## 6

### PUBLIC TRANSPORTATION SYSTEM

Girdwood Valley today has no public transit service. Tour buses associated with travel companies bring visitors into the Valley during the summer, and the Alaska Railroad passes along the Valley entrance on its way to Seward and Whittier. No local public transit services are available, and there is no regularly scheduled public transportation between Anchorage and Girdwood.

Public transportation will be a fundamental element in the future development of Girdwood Valley. It will help maintain a high quality of life for Valley residents and will be critical to the success of the Municipality's strategy of low-impact, environmentally based tourism and commercial development in Girdwood.

### POTENTIAL MARKETS FOR TRANSIT SERVICE

There are a number of markets for transit service within, to and from Girdwood Valley:

- Commuters living in Girdwood and working in Anchorage, or living in Anchorage and working in Girdwood;
- Day skiers from Anchorage and (if proposed airport rail station is completed) destination skiers arriving and departing through the Anchorage Airport;
- Tourists traveling the Alaska Railroad with tour groups or as independent vacationers;
- Tourists and visitors arriving by auto and spending one or more nights in the Valley;

- Valley residents traveling to and from the airport (future market if proposed airport rail station is completed):
- School children attending class in Anchorage; and,
- Internal circulation within the valley by all of the above.



Fig. 6-1 Dayskier drop-off at Alyeska Ski Resort

### TRANSIT ALTERNATIVES STUDIED

Transit alternatives discussed with the public during development of this plan included:

a. Bus Shuttle/Circulator. Provide circulator service within the Valley connecting an intermodal center along the existing rail corridor (possibly with an intercept parking lot) to the New Townsite, the Old Ski Base and the Prince Hotel/New Ski Base. The shuttle could also circulate within residential areas. Use small community transit vehicles (Fig. 6-2) powered by natural gas.

- b. Alaska Railroad Spur. Extend a spur of the railroad into the Valley (several alignments were studied) connecting a station along the existing rail corridor with the Alyeska Prince Hotel/New Ski Base (with other intermediate stations also possible depending on alignment). Encourage the Alaska Railroad to use the most modern, environmentally friendly technology and passenger equipment possible.
- c. High-Tech Fixed Guideway. Build a high-tech fixed guideway (monorail, personal rapid transit or automated guideway transit) connecting an intermodal center along the existing rail corridor to the Prince Hotel/New Ski Base (with other intermediate stations also possible depending on alignment).
- d. Light Rail Transit (LRT). Build an LRT line in the right of way of the Alyeska Highway and Arlberg Road connecting an intermodal center along the existing rail corridor to the New Townsite, the Old Ski Base and the Prince Hotel/New Ski Base. Use small light rail vehicles (LRV's) in Valley service.
- e. Valley Entry Multimodal Center.
  Build a transportation center near the intersection of Seward Highway and Alyeska Highway to provide for transfers between auto or Alaska Railroad and the Valley transit system -- whether bus, rail or high tech. Include a park 'n ride lot and a visitor/information center in the site.

Fig. 6-2 The "Hop"- a small Shuttle vehicle used in downtown Boulder, Colorado



The high-tech fixed guideway alternative is not included in this plan due to cost and feasibility considerations. This is not to preclude reconsideration of such an alternative in future decades if the need arises.

The light rail alternative is physically impractical if it utilizes overhead electrical power. If it utilizes on-board diesel power, it holds no technological or physical advantage over the Alaska Railroad spur. but retains the serious limitations of not being able to directly connect onto the Alaska Railroad mainline (due to safety issues with light rail equipment operating on a heavy rail system). As a result, a transfer from the Alaska Railroad to the Valley system would be required – a serious deterrent to ridership. Finally, analysis of rail spur alternatives indicated that a rail alignment along Alyeska Highway is not a recommended route for any type of rail system. Consequently, while light rail sounds more acceptable because it is "light" rather than "heavy," it offers no real advantages over the rail spur, would have much less operational flexibility, and would attract less ridership.

This Transportation Master Plan includes the following major transit elements:

- Local bus transit circulation within the Valley;
- Investigation of route alignment and feasibility, both physical and financial, of a rail spur into the Girdwood Valley; and,
- Development of a multimodal center at the Valley Entry, and additional multimodal centers as needed, with or without a rail component.

These are described in the following sections.

### INTERNAL TRANSIT CIRCULATION

Map 7 shows the service areas for future internal circulation within the Valley. Local transit service will be implemented incrementally over time as funding permits

and demand warrants. Anticipated phasing of the various services would be as follows:

#### Phase 1 - Core Area Shuttle

During the initial phase, high frequency (15 minute headway in peak hours) shuttle service would operate between the New Townsite (downtown), the Old Resort Base and the New Resort Base (Prince Hotel). The route would utilize Alyeska Highway and Arlberg Road, circulating around the New Townsite Square and along Hightower to commercial development in the golf course area. The shuttle would also circulate through the Old Resort Base and Olympic Circle areas.

This shuttle would serve all of the markets listed above. It would have particular value if rail service were implemented. Two buses would be required to accomplish a peak frequency of 15 minutes along with a spare vehicle for high demand periods and to allow for routine maintenance of the fleet. This shuttle is similar to a route recommended in the 1997 Girdwood Transportation Study.

#### Phase 2 - Intercept Connector

During the second phase, shuttle service would be extended along Alyeska Highway to the Seward Highway. This service would interconnect with the rail service through multimodal centers (described below) located at the Valley Entry and also potentially at the New Resort Base.

The principal purpose of the Connector would be to intercept Valley visitors at a parking facility to be developed as part of the Valley Entry Multimodal Center and bring them into the Valley on buses. This service would be provided during ski season and during special events in the Valley (e.g., Forest Fair). Eventually, the service could be operated throughout the summer if visitation levels rise to a point that would justify the cost.

The 1997 Girdwood Transportation Study considered an intercept parking facility

somewhere in the New Townsite (downtown). This plan does not rule out such a facility. If intercept parking could be provided near the New Townsite, the cost of providing the shuttle connection (at a specified frequency) would be less than running all the way to the Seward Highway. However, such an approach would not reduce core area vehicular traffic. It is potentially unlikely that sufficient land would be available in the core for the parking lot.

At 350 square feet per surface parking space (allowing for access roadways) the following surface areas would be required for different sizes of parking lots:

# of Cars	Sq. Ft.	Acres
50	17,500	0.4
75	26,250	0.6
100	35,000	0.8
150	52,500	1.2
200	70,000	1.6
400	140,000	3.2

#### Phase 3 - Community Circulator

Eventually, a local transit system circulating throughout Girdwood Valley could be implemented. In addition to the areas served in Phases 1 and 2, the circulator would provide direct service to the residential neighborhoods east of Glacier Creek and north and south of Alyeska Highway, to areas along Crow Creek Road and, possibly, to areas of future development. As the costs of this service would be relatively high, successful implementation of the community circulator would require:

- A source of capital funding;
- A stable source of operations and maintenance funding;
- Intercept parking facilities with restrictions on vehicular access to the Valley;
- A coordinated demand management program promoting use of the transit system.

### IMPLEMENTATION OF A RAIL SPUR

As part of the process to develop this Transportation Master Plan, an effort was made to estimate the potential demand for rail service and to determine the general physical feasibility of a new rail spur extension into Girdwood. The system may include a spur from the Alaska Railroad mainline to an internal valley terminus and/or a commuter station at the Alaska mainline with shuttle service to internal valley locations.

Extension of a rail line into Girdwood is not the current locally preferred alternative of many of those who live year round in Girdwood. Adoption of this plan by the Assembly is not intended to indicate that extension of a rail line into Girdwood is the locally preferred alternative of the Anchorage Assembly. Adoption of this plan only indicates that this option for future transportation should be preserved for additional study and analysis.

### Summary of Potential Rail Service Demand

Data for the estimation of potential rail service demand was drawn from the 1997 *Girdwood Transportation Study* prepared for the Municipality of Anchorage and from the 1999 *Market Analysis for ARRC Anchorage International Airport Rail Station* prepared for the Alaska Railroad Corporation. The analysis differentiates weekdays from weekend days and summer ridership from winter ridership. Ridership forecasts and estimates of vehicle trips eliminated are provided both for the near term (roughly 2000 to 2002) and for the future (by 2020).

#### Potential Demand for Commuter Travel by Girdwood Residents

This market includes people who live in Girdwood and commute into Anchorage to work. Mode shares (propensities to take rail transit) are taken from the AARC report. The propensity levels utilized here assume a \$7.50 one-way fare, which was

in the middle of the range of potential fares studied in the AARC report. (Ridership estimates represent one-way trips.)

RESIDENT COMMUTER	Su
RIDERSHIP	₫
	₹

Daily Ridership – Weekday		
2,000 population	84	132
5,000 population <sup>1</sup>	210	330

Vehicle Trips Eliminated –		
Weekday		
(@1.2 average occupancy <sup>2</sup> )		
2,000 population	70	110
5,000 population <sup>1</sup>	175	275

Daily Ridership – Weekend Day <sup>3</sup>		
2,000 population	25	40
5,000 population	63	100

Vehicle Trips Eliminated – Weekend Day		
(@1.2 average occupancy)		
2,000 population	21	33
5.000 population	53	83

#### Notes

- 1. 5,000 is used here as a population level in the Valley by (or before) 2020.
- Based on travel diary conducted as part of the Girdwood Transportation Study.
- Weekend employment estimated at 30% of weekday - same study.

#### Potential Demand for Commuter Travel by Non-Resident Commuters

This market includes people who live outside Girdwood and commute into the Valley to work. Mode shares (propensities to take rail transit) are taken from the ARRC report. The propensity levels utilized here assume a \$7.50 one-way fare, which was in the middle of the range of potential fares studied in the ARRC report. The analysis assumes that Valley residents will hold 75% of future jobs, an assumption which has a conservative effect on the rail ridership estimates. If more than 25% of jobs are held by people who commute into the Valley, the

estimates shown below would be too low. (Ridership estimates represent one-way trips.)

# NON-RESIDENT Summer Sum

Daily Ridership - Weekday		
1,100 workers <sup>1</sup>	180	180
2,800 workers <sup>1</sup>	470	470

Vehicle Trips Eliminated –		
Weekday		
(@1.2 average occupancy <sup>2</sup> )		
1,100 workers	150	150
2,800 workers	390	390

Daily Ridership – Weekend Day <sup>3</sup>		
1,100 workers	180	180
2,800 workers	470	470

Vehicle Trips Eliminated – Weekend Day		
(@1.2 average occupancy)		
1,100 workers	150	150
2,800 workers	390	390

#### Notes:

- Employment based on Girdwood Transportation Study. 2,800 workers represents an employment level in the Valley by (or before) 2020. Estimates assume only 25% of Valley jobs are held by workers who live outside the Valley.
- 2. Based on travel diary conducted as part of the Girdwood Transportation Study.
- Weekend employment in a resort area will be at least as high as weekday.

### Potential Demand for Rail Travel by Day Skiers

This market includes weekend skiers coming to Girdwood Valley from Anchorage. Both alpine skiers (at Alyeska) and nordic skiers are included. It has been assumed that weekday demand would not justify weekday trains. Based on weekend skier activity levels at Alyeska (most of whom come from Anchorage) and on the success of ski trains in other similar environments, it is probable that ARRC could sell all seats on ski trains up

to two trains (each way) per day. (Ridership estimates represent one-way trips.)

DAY SKIER RIDERSHIP	Summe	Winter
	¥	

Day Skiers – Weekend Day		
One train/day <sup>1</sup>	0	250
Two trains/day	0	500

Ridership – Day Skiers –		
Weekend Day		
One train/day <sup>1</sup>	0	500
Two trains/day	0	1,000

Vehicle Trips Eliminated – Weekend Day (@2.4 average occupancy <sup>2</sup> )		
One train/day <sup>1</sup>	0	210
Two trains/day	0	420

#### Notes:

- This analysis assumes ARRC utilizes 250passenger trains in this service.
- 2. Based on parking lot surveys.

### Potential Demand for Rail Travel by Cruise/Tour Customers

This market includes people headed for, or returning from, cruise ships docked at Whittier and Seward. The size of this market was analyzed and forecasted to 2020 in the market analysis prepared for ARRC and cited above. All activity is assumed to occur in the summer. While the potential demand for rail travel in this market is higher than shown below, the estimates used here assume that either one or two trains per day arrive (full) each direction on Saturday and Sunday during these months. Demand for more trains will probably exist, but may be difficult to support physically due to constraints at the ports and logistics of loading passengers. (Ridership estimates represent one-way trips.)

CRUISE/TOUR RIDERSHIP	Summ	Winter
	ier	_

Cruise/Tour Customers- Weekend Day		
One train/day <sup>1</sup>	250	0
Two trains/day	500	0

Cruise/Tour Ridership – Weekend Day		
One train/day	500	0
Two trains/day	1,000	0

Vehicle Trips Eliminated		
(buses) – Weekend Day		
(@ 50 occupancy)		
One train/day	10	0
Two trains/day	20	0

#### Note:

Potential Demand for Travel to/from Anchorage Airport by Girdwood Residents

This market includes people who live in Girdwood and travel to and from the Anchorage airport. Surveys conducted as part of the the ARRC "Market Analysis" report found that Girdwood residents would make about 7 such trips per person per year (one-way trips corresponding to about 3.5 round trips per person). (Ridership estimates represent one-way trips.)

ANCHORAGE AIRPORT	Su
RIDERSHIP	3
	mer

Daily Ridership – Weekday and Weekend Day		
2,000 population	38	38
5,000 population	95	95

Vehicle Trips Eliminated –		
Weekday		
(@ 2.0 average occupancy)		
2,000 population	19	19
5,000 population	48	48

Other markets for rail transit travel may exist. For example, it may be that ARRC could develop a day charter business similar to the charter bus services that currently bring 5 to 10 buses per day into the Valley during the warm weather months. It is also possible that high school students could utilize the rail system. If an intercept parking lot is developed (as planned) at the Valley Entry and includes parking for autos and RVs (recreational vehicles), some potential ridership by these people (gaining access to the Valley) would be possible. Finally, it is likely that the Resort and the ARRC could work together to develop scheduled rail connections bringing destination skiers (January, February and March) directly to the Resort from the airport (and back). While these are valid and important markets, the ridership estimates summarized below do not include these markets, as they are speculative and may not develop.

There are also certain markets that would not be served by a rail spur. Chief among these are tourists and visitors who drive into the valley and people circulating within the Valley. These markets would be served by the internal circulation transit systems described above, as the rail spur would not provide direct access to many of the Valley's internal destinations (e.g., the downtown or old resort base).

Summarizing the data presented above, four forecasts of ridership potential and vehicle trips eliminated are shown in the Ridership Summary table on the facing page.

The data indicate that both potential ridership and vehicle trips eliminated are higher in the winter than in the summer and higher on weekend days than on weekdays. On a winter weekend day in the future (by 2020), a rail spur into the Valley would have the potential of directly reducing daily traffic by 5 to 7%. Indirect effects (people who arrive without vehicles would not make local vehicle trips) would be in addition to this, bringing the total impact of a rail spur to perhaps 10% reduction in daily valley traffic in the future. The impact on peak hour travel would be even greater.

This analysis assumes ARRC utilizes 250passenger trains in this service.

RIDERSHIP SUMMARY	Summer	Winter
Weekdays – Near Term		
Daily Ridership Vehicle Trips Eliminated	302 239	350 279
Weekend Days – Near Term		
Daily Ridership Vehicle Trips Eliminated	743 200	758 412
Weekdays – Future (by 2020)		
Daily Ridership	775	895
Vehicle Trips Eliminated	610	710
Weekend Days – Future (by 2020)		
Daily Ridership	1,630	1,665
Vehicle Trips Eliminated	510	940

Meeting the commuter demand levels would support two train trips per day to and from Anchorage. Depending on schedules, this could require either one or two train sets. Meeting the cruise/tour demand would also require two trains per day each direction in the summer. During ski season, the cruise/tour equipment could be placed into skier service. Thus the Girdwood spur implies a potential need for three or four train sets to meet the Valley-based demand anticipated by 2020.

### **Summary of Initial Rail Corridor Feasibility Assessment**

The Rail Corridor Feasibility Assessment (HDR Alaska, Inc., July 1999) is summarized below and is available from the Municipality as Technical Appendix E to the Girdwood Transportation Master Plan. Map 8 shows the rail corridor alignments evaluated in the assessment.

The rail corridor physical assessment (1) describes (at a conceptual level) alternative corridor alignments for a spur from the Alaska Railroad mainline to an internal valley terminus within the

Girdwood valley; (2) identifies alternative locations for potential stations; and (3) provides a technical evaluation of five study corridors. It presents conceptual-level engineering and environmental analysis for each of the five study corridors to determine the engineering feasibility and environmental considerations associated with each. Based on these initial findings, the study identifies the most promising corridor.

The corridors studied in the assessment were identified through an examination of previous reports, discussions with the ARRC and, most importantly, through a series of public workshops in Girdwood. Rail spur implementation will be controversial since opposition to it has been expressed by many Girdwood residents.

All corridors identified were examined in the technical assessment despite readily identifiable flaws. Residents expressed a desire for the rail spur (if one is to be developed) to serve the "Core Area" (New Girdwood Townsite) and identified several corridors that would accomplish this.

Serving the New Girdwood Townsite requires bringing an alignment closer into or directly through developed areas. Such an alignment, however, also brings impacts associated with rail in close proximity to residential and commercial development, including noise, air pollution, community disruption, and train-vehicle and train-pedestrian safety concerns.

Alignment 1A, the alternative running along the far west side of the valley from the existing rail line to the Alyeska Prince Hotel, appears to be the most promising way to provide rail access into the Girdwood Valley. This was indicated not only by the engineering and environmental analyses, but also by public input at the second series of workshops. This corridor minimizes impacts to wetlands and floodplains: avoids serious avalanche hazards; minimizes community disruption from noise, vibration and air pollution to existing residential areas; and is technically feasible from an engineering perspective in terms of grades and curve radii. The study estimated the cost of

Alternative 1A at about \$18 to \$26 million, exclusive of stations and multimodal centers.

It should be noted that the information presented in the physical assessment document is useful at a planning level only, as data used are based on available mapping and other available information. Detailed environmental analysis and engineering will be required if the project proceeds.

Based on the most feasible alignment (Alignment 1A - up the west side of the Valley), the rail spur presents a number of potential negative impacts and benefits, which are summarized below.

### Potential Negative Impacts of a Rail Spur

Environmental and Landscape Impacts of Construction. Rail spur construction would impact a designated wetland area known as the Beaver Pond and could impact another wetland north of Moose Meadows. The corridor would cross both California and Glacier Creeks, and would require some cuts that could be visible from the upper parts of the ski area.

Noise In Residential Areas and Wild Lands. Depending on the equipment utilized, the operation of trains could introduce noise into residential areas west of Alyeska Highway and into forests along the west side of the Valley and north of the new townsite.

Concentration of Tourism and Visitors at One Location. Because the most feasible rail spur corridor involves stations at the Valley entry and at the Prince Hotel only, any potential benefits from tourism growth (retail and restaurant sales, jobs, etc.) might be concentrated at the new resort base, without economic benefits in the rest of the Valley.

Impacts to Recreational Trails and Nordic Skiing Areas. The rail corridor could impact several trails, including both summer use trails and Nordic skiing areas. Trails potentially affected by the rail spur include the Beaver Pond, California Creek,

Iditarod, Stumpy's Summer, Stumpy's Winter, and the Winner Creek Trailhead. The planned connection between the Bird Point regional trail and the paved trail along Alyeska Highway would be impacted by the wye track at the Valley entrance. Other undesignated use trails would also be affected.

#### Potential Benefits of a Rail Spur

Support for Strategic Tourism Objectives. Rail access into the Valley could directly support achievement of local objectives to develop the Valley's economy on a foundation of low-impact recreational activity and environmentally based tourism.

Enhanced Retail and Commercial Development. The rail spur would support development of a broader commercial base (retail/restaurant) than could otherwise be supported by auto-based access or by local residential shoppers.

Jobs for Valley Residents. In connection with the previous points, increased visitation would provide jobs in the Valley, reducing the need to commute to Anchorage for some residents.

Reduced Number of Tour Buses. As tourism grows in South Central Alaska, along the Seward Highway and in Girdwood Valley, it is likely that increasing numbers of diesel tour buses (over-the-road coaches operated by tour companies) will come into the Valley. This volume could be reduced if rail connections from Seward, Whittier and Anchorage into the Valley were provided.

Commuter Rail Service to and from Anchorage. While commuter rail service could be offered today from the existing rail station at the Seward Highway, the development of the rail spur, the acquisition of new rail equipment and the development of the Valley Entry Multimodal Center would make commuter rail service more feasible and more likely.

Reduced Vehicular Traffic in the Valley. The rail spur offers the potential for intercepting auto-based tourists and visitors to the Valley (including skiers) either in Anchorage or at the Valley Entry Multimodal Center. The same end could be accomplished with bus service.

Improved Skier Access. The rail spur would allow the Alaska Railroad to offer a ski train from Anchorage. Such systems in other places (e.g., the Winter Park Ski Train in Colorado) are popular and successful.

Opportunity to Leverage Local Bus Transit. The funding of the rail spur offers an opportunity to include capital funding for buses which could be placed in service as part of the Phase 1 (Internal Transit Circulation) described in the previous section.

Emergency Access and Egress. The rail spur would provide redundancy of access and egress for the Valley in the event of natural disaster (flood, fire, seismic, etc.).

Access for Special Events. If Girdwood is to realize local objectives to develop the Valley's economy on a foundation of low-impact recreational activity and environmentally based tourism, it will need to host special events to draw people into the Valley. (The Forest Fair is an example of this strategy.) The rail spur offers the opportunity to provide intercept parking at the Valley entry and rail service from Anchorage to boost such events and at the same time avoid having the Valley overrun with traffic and parking.

### Guiding Principles for Rail Spur Implementation

Based on these potential impacts and benefits, any recommended program for rail spur implementation should include the following list of guiding principles. It is important to keep in mind that, if the Municipality and the Alaska Railroad decide to implement the rail spur, it will be required to undertake an extensive environmental analysis and public involvement pursuant to the National Environmental Policy Act (NEPA), other Federal regulations and Alaska statutes. In that process, all feasible alternatives to the proposed action would be studied and

mitigation measures would be evaluated. Until that process has taken place, neither the Railroad nor the Municipality can resolve detailed design issues or commit to specific mitigation measures.

Restriction of Tour Bus Traffic. One benefit of rail spur implementation would be a reduction in diesel bus traffic associated with travel company tours staying at resort base hotel(s). Achieving this benefit would require placing conditions on future lodging development as part of the Municipality's development review of any new proposed hotels at the resort base. The intent would be to reinforce the shifting of tour arrivals from tour buses to the rail spur directly serving this destination.

Intermediate Transit Station. To ensure maximum benefit from the rail spur, provision should be made for an intermediate station as shown on Map 11. This station, just west of the downtown area, may not be needed for a number of years, but the site for it should be included and preserved in the master planning for development in that part of the valley.

Commuter Service Between Girdwood and Anchorage. A benefit of the rail spur to the local Girdwood population and employers would be the increased feasibility of commuter service. This should be addressed during project development.

Mitigation of Recreational Trails Impacts. The realignment or replacement of impacted trails should be evaluated as a mitigation measure. Map 11 in Chapter 7 shows the relationship between the recommended rail spur alignment and Valley trails. The Beaver Pond trail along the west side of the Valley could be impacted by the wye track and potentially by other parts of the spur. This trail could be reconstructed and improved as part of rail spur development. Another key issue will be the crossings of the rail spur by the Iditarod Trail and other local trails north of the New Townsite.

Landscape Impacts Minimized. During preliminary and final design, construction strategies to reduce or avoid large cuts

and fills should be considered in light of the delicate ecology of the Valley and the importance of the local viewshed.

Design of Valley Entry and Resort Base Multimodal Centers. Both stations should be designed to be open public facilities readily accessible and serviceable by all modes of transportation, with provision for cross-platform transfer to local buses, pedestrian access, bicycle access and, in the case of the Valley Entry Center, adequate parking. Both multimodal centers are necessary features of a Valley rail system.

Leveraging of Local Transit. The bus capital needs of the Valley should be included in the grant requests for the rail system.

Ski Train. Regularly scheduled ski train service (winter) from Anchorage should be incorporated into the physical planning and operational planning for the rail spur.

Utilization of Suitable Equipment. As Federally certified diesel mobile units and other technologies become available, such equipment should be deployed in the Valley service to reduce noise and other impacts of large trains.

Environmental and Public Process. If the Alaska Railroad pursues development of the rail spur, an extensive program of local public involvement in the environmental

Fig. 6-3 Historic railroad station in Glenwood Springs, Colorado



analysis and design process should become the backbone of project development.

### Role of the Potential Rail Spur in Girdwood Valley

The analysis of a rail spur into the valley along various potential alignments resulted in the following determinations for the Transportation Master Plan:

- Based on the available data to date, the best physical alignment for the rail spur appears to be alignment 1A as shown on Map 8 and Map 11. This alignment would be the safest, least disruptive and most environmentally suitable route for the rail spur.
- The actual implementation of a rail spur will require further environmental analysis and engineering development with extensive public review and involvement.
- 3. If developed, the rail spur may play an important role in Girdwood Valley's future mobility. Even with an initially limited amount of equipment, rail service will attract enough ridership to impact daily vehicular traffic significantly during peak seasons and will be especially beneficial during peak travel periods. The arrival of visitors by rail will create ridership for the valley public bus system, put more pedestrians on the streets, and energize the local economy. The rail spur will provide a new and attractive means of bringing skiers (Alpine and Nordic) and bicvclists to the valley and will provide an attractive means of access to Girdwood Valley for the millions of people traveling to Alaska as part of cruises.

While it is not impossible that similar results could be achieved by connecting the Alaska Railroad line to a valley bus system at a valley entry station (without a rail spur into the valley), this is much less likely to succeed. The impact of a mode change (with attendant delays, baggagehandling issues and inconvenience for

travelers) for the target markets described in this chapter would be significant, lowering ridership to a point that the viability of the service for the cruise market and the skier market would be minimal. Under such a scenario, development of the valley entry multimodal station would be much less attractive to Alaska Railroad and the multimodal station at the resort base would have no reason for being. Under this scenario, capital funding of an internal bus circulation system is also less likely.

Eventually, as development of the valley continues, the railroad could serve as a critically important transportation mode bringing people to Girdwood without the attendant impacts of motor vehicle traffic. The opportunity to develop a multimodal transit system with internal bus circulation connection to a rail spur may be one of the most important elements of the Transportation Master Plan with the potential to fundamentally shape the future of Girdwood Valley. There are few bold steps the Municipality can take to ensure the achievement of the objectives identified for Girdwood Valley. The rail spur may be one of them.

For this reason, the Transportation Master Plan adopts as part of its implementation elements the following policy:

The Municipality of Anchorage shall retain and preserve a potential Public Use Corridor along the '1A – Potential Transportation Corridor' route of sufficient width for various transportation alternatives. The conveyance, use or development of municipal lands within the Corridor shall not be undertaken without further approval from the Assembly, in conformance with this Plan and any amendment to this Plan. Temporary, short-term uses of the Corridor may be permitted.

The actual construction of a rail spur or other transportation alternative to the resort base area will also require subsequent approvals by the Assembly. A final decision may happen only after further detailed study and design, including analysis of the environmental,

economic and community impacts identified through the NEPA process, which ensures that the alignment, design, construction, and operation of rail service is consistent with the goals and objectives of this Plan. Future Assembly approval for proceeding with any conveyance of any interest in lands for construction of a rail spur may not be requested until such time as all of the following have occurred:

- 1. The Alaska Railroad has constructed the valley entry multi-modal center;
- The Alaska Railroad has completed a rail service feasibility assessment similar to that performed in 1994 and provided the results of that assessment together with detailed information on fares, proposed frequency of service and how operational costs would be financed to the Assembly;
- The Board of Directors of the Alaska Railroad has approved a request for an interest in municipal land for construction of a rail spur;
- The Assembly finds that growth within the Girdwood area, since adoption of this plan, as well as projected growth from proposed resort development, justifies extension of the rail spur;
- 5. The Alaska Railroad has completed an Environmental Impact Statement (EIS). In conjunction with the EIS the Alaska Railroad shall include: traffic volumes at the Seward Highway-Alyeska Highway; traffic volumes at the Glacier Creek bridge; the resident full-time population of Girdwood; the number of summer and winter visitors to the Alyeska Resort; and, the volume of passenger traffic on the Alaska Railroad between Anchorage and Seward:
- 6. The Heritage Land Bank has completed an economic feasibility assessment of future resort expansion in the Winner Creek area; and,
- 7. The Municipality of Anchorage has conducted an advisory vote on the rail

spur extension under terms set by the Anchorage Assembly.

The Assembly may approve any conveyance of any interest in lands for construction of a rail spur or other motorized transportation, only after finding that all applicable requirements of this plan for requesting such a conveyance have been met and that the alignment, design, construction and operation of such service is consistent with the goals and objectives of this plan and is feasible. At the time of any such conveyance the Assembly shall also consider land use regulations intended to limit the number of tour buses that may cross Glacier Creek bridge.

### VALLEY ENTRY AND RESORT BASE MULTIMODAL CENTERS

This plan identifies two multimodal centers to be developed in Girdwood Valley. The first, at the entrance to the Valley near the Seward Highway, should be implemented whether or not a rail spur is developed. The second, at the resort base, is needed only if a rail spur is built. Details of final design of any rail system could cause the location or recommended design of either of these centers to change. However, what will not change is how important it is to the future access and circulation needs of Girdwood Valley that rail, public transit, motor vehicle, bicycle and pedestrian systems be brought together in these two general areas.

#### **Valley Entry Multimodal Center**

Commuters, tourists and other travelers have needs which should be met at multimodal centers. These include basics such as shelter, telephone service, restrooms, visitor information (including transit and rail maps and schedules). It would also be appropriate to pursue location of pad sites for retail or restaurant uses. Some office space (e.g., for use by police or other public agencies) could also be incorporated into the buildings.

A conceptual site plan for the Valley Entry Multimodal Center is shown in the sketch

on the following page (and also discussed in Chapter 9). The location of the center was identified after consideration of a number of possible locations in the general Valley entry area. The actual design of the Multimodal Center will be the outcome of planning activities involving public facility managers, the land manager, and others, as well as market and other financial factors. These planning activities will be generally guided by the Master Plan and the new Title 22 Regulations. While details of this site or the location could change, the following are key principles to be followed in development of this multimodal center.

Open Public Access. The transportation center should be operated as an open public facility accessible to all citizens.

Multimodal Access. The transportation center should be designed for safe and convenient accommodation of rail, public transit, motor vehicle, motor vehicle parking, bicycle and pedestrian systems. The site plan assumes an ultimate parking need of about 200 spaces, although some of that parking supply could be phased in gradually and eventually the parking need could exceed that figure. Future consideration should be given to summer use of the parking area for remote RV parking, once internal transit circulation in the Valley extends to this site. Platform Length. The site plan assumes that train consists utilizing the station would be no longer than 500 feet.

Relationship to Wye Track. The multimodal center should be east (southeast) of any wye track developed as part of a spur into the Valley. This will allow the greatest flexibility in train movements, local train circulation and multimodal access to the transportation center.

Trail Connections. The opportunity exists to provide direct connections to regional and local multi-use trails at this center. In this manner, the center can function as trailhead access (with auto parking), thereby enhancing the utility of regional and local trails, activating the center during times when trains are not present. Eventually, trail users could park at the

center and ride/hike/skate into Girdwood Valley -- a high quality experience and a market consistent with local objectives for low impact tourism.

Wetland Mitigation. It has been assumed that mitigation of the impacts to the wetlands north of the Seward Highway would be accomplished as part of the development plan for the center.

#### **Resort Base Multimodal Center**

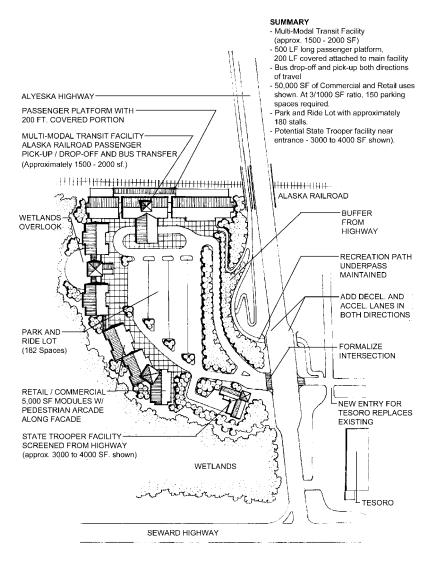
A conceptual site plan for the Resort Base Multimodal Center is illustrated in the sketch overleaf (and discussed again in Chapter 11). The center has been located in the vicinity of the existing tram, where it can accommodate the potential for a future tram connection to the proposed Glacier-Winner Creek ski area further north in the valley.

The plan anticipates that this center would perform several primary functions. First, it would provide a direct connection to the ski mountain for skiers arriving by rail. Second, it would provide a direct connection to the hotel for hotel guests arriving by rail. In addition to these functions, this center can also improve mobility for all Valley visitors by connecting the modes in an efficient manner and can improve the economic benefits from tourism by providing access to the entire valley, regardless of the mode of initial arrival.

While details of this site or the location could change, the following are key principles to be followed in the development of this multimodal center.

Open Public Access. The transportation center should be operated as an open public facility accessible to all citizens.

Multimodal Access. The transportation center should be designed for safe and convenient accommodation of rail, public transit, mountain tram, bicycle and pedestrian systems. The site plan provides no immediate on-site parking, and accessibility by motor vehicle (other than bus) would not be a high priority.



Platform Length. The site plan assumes that trains utilizing the station would be no longer than 300 feet.

Fig. 6-4 Valley Entry Multimodal Concept Design

Associated Traveler Services.
Commuters, tourists and other travelers have needs which should be met at multimodal centers. These include basics such as shelter, telephone service, restrooms, visitor information (including transit and rail maps and schedules).
Obviously the proximity of the hotel can help meet many traveler needs, but it should be recognized that not all travelers through the center will be hotel guests.

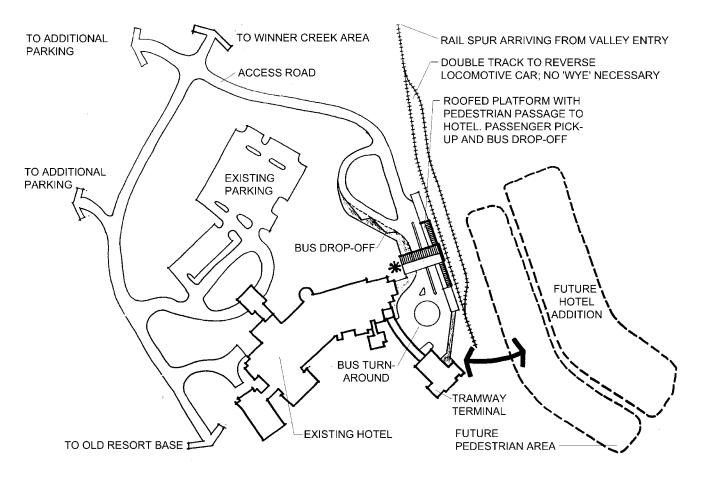


Fig. 6-5 Multimodal Center at the New Resort Base