 7 Existing Land Use .....	38
Map 8 Current Land Status .....	40
Map 9 Community Development Suitability .....	40
Map 10 Land Use Plan .....	46
Map 11 Land Use Plan (Lower Valley Enlargement) .....	46
Map 12 Existing Public Sewer and Water Systems .....	76
Map 13 Transportation Plan, Proposed Roadways .....	86

# Tables

	Page
Table 1	Historic Population ..... 24
Table 2	Average Annual Full-time Employment..... 25
Table 3	Household Income Distribution ..... 28
Table 4	Housing Occupancy Characteristics ..... 29
Table 5	Vacant Housing Characteristics ..... 29
Table 6	Projections for Employment, Population, and Housing..... 31
Table 7	Housing Projections by Type ..... 32
Table 8	Existing Land Use and Vacant Land ..... 38
Table 9	Housing Densities and Residential Development Guidelines ..... 49
Table 10	School Enrollment 1979/80 to 1993/94 ..... 68
Table 11	Analysis of Elementary Space Requirements (K-8)..... 69
Table 12	Implementation Schedule..... 98
Table 13	Main Affiliation in the Girdwood Area..... 102
Table 14	Place of Employment..... 102
Table 15	Main Occupation of Respondents ..... 103
Table 16	Most Liked Feature of Girdwood Area ..... 104
Table 17	Most Important Problem of the Girdwood Area..... 105
Table 18	Opinions About future Resort Expansion Proposals ..... 106
Table 19	Reasons for Favorable Resort Development Opinions..... 106
Table 20	Reasons for Unfavorable Resord Development Opinions ..... 107
Table 21	Reasons for Mixed Resort Development Opinions..... 108
Table 22	Resort Information Seminar Attendance ..... 108
Table 23	Gender of Respondents..... 109
Table 24	Age of Respondents..... 109



*Chapter 1*  
*Introduction*

CHRIS SPILLUM WAS ONE OF THE FIRST TO DISCOVER GOLD AT CROW CREEK ONE HUNDRED YEARS AGO.  
THE DISCOVERY LED TO THE ESTABLISHMENT OF GIRDWOOD AS A SUPPLY AND TRANSPORT CENTER FOR MINING ACTIVITY IN THE AREA.





*Skiers on the Glacier/Winner Creek massif looking southwest toward Girdwood and Turnagain Arm.*

**T**he **Girdwood Area Plan** has been prepared to provide community residents and public officials with a policy document to guide decisions regarding the future use of lands in the valley of Glacier Creek and its tributaries.\* As a policy document, it is intended to outline general strategies for land development and the installation of major public facilities and services, such as water, sewer, transportation, parks, and trails. It also provides basic strategies for disposal of municipal land, as well as the conservation and protection of certain natural resources and environmentally sensitive areas.

The **Girdwood Area Plan** is a revision of the **Turnagain Arm Comprehensive Plan**. The **Turnagain Arm Comprehensive Plan** was adopted in 1987 as a policy guide for development in all the settlement areas along Turnagain Arm from Rainbow to Portage. This Plan supersedes the 1987 plan only in regard to the Girdwood valley.

The primary impetus for the development of this Plan is the transfer of major land holdings in the upper valleys of Glacier Creek and its two tributaries, Crow and Winner Creeks, from the U.S. Forest Service to the State of Alaska and the Municipality of Anchorage. Accompanying this land transfer is an increased interest in additional major destination resort development.

Previous investigations by the U.S. Forest Service and the Municipality indicated that the Glacier-Winner Creek area has attractive characteristics for new resort/recreational development. This was confirmed in a more recent study undertaken by Snoengineering, Inc., for the Alaska Department of Natural Resources.

The **Girdwood Area Plan** is an integrated land use plan that encompasses both the upper and lower portions of the valley. The central issues that the Plan addresses are community growth, resort development, and retention of open spaces. Presently, Girdwood is a small mountain resort community with an economy heavily based on tourism and recreation. The community will continue to grow over the next several years as a result of resort/recreational expansion.

Girdwood will also continue to grow as a result of its closer proximity to Anchorage in commuting time as transportation improvements are made along Turnagain Arm, and employment centers expand in South Anchorage.

\*Also referred to as Girdwood valley or Girdwood area.

Key elements in ensuring that community change is beneficial and new resort development is compatible will be transportation and circulation patterns, and the retention of important natural open spaces. This Plan does not attempt to debate whether Girdwood should develop further, but instead focuses on where to build, how much, and how to build well.

The Plan focuses on the physical development patterns of the Girdwood valley. It is intended to deal with conditions and events expected to occur during the next 20 years, and attendant resulting needs or demands for public facilities and services. This length of time is the usual limit of demographic and economic forecasting, and also corresponds to the time period used in the design of most major public facilities.

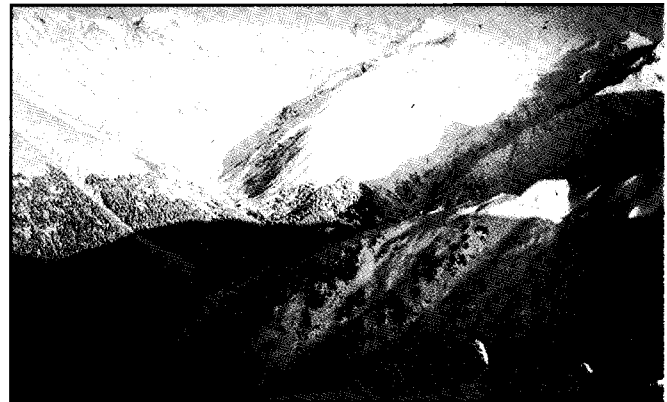
The Plan is based upon a given set of community aspirations, economic and demographic trends and projections, and environmental features. In the future, some of these factors may change. For that reason, planning should be viewed as a continuing process.

The direction outlined in this Plan for community and resort development is based upon information available at this particular time. In the future, new developments may occur and the needs of the community may change. Consequently, the Plan should be reviewed periodically and, if appropriate, revised in the future in response to new conditions.

## *Plan Development Process*

The State of Alaska and the Municipality of Anchorage are in the process of acquiring additional lands in the upper valley of Glacier Creek above Girdwood. The State, as part of its National Forest Community Grant land selections, has selected approximately 23,000 acres from Chugach National Forest in this area. More than 7,000 acres have already been transferred to state ownership. The Municipality of Anchorage is eligible to receive 1,000 acres of land from the State as part of its municipal entitlement.

Because of the need to establish compatible and complementary management plans and policies between the Alaska Department of Natural Resources and the Municipality, the development of the **Girdwood Area Plan** was undertaken as part of a jointly coordinated planning effort between the two governments. As such, the State's **Turnagain Arm Management Plan** should be viewed as a companion document which identifies the management policies for state lands.



*Upper portion of Girdwood valley and mountain headwall.*

The development of these plans evolved through a series of activities shown in Figure 1. Throughout the planning process, much data gathering and sharing of information took place among local residents, federal, state and municipal officials, professional consultants, and other interested parties. Through surveys, workshops, and public meetings, people expressed their individual and collective concerns about how future development should and should not occur in the Girdwood area.

As part of the planning process, the potential for future tourism/resort/recreational development as the main economic force in the valley was analyzed, as were the resulting implications for employment, population, and housing demand. Subsequent analyses identified and evaluated various future land use development patterns, taking into consideration the current land use configuration, environmental constraints, and existing public infrastructure. The land use alternatives were also based upon varying levels of resort activity and region-wide growth.

Following extensive public review and comment on the land use alternatives and their related impacts, a citizen advisory board provided additional guidance in the final preparation of this Plan and the State's **Turnagain Arm Management Plan**.

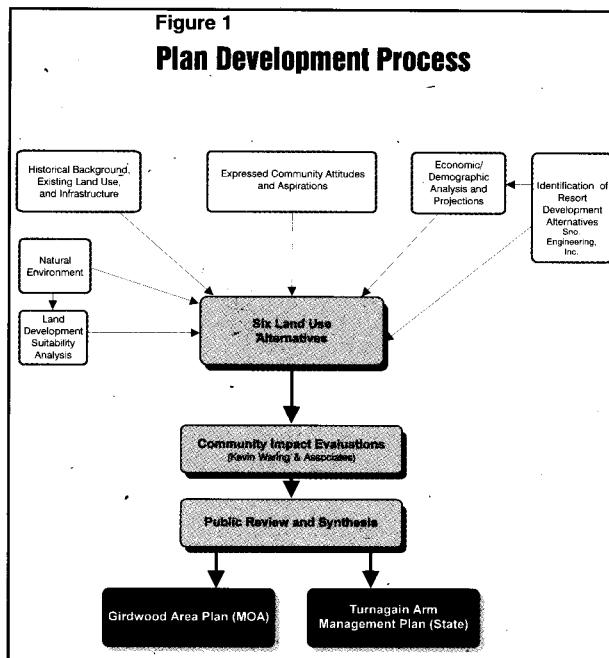
This Plan is based on the assumptions that the resident population of Girdwood will continue to grow, that the primary economic base will continue to be the tourism/resort/recreational industry, and that resort/recreational facilities will eventually expand to the upper valley area. The Plan recognizes the need for additional year-round recreational activities and general commercial space to support residential growth.

Environmental/open space recommendations are included in the Plan to acknowledge both the physical limitations imposed upon development in the Girdwood valley, as well as the importance of the preservation of natural spaces to the economic success and livability of this mountain resort community.

The Plan recognizes the importance of ensuring that a proper facility support system is expanded in order to maintain the expected development patterns and community/resort activities. And finally, implementation measures are identified, and the relationships between this Plan and other municipal plans are described.

Key implementation measures noted in the Plan include revisions to the current land use regulatory system in place in Girdwood, policies and practices concerning the disposal of municipal lands, and development and use of the Request for Proposals (RFP) process to attract new resort/recreational development.

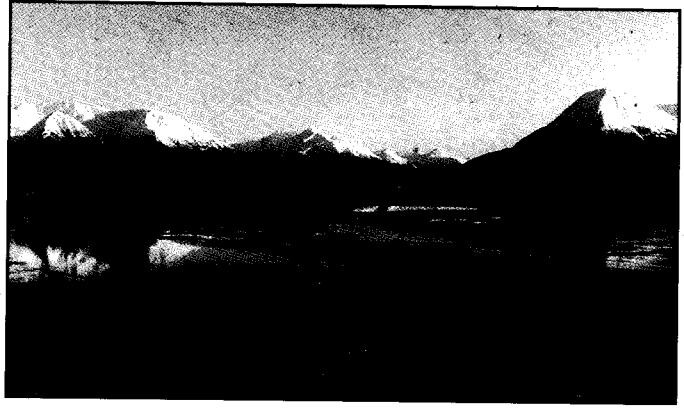
Included at the end of this document is an Appendix which contains the Girdwood Community Survey, a summary of the results of the Girdwood Community Vision Forum (a consensus-building workshop sponsored by the Four Valleys Community School held in conjunction with this planning process), and a selective list of references.



Chapter 2  
*Location and History*



MOST OF THE FOREST LAND IN GIRWOOD VALLEY WAS CUT DURING THE EARLY PART OF THIS CENTURY TO SUPPORT MINING ACTIVITY AND CONSTRUCTION OF THE ALASKA RAILROAD. THIS WAS ONE OF THE GIRWOOD SAWMILLS THAT PROVIDED TIES DURING EARLY RAILROAD CONSTRUCTION.



*Turnagain Arm.*

# *L*ocation

The Girdwood valley is located near the head of Turnagain Arm, about 42 miles southeast of Anchorage and 11 miles northwest of Portage. The community of Girdwood extends from the junction of the Seward and Alyeska Highways up the lower portion of the valley for 2.9 miles to the Alyeska Resort.

Before the mid-1960's, development at Girdwood was concentrated in the old townsite area near Turnagain Arm. However, much of the community became uninhabitable because of subsidence resulting from the 1964 earthquake, and settlement began to move up-valley shortly thereafter. This trend accelerated with the improvement of ski amenities at Alyeska Resort.

Today, development in Girdwood is most concentrated near the Resort, although this is also where most part-time occupancy units are located. Smaller nodes of settlement center around the new townsite area near Glacier Creek, west of the Alyeska Highway near the U.S. Forest Service's Glacier Ranger District headquarters, and in the old townsite between the Seward Highway and the Railroad. Other development is strung out along the Alyeska Highway and some isolated, scattered settlement has also taken place along Crow Creek Road.

Locational factors play a major part in the character and growth of a community. Although Girdwood was founded as a mining settlement, the community's present character derives more from its modern function as a ski resort and tourist center. This promises to continue. Alyeska Resort completed construction of a new 307-room luxury hotel in 1994. Additional expansion of Girdwood's ski amenities into areas further up the valley is likely to take place during the next 20 years.

The U.S. Census counted a total of 1,221 persons living in Girdwood in 1990. According to municipal estimates, resident population had increased to 1,450 people in 1994. However, on winter weekends when ski conditions are good, the community's population swells to more than twice that number.

# History

Girdwood was founded just before the turn of the century as a supply and transport center for placer and lode gold mines in the area. Placer gold was discovered on California Creek in 1895 and on Crow Creek in 1896, while lode gold deposits on upper Crow Creek were discovered in 1909. Glacier Creek itself was not a significant source of placer gold, but nearby California Creek and Winner Creek and, especially, Crow Creek were important gold streams.

Girdwood's original location at the mouth of Glacier Creek (between what are now the Seward Highway and Alaska Railroad rights-of-way) made it a convenient place for small boats plying Turnagain Arm to bring in crews of miners and a season's supplies. The settlement began as a collection of tents and small cabins along a single rutted street. A post office was established in 1907.

First called Glacier City, the town was later named after "Colonel" James E. Girdwood who arrived in the area in 1896. By 1905, the Colonel's Crow Creek Alaska Hydraulic Gold Mining Company was operating high in the Crow Creek Valley. Cabins were built and mining equipment was brought in to move giant boulders from the stream beds. However, mining efforts were soon halted as a result of a lawsuit brought by a company located downstream to stop the dumping of tailings into the creek.

Some of the other mines in the Girdwood area proved to be more durable. The Crow Creek Consolidated Mining Company began operating below Girdwood's claims in 1897 and was sold in 1906 to Nutter-Dawson Company. At that time, there were about fifteen buildings at the mine, including a two-story messhouse, a log cabin, a commissary, a manager's house, bunkhouses, a machine shop, a blacksmith shop, a sawmill, a stable and a bathhouse. A giant flume carried water from Crow Creek to jet away overburden and recover the gold.

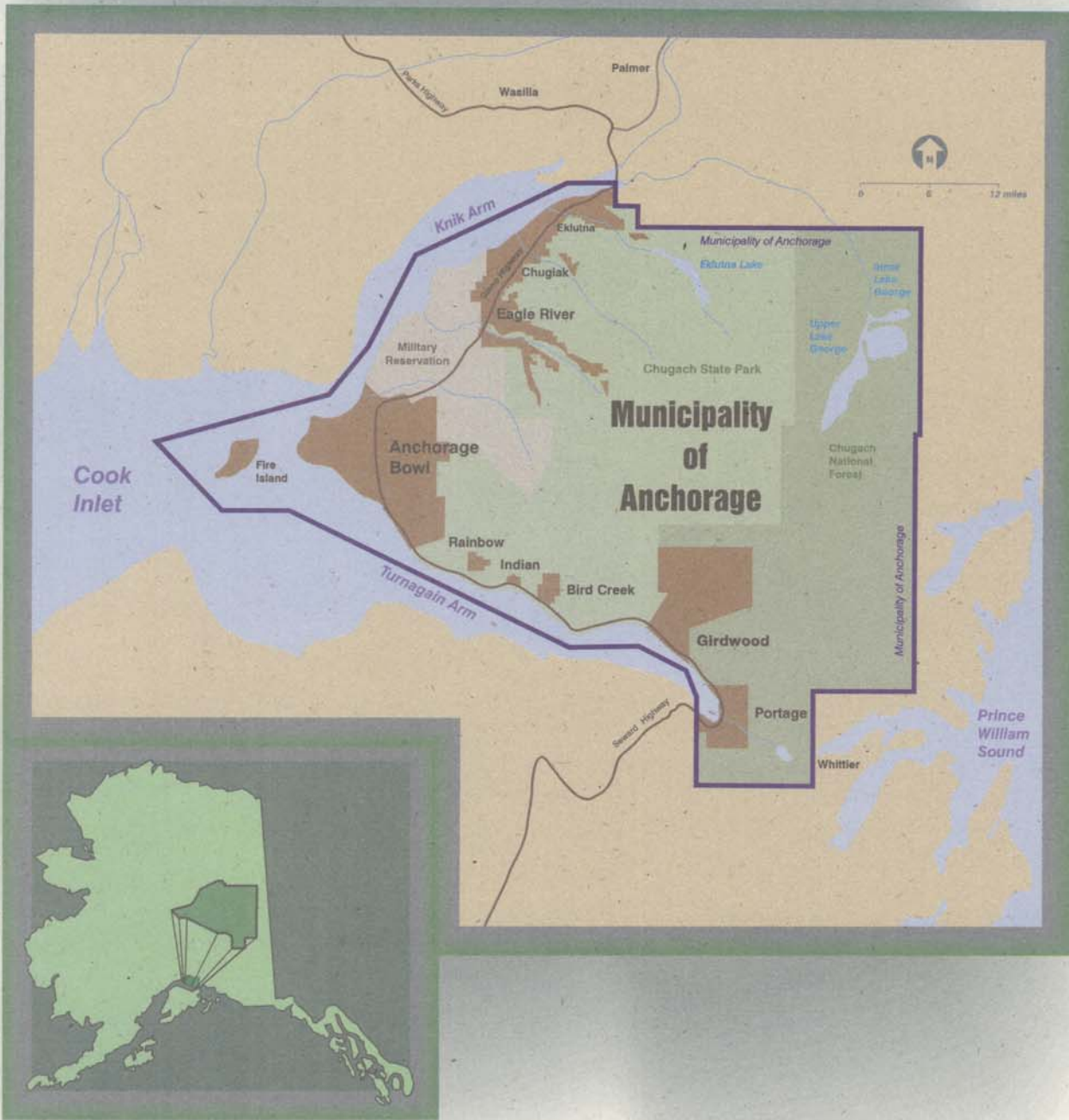
Lode gold mines in the area were much less successful. The Monarch mine in the upper Crow Creek Valley was reportedly the largest lode mine in the Turnagain Arm area. The vein deposits were discovered in 1909, and the mine operated intermittently under a series of different owners until the beginning of World War II. Other local lode properties included the Hottentot, Jewel and Brenner mines.

By 1910, the Alaska Northern Railway reached Kern Creek, four miles southeast of Girdwood. The community was linked to the railhead by boat and a trail. It was also connected to Anchorage via the Iditarod Trail, which originated in Seward and ran along the shores of Turnagain Arm to Girdwood where it branched. One route followed a steep, sometimes treacherous route along Glacier and Crow Creeks and over Crow Pass to the Eagle River valley. This route was used during the early years of the century as a winter route and mail trail to Knik. A second route, which continued along Turnagain Arm to Indian Creek and over the Indian Creek Pass and beyond to the headwaters of Ship Creek, was completed in 1908.

Despite subsequent improvements to the Crow Pass trail, the route through Indian Creek Pass was longer but less steep and came to be more heavily used.

In 1916, the Alaska Engineering Commission laid out the Girdwood townsite prior to construction of the railroad through the community. However, only one street, Main Street, was

*Vicinity Map*



ever built. Mining became a steady but seasonal occupation for many Girdwood residents. Some had cabins near their claims and also at or near Girdwood. Others stayed in town during mid-winter when daylight was minimal and working conditions, even for lode miners, were difficult.

Although it continued to function as a mining town, Girdwood boomed shortly before the twenties due to construction of the Alaska Railroad. A sawmill was set up on California Creek to provide railroad ties and, by 1918, a second sawmill was built on Glacier Creek to help fill the demand for lumber. In 1917, Girdwood reportedly had about 60 permanent residents, but on weekends the town's population swelled to as much as 300 with visitors from Anchorage and "gandy dancers" from the railroad camps at Bird Point, Mile 76, Kern Point, McHugh Creek and Indian. At the time, Girdwood's main street had about 16 buildings, 4 or 5 of which were saloons.

Despite its increased accessibility, Girdwood retained the flavor of a frontier settlement. This is believed to have been a factor in the town's selection as a movie location in 1924 for the silent screen frontier saga, "Cheechakos," produced by Austin "Cap" Lathrop.

The Crow Creek Highway, constructed in 1923 a distance of eight miles to the old Girdwood mining camp, provided an improved transportation route for the miners and their equipment. The Crow Creek Consolidated Mining Company property, later known as the Erickson mine and now as the Crow Creek mine, continued to operate until 1938 when it closed. Other mines in the Girdwood area also closed down in the late 1930's either because of lawsuits or presidential order and the community almost became a ghost town. Mining activities did not resume after World War II, although the Erickson mine reopened in 1950, primarily as a tourist attraction.

In 1949, new life was breathed into the Girdwood area with construction of the Seward Highway along Turnagain Arm. The 1950 Census counted a total of 79 local residents. Ribbon cutting for the new highway was held at the intersection of Main Street in Girdwood on October 19, 1951. However, following completion of this project, the town again lost population. Reportedly, one child had to be "imported" to justify the continued operation of the local one-room school.

In the mid-1950's, the Girdwood Valley began to attract the interest of local ski enthusiasts. A small ski slope on Mount Alyeska was developed with a rope tow in 1956 and the Alyeska Ski Corporation was formed in 1957-58. The first chairlift and a day lodge were constructed in 1960. Through the 1960's, the fledgling operation operated in the red but was subsidized by Francoise de Gunzburg, a Frenchman and the Resort's first benefactor. In 1962, the Alyeska Ski Corporation acquired 233 acres of land at the base of the mountain under a state permit and the Alyeska Subdivision was developed with roads and water service.

The 1960 Census counted 63 local residents, officially a decline from 1950. However, the area was seeing increased seasonal and weekend use because of the developing ski attractions. A municipal incorporation plan filed in July, 1961, stated that the community had 52 permanent residents (including 33 adults) and 266 property owners. Local voters unanimously approved Girdwood's incorporation as a third class city in September, 1961.



Girdwood changed forever in a few seconds on March 27, 1964. The earthquake caused five feet of regional subsidence and an additional three feet of local subsidence. This was enough to put lower lying areas of town, including the airport, under water at high tide. Water was reportedly as much as three feet deep in some of the buildings and it was obvious that the town would have to be moved. An earthquake-related chimney fire destroyed the Little Dipper Inn. In addition, the Seward Highway leading to and from Girdwood was severely damaged, as were all bridges.

The reconstruction of Girdwood was swift. Most of the town's approximately 60 residents were relocated about 2.5 miles further up the valley. A new townsite was established and an airstrip was built halfway between the new townsite and the Alyeska Resort. Several structures, including Crow Creek Mercantile and the old school/library, were moved from the old townsite. In addition, many chalets were constructed by individuals. Soon, the area along the road from Girdwood to Mount Alyeska was spotted with cabins and permanent homes.

Meanwhile, expansion of Alyeska ski amenities continued. In 1967, the Alyeska Ski Corporation entered into a three-year management contract with Alaska Airlines, with an option to purchase. Included in the management contract was a requirement for a hotel to be built. Since the airline was prohibited from subsidizing such a development, a private developer, Bruce Ficke, agreed to build a 75-room hotel. Construction of the first 32 rooms and the center core began in 1968, with a grand opening in February, 1969. In April of the same year, the new facility was almost wiped out by an avalanche. Plans for an additional 43 rooms scheduled for construction during the summer of 1969 were scrapped and condominium units were built instead and sold to individual investors.

The 1960's saw Girdwood begin its transformation to a recreational/resort community. In addition to the relocation of the townsite closer to the expanding ski resort, two new residential subdivisions were also created nearby. The two subdivisions, Alyeska and Alyeska Basin, were developed with a mix of primary and secondary homes. A third subdivision created in the 1960's, Raven Mountain Estates, was in a much more remote location at the end of Crow Creek Road, and was much slower to develop. Resident population growth more than doubled during the decade, increasing from a 1960 census count of 63 to 144 by 1970.

The decade of the 1970's witnessed the continued consolidation of Girdwood's function as a recreational/resort community. During this period of time, Anchorage enjoyed increased population growth and prosperity which was spurred by the trans-Alaska oil pipeline construction boom. A share of the growth and prosperity was felt in Girdwood. Between 1972 and 1979, four new chair lifts were added to Mount Alyeska, the Skyride Restaurant at the upper end of Chair 1 was expanded, and lighting was added to the upper mountain area. These improvements provided more skiable terrain and added to the hours of skiing pleasure for the growing number of recreationists.

In 1975, Girdwood's city government was dissolved with the establishment of a new unified home rule municipality. The new Municipality of Anchorage inherited the former borough and city land selections from the State in Girdwood valley, as well as the responsibility for providing basic public facilities and services.

Shortly after unification, the Girdwood Valley Service Area was established as a means of continuing the provision of services formerly provided by the City of Girdwood. A five-member

Board of Supervisors made up of local residents was established to advise the Municipality as to the level of service provided. Services included street construction and maintenance, solid waste collection and disposal (disposal was later consolidated into areawide service), fire protection and parks and recreation.

The new land use patterns, which initially started in the mid-sixties, expanded with new additions to Alyeska and Alyeska Basin Subdivisions. With this growth came the need for new and better public facilities. In 1978, Girdwood obtained a new fire station, which was centrally located in the valley in the new townsite area. A site located just north of the new townsite area was selected for construction of a new elementary school to serve kindergarten through eighth grade. Also included in the facility would be the local public library.

Also during the 1970's, a sewage treatment plant was constructed to handle the increased amount of wastewater that had become more and more of a public health hazard, not to mention odoriferous nuisance. The treatment plant was located a short distance above the old townsite area along the west bank of Glacier Creek. The initial sewage collection system was extended up valley to the new townsite and resort area where the need for wastewater disposal was greatest.

By the end of the decade, Girdwood's population had more than tripled, increasing from 144 to 577 permanent residents. With the continued oil-fed prosperity in the first half of the 1980's, Girdwood continued to grow, both in the number of secondary recreational homes as well as primary homes for new residents.

In 1980, Alyeska Ski Resort was acquired by Seibu Alaska, Inc., a subsidiary of the Seibu Group of Japan. The Seibu Group is a major international hotel and recreational facilities developer and operator with 37 ski properties in Japan. It also owns the Prince Hotel chain with approximately 80 deluxe hotels in Japan, Southeast Asia, Australia, Hawaii and Canada.

In 1983, the Anchorage Assembly placed approximately 5,200 acres of municipal land located in the Girdwood area into the Heritage Land Bank. The Heritage Land Bank had been established to manage lands acquired from the State through the Municipal Entitlement Program. The Heritage Land Bank was to manage municipal land that was uncommitted to specific public use by a municipal agency, and to manage and/or dispose of land determined to be surplus to the Municipality's needs.

A few years later, in an agreement between the State and the Municipality that was intended to settle all outstanding claims and obligations that had arisen over the municipal land entitlement program, Anchorage was allowed to select 1,000 acres from the State's National Forest Land Grant. The area of selection was limited to a portion of the State's selection area in the upper valley of Glacier Creek above Girdwood.

Before lands could be conveyed from the federal government to the State, and in turn, made available to the Municipality, the status of several different mining claims in the Glacier-Winner Creek area had to be resolved. In 1991, the Municipality bought out the interests of the claimants, thus freeing the land for transfer.

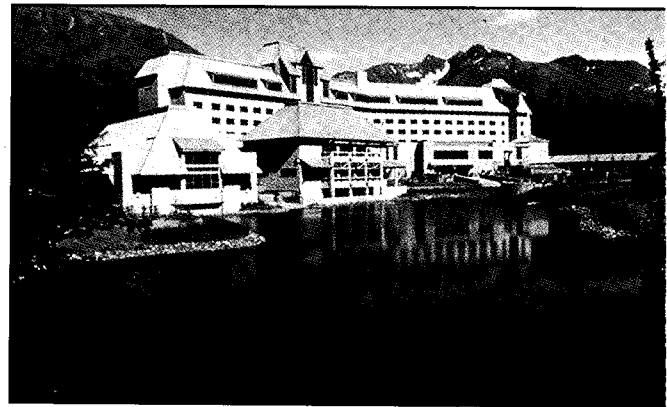
Since then, more than 7,000 acres have been transferred to the State. The Municipality has made a preliminary selection of its entitlement; however, no final selection or land transfer has yet been made.

In 1985, Seibu initiated a master plan for resort expansion at Alyeska. This led to a formal application by Seibu to acquire approximately 107 acres of land from the Heritage Land Bank. A sales agreement was approved a year later that resulted in approximately 80 acres in four separate parcels being sold to Seibu, and a fifth parcel of approximately 32 acres being leased to the company. Sale conditions included a requirement for the development and approval of a master plan prior to any construction on the newly acquired land. Municipal approval of Seibu's resort master plan was obtained in 1987.

The master plan was divided into two phases. The first phase called for construction of a 307-room deluxe hotel and parking lot, along with a tramway and new chairlift system to connect to the existing ski area. The second phase called for an additional 500- to 700-room hotel, and 250-350 resort bedroom units located on two separate parcels.

Construction of the first phase was completed in August 1994 with the opening of the new Alyeska Prince Hotel. By then, the remaining Phase I projects were already completed and in operation. (Seibu had also made several other significant improvements before the recently completed Phase I expansion. These included a new day lodge, a detachable quad lift, new parking lots, and upgrading of the grounds and ski trails.)

The cumulative effect of these major improvements under Seibu's ownership is to move Alyeska Resort toward becoming a world-class destination resort. Girdwood is evolving into a resort community that will likely continue to grow in response to resort-related activity, as well as from its close proximity to Anchorage.



*Alyeska Prince Hotel.*

Chapter 3  
*Natural Environment*



GIRDWOOD WAS A RESTING POINT ALONG THE IDITAROD TRAIL, WHICH RAN FROM SEWARD TO VARIOUS POINTS IN THE ALASKAN INTERIOR, AND EVENTUALLY REACHING TO NOME.  
A DOG TEAM IS RESTING IN GIRDWOOD DURING THE WINTER OF 1916-1917.



*Moose Meadows.*

T

he Girdwood valley provides an outstanding physical setting for a mountain resort community. As beautiful as it is, however, much of the land area is fragile, hazardous or marginal for development purposes. Such land area as steep alpine slopes, wetland meadows and marshes, deep green forests, braided streams and rock outcroppings combine to provide both unexcelled natural beauty and ideal recreational areas for the attraction and enjoyment of local residents, as well as visitors.

A fundamental objective of the **Girdwood Area Plan** is to create a mountain resort community design that regards the natural environment as its central rationale for form. The location and intensity of uses must take into consideration the constraints and assets that are presented simultaneously by the various physical features. With that in mind, the following overview is presented to describe the primary natural features of Glacier Creek valley and how they came into being.

### *Landform and Geology*

Girdwood lies within an extensive belt of Mesozoic marine deposits that were metamorphosed, uplifted and broken to form much of the present-day Chugach-Kenai-Kodiak Mountain system. The bedrock is composed chiefly of argillite, slate, and graywacke. The chief features of the mountain system's landforms seen today are the result of ice sculpting that occurred during the great glacial advances of the Pleistocene Ice Age.

Girdwood valley developed initially along a major structural trend in the bedrock that was later deepened and widened by glaciation. The valley is relatively short in length, being only about six miles long. It is nearly two miles wide at tidewater and gradually narrows as it progresses inland to the headwall. The lower portion of the valley is broad and flat with quickly steepening sidewalls along mountainsides that rise to about 3,000-3,500 feet elevation. The upper valley is narrower, with more hummocky terrain being wedged between mountains that rise higher to elevations of more than 6,000 feet at the headwall.

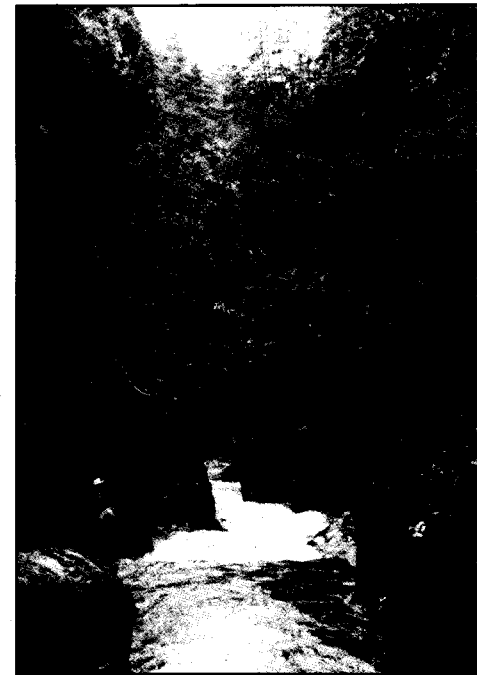
Unconsolidated sediments overlie the bedrock of the valley. Most of the unconsolidated material was originally transported to the area by glaciers, which at times nearly filled the valley. The distribution of various types of unconsolidated materials is complex because of repeated and interrelated effects of glacier ice, marine water of Turnagain Arm, and melt-water streams.

The original glacier deposits were poorly sorted mixtures of material ranging in size from clay particles to boulders. As the glacial ice receded and the waters of Turnagain Arm invaded the lower part of the valley, fine-grained materials were also deposited. Turnagain Arm water later withdrew and glacier melt-water streams then reworked the deposits. The washing action of the streams removed silt and clay from the existing deposits, leaving sand and gravel in the old stream channels.

The current major glacial melt-water stream is Glacier Creek, which heads at the termini of several glaciers on Goat Mountain. From its head, the creek flows southwest to tidewater. Two other major streams flow into Glacier Creek in the upper valley very close to one another. They are Crow Creek from the northwest, and Winner Creek from the southeast. In the area of the confluence of the three streams, the waters are rushing through narrow, deeply cut bedrock. This very scenic area is known locally as the "Four Corners" area.

Further downstream, a number of other melt-water creeks flow into Glacier Creek. The most significant is California Creek, which originates in a smaller side valley. Virgin Creek, which has its source in a small side valley at the lower eastern side of Girdwood valley, flows directly into Turnagain Arm.

The community of Girdwood and the resort have been built in the lower 2.5 miles of the valley. The area's landform, geology and soils have played significant roles in shaping the pattern of community development and will continue to do so in the future.



*Glacier Creek flowing through narrow, rock-walled gorge in the Four Corners Area.*

## *Soils*

The most commonly found deposits of unconsolidated materials in Girdwood valley that form the basic soil units are alluvial, colluvial, morainal, glaciomarine and estuarine deposits. Alluvial deposits are chiefly composed of sand and gravel, with some layering of silt. They are found primarily on the lower terraces and floodplain of Glacier Creek and outwash fans of California, Alyeska, and Virgin Creeks. Alluvial soils are well drained and have adequate bearing strength to be considered generally suitable for building and road foundations.

Colluvial deposits are accumulations of mixed materials that are thickest along the bottom portions of the mountain slopes along the sides of the valley. Colluvium typically includes old landslide and rockfall debris, as well as material that has moved downslope on a slow but continual basis.

Colluvial materials are mixed, with a wide range of grain size. They are typically found on sloping terrain, with drainage ranging from fair to poor. Some colluvial areas west of the Alyeska Highway, near the mountain slope, contain numerous seeps. These soils may be suitable for building and road foundations. However, care must be taken to avoid drainage problems.

Morainal deposits consist of material that was laid down by direct glacial action. These include terminal (end), lateral (side), and ground moraines. They are chiefly found on the valley sides and in the upper valley just above the confluence of Glacier-Winner-Crow Creeks. The materials are in many ways similar to, as well as mixed with, colluvial materials.

Glaciomarine and estuarine deposits are poorly drained, fine-grained silt and clay materials found on some of the upland ridges, in natural depressions, and in the lower flat portion of the valley that is close to tidewater. Many are overlain with a mat of peat or muskeg and closely correspond to wetland areas. Materials that make up these soil units have a high water-holding capacity. Unless mixed with large amounts of other sand and gravel material, they are generally unsuitable for road and building foundations.

The soils in the Girdwood valley are distinguished from those of the Anchorage area in one notable way. They are much wetter. This distinction has to do with the climatic differences between the two areas.

## *Climate*

The Girdwood valley has a maritime climate characterized by cool summers, relatively mild winters, and year-round precipitation. This is typical of southern coastal areas of Alaska where the ocean exerts a moderating influence. Compared with Anchorage, Girdwood experiences warmer winters, slightly cooler summers, and a great deal more precipitation.

Winters in the Girdwood area are characterized by periods of cold, stable weather followed by long periods of warm, inclement weather. These patterns result from the interaction of extremely cold, dense, high pressure systems that develop over interior Alaska, and relatively warm, moisture-laden, low pressure systems produced in the Gulf of Alaska. Periods of clear winter weather may last as long as a month when low sunlight angles cause a daily net radiation loss. During such periods, temperatures gradually decrease, sometimes reaching -20 degrees Fahrenheit or lower. Generally, these conditions remain unchanged until a very large, low pressure system moves the dense, cold air mass from the area.

January and February are normally the coldest months. Average winter temperatures in the lower valley between Turnagain Arm and Alyeska Resort typically range from 15 to 25 degrees Fahrenheit. Although very cold temperatures are sometimes experienced, periods of warm winter weather are also not uncommon, and January temperatures in excess of 50 degrees Fahrenheit have been recorded. At such times, snowmelt and accompanying precipitation can create extreme conditions of overland flow run-off. Typical summer temperatures are in the 60's, with July usually being the warmest month. Fall is the wettest time of year, while May and June are the driest.

Climate conditions vary within the valley. Temperatures are affected by altitude, especially during mid-winter. Limited available climate records indicate that while annual average

temperatures are similar (36.4 degrees Fahrenheit at the old train station versus 35.6 degrees Fahrenheit at the Alyeska Resort), average temperatures at Alyeska Resort in December and January are 4 degrees Fahrenheit and 3 degrees Fahrenheit colder respectively than those recorded for the old station. Also, total precipitation and snowfall are substantially higher in the upper valley because of differences in altitude.

Storms in Southcentral Alaska generally create an airflow from the southeast, producing heavy precipitation on the east side of the Chugach Mountains and light precipitation on the west. Girdwood averages 67 inches of precipitation annually, compared with 171 inches at Whittier and 27 inches at Anchorage. Similarly, the winter snowfall in Girdwood of 144 inches exceeds the 52 inches recorded for Anchorage.

Stormy periods consistently generate snow above the 2,000-foot level in the winter. Very wet snow and rain are common below 1,000 feet throughout the entire snow season, extending from November through April. Snow loads are high, a factor which must be considered in construction. On the other hand, since either rain or snow may occur at sea level, a shortage of snow at lower elevations sometimes results.

The micro-climate of the upper valley area at Glacier-Winner Creek is similar to Mount Alyeska's, with a few exceptions. The base elevation is 500-650 feet compared to an elevation of 300 feet at Alyeska. In addition, the Glacier-Winner Creek base is 2.5 miles farther away from the moderating influence of the marine waters of Turnagain Arm. Consequently, base temperatures at Glacier-Winner Creek should be slightly cooler than Alyeska, resulting in less rain and more snow. Miscellaneous snow depth measurements taken from 1981-1986 at both base sites showed the Glacier-Winner Creek base area to have approximately 55 percent greater snow depth, on average, than the Alyeska base.

Higher elevation snow depth comparisons between the two areas do not correlate with the differences in base snow depths. Miscellaneous snow depth measurements taken from 1981-1986, show Alyeska as having greater snow depths than Glacier-Winner Creek over a range of similar elevations above 1,000 feet. The lighter snowpack on the Glacier-Winner Creek upper slopes could be a result of a combination of factors, such as drier air at a greater distance from Turnagain Arm, terrain differences, exposure and wind.

There is only sketchy information available on wind direction and velocity in the Girdwood valley. Strong southeasterly winds usually accompany heavy snows. However, it is reported that the highest wind velocities experienced at Alyeska typically occur from the northeast and sweep across the upper mountain chairlifts. Resulting wind-related closures on Chairs 1, 2 and 4 average about seven days per year.

Climate has had a significant effect on the shaping and contouring of the Girdwood valley, as well as on its vegetative cover. It also influences the design of many basic facilities and structures in the community, and helps define available forms of recreation.



# Hydrology

Water is a resource in great abundance in the Girdwood valley. Surface waters emanate from several different sources, while existing wells and available evidence from various hydrological investigations indicate that the valley holds large groundwater reserves in relatively shallow aquifers.

## **SURFACE WATER**

Surface water in the Girdwood area is readily available in abundant quantities from Glacier Creek and its tributaries. The valley of Glacier Creek and its smaller related side valleys encompasses a drainage basin of approximately 62 square miles. More than 5 square miles, or about 8 percent, is covered with glacial ice. Perennial snowfields also exist on the high mountain slopes. Storage of water in glaciers and snowfields and the subsequent release of melt water regulate streamflow in the valley. Consequently, meltwater can maintain streamflows even during periods of hot dry summer weather.

The period of lowest streamflow is during late winter and early spring when glacial and snowmelt are at their lowest levels. The only current and anticipated withdrawal of any sizable amount of surface water is for snowmaking at the resort. However, snowmaking is typically undertaken in late fall to establish a snow base before the colder temperatures of winter bring plenty of natural snow.

## **GROUNDWATER**

Groundwater aquifers are found in porous and permeable unconsolidated deposits that are water saturated. Such materials are found where stream action on the glacial deposits has produced clean, well-sorted sand and gravel. Therefore, good producing aquifers are found along both the current and former channels of Glacier Creek and its tributaries, as well as the fan-shaped deposits at the base of steep mountain slopes by California, Alyeska, and Virgin Creeks.

Groundwater supplies nearly all the water demands in the Girdwood area. All the high producing community wells are located in the alluvial deposits of Glacier, California, or Alyeska Creeks. About one fourth of Girdwood homes (all located on the west side of the valley), however, rely on private wells. Development in the new townsite area and areas on the east side of Glacier Creek utilize community wells.

The aquifer depths below ground level vary throughout the valley. However, they are all quite shallow, generally in the 40-80 feet range and very seldom going deeper than 100 feet. The community well serving the new Girdwood townsite has one of the highest reported yields in the valley. Yet, the water level is only about 10 feet below the land surface.

The highest producing wells in the valley belong to Anchorage Water and Wastewater Utility (AWWU). They have two wells tapped into the Glacier Creek aquifer a short distance northeast of the Girdwood airstrip. These two wells can produce flows of 1,000 and 600 gallons per minute respectively to the water system.

A short distance upstream from the AWWU wells, the Glacier Creek floodplain narrows from nearly 1,000 feet in width to less than 100 feet and the creek becomes constrained within a

bedrock gorge. Here, the alluvial deposits are narrowly confined and thin, and may not be adequate for any significant groundwater production. Thus, large sources of groundwater production in the upper valley may be more difficult to find than in the lower valley.

#### **WATER QUALITY**

The chemical quality of the groundwater in the area is excellent. The water is a moderately hard, calcium-bicarbonate type. Chemical analyses performed by the U.S. Geological Survey and Alaska Division of Water indicate the surface waters of Glacier and Winner Creeks are of similar chemical quality to the valley's groundwater, except for slightly lower levels of dissolved solids such as calcium and manganese.

Most of the sand, silt, clay and finer-sized particles found in stream channels are transported in suspension, giving the water a turbid appearance. The level of turbidity varies from stream to stream, with glacial-fed streams generally having a higher sediment load during periods of high flow. The local streams are more turbid during periods of fast flow (coinciding with periods of rapid snow and ice melt, and after heavy rains) than periods of low flow during the colder winter and early spring months.

The most serious potential impacts on water quality in the Girdwood valley are likely to be associated with further community development. Care will be required to avoid disturbance or contamination of important groundwater aquifers. Surface waters will need to be protected from additional sedimentation associated with construction and runoff from developed areas.

### *Wetlands*

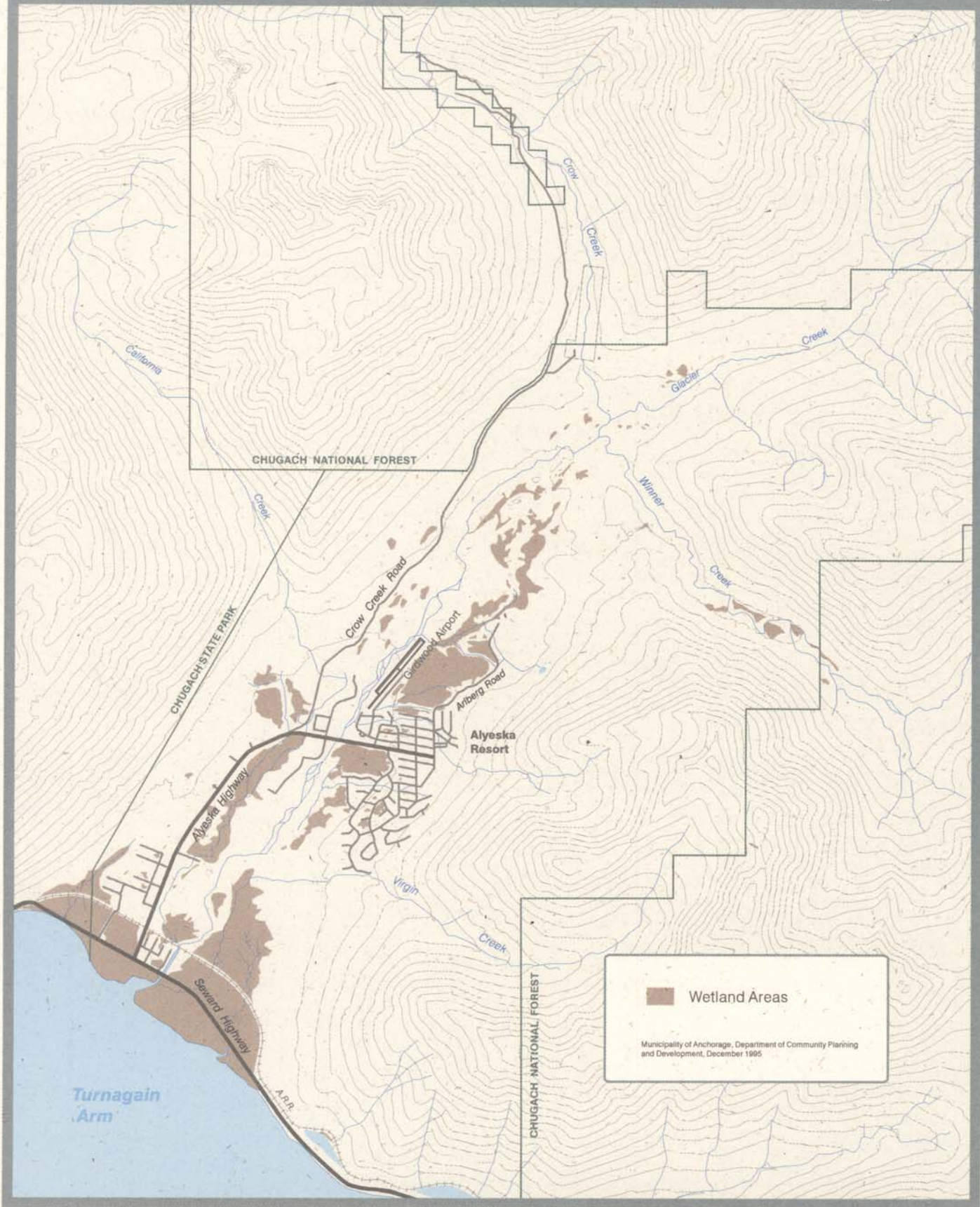
There are three basic wetland types within the Girdwood valley: intertidal wetlands, floodplain wetlands, and open patterned ground peat bogs. Both the intertidal and floodplain wetlands overlie mostly unconsolidated surficial soils. The open meadow bogs overlie peat deposits commonly found in low-relief depressions in the middle and upper valley on the larger river terraces.

Intertidal wetland areas occur chiefly along the Seward Highway right-of-way and reach their inland extent in the vicinity of the Alaska Railroad right-of-way. The zone of intertidal influence extends further inland up the floodways of Glacier and Virgin Creeks and Tidewater Slough. Several areas of formally intertidal wetlands are evolving to more brackish to fresh-water conditions where the Seward Highway has restricted the influence of high tides, mostly in the vicinity of the Seward Highway / Alyeska Highway intersection.

The intertidal wetlands are dominated by salt-tolerant sedges, grasses, and woody shrubs, and contain scattered shallow, silt-laden pools. These wetlands provide moderate- to high-value migratory bird habitat. Pockets of fairly productive breeding habitat can also be found in areas where slight elevation changes preclude summer tidal flooding. The key intertidal habitat sites include the large brackish pond south of the Alyeska Highway intersection, the mouth of Glacier Creek, and the loose conglomeration of pools and flooded meadows seaward of the railroad east of Glacier Creek.

Floodplain wetlands in the Girdwood valley occur in alluvium chiefly along the floodways of the major streams and tributaries and the larger ephemeral drainage courses. These habitats

# Wetland Areas



are dominated by deciduous thickets and interspersed with large black cottonwood trees. Occasional pools and beaver ponds are found mainly along the lower Glacier/California Creeks, below the Girdwood School, and also the lower portions of Moose Meadow and Virgin Creek. These wetlands provide valuable flood control, water quality, and fish habitat functions, especially in flatter sections where stream waters more regularly interact with adjacent wetlands. A series of floodplain wetlands also exist far up valley in shallow sections of the upper Winner Creek drainage.

The third major wetland type is referred to as open patterned ground and typically covers deeper peat soils away from the floodplains. The larger patterned bogs are concentrated on the east side of the valley floor and inland of the railroad. These bogs are nutrient poor and contain small islands of western hemlock interspersed among wet sedge/grass meadows. Small solifluction pools are often scattered across the meadows wherever micro relief allows local ice conditions to carve out depressions. Small tributaries of Glacier Creek wind through these open meadows often carving out deep incised channels which often provide anadromous fish habitat.

Unlike the patterned ground wetlands found in Anchorage, which typically include very complex and diverse plant communities, the patterned ground meadows in Glacier Creek valley include very simple plant assemblages and provide correspondingly moderate to low value wildlife habitat. The chief wetland functions of these areas appear to be for flood water attenuation, upper watershed water quality, and summer fish habitat. These patterned ground meadows become even less valuable for fish and wildlife habitat farther up valley, where higher elevations allow deeper snow accumulation and a shorter growing season. Therefore, the Winner Creek terraced meadows are simpler and of lower value than the Moose Meadows.

## *Vegetation*

The Girdwood valley is located at the northern edge of the Pacific coastal rainforest zone. This is in contrast to the drier boreal or interior forest zone of most of Alaska.

The forest growth within the Girdwood valley consists of western hemlock, sitka spruce, and black cottonwood. They are typical for parts of coastal forests at this latitude and topographic conditions.

The most predominant species with the largest coverage is the western hemlock, followed by the sitka spruce. These large standing trees have created dense evergreen forests with soft forest floors of duff and moss. The black cottonwoods occupy the well-drained floodplain of Glacier Creek, as well as the alluvial fans of California and Virgin Creeks.

The forest extends up the mountainsides to about 1,500 feet elevation. Shrub/scrub growth occurs for a slightly higher distance, but is soon replaced with alpine tundra cover at the higher elevations.

The dominant forms of low shrub/scrub growth are alder, willow, and devil's club. Although they are found throughout the valley, they appear most prominently along small drainage ways on sloping terrain, or in more open areas.

Commercial logging operations took place in the Girdwood valley during the early years of this century, mainly to provide railroad ties. Today, the primary values of the valley's forest lie in its beauty and associated quiet. Together, these qualities provide the focus of human appreciation and interest.

The main natural threat to the forest is the spread of the spruce bark beetle and black-headed budworm. These pests have been spreading throughout the region and have been observed in the Turnagain Arm area. The rapidity of their spread is based upon the abundance of breeding material and favorable weather conditions.

## *Fish and Wildlife*

The Girdwood valley and adjacent Chugach State Park and Chugach National Forest lands support a wide variety of fish and wildlife resources.

### **FISH**

All five species of salmon, along with dolly varden and eulachon smelt (hooligan) migrate up Turnagain Arm to various streams. Those found in Glacier Creek and its tributaries are pink, chum, coho, and king salmon, as well as some steelhead and dolly varden. The anadromous salmon species have been observed as far up Glacier Creek as the four corners area in the upper valley.

Most fish spawning, however, occurs in the clearer running tributaries and/or their confluence with Glacier Creek. Fish generally avoid glacially fed, braided streams for spawning due to the uncertainty of the river channels. Significant fish milling areas are at the confluences of California and Moose Meadow Creeks with Glacier Creek.

The most significant fish spawning areas are located on California Creek between Alyeska Highway and Crow Creek Road (near the new Girdwood townsite area), and on the lower portion of Moose Meadow Creek. The small tributary/wetland complexes associated with Glacier, California, and Moose Meadow Creeks are the important fish rearing areas.

Little is known about the fishery resources of Virgin Creek, which flows directly into Turnagain Arm. As the stream reaches the lowlands, it enters an area flooded by beavers, which has made it difficult to access. On the opposite side of the valley, the upper portion of the Tidewater Slough is an important holding area for juvenile fish heading out to sea.

### **WILDLIFE**

Because of its location between coastal and boreal ecosystems, the Girdwood valley and its surrounding environs support a high diversity of wildlife species. Large mammals that can be found throughout the area include moose, brown bear and black bear. Mountain goats exist in significant numbers on the higher slopes in the upper portion of the valley, while Dall sheep and wolf can be found in the adjacent Chugach State Park.

Recent aerial surveys performed by the Alaska Department of Fish & Game documented approximately 40 mountain goats and approximately 20 moose occupying the upper portion of the valley and surrounding mountains. The lowlands in the valley, and particularly riparian lands along Glacier Creek, are important moose overwintering habitat.

Furbearers commonly found in the valley are beaver, mink, river otter, and weasels. More rare are coyote, wolverine, and lynx. Smaller mammals include squirrel, porcupine, snowshoe hare, voles and shrews.

Marine mammals that can sometimes be seen offshore in Turnagain Arm are beluga and orca (or killer) whales. They come during the annual salmon runs. Other less common whale species, such as the minke whale, occasionally also venture up the Arm.

Many bird species are also present in the area. They include bald eagle, golden eagle, hawks, owls, ducks, geese, swans, ptarmigan, spruce grouse, raven, magpie, and a large variety of resident and seasonal passerines. The coastal wetlands and impounded ponds along the Seward Highway and railroad corridors are important feeding, staging, and nesting habitat for waterfowl, arctic terns, shorebirds, and raptors.



*Beaver dam and lodge on Moose Meadows Creek.*

## *Minerals*

The two primary mineral resources of interest in the Girdwood valley area are gold and gravel. Girdwood was founded as a result of gold discoveries, particularly in the Crow Creek drainage. Today, most gold mining is recreational and confined to Crow Creek, although Winner Creek may also have some potential for recreational mining.

Nevertheless, there are a few federally recognized gold mining claims in the upper part of Crow Creek drainage that may have commercially recoverable subsurface lode deposits. Although there has been no lode mining activity there for more than half a century, the possibility of future lode mining should not be discounted. In addition, the Girdwood Mining Company has an active placer mining operation at the end of Crow Creek Road.

In the future, the mineral most in demand in the Girdwood area will be gravel. All new development in the area will require gravel for foundation support, be it a road, utility line, or structure. The only local source of gravel material currently in use comes from the Girdwood Mining Company as a by-product of its mining operation. Otherwise, the material must be imported, usually from Portage valley.

The most readily available source of gravel is from the alluvial deposits in and along Glacier Creek. However, previous extractions exceeded the recharge expected from streamflow. In addition, contractors extracting the gravel committed too many violations of environmental stipulations, causing reparable harm to the stream habitat and floodplain. Consequently, the mineral extraction was halted.

A Girdwood area gravel extraction study undertaken for the Heritage Land Bank a few years ago noted two potential sites on municipal land for retrievable amounts of gravel. One site is along Glacier Creek above the airport, and the other is in the Virgin Creek area.

The Heritage Land Bank followed up the report with a soils investigation effort in the alluvial fan of Virgin Creek, which indicated the presence of gravel in recoverable quantities. The

report covering this effort noted, however, that the gravel was discontinuous and interspersed in layers between finer sands, thus requiring separation and processing. The report also advised avoidance of a shallow groundwater table at the lower portion of the study area.

The only other known source of material is a state pit operated by the Department of Transportation & Public Facilities, located south of Virgin Creek next to the Alaska Railroad right-of-way. Its quantity is limited and will continue to be used for highway construction and maintenance purposes, thus precluding any community use.

## *Natural Hazards*

There are a number of natural hazards in the Girdwood valley and on the surrounding slopes that are not unusual for a mountain setting with a high level of precipitation. These hazards can pose a significant threat to life and property, and as such, must be identified and taken into consideration.

### **FLOODING**

The primary cause of flooding is the rapid runoff during heavy rains. The three heaviest floods on record in the Girdwood valley in this century all occurred as a result of heavy rainfall in summer or early fall. However, flooding can also occur as a result of rapid snowmelt during spring, which would be preceded by a sequence of supporting weather patterns.

The main source of flooding is Glacier Creek. Glacier Creek occupies a braided channel in the lower valley, producing a wide floodplain. Other areas prone to flooding are the smaller streams, California, Alyeska, and Virgin Creeks. In the upper valley, on the other hand, flooding is less of a threat. Here, the floodplain of Glacier Creek, as well as its tributaries Crow and Winner Creeks, is much narrower and more confined to the stream channel by steeply rising embankments.

An additional hazard during a flood is presented by floating logs and trees, which can cause jams, erode banks, and change the location of the stream channel. The floating debris can pile up, threaten bridge structures, and cause rapid shifts in the velocity and direction of water flow. There is evidence of channel changes and flood levels on the trees and vegetation in the valley, particularly along Glacier Creek.

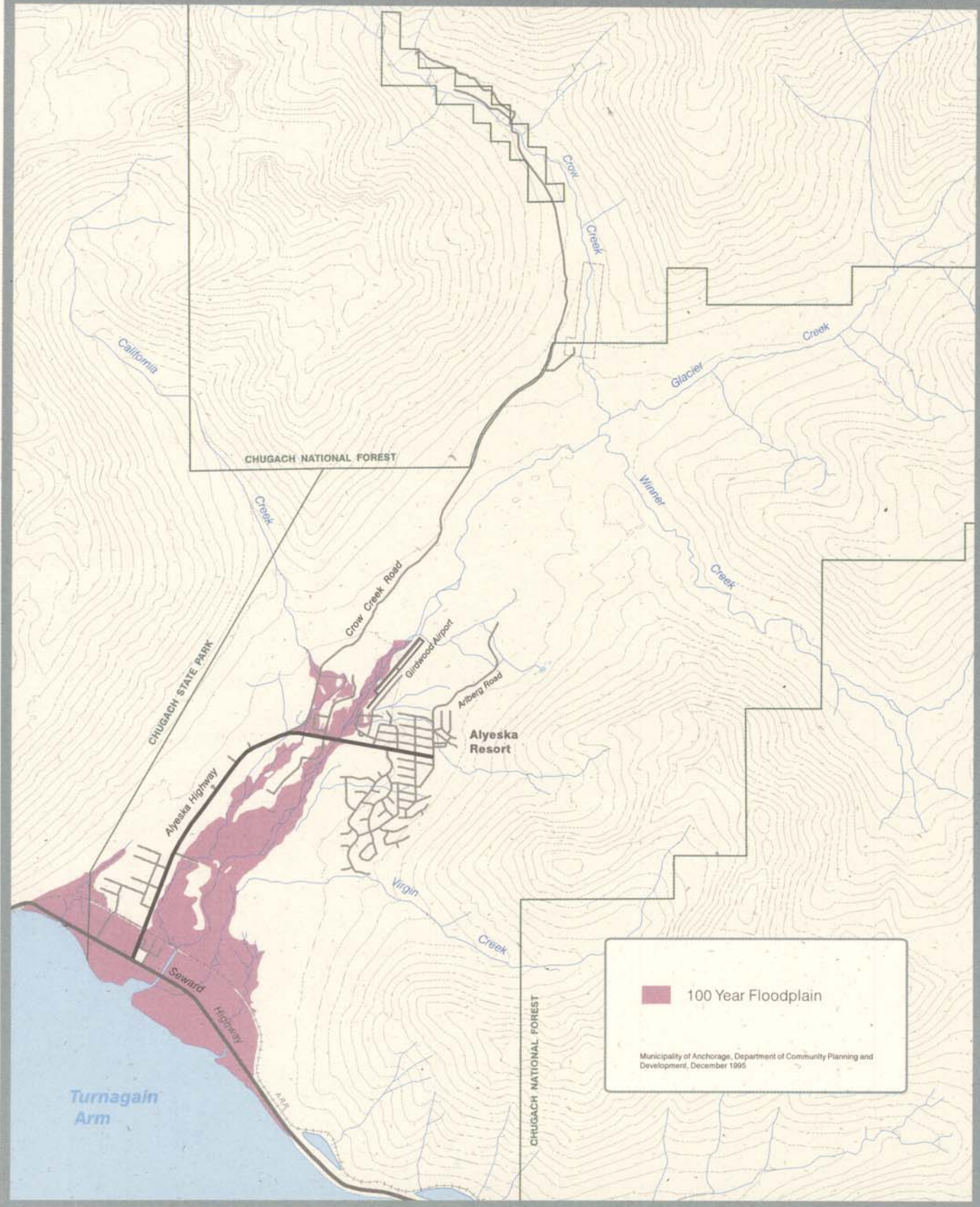
Girdwood has not had a major flood in more than 25 years. The last one occurred in 1967, and brought flood waters to the steps of businesses in the new townsite.

### **SNOW AVALANCHES**

Like floods, avalanches are caused by a combination of terrain and weather. In the case of avalanches, a third factor is also present – the snowpack. Avalanches occur when a portion of an unstable snowpack on or atop a mountain slope releases and moves rapidly downslope. Many times, it may carry vegetative, rock or soil debris with it.

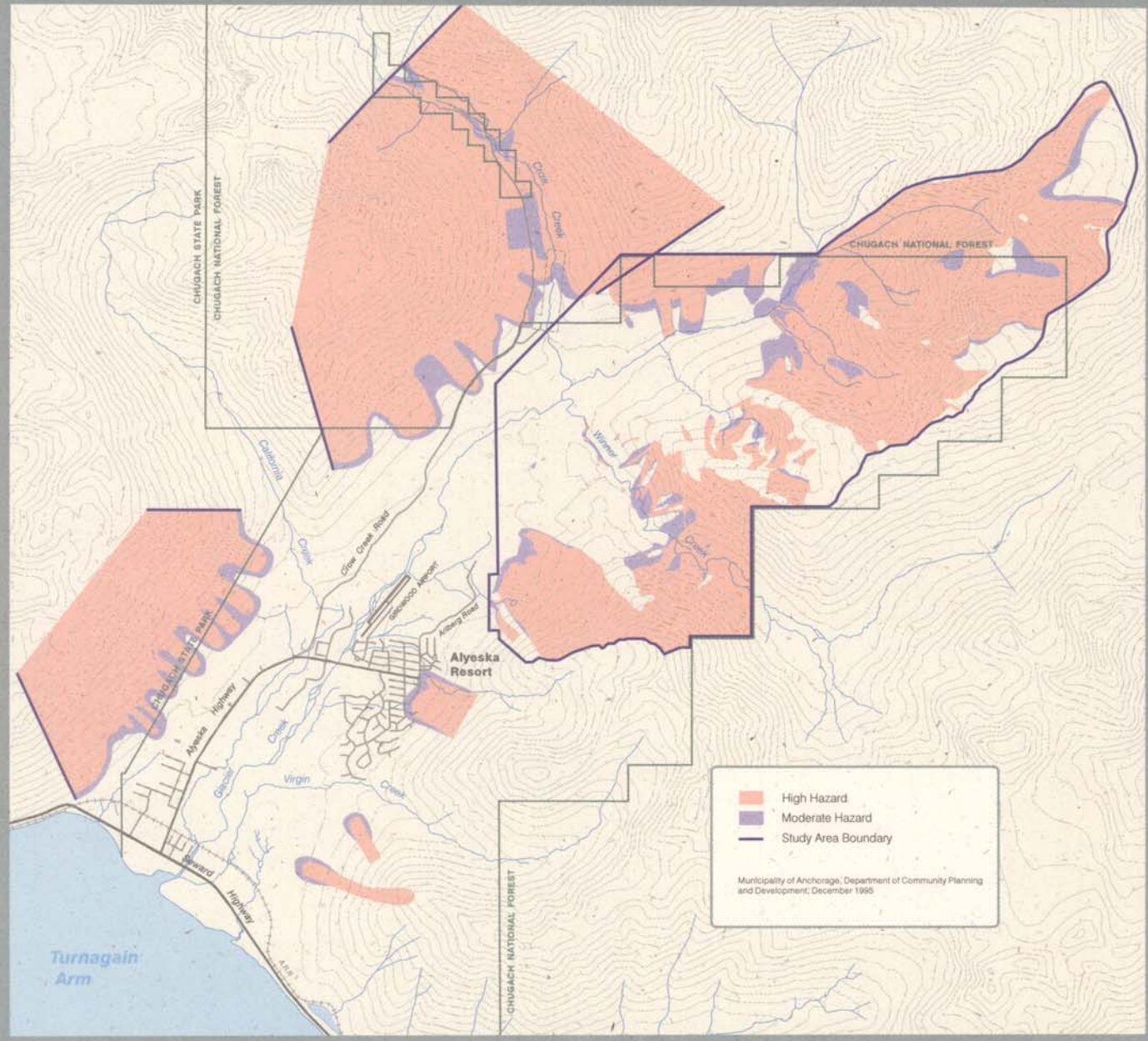
The most dangerous avalanches are slab avalanches. They pose the most risk to people and structures because they tend to fail across an extensive area, encompass a greater mass of material, and attain greater velocities and reach higher impact pressures.

# 100 Year Floodplain





# Snow Avalanche Hazard Areas



Evidence of snow avalanches are prominent on the mountain sides above the valley. Some avalanches have reached lower elevations at times, snapping large mature spruce trees like match sticks. A number of avalanches have occurred at Alyeska Resort, causing a variety of damage to the facilities.

The best form of avalanche defense is avoidance. Consequently, community development should remain outside known or potential avalanche areas.

### **MASS-WASTING**

The principal mass-wasting processes in the Girdwood valley area are rock avalanches (rock slides), debris flows, and rock falls.

Rock avalanches are widespread throughout the region, initiating within steep rock outcrops in the glacially oversteepened terrain. Typically, failure is initiated as large volumes of rock, soil, snow, and ice in cliff areas fail catastrophically. These slope failures are commonly triggered by earthquake-induced ground vibrations.

An example of a major earthquake-induced rock avalanche which occurred in 1964 is located in Winner Creek valley. The debris from that event fell more than 4,000 feet vertically, while traveling horizontally 10,000 feet. The debris reaching the runout zone traveled approximately one-half mile over nearly flat terrain in the valley bottom.

Debris flows occur in small, steep drainage basins throughout the valley. Debris (usually consisting of mud, rocks, entrained vegetation) typically flows into steep channels which are already conveying large water discharges from snowmelt or rainstorms. The combination of water and material becomes a "slurry" and moves downslope. Areas of debris flow correspond closely to previously identified avalanche hazard areas.

Rockfall occurs within and below steep outcroppings of bedrock throughout the area. Typically, single rocks or a few rocks become detached and fall, bounce, and slide as individual events.

### **SEISMICALLY INDUCED GROUND FAILURE AND SUBSIDENCE**

Earthquakes can trigger a number of natural hazards. In addition to snow avalanches and mass-wasting, earthquakes can also cause ground failure and subsidence in certain areas.

Seismic vibration which occurs during an earthquake may cause ground failure when certain conditions are present. Ground failure occurs when water-saturated material slides or drops to a lower lying area.

Subsidence can be a localized event if the seismic vibrations consolidate previously unconsolidated material resulting in further settlement of the material. Subsidence can also occur on a regional scale, such as occurred for the entire Turnagain Arm area during the 1964 earthquake.

Generally, the Girdwood valley has a moderate to moderately low susceptibility to seismically induced ground failure. Areas underlain with saturated fine-grained materials are more prone to ground failure and subsidence than courser, well-drained areas.

The lower portions of the valley near tidewater are more at risk from regional subsidence, as well as localized consolidation and settlement. In 1964, five feet of regional subsidence and an

additional three feet of local subsidence occurred at Girdwood. This was enough to put many lower lying areas in the old Girdwood townsite underwater during high tides and to force the relocation of settlement further up the valley.

Recent research indicates that certain coastal areas, like Girdwood's, appear to go through natural cycles of earthquake subsidence, post-earthquake restoration and subsequent subsidence over time.

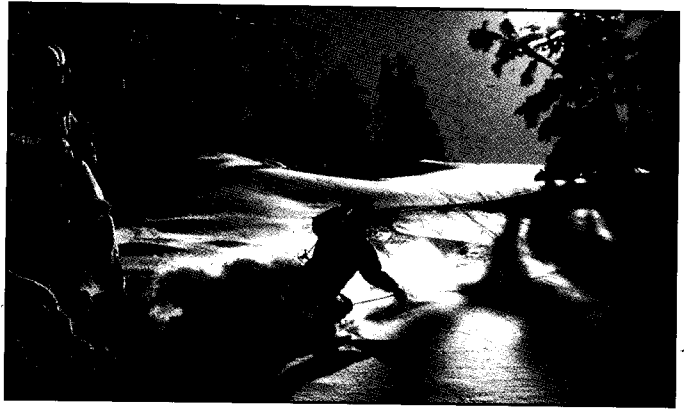
*Most of the natural features noted in this chapter were categorically mapped and then composited in order to formulate an image of the Girdwood valley in terms of its suitability, and sensitivity, to development. This was done to create a future community development pattern that will avoid sensitive areas, minimize development costs, and be safe from natural hazards.*

*A community development suitability map is included in Chapter 6 of this Plan. That map gives a general indication of which portions of the valley are most suitable for community development, which portions are not, and which portions would be with certain design and construction precautions specific to the area.*

Chapter 4  
*Population, Employment  
and Housing*



ALTHOUGH A FULL TOWNSITE HAD BEEN PLATTED IN 1916, ONLY MAIN STREET WAS EVER BUILT,  
AS VIEWED HERE DURING THE 1930'S.



*Downhill skiing.*

**G**irdwood's distinctive demographic, social and livelihood patterns stem largely from its growth as a winter recreational community within convenient reach of the Anchorage Bowl. These current patterns suggest how the town's socioeconomic character may be affected by continuing resort and visitor industry development. The fundamental forces that have imprinted a character on Girdwood today, its geographic and economic position within Southcentral Alaska, and its role as a recreational/tourism destination will persist. As a result, future socioeconomic patterns should resemble present-day Girdwood more closely than those of Anchorage or other Alaska towns.

## *Population*

### **PAST POPULATION TRENDS**

There has been a settlement at Girdwood since the turn of the century. However, the community was not listed separately by the U.S. Census until 1950. At that time, 79 people were counted.

Following completion of construction of the Seward Highway in 1951, Girdwood lost population. This was reflected in the community's 1960 population of 63, a drop of 20.3 percent from 1950. The 1960 Census also counted 71 persons at Portage, 25 at Bird, and 24 at other locations along Turnagain Arm.

The 1964 earthquake and expansion of Alyeska ski amenities resulted in a reversal of Girdwood's downward population trend. Although much of the old townsite was not usable after the earthquake, reconstruction quickly took place further up the valley. Construction of a hotel and condominiums under the auspices of Alaska Airlines also took place during this decade. Reflecting this increased level of economic activity, the 1970 Census counted 170 people at Girdwood, a 128.6 percent increase over the 1960 figure.

The impact of the Alyeska expansion in the late 1960's resulted in an increase in real estate activity during the 1970's. During that decade, Girdwood's population grew 300 percent, with a total of 577 people counted here by the 1980 Census.

Seibu purchased Alyeska from Alaska Airlines in 1980 and began to make further improvements in the ski resort's amenities. Population growth was especially rapid during the early 1980's. In 1983, the Municipality estimated Girdwood's population at 1,070, an increase of about 85 percent. Also in 1983, the Municipality estimated part-time residents during peak population periods at 1,865 people.

Population growth since the mid-1980's has been much flatter, as it has been elsewhere in the Anchorage area. The 1990 Census counted 1,221 residents in Girdwood. In 1993, the Municipality estimated the community's population at 1,350, an 11 percent increase over the 1990 figure.

### PRESENT POPULATION CHARACTERISTICS

The composition of the population of the Girdwood area differs significantly from that of Anchorage as a whole. In brief, Girdwood's population is an older, relatively heterogeneous one, which includes a disproportionate number of males.

According to the 1990 Census, the median age for Girdwood (33.6) resembles national (33.1) more than Alaska (29.5) or Anchorage (29.8) norms. Closer examination, however, indicates that the median age is older in Girdwood because 43.2 percent of the population is concentrated in the 30-45 age ranges. The proportion of the population in both the older and younger age groups is actually lower than is the case for Anchorage. Although unusual by Alaska standards, the concentration of Girdwood's population in a few age groups is not unlike that of other ski resort areas. In addition, the lack of a local high school may be a factor in the relatively low proportion of teenagers in the Turnagain Arm area.

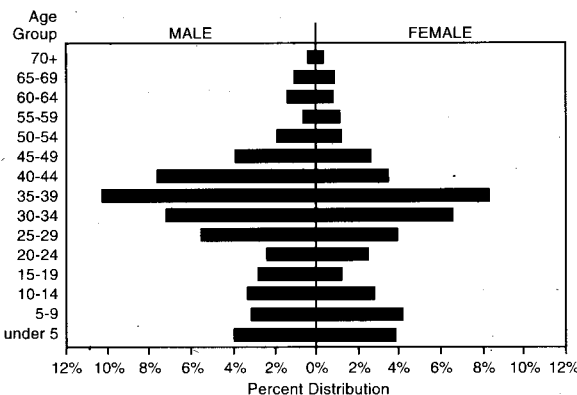
Unlike national norms where females (51.3 percent) outnumbered males (48.7 percent) in 1990, males typically outnumber females in Alaska. The 1990 statewide ratio was 52.7 percent males versus 47.3 percent females. However, in an urban area such as Anchorage, the sexes are typically more balanced, as reflected by the Municipality's 1990 ratio of 51.4 percent males to 48.6 percent females. Girdwood's male-to-female ratio was more extreme, with males outnumbering females by a 56 to 44 percent margin in 1990.

**Table 1**  
**Historic Population**  
**1950 - 1993**

Year	Number	Percent Change
1950	79	
1960	63	-20.3
1970	144	128.6
1980	577	300.7
1990	1,221	111.6
1993	1,350	11.0

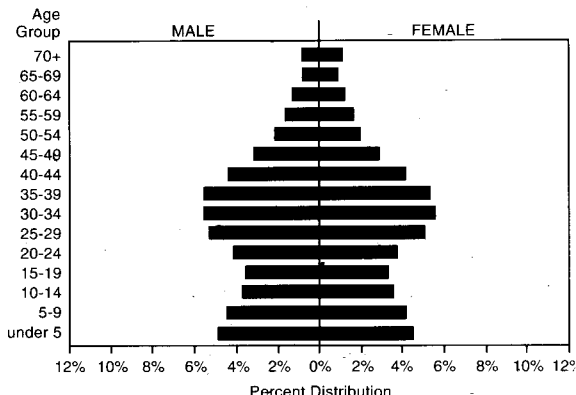
Sources: U.S. Census  
MOA, Department of Community Planning and  
Development, Research Division

**Figure 2**  
**Population Distribution, by Age & Sex**  
**Girdwood, 1990**



Source: U.S. Bureau of the Census.

**Figure 3**  
**Population Distribution, by Age & Sex**  
**Anchorage, 1990**



Source: U.S. Bureau of the Census.

Girdwood has a lower share of family households (54 percent) than Anchorage (68 percent), with a high share of households comprised of unrelated persons (46 percent). Households tend to be small, with an average 2.24 persons per household, compared to Anchorage's 2.68 average.

Although Girdwood's population is ethnically diverse in national origin, it is racially uniform (97.5 percent white). In Anchorage, by comparison, whites account for 80.7 percent of the population.

## *Employment*

Girdwood's economy is dominated by the tourism and recreational industry, with Alyeska Resort being by far the single largest employer. A lesser source of economic strength is the U.S. Forest Service's Glacier Ranger District which is headquartered in the community. However, approximately one-third of Girdwood's resident workforce is employed outside the local area, mainly in Anchorage.

### COMPOSITION OF EMPLOYMENT

Employment in Girdwood constitutes a very minor part of employment for the Anchorage area as a whole. In addition, Girdwood's economy is fundamentally different from that of Anchorage. As a result, employment information for Anchorage is not relevant to Girdwood's situation.

Insured employment statistics for Girdwood developed by the Alaska Department of Labor were examined. However, insured employment statistics do not include self-employed persons or municipal employees. As a result, although insured employment information indicates some of the seasonality of employment in the Girdwood area, it does not give a complete picture of the composition of employment.

A separate survey of employment in Girdwood was therefore undertaken in August, 1992. Each business in the area was contacted and asked to provide information on full-time and part-time employment at different times of the year. The results were tabulated and arrayed by industry category.

The dominant industry in the Girdwood area is services, which accounted for an equivalent of 320.75 full-time jobs in 1992. Although the major single employer was the Alyeska Resort, this industry sector also included the Crow Creek Mine, the Little Bears Playhouse, and a large number of other, smaller employers.

The second largest industry sector in Girdwood in 1992 was construction, which had a total of 101.25 employees when converted to average annual full-time employment. Most were temporary jobs associated with construction of the new Alyeska Prince Hotel and tramway. However, several small contractors who live and operate out of Girdwood fell into this category.

**Table 2**

#### **Average Annual Full-time Employment 1992**

Industry Sector	Number	Percent of Total
Agriculture, Forestry, Fisheries	0.00	0.0
Mining	2.50	0.4
Contract Construction	101.25	17.5
Manufacturing	2.50	0.4
Transportation, Communication & Public Utilities	6.25	1.1
Trade	91.75	15.9
Finance, Insurance & Real Estate	6.25	1.1
Services	320.75	55.4
Government	47.50	8.2
Federal	(16.00)	(2.8)
State	(7.50)	(1.3)
Local	(24.00)	(4.1)
<b>TOTAL</b>	<b>578.75</b>	<b>100.0</b>

Source: Municipality of Anchorage Employment Survey, August 1992

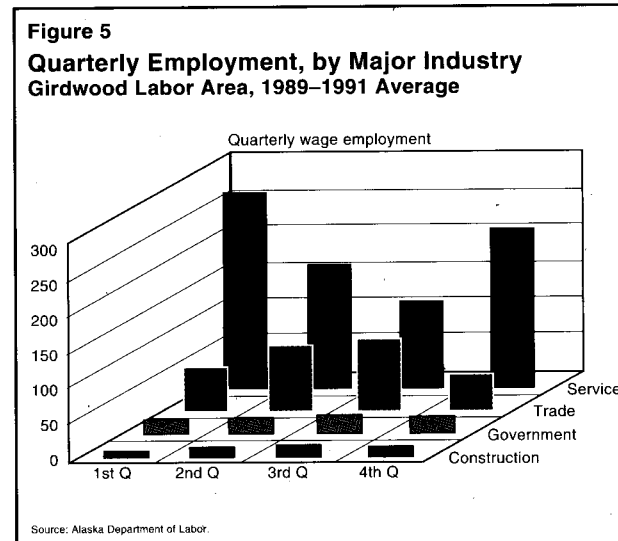
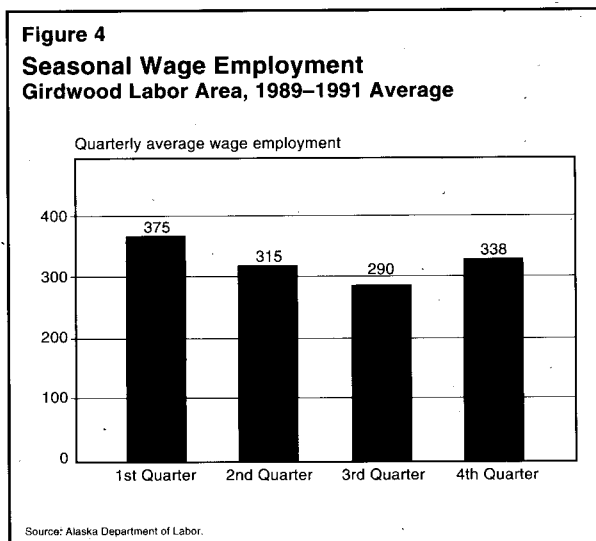
Trade was the third major industry sector in Girdwood in 1992. Although some jobs in this sector serve primarily local needs, most depend on visitors for a major share of their business. Included in the latter group are restaurants, bars and gift shops.

Other industry sectors in Girdwood are less well represented. Government accounted for an annual average of 47.5 full-time job equivalents in 1992. The major government employers were the Girdwood elementary/junior high school and the U.S. Forest Service's Glacier Ranger District. Other employment sectors accounted for a combined total of less than 15 full-time jobs in 1992.

**UNEMPLOYMENT AND SEASONALITY OF EMPLOYMENT**

Although there are no data available specifically for Girdwood, it is not believed that unemployment is a major problem locally. Furthermore, almost one half of local jobholders commute to Anchorage or work in other locations outside the Girdwood area. Nevertheless, Girdwood does experience marked seasonal fluctuations in employment and seasonal unemployment may be a problem for some local households.

Unlike most Alaskan communities, peak employment in Girdwood occurs in the winter months, reflecting the seasonal activities of Alyeska Resort, the community's major employer. Typically, employment at the Resort peaks during prime skiing weekends in the winter and is at its lowest in the summer months. However, unlike most skiing communities, Girdwood also has a strong summer tourist season. Except for a few employers directly involved in servicing skiing activities, most local businesses experience peak activity during the summer. This is particularly true in the trade sector where tourists and other visitors contribute to increased employment. As a result, the "low" periods of employment in Girdwood are months such as October and April, which fall between the winter skiing and summer tourist seasons.





Construction of the new Alyeska Prince Hotel and associated parking and skiing amenities got underway in 1992 and helped mask local employment seasonality in the summer and fall of that year. In July, 1992, there were 204 jobs in contract construction in Girdwood, most of them associated with the expansion of Alyeska Resort. Employment in this sector continued at a high level through 1993. A significant proportion of these jobs were held by Anchorage residents who either commuted each day to Girdwood or who lived temporarily in the community.

When the new Alyeska Prince Hotel opens, summer employment in Girdwood will show a significant increase. Management of the Resort anticipates that the hotel will have its highest rates of occupancy during the summer tourist season. In turn, this will translate into additional non-resort summer jobs in Girdwood, particularly in the trade and services sectors. However, it is anticipated that many of the new jobs will be filled by non-Girdwood residents. Any future expansion of resort development in the Girdwood area is likely to further accentuate winter and summer peaks of employment.

### RECENT TRENDS AND CHANGES

Trends in employment for the Municipality of Anchorage as a whole are not representative of those for Girdwood. However, the Alaska Department of Labor does compile "sub-area" insured employment data for the Girdwood area. Although they have major limitations in that local government employment and self-employed persons are not counted, these statistics do provide some indication of the changes that have taken place in Girdwood since 1990. A review of those data indicates that, although overall employment grew only about 4 percent between 1990 and 1992, strong growth was recorded in the retail trade sector, which grew almost 12 percent during the same period.

The most significant change in Girdwood's economy since 1990 is related to the expansion of Alyeska Resort. Major components of this expansion include construction of a 307-room hotel and associated parking amenities, a 60-passenger mountain tram and a new mountaintop restaurant. The tramway and mountaintop restaurant opened in late 1993, and the hotel opened in August, 1994. These improvements involve a corporate investment estimated at between \$60 and \$70 million and will significantly alter the scale and seasonality of the tourist industry in Girdwood. It is anticipated that during peak season Alyeska Resort's expansion will generate 300 new jobs, and indirectly 100 more in the area.

A second change affecting Girdwood's economy is the improvement of seven miles of the Seward Highway between Bird Point and the Alyeska Highway. Initial work on the first phase of the "Bird-to-Gird" project got underway in 1993, and the project is currently scheduled to be completed by the end of 1998. Upgrading of this route will greatly reduce the likelihood of road closure due to avalanches and will also make the daily drive for commuters safer and less stressful. Such improvements are important to Girdwood residents who commute by car to Anchorage and are equally important to Anchorage residents expected to commute to work in Girdwood.

### INCOME LEVELS

Personal and household purchasing power are comparatively high in Girdwood. In 1989, per capita income was \$25,769 (compared to \$19,620 for Anchorage) and median household income was \$47,920 (compared to \$43,946 for Anchorage). These figures partly reflect a statistically higher labor force participation rate by Girdwood residents and fewer dependents. The percentage of Girdwood residents reporting incomes below the poverty line 1989 was only about 1.5 percent, compared to 7.1 percent for Anchorage.

# Housing

Girdwood's multiple roles as a primary residential community, a second-home setting, and a resort community have produced several distinct housing submarkets, each with its characteristic housing stock, spatial arrangement, and occupancy patterns. Many of these characteristics are unique to Girdwood, reflecting the dominance of the resort/recreational character.

The most notable housing characteristic in Girdwood is that there are more second homes than primary homes and, as a result, there are more vacant than occupied dwelling units. In 1990, the community had a total of 1,227 residential dwelling units, only about 1 percent of the Municipality's total housing stock. However, 56 percent of the units in Girdwood were vacant. Most vacant units (86 percent) were second homes (seasonal, recreational or occasional use), while another 11 percent were for sale or rent. The remainder had been sold or rented and were either not yet occupied or were vacant for unidentified reasons.

Of the secondary homes, 53 percent were multi-family units, with most being located close to the ski resort. The remaining 47 percent were single-family homes. Whereas the second home market is skewed toward multi-family units, the primary home market is dominated by single-family homes.

Primary homes (those occupied by residents) account for less than half (44 percent) of the total housing units in Girdwood. However, nearly three fourths of them are single-family residences, with the remainder being multi-family (includes small number of mobile homes.) Compared to Anchorage, Girdwood has a much higher percent of residents living in single-family homes (74 percent to 52 percent).

Girdwood homes tend to be smaller than in Anchorage, with the median number of bedrooms per dwelling being 2.38 versus 3.07 in Anchorage. This probably reflects the fewer number of people per household in Girdwood, as well as the fact that over half of the units are second homes.

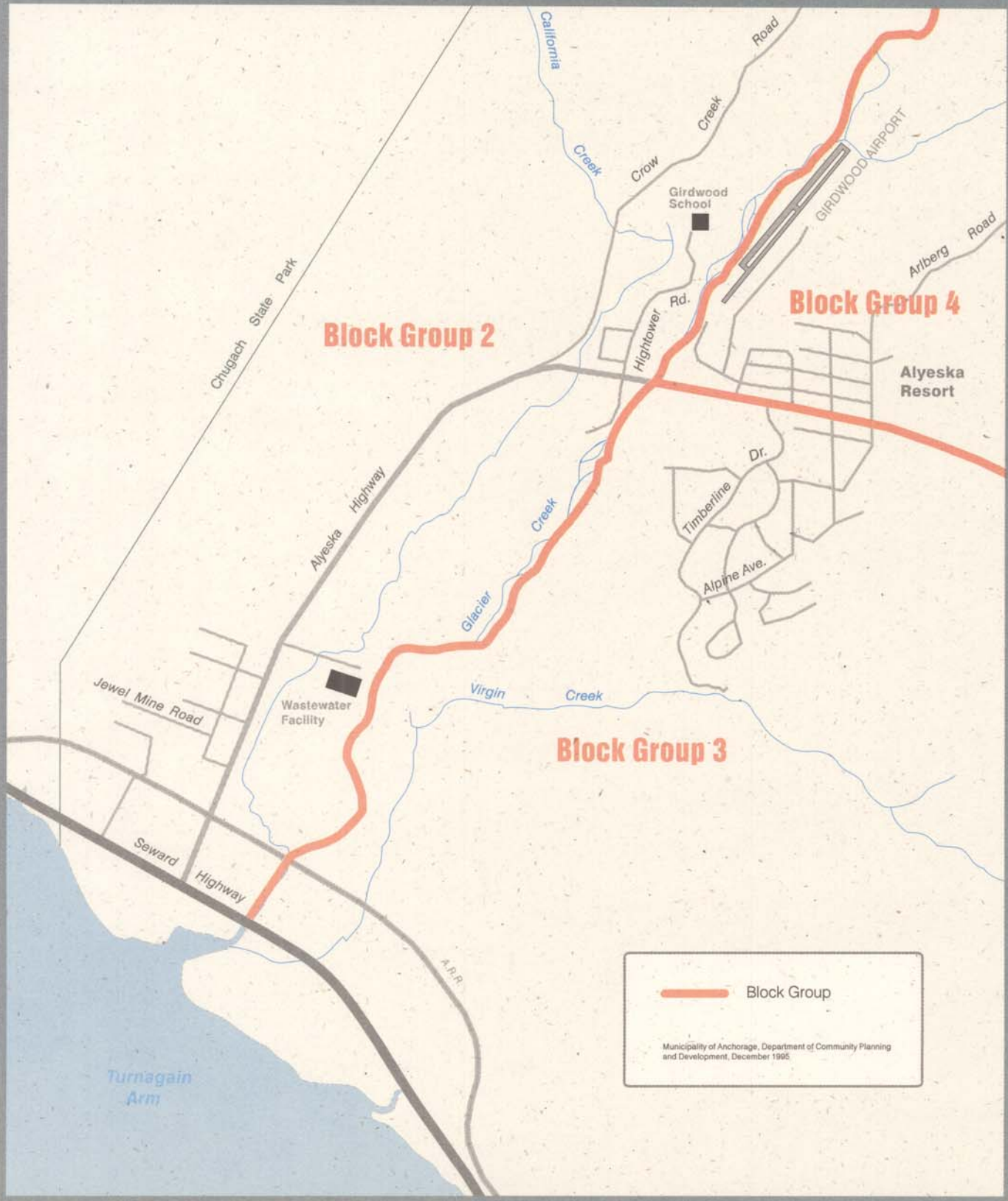
The distribution of dwelling units is not uniform throughout the Girdwood area. Proximity to the ski resort has heavily influenced the siting of most of the large multi-unit structures and other second homes in the valley. For example, Block Group 4 (see Map 5) contains 91 percent of Girdwood's dwellings in large multi-unit (10 or more units) buildings, 71 percent of its condominiums, and 52 percent of its second homes. By contrast, Block Group 2, the western side of the valley, includes only 9 percent of Girdwood's multi-unit dwellings, 3 percent of its condominiums, and 13 percent of its second homes.

**Table 3**  
**Household Income Distribution**  
**1989**

Household Income	Number	Percent of Total
Under \$10,000	13	2.6
\$10,000 - \$19,999	16	3.2
\$20,000 - \$29,999	83	16.5
\$30,000 - \$39,999	80	15.9
\$40,000 - \$49,999	91	18.1
\$50,000 - \$59,999	41	8.1
\$60,000 - \$74,999	66	13.1
\$75,000 - \$99,999	39	7.8
\$100,000 - \$124,999	45	8.9
\$125,000 - \$129,999	9	1.8
\$150,000 or more	20	4.0
<b>Total Households</b>	<b>503</b>	<b>100.0</b>
<b>Median Household Income</b>		<b>\$47,920</b>

Source: U.S. Census

# 1990 Census Block Groups



— Block Group

Municipality of Anchorage, Department of Community Planning and Development, December 1995

Housing densities vary throughout the valley, but some general patterns are worth noting. On the east side of the valley in Block Groups 3 and 4 are two residential subdivisions near Alyeska Resort. The single-family portions of these subdivisions range from 2.1 to 2.4 dwelling units per acre. The multi-family housing developments, which are located immediately adjacent to the resort, average around 12 dwelling units per acre on the south side of the resort area, and 40 dwelling units per acre on the north side. Densities actually exceed 60 dwelling units per acre in a couple of individual developments on the north side.

Away from the resort on the west side of the valley, in Block Group 2, nearly all residential development is in the form of single-family homes. Two major exceptions are an 8-unit condominium development in two 4-plexes along Alyeska Highway, and a 15-unit condominium development located in the new townsite.

Lot sizes vary considerably in Block Group 2. The original lots created by BLM along Alyeska Highway ranged from 1-3 acres in size. However, several were subsequently subdivided. Today, densities typically range from less than 1 dwelling unit per acre to 8 dwelling units per acre.

The availability of housing in Girdwood is limited: Despite the overall high vacancy rate, the number of units for sale or rent was only about 8 percent of all units. Most second-home owners appear reluctant to rent or lease their homes. Consequently, without new construction, Girdwood's existing housing stock will continue to be limited in the demand it can accommodate.

**Table 4**  
**Housing Occupancy Characteristics**  
**1990**

Housing Occupancy	Number
<b>Occupied Units</b>	<b>544</b>
Area 2 -- West Valley	(231)
Area 3 -- South Alyeska	(191)
Area 4 -- North Alyeska	(122)
<b>Vacant Units</b>	<b>683</b>
Area 2 -- West Valley	(118)
Area 3 -- South Alyeska	(239)
Area 4 -- North Alyeska	(326)
<b>Total</b>	<b>1,227</b>

Source: U.S. Census, 1990

**Table 5**  
**Vacant Housing Characteristics**  
**1990**

Vacant Unit Type	West Valley	South Alyeska	North Alyeska	Total
Unit for Rent	19	25	6	50
Unit for Sale	8	7	8	23
Unit Rented or Sold, Not Occupied	7	0	1	8
Seasonal/Recreational/Occasional Use	76	203	306	585
Other Vacant	8	4	5	17
<b>TOTAL VACANT UNITS</b>	<b>118</b>	<b>239</b>	<b>326</b>	<b>683</b>

Source: U.S. Census, 1990

## *Projections for Employment, Population and Housing*

The fundamental forces that drive community change are employment and population growth. Growth creates new demand for the use of land, with new housing typically being the single most important use in terms of the amount of land consumed.

There is always a certain degree of uncertainty in projecting future economic and population growth. Much future activity and growth will occur as a result of variables that are beyond the local ability to control, although they may be influenced by local actions. Therefore, it is important to anticipate, as reasonably as possible, those variables over which there is little local control, and combine them with local actions to form the assumptions upon which the projections will be based.

Although the uncertainty of long-range projections is recognized, it is still important to make best "guessestimates." The projections are used to indicate future land demands for various uses and activities which, in turn, can influence spatial development patterns. Projections are also used to guide the size and placement of public facilities and utilities.

In the course of developing this plan, employment, population and housing projections were developed for various land use alternatives. These projections were based upon differing levels of new resort development that could possibly occur in the Girdwood area over the next two decades, or longer.\*

The projections also considered the degree to which the community would grow without additional resort development. Such growth would result from people desiring to live in Girdwood, but whose economic livelihood was derived elsewhere. Most of this group would commute to jobs in Anchorage, as many of Girdwood's residents already do.

The basic assumptions underlying the projections used in this plan are as follows:

- There will continue to be local, regional, national, and international interest in outdoor recreational activities as a way to occupy leisure time.
- Alaska, particularly the southcentral region, will continue to attract visitors who are interested in the area's natural scenery, wildlife, history, and for a variety of recreational opportunities.
- It is in the State's best interest, as well as that of the region and local community, to foster a variety of year-round recreational activities, supported by varying levels of support services.
- The Girdwood valley and the immediate environs currently offer a limited range of opportunities for outdoor recreation.
- The Girdwood valley has natural features and space, within limits, for the development of additional recreational activities, and the lodging and services to complement them.
- Girdwood will expand as a destination resort/recreational community, as well as a satellite community within the larger Anchorage metropolitan area.
- The State and Municipality will make available, as appropriate, ample land for community and resort/ recreational development in the Girdwood area.

Tables 6 and 7 indicate 20-year projections for employment, population, and housing that form the basis for the **Girdwood Area Land Use Plan**. To a large degree, these projections reflect the moderate level of new resort development identified as scenario/alternative 2/2A in studies completed by Sno.engineering, Inc., and Kevin Waring Associates.

\*The land use alternatives, and the assumptions and projections which they are based upon, are described separately in the Girdwood Community Impact Study, by Kevin Waring Associates, et al., August, 1993. This report also includes a description of resort alternatives prepared by Sno. Engineering, Inc.

**EMPLOYMENT PROJECTIONS**

The 20-year employment projections include a combination of new resort and visitor industry employment, coupled with increasing community-based, local-serving employment. The initial major increase in employment will accompany the opening of the Alyeska Prince Hotel and mountain restaurant. This is projected to add 300 new resort-related jobs, as well as indirectly create 100 additional jobs in the community.

The employment projections also assume that additional skier-based recreational development will occur during the next 20 years in the Glacier-Winner Creek area. The scale of that development is assumed to be comparable in capacity and number of visitors to the maximum level of development at Alyeska Resort under its current expansion program. New recreational development, combined with new base area resort facilities, is projected to add another 700 jobs in the Girdwood valley.

Separate estimates are included in Table 6 for direct on-site and indirect off-site employment. On-site employment includes jobs within the resort area. Off-site employment includes new jobs elsewhere in Girdwood supported by community growth and increased visitor activity.

Currently, Girdwood's employment multiplier is about 3.5:1. That means 3.5 jobs in basic industries (e.g., the visitor industry) generate one additional support sector job in trade, construction, public and private services. Girdwood's multiplier is low, chiefly because residents purchase many goods and services in Anchorage. This situation is not projected to change significantly over 20 years. However, as Girdwood's population and visitor numbers grow, the local economy will expand and diversify, resulting in an off-site employment multiplier projected to be closer to 3:1 for new resort development.

**POPULATION PROJECTIONS**

Table 6 indicates the change in population that is projected from the 1993 base year to the year 2013. Included are projections for residents and visitors that would be expected on a typical in-season day.

Even without additional resort development, Girdwood's resident population is anticipated to double over the next 20 years. This equates to an annual average growth rate of approximately 3.5 percent. A further increase of more than 600 residents is anticipated, however, as a result of additional resort development. Thus, the housing and land demand projections in this Plan are based upon a resident population that is projected to increase by about 145 percent by the year 2013.

It should be noted that the resident population projection assumes that a majority of the resort workforce will be transient/seasonal workers, and commuters from Anchorage's labor pool. This assumption, however, restricts overall population growth. If more workers become Girdwood residents, local population growth will increase.

**Table 6  
Projections for Employment, Population, and Housing**

	1993 Current Estimates	Incremental Increase	2013 (Total)
<b>Total Employment</b>	<b>610</b>	<b>1,873</b>	<b>2,483</b>
Direct-Resort-On-Site	300	1,000	1,300
Indirect-Off-Site (trade/services)	310 (207)	873 (582)	1,183 (789)
<b>Total Population</b>	<b>3,230</b>	<b>4,945</b>	<b>8,175</b>
Resident	1,350	1,950	3,300
Visitor (overnight)	1,880 (805)	2,995 (1,510)	4,875 (2,315)
Visitor (daytime)	(1,075)	(1,485)	(2,560)
<b>Total New Housing Demand</b>	<b>1,314</b>	<b>1,559</b>	<b>2,873</b>
Primary Homes	631	895	1,526
Secondary Homes	683	549	1,232
Employee/Transient Housing	N/A	115	115
<b>Vacancy Factor</b>	<b>(8%)</b>	<b>(5%)</b>	<b>(5%)</b>

Also included in the population projections are nonresident visitors. Projections of visitors have been included because the demands they place on lodging/camping, local circulation, commerce, and public utilities and services must also be taken into consideration.

**HOUSING PROJECTIONS**

New population growth in Girdwood will create a demand for additional housing. Table 6 includes projections for both primary and secondary housing demand. Also included is the addition of a certain amount of employee/transient housing.

Housing projections were also distinguished by housing type (single-family/multi-family) for both primary and secondary homes. The projected housing splits by type are identified in Table 7. The housing type splits are significant because each has different siting and density characteristics that influence the land demand and placement within the valley.

**Table 7**  
**Housing Projections by Type**

	1993 Current Estimates	Incremental Increase	2013 (Total)
<b>Primary</b>			
Single-family	467	662	1,129
Multi-family	164	233	397
<b>Secondary</b>			
Overnight	321	258	579
Daytime	362	291	653
Employee/Transient Housing	N/A	115	115
<b>TOTAL</b>	<b>1,314</b>	<b>1,559</b>	<b>2,873</b>

Note: Projections include a vacancy factor.

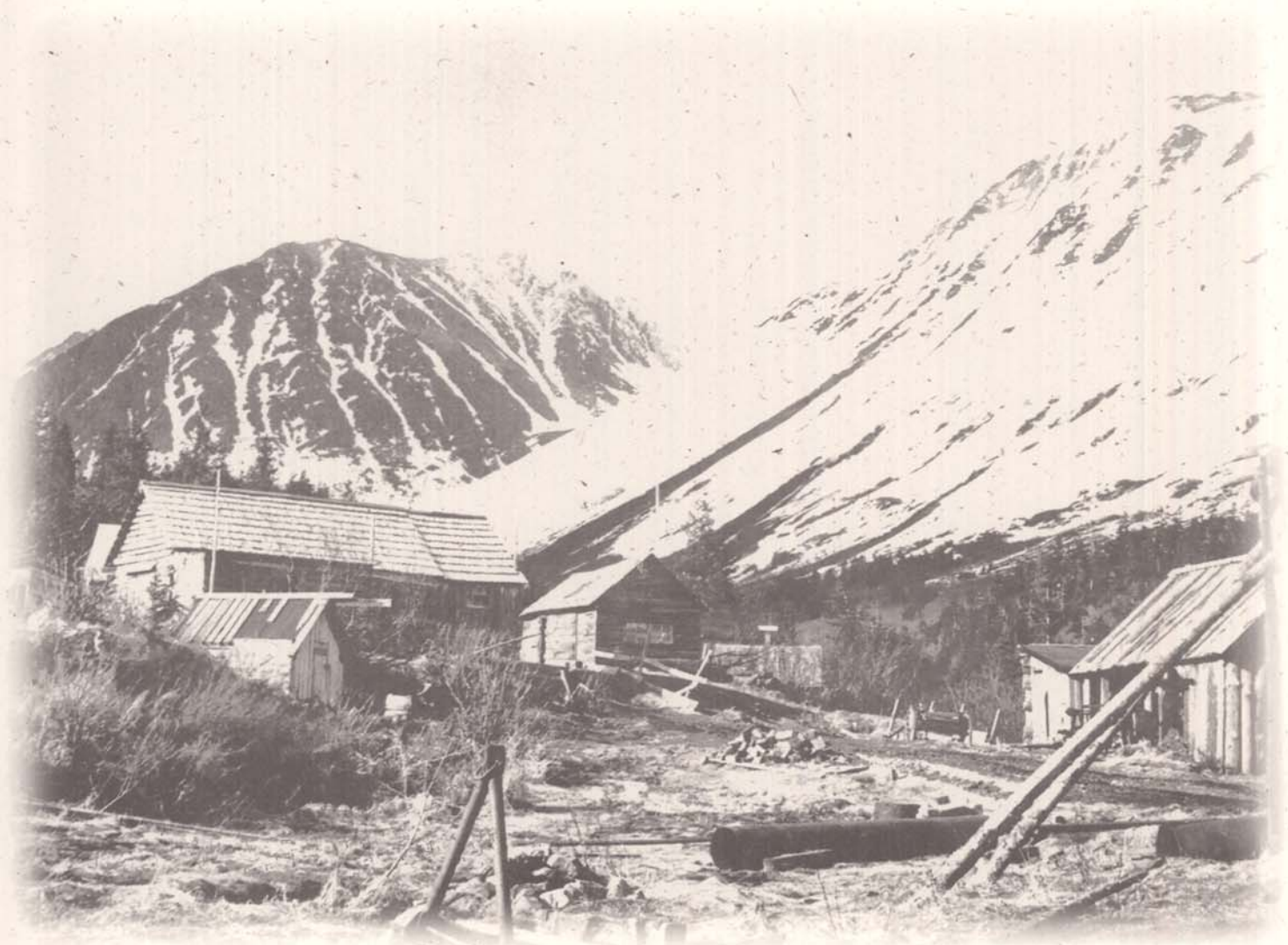
The projected demand for primary homes is keyed to resident population growth, and the assumption that the average number of people per household will remain constant. It also presumes that the present ratio of single-family to multi-family homes will remain constant.

Like other resort communities, there will also be demand for additional second homes, which will continue to comprise a sizable share of the total housing stock in Girdwood. Currently, nearly all of the second homes are owned by Anchorage residents, with some owned by residents of the neighboring Kenai and Matanuska-Susitna Boroughs. Only a handful are presently owned by non-Alaskans.

Even though second homes currently outnumber primary homes in Girdwood, the rate of growth for second homes is projected to be less than for primary homes over the next 20 years. Should Girdwood become a national and international destination resort, the feeling is that most new second homes will continue to be owned by Alaskans. These projections assume that most out-of-state visitors overnighiting in Girdwood would be staying in commercial lodging.

A significant portion of the visitor industry employment is seasonal. Many of the seasonal jobs are relatively low paying and are typically filled by nonresident workers. A certain amount of housing is projected specifically to meet the needs of these employees. The amount of housing equates to 1 unit for every 2.5 transient/seasonal employees.

Chapter 5  
*Community Attitudes  
and Aspirations*



CROW CREEK MINE BEGAN AS A COMMERCIAL GOLD MINING OPERATION JUST BEFORE THE TURN OF THE CENTURY AND WAS STILL OPERATING IN 1940, THE DATE OF THIS SCENE OF THE MINING CAMP. TODAY, THE CROW CREEK MINE IS PRESERVED AS A NATIONAL HISTORIC SITE WHERE RECREATIONAL PLACER MINING IS STILL PRODUCING GOLD.





*Taking a walk.*

**G**irdwood residents expressed their attitudes about future community and resort development in the Girdwood area in numerous public meetings and community surveys. Additionally, many residents stated their views in correspondence to public agencies. In January, 1993, Girdwood property owners (residents and non-resident owners alike) were surveyed on their attitudes toward Girdwood's future development. Responses were tallied separately for primary and secondary residents.\*

The features that primary residents most liked about the Girdwood area were its small-town atmosphere (64 percent), followed by the natural environment (13 percent). Access to skiing and other outdoor recreation (5 percent) and distance from Anchorage (5 percent) were also cited. Second-home owners most often cited Girdwood's skiing and other outdoor recreation (44 percent), followed by its small-town atmosphere (20 percent) and its natural environment (13 percent).

Primary and secondary residents value various features of the Girdwood area differently. Full-time residents care most about the quality of daily life. Second-home owners most enjoy the recreational assets. The principal preferences of primary and secondary residents are different but not irreconcilable. Indeed, many primary and secondary residents share a common regard for Girdwood's small-town atmosphere and natural environment.

Primary and secondary residents hold different attitudes toward future resort expansion and different reasons for favoring resort development. Girdwood residents as a group expressed some uncertainty, with 34 percent favorable, 24 percent unfavorable, and 41 percent of mixed opinion. Among Girdwood residents who favored future resort expansion, the most commonly cited reason was economic development, followed by improved ski amenities and

\*A complete description of the Girdwood Area Survey and its results are contained in the Appendix. These survey results suggest that, if resort expansion can be developed without impairing Girdwood's small-town atmosphere as perceived by residents, it may be feasible to frame a development strategy that satisfies the foremost concerns of both full-time residents and recreational homeowners.

increased property values. No full-time residents favored resort expansion for the sake of increased tourism and recreation. Secondary residents were decidedly more favorable (71 percent) toward development; 23 percent held mixed opinions; and few were unfavorable (5 percent). Among secondary residents who favored resort development, the most commonly expressed reason was improved skiing and amenities, followed by economic development and increased tourism and recreation.

Shortly after the survey, the Four Valleys Community School, Inc., sponsored two Girdwood Vision Consensus-Building Forums that focused on three questions about the Girdwood community. Results correlated very closely with community survey findings. The three questions and the most numerous responses were as follows.

1. Question:  
What do you like most about Girdwood?

Responses:  
Small-town lifestyle; scenic beauty; low pollution levels; wilderness setting; recreational environment/opportunities.

2. Question:  
What do you think needs to be done to improve Girdwood?

Responses:  
Local control of planning & zoning process; multi-purpose community center; improved recreational facilities; improved/expanded trails; planned town center; natural gas availability; greater political autonomy.

3. Question:  
As Girdwood grows and develops as a community, what are the major concerns that need to be addressed?

Responses:  
Loss of small-town atmosphere; air pollution; noise pollution; rapid growth; local control/autonomy; zoning enforcement; affordable housing; infrastructure costs.

The results of these two community surveys also closely resembled community attitudes toward earlier resort development proposals (Leonard Lane Associates 1984; Ott Water Engineers, Inc., 1987). This consistency over time indicates that these community attitudes are longstanding and deeply rooted. Thus, the community overall has held a consistent and balanced attitude toward ongoing ski resort development and town growth. Many of the same attitudes have been expressed about Alyeska Resort's recent expansion program.

Overall, community residents did not seem strongly predisposed or polarized about the issue of future resort expansion. Rather, residents seemed most immediately concerned with the quality of community life. Additional resort development seems acceptable as long as specific concerns about community life are addressed. Community diversity is valued, but concerns were expressed at public meetings that, with additional large-scale ski resort development, the visitor industry might overwhelmingly dominate the local economy and community life.

Following are four broad goals with respective general policies/strategies which reflect the community consensus reached in the community surveys, local public meetings, and the correspondence record from residents regarding proposed developments in Girdwood:

- *Perpetuate Girdwood's small-town atmosphere.*
- *Preserve the valley's natural environment.*
- *Provide a variety of year-round recreational opportunities.*
- *Provide facilities and services to maintain and enhance the quality of community life.*

These goals were used in the development of Girdwood's Land Use Plan. They can also be used as general standards for evaluating major development proposals, and as a basis to identify and propose appropriate mitigation measures for adverse community impacts.

**GOAL: *Perpetuate Girdwood's Small-Town Atmosphere***

- Minimize induced population growth from resort expansion by recruiting temporary/transient employees for the resort workforce during seasonal peak, and require provision of employee housing for a certain portion of these resort workers.
- Phase development of new residential tracts to maintain neighborhood scale; perpetuate the predominately low-density, single-family character of Girdwood's resident community; situate multi-family housing in dispersed pockets with higher density development located within the resort areas, or next to major commercial centers.
- Expand the town core as a commercial and community center.
- Dispose of Heritage Land Bank land intended for community development in keeping with community and land use objectives as outlined in this Plan, and any subsequent revisions.
- Reduce vehicular congestion through efficient land use, local circulation patterns, and adequate parking.
- Limit industrial land uses to community construction and maintenance-related functions.
- Provide suitably located visitor services and amenities; minimize visitor intrusions into residential neighborhoods.
- Protect visual quality of the Alyeska Highway corridor; incorporate aesthetically attractive design features into man-made environment.

**GOAL: *Preserve Girdwood's Natural Environment***

- Establish permanent trail corridors and public open spaces.
- Designate Four Corners as protected public open space. Excepting transportation and utility crossings, limit use of open space area to recreation.
- Avoid placement of buildings intended for human occupancy in natural hazard areas.

**GOAL: *Provide a Variety of Year-round Recreational Opportunities***

- Reserve appropriate land areas that are suitable for various recreational opportunities for the benefit of local residents and visitors alike.
- Improve resident pedestrian access to local trails, recreational facilities, and natural areas. Establish a system of neighborhood parks with pedestrian access from nearby residential areas.

**GOAL:** *Provide Facilities and Services to Maintain and Enhance the Quality of Community Life*

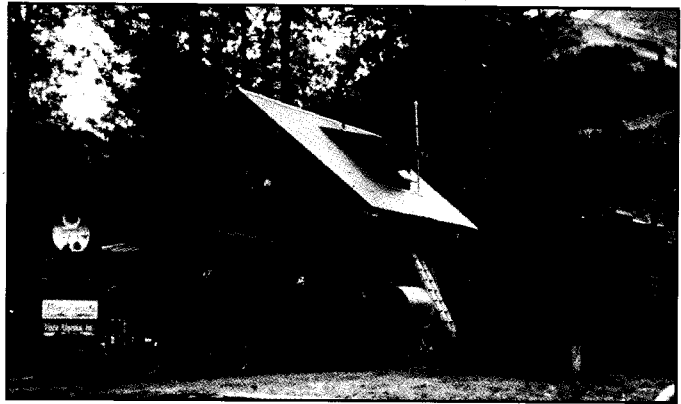
- Schedule water, sewer, and road improvements for community expansion.
- Place all new telephone, cable, and electrical distribution lines underground.
- Develop a joint-use, multi-purpose community center for recreational, cultural, and civic functions.
- Provide a range of public indoor, as well as outdoor, recreational facilities.
- Build new public safety facilities for police and fire services; purchase new fire-fighting equipment.
- Explore complementary shared use of new community and resort facilities.
- Implement shuttle-bus service to connect the resort facilities with each other and with Girdwood commercial districts.

Chapter 6

*Current Land Use Pattern,  
Ownership, and Suitability*



A CROWD GATHERED AT GIRDWOOD FOR THE OPENING DEDICATION OF THE SEWARD HIGHWAY ON OCTOBER 19, 1951. THE OPENING OF THE HIGHWAY PROVIDED MUCH EASIER ACCESS TO GIRDWOOD FROM ANCHORAGE, WHICH LATER LED TO INCREASING INTEREST IN THE VALLEY'S RECREATIONAL POTENTIAL.



*New townsite area.*

T

Three important factors that will influence future development are: existing land uses and development pattern; current and anticipated land ownership; and the physical features that will allow or constrain development.

### *Existing Land Use Pattern*

Girdwood is an extended community that originally started at tidewater, then began to extend up valley toward Crow Creek, and later diverted across the valley to the ski area at Mount Alyeska. Following the 1964 earthquake, the townsite was relocated from one floodplain to another. Today, the community of Girdwood is spread out, and is divided and surrounded by natural hazard areas. There is only one road outlet from the valley, with development most concentrated at the upper end below Mount Alyeska.

Girdwood's existing development is the result of its past history and the valley's geographical features. While the location of development was most influenced by siting of the early road connecting the Crow Creek mines to tidewater, and the establishment of skiing facilities on Mount Alyeska, the development pattern was heavily influenced by public land disposals and subsequent subdivision of those lands.

#### **OLD GIRDWOOD TOWNSITE**

The earliest subdivision and land disposal occurred at the original townsite. Platted in 1916, the original townsite is laid out in a rectangular grid. Streets are straight and evenly spaced. Although varying in size, most lots are very small, typically between 3,600 and 6,000 square feet in area.

The original townsite area is only partially developed, with more lots currently vacant than in use. Existing development includes a mix of uses, with the most prominent use being the Girdwood Station, a small commercial mall at the corner of Seward and Alyeska Highways. Other uses in the area consist of a small number of residences and some light industrial uses (storage/warehousing), as well as two utility facilities.

Recent development in the townsite area has been hampered by the small lot sizes coupled with the lack of an adequate sewer system. This situation will change, however, with the planned extension of a sewer trunk line to the area in the near future.

**ALYESKA HIGHWAY/WEST VALLEY AREA**

This area, which extends from the lower portion of Crow Creek Road down to the original townsite along what is now the Alyeska Highway, was platted by U.S. Bureau of Land Management in the early 1950's as part of its homesite land disposal program. Original lot sizes generally ranged from 1 to 3 acres, with direct access provided from each fronting lot onto Alyeska Highway. One of the minimum development requirements imposed by the Bureau of Land Management was the construction of a livable 10-foot by 12-foot structure on the lot.

Many lots have remained as they were originally platted, while others have been further subdivided into various lot sizes and configurations. One of the consequences of this early subdivision and land disposal is the many closely spaced driveways accessing directly onto Alyeska Highway. Some of the old "livable" structures still remain.

The predominant form of land use along this stretch of Girdwood is residential, with single-family homes being the primary form of housing. Several lots have more than one dwelling. There are also a handful of small commercial establishments. Those which regularly generate the most traffic are the bar/restaurants on Crow Creek Road.

**NEW GIRDWOOD TOWNSITE**

The remaining development patterns in Girdwood derived from the establishment of the ski resort and relocation of the townsite area. These actions resulted in three separate public land disposals in the 1960's, which in turn led to three major subdivisions.

Following the 1964 earthquake, a new townsite area was platted between Glacier and California Creeks next to Alyeska Highway, then being built to the ski resort. The commercial portion, located on the north side of the highway, focused on a small version of the traditional town square design. Small business lots, about 6,000 square feet each, surround a small internal town square park. Other lots were platted across Hightower Road, closer to Glacier Creek.

The new Girdwood townsite retains a mix of commercial and residential uses today. Residential uses include a small trailer park, a 15-unit condominium, and a few single-family homes. Businesses include a small convenience store, two restaurants and a few other commercial services. Girdwood's Post Office, a focal point in the community, is also located here.

There is a small-town quaintness to the area; however, it is limited in its ability to function on its own as Girdwood's commercial core. Its size is constrained by floodplains on the east and west sides, by the Alyeska Highway to the south, and the Girdwood school to the north. It is further constrained at the present time by a well site reserve area, which surrounds the townsite's water source.

**Table 8  
Existing Land Use and Vacant Land**

Developed Land	Land Area (acres)
<b>Residential</b>	253
One- & Two-family	(236)
Multi-family	(15)
Mobile Home Park	(2)
<b>Commercial</b>	64
<b>Commercial Recreation</b>	1,494
<b>Industrial</b>	154
<b>Transportation</b>	174
<b>Utilities</b>	10
<b>Public Lands and Institutions</b>	47
<b>Parks</b>	41
<b>TOTAL</b>	<b>2,237</b>
<b>Undeveloped Land</b>	<b>Acres</b>
<b>Municipal</b>	5,182
<b>State</b>	6,390
<b>Private</b>	288
<b>TOTAL</b>	<b>11,860</b>

*Aerial Photograph - Girdwood Valley*

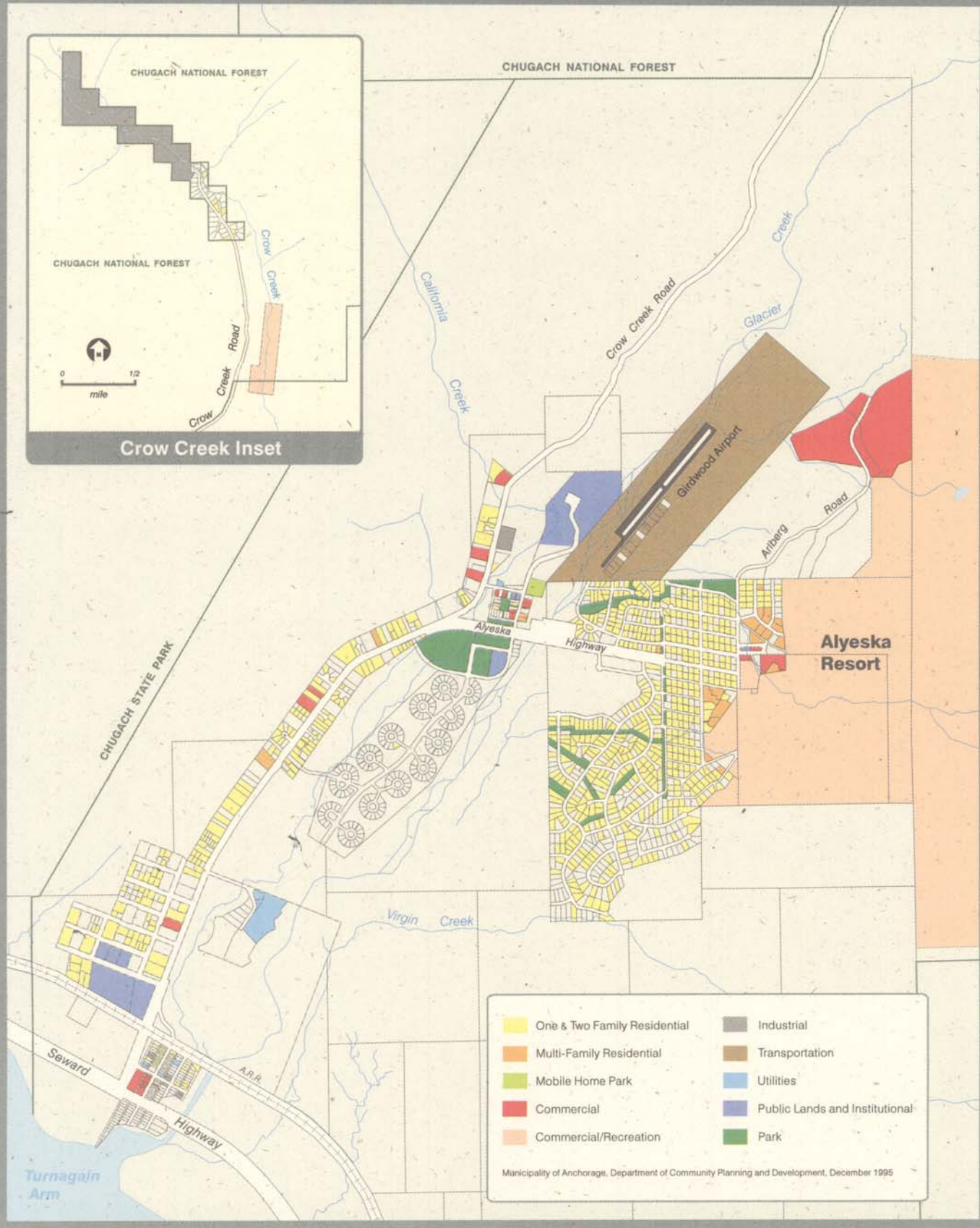
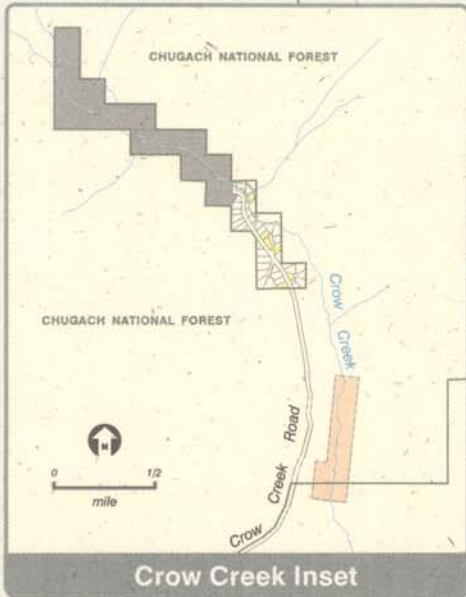


Date of Photography: July 1991

Municipality of Anchorage, Department of Community Planning  
and Development, December 1995



# Existing Land Use



One & Two Family Residential	Industrial
Multi-Family Residential	Transportation
Mobile Home Park	Utilities
Commercial	Public Lands and Institutional
Commercial/Recreation	Park

Municipality of Anchorage, Department of Community Planning and Development, December 1995

The residential portion of the new Girdwood townsite was platted on the south side of Alyeska Highway as a cluster subdivision. The pattern took the form of several small circular clusters. Each small lot shared common open space on one side, and a shared cul-de-sac driveway on the opposite side. Although lots in the commercial area were sold in public auction, the residential portion was not. With the exception of three lots, the residential portion, commonly known as the "squirrel cage," remains in public ownership in the Heritage Land Bank.

### **ALYESKA SUBDIVISIONS**

The other two subdivisions initially created in the 1960's were Alyeska Subdivision and Alyeska Basin Subdivision. Alyeska Subdivision, located immediately adjacent to the ski resort, has a standardized grid of uniform streets and lots. Most lots average 12,500 square feet in size and are developed with single-family homes. The exceptions are two areas next to the resort, where lot sizes vary and where mid- and high-density multi-family housing prevails.

Alyeska Basin Subdivision is primarily developed with single-family homes. Lots vary in size from under 9,000 to over 20,000 square feet, with the average being from 14,000 to 16,000 square feet. Like Alyeska Subdivision, Alyeska Basin was developed with its own community water system, which was later acquired and upgraded by Anchorage Water and Wastewater Utility.

Unlike other subdivided areas in Girdwood, Alyeska Basin Subdivision was designed with a curvilinear street system, taking into account the natural features in the area. The street design, however, has led to a funneling of local traffic onto Timberline Drive, the subdivision's only roadway connector to Alyeska Highway on the south side.

Alyeska Basin also contains two large unsubdivided areas. One is at the southeast corner where the mountainside topography steepens and where future residential development will be limited. The other unsubdivided area is at the northwestern corner of Alyeska Highway and Timberline Drive. Most of the area is wetlands, with limited stands of spruce/hemlock and a grove of cottonwoods along the highway.

### **RESORT AREA**

Alyeska Resort facilities were initially built at the base of Mount Alyeska, near the terminus of Alyeska Highway. Although a new day lodge was constructed in this area a short while ago, the focus of resort activity, particularly for overnight destination visitors, is shifting northward about four-fifths mile to the site of the new Alyeska Prince Hotel and tramway. The two areas are connected by Arlberg Road. Between the new and old resort base facilities, Alyeska Resort has also acquired two tracts of land for future additional resort lodging.

Over the years, a number of public facilities have been provided in Girdwood that have had a bearing on the way land use patterns have developed. The most obvious is Alyeska Highway. However, a significant facility in land area is Girdwood Airport. Following the 1964 earthquake, the state-owned airport was relocated from the old townsite area site seaward of the Seward Highway to the very center of the valley between Glacier Creek and Alyeska Resort.

The present airport occupies 174 acres. Together, the Moose Meadows wetland, airport and Girdwood School site have created a barrier to community expansion up valley, except along mountainsides.

## **CROW CREEK**

The only development up valley is in the Crow Creek area. Just below the trailhead for the popular Crow Pass Trail is the Girdwood Mining Company, which has a commercial placer mining operation on approximately 140 acres. Immediately below the mining company property is Raven Mountain Estates Subdivision, created in 1966 from part of an old patented federal mineral survey. Although the subdivision is now nearly 30 years old, it is remote. Only 6 of the 44 lots have been developed, all with single-family homes.

Below Raven Mountain Estates Subdivision is the Crow Creek Mine. Today the mine is owned and managed by a local family, who operate it as a recreational/historical enterprise. Many of the original structures and equipment from the early mining days have been preserved on site.

The Crow Creek area is still somewhat remote. Access is provided by a narrow unimproved gravel roadway. No utilities have been extended to this area of the valley. Major concerns with future development, however, will focus on the high avalanche hazard potential that is present over much of the area.

## *Land Ownership*

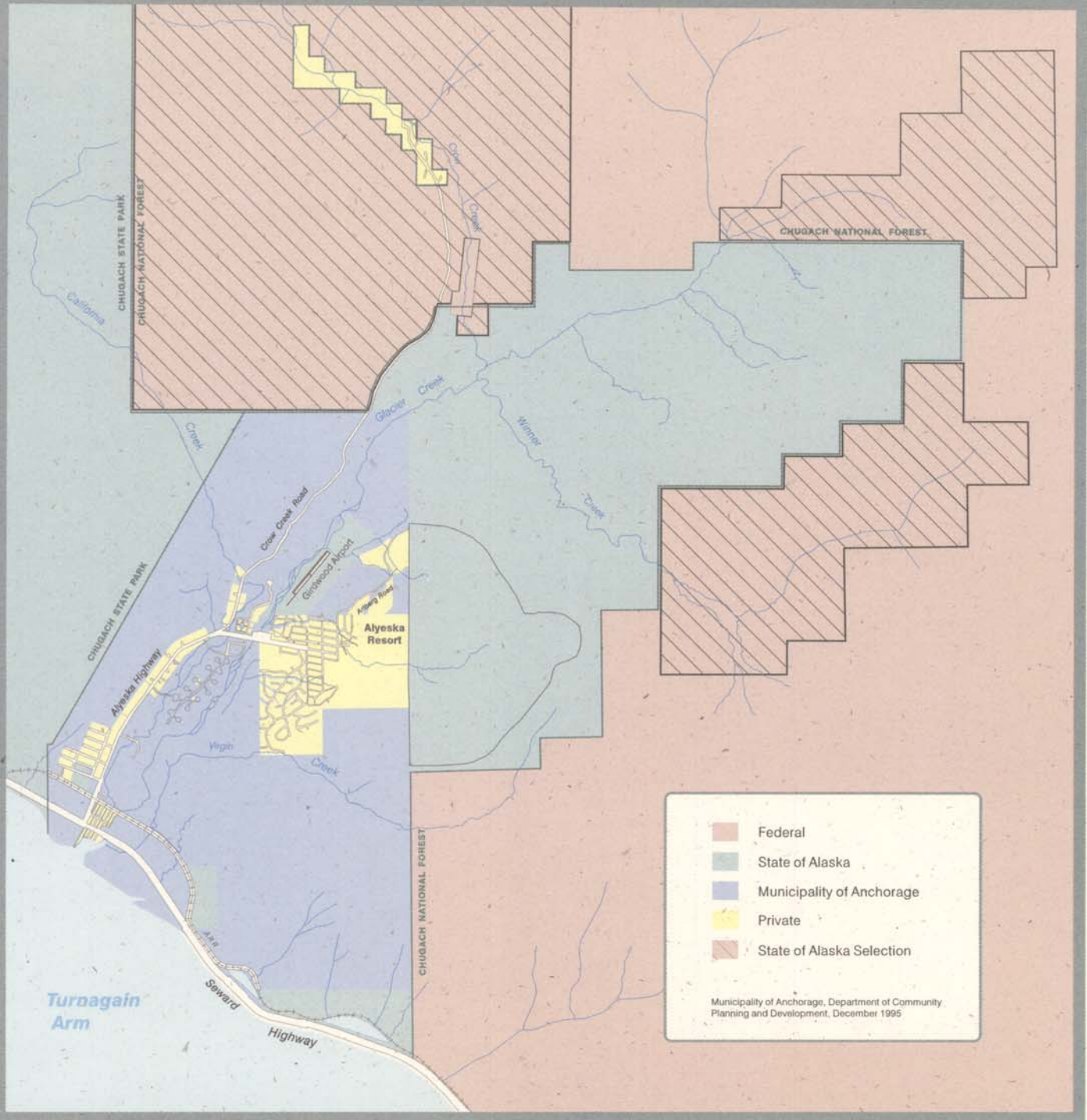
The community of Girdwood, as well as the resort, has been built upon public land disposals of the past. This method of community and resort growth will continue in the future. Although there are more than 300 remaining undeveloped privately owned parcels in the Girdwood area (including Crow Creek), future community growth and resort/recreational development will require further disposals of land from the public domain.

Map 8, Current Land Status, depicts the status of land ownership in the Girdwood valley. Undeveloped private land comprises less than three percent of the land supply. Most undeveloped/uncommitted land (leased or permitted lands are committed) is owned by the State or the Municipality. Most of the proposed future development areas are currently municipally-owned lands in the lower portion of the valley, surrounding the Girdwood community.

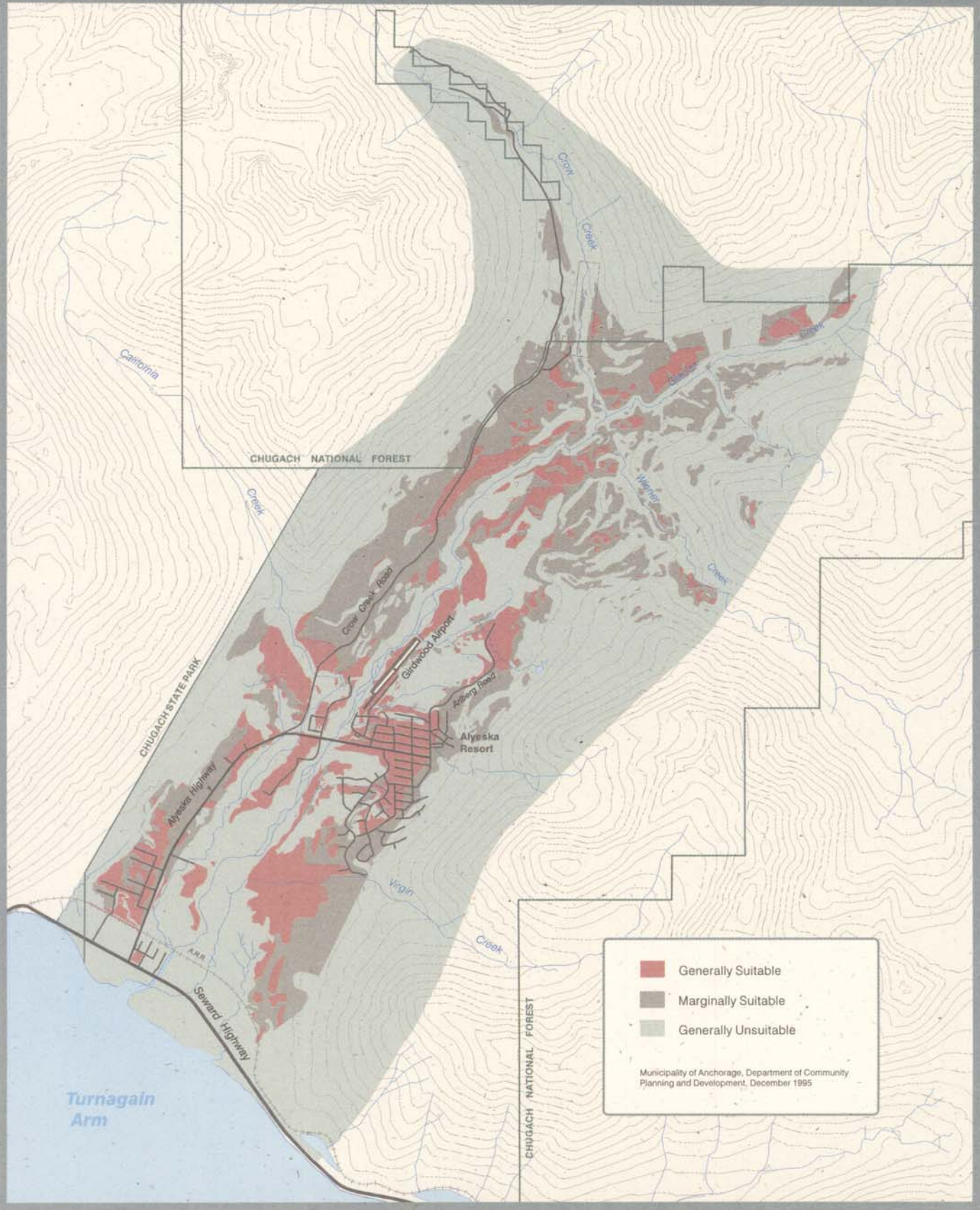
Nearly all of the state lands are located in the upper valley, including the mountain massif located between Glacier and Winner Creeks. The Municipality, however, is eligible to select another 1,000 acres of state land in the upper valley. The municipal land selection will focus on the valley bottom where future resort/recreational base facilities are most likely to be located. The State will retain the mountain slopes where additional alpine skiing facilities may be located.

The State has also selected National Forest land encompassing Crow Creek valley and the upper portion of Winner Creek. These selections, however, have not yet been finalized.

# Current Land Status



# Community Development Suitability



## *Land Suitability*

In order to foster a successful mountain resort community, care needs to be taken to preserve those natural features which give the area its scenic and open space identity. Development should be located where it can take place with minimal cost and disturbance, free of natural hazards.

As noted previously, the Girdwood valley has many natural features that, individually or in conjunction with others, may pose significant problems to development. Map 9, Community Development Suitability, contains a general classification of the physical suitability of the valley area for community development (i.e., roads, utilities, and structures). Physical features that were considered included soil and groundwater conditions, slope, wetlands, and natural hazards such as floods, avalanches, and other mass-wasting events.

The Community Development Suitability Map is intended to be generalized and not site-specific. Many physical conditions can vary within a short distance. However, it gives an overall picture of where new development should be directed, as well as those areas which should be avoided.

Areas identified as being generally suitable have characteristics that would allow development to occur with a minimal amount of cost, environmental disturbance or hazard. Areas identified as marginally suitable may be developable, but contain certain features that will require a greater degree of specialty design.

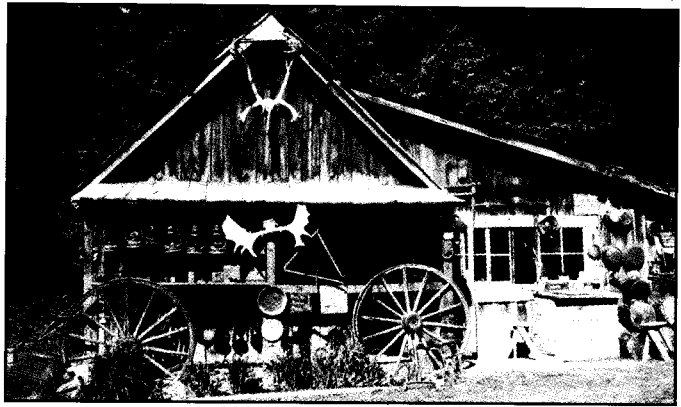
Much of the area, for example, shown as marginally suitable is associated with moderately-sloping terrain. In such areas, extra care needs to be taken to address soil stabilization, and erosion and sedimentation control. Additional disturbance with cut-and-fill operations may also occur; and there may be a moderate degree of hazard that requires specific siting and design measures be taken.

For the most part, those areas identified as generally unsuitable should be avoided and left in a natural state. Costs of development, environmental disturbance, or high exposure to natural hazard would make development undesirable. However, there may be certain instances where the benefit of development may outweigh the cost, and the environmental disturbance or hazard may be satisfactorily mitigated. Such instances should generally be considered the exception rather than the rule.

Chapter 7  
*Land Use Plan*



IN THE MID-1950's, THE GIRWOOD VALLEY BEGAN TO ATTRACT THE ATTENTION OF LOCAL SKI ENTHUSIASTS. BEFORE ANY SKI FACILITIES WERE BUILT, SKIERS WERE AIRLIFTED BY HELICOPTER FROM THE VALLEY FLOOR TO THE UPPER SLOPES OF MOUNT ALYESKA, AS SEEN IN THIS 1958 SCENE.



*Crow Creek Mine.*

**D**

uring the past 100 years, Girdwood has experienced a variety of historical episodes that were filled with interesting characters and colorful activities. In the more recent decades, the area has evolved a dual identity as an attractive small town within an hour's drive of Anchorage, and as a recreational visitor destination. This Plan is based upon a continuation of these current trends.

The Girdwood Area Land Use Plan is intended to guide decisions affecting management of lands in the Girdwood valley. The Plan has been developed in coordination with state and federal agencies that maintain management jurisdiction over lands adjoining those under municipal regulatory control.

### *General Land Use Themes*

The Land Use Plan addresses three general themes that are significant to the area. They are:

- the development of new resort/recreational facilities;
- the continued growth of the Girdwood community; and
- the establishment and preservation of a system of open spaces.

These themes are anticipated to dominate the life of the area within the timeframe of this Plan.

#### **RESORT/RECREATIONAL FACILITIES DEVELOPMENT**

Alyeska Resort has brought to Girdwood a major alpine skiing facility for the recreational enjoyment of residents and visitors alike. Although its primary reason for being is recreation, it has also produced local jobs and income for the community. To a certain degree, this has given Girdwood an independent economic base, with the resort facilities providing indirect benefits to other sectors of the local economy.

The Glacier-Winner Creek area in the upper valley has the potential for expanding the resort/recreational base of the local economy, while simultaneously providing new recreational opportunities in the area. The mountain massif located between Glacier and Winner Creeks



has the potential for an additional downhill ski facility. The mountain could possibly hold a ski area with year-round glacier skiing. The skiable area has more than a 5,000-foot vertical drop, and a capacity for about 12,000 skiers (approximately 3 times the current capacity of Mount Alyeska).

Besides downhill skiing, there are other recreational opportunities in the valley that could be created, with visitor support services coming from resort base area facilities. In particular are summer season activities, such as golf, tennis, hiking, mountain biking, gold-panning and many others.

In addition to recreation, destination resorts can also attract other activities that can be a benefit and enjoyment to the community. Four-season mountain resorts are typically becoming the site of music, art and film festivals, as well as education and business seminars. These activities can vary in size and scope from local and regional to national and international.

The successful visitor destination is one that recognizes that quality is more important than quantity. This is particularly the case with Girdwood. The Girdwood valley is not large, being only six miles in length. The Girdwood community will be sharing the valley with the resort/recreational areas. Consequently, there will be limits to how far each can grow without placing detrimental effects on the other.

The establishment of year-round destination resort/recreational facilities in the Girdwood area can be part of a larger local and regional strategy to create a more independent and diversified economy. It can also bring additional social and recreational benefits to the area as well.

#### **COMMUNITY GROWTH**

The community of Girdwood and Alyeska Resort have a symbiotic relationship based upon their immediate proximity to one another. The resort provides a source of livelihood and recreation for the community, while the community provides a labor force and needed facilities and services to the resort.

Although the two are separated by 40 miles of winding roadway along Turnagain Arm, Girdwood has a similar relationship with Anchorage. Anchorage provides a source of livelihood for the approximately one third of the local residents who commute daily to Anchorage for work. Residents also rely on Anchorage for such basic public services as secondary education and health care, as well as retail goods and services.

Girdwood, in turn, provides a major recreational resource for Anchorage residents, many of whom have built second homes in the community. Girdwood also provides a market for a small portion of Anchorage's labor force, which is anticipated to expand with further resort development. More importantly, however, Girdwood is likely to become a more attractive location to reside for residents of the Anchorage area.

One of the critically important factors in Girdwood's attraction for both local residents and non-residents alike is the small-town atmosphere. There are a number of ways to define small-town atmosphere. However, in relation to physical form and land use planning, it is generally meant to be lower intensity of uses and lower scale of structures than are typically found in urban settings. Relative to Girdwood, it also includes slower paced pedestrian and vehicular movement that is free of congestion and pollution. Additionally, it includes social and economic diversity without a large degree of stratification.

The policies and guidelines contained in this Plan are intended to provide a framework for growth that will retain small town characteristics that are important to the community. However, in doing so, the Plan also reflects the continued relationships the Girdwood community will have with the Anchorage metropolitan area, as well as with the nearby resort area.

### **OPEN SPACE SYSTEM**

During the early part of this century, much of Crow Creek valley was washed downstream by hydraulic mining. The Girdwood area was stripped of its evergreen forest to produce railroad ties and to support mining activities. Today, the forests have recovered and cover over most of the scars left by earlier activities.

The area's economy and lifestyle have also changed from the extraction of natural resources to tourism and recreation. As a result, the best economic use of the area's natural resources are to preserve them for their recreational, scenic and wildlife values.

For the destination visitor, authenticity and uniqueness are particularly important features of an area. The quality of recreational and resort base facilities are important features. The draw to out-of-state visitors, however, will be the setting and its natural features, more so than the facilities. Scenery and wildlife viewing, ecotourism and recreation all require the protection of the valley and surrounding area's valuable natural open spaces.

Natural open spaces are also very important for the residents of Girdwood. They are part of what makes the community livable and attractive. As beautiful as many of the valley's natural features are, they can also be difficult or hazardous to development.

An open space system is a critical component of Girdwood's Land Use Plan. The Plan recognizes the dual functions that open spaces can perform for the community – to provide a physical form to the pattern of development, and to provide space for active and passive recreation.

In a mountain valley the size of Girdwood's, the attractions of the area must be integrated and relate well with the basic fabric of the community and resort areas. The valley's natural open spaces are key to that integration. For residents and visitors alike, the quality of place is linked to how well the important natural features of the area are preserved.

## *Land Use Plan*

The Land Use Plan is intended to guide the physical development of the Girdwood area. The Plan was prepared utilizing the following process:

- Land Demand. Projections of employment, population, and housing were converted to residential and commercial land demand.

- Land Allocation Sequence. Land uses were allocated in the following sequence:
  - a. open space (important natural features, environmentally sensitive and hazardous-areas),
  - b. region-serving employment areas (resort base areas),
  - c. residential areas,
  - d. local-serving commercial and industrial areas,
  - e. public-Institutional areas (parks, community and transportation facilities).
  
- Major Siting Criteria. Several factors were taken into consideration in determining the spatial pattern of development. Significant criteria included:
  - a. development suitability,
  - b. proximity of existing utility infrastructure (water and sewer),
  - c. vehicular and pedestrian circulation,
  - d. use compatibility, and
  - e. public review and response to a series of land use plan alternatives.

The following Land Use Plan consists of a series of land use classifications, a description of the location and intended application, and a Plan Map. The Plan Map graphically portrays the placement of land uses that are intended to create Girdwood's development pattern throughout the timeframe of the Plan.

**LAND USE CLASSIFICATIONS**

The land use classifications used in this Plan are defined below. Some of the definitions are identical or similar to definitions for classes of use found in other municipal regulatory and policy documents. Other definitions have been modified exclusively for this Plan in order to better address the circumstances unique to the area. In addition, two new land use classifications have been added.

Single-family Residential - This classification is for areas substantially developed for single-family residential purposes and are expected to remain so for the duration of the Plan, and for vacant areas best suited for single-family residential use.

Multi-family Residential - This classification is for areas substantially developed for multi-family purposes and are expected to remain so for the duration of the Plan, and for vacant areas best suited for multi-family residential use.

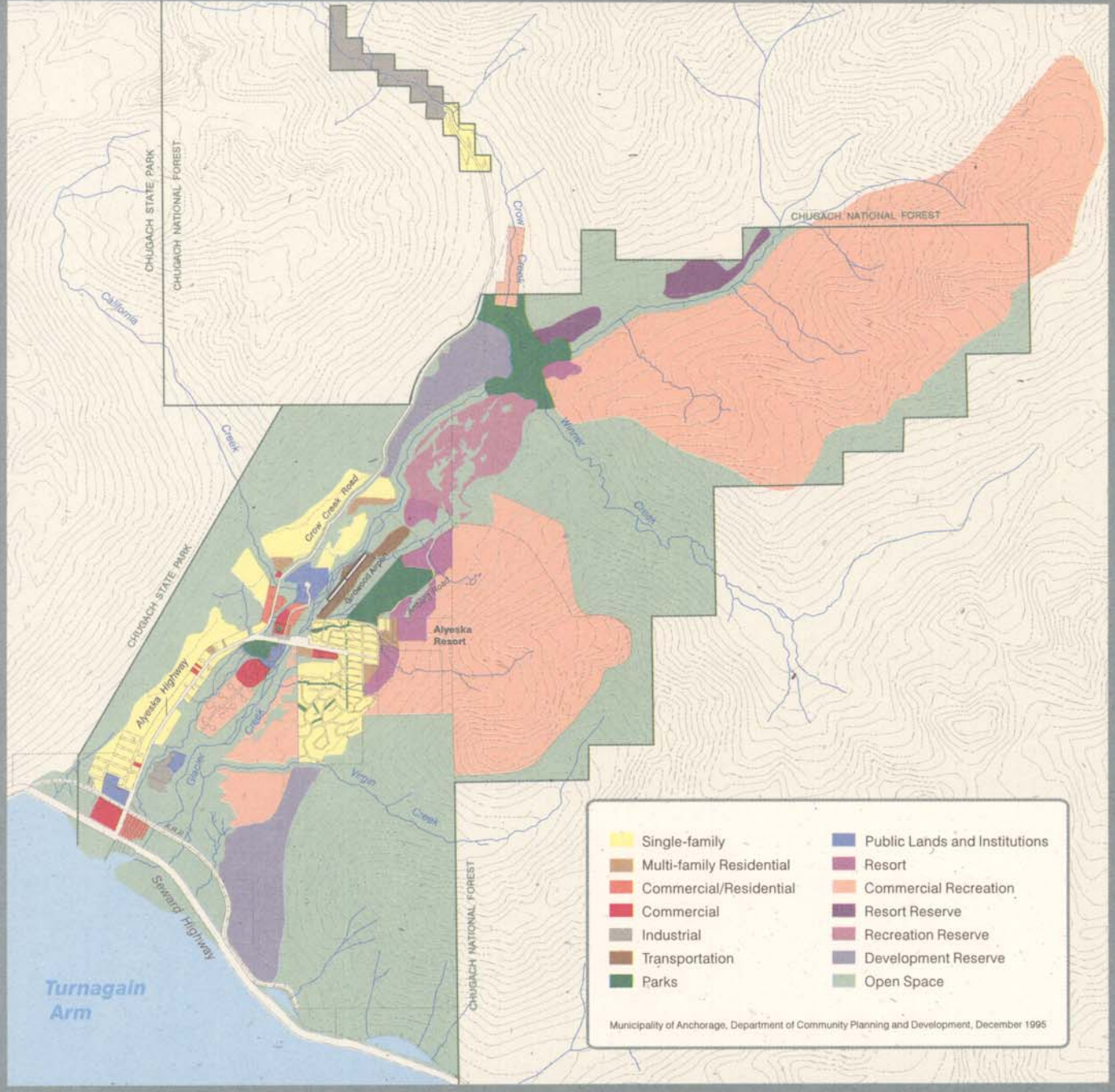
Commercial/Residential - This classification is for areas substantially developed with a mix of commercial and residential uses and are expected to remain so for the duration of the Plan, and for vacant areas best suited to a mix of commercial/ residential uses.

Commercial - This classification is for areas substantially developed for commercial purposes and are expected to remain so for the duration of the Plan, and for vacant areas best suited to commercial development.

Industrial - This classification is for areas substantially developed for industrial purposes and are expected to remain so for the duration of the Plan, and for vacant areas best suited to industrial development.

Transportation - This classification is for areas substantially developed or specifically reserved for transportation purposes and are expected to remain so for the duration of the Plan.

Land Use Plan



Single-family	Public Lands and Institutions
Multi-family Residential	Resort
Commercial/Residential	Commercial Recreation
Commercial	Resort Reserve
Industrial	Recreation Reserve
Transportation	Development Reserve
Parks	Open Space

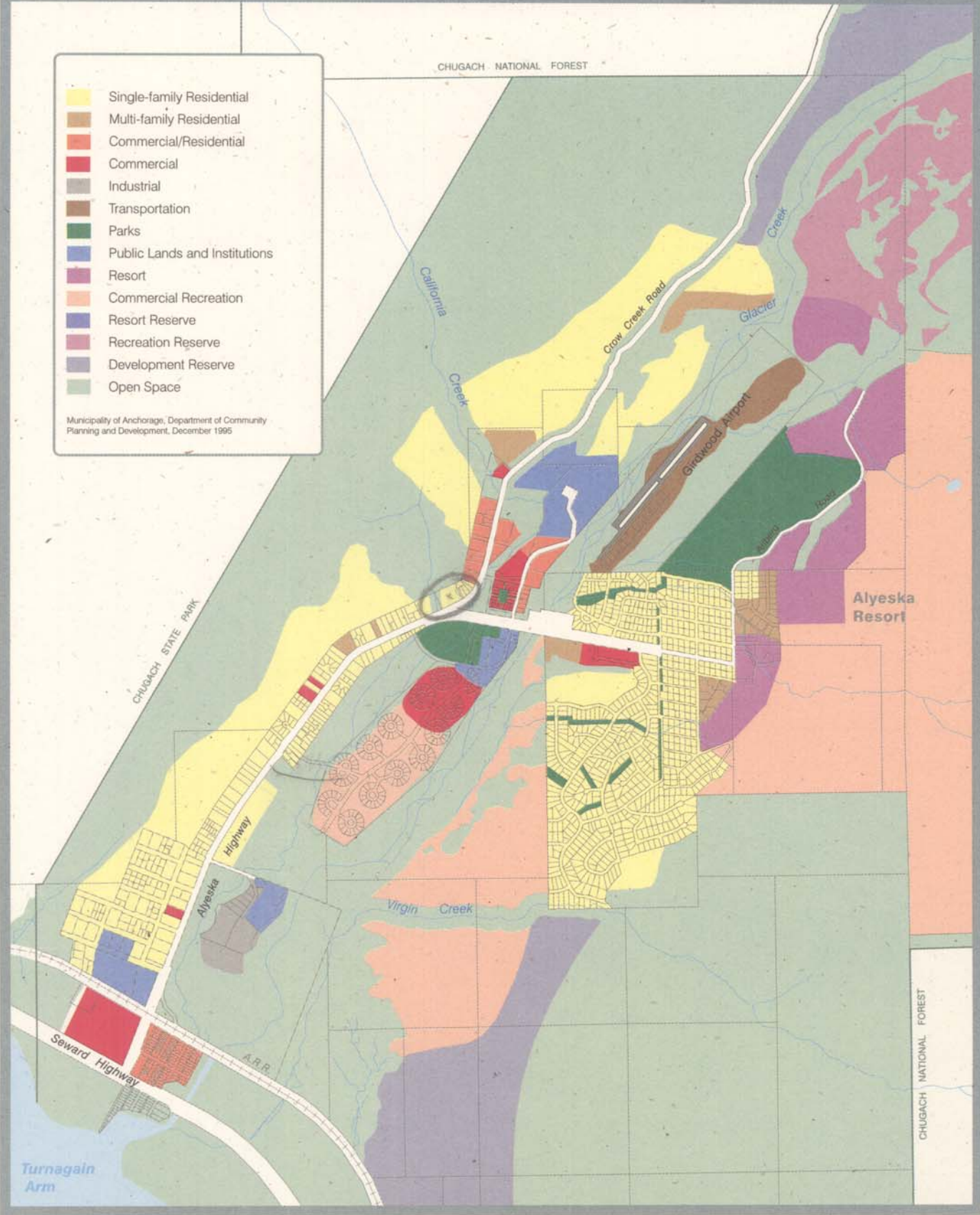
Municipality of Anchorage, Department of Community Planning and Development, December 1995

# Land Use Plan (Lower Valley Enlargement)



	Single-family Residential
	Multi-family Residential
	Commercial/Residential
	Commercial
	Industrial
	Transportation
	Parks
	Public Lands and Institutions
	Resort
	Commercial Recreation
	Resort Reserve
	Recreation Reserve
	Development Reserve
	Open Space

Municipality of Anchorage, Department of Community Planning and Development, December 1995



Public Lands and Institutions - This classification is for areas substantially developed for active public and institutional purposes and are expected to remain so for the duration of this Plan, and for vacant areas best suited for such use.

Parks - This classification is for areas substantially developed with park/recreational facilities and/or areas that are specifically reserved or dedicated for such purposes and are expected to remain so for the duration of this Plan. This classification is also intended for areas with natural features that have special significance in the valley.

Commercial Recreation - This classification is for areas substantially developed with recreational facilities for which there is a fee or charge for use and are expected to remain so for the duration of this Plan, and for vacant areas best suited for commercial recreational development.

Resort - This classification is for areas that are substantially developed with facilities and services that have a primary relationship to a major commercial recreational resource and that are expected to remain so for the duration of this Plan, and vacant areas that are best suited for resort use.

Resort Reserve - This classification is for areas that are suitable for base facilities and services that have a primary relationship to a major commercial recreational resource, but which are not anticipated to be developed during the near or intermediate timeframe covered by this Plan.

Recreation Reserve - This classification is for an area that is suitable for multi-purpose recreational use, but which is not anticipated to have any major recreational facilities development during the near or intermediate timeframe covered by the Plan.

Development Reserve - This classification is for areas that are generally suitable for development, but whose location and absence of public facilities and lack of projected demand make near- and intermediate-term development inappropriate and unnecessary.

Open Space - This classification is for areas with environmental characteristics or functions that should be protected, areas which are physically unsuitable or unsafe for development, and areas which have high recreational and/or scenic/wildlife habitat values.

## **DESCRIPTIONS AND APPLICATIONS**

The overall land use pattern for the Girdwood area generally has community development most concentrated on the west side of the valley, and resort/recreational development oriented more toward the east side. Aside from the potential for new resort and commercial recreational development occurring in the Glacier-Winner Creek area, development would be contained in the lower half of the valley. Supporting infrastructure is located here and can be more easily expanded to serve new development.

### **Residential**

Single-family residential development areas are designated where it currently exists, as well as on vacant land west of Alyeska Highway and both sides of the lower portion of Crow Creek Road. Multi-family development areas are also designated where it already exists. Additional areas are located in the northwestern portion of Alyeska Basin Subdivision, and two other areas along Crow Creek Road. One area is north of California Creek just off Crow Creek Road; the other is near the intersection of Crow Creek Road with the proposed Arlberg

Road Connector roadway, which would access the resort base area just across Glacier Creek. The Plan also allows for multi-family housing in the areas classified commercial/residential, commercial, commercial recreation, and resort.

The Plan recognizes a need for a variety of housing types to meet the demands of an expanding resort community. Included here are provisions to address anticipated housing demands. They are guided by the goal of facilitating new development in keeping with the retention of the small town character of the community, and development of an expanded mountain resort destination area.

One of the most critical land use issues for Girdwood is where and how new housing (in particular, multi-family) will be provided. There are two general policies that underlie the residential component of the Plan. First, new resort-based multi-family housing should be concentrated within the designated resort areas. This type of housing will likely be oriented toward the second home owner and/or resort employees. The vast majority of current multi-family units near Alyeska Resort are second homes, thus reflecting this policy.

Second, community-based multi-family housing should be dispersed and kept low scale in order to blend in with the small town atmosphere of the community, rather than resemble that of a more urban setting. This type of housing is intended to be affordable and to be available for both seasonal and full-time residents of the community.

Aside from single-family housing, community-based affordable housing can range from an attached or detached rental unit with a single-family dwelling (accessory unit), small-scale structures housing 2-4 units, to larger-scale structures housing from 10-20 units. The ability of multi-family housing to blend in with the community will be based upon where it is sited, and how well it is designed for continuity, scale, and compatibility with surrounding uses.

The provision for accessory units is a key component of the housing strategy for Girdwood. Accessory units are typically defined as separate self-contained dwelling units that are incorporated within and subordinate in size, location, and appearance to a single-family residence. An accessory unit frequently has its own outside entrance and always has a separate kitchen and bathroom. Accessory units are sometimes referred to as in-law apartments or graany flats. In some communities, accessory units are also defined as a separate structure from the single-family residence, but still subordinate to it. An example of this would be a small living unit over a garage or stable.

Studies have shown that accessory units typically rent for less-than-average market levels. Accessory units do not require development of new land, do not require much construction and cost about one-third as much to build as conventional rental units. In addition to providing opportunities for affordable housing, accessory units can provide homeowners with income, security, and companionship.

Development standards for accessory units typically include limits on:

- size
- front or street-side entrances
- number of occupants
- number of off-street parking spaces.

Some communities also have a dispersion provision so accessory units do not become too concentrated in an area. Limits or exclusion of accessory units can also be done by geographic area. They could be prohibited from some areas, while allowed in others.

In order for accessory units to be allowed in Girdwood, new regulations will need to be established. The intent of the development standards is to assure that accessory units do not increase the intensity of activity or effect on a single-family neighborhood beyond that which would already be allowed under the regulations for single-family development.

Housing as a primary use is intended to be allowed in areas classified for residential and residential/commercial use. Housing may also be allowed as a secondary use in the commercial, resort and commercial recreation areas. Housing is to be prohibited elsewhere.

Guidelines for new housing types and densities are summarized in Table 9, Housing Densities and Residential Development Guidelines.

**Table 9**  
**Housing Densities and Residential Development Guidelines**

Land Use Classification	Housing Type	Density (dwelling units per acre) <sup>①</sup>	Comments
Residential: Single-family	Single-family (attached and detached)	2-4	Duplexes are permitted if in compliance with lot and design standards; <sup>②</sup> an accessory dwelling unit is allowed with single-family dwelling per design standards <sup>③</sup>
(for lots fronting Alyeska Highway west of Glacier Creek)	(Single-family Duplex Multi-family)	(2-8)	(5-8 dwellings per acre density, or triplexes or greater structures require conditional use) <sup>④</sup>
Residential: Multi-family	Duplex Multi-family	5-20	5-10 units per acre require administrative site plan review; <sup>⑤</sup> 10-20 units per acre require conditional use
Commercial/Residential	Single-family Duplex Multi-family	5-20	5-10 units per acre require administrative site plan review; <sup>⑤</sup> 10-20 units per acre require conditional use
Commercial	Single-family Duplex Multi-family	2-20	Residential units only allowed as secondary use, and must be located above first floor level, with a maximum of two stories
Resort	Multi-family	No maximum	Requires master plan approval through conditional use process; also must address seasonal/transient employee housing
Commercial Recreation	Single-family Duplex Multi-family	No maximum	Residential units only allowed as secondary use; requires master plan approval through conditional use process

<sup>①</sup> For lots already platted, only the area within the lot lines is usable in calculating densities.  
<sup>②</sup> Duplexes are allowed only in accordance with Section 4.2.1.2. and Figure 3.1 of the Turnagain Arm Comprehensive Plan until new land use regulations are adopted which specifically address them.  
<sup>③</sup> Accessory dwelling units are not permitted until new land use regulations are adopted which contain specific allowances for them.  
<sup>④</sup> Allowance of conditional uses for housing development at 5-8 dwelling units per acre, or triplexes or greater structures on lots fronting the Alyeska Highway west of Glacier Creek will not become effective until new design guidelines and development standards are adopted.  
<sup>⑤</sup> Conditional use approval is required in lieu of administrative site plan review until new regulations are adopted which include new design and development guidelines and standards.

**Commercial/Residential and Commercial**

Areas designated for commercial use are primarily intended to provide trade and services for local residents as well as for visitors. Although it is anticipated that most major purchases made by local residents will continue to occur in Anchorage, there will be an increasing threshold of feasibility for new and more diversified trade and service providers as the area's population and visitorship increases.



One of the main concerns with commercial development in Girdwood centers on the Alyeska Highway corridor. This corridor is the gateway to the valley, and as such is the most visible element in the community. Interest and concern has been raised over whether or not any additional commercial development should be allowed to occur along this highway.

Once started, commercial development along Alyeska Highway would be very difficult to limit or control. Businesses would continue to find it attractive for the exposure provided by its location. As such, it could take away from the viability of the more concentrated commercial areas to become fully developed. The result would lead to commercial development being scattered throughout the community.

The impact of additional commercial development along Alyeska Highway would not only affect the community character as a whole, but would also affect the many residences that are already located along the highway. In addition, use of the adjoining pedestrian pathway would become more hazardous with increasing auto-turning movements that commercial development would bring.

The Alyeska Highway will continue to function for many years as the only link between the Seward Highway and the valley. Traffic will increase with the growth of the community and resort development. Consequently, care should be taken not to create any unnecessary traffic congestion that strip commercial development could bring.

The intent of this Plan is to prohibit any further commercial uses from locating along the Alyeska Highway other than where designated on the Land Use Plan Map. Ultimately, if commercial development is ever needed or desired along the highway, the only place where it may possibly be accommodated with reduced impacts on the existing residences and traffic flow would be the area on the east side of the highway from Ruane Road northward for a distance of approximately 1,000 feet.

Instead of strip development along the Alyeska Highway, the Plan recommends three general areas where commercial development can be more concentrated. Each area provides a range of advantages that will adequately accommodate the anticipated types of commercial development that may be attracted to Girdwood. By concentrating development at key locations, the commercial establishments can also complement one another. In addition, it can reduce the length and number of trips for residents and visitors who need to make multiple stops.

One commercial area is located at the entrance to the valley, centering on the intersection of Seward and Alyeska Highways. A second area focuses on the new townsite area and includes a portion of lower Crow Creek Road. A third commercial area is located at the intersection of Alyeska Highway and Timberline Drive in Alyeska Basin Subdivision.

#### *Valley Entrance*

The old townsite area is classified residential/commercial in keeping with the current mix of uses. New development will require additional public facilities and consolidation of lots that were created with the original platting of the site. However, over time the area will undergo new development and redevelopment. Its location is suitable for capturing the highway traveler-oriented market, as well as local residents.

The commercially designated area across the highway from the old townsite is currently a vacant wetland area, with slightly more than one acre of upland area near the railroad line. This area shares many similar locational attributes with the old townsite area.

Use of this area, however, will have to be handled carefully, both from an environmental and community aesthetics perspective. Development of this area will require a wetland permit from the U.S. Army Corp of Engineers, which will likely require mitigation for any wetland loss.

An important use for a portion of this area will also be for transportation use. Regularly scheduled rail service may likely occur sometime during the timeframe of this Plan. The site could also be utilized as a park-and-ride lot for commuters traveling between Girdwood and Anchorage, and for visitors to the resort base areas in the valley. Therefore, any commercial use of this site should consist of complementary uses to any transportation facilities located there in the future.

Because of its high visibility at the entrance to the valley and its location along the Seward Highway scenic corridor, as well as the need to coordinate uses with a future transportation facility, development of the 24-acre site across Alyeska Highway from the old townsite should not be piecemeal. Instead, it should be done as part of a master plan in accordance with established design standards.

#### *Central Community Core*

A second commercial area focuses on the new townsite area on both sides of Alyeska Highway, and the lower portion of Crow Creek Road. This area is most centrally located to the community. It is intended to contain a mix of commercial, institutional, and residential development in a more compact arrangement where the various uses and activities can complement one another.

The Crow Creek Road commercial/residential area is partially developed at the present time. With the exception of the commercial boarding house on the north side of the creek, commercial development along the roadway is to be limited to the area south of California Creek. The creek and roadway greenbelt will form a natural barrier separating the commercial strip from the residential area further north along the roadway.

The commercial and commercial/residential portions of the townsite area north of Alyeska Highway are also partially developed with commercial and residential uses. The Plan calls for the area on the east and north sides to be commercial/residential in order to allow a continued mix of use. The residential use, however, should be limited to multi-family development. Such use can be more compatible and supportive of the commercial area, while the commercial development provides employment and easy convenience to multi-family residents. The nearby school and playgrounds are also conveniently located supporting facilities.

The commercially designated area is limited in size and should be reserved exclusively for commercial use, particularly, the first-floor occupancy. Consequently, the Plan recommends that any new residential use in the commercial areas be limited to second and third floor levels.

Future development of the commercial townsite area is constrained by a number of factors that will need to be resolved. They include the creek floodplains, well site reserve for the local water system, lack of adequate parking and limited vehicular access.

The Plan calls for construction of a new road from Crow Creek Road to Hightower Avenue. The new road will provide better access, as well as link the two adjoining commercial areas into a more mutually supporting town core.

The new townsite area lacks adequate parking, which will become exacerbated with future growth. Much of the parking problem revolves around the small lot sizes in the existing platted townsite. Potential solutions center on utilizing the town square park, and/or having a series of small public parking lots located on public land on the north, west, and south sides of the platted block. Since the town square is already dedicated parkland, it may be more feasible to consider a series of three parking lots on the perimeter of the area. Resolution of this issue should be a high priority before any further municipal land sales in this area occur.

Future development north of Lindblad Avenue will require the removal of Glacier Utility's water supply source. The water system is an unregulated, substandard community system serving the townsite area. In the future, it is possible potable water provision for the townsite area will be assimilated into the AWWU service area. If this should occur and the existing well site is released for development, the site could become available for commercial use.

A more significant concern for continuing development in this area is the potential for flooding from both Glacier and California Creeks. Given the commitment of use that has already been made in the area, it will be important to protect existing and future development from flooding. Some form of levee may be needed to protect the area from Glacier Creek. On California Creek, a combination of weir and levee for temporary water impoundment just upstream may suffice. With such a system, floodwaters may be captured and released under controlled conditions in order to avoid flooding portions of the townsite. This Plan does not recommend any specific solution to resolving the flood hazard, but does recommend that it be properly addressed before further development occurs in the floodplain.

Interest has also been expressed in redesigning the new townsite area to relocate California Creek to a more central or prominent location within the commercial area. However, relocation of the creek may prove difficult for reasons just discussed, as well as for its significant use as a salmon-spawning area at its current location. The creek's location between Crow Creek Road and the new townsite area will still allow it to be a focal point for human interest and activity as long as its presence is considered in any future design and development in the immediate area.

The third commercial cornerstone of the community's townsite core area is located on the south side of Alyeska Highway. The 10- to 12-acre area is located between the community's civic core area and a proposed commercial recreational area to the south. Commercial use of this area will complement the current and proposed adjoining land uses.

The commercial area is currently owned by the Municipality and platted in a configuration that is not conducive to its proposed use. The design and development of this site should be master planned as an integrated unit. The design should address the site's compatibility with adjoining uses and greenbelts, as well as the vehicular and pedestrian circulation systems which are recommended for the area.

***Alyeska Basin Commercial Area***

Approximately seven acres is designated for commercial use just south of Alyeska Highway and west of Timberline Drive. The commercial site is part of a larger undeveloped tract of land in Alyeska Basin Subdivision. Outside of the resort areas, this is the only commercial area on the east side of the valley. As such, it is well situated to serve the residents of Alyeska and Alyeska Basin Subdivisions.

Most of the site is an open meadow with a high stand of cottonwood and lower stand of spruce/hemlock bordering the north and south sides, respectively. As such, it offers scenic vistas on three sides with excellent southern exposure. With proper site and building design, to include preservation of the tree stands, the site offers many attributes for a variety of local as well as visitor-serving commercial services.

In consideration of the close proximity and exposure the site has to the adjoining residential neighborhood, commercial uses are limited to overnight lodging and certain specified business, personal and professional services that can function efficiently without generating large volumes of vehicular traffic (as designated in AMC 21.40.130, Residential-Office District).

There are also some existing commercial uses along the Alyeska Highway which have a prior history of use. These enterprises are classified as commercial. With the commercial classification, they will remain conforming uses.

**Industrial**

Industrial uses in the Girdwood area generally fall into two categories. They are mining and industrial storage and repair. Mining is occurring at the end of Crow Creek Road where Girdwood Mining Company operates a placer mine on approximately 140 acres of land. The other form of activity -- storage and repair -- is typically carried out by contractors in the construction trades who use light and heavy equipment and materials.

Recently, the Heritage Land Bank created the Girdwood Industrial Park Subdivision. The purpose of the industrial subdivision is to encourage the removal of industrial activities and storage from the rest of the community, and centralize these functions at this site. There is also room for some limited expansion.

This Plan does not encourage the siting of industrial uses or activities in the Girdwood area unless they can be located in the industrial park. Industrial activities are generally out of character with, and detract from, the small town/resort recreational setting.

**Transportation**

This classification only applies to Girdwood Airport. The airport is owned and operated by the Alaska Department of Transportation & Public Facilities (ADOT/PF). ADOT/PF requires in its airport leases that all uses be airport related.

**Public Lands and Institutions (PLI)**

This classification applies to all areas currently occupied by an institutional use or user. The Plan recommends adding another 2-3 acres of PLI classified land next to the Girdwood Fire Station, and across Glacier Creek Drive. These additional PLI lands are anticipated to meet current and future needs for public facilities, to include a new library and community center.

## **Park**

This classification applies to all currently dedicated parks and reserves. As new neighborhood and community parks are platted and established, it is recommended that they become dedicated and classified as park. This classification also applies to certain areas with natural features that have special significance in the valley. Two such areas are the Four Corners area and the Moose Meadows.

The Four Corners is a unique scenic area characterized by dense woodlands converging on three creeks - Glacier, Crow, and Winner Creeks - that flow rapidly through deeply incised, rock-walled gorges. The winding gorges, rapids and waterfalls offer the sights and sounds of an untouched wilderness setting. Aside from providing access across Winner Creek for alpine skiing and the potential resort base area nearby, use of the Four Corners should be limited to passive trail-oriented activities.

Also classified as park are two Heritage Land Bank parcels (Parcels 6-012 and 6-013) that comprise a large portion of the Moose Meadows located west of Arlberg Avenue and north of Moose Meadow Park. The Moose Meadows is the largest open patterned-ground wetland complex in the valley. It is highly utilized for recreational purposes, particularly during the winter season. It will eventually require park management.

The Plan recommends that the two HLB parcels be classified and dedicated as park land. Such actions would be in keeping with the 1993 Heritage Land Bank Inventory and the municipal park dedication ordinance.

As other important areas that make up Girdwood's open space system are surveyed and platted for disposal and development of adjoining areas, they should also be added to the park system. In particular are the creek greenbelt systems.

## **Commercial Recreation**

There are four areas classified for Commercial Recreation. Two of them -- the alpine ski area on Mount Alyeska and the Crow Creek Mine -- are currently active commercial recreational areas. Three other areas are proposed for commercial recreational use.

One area is the large mountain massif located between Glacier and Winner Creeks in the upper end of the Girdwood valley. Studies have indicated the area has ideal terrain for alpine skiing. A second area is located in the lower valley, straddling Glacier Creek. Here, the intended uses are a golf course and possibly an RV park/campground.

The third undeveloped area classified Commercial Recreation is located on the northwest side of Mount Alyeska and adjoins the current lease area held by Alyeska Resort. This area consists of 150 acres which may have the potential for additional lift-supported alpine skiing with access from the Alyeska Prince Hotel base area.

Although recreation takes many forms in the Girdwood valley, alpine skiing and golf will provide the major commercial recreational facilities for residents and visitors alike. Consequently, these recreational uses, and the areas intended for their development, are linked closely with the economic base of the community.

### *Alpine Skiing*

The Glacier-Winner Creek mountain massif offers tremendous potential for alpine skiing. The skiable terrain is far in excess of what is currently available on Mount Alyeska, which has been developed close to its maximum extent.

Glacier-Winner Creek offers a wide range of skiable terrain from high alpine to lower elevation forested runs, and from beginner terrain to expert, with a sizable amount of intermediate terrain. The area can offer lift-supported skiing, as well as sno-cat and backcountry guided skiing. All-season skiing is also possible on one of the glaciers.

Summertime use of Glacier-Winner Creek can include hiking and mountain biking, as well as other resort-supported recreation. Development of commercial recreational facilities would complement the existing facilities on Mount Alyeska.

Access and visitor/user support facilities will be provided from the resort-designated area located at the base of the mountain massif or from the lower valley resort bases, or both.

A number of studies have been done to evaluate the potential of the Glacier-Winner Creek mountain massif for alpine and related skiing. The studies have reinforced what local skiers familiar with the area have known; i.e., it has very good potential.

This Plan recommends pursuit of commercial recreational development centering on alpine skiing for the Glacier-Winner Creek area. Attracting development is intended to be done through a formal solicitation process, referred to a RFP process (Request for Proposals). This process will involve the participation of the Alaska Department of Natural Resources.

Municipal involvement will include participation by the Girdwood Board of Supervisors. The RFP should require an activities plan and contain standards for resort and mountain design, as well as guidelines for recreational development, environmental quality and wildlife protection. Social, environmental and economic impacts should be identified and evaluated before any final decision is made. These requirements should ensure that any development is appropriate and beneficial to the valley.

### *Golf*

Golf is a recreational sport that has grown in popularity worldwide. Where once it was viewed as a more exclusive outdoor sport, golf is now played by a wide variety of people of all ages. A golf course can offer Girdwood many advantages. It is a pleasant and challenging form of outdoor recreation. It can provide economic benefits, both directly and indirectly.

Consideration of a golf course in Girdwood is not a new idea. It was first considered in 1965 during the development of the new townsite plan. In 1986, the Girdwood Board of Supervisors requested the Heritage Land Bank to investigate the possibility of a golf course in Girdwood, citing potential economic benefits and a balancing of seasonal employment fluctuation in the valley.

In response, the Heritage Land Bank contracted with Robert Trent Jones II International, a nationally recognized firm in golf course siting and design, to perform an evaluation of the Girdwood area to determine if there were any sites that would be suitable for an 18-hole golf course.

Two sites were found to be very attractive for a golf course. One site was located in the upper valley a short distance north of the new Alyeska Prince Hotel. The other site was located in the lower valley, straddling both sides of Glacier Creek.

The Heritage Land Bank followed the site selection study with an economic feasibility study, performed by the National Golf Foundation. The study was completed in 1992 and concluded that an 18-hole course could be feasible, with use by both residents of the Anchorage area, as well as by visitors.

Golf courses are viewed as an important recreational component of year-round destination resort areas. Recently constructed resort golf courses have tended to be part of mixed-use developments that include residential development and/or other forms of recreation.

A typical 18-hole golf course with a club house and driving range will generally use 200 acres of land. However, that may vary, depending upon the physical setting and other uses being considered with the course.

Although that may appear to be a large amount of land, most of it is basically open space. Golf courses being built today are designed and constructed to maximize the existing natural features, to retain natural habitat (bird and animal life being an added attraction), and to minimize maintenance (which means using hardy native plant species and minimal site disturbance). Course designers and operators have become much more environmentally conscious than in years past.

Girdwood valley provides an outstanding setting for a golf course, a major factor for attracting visiting players. A course would also create many of the positive benefits mentioned previously. It would provide a major form of summer recreation as a balance to the existing winter recreational orientation. It would help to diversify resort/community employment. It would effectively create an open space area available for summer and winter use. Properly designed and constructed, it would also fit into the natural open space/recreational character of the valley.

This Plan recommends a golf course development be pursued in the lower valley commercial recreation area. The area designated commercial recreation in the lower valley on both sides of Glacier Creek contains approximately 270 acres for a mixed golf course development. This includes space for buffering and the new Girdwood access roadway.

The development should be a full 18-hole course with clubhouse and driving range. Other uses associated with the golf course development may include residential, limited related commercial and/or other recreational activities. Any proposals, whether solicited or unsolicited, should be evaluated against a rigid set of criteria that includes land use compatibility, access, retention/enhancement of natural setting, incorporation of public greenbelt/trail facilities, and protection of important environmental features (particularly water resources). The proposed development review should also weigh all aspects of the project, from design and construction to course operation and maintenance.

***RV Park/Campground***

A portion of the commercial recreation area located south of the commercial area between Glacier and California Creeks has potential to be developed as an RV Park/Campground. Such a facility typically includes utility hook-ups, laundry and shower facilities, sewage dump station, and picnic tables and fire pits. Many popular RV park/campgrounds also offer additional recreational amenities that appeal to all age groups of campers. Nearby commercial areas at the Seward Highway and just north of this area contain retail trade and services establishments for the visitors utilizing the facility.

This facility would be an alternative form of overnight accommodation, as well as recreation for many out-of-state visitors to the area. Many in-state residents could also use it.

Any proposal for an RV Park/Campground should require submittal of a master plan that identifies uses, unit or space lay-out, pedestrian and vehicular circulation system, infrastructure requirements and landscaping. The proposal should also show evidence of economic feasibility, as well as operational management.

RV parks/campgrounds can be an added benefit to a visitor- destination area. However, they must be able to enhance the user's visit, without detracting from the area's appearance.

***Ski Area Expansion on Mount Alyeska***

Alyeska Resort currently leases 1,150 acres, classified as Commercial Recreation, from the State of Alaska on Mount Alyeska. The leased area was formerly a special use permit area when owned and managed by the U.S. Forest Service. In addition to the tram station and mountain restaurants, the leased area is developed with lift-supported alpine ski runs.

This Plan includes an additional 150 acres of land classified Commercial Recreation outside Alyeska Resort's leasehold on Mount Alyeska. The additional Commercial Recreation area is located immediately north of the existing leasehold boundary on the northwest side of the mountain.

The purpose for inclusion of the 150 acres as commercial recreation land is to allow, if feasible, the expansion of additional lift-supported alpine skiing to the north of the existing developed slopes. The area of inclusion may provide more moderate level ski terrain with direct access from the Alyeska Prince Hotel base area.

The classification of the 150 acres as Commercial Recreation includes the following stipulations:

1. The classification shall revert to Open Space if Alyeska Resort does not complete a feasibility and design study within five years after the adoption of the **Girdwood Area Plan**, or if the studies indicate development is not warranted.
2. In conjunction with any future conditional use or land conveyance process leading to construction of a new downhill ski run:
  - a. A buffer will be established between the new ski run and the Winner Creek Trail. The buffer, to the maximum extent possible, will provide visual and sound screening from the Winner Creek Trail. This concern will receive particular attention at the point the Winner Creek Trail crosses the bottom of the avalanche path locally referred to as the "Zug Slide."



- b. The only structures permitted in this area will be towers and terminal typically associated with a chairlift.
- c. All areas disturbed by construction and operation of a downhill ski run will be appropriately revegetated.
- d. The service road to the base of the chairlift will be used solely for the purpose of maintaining and operating this new downhill-ski run.
- e. To the maximum extent possible, the ski out route from the base of the new chairlift to the Alyeska Prince Hotel will follow the alignment of the service road.

**Resort and Resort Reserve**

The Resort classification applies to areas that are intended to be developed with base facilities and services that have a direct relationship to a major commercial recreation resource.

Typically, such facilities include lodging, bars/restaurants, shops, entertainment/ conference centers, and parking facilities.

Resort facilities are intended to attract visitors who are not just passing through the area, but intending to make this area their travel destination. To successfully do so, resorts offer, in conjunction with the major recreational attraction, a variety of facilities and services in a comfortable yet attractive atmosphere.

In addition to Seibu Alaska's Alyeska Resort area, the Plan identifies four additional locations that have site attributes that would make them suitable for new resort facilities. The two sites on the north side of Glacier Creek opposite the commercial recreation area have major constraints related to access and are classified as Resort Reserve. They are not anticipated to be needed during the near and intermediate timeframe of this Plan.

The Resort-designated area located near the confluence of Glacier and Winner Creeks was identified by Sno.engineering, Inc., as the most suitable site to support skiing and other recreational activities in the Glacier-Winner Creek area. This site could offer ski-to and ski-away opportunities in a self-contained resort setting, which in its judgment was the most important factor in the overall marketability of a destination ski and tourism experience.

Due to topographic characteristics, there is a limited amount of suitable land for resort development at that site (approximately 15 acres). If used as a resort base area, it is intended to be a pedestrian area, free of private vehicles.

The remaining Resort-designated areas are located closer to the Girdwood community. One of them is a site approximating 27-30 acres located northeast of the Girdwood Airport. Access is anticipated to come from a road extended from the north end of Arlberg Avenue.

Eventually, a new collector road (identified as the Arlberg-Crow Creek Road connector) would link the resort site to the west side of the valley via a new bridge across Glacier Creek. With the connection to Arlberg Road, this site would be reasonably close to Alyeska Resort's new hotel and tram.

The other Resort-designated areas are lands that make up Alyeska Resort. Alyeska Resort actually has two base areas. One is the original base area which contains most of the mountain lift terminals, Golden Nugget Inn, day lodge, administrative offices and parking facilities. The other base area is about a mile to the north and consists of four separate tracts of land. Sited on the largest and northernmost tract is the new hotel and tram station. They occupy

slightly more than one third of the 31-acre parcel. The adjoining parcel is devoted to parking, and the other two parcels are reserved for additional resort bedroom units, according to an approved master plan. The new resort base area is connected directly to the skiing area by tram and chairlift.

During the course of plan development, much discussion focused on the appropriate location for a resort base to serve the Glacier-Winner Creek recreational area, and to what extent the Glacier-Winner Creek resort area should be allowed to develop. Many concerns centered on the impacts that intensive development at the resort location may have on the adjacent Four Corners area.

While the intent of the Plan is not to impose limits on the range of uses that may be considered at the Glacier-Winner Creek resort area, there is a very clear intent to manage and protect the Four Corners area for its scenic and recreational values. Consequently, the siting, design, and development of resort facilities will have to be done with this in mind.

There are a range of architectural themes and site designs that may be appropriate for this location. The Plan does not favor any particular design theme. However, any resort development proposals that consider uses in the Glacier-Winner Creek resort area must take into consideration the following:

- Traffic into the Four Corners area should be minimized, and preferably restricted to some form of mass transit, such as shuttle bus, or ultimately an automated system.
- Any road into the Four Corners area should be curvilinear and aesthetically designed and landscaped.
- Removal of trees and vegetation should be kept to a minimum.
- Development should be hidden, designed to fit in with the area.
- As much buffer/ open space as possible should be retained between the development and the creeks.

The Plan does not favor one particular resort area over another. The resort areas that are identified provide an acceptable range of alternatives for potential resort developers who may be interested in the Girdwood area. As with consideration of development in the commercial recreation area, any proposal for resort development will have to address the social, environmental, and economic effects such development will have on the community and valley as a whole. Development proposals will be expected to respond to established design and development guidelines and standards identified in a Request for Proposal.

### **Recreation Reserve**

The area classified as Recreation Reserve contains a mixture of spruce/hemlock-forested uplands interlaced with extended, open, wet meadows. Small creeks and natural drainages connect many of the open meadows with Moose Meadow Creek and Glacier Creek. With their location in the center of the valley, the meadows provide very scenic mountain vistas in all directions.

The Recreation Reserve is bordered by Glacier Creek on the west, Winner Creek to the north, and the sloping terrain of Mount Alyeska to the east. The southern boundary is bordered mostly by areas proposed for resort development.

This is one of two areas that was identified by Robert Trent Jones II International as a potential site for a golf course (see page 57). A conceptual layout indicated that an 18-hole course could

be developed with little disturbance of the wetland meadows, and most of the area would remain undisturbed.

A course at this location would present players with a breathtaking setting. However, it would be difficult to develop, and there would be uncertainty as to its success given the short season that would be available at this location. As noted previously, there is also strong local opposition at this time for a golf course in this area.

Currently, the area receives a wide range of recreational use by local residents and visitors. Most use is trail related. Nordic skiers, skijorers, dogmushers, hikers and mountain bikers have established a labyrinth of trails throughout the area. The area continues to receive an increasing number of users.

To date, the multiple recreational use of the area has been accommodated without much problem. However, in future years, the area is likely to experience conflicts among users. Heavy use of the area will also require formal management in order to protect some of the more environmentally fragile areas, especially the meadows where many of the trails are located.

The use of this area for continued outdoor recreation will be an asset to the destination-resort visitor, as well as the local resident. The site would be readily accessible from resort areas located on both the north and south ends.

The continuing use of this area will lead to the need for a management plan. The plan should address current and potential future use of the area, recognizing that the multiple recreational demands placed on the area will require forethought on how to best avoid conflicts. Although formal improvements should be kept to a minimum, some will likely be warranted.

This area is a valuable recreational asset for both community and destination visitor usage. As such, it should be given the thoughtful attention that multiple-use recreation will require.

#### **Development Reserve**

There are two areas classified as Development Reserve. One area is located in the upper valley between Crow Creek Road and Glacier Creek; the other is located in the lower valley between Virgin Creek and the Seward Highway.

These areas have physical characteristics that make them generally suitable for development. However, they are currently located well away from any utility infrastructure that would be needed to effectuate their development. Moreover, there does not appear to be a need for their use during the near and intermediate timeframe covered by the Plan. Consequently, these public lands are put into a development reserve status, to be held for future use.

Although it is not anticipated that these areas will develop within the near future, development may be allowed under the following conditions:

- The **Girdwood Area Plan's** Land Use Plan Map is revised for the affected area from Development Reserve to an active classification. This would allow the community to analyze the overall impacts and benefits of the proposed project.

- A Master Plan is submitted. The Master Plan should identify the intended uses and site layout, and address the social, environmental and economic impacts that development of the area would have on adjoining areas and the community as a whole.

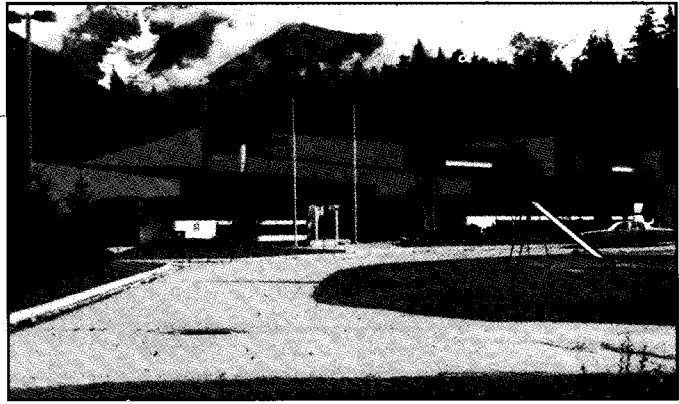
**Open Space**

Open space accounts for the largest amount of classified land area. It is located throughout the valley, taking in several types of land area. It includes wetlands and floodplains, steep slopes and hazardous lands, as well as recommended creek greenbelt areas. These lands should generally be left natural. Notwithstanding transportation and utility placements, the primary use of open space land is recreation. Development should be prohibited except as related to a recreational use and/or if authorized in an approved master plan.

# *P* Chapter 8. *ublic Facility Plan*



By 1962, Chair 1 had been built by the newly established Alyeska Resort, whisking a line of skiers from the mountain base to the upper slopes of Alyeska.



*Girdwood school.*

*a*

s a small community, Girdwood currently has a limited range of public facilities. As the area grows, it will be necessary to improve and expand the level which currently exists. Determination of actual need will have to consider visitor demands, as well as those of the local residents. Following are descriptions of the existing facilities and services, and recommendations for improvements.

### *Administrative Building*

Girdwood was an incorporated city between 1961 and 1975. Between the time following the 1964 earthquake and until the city was dissolved with the unification of the Municipality of Anchorage, city offices shared space with the community library in an old school building, currently occupied by the Little Bears Playhouse and located off the Alyeska Highway near its intersection with Glacier Creek Drive.

Following unification, the Girdwood Valley Service Area was created. The powers of street construction and maintenance, solid waste collection, fire protection, and parks and recreation were specifically required to be exercised within the service area and an elected Girdwood Valley Service Area Board of Supervisors was established. The five-member Board of Supervisors meets once a month in the Little Bears Playhouse building.

The Little Bears Playhouse has been serving the community as a meeting space for many years. In many ways, it has lent itself well to providing a relaxed informal atmosphere that is conducive to running the civic affairs of a small town.

As a result of its size and function as a child care center, however, it has become ill-suited for many public meetings of the Girdwood Board of Supervisors. The space is not large enough for many meetings, seating is limited, and the acoustics make it difficult for the public to follow the Board's deliberations.

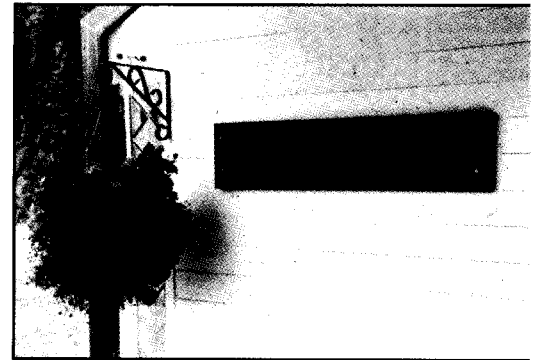
There is also no office area available to the Girdwood Board of Supervisors. Community development and visitor activities will likely increase in the future, requiring more time and attention from the Board. Ultimately, the Board will need full-time assistance to address the various issues coming before them. A small staff will require administrative office space and proper equipment, and the Board will need larger and better accommodations for handling public meetings.

## *Cultural Facilities*

### **LIBRARY**

The Scott and Wesley Gerrish Library has been located in the Girdwood Elementary School on Hightower Road since the school was built in 1981. Before that time, local library services were provided from the community's original school, a structure now occupied by the Little Bears Playhouse. The library joined the Anchorage library system in 1976 and is currently operated by the Municipality's Department of Cultural and Recreational Services.

The library occupies approximately 1,300 feet of floor space which houses a combined circulation area and children's room, stacks, a reading room, a staff office/lounge/workroom and bathrooms. The library is open 33 hours per week from Tuesday through Saturday. It currently houses between 12,000 and 13,000 books, plus close to 5,000 records/tapes, as well as periodicals, compact discs and microfiche materials. Total circulation in 1991 was 16,381 items compared with 14,844 in 1990 and 15,641 in 1989. Children's picture books and adult popular books are the most popular items. The facility is staffed by a full-time non-professional librarian and two part-time clerks.



On average, close to 1,000 patrons use the library each month, with October being the peak month and the summer months of June and July being the low months. Saturday patrons include a high proportion of ski spouses and weekenders. Special programs offered by the library include pre-school story time which is offered year-round, plus a summer reading program. In addition, a grade school story time is offered during the school year for first and second graders, and the library is heavily used as a supplement to the small elementary school library.

Although the school building is in generally good condition, the library lacks adequate space, particularly for a separate reference room and space for computerized reference equipment. It also lacks handicap accessibility in terms of aisle and shelf use.

Ultimately, the space in the school used by the library will be needed for school use. With the expected population growth in residents and visitors, a larger facility is needed in a more accessible and centrally located part of the community.

# Public Safety Functions

## **POLICE PROTECTION**

The Municipality of Anchorage does not provide police services in the Turnagain Arm area. As a result, police protection is provided by the Alaska State Troopers. A trooper has been based in Girdwood since 1972. In addition to Girdwood and Portage, the trooper serves a wide area extending between Mile 75 (Ingram Creek) and Mile 95 (McHugh Creek) of the Seward Highway; the western portion of Cook Inlet, including the Tyonek and Beluga areas; and western Prince William Sound, excluding Whittier. Prisoners are transported to Anchorage.

The trooper operates out of his house and from his patrol car. Altogether, he is responsible for about 700 case reports per year. Traffic enforcement and motor vehicle accidents are the primary problems in the area, followed by burglaries/thefts. Junked vehicles are also considered a problem. Girdwood is known as a "party town," although problems associated with unruly parties have reportedly declined in recent years. The trooper also assists in search-and-rescue missions in the service area.

The trooper has an excellent communications system which is used to contact headquarters, the military, school buses, and snow plows. However, the lack of formal office facilities is seen as a problem. The Alaska State Troopers are interested in establishing a public safety building which also would house a second trooper, a park ranger and Fish and Wildlife officers. Logically, such a facility would be located adjacent to the Seward Highway. However, no plans have yet been developed.

There have been recent efforts to extend the Anchorage Police Service area to Girdwood, and to phase out the role of the State Trooper in providing public safety services in the valley. Although it is currently not popular in the community, there will eventually be a need to increase the level of police service in the community. This plan does not address the issue of who is best positioned to provide the service, but notes that there will be a need to address community-wide public safety separate from the Seward Highway and the rest of the Turnagain Arm area. Consideration should be given to reserving space for a centrally located facility that can include inter-agency communications, and a small holding area.

## **FIRE PROTECTION**

Fire protection services are provided by the Girdwood Volunteer Fire Department in the Girdwood Valley Service Area.

The Girdwood fire station is a four-bay structure located south of the Alyeska Highway at the intersection of Glacier Creek Drive and Quartz Avenue. It was built in 1978 and is staffed by a fire chief and 30 volunteers. In addition to housing firefighting and emergency medical equipment, the building includes a kitchen, a small sleeping room and bathroom facilities.

Funding for the Fire Chief is equally split between the Girdwood Valley Service Area and Areawide Emergency Medical Services. The Anchorage Fire Department assists in the training of volunteers. However, much of the training is done in-house by the Girdwood volunteers themselves and is supplemented by personnel from the State Fire Training Division.



Firefighting equipment includes three 1981 pumper-tankers, each with a carrying capacity of 1,750 gallons and a pumping capacity of 750 gallons per minute. However, the fire station is too small to house all equipment and a reserve ambulance and a pumper-tanker are instead stored in an adjacent community garage. Although there have been no major fires in the Girdwood Valley in recent years, the Girdwood Volunteer Fire Department responded to 121 fire calls in 1991.

The Girdwood Valley Service Area has an Insurance Services Office (ISO) rating of 7 for commercial structures and 8 for residential properties. Water is derived from hydrants associated with the community water system. Areas not on the community system are served by a tanker shuttle.

There are two major problems associated with fire protection in the Girdwood Valley Service Area, one associated with the fire station and the other with equipment. The existing fire station is too small to handle all of the existing fire protection and emergency medical services equipment. The facility also lacks a training room. In addition, the building has structural flaws. It has no heat and there are no drains in the floor of the equipment room.

The lack of a ladder truck is another potentially serious problem. The Department's longest ladder is 35 feet, which is inadequate in view of a recent trend to multi-family structures and with construction of the new Alyeska Resort hotel. The Municipality of Anchorage has made the acquisition of a quint fire apparatus a high priority for legislative funding. The new quint fire apparatus would include a 65- to 75-foot elevating ladder and a 1500-gallon-per-minute pump. However, a new truck cannot be acquired until space is available to house it.

#### **EMERGENCY MEDICAL SERVICES**

Emergency medical services (EMS) are provided areawide throughout the Municipality. From the Girdwood fire station, these services are provided not only to the Girdwood area but also to the area between Mile 75 and Mile 100 of the Seward Highway.

Emergency medical equipment includes two Advanced Life Support ambulances, one a 1990 model and the other a 1988 chassis with a 1973 ambulance module; a 1979 rescue vehicle; and an inflatable raft with an outboard motor. This equipment is housed at the Girdwood fire station except for the reserve ambulance, which is stored in an adjacent community garage.

Except for the fire chief, all emergency medical services personnel in the Girdwood area are volunteers. The department is trained and certified in advanced life support; EMT-I, II and III (EMT III's are qualified to use defibrillator equipment); CPR; and first responder-hazardous materials. The department averages about 190 EMS calls per year. Patients are transported to hospitals in Anchorage.

Aside from periodic additions and upgrading of equipment, the major unmet emergency medical services need in the Girdwood area is related to a need for a civic/public safety building capable of handling all EMS equipment and accommodating EMS training activities. Another problem is related to Girdwood's location 40 miles south of Anchorage which results in relatively long travel times for transporting patients. Despite continued improvements to the Seward Highway, it is not anticipated that this situation will change significantly in the future.

**PROPOSED JOINT COMMUNITY FACILITY**

In response to a variety of community facility needs, the Municipality is in the process of having engineering and design work done for the renovation of the existing Girdwood Fire Station and other proposed facility additions. The proposed improvements include renovations to the existing fire station to bring it up to current code compliance, an addition to the existing fire station of approximately 2,500 square feet for the anticipated quint fire apparatus (combined ladder-pumper-tanker truck), and additional vehicles.

The design work will also include a 4,000 square foot library, and 2,000 square foot community meeting area. The new library and community meeting room are intended to replace the current substandard facilities with larger ones that better meet the needs of the community. The new facilities are planned to be co-located on the site of the existing fire station and a portion of land immediately to the west that currently includes a little league ballfield.

When these facilities are constructed (funds are not yet available), they will be a significant addition to the community. However, these improvements will not address all community facility needs.

Given the central location in the heart of the community with access to Alyeska Highway, land in this area should be reserved for additional or expanded community facilities. The four lots between Glacier Creek Drive and Glacier Creek should be retained for future community use. In addition, two acres from the northernmost portion of the "squirrel cage" subdivision should also be retained. Sufficient land area should be reserved for an integrated siting and design of new complementary facilities to serve the community.

Such uses may include a police facility, additional parking area, and/or expanded community center that may include kitchen facilities, historical/art display area, recreation center, and administrative offices. Eventually, the older structures housing the Little Bears Playhouse and fire/EMS vehicles may be replaced with expanded child care and recreational facilities.

*Health Services*

Due to the small size of the community, Girdwood has few formal medical or dental services. At present, the Girdwood Health Center offers the only formal medical services in the valley. Located in the Girdwood Mall, the Girdwood Health Center offers a full range of diagnostic and treatment services by a family practice physician, as well as a chiropractic physician.

Girdwood also has part-time dental offices and a holistic healing enterprise. Girdwood's projected population, combined with its proximity to Anchorage, will not support a hospital facility in the area during the foreseeable future. Nevertheless, it is likely that additional medical and dental offices will open to support growing numbers of residents and visitors.

## Education

As in other areas of the Municipality, educational services in the Turnagain Arm area are provided by the Anchorage School District. An elementary/junior high school housing students from kindergarten through the eighth grade is located in Girdwood and serves students from throughout the Turnagain Arm area. However, students from Rainbow, Bird and Indian have the option of attending classes at either the Girdwood or Oceanview elementary schools. Approximately 40 high school students from the area attend Dimond High School in Anchorage.

### EXISTING SCHOOL FACILITIES

The Girdwood School occupies a relatively remote 27.8-acre site north of the Alyeska Highway, at the end of Hightower Road. The present school was completed in 1981. It replaced earlier facilities located nearer the Seward Highway, one on Monarch Mine Road now utilized by the U.S. Forest Service, while the other was moved from the Old Townsite area and functioned as a community library for a number of years. It is now located off the Alyeska Highway near its intersection with Glacier Creek Drive and is used by the Little Bears Playhouse and as a meeting place for the Girdwood Valley Service Area Board of Supervisors.



*Girdwood school.*

Since the school was constructed, the only significant modification was a four-room addition in 1984. Currently, the school has nine classrooms (seven for elementary and two for junior high). Other school amenities include a small library, an art/science room, a multi-purpose room, a community schools office, a nurse's room, custodial closets, a kitchen and staff office/reception space. As noted previously, the Scott and Wesley Gerrish Library is located within the school.

The Girdwood School is staffed by a principal, five certified elementary school teachers, two junior high school teachers, a half-time kindergarten teacher and a half-time librarian. Some special programs, such as music and art, are provided at the school by itinerant teachers from Anchorage, while gifted students are periodically bused to town for their program needs.

At the end of September, 1993, the Girdwood School had a total enrollment of 163 students, including kindergarten. (See Table 10.) Girdwood School has a program capacity of 189 students (21 students per classroom), which puts its utilization at 86 percent of capacity. Unlike many Anchorage area schools, Girdwood School is not overcrowded at this time. Furthermore, the school building is in very good condition and the size of the school site is well in excess of ASD minimum standards.

### ENROLLMENT TRENDS AND FORECAST

Including kindergarten students, overall enrollment in the Girdwood School rose from 91 to 163 students between 1979 and 1993, an increase of almost 79 percent. Rates of growth have been uneven but the September, 1993 enrollment is the highest recorded during that period.

**Table 10**  
**School Enrollment**  
**Elementary/Junior High School**  
**1979/80 -- 1993/94**

School Year	Enrollment
1979/80	91
1980/81	109
1981/82	131
1982/83	148
1983/84	110
1984/85	111
1985/86	109
1986/87	125
1987/88	144
1988/89	124
1989/90	123
1990/91	133
1991/92	143
1992/93	150
1993/94	163

Source: Anchorage School District

The Anchorage School District's most recent analysis of student enrollment trends and future projections indicate the current school facility will be sufficient to meet projected enrollment increases through the end of this decade. Table 11 depicts the District's analysis of space requirements at the school.

There is a possibility that actual enrollments could increase beyond what is projected if new employment associated with the new resort hotel brings more permanent residents with school- aged children to the valley than anticipated over the next six years. However, the relocation of the public library would free up space for an additional classroom.

Further classroom additions will ultimately be needed. The Anchorage School District should monitor their projections closely and schedule a new addition at least three years in advance of need to allow time for funding, design and construction to occur.

Girdwood will never reach enrollments to meet Anchorage School District standards for a high school. However, the School District may eventually build a facility for high school students that is less than its standard. It may be more in scale with some of its secondary alternative schools in Anchorage which typically range from 200-400 students, or even less.

This Plan includes an additional 12 acres of land classified as Public Lands and Institutions next to the existing school property. The land is located north and west of the existing school, and is intended to be used for a secondary school and physical education/sports recreation facilities.

**Table 11**  
**Analysis of Elementary Space Requirements (K-8)**  
**Girdwood**  
**1993 -1999**

Year	Classrooms	Program Capacity	Projected Membership	Add'l Students Program Could Accommodate	Rooms Needed for Membership	Classrooms Available	Capacity Utilized
1993-94	9	189	163	26	8	1	86%
1994-95	9	189	168	21	8	1	89%
1995-96	9	189	175	14	8	1	93%
1996-97	9	189	176	13	8	1	93%
1997-98	9	189	177	12	8	1	94%
1998-99	9	189	178	11	8	1	94%
1999-00	9	189	179	10	9	0	95%

## *Parks and Recreation*

The provision of a variety of recreational facilities is an essential element of good community development. In the Girdwood area, more than in most Alaska communities, not only must local recreation demands be satisfied but also those of tourists and other visitors. To some extent, the same facilities can serve both groups. However, for young children and teenagers, special recreational facilities must be provided.

### **REGIONAL PARKS AND RECREATIONAL AMENITIES**

Girdwood has several public and private recreational amenities which attract recreational enthusiasts and other visitors from outside the community, as well as being available to local residents.

Alyeska Resort is the State's premier skiing area, attracting in excess of 150,000 skier visits each year. The presence of ski amenities is the primary reason for the large number of week-end and other temporary residents in Girdwood, a significant proportion of whom have invested in second homes in the community. Skiing was also a motivating force for many residents who chose to live in the community year-round. In addition, Alyeska is a popular summer attraction, with 96,200 visitors counted in the summer of 1989.

The western edge of the Girdwood valley abuts Chugach State Park. This 495,000-acre park extends between Turnagain Arm and Knik Arm. It is accessible from the community and offers a wide variety of outdoor recreation experiences, including hiking and wildlife viewing. The northern and eastern edge of the Girdwood valley abuts the Chugach National Forest which also offers a comprehensive range of outdoor recreational opportunities.

The Crow Creek Mine is another local recreation-related attraction. This National Historic Register property offers opportunities for recreational gold panning, viewing old mining buildings and equipment, as well as overnight camping, lodging, and food service. It was visited by an estimated 32,100 people in 1989.

#### **LOCAL PARKS AND RECREATIONAL AMENITIES**

Local parks and recreational services in the Girdwood area are provided by the Municipality's Department of Cultural and Recreational Services, with input from the Girdwood Valley Service Area Board of Supervisors. Municipal park lands include Girdwood Park, California Creek Park, Moose Meadows Park, Girdwood Town Square Park, Girdwood Town Square Buffer Park and 27 parcels within the Alyeska Basin area. Most of these lands have not been formally developed.

Girdwood Park is located off the Alyeska Highway at Glacier Creek Drive. This 2.77-acre park was established in 1966 and formally dedicated as a park in 1984. It includes a fenced play area with playground equipment, two tennis courts, an open grassed area with a volleyball court, picnic tables and a fire pit. The site also includes a former community school/library building which now houses the Little Bears Playhouse; an old fire hall which is still used to house some firefighting/emergency medical services equipment and also serves as a caretaker's residence; and an old community building which is currently used as a pottery studio.



*Children playing in Girdwood Park.*

Girdwood Park is a community asset. Except for the school, this is the only developed playground in the Girdwood area. However, the playground area is too crowded, the tennis courts need re-surfacing and the structures on the property are old and require constant maintenance. Re-surfacing and repairs are planned for the tennis courts and playground improvements are also scheduled.

Although it is not a dedicated park, a ballfield has been established between Girdwood Park and California Creek Park, on the west side of the public safety building property. These lands were withdrawn from the Heritage Land Bank and management authority was transferred to the municipal Parks and Recreation Department in 1988.

California Creek Park is located off the Alyeska Highway, next to Girdwood Park. It was established in 1966 and dedicated in 1990, and is the location of the annual Forest Fair held on the first weekend in July. The 12.53-acre site includes land on both sides of California Creek. Amenities include pathways, some playground equipment and a covered pavilion. Planned improvements include development of a basketball court and the installation of playground equipment. Parking improvements are also planned.

Moose Meadows Park is located off Arlberg Avenue, north of Aspen Road. This 3.9-acre park covers two tracts which are separated by a platted but undeveloped portion of Alyeska Avenue. In 1989, a soccer field was developed on the eastern tract adjacent to Arlberg Avenue. A well house and a small gravel parking area are also on the property. The remaining area has no site improvements. Future park plans call for development of a playground, plus landscaping and additional parking space.

Girdwood Town Square Park was established in 1965 and dedicated in 1990. It is an 0.82-acre tract in the center of the commercial area of the new Girdwood townsite, between Hightower Road and Holmgren Place and between Lindblad Avenue and Girdwood Place West. Pedestrian access from all four streets is platted, but no amenities have been developed to date. When this area was platted after the 1964 earthquake, it was intended that the park would function as a central community square for a re-established townsite. However, commercial structures surrounding the park face outward toward the street rather than inward. Future plans call for the development of a playground and landscaping at this site.

Girdwood Town Square Buffer Park is also located in the new Girdwood townsite area, between Girdwood Place West and the Alyeska Highway. It was established in 1965 and was dedicated in 1990, except for the eastern 10 feet. The park functions as a buffer between the new townsite area and the Alyeska Highway, and there are no plans for formal improvements.

Finally, there are 27 small park reserves ranging in size from 1,835 to 62,140 square feet within the Alyeska Basin Subdivision. These reserves were established by plats between 1970 and 1974. They are not dedicated park lands, but serve either as buffer strips along Alpine Avenue or as drainageways. There are no plans to develop formal park facilities on any of these lands.

In addition to local parks and park reserve lands, the Girdwood School facilities are available for public use. Recreational amenities at the school include a playground, a playing field for soccer and softball, basketball hoops and a lighted ice hockey rink. The school multi-purpose room is also available for a variety of recreational and civic uses.

The current parks, with existing and planned improvements, are a good base for the community's system of parks and recreational facilities. As the area grows, additional parks and recreational facilities will be needed, particularly at the neighborhood park level. Although adopted in 1987, Volume 3 of the **Anchorage Park, Greenbelt and Recreation Facility Plan** is still very germane in identifying future needs of the community. In particular, it identifies the need for additional parks where there are current deficiencies, as well as where new residential development is anticipated. Parks identified include the following:

- Girdwood School/Community Park,
- Alyeska Basin Neighborhood Park,
- Crow Creek Road Neighborhood Park,
- West Side Neighborhood Park, and
- Virgin Creek Neighborhood Park.

These parks are intended to provide space for active recreational facilities that may include equipped playlots, tennis and basketball courts, and open play fields for soccer and softball. The parks would also include wooded footpaths and benches for passive use.

The parks would range in size from 5-15 acres. The latter three parks are not specifically identified on the Land Use Plan Map. A specific location should be reserved as plans for residential development of the area are prepared prior to any land disposal.

The 1987 Park Plan locates Alyeska Basin Neighborhood Park along the western side of the subdivision near the end of Alpine Way. However, there may be a potential conflict if a new road is needed in the future to connect Seward and Alyeska Highways on the east side of Glacier Creek.

An alternative location for the park may be the southern portion of the remaining undeveloped part of Alyeska Basin Subdivision that is on the north side of Alpine Way. The park, which would include retention of the ephemeral stream and spruce/hemlock grove, could provide recreational amenities to the neighborhood. It could also provide a buffer or transition between the existing residences and any new development that may occur on the remaining undeveloped land.

Acquisition of the park could occur either by fee simple acquisition, or through a land trade with the private land owner. The Heritage Land Bank would be an appropriate vehicle to effectuate such an acquisition.

The community park proposed next to the school could largely be sited on school land. The current school site is 27.8 acres in size, far in excess of its needs. Another 12 acres is designated for school purposes, most notably for a secondary school facility. If additional land is needed, however, it could be made available from adjoining Heritage Land Bank property.

### **RECREATIONAL TRAILS**

Trails were the earliest form of transportation in the Girdwood area. One of the earliest was the Iditarod Trail, which ran from Turnagain Arm up through the valley to Crow Pass, where it descended to Eagle River and out to Knik Arm. Today, trails serve both a pedestrian transportation and recreational purpose. Trails form integral links in a community as spread out and divided by natural features as Girdwood.

The trail receiving the most recreational use, which is also the major pedestrian transportation link in the community, is the Alyeska Highway Trail. Built during the summers of 1982 and 1983, the trail parallels the Alyeska Highway from south of the railroad to the end of the highway at Alyeska Resort.

The trail is located on the west and north sides of the highway within the right-of-way. The trail is connected to the Old Girdwood Townsite by way of an underpass beneath Alyeska Highway. Future plans call for the trail to be extended to the Seward Highway, and then routed westward along the highway to Chugach State Park.

The Alyeska Highway trail has two paved off-shoots. One extends down Hightower Avenue to the Girdwood School. The other is located along Arlberg Avenue from the end of Alyeska Highway to the new Alyeska Prince Hotel parking area.

One of the most popular and well-known off-road recreational trails is the Winner Creek trail. Developed by the U.S. Forest Service, the trail extends from Alyeska Resort to Winner Creek. At the creek, the trail forks, with one fork going upstream into the upper valley of Winner Creek, and the other going downstream to the confluence with Glacier Creek, in the Four Corners area.

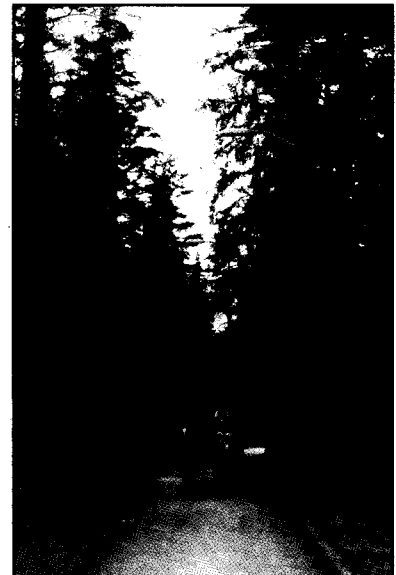
Concern has been expressed for the loss of the lower portion of the trail due to the new resort expansion. This plan proposes a new trailhead be established at the new resort hotel parking lot. A new trail link should be made to connect it with the existing trail. The trail should be protected from any further encroachment due to development.

There are many other unimproved trails throughout the valley which receive a significant amount of use, particularly by local residents who are familiar with the trails. They are generally located along the perimeter of the valley and alongside the creeks.

The one area that receives the largest amount of trail use by both local residents and visitors is that portion of the valley generally located on the east side of Glacier Creek between the existing community and Winner Creek. Several trails extend from the north end of the airstrip and the Moose Meadows to Winner Creek. Hikers, cross-country skiers, skijorers, and dog mushers all use the area quite extensively.

The area is interlaced with a series of small waterways and connecting, open meadows within spruce/hemlock uplands that have made it particularly attractive for recreationists. Some of the most dramatic views of the surrounding mountains can be seen from the open areas. This area, which is classified Recreation Reserve, is viewed as a key component for future year-round visitor recreation as well as local use.

The **Anchorage Trails Plan** (which includes Girdwood) is currently in the process of being revised. The revision will update the current plan, which was adopted in 1985, as well as the trails component of the **Anchorage Park, Greenbelt and Recreation Facility Plan**. Upon adoption, the newly revised **Anchorage Trails Plan** will be a functional component of the Anchorage Comprehensive Plan. As such, it will address the location and type of trails to be established, design standards and policies, and prioritization of improvements.



*Moose Meadows Greenbelt Trail  
along Arlberg Avenue.*

The following policies/guidelines are intended to be interim measures specifically oriented to the Girdwood area until the revised **Anchorage Trails Plan** is adopted. It is further recommended that, to the extent practicable, these policies/ guidelines be made a part of the revised Trails Plan.

1. Official trail corridors are those currently identified in the **Anchorage Trails Plan** and Volume 3 of the **Anchorage Park, Greenbelt and Recreation Facility Plan**. These plans will be superseded by the revised **Anchorage Trails Plan** and the proposed management plan for the Recreation Reserve.



2. Each off-road trail corridor should have a trail and buffer area associated with it. 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; and
  - patent notes/restrictions. (Some parcels transferred to the State and the Municipality have public access easements that vary from 0 to 600 feet in width. These easements will prevail unless a formal request is made to modify the dimensions. Any requests to reduce the dimensions must be based upon an on-site evaluation using the previously noted factors.)
3. Prior to the disposal of any public land containing a trail corridor, the location of the trail and buffer area should be located in the field, and recorded as an easement for such use. The easement should be noted on any subdivision plat made of the area.
4. New roadways that are classified as collectors should be designed to include a separated foot/bicycle path.
5. All existing trails should be available for multiple use, except where motorized use is prohibited.
6. Off-road trails should be left primitive or unimproved. Exceptions may be considered for clearing and brushing of downed timber, and to improve drainage that may be causing trail damage.
7. A specific management plan should be prepared for the Recreation Reserve area noted on the Land Use Plan Map. The management plan should identify existing trails and other potential recreational uses. Most trails are considered for multiple use at the present time. However, the management plan should recognize the potential for future competing uses and conflicts and identify a means for resolving them. The plan should also include a relocation of the trailhead in the clear zone at the north end of the Girdwood airstrip.

## *Utilities*

### **WATER**

The provision of adequate quantities of water to all major developed areas is essential for good community development. In Girdwood, which experiences large daily variations in population during the winter and summer tourist seasons, the demands of part-time residents and visitors must also be accommodated.

Piped water services in the Girdwood area are provided by the Anchorage Water and Wastewater Utility (AWWU) and by Glacier Utilities. AWWU provides service east of Glacier Creek, while Glacier Utilities serves part of the new townsite area and an adjoining trailer court located immediately west of Glacier Creek. Elsewhere, water is provided by private wells.

The present AWWU service area includes two formerly private water systems, the Alyeska Lodge and the Alyeska Basin Subdivision systems, plus a new area to the north which takes in the new Alyeska Prince Hotel site and adjoining lands controlled by the resort and the Municipality. The former Alyeska Lodge system was operated by Alyeska Utilities, Inc., and was built during the mid-1960's to serve the lodge and the adjoining Alyeska Subdivision. The water source for this system was a well with a reported capacity of 400 gallons per minute located in what is now Moose Meadows Park. The former Alyeska Basin Subdivision system was operated by Cherrier, King and Cherrier, the original subdivision owner/ developer. This subdivision was served by a well with a reported capacity of 200 gallons per minute.

Both private water systems were plagued with problems relating to water quality, inadequately sized lines, poor construction and lack of hydrants. They were acquired by AWWU in the fall of 1990 and in the spring of 1991. Following acquisition, AWWU drilled two new wells northeast of the airport and added a one-million-gallon water storage reservoir. In addition, AWWU has replaced many lines, installed fire hydrants, and established pressure reducing stations. The upgraded system went into service in October, 1991.

As of September, 1992, the AWWU system had a total of 461 water connections, of which 419 were classed as residential and another 33 were classed as metered residential. The remaining connections were commercial, only one of which was metered. In 1991, the average daily water production for the system was 200,000 gallons per day. This is well within the 600,000-gallons-per-day capacity of the well serving the system. However, Girdwood does not experience consistent water demands. Peak flows occur on weekends during the winter ski season. Higher flows during the week in the winter are believed to result from owners of second homes leaving their taps running to keep the pipes from freezing. Unfortunately, information on peak flows is sketchy since there are few metered users.

A separate small piped water system in Girdwood was developed after the 1964 earthquake by the former City of Girdwood to serve the then newly established townsite area. This system was later extended to serve a trailer court on Hightower Road. The system is operated by Glacier Utilities and is essentially a user-operated system that contracts for maintenance. It has approximately 35 connections, 1 hydrant and is served by a well with a reported capacity of 500 gallons per minute.

The 1993 **Anchorage Water Master Plan** update has recently been completed, and includes an evaluation of Girdwood's existing public water system. It also contains a number of recommendations for expanding and upgrading the system to address current problems, as well as future water demand.

The water master plan identifies major capital improvements, to include the development of additional water supply, reservoir storage and system extensions to serve the entire community. The plan notes the proposed water system for Girdwood is flexible enough to accommodate various phasing strategies.

### **Water Supply**

The master plan recommends a new well supply be developed in the vicinity of the existing sewer treatment plant in the lower part of the valley. The new well capacity should be at least 600 gallons per minute. The purpose would be to provide enough water to the community system to meet the peak day demand for the next 25 years; to fill a new reservoir to be located on the eastern side of the valley; and to provide redundancy in the water system in the event that service from the existing wells at the north end of the airport is disrupted.

The vicinity of the wastewater treatment plant offers considerable advantages as a site for a new well source. The site has access, power supply, and proximity to chemical handling and storage facilities. It's located between Glacier and California Creek drainages on alluvial deposits and offers good potential for development of a high producing well. The site is also suitably located for interconnection with transmission mains feeding the east and west sides of the valley.

#### ***Water Storage***

The master plan recommends that an additional above-ground reservoir of one million gallons capacity be located at the southern end of Timberline Drive, and be connected to both the Alyeska Basin Subdivision water system, as well as to the new well supply near the wastewater treatment plant.

The most critical criteria for locating the reservoir is elevation. The reservoir must be above the 405-foot elevation. The only practical place is in the vicinity of the southern end of Timberline Drive. Areas at the 405-foot elevation on the west side of the valley are on the inaccessible and avalanche-prone mountain side.

Prior to construction, the water reservoir will go through siting and design processes that will involve local review. AWWU will look at site and design alternatives which minimize impacts on the surrounding area.

The recommended storage volume will be needed in order to have sufficient reserve in the water system for fire protection, and to moderate or equalize water pressure throughout the service area.

#### ***Water Transmission and Distribution***

The east side of the valley is wholly served by AWWU. However, the west side of the valley, excepting the new townsite area, continues to rely on individual wells. Much of the existing development and any new development will likely need community water service.

There are two viable options for providing water service to the west side of the valley.

- One option is to first establish a new well supply near the wastewater treatment plant and expand the transmission and distribution system from there to the lower part of the valley, such as the old townsite area and Jewel and Monarch Mine Road area. Eventually, the system could be extended up Alyeska Highway and link with the current system, which could be extended westward across Glacier Creek at the new townsite area.
- The second option would be to extend the existing system across Glacier Creek at Alyeska Highway and continue down the highway to the lower valley. Along the way, new lines could be extended to the new townsite and Crow Creek Road areas.

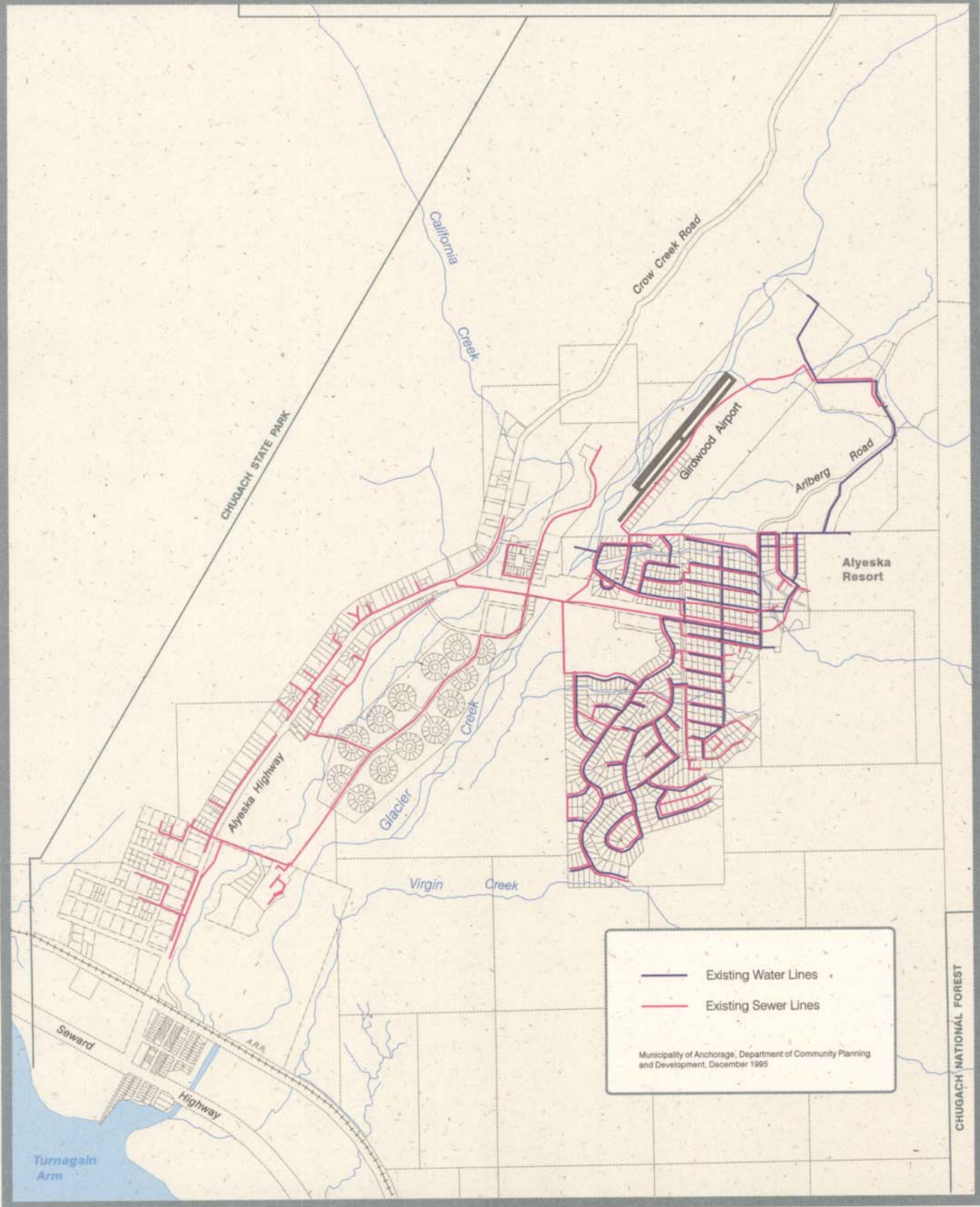
Both water transmission options will eventually lead to the same result -- a looped system serving the entire community. However, each option has its advantages and disadvantages, depending on how and when each area needs to be served.

A significant advantage of first expanding from the existing system rather than starting a new system on the west side is that the reservoir capacity is already in place to offer adequate

# Existing Public Sewer and Water Systems



0 1/2  
mile



reserve for fire flow and pressure equalization. Connection to a new Alyeska Basin Subdivision reservoir would be required for a new west valley well source in order for that system to provide the same degree of water service.

The need for a water service line extension from the existing system to the Glacier-Winner Creek area is unknown at this time. However, if it is needed, a new pressure zone will have to be created, which may likely require additional water storage. The potential need for the extension of water service could be made in conjunction with consideration of any development proposals for that area.

The water master plan for Girdwood identifies how to achieve a community-wide water system that is capable of producing a sufficient supply of water to meet projected peak demands. The plan also acknowledges the policy of the Municipality that any actions taken to implement it through capital improvement programming be consistent with the Girdwood Area Plan.

**SEWER**

As with water, an adequate sewer system serving all major developed areas, together with sewage treatment, is essential for good community development. This is especially important in the Girdwood valley where poor soil conditions and high water tables often limit the effectiveness of septic tanks.

The existing gravity flow sewer system was constructed by AWWU and put into operation in 1977/78. The system presently has one pump station, located on the east side of Glacier Creek. As of September, 1992, there were 582 sewer connections, all but 20 of which were classed as residential. Sewer service is available throughout most of the Girdwood valley, including the new Alyeska Prince Hotel site, although many residents continue to rely on individual septic systems. The only major areas not served are the old Girdwood townsite, portions of the Monarch Mine Road to Agostino Mine Road neighborhood, and north of the Double Musky on Crow Creek Road.

Sewage is treated at the Girdwood wastewater treatment plant which occupies an 8.9-acre site at the eastern end of Ruane Road. Here, wastes are screened, filtered, aerated and clarified. Liquid sludge is hauled to Point Woronzof, while treated effluent is discharged into Glacier Creek under a state permit. A 2.6-acre percolation pond used to dispose of secondary effluent from the plant is no longer in use.

Normal winter sewage flows average 400,000 gallons per day, while normal summer flows average 250,000 gallons per day. However, the Girdwood area does not experience consistent daily sewage flows for two main reasons. First, the community has large daily fluctuations in population. This is at its most extreme on winter weekends when snow conditions are good for skiing and many more skiers are present. Fluctuations also occur during the summer tourist season. Second, and more serious, the system experiences severe inflow and infiltration problems resulting primarily from the lack of a storm sewer system. These problems are most severe during periods of high snowmelt and/or precipitation, or at break-up when extreme surface run-off conditions are compounded by high groundwater tables and the location of many manholes in low-lying areas. At such times, peak flows can average as high as 1.2 million gallons per day and threaten the capability of the treatment plant.

AWWU anticipates the wastewater treatment plant will be operating at or near capacity in the near future. However, design work is currently being undertaken for planned improvements at the facility, which will boost its capacity by 30 percent. The plant expansion is planned for construction in 1996 at an estimated cost of \$2.5 million.

AWWU is currently having the **Anchorage Wastewater Master Plan** updated, to include the Girdwood area. The plan will investigate ways to resolve the major needs of the system and, in particular, the reduction of infiltration and inflow of ground and surface water.

The size and capacity of the existing collection system, the system of pipes that collect the sewage and deliver it to the treatment plant, is adequate to handle the increase in wastewater resulting from the projected growth that is assumed in this Plan. However, new extensions will be needed to provide service to new development areas. The master plan update will investigate how to best provide the needed extensions.

There are a few existing areas that are also in need of the sewer service. Efforts are being undertaken to extend sewer service to the old townsite area between the Seward Highway and Alaska Railroad. The service area also includes a small portion of the undeveloped area on the west side of Alyeska Highway across from the old townsite.

Another area of existing development which is planned for sewer service is the Monarch Mine Road to Agostino Mine Road neighborhood that is over the ridge crest just west of Alyeska Highway and north of the U.S. Forest Service facilities. Both of these areas contain some of the oldest subdivided lots in the valley.

Experience in the valley has shown that the area's wet climate coupled with its soil and groundwater conditions does not make the standard on-site septic system a reliable way to handle wastewater disposal. Consequently, it is the general policy of this Plan that any new development in the valley that requires wastewater disposal should, to the extent practicable, be connected to the public sewerage system. Exceptions should be documented with clear findings of fact that a suitable alternative will work.

### **ELECTRIC POWER**

Electric power has been provided to the Girdwood area by Chugach Electric since the 1950's. The community is fed via a 24.9-kilovolt line-to-line distribution system which leads from a 115-kilovolt main transmission line running between Anchorage and the Kenai Peninsula. Both single- and three-phase power are available locally.

Girdwood is a relatively minor part of a much larger electric power system which extends from the Anchorage Bowl to the northern Kenai Peninsula and from Whittier to Tyonek. The system utilizes power sources remote from Girdwood, and the only local power-related facility is a substation located off the Alyeska Highway in the old townsite area.

As of September, 1992, there were 1,242 metered electric power customers in the Girdwood valley area. Upgrading of the substation and transmission switching were undertaken in 1991. The local system has no serious problems and, except for routine maintenance, Chugach Electric anticipates no need for additional major improvements.

**NATURAL GAS**

The Girdwood area does not have access to natural gas as a source of heat and energy. Most of the residents and businesses in Girdwood currently use oil, propane, wood, electricity or a combination of these.

For many years, there has been interest by residents in receiving natural gas service. However, no objective evaluation of the feasibility of extending service to the area had been done until recently. In 1993, Enstar Natural Gas Company did an economic feasibility study, to include evaluations of various routing alternatives, and to determine what it would cost to extend service to the community.

Enstar concluded that the extension of a new 8-inch pipeline from Anchorage via Powerline Pass would be the most feasible means of extending service to Girdwood, as well as the Bird and Indian communities. The cost of the transmission line was estimated at \$12 million.

One proposal for financing the line would be for the State to pick up two thirds of the cost (\$8 million) and the Municipality the other third (\$4 million). The Municipality's portion would be funded through a local improvement district where the Girdwood property owners would be assessed for the costs. Once the line reached Girdwood, Enstar would assume the costs for the distribution system.

Another alternative currently being investigated would be to convert an existing 8-inch line which is operated by the Defense Fuel Supply Command and used to transport petroleum products from Whittier to Anchorage. The line is believed to be surplus to current needs and, thus, may be available for conversion to transport of natural gas. The cost of line conversion is estimated to be \$3 million. The Girdwood Board of Supervisors has made a formal request of the federal government to see if the line may be made available. The Anchorage Assembly also supports the investigation of this alternative.

This Plan supports the extension of natural gas service to Girdwood. It would be a much less expensive and cleaner form of energy, particularly for heating. The use of natural gas over other currently used energy sources would improve the air quality in the valley, especially during the colder winter months. The cost and feasibility of new development would also be less with the economical source of energy that natural gas would provide.

**SOLID WASTE DISPOSAL**

Solid waste disposal services are provided within the Girdwood Valley Service Area by two entities. The Municipality's Solid Waste Services has maintained a transfer station in the community since 1976, while Peninsula Sanitation is licensed by the Alaska Public Utilities Commission to pick up and haul garbage.

The Girdwood transfer station is located on Ruane Road, next to the wastewater treatment plant. A 120-cubic yard transfer trailer is used to receive garbage that is hauled there either by individuals or businesses. Reportedly, most residential users haul their own garbage. Peninsula Sanitation has close to 115 local customers.

Solid Waste Services hauls the filled transfer trailers directly to the Anchorage Regional Landfill located near Hiland Road and the Glenn Highway north of Anchorage. Approximately 45 tons a week of solid wastes are removed from Girdwood each week. This quantity should increase significantly when the new Alyeska Prince Hotel is operating at capacity.

The solid waste disposal system at Girdwood generally works well. Previously, the main problem had been that the former containers were open to the elements. This problem was rectified in 1993 when a new covered transfer station was completed and a new attendants building and a buried holding tank added. In the longer term, the transfer building can be expanded to place two trailers to receive solid waste if it becomes necessary.

### **TELEPHONE**

Telephone service in Girdwood is provided by the Anchorage Telephone Utility, which serves the Anchorage Bowl and also provides service south along Turnagain Arm to the Begich-Boggs Visitor Center in Portage, plus the small Kenai Peninsula communities of Sunrise and Hope. Originally, telephone service in Girdwood was provided by a private operator from an exchange located in the old townsite. The system was acquired by the Anchorage Telephone Utility from GAB Telecommunications, Inc., in June, 1978.

The Girdwood Wire Center serves a 9.51-square-mile area. It was constructed in 1984 and is located on Lindblad Avenue in the new Girdwood townsite. In turn, it is currently served by the Central Wire Center in Anchorage via host/remote line modules over a fiber-optic cable which extends between Anchorage and Whittier.

The 1992 Anchorage telephone book includes a total of 912 listings for Girdwood. It should be noted that this figure understates the actual number of lines because it excludes unlisted numbers and because agencies and corporations such as the U.S. Forest Service and the Alyeska Resort have multiple lines.

Local growth in demand for telephone service has reportedly been relatively flat for the past few years. However, the Anchorage Telephone Utility is currently assessing options for upgrading and expanding telephone service in the Girdwood area in light of the new 307-bed Alyeska Prince Hotel and associated development.

### **SNOW REMOVAL**

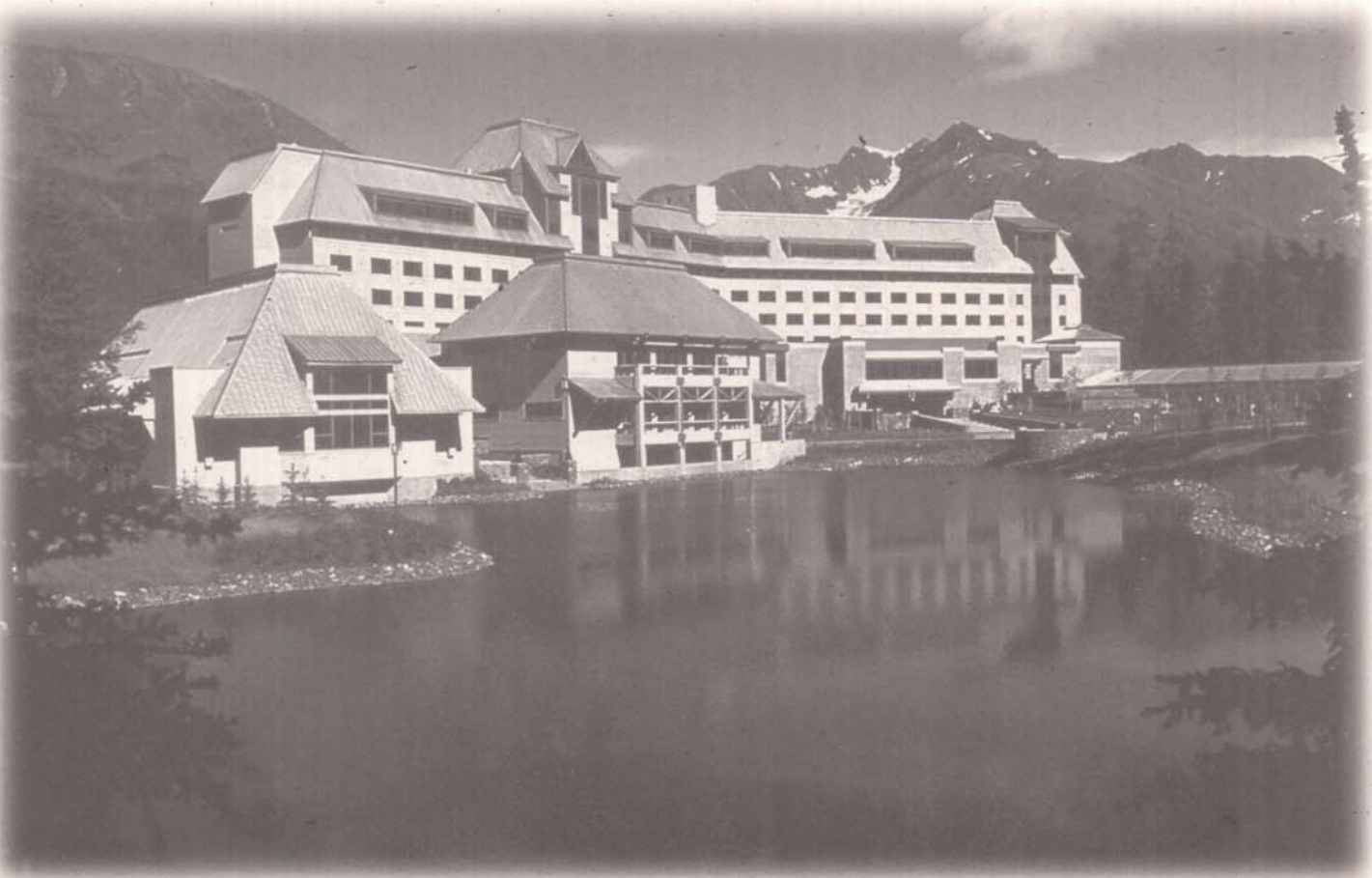
Snow removal services in the Girdwood Valley Service Area are presently contracted out to a private company. Girdwood normally receives in excess of 128 inches of snow per year. This, coupled with uneven grades in some portions of the valley, makes efficient snow removal essential to the community's well-being.

To date, snow removal has primarily involved pushing snow off the traveled way of local roads. However, the Municipality's Public Works Department is investigating the possibility of establishing a snow dump area on a five-acre site occupied by the Girdwood wastewater treatment plant's former percolation pond off Ruane Road.

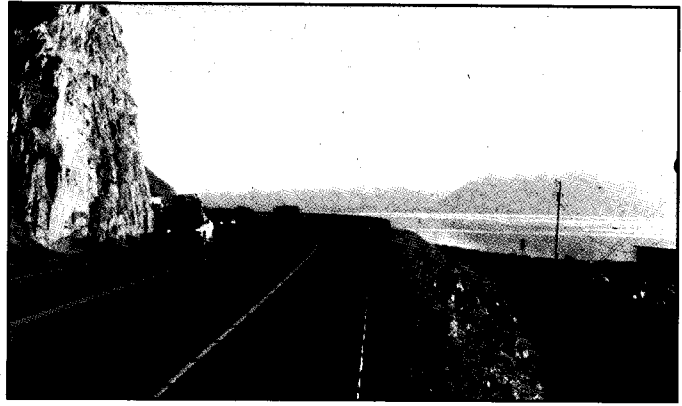
Eventually, there may be a need for a centralized snow disposal site. Off-site snow storage can be minimized, however, if on-site snow storage is incorporated into the site design for new development and roadways.



# *T* Chapter 9 *Transportation*



COMPLETED IN 1994, THE NEW ALYESKA PRINCE HOTEL PROVIDES LUXURY ACCOMMODATIONS, RECREATIONAL AMENITIES AND FINE DINING. WITH ITS NEW HOTEL, AERIAL TRAMWAY AND IMPROVED SKI FACILITIES, ALYESKA RESORT ANCHORS GIRLWOOD AS A MAJOR VISITOR DESTINATION RECREATION AREA IN ALASKA.



*Seward Highway.*

T

ransportation is a very critical component to the **Girdwood Area Plan**. The type and pattern of circulation system that is established should provide easy access to the resort/recreational areas while preserving Girdwood's small-town character.

Three factors are key to establishing a successful circulation system. First, the circulation system should be efficient and free of congestion. Roadways should be adequately designed to handle anticipated traffic levels. In order to avoid high concentrations of traffic on any segment of the system, there needs to be routing that is connected. Having redundancy and connectedness will balance the traffic flow and reduce the need for wider and more extensive roadway arterials that are contrary to small-town character.

Second is the need to have a multi-modal circulation system. Movement throughout the area should not be dependent on a single mode of transport. A pedestrian circulation system is just as important as a vehicular-oriented system. Pedestrian pathways need to be included as part of the transportation plan in order to reduce roadway trips, as well as to recognize the needs of different segments of the population.

A successful multi-modal circulation system in a destination resort community should also include a transit system. The purpose is to reduce the number of auto-related trips on the roadway system by providing a convenient all-season and all-weather alternative mode of travel.

The third key factor to establishing a successful circulation system is to create the proper land use and site design for properties that adjoin the main roadways. Since land along the main roadway is the most visible area of the community, adjoining uses should be designed to add to, rather than detract from, the small-town resort character of the valley. It is also important to minimize congestion by restricting the types of uses that could generate a lot of turning movements.

# Roadways

To a large degree, transportation to, and within, Girdwood today is synonymous with the roadway system. Following is a description of the existing roadways, which is followed by transportation recommendations. Although the Seward Highway is not included in the scope of this Plan, it is still considered an element in understanding Girdwood's transportation needs.

## SEWARD HIGHWAY

The Seward Highway is classified as a principal arterial. Annual average daily traffic (AADT) measured at Potter Marsh during 1992 was nearly 7,000 trips per day. This level is compared to approximately 4,000 trips per day for 1982 and about 2,250 trips per day in 1972. Figure 6 displays AADT recorded over the past 25 years.

Compounding the significant increases in annual traffic are the pronounced seasonal fluctuations in the traffic flows. The highest monthly average daily traffic, which normally occurs in July, has consistently been two to four times greater than the lowest averages in November, December, and January. Figure 7 illustrates seasonal variations in Seward Highway traffic levels for the Bird Point to Girdwood segment by showing the average daily traffic by month for 1992.

Using normal traffic engineering computational methods, the current level of service provided by the Seward Highway in the Bird Point to Girdwood area is "D" to "F."\* This determination is strongly influenced by the very high summer weekend volumes typical of a road with seasonal recreational traffic.

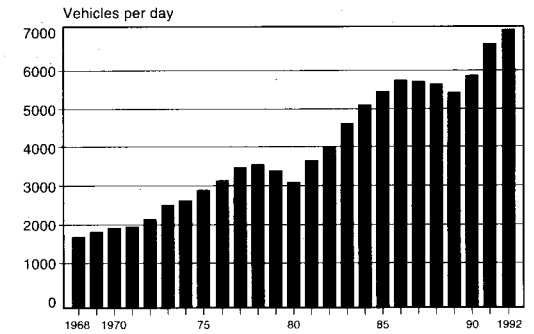
The Alaska Department of Transportation and Public Facilities (ADOT/PF) is improving the Bird-Point-to-Girdwood segment of the Seward Highway. Rather than widening the existing roadway into the mountainside, the roadway is being relocated at the edge of Turnagain Arm outside the existing Alaska Railroad Corporation (ARRC) line. The new location will reduce the frequency of avalanche closures and will allow room for a third passing northbound lane.

## ALYESKA HIGHWAY

In contrast to traffic patterns on the Seward Highway, traffic on the Alyeska Highway in Girdwood is characterized by two peak seasons during the year. The timing of the tourist-related summer peak mirrors that of the Seward Highway. In addition, Alyeska Highway experiences ski season-related weekend peaks, especially during February, March, and April. Virtually all of the recent counts taken by ADOT/PF and others indicate that the winter traffic peaks on Alyeska Highway exceed summer peaks.

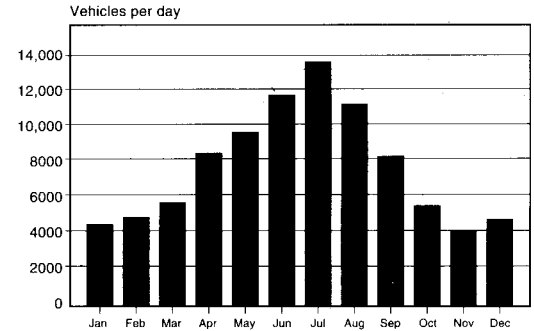
\* Level of service measures range from "A," which is free-flow traffic in which vehicles are not hindered by traffic, to "F," in which cars must move at the pace of the surrounding traffic and delay is frequent.

**Figure 6**  
**Seward Highway Traffic**  
**Annual Average Daily Traffic at Potter**



Source: ADOT/PF.

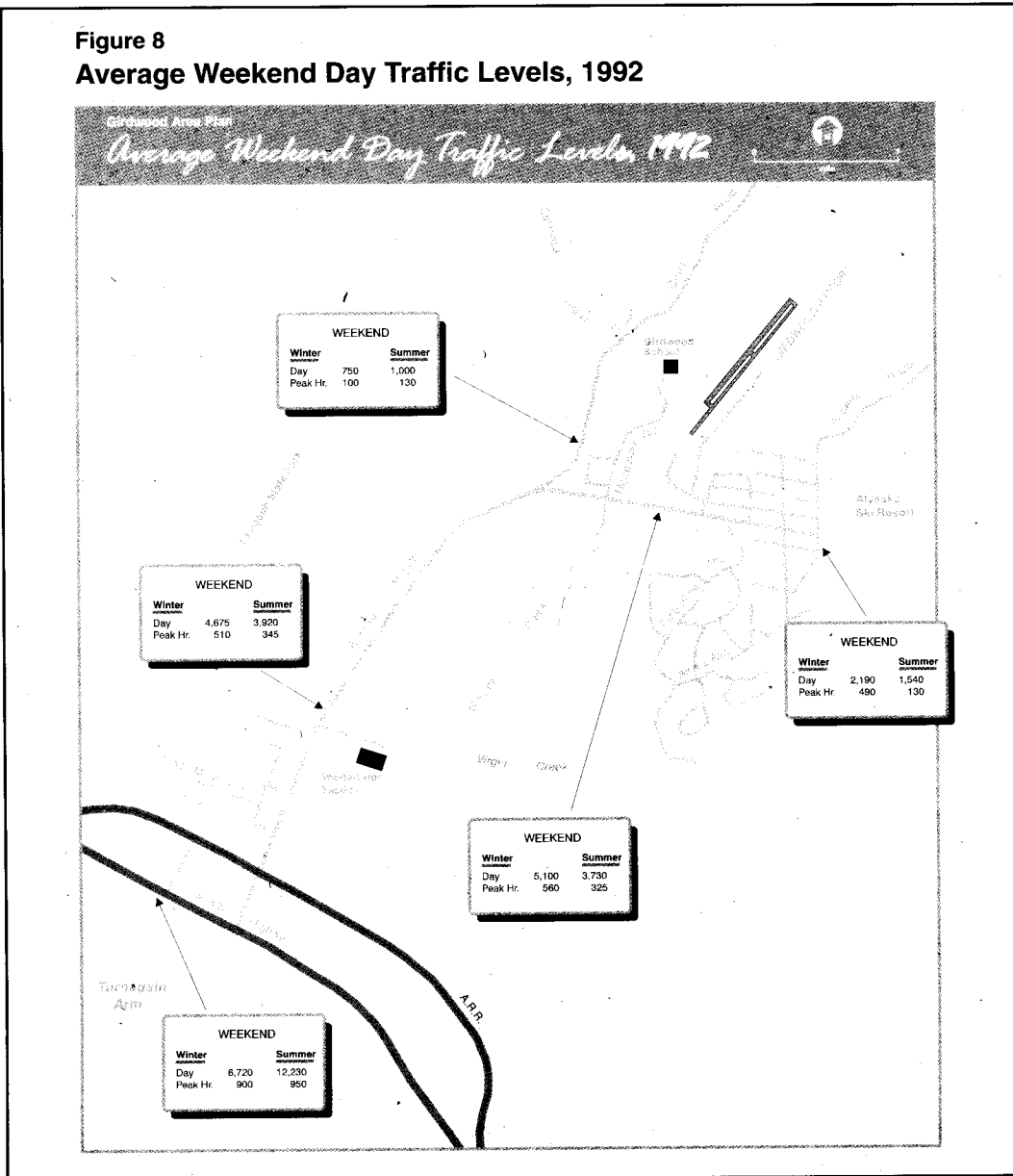
**Figure 7**  
**Seward Highway Traffic at Girdwood**  
**Weekend Vehicles Per Day, 1992**



Source: ADOT/PF, TPA.

The Alyeska Highway, designated a minor arterial, receives winter weekend traffic volumes that are 20 to 35 percent higher than summer. Winter midweek traffic, however, is comparable to summer midweek volumes. This is because winter traffic is much higher on the weekends due to Anchorage area skiers going to Alyeska, while summer traffic levels are more constant throughout the week as a result of summer tourism.

Most Alyeska Resort summer visitors come as clients of packaged tours and tend to arrive by bus rather than car, significantly reducing traffic-related impacts. Figure 8 shows summer and winter weekend traffic volumes by day and peak hour at key points on selected roads in the Girdwood area. Data from ADOT/PF and Alyeska Resort-sponsored field surveys were used to estimate the weekend traffic volumes. ADOT/PF estimated AADT on the Alyeska Highway for 1992 at 2210 vehicles per day. As can be seen, the winter weekend daily volumes presented in Figure 8 are more than double the AADT.



With few exceptions, the Alyeska Highway and other principal roads in the valley operate with little delay. This is evidenced by the generally free-flow conditions that characterize the road at nearly all times except ski season weekends that coincide with good weather.

During the summer the intersection of the Alyeska and Seward Highways is believed to function reasonably well, particularly after the recent improvements that added a left-turn lane for eastbound Seward Highway traffic turning onto the Alyeska Highway. However, local residents experience delays in making turns when summertime traffic on the Seward Highway is heaviest.

#### **OTHER LOCAL ROADS**

There are a few other roads in the Girdwood area that receive more than local traffic. The two most significant are Crow Creek Road and Arlberg Avenue. Crow Creek Road is a gravel roadway which has no state maintenance much beyond California Creek. Beyond the state-maintained lower portion of the roadway, maintenance, clearing and widening has been performed by local residents. The roadway has been receiving increasing vehicular traffic in the summer as more people use the road to access the Crow Creek Pass Trailhead and Crow Creek Mine attraction. The road has also seen an increase in pedestrian usage by bikers and walkers.

Arlberg Avenue is a collector that extends from the end of Alyeska Highway to the new resort hotel. In 1993, the road was upgraded as part of the resort expansion project. The upgrade included paving of the roadway, and development of a separated and paved bicycle/foot path.

Other roads in the valley are basically local residential streets. Timberline Drive functions more as a collector than a local street, since it is the only outlet to Alyeska Highway from the southern portion of Alyeska Basin Subdivision. The other exception worth noting is Hightower Avenue, which extends from Alyeska Highway through the new townsite commercial area to the elementary school. Like Arlberg Avenue, it is also paved with a bicycle/foot path.

#### **RECOMMENDED ROADWAYS**

A number of new roadways are proposed in this Plan, along with selected intersection improvements that will be necessary to facilitate safe and efficient movement through the valley community. The recommendations reflect the importance a circulation system has on the successful functioning of a resort community. In addition, they are intended to be sensitive to the desire to retain a small-town character to the valley.

Continued use of the existing roadway system, with proper improvements, will accommodate most of the new community development being projected in this Plan for the greater portion of the 20-year planning period. Some of the roadways are proposed to provide better connections to current or planned activity areas, while others will be needed in response to new resort development.

The sequence of actions to be considered for addressing increased transportation needs should begin with improvements to the existing roadway system and commencement of transit service before certain major new roads are introduced. Before such roads as the New Girdwood Access and Crow Creek - Arlberg Connector are constructed, corridor studies identifying transportation alternatives, costs, and community and environmental impacts should be undertaken. Final actions should be based upon the results of these studies.

# Transportation Plan, Proposed Roadways



**Existing Roadways**  
**Proposed Roadways**  
**Proposed Up-grade Roadways**

Municipality of Anchorage, Department of Community Planning and Development, December 1995



*New Girdwood Access Road*

This road is proposed to connect the Seward Highway with Alyeska Highway on the east side of Glacier Creek. It would be a two-lane roadway with vegetative buffers on each side. It would also include a separated but parallel bicycle/foot path.

The road would be needed to provide relief to Alyeska Highway at such time as new resort development doubles in size or activity over the current level with the new hotel.

The alternative to building the new Girdwood access road would be to upgrade Alyeska Highway to a four-lane roadway with a fifth lane for turning movements onto side streets and driveways. This alternative, however, may significantly alter the small town character of the community. The large number of closely spaced driveways on the western portion of the roadway below its intersection with Crow Creek Road, coupled with future development on the western side of the valley, may also create additional safety hazards and congestion during periods of peak visitor traffic.

This Plan recommends that a corridor study be done to evaluate each alternative prior to any decision being made. The study should evaluate each alternative for its community and environmental impacts, as well as cost.

*Crow Creek - Arlberg Connector*

This new roadway would connect Arlberg Road from its current terminus at the new Alyeska Resort hotel site, to Crow Creek Road. The roadway would be routed north of the Girdwood Airport, providing access for additional resort base facilities, as well as the upper valley recreational area.

The connector roadway would serve to relieve traffic loading and congestion at the Arlberg/Alyeska Highway intersection and on the eastern portion of Alyeska Highway. Recreational/resort traffic would be balanced between Crow Creek and Arlberg Roads.

The lower portion of Crow Creek Road would also be upgraded from its intersection with Alyeska Highway to the link with the new connector. Crow Creek Road would remain two lanes, but may be widened to allow for some channelization at key locations. It would also have a separated bicycle/foot path, and a vegetative buffer beyond California Creek.

Rather than using Crow Creek Road, an alternative route for providing additional access to the resort area(s) may be to extend a new road north of Alyeska Highway along the west bank of Glacier Creek past the new townsite area and school. The new roadway's intersection with Alyeska Highway would be grade-separated, thus allowing for continuous movement of traffic.

This routing alternative could act as a levee to protect the commercial townsite area from future flooding by Glacier Creek, as well as minimize the impact of resort-bound traffic on Crow Creek Road. Problems associated with this alternative, however, would be high cost, and the land area needed for the right-of-way.

Similar to the New Girdwood Access Road, this Plan recommends that a corridor study be done to evaluate each alternative prior to any route decision being made. The study should evaluate each alternative for its community and environmental impacts, as well as cost.

***Arlberg Extension to Winner Creek Resort Base***

This roadway would be a continuation of Arlberg Road from the current terminus at the Alyeska Prince Hotel to the Glacier-Winner Creek resort base area. The purpose for the road would be to provide access to alpine skiing recreational facilities, and possibly other resort base area facilities.

The roadway would be built very similar to the most recent extension of Arlberg Road around the Moose Meadows. It would be a curvilinear roadway that would basically keep to the base of Mount Alyeska along its north face, skirting the eastern edge of the Recreation Reserve. Actual design standards would be based upon type and degree of use.

Limitations on vehicular access to Glacier-Winner Creek are encouraged. There is insufficient space for parking of private vehicles in the Glacier-Winner Creek area. Skiers and other recreationists may be shuttled to the upper valley from the lower valley resort base areas by road or other off-road system, such as gondola. The roadway may possibly function as only a service road.

This Plan recognizes that a roadway to the Glacier-Winner Creek area will be necessary. The actual design and construction can be decided during the course of resort master plan development and review, based upon the proposed type and intensity of use.

The Alaska Department of Natural Resources owns a large portion of the Glacier - Winner Creek area and needs access to its land holdings across municipal lands. The construction of new access to these state lands should generally coincide with the extension of Arlberg Road to the Winner Creek Resort Base. The location of any access beyond the resort base area to state lands should be based upon the type of access needed.

***Girdwood Airport Access Road***

This road would provide direct access to the airport from the new connector roadway described previously. The new access road is intended to re-direct general traffic away from the current access through an existing residential subdivision. The new access road would also provide a more direct connection between the resort areas and the airport.

With the new access road, the current airport access entry could be gated, with access limited to plane owners and airport leaseholders. This would eliminate most airport-related traffic from the residential neighborhood.

***Hightower - Crow Creek Connector***

This two-lane collector road, with separated pathway, would provide a direct link between the Crow Creek Road and new townsite commercial areas. This would help re-enforce the two adjoining commercial/residential areas, and make California Creek a more central asset to them. The road would also provide better access to such public facilities as the post office and school.

***Ruane to Glacier Creek Drive Connector***

This road is intended to be a two-lane collector that provides access to the commercial/institutional, recreational area located between Glacier Creek and Alyeska Highway. This road is critical in providing convenient access to the most centrally located area in the Girdwood community. This area is intended to be a focal point for many community activities. In addition, the road will provide direct access to the proposed golf course and RV park/campground for visitors coming from outside the valley.



## OTHER RECOMMENDATIONS

The following measures are recommended in order to improve traffic flow and reduce the number of auto trips. As with the proposed roadways, the timing of implementation of these recommendations would depend upon the anticipated need and feasibility. However, traffic conditions should be monitored, and the measures be considered well in advance of actual need.

- As traffic increases at the intersection of Seward and Alyeska Highways, consideration should be given to channelization in order to allow for smoother traffic flow and safer turning movement.
- As traffic increases at the intersection of Alyeska Highway and Crow Creek Road, consideration should be given to channelization and re-alignment of Crow Creek Road in order to allow for smoother traffic flow and safer turning movement.
- The Arlberg Road and Alyeska Highway intersection should be channelized to provide a continuous right-turn lane from Arlberg Road onto the Alyeska Highway, and a separate right-turn lane for traffic heading from Alyeska Highway to the Alyeska Resort Day Lodge parking lot.
- As traffic increases on Arlberg Road and drivers start taking short-cuts through Alyeska Subdivision, consideration should be given to closing to all but emergency vehicles the intersections of Arlberg Road with Cortina, Davos, Brighten, and Aspen, or alternatively the eastern end of all four local streets should be made one-way east-bound.
- Shuttle bus service should be instituted between the two existing resort base areas, any future resort base areas, the Girdwood commercial areas, and a prospective rail service station (when service is offered), to help alleviate some of the summer and winter peak period traffic congestion. It would also give residents and visitors alike an opportunity to make short trips within the community without the use of a car, particularly during inclement weather.

It is recognized that additional collector roads will be needed to access areas that are proposed for new residential development. Their location and design can best be accomplished at the time specific areas are being master planned prior to land disposal and development. The following design guidelines should be considered for future local streets and collectors.

- All new collector roads should include separated, fully improved bicycle/foot paths.
- Direct access should not be allowed from individual lots onto collector roads. Direct access should be limited to side streets and for corner lots with frontage on more heavily used roadways.
- Local streets and collectors should be designed and constructed to allow adequate space for underground utilities, drainageways and snow storage.
- Local streets and collectors should be configured to maximize views of unique and/or scenic vistas.

Interest has been expressed in investigating the possibility of establishing a small-scale automated people mover (APM) system in Girdwood. Ideally, the system would connect train sta-

tion/parking lot/transfer area near the Seward Highway with residences and business along the Alyeska Highway and north and south new townsite areas, as well as the resort base facilities from Mount Alyeska to Glacier-Winner Creek.

The APM system would essentially be a fixed-guideway transit system that is designed around a small footprint structure supporting vehicles that would carry a small number of people. Operation would be similar to a horizontal elevator, wherein passengers select their destinations and are taken there directly.

Although there would likely be much public appeal for such a transit system, the reality of the high installation cost, as well as on-going operating costs, preclude it from being a viable option for moving people through the community in the foreseeable future. A more likely possibility, however, may be a cable-based system such as trams or gondolas for transporting people from mid-valley resort base areas to the Glacier-Winner Creek area. The unknown costs associated with such a system for cross-valley transportation make its feasibility an uncertainty.

This plan does not preclude future consideration of an APM system of transportation in the Girdwood area. However, it will unlikely be able to substitute for the roadways being proposed.

A significant portion of traffic on the Seward Highway is Girdwood-related (approximately 1/3 on peak summer weekends). With continued population growth in Anchorage and Girdwood areas coupled with increased numbers of visitors traveling to Turnagain Arm, Prince William Sound and the Kenai Peninsula, traffic on the Seward Highway will continue to grow.

This Plan encourages the Municipality, the Alaska Railroad, Seibu Alaska, Inc., and any other future major resort operators to consider actions that will reduce the number of vehicle trips between Anchorage and Girdwood. For example, an immediate step being taken by the Municipality is the introduction of a van pool program. For long commutes, such as between Girdwood and Anchorage, van pools can be convenient and cost effective.

Rail ridership studies should be done periodically in the future to monitor increases in potential ridership associated with various employment, recreational and visitor-related markets. (Rail transportation passenger service is discussed more fully on pages 90-92.) In the meantime, the operation of various public and private bus transport systems with sufficient flexibility to respond to fluctuating demand should also be considered.

## *Girdwood Airport*

Girdwood Airport is located on 174 acres in the middle of Girdwood valley. Only a small portion of the site is in active aviation use. The airstrip, adjoining lease lots and access road are wedged between Glacier Creek and the Moose Meadows wetland.

The airport is owned and operated by the ADOT/PF. Aircraft using the facility are small single-engine planes, typically Cessna 185's and 206's and Piper Cherokees. The department operates the airport as a public facility under state regulations. As such, the State determines which airport development activities ensure compliance with state and federal laws and regulations that govern airport operations.

**EXISTING CONDITIONS**

A 2,080-foot-by-73-foot gravel runway and a 35,000-square-foot apron have been constructed next to Glacier Creek. The creek and its braided floodplain are at each end of the runway as well as flowing along side its entire length on the northwest side.

To the southeast of the runway are 12 hangers located on 16 lease lots. Several businesses are based on the lease lots. These include a sky-diving and flight-seeing service and a certified A/P mechanic. There are no terminal or commercial fueling facilities serving the airfield. However, telephone, electric, and sewer services are available to each lease lot.

The airport has no control tower or flight service station. The runway also has no lights, and navigational aids are limited to wind cone and a segmented circle.

Being centrally located in the valley, the surrounding area is generally flat. The airport grade is slightly sloped. The southern approach to the runway follows a 20:1 slope and begins over Turnagain Arm, running towards the mountains. The northern approach is off the mountains, and although the approach is still 20:1, the area outside the approach slope is obstructed by the mountains.

Little data is available on wind speed and direction or ceiling and cloud cover. However, poor weather is frequent in the area, and often limits operations at the airport to visual flight rules (VFR).

In 1992, there were 28 general aviation single-engine aircraft based at the airport. According to FAA data, there were about 3,300 operations that year, the majority of which occurred in the summer. Almost half of the operations are air taxi, about 1,000 are general aviation local, and 800 general aviation itinerant. Operations levels have not increased since 1980.

The only existing access to the airport is a circuitous route combining three residential streets in an adjoining subdivision to the southeast. Other existing and proposed land uses nearby include the school immediately across the creek to the west, and the commercial/residential area in the new townsite area a short distance to the southwest. AWWU also has two water wells at the north end of the airport property.

**AVIATION FORECASTS**

Girdwood Airport is lightly used by general aviation single-engine aircraft, and periodically by helicopter traffic. Future air traffic will most likely depend upon population growth, and to some extent, on resort/recreational development and increasing visitorship. Along with the number of operations increasing, the number of private planes based at the airport may also rise.

If new resort development activity significantly increases the number of destination visitors to the valley, there may be enough potential demand to introduce commuter shuttle service using twin-engine aircraft. However, such activity would be constrained by the existing facility deficiencies and environmental conditions.

A more likely demand for aviation services will be summertime flight-seeing and year round heli-skiing activities by use of helicopter. Flight-seeing has become a very popular activity for many tourists who want to see many of the spectacular natural features and wildlife found nearby, but lack the time or ability to do it on their own.

Major constraints to basing helicopter services in Girdwood will be inclement weather and lack of necessary helicopter facilities, especially fueling and terminal facilities. It is conceivable, however, there will be interest in establishing helicopter services at Girdwood Airport. There is currently space for such an operation. However, the shape of the valley coupled with the potential number of operations will likely pose a noise problem for the surrounding area.

This Plan recommends that any proposed helicopter operations at the Girdwood Airport for the purpose of providing flight-seeing or heli-skiing services be preceded by a noise impact study. Based on the results of the study, conditions may be placed on the proposed operations which could include restrictions on hours of operation, approach and departure paths, total daily helicopter operations, or even relocating the operations away from the Girdwood Airport.

As resort/recreational activity increases in the Girdwood area, aviation operations associated with such activity should be closely monitored. Monitoring will better allow the community to establish relationships between the level of aviation activity to any resultant off-site impacts.

## *Railroad*

Rail passenger transportation service came to Girdwood in the early 1920's with the completion of the Alaska Railroad. For a few decades, it was the only ground transportation available to the community. However, the completion of the Seward Highway during the early 1950's spelled the beginning of the end for rail passenger service between Anchorage and Girdwood.

Recent interest has been expressed for re-establishing regularly scheduled rail passenger service between Anchorage and Girdwood as an alternative to the automobile. Much of this interest has been caused by the growing level of summer traffic, congestion and accidents along the Seward Highway.

Girdwood residents, many of whom commute daily to Anchorage, have expressed interest in the availability of rail service as a reasonably safe and convenient way to travel to Anchorage. Seibu Alaska, Inc., owners of the new Alyeska Prince Hotel, has hired many Anchorage residents, and has also expressed interest in employee use of rail service. Additionally, rail service along scenic Turnagain Arm is being viewed as a growing recreational attraction and pleasant means of transportation for day-use and destination resort visitors to Girdwood.

As part of the comprehensive planning effort for the Girdwood area, a rail service feasibility assessment was performed as part of the Girdwood Community Impact Study (Transport/Pacific Associates and Kevin Waring Associates). The feasibility assessment included the development of an operational plan and schedule which took into consideration coordination with other rail activity, costs of operation, and potential users and ridership.

Potential users were segmented into specific markets, and included Girdwood residents who commute to Anchorage, Alyeska Resort employees, Girdwood students who attend Dimond High School, skiers and out-of-state and Alaska resident visitors. Two fare levels were analyzed using \$10 and \$5 one-way base fares, as well as monthly passes.

The operational schedules, fares, markets, season and day of week were then assessed to produce a range of ridership estimates for each rider group by season. This resulted in estimates of revenues, which in turn, were compared to estimated operational costs.

The proposed rail service that was assessed would operate from the Alaska Railroad depot on First Avenue in Anchorage to a station location in Girdwood near Alyeska Highway. The service would include intermediate stops at the Dimond Center and in the vicinity of Huffman Road and Old Seward Highway. One or two Rail Diesel Cars (RDCs), depending on season, would be the rail vehicle used for this service.

The rail service assessment study concluded that sizable government support would be required in the near term to cover the difference between revenues and costs. If the service was operated during all seasons, either fare scenario would require \$350,000 to \$500,000 in annual operating support during the next one to three years.

When the prospects for rail service were viewed over the 20-year planning period, a number of factors were anticipated that would tend to increase the attractiveness of the rail service. Increased attractiveness would translate into higher ridership and improved financial feasibility.

Even without additional resort development, the number of Girdwood residents, commuters to Anchorage, and non-residents employed in Girdwood would all be expected to increase. Resort/hotel employee and skier trips would be influenced primarily by the realization of any additional resort expansion, while other, mostly summer, visitors would increase at a rate determined by the growth of tourism in Alaska and the population of Anchorage. If Girdwood continues to be increasingly attractive to the visitor, the community will likely see a larger portion of those who come to Alaska and travel along Turnagain Arm regardless of the specific feature that brought them to the State. The combined effect of growth in each of these markets should be a steady improvement in the cost/revenue "balance sheet" of the proposed Girdwood rail service.

Summer traffic volumes on the Seward Highway are likely to continue to increase as a result of increased tourism, whether or not additional resort development occurs in Girdwood. Given the difficulty and cost of expanding the entire Anchorage-Girdwood segment of the Seward Highway to four lanes, the present two-lane configuration with three lanes between Bird and Girdwood will be in place for most of the next 20 years. Consequently, the likelihood of summertime, and especially weekend congestion-related delay is substantial. As such delay begins to add noticeable time to the trip, a rail option will appear steadily more competitive and attractive.

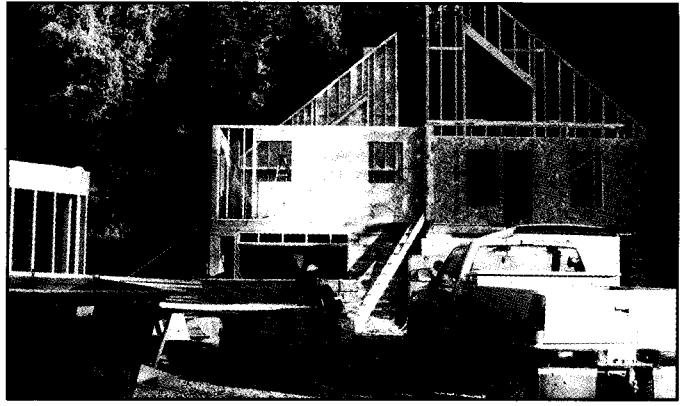
Given the difficulty in anticipating both the growth of the market for rail service and the growth in population and tourism, it is not possible to gauge future improvement in feasibility of the rail service with precision. However, it is clear that the specific, and in some cases unique, factors that will influence the potential rail service ridership and revenue will, during the next 20 years, move it in the direction of improving feasibility.

This Plan anticipates the eventuality of rail service to Girdwood as a beneficial transportation and recreational service. Any use of the commercially designated area next to the rail line west of Alyeska Highway must be complementary to the establishment of a rail station and related parking area. Adequate land area, up to three acres, should be reserved in the northern portion of the site for transportation facilities.

# Chapter 10 Implementation



CONCURRENT WITH RESORT EXPANSION HAS COME COMMUNITY GROWTH AND ITS ATTENDANT NEED FOR IMPROVED FACILITIES AND SERVICES. DESIGN HAS BEEN COMPLETED FOR A NEW PUBLIC FACILITY THAT WILL INCLUDE AN ADDITION TO THE GIRDWOOD FIRE STATION, A NEW LIBRARY AND COMMUNITY CENTER.



*New residential development on Taos Road.*

**T**he Girdwood Area Plan represents a policy guide for the management and development of lands in the Girdwood area. The Plan guides development but does not, by itself, actually control where, how and when it occurs. Other means are used to implement the Plan. In Girdwood, the most typical means to implement the Plan will include zoning and subdivision regulations, capital facilities programming, public land disposals, and development and implementation of related functional plans.

## *Zoning*

There are two zoning actions that will need to be accomplished. One will be the revision of the current zoning regulations. The other will be to change the zoning boundaries to include lands that are being transferred from federal ownership to state and municipal ownership.

Currently, the effective zoning regulations for the Girdwood area are the R-11 district regulations. The regulations were created in 1983 as a means of implementing the 1979 **Turnagain Arm Comprehensive Plan**. At that time, there were no land use regulations in effect for this area. The R-11 district was designed to be a single district to cover all of Turnagain Arm, including the Girdwood area.

Being a single areawide district, the permitted uses were controlled by the Comprehensive Plan Map. Any use that was properly designated on the Plan Map was permitted if under a certain size or scale. Proposed uses that were larger in scale or intensity, but in keeping with the Plan's land use classification required a conditional use approval by the Planning and Zoning Commission. This gave the community and Commission an opportunity to review the project for its impacts on the surrounding area and determine if it was appropriate development.

One of the stated objectives of the R-11 district was to provide flexibility in design and planning of land uses. Consequently, a key provision in the district regulations allowed for any use that was not in keeping with the Plan Map to be considered as a conditional use. Today,

this provision may no longer provide adequate control in preventing applications for uses which the Plan indicates as clearly being contrary to established public land use policy.

In light of the anticipated level of commercial, resort, and residential development likely to occur in the coming years, the R-II zone will need to be revised to modify and add design standards and guidelines. The design standards and guidelines are needed to better assure that there is a degree of continuity and compatibility between and among new and existing uses. The regulations should be structured to allow for design flexibility, but within acceptable limits that meet the objectives of protecting and preserving the various neighborhoods, small town community character, and natural aesthetic features of a destination mountain resort area.

Typical of many small towns, the Plan calls for some mixing of various uses and densities, rather than having a rigidly stratified land use pattern. However, mixing of uses and densities will require more stringent standards and guidelines be applied to development in order to be successfully integrated.

Development standards in the revised regulations should include the following:

- requirement to place underground all new telephone, cable and electrical distribution lines;
- requirement for all new development in the lower portion of the valley requiring wastewater disposal to connect to the municipal sewer system;
- limitation on the number of principal structures containing living units in the single-family residential areas to no more than two per lot, with the accessory unit having a maximum area equal to 30-50 percent of the primary unit (percent or size of accessory unit to be determined in the revision process);
- lot coverage requirement for landscaping (to encourage retention of existing vegetative cover);
- standards for continuity and compatibility which address mass/scale of structures on same or adjoining lots; and
- reassessment of building setbacks and buffer requirements to provide for privacy and adequate separation of incompatible uses.

This is not intended to be a conclusive list of guidelines. A comprehensive evaluation of siting and building design guidelines that are pertinent to Girdwood should be performed. The guidelines should be incorporated into the new land use regulations or used as an officially recognized supplement to the regulations. The guidelines would assist developers in the design of new projects. They could also be used by project reviewers in evaluating and deciding upon the appropriateness of new development.

In conjunction with the use of siting and design guidelines, establishment of an advisory design review board should be considered. The design review board could ensure that new development projects are consistent with the design guidelines. The board would be composed of design and construction professionals who would provide technical expertise to any public reviewing and decision-making body such as the Planning and Zoning Commission.

The scope of design review board purview would not need to take in all new development. Most residential development could be excluded. However, it should include multi-family, commercial, commercial recreational, and resort development.



Until the current R-11 zoning district regulations are revised to include expanded design guidelines and standards, the existing design criteria and development standards which are contained in sections 4.2.1 and 4.2.2 (minus 4.2.1.1.5) of the **Turnagain Arm Comprehensive Plan**, adopted April 7, 1987, should remain in effect.

One other item that should be considered in the revision to the zoning regulations is the ability to accommodate new commercial lodging. At present, commercial lodging consists of the new luxury hotel at Alyeska Resort, a boarding house and a number of bed and breakfast establishments. The Plan also calls for an RV park/campground. However, there may also be demand or interest in other forms of commercial overnight lodging for visitors.

An example of such lodging typically found in destination resort areas are country inns, or lodges. They are similar to a hotel in that rooms share a common lobby (as opposed to motels), and they usually offer sit-down food and beverage service. Unlike hotels, many have fewer than 20 units. A country inn or lodge may also be located on a larger lot area in order to provide a different atmosphere to their guests than the more urban or compact setting of a resort area, or highway setting of a motel.

This Plan recommends consideration of a commercial accommodation "floating" zone, or overlay district in order to accommodate this potential land use. Design guidelines applicable to such a use would be included in the new regulations.

## *Subdivision Regulations*

The design standards for streets found in the municipal subdivision regulations should be revised to require paving, and adequate provision should be made for drainage and snow storage. Although initial costs for road construction may be higher, there will be fewer operational and maintenance problems in the future. Paving will also reduce the amount of dust, thus improving the local air quality.

## *Public Land Disposals*

In the long term, no other issue will likely influence the Girdwood area more than how, when, and where public lands are disposed. Past public land disposals created the pattern of community development we see today. Future land disposals will continue this process.

Inevitably, land disposals will be accomplished in different ways to serve different purposes. The two most obvious are those disposals that will be done through a professional solicitation process for the purpose of attracting major resort/recreational development, and those that will be done for the purpose of fostering or responding to community growth.

Approximately 80% of the land in the valley is owned by the Municipality of Anchorage. Nearly all of the vacant lands are under the management of the Heritage Land Bank. The Heritage Land Bank is a municipal agency given the responsibility for managing lands that may be needed for current or future public purpose, and disposing lands deemed to be surplus to municipal need.

To date, very little land from the Heritage Land Bank has been disposed. This is likely to change in the future. Disposal of land is viewed as a means of generating revenues for a variety of municipal needs. However, it is important that public land disposals be done in compliance with established community goals and objectives which are reflected in adopted municipal plans and policies.

The following actions should be taken as part of the implementation process for the Girdwood area:

- establish formal procedures, policies, phasing strategies and schedule for the disposal of land for community, resort and recreational development (including policies regarding the use of income generated from Girdwood area land disposals);
- complete the municipal selection of state lands and any necessary surveying that may be required as part of the land conveyance process; and
- prepare Requests for Proposals (RFP) for resort and commercial recreational area development.

Given the magnitude of municipal-owned land in the Girdwood area, it will be important for the Municipality to establish a strong public trust with the community in the use and disposal of public land. This can be done by ensuring that land disposals are made fairly, properly, and in compliance with established policies, procedures, phasing strategies and schedule. The disposal process, however, should be flexible enough to respond to changing market conditions and financial constraints.

It is suggested that re-evaluation be given to the **Girdwood Land Development and Disposal Study** that was done by local consultants for the Heritage Land Bank in 1987. The study contains useful information on the various ways land should be considered for disposal in the Girdwood area. It also addresses the level of participation, or role the Municipality could take in the development process.

All tracts of municipal lands greater than 20 acres should not be developed until master planning has been done, or required. The master planning process is intended to identify the type and intensity of land use, location of neighborhood parks, greenbelts and recreational trails, any significant historical resources, as well as the street circulation system. Community impact assessments would also be included in the master planning process. The assessments would evaluate impacts on public facilities as well as address the need for buffering of existing adjoining land uses.

Due to the anticipated dual ownership of land in the Glacier-Winner Creek area between the State and Municipality, there is presently a certain degree of uncertainty regarding governmental roles and responsibilities in the process of soliciting major new resort/recreational development. Ideally, it should be a single process, with close coordination between the two entities.

The resort/recreational development RFP for the Glacier-Winner Creek area should contain a clear description of the objectives being sought, siting and development guidelines, informational requirements that allow for an evaluation of the social, environmental and economic impacts of the proposed project and criteria that will be used in evaluating proposals. The goal should be to allow development of a ski area/four-season destination resort in a uniquely Alaskan setting, while maintaining a high quality natural environment and protecting the small-town character of Girdwood.

## *Capital Facilities Programming*

The municipal Capital Improvement Program (CIP) is a planning and budgeting program that outlines the timing, location and cost of public facilities and improvements. The CIP identifies projects that are necessary to meet community needs and to accommodate new development.

Capital projects are generally expensive, and once constructed are permanently fixed. Consequently, short-term needs have to be weighed against longer-term community objectives.

Funding for capital projects typically comes from federal and state grants, municipal general obligation bonds or service area tax assessments. Because funding is usually limited, project needs must be prioritized. It is the intent of the Plan that all capital projects should be designed and located in compliance with the Land Use Plan Map and densities contained herein.

Table 12, Implementation Schedule, identifies a list of capital projects that are needed now, or will be needed in the future to implement the Plan. The list is not intended to be conclusive, but instead to give a general overview of the type of facilities that will be needed over the timeframe of the Plan.

## *Functional Plans*

The **Girdwood Area Plan** is intended to provide broad policy guidance toward management and development. However, there are certain functional areas that require more detailed study and policy direction than is established in this Plan.

### **ANCHORAGE TRAILS PLAN**

The **Anchorage Trails Plan** is the basic planning and policy document for the development of trails in the Municipality of Anchorage. The **Anchorage Trails Plan** is currently in the process of being revised. Included in the Plan will be the following:

- location of trail corridors,
- type and use of trails,
- design standards for construction and maintenance, and
- criteria and process for the siting of trails and related buffers.

When adopted by the Anchorage Assembly, the **Anchorage Trails Plan** will be a functional element of the Comprehensive Plan.

**Table 12**

**IMPLEMENTATION SCHEDULE**

ACTION	TIMEFRAME
<b>Zoning</b>	
• Revise District Regulations	Immediate
• Revise Zoning District Boundaries	Near Term*
<b>Subdivision Regulations</b>	
• Revise Street Improvement Standards	Immediate
<b>Public Land Disposal</b>	
• Establish Policies/Procedures and Phasing Strategies	Immediate
• Select and Survey Selected Lands from State	Immediate
• Prepare RFPs for Alpine Resort and Golf Course Development	Near Term
<b>Capital Facility Programming</b>	
<b>New Girdwood Townsite</b>	
• Parking Areas	Immediate
• Removal of Wellsite Reserve	Near Term
• Flood Control	Near-Intermediate Term
<b>Sewer</b>	
• Treatment Plant Expansion	Immediate
• Old Girdwood Townsite Trunk and Laterals	Immediate
• Crow Creek Road and Hightower Road Trunk Extensions	Intermediate Term
<b>Water</b>	
• New Lower Valley Water Source	Near Term
• Alyeska Basin Water Reservoir	Near Term
• Alyeska Highway Transmission Line Extension	Near - Intermediate Term
• Loop Transmission Line Extension	Intermediate - Far Term
<b>Schools</b>	
• Girdwood School Addition	Near - Intermediate Term
• High School	Undetermined
<b>Public Facilities</b>	
• Fire Station Expansion	Immediate
• Library Relocation	Immediate
• Community Center	Immediate
• Public Safety Center	Near - Intermediate Term
<b>Roads</b>	
• New Girdwood Access Road and Crow Creek-Arlberg Connector Corridor Studies	Near Term
• Crow Creek-Hightower Connector	Near - Intermediate Term
• Ruane-Glacier Creek Drive Connector	Near Term
• New Airport Access Road	Intermediate Term
• Arlberg-Winner Creek Extension	Near - Intermediate Term
• Upgrade Crow Creek Road	Near - Intermediate Term
<b>Functional Plans</b>	
• Revise <i>Anchorage Trails Plan</i>	Immediate
• Revise <i>Anchorage Wetlands Management Plan</i>	Immediate
• Revise <i>Official Streets &amp; Highways Plan</i>	Near Term
• Revise <i>Parks, Greenbelt &amp; Recreation Facilities Plan</i>	Near Term
<b>Other</b>	
• Institute Building Codes	Near Term
<b>Definitions:</b>	
Immediate	First year following adoption of <i>Girdwood Area Plan</i>
Near Term	2 - 5 years
Intermediate Term	6 - 15 years
Far Term	Beyond 15 years

\*New zoning district boundaries will occur immediately following adoption of new zoning regulations which include design guidelines.

**ANCHORAGE PARK, GREENBELT AND RECREATION FACILITY PLAN,  
VOLUME 3: TURNAGAIN ARM**

This park plan identifies trails, open spaces, and community and neighborhood parks for the small Turnagain Arm communities, including Girdwood. Even though the plan was adopted seven years ago, it is still germane for Girdwood. Generally speaking, the plan is consistent with the **Girdwood Area Plan**.

The park plan, however, should be modified to incorporate the expanded Moose Meadows Park. More importantly, the park plan will need to be revised to include a management plan for the area designated Recreation Reserve, along with its associated open space.

**OFFICIAL STREETS AND HIGHWAYS PLAN**

The **Official Streets and Highways Plan** establishes the general location, and functional classification of roadways. The Plan is used during land subdivision and development to ensure that right-of-way for planned roads is reserved and that the roads are adequately sized for the anticipated level of traffic. Roadway design details are not incorporated in the **Official Streets and Highways Plan**, but are decided during project design.

The current Plan was adopted in 1985 and does not reflect the current or proposed roadway network for the valley. Therefore, it should be revised to reflect the recommended roadway system in this Plan.

**ANCHORAGE WETLANDS MANAGEMENT PLAN**

The **Anchorage Wetlands Management Plan** was adopted in 1982 to facilitate both orderly development of lower value wetlands and protection of higher value sites. The plan provided, for the first time, complete mapping of all freshwater wetlands within the municipality, and provided a detailed, site-specific management strategy for each site.

Based upon the development and adoption of the **Anchorage Wetlands Management Plan**, the Municipality was able to obtain authorization from the federal government to manage development of the lower valued wetlands. The authorization has since expired, and the Municipality has recently been revising the 1982 **Anchorage Wetlands Management Plan** in order to successfully apply for a renewal of authorization.

The reauthorization of management authority over low-value wetlands will facilitate development in areas so designated. In Girdwood, most of the low-value wetlands are located in existing subdivided areas, such as Alyeska Basin Subdivision, old Girdwood townsite, and a number of lots off Sproat Road.

*Other*

**BUILDING CODES**

Ultimately, there will be other measures needed to implement the **Girdwood Area Plan**. One final recommendation noted here is expanding the Building Safety Service Area to Girdwood in order to put new construction under the Uniform Building Code (UBC). The purpose for requiring new construction to conform to the UBC would be to better assure that buildings are soundly constructed, that utilities are installed properly, and that proper seismic safety standards are met.

The new Alyeska Prince Hotel was required to meet the UBC requirements as a condition of approval. The requirement should become standard for all new development, which may likely increase substantially over the coming years.

Expansion of the Building Safety Service Area would involve a ballot proposition where a majority of the registered voters in the valley must approve the service. Expansion of the service area would involve a small increase to the mill rate, and would add somewhat to the cost and time of new construction. However, the added assurance that structures are built properly may in the long run prove more beneficial to the community as well as individual property owners than the added cost.

## *Plan Review Process*

This Plan is intended to represent a broad policy toward land management and development within the Girdwood area. As such, it was influenced by identified community aspirations and economic and demographic data and trends. It is expected that these aspirations and trends may change over time. For this reason, it is necessary to have a process for plan review and re-evaluation. Because this review need not necessarily result in the complete revision of this Plan, two levels of study are identified:

- Plan Re-evaluation - A reevaluation of the major trends and/or policies of the **Girdwood Area Plan** should occur five years from the time of its adoption or revision. If major deviations from those trends anticipated in the Plan are not identified, a complete revision is not required. If major discrepancies are noted in this re-evaluation, a complete revision of the Plan is warranted.
- Plan Revision - The Plan should be reviewed and revised at least once every 10 years.

It is intended that the adoption of this Plan will indicate that the above processes are to be followed in study re-evaluation, to ensure that the basic framework for decision-making on land management/use issues remains current.

# Appendix



THIS 1929 FORD TRUCK MADE MANY TRIPS THROUGH GIRDWOOD VALLEY HAULING MINERS AND SUPPLIES BETWEEN CROW CREEK AND THE TINY SETTLEMENT ALONG TURNAGAIN ARM. TODAY, IT IS PART OF THE PRESERVED CROW CREEK MINE, AN HISTORIC AND ATTRACTIVE RECREATION AREA.

# Girdwood Area Survey

The Girdwood area survey was conducted in January 1993 by the Alaska Department of Natural Resources and the Municipality of Anchorage. The survey contained twelve questions relating to residence, place of employment, most liked features and most important problems of the Girdwood area, opinions about future resort expansion proposals and the main reasons for those opinions, and attendance at an October 1992 resort information seminar held in Girdwood. The remaining questions related to the sex, age, and main occupation of respondents.

Approximately 1,700 survey forms were mailed to all Girdwood property owners, plus additional persons on the Department of Natural Resource mailing list who had expressed an interest in the area. A total of 247 completed surveys was received, representing a respectable 14.5 percent return rate.

## RESIDENCE

A high proportion of Girdwood property owners do not live in the community. Permanent residents, seasonal residents and visitors tend to hold different opinions about community development. As a result, a key question in the January 1993 survey asked respondents if their main affiliation in the Girdwood area was as primary residents, secondary residents or "other". Those claiming primary residence live in Girdwood either year-round or for most of the year. Persons claiming secondary residence typically live in Anchorage and spend weekends in Girdwood, especially in the winter months. The "other" category includes persons who own vacant lots in Girdwood, those who visit the community but who do not own property there, and other interested persons who were on the Department of Natural Resources mailing list.

Of the 247 respondents, 92 persons (37.2 percent) claimed primary residence in Girdwood, 111 (44.9 percent) had second homes in the community and 44 (17.8 percent) fell into the "other" category. (See Table 13.) Excluding the "other" group, the proportion claiming primary (45.3 percent) and secondary (54.7 percent) residence is approximately the same as the proportion of occupied (42.6 percent) and vacant (57.4 percent) units counted in Girdwood by the 1990



Census. In other words, the ratio between permanent and seasonal residents is reflected in the survey. To a limited extent, the "other" category reflects day users of the Girdwood area.

**EMPLOYMENT**

The Girdwood Area Survey contained two questions relating to employment. Respondents were asked where they worked and what was their main occupation. The results of both questions were analyzed separately and in terms of the residence of respondents.

*Place of Work.*

Of the 92 Girdwood residents surveyed, 39 (42.4 percent) said they worked in Girdwood and another 9 (9.8 percent) said they worked in both Girdwood and Anchorage. (See Table 14.) Twenty-five people (27.2 percent) said they worked in Anchorage and 8 (12 percent) said they worked in other locations such as the North Slope and Prince William Sound. Another 8 persons (8.7 percent) were either retired or not presently employed, or did not answer the question.

Excluding persons outside the labor force or for whom information was not available, 46.4 percent of the Girdwood residents who were employed commuted to Anchorage, while another 10.7 percent (i.e., those who worked in both Anchorage and Girdwood) commuted to work at least part of the time. By contrast, only one respondent listing Girdwood as a secondary residence claimed to work in the community.

The survey results were compared with those from the 1990 Census. The 1990 Census reported that the mean travel time to work for Girdwood residents was 27.8 minutes. Given an average travel time to Anchorage of 50 minutes to 1 hour, together with some travel time allowance for persons working locally, the Census indicated that slightly less than 50 percent of Girdwood residents who are employed commute daily to Anchorage. Thus, the Census results and the 1993 Girdwood Area Survey results are consistent.

*Occupation.*

People were asked to list their main occupation as part of the Girdwood Area Survey. All told, a high proportion (61.5 percent) of respondents listed professional, technical and managerial occupations. (See Table 15.) An even higher proportion of residents with second homes in Girdwood (77.5 percent) cited professional, technical and managerial occupations. This is not surprising since persons with the financial capacity to afford second homes are typically associated with such occupations.

**Table 13**  
**Main Affiliation in the Girdwood Area**

Girdwood Affiliation	Number	Percent of Total
Primary Residence	92	37.2
Secondary Residence	111	44.9
Other	44	17.9
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>

Source: Girdwood Area Survey, January 1993

**Table 14**  
**Place of Employment**

(by percentage)

Place of Employment	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Girdwood	40	16.2	42.4	0.9	0.0
Anchorage	155	62.7	27.3	88.3	72.7
Girdwood & Anchorage	11	4.5	9.8	0.9	2.3
Other	23	9.3	12.0	6.3	11.4
Retired or Not Employed	16	6.5	7.6	3.6	11.4
No Answer	2	0.8	1.1	0.0	2.3
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(by number)

Place of Employment	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Girdwood	40	16.2	39	1	0
Anchorage	155	62.7	25	98	32
Girdwood & Anchorage	11	4.5	9	1	1
Other	23	9.3	11	7	5
Retired or Not Employed	16	6.5	7	4	5
No Answer	2	0.8	1	0	1
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>92</b>	<b>111</b>	<b>44</b>

Note: "Other" places worked by Girdwood residents included North Slope Borough (4); remote Alaska locations (1); Girdwood/Bush (1); Prince William Sound (2); Seward (1); Portage (1); and out-of-town (1).

An analysis of Girdwood respondents indicated that 43.5 percent of respondents were engaged in the professional, technical and managerial occupation category. The next largest group (15.2 percent) was involved in service occupations, followed by 7.6 percent each in clerical/sales and in miscellaneous occupations. Another 13.3 percent either was not in the labor force or did not answer the question.

Although Girdwood undoubtedly has a high proportion of persons in professional, technical and managerial occupations, it is believed that the survey probably overstates their relative significance. Almost two-thirds (65.2 percent) of the Girdwood surveys were answered by males. If the ratio of male to female respondents had been closer to the 55.9 to 44.1 percent ratio identified by the 1990 Census, it is probable that a higher proportion of respondents would have been engaged in service and in clerical/sales occupations.

#### MOST LIKED FEATURE OF GIRDWOOD AREA

Respondents were asked to list what they liked most about the Girdwood area. Overall, the community's small-town atmosphere was listed the most frequently (34.4 percent), followed by skiing and other outdoor recreation opportunities (27.5 percent) and the natural environment (17.4 percent). (See Table 16.)

An analysis of responses by residence showed significant differences. The small-town atmosphere was listed first by almost two-thirds (64.1 percent) of Girdwood residents, followed by the natural environment (13 percent). Skiing and outdoor recreation opportunities (44.1 percent) were listed first by those with second residences in Girdwood, followed by the community's small-town atmosphere (19.8 percent), the natural environment (16.2 percent) and distance from Anchorage (10.8 percent). The "other" category listed skiing and other outdoor recreation opportunities first (31.8 percent), followed closely by the natural environment (29.5 percent). The small-town atmosphere was not particularly important to most people in this group.

The divergence of opinion among the three groups is not surprising, given the different reasons for their interest in the Girdwood area. Girdwood residents obviously see their existing small-town lifestyle as a major reason for remaining in the community.

Those who have invested in recreation homes in Girdwood place their highest value on skiing and other outdoor recreation opportunities. This group also values Girdwood's small-town

**Table 15**  
**Main Occupation of Respondents**  
(by percentage)

Main Occupation	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Professional, Technical & Managerial	152	61.5	43.5	77.5	59.1
Clerical & Sales	17	6.9	7.6	4.5	11.4
Service	18	7.3	15.2	1.8	4.5
Agriculture, Fishery, Forestry & Related	7	2.8	5.4	0.9	2.3
Processing	0	0.0	0.0	0.0	0.0
Machine Trades	1	0.4	1.1	0.0	0.0
Benchwork	0	0.0	0.0	0.0	0.0
Structural Work	11	4.5	5.4	3.6	4.5
Miscellaneous	8	3.2	7.6	0.9	0.0
Not in Labor Force	24	9.7	9.8	9.9	9.1
No Answer	9	3.6	4.3	0.9	9.1
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(by number)

Main Occupation	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Professional, Technical & Managerial	152	61.5	40	86	26
Clerical & Sales	17	6.9	7	5	5
Service	18	7.3	14	2	2
Agriculture, Fishery, Forestry & Related	7	2.8	5	1	1
Processing	0	0.0	0	0	0
Machine Trades	1	0.4	1	0	0
Benchwork	0	0.0	0	0	0
Structural Work	11	4.5	5	4	2
Miscellaneous	8	3.2	7	1	0
Not in Labor Force	24	9.7	9	11	4
No Answer	9	3.6	4	1	4
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>92</b>	<b>111</b>	<b>44</b>

Source: Girdwood Area Survey, January 1993

lifestyle, in part because it offers an escape from Anchorage. The "other" group, which presumably spends less time in Girdwood, values skiing and outdoor recreation opportunities and the natural environment almost equally, but gives a much lower value to the community's small-town lifestyle.

### MOST IMPORTANT PROBLEM IN THE GIRDWOOD AREA

When asked to list the most important problem in the Girdwood area today, respondents gave a wide variety of responses. Overall, the most frequently cited response was community growth and change (19.4 percent), followed by inadequate roads (13.8 percent), a lack of affordable housing (8.1 percent) and inadequate utilities (8.1 percent). Other problems cited included a need for improved skiing and recreation amenities, planning and zoning issues, and public safety problems. (See Table 17.)

A review of problems listed by place of residence indicated some differences. Community growth and change was listed first by all groups, although most strongly by Girdwood residents (25 percent). Other problems listed by local residents were affordable housing (13 percent), roads (12 percent), public safety (9.8 percent), and a lack of local control (7.6 percent).

After community growth and change (16.2 percent), persons with second residences in Girdwood listed roads (14.4 percent), a need for improved skiing and recreation amenities (10.8 percent), and inadequate utilities (9.9 percent) as the most important problem in the community.

In terms of utilities, this group most often cited the lack of natural gas services as the main problem.

Respondents in the "other" category ranked community growth and change, roads, and planning and zoning issues equally (15.9 percent) as the most serious problems in the Girdwood area, followed by inadequate utilities (13.6 percent). This group ranked Girdwood's water and sewer systems as the most deficient utilities.

**Table 16**  
**Most Liked Feature of Girdwood Area**  
(by percentage)

Feature	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Skiing and Other Outdoor Recreation	68	27.5	5.4	44.1	31.8
Natural Environment	43	17.4	13.0	16.2	29.5
Small-town Atmosphere	85	34.4	64.1	19.8	9.1
Distance from Anchorage	19	7.7	5.4	10.8	4.5
Other	25	10.1	10.9	6.3	18.2
No Answer	7	2.8	1.1	2.7	6.8
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(by number)

Feature	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Skiing and Other Outdoor Recreation	68	27.5	5	49	14
Natural Environment	43	17.4	12	18	13
Small-town Atmosphere	85	34.4	59	22	4
Distance from Anchorage	19	7.7	5	12	2
Other	25	10.1	10	7	8
No Answer	7	2.8	1	3	3
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>92</b>	<b>111</b>	<b>44</b>

Source: Girdwood Area Survey, January 1993

**Table 17**

**Most Important Problem of the Girdwood Area**  
(by percentage)

Problem	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Community Growth/Change	48	19.4	25.0	16.2	15.9
Lack of Development	8	3.2	1.1	4.5	4.5
Skiing/Recreational Needs	16	6.5	2.2	10.8	4.5
Roads:	34	13.8	13.8	13.8	15.9
Seward Highway	(21)	(8.5)	(8.5)	(8.5)	(9.1)
Local	(13)	(5.3)	(5.3)	(5.3)	(6.8)
Affordable Housing/Land	20	8.1	13.0	6.3	2.3
Public Safety	13	5.3	9.8	2.7	2.3
Utilities:	20	13.8	13.8	13.8	13.8
Natural Gas	(9)	(8.5)	(8.5)	(8.5)	(8.5)
Water/Sewer	(11)	(5.3)	(5.3)	(5.3)	(5.3)
Air Pollution	5	2.0	1.1	2.7	2.3
Planning/Zoning	14	5.7	2.2	4.5	15.9
Lack of Local Control	7	2.8	7.6	0.0	2.3
Conflicts with Seibu	6	2.4	5.4	0.0	2.3
Other	32	13.0	14.1	11.7	13.6
No Problems	6	2.4	1.1	4.5	0.0
Don't Know	3	1.2	1.1	0.9	2.3
No Answer	15	6.1	1.1	10.8	4.5
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Most Important Problem of the Girdwood Area**  
(by number)

Problem	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Community Growth/Change	48	19.4	23	18	7
Lack of Development	8	3.2	1	5	2
Skiing/Recreational Needs	16	6.5	2	12	2
Roads:	34	13.8	11	16	7
Seward Highway	(21)	(8.5)	(7)	(10)	(4)
Local	(13)	(5.3)	(4)	(6)	(3)
Affordable Housing/Land	20	8.1	12	7	1
Public Safety	13	5.3	9	3	1
Utilities:	20	8.1	3	11	6
Natural Gas	(9)	(3.6)	(1)	(7)	(1)
Water/Sewer	(11)	(4.5)	(2)	(4)	(5)
Air Pollution	5	2.0	1	2	1
Planning/Zoning	14	5.7	2	5	7
Lack of Local Control	7	2.8	7	0	0
Conflicts with Seibu	6	2.4	5	0	1
Other	32	13.0	13	13	6
No Problems	6	2.4	1	5	0
Don't Know	3	1.2	1	1	1
No Answer	15	6.1	1	12	2
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Girdwood Area Survey, January 1993

## RESORT DEVELOPMENT OPINIONS

Respondents were asked to indicate if they had favorable, unfavorable or mixed feelings about proposals to expand resort development in the Girdwood area beyond the expansion then being undertaken by the Alyeska Resort.

Overall, almost 56 percent (55.9 percent) said they favored such development. Another 30.8 percent held mixed opinions, and 12.1 percent said they were opposed. Only three people claimed to hold no opinion on the subject. (See Table 18.)

A review of responses by residence showed significant differences. Whereas 71.2 percent of persons with second homes in Girdwood and almost two-thirds (63.6 percent) of the "other" group favored additional resort development, only one-third (33.7 percent) of Girdwood residents gave this response. The difference is not surprising, given the primary interest in skiing of persons with second homes in Girdwood versus the greater focus on community issues by local residents.

Further analysis of reasons for favorable responses indicated that improved skiing and recreation amenities was the primary reason cited by persons with second homes in Girdwood, followed by economic development and increased tourism and recreation. (See Table 19.) On the other hand, Girdwood residents who favored additional resort development most often cited economic development as the primary reason for their support.

The greatest proportion of permanent Girdwood residents (41.3 percent) said they had mixed feelings about additional resort development in the Girdwood valley area. When asked the reason for their "mixed" opinion, local residents most often said that they favored upgraded recreation opportunities but they feared accompanying growth and change. (See Table 20.) The same reason was also most often cited by persons with mixed feelings who either had second homes in Girdwood or fell into the "other" category.

**Table 18**

### Opinions about Future Resort Expansion Proposals

(by percentage)

Opinion	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Favorable	138	55.9	33.7	71.2	63.6
Unfavorable	30	12.1	23.9	4.5	6.8
Mixed	76	30.8	41.3	23.4	27.3
Don't Know	3	1.2	1.1	0.9	2.3
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(by number)

Opinion	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Favorable	138	55.9	31	79	28
Unfavorable	30	12.1	22	5	3
Mixed	76	30.8	38	26	12
Don't Know	3	1.2	1	1	1
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>92</b>	<b>111</b>	<b>44</b>

Source: Girdwood Area Survey, January 1993

**Table 19**

### Reasons for Favorable Resort Development Opinions

(by percentage)

Reasons	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Improved Skiing and Amenities	44	17.8	5.4	28.8	15.9
Increased Tourism and Recreation	22	8.9	0.0	14.4	13.6
Economic Development	39	15.8	14.1	16.2	18.2
Increased Property Values	13	5.3	3.3	7.2	4.5
Environmentally Sound Development	4	1.6	0.0	1.8	4.5
Other	16	6.5	10.9	2.7	6.8
Not Applicable	109	44.1	66.3	28.8	36.3
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(by number)

Reasons	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Improved Skiing and Amenities	44	17.8	5	32	7
Increased Tourism and Recreation	22	8.9	0	16	6
Economic Development	39	15.8	13	18	8
Increased Property Values	13	5.3	3	8	2
Environmentally Sound Development	4	1.6	0	2	2
Other	16	6.5	10	3	3
Not Applicable	109	44.1	61	32	16
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>92</b>	<b>111</b>	<b>44</b>

Source: Girdwood Area Survey, January 1993

Relatively few people interviewed (12.1 percent) held unfavorable opinions about additional resort development beyond the recently completed Seibu expansion. Although the proportion of Girdwood residents holding such opinions (23.9 percent) was higher than those with second homes in the community and the "other" category (4.5 percent and 6.8 percent respectively), more local people held mixed or favorable opinions. Concerns about growth and overcrowded conditions were most often cited as the main reason for opposing further resort expansion. (See Table 21.)

**RESORT INFORMATION SEMINAR ATTENDANCE**

During October 1992, the Department of Natural Resources and the Municipality of Anchorage co-sponsored a Resort Information Seminar in Girdwood which featured presentations on destination resort development by knowledgeable representatives of Whistler, British Columbia.

A significant proportion of Girdwood residents surveyed (40.2 percent) said they had attended at least part of the Resort Information Seminar.

(See Table 22.) In addition, one individual stated that he had viewed tapes of the seminar. This indicates that a large share of local people are relatively well informed about the implications of resort development.

**AGE AND SEX CHARACTERISTICS OF RESPONDENTS**

As part of the survey, questions were asked about the age and sex of respondents, primarily to see if different groups of people answered particular questions in different ways.

Overall, a very high proportion of surveys was answered by males (70 percent). (See Table 23.) Although this proportion was lower for Girdwood residents (65.2 percent), it was still not consistent with the male-to-female ratio for the community.

In terms of age, most respondents were in their 40's. (See Table 24.) The median age of Girdwood respondents was 41.46 versus 47.59 for secondary residents and 45.36 for persons in the "other" category. The older age of secondary residents probably reflects the longer time needed to accumulate the income necessary to acquire a second home.

**Table 20**

**Reasons for Unfavorable Resort Development Opinions**

(by percentage)

Reasons	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Growth/Overcrowded Conditions	16	6.5	12.0	3.6	4.5
Area Physically Unsuitable	5	2.0	4.3	0.9	0.0
Other	8	3.2	7.6	0.0	2.3
Not Applicable	218	88.3	76.1	95.5	93.2
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(by number)

Reasons	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Growth/Overcrowded Conditions	16	6.5	11	4	2
Area Physically Unsuitable	5	2.0	4	1	0
Other	8	3.2	7	0	1
Not Applicable	218	88.3	70	106	41
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>92</b>	<b>111</b>	<b>44</b>

Source: Girdwood Area Survey, January 1993

**Table 21**

**Reasons for Mixed Resort Development Opinions**

(by percentage)

Reasons	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Favor Recreation Upgrade but Fear Growth/Change	28	11.3	17.4	7.2	9.1
Fear Higher Costs/Taxes	5	2.0	3.3	1.8	0.0
Fear Loss of Town Character	11	4.5	4.3	3.6	6.8
Need More Information	12	4.9	4.3	6.3	2.3
Other	19	7.7	12.0	3.6	9.1
No Answer	1	0.4	0.0	0.9	0.0
Not Applicable	171	69.2	58.7	76.6	72.7
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(by number)

Reasons	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Favor Recreation Upgrade but Fear Growth/Change	28	11.3	16	8	4
Fear Higher Costs/Taxes	5	2.0	3	2	0
Fear Loss of Town Character	11	4.5	4	4	3
Need More Information	12	4.9	4	7	1
Other	19	7.7	11	4	4
No Answer	1	0.4	0	1	0
Not Applicable	171	69.2	54	85	32
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>92</b>	<b>111</b>	<b>44</b>

Source: Girdwood Area Survey, January 1993

**Table 22**

**Resort Information Seminar Attendance**

(by percentage)

Attendance	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Yes	53	21.5	40.2	7.2	18.2
No	191	77.3	58.7	91.0	81.8
No Answer	3	1.2	1.1	1.8	0.0
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(by number)

Attendance	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Yes	53	21.5	37	8	8
No	191	77.3	54	101	36
No Answer	3	1.2	1	2	0
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>92</b>	<b>111</b>	<b>44</b>

Source: Girdwood Area Survey, January 1993

**Table 23**

**Gender of Respondents**

(by percentage)

Gender	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Male	173	70.0	65.2	72.1	75.0
Female	74	30.0	34.8	27.9	25.0
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(by number)

Gender	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Male	173	70.0	60	80	33
Female	74	30.0	32	31	11
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>92</b>	<b>111</b>	<b>33</b>

Source: Girdwood Area Survey, January 1993

**Table 24**

**Age of Respondents**

(by percentage)

Age Range	Number	Percent	Girdwood Primary Residence (%)	Girdwood Secondary Residence (%)	Other (%)
Under 30	10	4.0	7.6	0.9	4.5
30 - 34	22	8.9	15.2	3.6	9.1
35 - 39	33	13.4	19.6	9.0	11.4
40 - 44	61	24.7	26.1	24.3	22.7
45 - 49	46	18.6	13.0	24.3	15.9
50 - 54	26	10.5	7.6	11.7	13.6
55 - 59	13	5.3	2.2	8.1	4.5
60 - 64	16	6.5	3.3	8.1	9.1
65 or older	19	7.7	4.3	9.9	9.1
No Answer	1	0.4	1.1	0.0	0.0
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(by number)

Age Range	Number	Percent	Girdwood Primary Residence (#)	Girdwood Secondary Residence (#)	Other (#)
Under 30	10	4.0	7	1	2
30 - 34	22	8.9	14	4	4
35 - 39	4	13.4	18	10	5
40 - 44	61	24.7	24	27	10
45 - 49	46	18.6	12	27	10
50 - 54	26	10.5	7	13	6
55 - 59	13	5.3	2	9	2
60 - 64	16	6.5	3	9	4
65 or older	19	7.7	4	11	4
No Answer	1	0.4	1	0	0
<b>TOTAL</b>	<b>247</b>	<b>100.0</b>	<b>92</b>	<b>111</b>	<b>44</b>

Source: Girdwood Area Survey, January 1993



## *Summary of Girdwood Vision Consensus Building Forum*

The Girdwood Board of Supervisors and the Four Valleys Community School Board co-sponsored two consensus building workshops on Saturday January 16 and 23, 1993. The workshops took place in the Girdwood School gymnasium, from 10 a.m. to 4:30 p.m.. Each workshop was attended by approximately 30 people.

The purpose of the workshops was to provide a forum for residents and property owners to begin developing a consensus and a vision of those qualities of life considered essential to the community.

**SATURDAY, JANUARY 16, 1993.** Workshop participants brainstormed answers to four questions. Each participant was asked to rank his/her most important priorities. The four questions and the answers received are listed on pages 111-117.

**SATURDAY, JANUARY 23, 1993.** Workshop participants ranked the answers to three questions from the January workshop. These rankings are shown on pages 115-117.

Participants then developed a summary statement for each of these three questions. These summary statements are as follows:

**Question A.** People live in Girdwood because of its unique Alaska small town atmosphere and attributes which make it an excellent place to raise a family. These attributes include: a diverse, tolerant and caring community with a strong sense of volunteerism, involvement, and easy access to local government officials. Other important small town attributes include intimacy, a slower pace of life, safety, and excellent primary education.

Girdwood has a pristine and beautiful wilderness setting which is close to, yet removed from, the Anchorage metropolitan area and encompasses a variety of outdoor recreational opportunities surrounding a ski resort.

**Question B.** People's priorities for improving Girdwood include increased local political autonomy, particularly local control of the planning and zoning process. There is a desire to see development of a multi-purpose community center, which may include both indoor and outdoor recreation facilities, a planned town center and improved, expanded and managed trails, an industrial park and a recycling center. People want access to a natural gas utility and rail service to Anchorage. There is a desire for better communication with the Alyeska Resort management.

**Question C.** Girdwood residents are concerned about the problems brought about by rapid growth, which includes loss of the unique small town atmosphere, increased noise and air pollution and other environmental impacts. They are also concerned about not having enough local autonomy, control, and zoning enforcement, as well as a lack of affordable housing and the cost of public facilities and services.

A local newspaper article which summarizes the results of both workshops is reprinted on pages 118-119.

**QUESTION A: Four-part question:**

- What are the qualities of Girdwood that determine its character as a community?
- Why do you live in Girdwood?
- What do you like most about Girdwood?
- Identify the values of the Girdwood lifestyle that are essential to why you live here.

Rural setting	[ ]
Access to political leadership	[ ]
Small town atmosphere where everyone knows everyone	[ ]
Scenic beauty and wildlife	[ ]
Safety for children and adults	[ ]
Recreational environment and opportunities	[ ]
Access to metro area	[ ]
Weather attracts a particular type of person	[ ]
Separate and independent of Anchorage	[ ]
Diversity of residents	[ ]
Quality of Life:	
<u>Facilities:</u>	
• School and community school	[ ]
• Library	[ ]
• Local road service	[ ]
• Fire/EMS	[ ]
<u>Attributes:</u>	
• Quiet	[ ]
• Low pollution levels	[ ]
• Easy pedestrian access to services	[ ]
• Sense of community/caring	[ ]
• People are open, involved, tolerant, supportive, generous - lack of caste system	[ ]
Slower pace of life	[ ]
Great place to raise a family	[ ]
Relatively low taxes	[ ]
Short lines at Post Office	[ ]
Large tracts of unpopulated land	[ ]
Living in a ski resort town/amenities	[ ]
Individual freedom	[ ]
Employment/economic opportunities	[ ]
Wilderness access	[ ]

**COMMENTS ON QUESTION A:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**QUESTION B: What do you think needs to be done to improve Girdwood?**

Affordable multi-family housing	[ ]
More decent paying jobs	[ ]
Building/architectural controls	[ ]
Possibility of more Planned Unit Developments	[ ]
Planned subdivisions with utilities and ingress/egress	[ ]
Planned town center	[ ]
Increased minimum lot sizes for residences	[ ]
Campground and RV park	[ ]
Improved roads and drainage	[ ]
Mass transit / public parking / train -- In-valley	[ ]
Rail service to Anchorage	[ ]
Alternative access to hotel	[ ]
Improve roads / additional trails / loop to 20 Mile River	[ ]
Designated trails (allocation among user groups)	[ ]
Improved pedestrian access	[ ]
Move vs. leave airport	[ ]
Community center (multi-purpose)	[ ]
Cemetery	[ ]
Recreational facilities (sledding hill, swimming pool, undeveloped recreation lands)	[ ]
Upgrade/expand utilities (water, sewer, gas, solid waste, small hydro, and recycling/junk clean-up)	[ ]
Increased public safety (fire, police, animal control)	[ ]
Local high school	[ ]
Greater local control of planning and zoning process	[ ]
Greater political autonomy, e.g. "development city"	[ ]
Improve air quality	[ ]
Closer relationship with Seibu	[ ]
Improved atmosphere for additional businesses, e.g. banks	[ ]
Industrial park	[ ]
Local gravel supply vs. non-local gravel supply	[ ]
Ban hunting and trapping in the valley	[ ]

**COMMENTS ON QUESTION B:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**QUESTION C: As Girdwood grows and develops as a community, what are the major concerns that need to be addressed?**

Local control / autonomy	[ ]
Courting development vs. demand-driven development	[ ]
Involvement of local businesses in economic growth	[ ]
Developing too rapidly / haphazardly	[ ]
Need for code enforcement and zoning	[ ]
<u>Pollution:</u>	
• Visual (lights, signs, unfinished buildings)	[ ]
• Noise (snowmachines, sno cats, buses)	[ ]
• Air (wood stoves, auto exhaust)	[ ]
• Litter (recycling)	[ ]
Crime / law enforcement / safety	[ ]
<u>Increased use of facilities:</u>	
• Schools	[ ]
• Water & sewer	[ ]
• Roads / transportation (including traffic, need for mass transit, parking)	[ ]
• Emergency medical & fire	[ ]
<u>Housing:</u>	
• Affordable housing for all residents	[ ]
• Resort employee housing	[ ]
Loss of small town atmosphere	[ ]
Don't want a "company town"	[ ]
<u>Effect on property values:</u>	
• Decrease or increase	[ ]
• Who pays for the increased burden on the infrastructure	[ ]
Transient community / party town problems	[ ]
Commercial development of prime land	[ ]
Avoid the "us" (locals) vs. "them" (tourists) mentality	[ ]

**COMMENTS ON QUESTION C:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**QUESTION D: Share your expanded vision of what the community should be in ten, twenty and fifty years when today's children are seated as the adults in charge of decision-making and dealing with the problems we have created.**

Retirement community	[ ]
Local decision making	[ ]
Retain "small town community"	[ ]
Schools	[ ]
Enhance / preserve local environment with sound planning and controlled growth with little impact on community and at no cost to the public	[ ]
More privately owned land	[ ]
Not more privately owned land	[ ]
Affordable living standards	[ ]
Reasonable taxation	[ ]
Four season resort	[ ]
Artist retreat community	[ ]
Interaction between resort and the local community	[ ]
Convention facility	[ ]
Abundance of recreational facilities	[ ]
Safe, clean neighborhoods	[ ]
Better and more jobs and benefits	[ ]
Decrease auto traffic / increase public transportation	[ ]
Diverse income levels	[ ]
Lots of wildlife	[ ]
Many opportunities for children	[ ]
All Heritage Land Bank land is parkland	[ ]

**COMMENTS ON QUESTION D:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## GIRDWOOD VISION CONSENSUS BUILDING FORUM RESULTS

**Question A: What do you like most about Girdwood?** (Choose the five most important things and rank them on a scale of 1 to 5, with 5 being the most important and 1 the least important).

Most Liked Features of Girdwood	Number of Points Awarded	Ranking
<b>Small town lifestyle</b>	74	#1
<b>Wilderness setting</b>	64	#4
<b>Scenic beauty</b>	72	#2
Sk resort town	49	
<b>Recreational environment/opportunities</b>	61	#5
Employment/economic opportunities	47	
Convenient to but separate from metro area	53	
Like the people	56	
Availability of good public services	52	
Relatively low taxes	39	
<b>Low pollution levels</b>	67	#3
Access to political leadership	55	7
<b>Other</b>	<b>Number of Points Awarded</b>	
Personal security / safety	14	
Large tracts of unpopulated land	5	
"Strong" community	5	
Girdwood based for-profit community development corporation	5	

**Question B:** What do you think needs to be done to improve Girdwood? (Choose the five most important things and rank them on a scale of 1 to 5, with 5 being the most important and 1 the least important).

Needed Improvements for Girdwood	Number of Points Awarded	Ranking
<b>NATURAL ENVIRONMENT</b>		
• Ban hunting/trapping in valley	56	
• Develop local gravel supply	29	
• Do not develop local gravel supply	31	
• Improve air quality	51	
<b>ECONOMY AND POPULATION</b>		
• More jobs	40	
• Closer relationship with Seibu	57	
• Improved atmosphere for additional businesses, e.g. banks	40	
<b>LAND USE</b>		
• Affordable multi-family housing	44	
• Possibility of more Planned Unit Developments	40	
• Planned subdivisions with utilities and ingress/egress	50	
• Increased minimum lot sizes for residences	49	
• <b>Planned town center</b>	<b>65</b>	<b>#4</b>
• Industrial park	59	
<b>COMMUNITY FACILITIES &amp; UTILITIES</b>		
• <b>Multi-purpose community center</b>	<b>68</b>	<b>#2</b>
• Increased police services	40	
• Improved fire protection services	44	
• Improved animal control services	49	
• Local high school	42	
• Cemetery	37	
• Campground/RV park	45	
• <b>Improved/expanded trails</b>	<b>65</b>	<b>#4</b>
• <b>Improved recreation facilities</b>	<b>66</b>	<b>#3</b>
• Upgraded/expanded water utilities	48	
• Upgraded/expanded sewer facilities	50	
• <b>Natural gas availability</b>	<b>63</b>	<b>#6</b>
• Small hydro-electric power development	26	
• Upgraded solid waste services	40	
• Recycling	62	
• Junk clean-up	56	
<b>TRANSPORTATION</b>		
• Improved roads/drainage	46	
• Alternate access to Resort	47	
• Mass transit in valley	45	
• Improved pedestrian access	49	
• Rail service to Anchorage	56	
<b>LOCAL GOVERNMENT</b>		
• <b>Greater political autonomy</b>	<b>63</b>	<b>#6</b>
• <b>Local control of planning &amp; zoning process</b>	<b>72</b>	<b>#1</b>
• Building/architectural controls	61	

**Question C: As Girdwood grows and develops as a community, what are the major concerns that need to be addressed?** (Please rank every item on a scale of 1 to 5, with 5 being the most important and 1 the least important).

Major Concerns to be Addressed	Number of Points Awarded	Ranking
<b>NATURAL ENVIRONMENT</b>		
• <b>Air pollution</b>	70	#2
• <b>Noise pollution</b>	66	#3
<b>ECONOMY AND POPULATION</b>		
• <b>Rapid growth</b>	66	#3
• Company town	53	
• Involvement of local businesses in economic growth	50	
• <b>Loss of small town atmosphere</b>	72	#1
• Impacts on property values	50	
• Transient community problems	53	
• Encouraging development	36	
<b>LAND USE</b>		
• <b>Affordable housing</b>	58	#7
• Resort employee housing	51	
• Commercial development on prime land		
<b>COMMUNITY FACILITIES &amp; UTILITIES</b>		
• Crime	52	
• Fire protection	51	
• Emergency medical services	51	
• Schools	52	
• Water	52	
• Sewer	57	
• Solid waste disposal/litter	51	
<b>TRANSPORTATION</b>		
• Local roads	46	
• Parking	54	
• Mass transit	54	
<b>LOCAL GOVERNMENT</b>		
• <b>Local control/autonomy</b>	64	#5
• <b>Zoning enforcement</b>	62	#6
• <b>Infrastructure costs</b>	58	#7



LOOK TO THE

**Future**

## Consensus Building Workshop Review

By: *Diane Powers*

Saturday, January 16, 1993 was the first Girdwood Vision Consensus Building Forum. All in all it went very well—the Board of Supervisors & the Four Valleys Community School did a great job of organizing. The attendance was not impressive, but the information received was and will be very useful and worthwhile. The purpose of the workshop was to get a vision of what the community would like to see happen in the future of the valley. There is approximately 24,000 acres that is being appropriated by the state from the National Forest, 1,000 of that will be acquired by the Municipality of Anchorage. With all this new land (Winner/Glacier Creek) becoming available, there is a need to update the Turnagain Arm comprehensive plan. The information that is being gathered at these forums will be very useful in determining the direction the valley should take.

The meeting was opened by Tim Bennett and Sam Daniel facilitated the meeting. Ed Fogels, Project Manager of the Turnagain Arm Management Plan, and Tom Nelson, Project Manager of the Turnagain Arm Comprehensive Plan Update gave some background information and how it relates to these meetings.

After the opening, everyone broke into groups to brainstorm 4 important questions:

1. Why do you live in Girdwood? What do you like the most about Girdwood? Identify the values of the Girdwood lifestyle that are essential to why you live here?
2. What do you think needs to be done to improve Girdwood?
3. As Girdwood grows and develops as a community, what are the major concerns that need to be addressed?
4. Share your expanded vision of what the community should be in 10, 20, & 50 years when today's children are seated as the adults in charge of decision making, dealing with the problems we have created.

The ideas generated were used to create a questionnaire in which people were asked to prioritize the answers. At the January 23rd forum, participants generated statements that summarized the major issues identified within each of the topics addressed.

Following is a list of the ideas generated by the first three questions, and their respective summary statements. The top 5 issues identified are listed by number-#1 being top priority. They are not intended to be inclusive and are reflective of the thinking of a small sample of the community.

**Question A: What do you like most about Girdwood?**

- #1 Small town lifestyle
- #2 Scenic beauty
- #3 Low pollution levels
- #4 Wilderness setting
- #5 Recreational environment/opportunities

Ski resort town  
Employment/ economic opportunities  
Convenient to but separate from metro area  
Like the people  
Availability of good public services  
Relatively low taxes  
Access to political leadership  
Personal security/safety  
Large tracts of unpopulated land  
"Strong" community  
Girdwood-based for profit community development corporation

**Summary Statement #1.** People live in Girdwood because of its unique Alaskan small town atmosphere and attributes which makes it an excellent place to raise a family. These attributes include: a diverse, tolerant and caring community with a strong sense of volunteerism, involvement, and easy access to local government officials. Other important small town attributes include intimacy, slower pace of life, safety and excellent primary education.

It has a pristine and beautiful wilderness setting which is close to, yet removed from, the Anchorage metropolitan area and encompasses a variety of outdoor recreational opportunities surrounding a ski resort.

**Question B: What do you think needs to be done to improve Girdwood?**

- #1 Local control of planning & zoning process
- #2 Multi-purpose community center
- #3 Improved recreation facilities
- #4 Planned town center
- #5a Natural gas availability
- #5b Greater Political autonomy

Natural Environment:

- Ban hunting/trapping in Valley
- Develop local gravel supply
- Do not develop local gravel supply
- Improve air quality

Economy and Population:

- More jobs
- Closer relationship with Seibu
- Improved atmosphere for additional businesses, e.g. banks

Land Use:

- Affordable multi-family housing
- Possibility of more Planned Unit Developments
- Planned subdivisions with utilities and ingress/egress
- Increased minimum lot sizes for residences

- Industrial park

Community Facilities and Utilities:

- Increased police services
- Improved fire protection services
- Improved animal control services
- Local high school
- Cemetery
- Campground/RV park
- Improved/expanded trails
- Upgraded/expanded water utilities
- Upgraded/expanded sewer facilities
- Small hydro-electric power development
- Upgraded solid waste services
- Recycling
- Junk clean-up

Transportation:

- Improved roads/drainage
- Alternate access to Resort
- Mass transit in Valley
- Improved pedestrian access
- Rail service to Anchorage

Local Government

- Building/architectural controls

**Summary Statement #2.** People's priorities for improving Girdwood include increased local political autonomy, particularly local control of the planning and zoning process. There is a desire to see development of a multi-purpose community center, which may include both indoor and outdoor recreation facilities, a planned

town center and improved, expanded and managed trails, an industrial park and a recycling center. People want access to a natural gas utility and rail service to Anchorage. There is a desire for better communication with the Alyeska Resort management.

**Question C:** As Girdwood grows and develops as a community, what are the major concerns that need to be addressed?

- #1 Loss of small town atmosphere
- #2 Air pollution
- #3a Noise pollution
- #3b Rapid growth
- #4 Local control/autonomy
- #5 Zoning enforcement

Economy and Population:

- Company town
- Involvement of local businesses in economic growth
- Impacts on property values
- Transient community problems
- Encouraging development

Land Use:

- Affordable housing
- Resort employee housing
- Commercial development on prime land

Community Facilities and Utilities:

- Crime, Fire protection,
- Emergency medical services, Schools, Water, Sewer,
- Solid waste disposal/litter

Transportation: Local roads, Parking,

- Mass transit

Local Government:

- Infrastructure costs

**Summary Statement #3.** Girdwood residents are concerned about the problems brought about by rapid growth which includes loss of unique small town atmosphere, increased noise and air pollution and other environmental impacts. They are also concerned about not having enough local autonomy, control and zoning enforcement as well as a lack of affordable housing and the cost of public facilities and services.

If there are ideas you have that weren't addressed, please let the Turnagain Arm Management Plan Advisory Board Members know your thoughts. Contact Tim Bennett, Tom Yeager, Bill Schwartz, or Diane Powers. You can write to them c/o:

Girdwood Board of Supervisors  
P.O. Box 345, Girdwood, AK 99587.

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