

## **PALMER TRANSPORTATION ELEMENT**

The purpose of the Palmer Transportation Plan is to provide an integrated, multi-modal transportation system that enhances the economy and quality of life by facilitating a safe movement of people, services, and goods within the city of Palmer and surrounding area.

Palmer is a unique Alaska community which provides an environment friendly to pedestrians making it one of the few communities in which a person can live, work and shop without an automobile or public transportation. This is a rare advantage and one that should not be overlooked when planning the city's future transportation network.

### **GOALS AND OBJECTIVES**

**GOAL:** Pave existing gravel roads within the city.

**Objective:** Establish Master Plan to include:

- (A) Develop an estimated cost of paving all unpaved roads in the city of Palmer;
- (B) Define aggressive funding avenues.

**GOAL:** Develop a comprehensive trail system.

**Objective:** Provide designated pathways for pedestrians and non-motorized uses.

**Objective:** Develop Master Plan for connecting all existing trail facilities within the city of Palmer.

**GOAL:** Safe and efficient movement of traffic within the city.

**Objective:** Promote transportation improvements that coordinate multi-modes of transportation.

**Objective:** Promote alternative transportation modes for city residents including public transportation, pedestrian and bicycle.

### **ROADS**

#### **Physical Condition**

Total road miles within the city of Palmer is 32.05 miles. The general condition of existing roads is good, with 64% having a gravel surface and 36% having a paved surface. Although the gravel roads are generally in good condition, some of them presently serve as minor collectors. The relatively high level of traffic on these roads is of concern for many reasons. For instance, stopping

distances are greater on a gravel surface. High maintenance costs are also associated with gravel roads because the roads must be maintained more often. Gravel roads increase vehicle maintenance costs due to flying rocks, potholes, and ruts. And lastly gravel roads have negative impacts on air quality as higher amounts of dust and particulates are generated.

Improvement to local streets such as paving and installation of curbs, gutters, and sidewalks, as required, would greatly improve safety and reduce maintenance costs. Due to the current positive financial climate within the city, it is recommended that the city establish a master plan for the paving of every street within its corporate boundaries. Every effort should be made by the City to obtain, where possible, grants from the borough, state, and federal governments to help offset the cost to individual homeowners. The paving of all streets within Palmer would not only reduce the amount of dust generated but increase overall property values.

### *Traffic Counts*

The following table illustrates the average annual daily traffic counts for major roads in or near the city of Palmer. As the reported traffic counts indicate, traffic has increased over the years as the city has grown in terms of population and jobs.

The Borough has developed a computer-based transportation model and has forecast traffic through the year 2015. While not all of the roads within the city have traffic forecasts, the principal roads do. The forecast indicates that traffic will about double on the major roads feeding traffic into the city center. As some of the existing roads are already over capacity, alternatives must be considered in order to reduce congestion and maintain acceptable level of service.

### AVERAGE ANNUAL DAILY TRAFFIC 1990 - 2015

Intersection	1990	1991	1992	1993	1994	1995	1996	2015
Palmer-Wasilla Hwy. @ Trunk Rd.	8,800	7,465	8,100	8,300	7,371	7,800	10,800	23,431
Palmer-Wasilla Hwy @ Glenn Hwy	8,385	8,348	9,119	9,420	9,913	11,384	12,000	18,405
Glenn Hwy @ Palmer- Wasilla Hwy	7,450	7,700	8,011	8,000	8,000	10,197	9,996	15,101
Glenn Hwy @ Arctic	NA	5,800	6,200	6,200	6,200	7,798	7,376	14,326
Old Glenn Hwy @ South Alaska	NA	7,010	7,000	6,958	7,000	7,400	8,749	11,483
Old Glenn Hwy @ Airport	5,886	6,330	6,300	6,400	6,284	6,600	6,800	9,472

Source: State of Alaska Department of Transportation and Public Facilities, 1990-1996.  
Matanuska-Susitna Borough, Department of Planning, 2015

### *Intersections*

Some intersections within the city of Palmer need to be upgraded in order to improve safety, reduce congestion, and promote economic growth. Only limited improvements will be required for some intersections. Other intersections may require major improvements including new roadways to redirect traffic flows in order to reduce congestion and travel times.

An in-depth transportation study will be undertaken in the summer of 1998 that will thoroughly examine problem intersections and congested roadways. The study should provide recommendations for improving the transportation network to enhance travel throughout the city, enhance the local economy, reduce congestion, improve safety, and accommodate future growth.

In addition, the City, affected Businesses, and DOT are in the design phase for intersection improvements to be constructed in 1999 at the intersection of the Palmer-Wasilla and Glenn Highways.

### *Safety*

The speed limit on the Palmer-Wasilla Highway is currently 55 mph. This is reduced to 35 mph approaching the Glenn Highway intersection from the west. The speed limit east of the Glenn Highway intersection is 25 mph. An incremental drop in the existing speed limit from 35 mph to 25 mph would improve safety for traffic accessing the Palmer-Wasilla Highway within the city of Palmer and would also provide a transition for traffic continuing onto West Evergreen.

### *Recommendations*

The following is a list of recommendations for improving Palmer's existing road system. In addition, the city should have an in-depth transportation study done. The study should examine ways of enhancing travel throughout the city; reducing congestion on roadways and intersections; improving safety; and accommodating future growth. The study should also consider the economic impacts of proposed transportation improvements.

- Pave all remaining gravel-surfaced city roads to improve air quality, safety, and the quality of life.
- Aggressively seek funding for road paving.
- Pave existing roads before the City funds the construction of new roads.
- Incrementally reduce the speed limit on the Palmer-Wasilla Highway beginning at the East Irwin Loop intersection and heading east to the city center.

- When a road is built on a section line, it should meet the standards of a main arterial road. Roads that are built on half section lines should meet the standards for secondary collector streets. Any other roads are to meet the minimum road requirements that are set forth in the City Standard Specifications (C.S.S.) books. This is subject to change depending on the traffic loads on the developing area.

## **INTER-MODAL NETWORK**

With the improvements being planned at the Palmer Municipal Airport, the airport will become more attractive to air transportation companies. Aggressive efforts to improve the road and rail network that connects to the airport should be made to ensure that multi-modal connections are efficient and effective. Specifically, a fully-paved road system should connect the airport to the Glenn Highway and rail service should be connected to the "warehousing" area of the airport. Land should also be set aside for warehousing and break bulk services.

### **Railroad**

The condition of the rail bed that connects from the main line to the Palmer Industrial Park is in good condition and is lightly used. The portion of the rail line north of East Industrial Way is in poor condition and is lightly used.

### **Public Transportation**

Public transportation services for city residents are limited to nonexistent. Taxi services are available within the city and core area of the Borough. The Borough has entered into a Memorandum of Understanding with the Municipality of Anchorage to coordinate on the Municipality's car-pool and van pool programs. These programs are targeted to commuter work trips between the Borough and Anchorage. Additionally, the Borough and the United Way of Mat-Su are working with several social service agency providers to determine whether or not coordination of transportation resources could reduce agencies' overall cost of providing transportation services as well as provide transportation services to the general public.

While the city is small and compact, public transportation would allow those without access to an automobile, particularly the young and old, to increase their overall mobility. If a coordinated transportation system was created, such as the borough and the United Way of Mat-Su are working toward, city residents could avail themselves of the service. The city should continue its representation in the coordination planning effort to ensure that transportation needs within the city are considered.

### **Airport**

An Airport Master Plan Update and Environmental Analysis is presently being prepared. The airport planning documents provide an inventory of existing conditions, forecast of aviation activity,

a need for aviation easements, facility requirements, alternative development, capital improvement program for a twenty-year planning period and analysis of potential environmental impacts for the proposed short-term (0-5 years) development plan. While the airport plan provides a twenty-year analysis, the most important time frame is the first five year capital improvement program. Similar to all planning documents, the airport master plan is a dynamic document, and should be continuously reviewed and updated when necessary. The most current Airport Master Plan should be consulted regarding all future development that may have an impact on aviation activity at the Palmer Municipal Airport and community.

## **TRAILS AND PEDESTRIAN FACILITIES**

A basic network of paths and trails is essential for a well rounded community. The vitality of Palmer's downtown is in part attributable to the area's pedestrian friendly atmosphere. Palmer is unique among most communities its size in South Central Alaska for its higher densities and extensive sidewalk development throughout downtown. Development of a trail system will complement the existing pedestrian facilities and provide opportunities for a myriad of trail related recreation opportunities.

### **Existing Trail Facilities**

The following pedestrian facilities, trails and separated paths, exist or are under development within the Palmer area.

#### **Sidewalks**

- Extensive sidewalks throughout downtown
- Arctic Avenue from the Glenn Highway to Gulkana Street
- South Chugach Street from Palmer Middle School to East Fireweed Avenue
- Gulkana Avenue from Arctic Avenue to Sherrod and Swanson Elementary School

#### **Separated Paths**

- Cope Industrial Way from Inner Springer Loop to Palmer Junior/Middle School
- Hemmer Road from the Palmer-Wasilla Highway to Arctic Avenue continuing on Arctic Avenue past Palmer High School to the Glenn Highway.
- Glenn Highway, connecting East Auklet Avenue via an underpass to the Arctic and Glenn intersection and the Carrs Mall.
- Matanuska River Bridge has been converted to a non-vehicular pathway, connecting to the separated pathway along the Old Glenn Highway to Plumley Road in the Butte.

#### **Primitive (unpaved) Trail Facilities**

- Matanuska River Park trails

- Palmer High School Ski trails
- Railroad rights-of-way

### Proposed Trails Plan

In addition to existing trail facilities there are several projects for which the borough is either seeking funding from the state or looking to obtain funding through other mechanisms. Most of these projects will provide connections with surrounding communities. The projects include:

- Obtaining legal public access and establishing an unpaved primitive trail along the railroad right-of-way north to Moose Creek. (Included in current Public Review Draft of Matanuska-Susitna Borough Trails Plan)
- Connecting the Old Matanuska River Bridge to existing sidewalks along Arctic Avenue and Gulkana Street and with a paved separated path extending to Plumley Road in the Butte. (Included within the Matanuska Susitna Borough (MSB) Capital Improvement Program (CIP) as a request for funding from the State)
- Connecting the Old Matanuska River Bridge with an upgraded trail along the Matanuska River through Matanuska River Park connecting Sherrod Softball Field and Sherrod and Swanson Elementary Schools. (Included within the current Public Review Draft of Matanuska-Susitna Borough Trails Plan)
- Obtaining legal public access and establishing a paved separated pathway along the railroad right-of-way extending south and eventually connecting with the separated pathway east of Birchwood in the Municipality of Anchorage. (Included within the MSB CIP)

The following are priority trail projects that the City wishes to promote:

- 1 - PHS/Carrs Mall/Downtown Route
- 2 - PJMS/Downtown/Carrs Mall Route
- 3 - Matanuska River Bridge Conversion and Trail
- 4 - Rail Trail
- 5 - Matanuska River Bridge/Rail Trail Connector
- 6 - Glenn Highway Separated Pathway
- 7 - North/South Connection to Springer System
- 8 - Underpass Improvements and Link with Rail Trail

### Recommendations

- New major arterial roadway construction and improvements to existing major arterial roadways should include provisions for separated paved bicycle/pedestrian pathways.
- Identify existing collector streets in Palmer which do not currently have sidewalks. Develop a procedure for retrofitting these streets with pedestrian facilities where needed.
- Develop a trail system within the City.
- Designate pedestrian/bicycle routes within the City.

- Work with the subdivider of the property behind the Carrs Mall to provide pedestrian facilities from the Palmer High School to Carrs Mall. Construction should include adequate lighting for winter and nighttime use.
- Review the viability of restricting parking at intersections along designated pedestrian/bicycle routes.
- Evaluate sidewalks and roadway shoulders along proposed pedestrian/bicycle routes for adequacy to accommodate bicycle and pedestrian traffic.
- Provide adequate lighting for winter and nighttime use along designated pedestrian/bicycle routes. Installation of lighting should be prioritized based on frequency of route use, diversity of route use, and cost of lighting.
- Construct a separated pathway along the east side of the Glenn Highway from commercially developed properties to the Palmer-Wasilla Highway intersection.
- Include development of the proposed trail system within the city's Capital Improvement Program.
- Seek a permit from the railroad for development of trails within the railroad right-of-way.
- Work with the railroad to design and develop trails within the railroad right-of-way.
- Promote activities within the city of Palmer that utilize the trail system both in summer and winter.