

CHAPTER 5: PUBLIC TRANSPORTATION AND OTHER MODES AND POTENTIAL FOR EXPANSION

I. PUBLIC TRANSPORTATION

A. Transit

The primary mode of travel in the Chugiak-Eagle River area is the private automobile. Public transportation options are limited to People Mover, AnchorRIDES, Chugiak Senior Center, and the Anchorage School District pupil transportation service. Private transportation providers (taxis) are based in Anchorage and charge up to \$35 for a trip into Anchorage. Unlike Anchorage, with numerous social service agencies, Chugiak-Eagle River residents have limited options and most rely on the private automobile.

People Mover service is primarily oriented toward commuters traveling from home to places of work in the Anchorage Bowl. The Municipality currently operates three bus routes in the area, which have remained largely unchanged since 1993. Ridership during the same period of time has remained unchanged as well. The constant ridership has been around 140,000 annual passengers with an average weekday ridership of almost 550.

The three routes operating in the area are described below:

- Route 74 connects downtown Anchorage and Eagle River with service to Eagle River Road and Eagle River Loop Road. It operates about 6 hours and provides about 85 passenger trips per day.
- Route 76 connects the Eagle River area to midtown Anchorage during peak hours and to downtown Anchorage during non-commute hours. About 50% of the route operates on local roads with potential to generate riders. It operates about 24 hours and provides about 380 passenger trips per day. This route also provides the only service on Saturdays between Eagle River and Anchorage.
- Route 102 services as a park & ride route operating primarily on the Glenn Highway with stops at Peters Creek, the North Birchwood Park & Ride lot, and the Eagle River Transit Center. It operates about 4 hours and provides about 80 passenger trips per day.

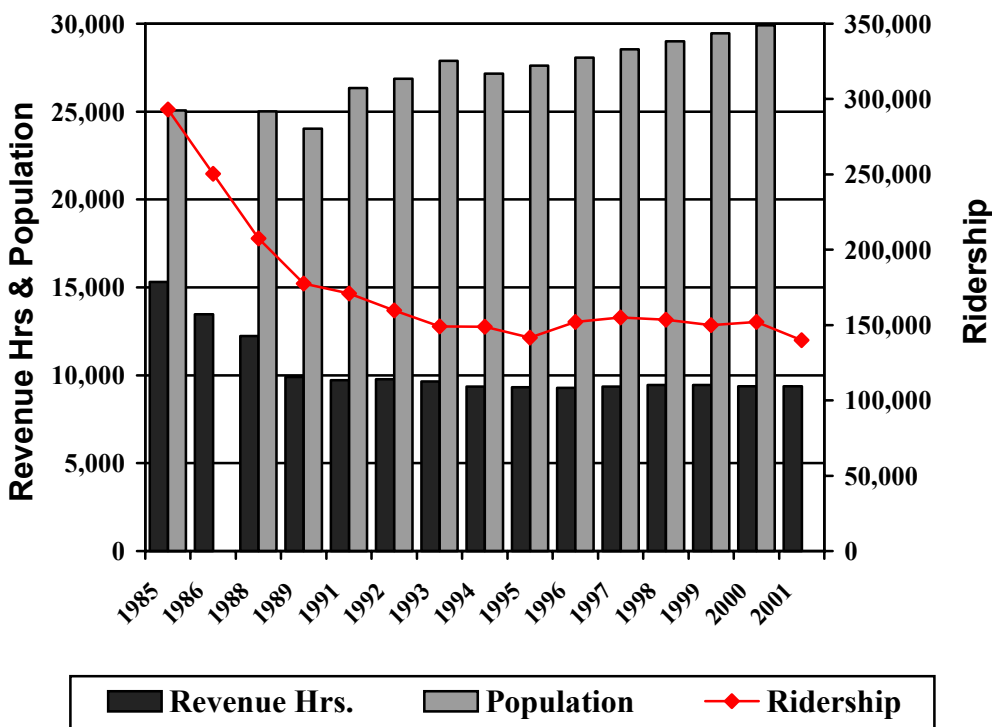
Park & ride lots are used extensively in the Chugiak-Eagle River area and are intended to provide an incentive for time-sensitive commuters in suburban and lower density areas of the Municipality. The Eagle River Transit Center, located on Business Boulevard in downtown Eagle River, serves as the primary park & ride lot. Other park & ride facilities include Joy Lutheran at Eagle River Road and Eagle River Loop Road, the North and South Birchwood Interchanges, and the Thunderbird Falls Trailhead.

As Figure 4 indicates, there is a direct correlation between service hours provided and transit ridership. After Anchorage voters approved a tax cap for municipal services in 1983, public transportation services citywide were reduced about 35%. The Eagle River area experienced a reduction of close to 50%. A corresponding reduction in People Mover ridership resulted from the service reduction, despite increases in the population of the Chugiak-Eagle River service area. Additionally, major improvements to the roadway network, such as the Eagle River Loop

extension and the North Eagle River interchange have substantially decreased travel time by car between Chugiak-Eagle River and Anchorage, thus increasing the relative attractiveness of automobile travel.

People Mover services in the area have not increased due to continued budget difficulties and the need to spread limited resources to the most people. Consequently, the area continues to rely extensively on the private automobile.

**Figure 4
Transit Ridership in Chugiak-Eagle River**



According to a 1996 Origin-Destination study conducted of all municipal residents, there is a forecasted daily demand for 2,900 transit trips for Eagle River/Chugiak residents—almost six times the current level of ridership. More than 1/3 of these trips are intra-zonal—trips both starting and ending in the area. As additional community services are provided (retail, medical, educational), even more trips will remain in the area. Trips serving other areas of high potential demand include north and south midtown, downtown, the military bases, the University area, and Mountain View.

Increasing ridership in the Chugiak-Eagle River area will require changes to the way public transportation services are delivered. Service must be more frequent, be more direct/faster, and stop closer to origins and destinations. To meet the forecasted demand requires almost tripling the amount of service to the area, the ability to serve multiple destinations, and smaller vehicles to operate on the narrower roads in the area.

Low population density, as well as the distance from downtown Anchorage, contribute to difficulties in improving service in Chugiak/Eagle River. According to Pushkarev and Zupan (1977), residential densities need to be at least an average of eight dwelling units per acre to support viable feeder bus service, and an average of 15 dwelling units per acre to support light rail and high frequency bus service. A more recent study on the relationship between transit usage and density was conducted by Lawrence D. Frank and Gary Pivo (“Relationships Between Land Use and Travel Behavior in the Puget Sound Region,” Sept. 1994). This study concluded that significant movement from Single Occupancy Vehicles (SOVs) to other modes does not occur until certain density thresholds are reached. For work trips, the thresholds are 9 to 13 residents per gross acre. For shopping trips, they are 18 dwellings per acre.

Research conducted as a part of the Chugiak-Eagle River Comprehensive Plan reveals that only one area in the region has a density that exceeds 8 dwelling units per acre (DUA). Coronado Road, Eagle River Loop Road, and the Old Glenn Highway border this relatively high-density area. Most of the core area of Eagle River has a density of between 2-4 DUA. The outlying areas of Birchwood and Chugiak have an even lower density of less than 1 DUA. The rezoning of the Powder Reserve pointed up the practical difficulties of raising residential densities in both in-fill areas and peripheral areas. Existing residents consider higher density housing a Locally Undesirable Land Use. In the case of the Powder Reserve rezoning, some neighbors opposed the rezoning as conflicting with the existing low-density rural lifestyle of the area.

Although the low density of the Chugiak-Eagle River area poses difficulties in relying exclusively on conventional 40-foot fixed route service, there are opportunities for expansion of the bus system. Several possibilities include: maintaining quick, fixed route service between destinations adjacent to the Glenn Highway (Peters Creek, the North and South Birchwood Interchanges, and the Eagle River Transit Center); connections between Eagle River and the Muldoon Town Center Transit Hub; and smaller vehicles which can operate on the narrower roads and can get people from the neighborhoods to stops connecting with the quicker Glenn Highway route.

Additional opportunities include development of vacant land in the rezoned Powder Reserve at a high enough density to warrant transit service into this area. Although the overall density will only be 3.4 dwelling units per acre, three of the multi-family areas are planned to contain approximately 800 units and result in about 8 dwelling units per acre. With this kind of density, a park and ride facility on the west side of the Glenn Highway near the intersection with the North Eagle River Access Road may be attractive to persons living in this newly developing area.



Eagle River Transit Center

Within the Chugiak/Eagle River area, the Chugiak Senior Citizens Center is responsible for social service transportation for senior citizens in the area. The Municipality is responsible for similar transportation for people with disabilities who are unable to use the People Mover system. AnchorRIDES is an umbrella organization designed to provide coordinated social service trips, specializing in curb-to-curb dial-a-ride service. To eliminate duplication of services, AnchorRIDES has contracted with the Chugiak Senior Citizens Center to coordinate rides for both populations on the same system.

This coordinated concept can be expanded to include the general public. A Community Circulator system would serve all area residents through a combination of fixed route and neighborhood service. Smaller vehicles would be operated on a fixed route but would travel off-route, if requested, to serve someone closer to their home. This type of service is programmed for implementation in Chugiak/Eagle River towards the end of 2003, with continuation of direct service off a Glenn Highway route.

B. Carpooling / Vanpooling

Anchorage's Share-A-Ride program is an employer-based Transportation Demand Management strategy that has been in place since 1976. In February 1995, the Public Transportation Department initiated a vanpool component to the program, encouraging long-distance commuters to ride together in a 13-14-passenger van.

The Share-A-Ride program is identified as a control measure in congestion mitigation and air quality plans for the municipality. The program promotes carpooling and vanpooling to commuters with at least one end of their trip within the Municipality of Anchorage area. Share-A-Ride staff primarily targets area employers to educate employees and to generate interest in the program. Additional potential carpool/vanpool participants are identified through trade shows and from roadside signs with the Share-A-Ride telephone number.

The program uses a GIS-based computer system matching commuter origins, destinations, trip times, and personal preferences. The system can accept and geocode trip origins and destinations throughout the state, providing an option to expand carpooling and vanpooling statewide.

In addition to reductions in stress and commute costs, program incentives for Share-A-Ride participants may include: reduced parking at the major downtown garages; reserved parking; and occasional drawings and promotions. Two recent additions to the benefits include a reduced bus pass for vanpoolers who may need to travel during the day, and "Commuters Choice". Commuter Choice provides a deductible benefit tax-incentive to employers who choose to pay all or a portion of employee commute costs. A large hidden cost for employers is for employee parking. Providing a bus pass or vanpool fare is significantly cheaper for the employer, improves worker on-time performance, and provides an employee benefit that has positive tax benefits for the employer.

Carpooling and vanpooling have the most potential for reducing congestion between Chugiak-Eagle River and Anchorage. Anthony Downs in his book entitled Stuck in Traffic (1992) states that "the most effective means of reducing peak-hour congestion would be to persuade solo drivers to share vehicles".

The potential of carpooling becomes readily apparent when examining statistics on the numbers of solo drivers who commute to work alone. In 1983, 86.3 percent of all morning peak-hour commuters nationwide were in private vehicles, and 68 percent were driving alone. The driving habits of Anchorage residents correspond closely to the national figures. According to a 1993 telephone survey conducted in conjunction with the Municipal Congestion Management Plan, 70% of Anchorage area residents drive alone, another 23% carpool with a family member, and the rest use another mode of travel. The U.S. Census 2000 – Carpool Share by State ranks Alaska fifth nationally in the share of commuters carpooling. This is up from tenth from the 1990 U.S. Census.

Chugiak-Eagle River residents have a higher than average carpool participation rate. According to the 1992 Anchorage Transportation Research Survey the average number of passengers per vehicle in Chugiak-Eagle River is 1.65 compared to 1.52 for the entire Municipality. Carpooling to work is also more popular, with 1.16 passengers per vehicle riding together on the Glenn Highway at the Fort Richardson exit, compared to 1.14 in the entire Municipality of Anchorage.

To date, there are 18 active vanpools in the Share-A-Ride program. Of these, 14 vanpools originate in the Mat-Su area, one travels from Anchorage to Mat-Su, and three vanpools originate in Anchorage and travel to Girdwood. There are currently no vanpools that originate in the Chugiak/Eagle River area. Due to fixed costs spread over miles traveled, vanpools work best for commutes in excess of 25-30 one-way miles. At this time, there are no available vehicles for expansion of the vanpool program. Due to continued demand, additional vehicles have been ordered for Fall 2003 delivery, with the option for more vehicles in Spring 2003.

Table 4
Share-A-Ride Program Background

Year	Carpoolers/ Vanpoolers	Annual Reduction in Vehicle Miles
1987	188	1,007,000
1988	797	3,206,000
1989	1,294	5,148,000
1990	1,422	5,940,000
1991	1,653	6,539,000
1992	1,731	6,896,000
1993	1,936	7,596,000
1994	2,176	8,663,000
1995	1,987	9,343,000
1996	1,782	8,943,000
1997	1,703	8,781,000
1998	1,185	6,830,000
1999	1,095	6,641,000
2000	1,091	8,916,000
2001	973	10,883,000

Ridesharing will continue to be a critical mode of alternative transportation in Chugiak-Eagle River, although participation levels are difficult to project based on historic trends. Nevertheless, the potential exists for expanding this important service.

C. Public Transportation Recommendations

The following recommendations for the Chugiak-Eagle River area are based on the Public Transportation Department Route Restructure Analysis, completed in 2002. These recommendations are provided for concept only. Additional analysis of the Chugiak-Eagle River area is needed in order to finalize the long-range public transportation recommendations.

1. Implement convenient public transportation service that combines the predictability of a fixed route system with the accessibility of a dial-a-ride/community circulator system.
2. Maintain large bus service, oriented to the Glenn Highway, to provide transportation for area residents into Anchorage.
3. Provide connectivity between Chugiak-Eagle River and destinations in Anchorage other than downtown.
4. Explore expanding People Mover service to serve the high-density residential development in Tract A, Powder Reserve when development is nearing completion, either through park & ride or through community circulator service.
5. Explore additional Share-A-Ride program alternatives, particularly the vanpool program in the Chugiak-Eagle River area.

II. PEDESTRIAN AND BICYCLE FACILITIES

Eagle River has some bicycle and pedestrian facilities that are enjoyed by many residents. According to a 2001 transportation survey, the bicycle and walking trails are important to 53.5% of Eagle River residents surveyed; 19.8 % are neutral, while 26.7 % believe they are unimportant. Of those surveyed, 7.1% use the trails daily in summer, and 4.0% in winter. More residents (38.7% summer and winter) indicated they use the trails system some of the time. Of those residents surveyed who use the trails system, 3.2% bike or walk to work or school in summer, and never in winter.

Deficiencies in the community-wide network do exist, however. According to the 2001 survey, of Eagle River residents asked, most (56.2%) agree that there are not enough sidewalks. When asked if trails and sidewalks should be included in street work, 70.0% of Eagle River respondents agreed.

The 1997 Areawide Trails plan serves as the official guide for the future development of pedestrian and other facilities within the Municipality of Anchorage and is incorporated by reference in this report. Chapter 3 identifies issues and needs, and makes recommendations for pedestrian and related uses, bicycle and other uses for the Chugiak-Eagle River area. The locations of trails / pedestrian accommodations on the Areawide Trails Plan maps are approximate, and are subject to available right-of-way, project budgets, terrain and other

constraining factors. Recommendations will be analyzed for feasibility and suitability as projects are developed.

A. Pedestrian Facilities

The rural character of much of Chugiak-Eagle River has resulted in development that is largely without pedestrian facilities. As a result, few neighborhoods have separate sidewalk facilities. However, sidewalks and walkways have been and are being required in the urban areas through the subdivision process. The Municipality of Anchorage Traffic Department designates walking routes for pedestrian safety for elementary schools, but these routes are not currently maintained.

Many of the older portions of the urban core of Eagle River do not have sidewalks. Where sidewalks exist, connectivity has been lacking. Recently completed and current programmed improvements have addressed some of these needs. The largest gap in the pedestrian system existed along Business Boulevard, which was built without sidewalks. Recently completed major upgrades to Business Boulevard include new walkways on either side of the road, and several new crosswalks along Business Boulevard.

Although the Old Glenn Highway has sidewalks on both sides, better pedestrian crossings were requested by residents living on the east side. The Old Glenn Highway Rehabilitation project, to be constructed in Summer 2003, will address some of the pedestrian safety issues voiced by the community, but not all. The Eagle River Loop Road reconstruction project, currently in design and scheduled for construction in 2006, will widen Eagle River Loop Road, as well as provide pedestrian amenities from the Old Glenn Highway to Eagle River Road.

Rural areas of the community also lack pedestrian facilities. Most residents of rural areas are forced to walk on roadways or unimproved roadway shoulders to get to bus stops or other locations. According to the Areawide Trails Plan, the Old Glenn Highway from Eagle River to Peters Creek is particularly in need of a separated pedestrian/bicycle trail. The Old Glenn Highway also needs safe pedestrian crossings at the intersections with Eagle River Loop Road and at Chugiak Elementary School. Other critical needs include a separated pedestrian / bicycle trail along Eagle River Loop Road from the Old Glenn Highway and Eagle River Road and along North and South Birchwood Loop Roads. All of the above mentioned roadways serve as bus transit routes. Pedestrian facilities along these routes may, therefore, have the added advantage of increasing bus ridership.

The best opportunity to create a pedestrian oriented environment lies in the downtown commercial core of Eagle River. According to the Chugiak-Eagle River Comprehensive Plan, the commercial development concentrated along both sides of the Old Glenn Highway and extending to the west into the Regional Park Subdivision bordering Business Boulevard serves as the trade center for Chugiak-Eagle River. The areas adjacent to the commercial core also contain some of the highest residential densities of the area. Thus, the potential for pedestrian oriented shopping trips is consequently very high.

A Pedestrian and Bicycle Circulation Plan, one of the key elements of a May 2001 **Draft Eagle River Central Business District Revitalization Plan** prepared for the Municipality of Anchorage, was the product of community concerns and interest in creating better opportunities for pedestrians and cyclist in Eagle River. The Plan identifies gaps and deficiencies in the bicycle / pedestrian network for the study area, and makes recommendations for improvements. Specific locations and upgrades of sidewalks and paths are recommended for three districts of the CBD: the Town Core (Old Glenn Highway and Business Boulevard between Monte Road and Eagle River Loop Road), “South Gateway” (Old Glenn Highway, Artillery Road to Monte Road), and North Eagle River, (Old Glenn Highway, Eagle River Loop Road to the North Interchange).

While community interest was expressed in improving recreation opportunities and better links between community nodes, much concern was related to perceived safety, particularly along the Old Glenn Highway. Based on public input and a review of existing facilities and deficiencies, the plan recommends specific improvement projects. The goal is to achieve an interrelated walking / bicycling network that

- Improves safety and access
- Connects activity nodes (for example, parks, schools, retail businesses, the Boys and Girls Clubs, and the library)
- Creates a more “pedestrian friendly” CBD environment that better supports commercial and community activities
- Enhances recreation and tourism
- Increases opportunities for bike commuters
- Improves access for community members without vehicles, especially the young.

A key focus of the plan is to examine the need for additional crossing points on the Old Glenn Highway as a means of improving pedestrian safety and encouraging people to walk. Eleven projects are identified for inclusion in the Pedestrian/Bicycle Circulation Plan. Future project development for trails within the Circulation Plan’s study area should reference and utilize the Plan’s findings, where feasible, when it is approved.

B. Bicycle Facilities

The Chugiak-Eagle River area is currently served by two main bike trails. A bike trail paralleling the Glenn Highway from the Boniface Interchange in the Anchorage Bowl to North Birchwood forms the north-south backbone of the system. The Eagle River Road bike trail serves as the main east-west bike route and extends from the Old Glenn Highway to Pruess Road on the north side of the road. An extension of this bike trail provides a connection from the residential neighborhoods north of Eagle River Road to Gruening Junior High School, located south of Eagle River Road. Another private bike trail system was developed as a part of the Eaglewood Subdivision just west of Gruening Junior High School. However, this system does not connect to the Eagle River Road bike trail system. A public bike trail connects the Fire Lake Recreation Center to the Old Glenn Highway and downtown Eagle River.

The 1997 Areawide Trails Plan states that development of an areawide bike trail system is warranted by the number of persons now residing and projected to reside in Chugiak-Eagle

River. The bike trail system should serve both practical and recreational purposes and should be designed to provide links between homes and parks; parks and schools; and schools to homes. Furthermore, it states that the needs of each type of cyclist- the generalist, the commuter, and the racer- should be incorporated to create an effective and usable bike trail system.

The existing bicycle trail system, as described in the first paragraph, does not meet the objectives of the Areawide Trails Plan. The bicycle trail system in Chugiak-Eagle River lacks directness, completeness and convenience. With the exception of the bike route adjacent to the Glenn Highway, there are no recreational bicycle facilities of any substantial length in the Chugiak-Eagle River area. According to the Areawide Trails Plan, the following problems have been identified along the Glenn Highway trail: (1) the section between the North Eagle River Access Road and North Birchwood contains numerous breaks in the pavement and is not up to current standards for grade and width, (2) there is insufficient separation from the Glenn Highway at points between South Birchwood and North Birchwood exits which causes maintenance, safety and enjoyment problems, and (3) there are conflicts between bicyclists using the Glenn Highway trail and vehicles attempting to exit the landfill facility as well as vehicles turning left from Eagle River Loop Road onto the southbound ramp of the Glenn Highway.

The utilitarian bicycle needs of Chugiak-Eagle River residents are also not being met. Given the existing trail system, is it difficult for either children or adults to safely travel by bicycle from their homes to areas of commerce, transit, and education. The trail along the north side of Eagle River Road, which serves as a connection from the residential areas in the Eagle River Valley to local area schools and downtown Eagle River, lacks completeness and connectivity. The trail, which only extends to Pruess Road, crosses private driveways along its entire length. This creates potential conflicts as bicyclists are confronted with automobiles making turns across the bike trail. The bike trail on the east side of the Old Glenn Highway connecting the Fire Lake Elementary School and Fire Lake Recreation Center with northern Eagle River also lacks completeness and connectivity.

C. Pedestrian / Bicycle Recommendations

To implement the Trails Plan, approximately 300 projects included in the recommendations in the text of the Plan were considered and prioritized by the Trails Plan Review Group (TPRG) using 9 ranking criteria. Each project on the list was given a numerical ranking for each of the criteria and the top 50 trail projects were determined. The cost estimates are rough for planning purposes only, no limited design / engineering work was completed for most projects listed. Of the 50 projects listed, 14 are in the Chugiak – Eagle River. (See Appendix A: Top 50 Trail Projects, Areawide Trails Plan.) Several of the projects have been completed. Those remaining include:

- Coastal Trail – Mouth of Peters Creek Beach Lake Park to Eklutna
- Eagle River Greenbelt – connect to Hiland Road
- Eagle River Loop Road – Eagle River Road to Old Glenn Highway
- Eklutna Waterline – dedicate trail
- Fire Creek Trail

- Glenn Highway – Peters Creek to Mat-Su
- Hillside Trail – Chugack Rim
- North Birchwood Loop / Old Glenn Highway – North Birchwood Interchange to Loretta French Park
- Old Glenn Highway – Chugiak to Eagle River.

In addition to the specific projects listed above, trails and sidewalks along major roadways, as well as pedestrian access to schools, are and should continue to be a focus of transportation enhancements in Chugiak-Eagle River.

For this LRTP Update, the short-range recommendations include committed trail projects that are expected to be constructed within the next six years through the Transportation Improvement Program. Three stand-alone projects currently programmed for inclusion in the AMATS Transportation Improvement Program FY 2001-2003 are included in Appendix B under Transportation Enhancements. These include Eagle River Greenbelt Access and Pathway, Glenn Highway Trail Rehabilitation (Muldoon Road to North Birchwood Loop Road), and Glenn Highway Trailhead Improvements (at Thunderbird Falls, Peters Creek, and south Fork of Eagle River). Improvements to trails are also included in several of the roadway improvement projects listed: Old Glenn Highway Rehabilitation (Artillery Road to North Eagle River exit), Old Glenn Highway Reconstruction (North Eagle River exit to Peters Creek), and Eagle River Road Rehabilitation.

Future roadway improvements should reference the Areawide Trails Plan. Future roadway improvements for the urban core of Eagle River should reference and utilize, where feasible, findings of the Eagle River Central Business District Revitalization Plan, when it is approved.