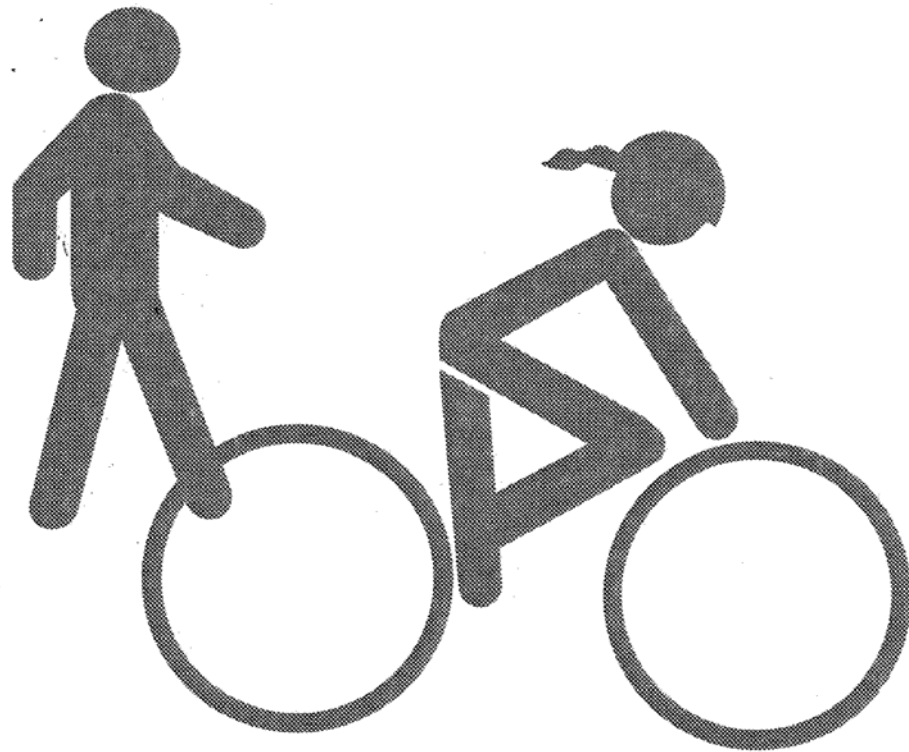


ALASKA BICYCLE AND PEDESTRIAN PLAN

**An Integral Part of
VISION 2020
Alaska's Long-Range Statewide Transportation Plan**



March 1, 1995

Prepared by:

Alaska Department of Transportation and Public Facilities

Alaska Bicycle & Pedestrian Plan

"It is the policy of the State of Alaska to promote the increased use and safety of bicycling and walking as year-round transportation choices by giving them full consideration in the planning, design, construction and maintenance of transportation facilities."

Michael A. Barton
Commissioner
Alaska DOT&PF
November 1994

"It is Federal transportation policy to promote increased use of bicycling, and encourage planners and engineers to accommodate bicycle and pedestrian needs in designing transportation facilities for urban and suburban areas."

"It is Federal transportation policy to increase pedestrian safety through public information and improved crosswalk design, signaling, school crossings, and sidewalks."

Moving America
New Directions, New Opportunities
A Statement of National Transportation Policy
Strategies for Action
February 1990

"The policies of encouraging the increased use and safety of bicycling and walking have been endorsed by the Secretary (of Transportation.) I would like to reiterate our enthusiastic support of bicycling and walking as legitimate transportation modes, and request our field offices' continued assistance in carrying out this policy."

Rodney E. Slater
FHWA Administrator
May 9, 1994

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INTRODUCTION

The purpose of the Alaska Bicycle & Pedestrian Plan, an integral part of *Vision 2020*: Alaska's Long Range Statewide Transportation Plan, is to present a framework for a practical, workable Bicycle/Pedestrian program in the State of Alaska. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), requires each state to incorporate a long-term bicycle & pedestrian plan into its long range transportation plan. While the focus of this plan is on bicycles and pedestrians, we recognize that many of the facilities provided for these modes are readily usable by other forms of transportation such as in-line skating, equestrians, Nordic skiing, and, depending on local ordinances and season: snowmobiles or all-terrain vehicles.

By providing safe, well-designed, all-season paths, trails, lanes, sidewalks and other facilities, this plan is intended to develop practical non-motorized transportation alternatives - primarily to the use of motorized single-occupant vehicles (SOV). In conjunction with other transportation choices, this can reduce congestion on our more heavily-traveled roads, reduce air and water pollution, and in general improve the quality of life in Alaska.

Despite Alaska's northern climate, non-motorized transportation such as bicycling and walking can be a viable transportation choice. For example, a small group of bicyclists in Fairbanks do not allow sub-zero temperatures to deter them. But deep snow berms at the edge of the road, where they normally would ride, frustrate not only these hardy cyclists but pedestrians as well. Virtually all transportation trips involve, at some point, a pedestrian element. For some, this pedestrian element may be in a wheelchair or with some other assistive device. Planning and designing transportation systems that allow each individual to make the transportation modal choice that best suits them is one of the goals of the transportation department.

By referring to this document, an individual will find the goals of the Alaska Bicycle & Pedestrian Program, specific steps that will accomplish those goals; and steps that lead to selection and funding of a particular bicycle or pedestrian project.

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I. NON-MOTORIZED TRANSPORTATION IN ALASKA

THE PEOPLE

1. The Cyclists

The FHWA publication "Selecting Roadway Design Treatments to Accommodate Bicycles," January 1994, divides bicyclists into three broad groups:

Group A - Advanced Bicyclists:

These are experienced riders who can operate under most traffic conditions. They comprise the majority of the current users of collector and arterial streets and are best served by the following:

direct access to destinations usually via the existing street and highway system;

the opportunity to operate at maximum speed with minimum delays; and

sufficient operating space on the roadway or shoulder to reduce the need for either the bicyclist or the motor vehicle operator to change position when passing.

Group B - Basic Bicyclists:

These are casual or new adult and teenage riders who are less confident of their ability to operate in traffic without special provisions for bicycles. Some will develop greater skills and progress to the advanced level, but there will always be many millions of basic bicyclists. They prefer:

comfortable access to destinations, preferably by a direct route, using either low-speed, low traffic-volume streets or designated bicycle facilities; and

well-defined separation of bicycles and motor vehicles on arterial and collector streets (bike lanes or shoulders) or separated paths or trails.

Group C - Children:

These are pre-teen riders whose roadway use is initially monitored by parents. Eventually they are accorded independent access to the system. They and their parents prefer the following:

access to key destinations surrounding residential areas, including schools, recreation facilities, shopping, or other residential areas;

residential streets with low motor vehicle speed limits and volumes;

well-defined separation of bicycles and motor vehicles on arterial and collector streets or separate bike paths;

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rural bicycle/pedestrian needs are similar to their urban cousins, but traffic volumes, both of bicyclists and motor vehicles, are lower. Shared roadways may be sufficient on low-volume collectors and local roads within communities, but some sort of separation - bike lane, path, or designated shoulder - is necessary on rural arterials and collectors.

2. The Pedestrians

Pedestrians, like bicyclists, vary widely in their abilities. Their descriptions would vary as much as descriptions of the general population because all of us are pedestrians. Virtually all travel trips at one point or another include a pedestrian element. It could be as little as the walk from the front door to the car in the driveway and from the parking place to the office. For others it could be an eight-mile run from home to the office. For most of us, however, it's running errands to nearby businesses at lunch or after work, or a trip to a shopping center near home. According to the 1990 National Personal Transportation Study the average walking trip length is 0.6 mile. The 1990 Census found that four percent of all adult workers commute to work on foot. Comparable figures for Alaska are not available.

In developing plans and programs to meet the needs of pedestrians we must keep in mind not only the "typical" or "average" person, but nearly any other category one could define. For example, the elderly, the young, the poor, and people with disabilities all have different needs and concerns.

3. The Numbers

The level of bicycle and pedestrian activity in Alaska has not been accurately measured. We do know, according to a 1992 statewide survey conducted by Alaska State Parks, that nearly 80% of Alaskan households have one or more bicycles. According to the same survey, over 60% of Alaskans biked or walked for recreation in 1991. Walking and biking are among Alaska's more popular recreational activities, with participation in each having significantly increased since 1979, when a similar survey was conducted.

According to the 1990 National Personal Transportation Study, 7.9% of all travel trips nationwide are now made by bicycling and walking. Overall, 7.2% of all trips were by walking and 0.7% by bicycling. We were unable to find comparable figures for Alaska. The size of the 1990 survey sample in Alaska was too small to provide meaningful numbers for analysis of our situation. Given our climate and the sprawling nature of our largest cities, we can assume that the total percentage of trips in Alaska made by bicycles and pedestrians now is somewhat lower than the national average, probably in the 4-5% range.

4. Special Needs

a. Winter Travel

(1) Cyclists in Winter

Despite Alaska's severe winter weather, a small but growing number of individuals continue to use their bicycles year-round for commuting, errands and other uses. According to many winter cyclists, a key limiting factor to greater winter bicycle use is

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not necessarily low temperatures or high snowfall, but road maintenance practices in which snow plowed from roadways is left on shoulders - blocking the areas normally used by cyclists. Cyclists are then forced into narrowed traffic lanes shared by motor vehicles. The problem for cyclists is compounded when separated trails and paths are not cleared of snow - forcing them to use the roads. In many municipalities trails are left unplowed to save on maintenance costs and to allow for use by cross-country skiers or by ATVs and snowmachines. Another factor is the blind spots created by berms of snow, which render the bicyclist invisible to cars crossing a trail or entering the roadway. Winter darkness, often coupled with heavy rain or snowfall, reduces visibility - making proper lighting, reflectors and reflective clothing even more important for cyclists. Winter darkness also emphasizes the need for cyclists to obey traffic laws. Cyclists are less likely to become involved in accidents and receive injuries if they follow the rules and ride where motor vehicle operators will be looking for other traffic.

(2) Pedestrians in Winter

Winter pedestrians face many of the same problems as winter cyclists. Winter maintenance practices or road designs often leave pedestrians no place to walk except in roadways. Snow piled at crossings makes it difficult, if not impossible for some pedestrians, to cross properly. Signal buttons are often blocked by snow, as are bus stops and sidewalks. Winter darkness makes pedestrians more difficult to see, therefore pedestrians must be more alert to dangers. Where the numbers of cyclists will decrease significantly in winter, the numbers of pedestrians remain relatively constant. People still need to run errands or walk from the parking lot to work in winter.

Most municipalities require adjacent property owners to clear sidewalks of snow. Some property owners skirt the ordinances by clearing only a portion of their sidewalk, piling snow at the curb. Others are frustrated by clearing their sidewalks only to see road maintenance crews come by later and pile snow back on the recently cleared sidewalk. Some municipalities include sidewalk clearing as part of their regular winter road maintenance of business districts, but often sidewalks are last on the list - after the roads are cleared.

b. ATVs, Snowmobiles

Alaska is unlike other states in that all-terrain vehicles (ATVs) and snowmobiles are used for basic transportation in much of the state for a significant part of the year. Generally, ATV use is year-round while snowmobile use is seasonal. These vehicles are prohibited from roadways except to cross. This rule is often ignored, however, due to lack of enforcement. Sometimes conflicts arise through the mix of motorized and non-motorized vehicles on trails, especially when motorized vehicles are driven at high speeds. Often, enforcement is lacking along trails when local police officials do not have the proper equipment to use the trails.

c. Rural vs. Urban Needs

While rural traffic volumes are generally lower than urban traffic volumes, the percentage of bicycle and pedestrian users is often higher. Rural communities typically cover relatively small areas; the distances from home to work, shopping or school are well within the comfort level and ability of most cyclists or pedestrians. Many communities with industries that attract young seasonal workers such as fish processing

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and tourism see a proliferation of bicycles in the summer months - more so than the year-round population would suggest. With lower motor vehicle volumes and speeds in rural areas, cyclists and pedestrians are less "intimidated" and more willing to walk or cycle. Facilities for cyclists and pedestrians are more likely to be shared roadways than separate trails, lanes or sidewalks. Rural roads are less likely to be paved than in urban roads. In rural areas with paved highways, the paved shoulders may serve local cyclists and pedestrians. As noted in the previous section, rural areas see a greater proportion of ATVs and snowmobiles used for basic transportation, although motor vehicle use is increasing.

d. Handicapped Access

It is the policy of DOT&PF to provide facilities that are accessible to the disabled on all projects constructed after January 26, 1993. This doesn't mean that pedestrian facilities are required on every project, only that if a pedestrian facility is provided, then it must be accessible to the disabled. Even before the passage of the Americans with Disabilities Act (ADA) in 1990, Alaska had begun improving its transportation system to allow smooth access by those with disabilities. For example, curb cuts at pedestrian crossings are standard features of roadway design and construction.

The ADA requires that accessible facilities be maintained in accessible condition.

5. Rights and Responsibilities of Bicyclists and Pedestrians

a. Bicycles

The State of Alaska legally classifies bicycles as vehicles. As such, they are allowed to use most roads in the state. The exceptions are controlled access roads such as freeways and expressways. Of the nearly 14,000 miles of public road in Alaska in 1993, less than 100 miles are closed to bicycles and pedestrians.

In addition to the motor vehicle laws, the "rules of the road" which all vehicle operators must follow, there are some special rules for bicycles:

Cyclists must ride as near to the right side of the roadway as practical;

Cyclists may not ride two (or more) abreast except in lanes or paths set aside exclusively for bicycles;

Cyclists must use the highway shoulder when it is maintained in good condition;

Cyclists may not ride on the sidewalk in business districts.

A list of State laws and regulations affecting bicyclists and pedestrians is included in Addendum C.

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b. Pedestrians

State law allows pedestrians to use most roads in the state with certain restrictions. Like cyclists, they may not use controlled access roads such as freeways and expressways (except in emergencies). Pedestrians must use the sidewalk if available and its use is practicable. If a sidewalk is not available, then the pedestrian must use the shoulder and walk well away from the traffic. If neither a sidewalk or a shoulder is available, pedestrians must walk as near as possible to the outside edge; and if walking along a two-way road, walk only on the left side (facing traffic). By using a road, pedestrians may not act in a manner that creates an unreasonable danger to self or interfere with the normal flow of traffic.

If a pedestrian overcrossing, tunnel, or marked crosswalk is accessible and within a reasonable distance, pedestrians must use it to cross the road. If no crossing is provided, pedestrians must yield the right-of-way to all vehicles. Unless authorized by a traffic control device, pedestrians must cross by the shortest route to the opposite side of the roadway, usually right angles to the roadway. In business or residential districts when between adjacent intersections with operational traffic control devices, pedestrians may not cross except at the marked crosswalks. Vehicles must yield to pedestrians in crosswalks.

A list of State laws and regulations affecting bicyclists and pedestrians is included in Addendum C.

THE FACILITIES

1. Types and Miles of Bike/Ped Facilities

Bikeways in Alaska can be divided into four basic types:

Shared Lane (or Roadway): shared motor vehicle/bicycle use of a travel lane. Typical examples include low-volume residential streets or rural village roads. A subtype of the shared lane is the wide outside lane, which is an outside travel lane with a width of at least 14 feet (4.2 meters). The wide outside lane is generally not used in Alaska.

Bicycle (Bike) Lane: a portion of the roadway designated by striping, signing, and/or pavement markings for preferential or exclusive use of bicycles. Bike lanes are typically found in urban areas with high motor vehicle and bicycle traffic.

Shoulder: a paved portion of the roadway to the outside of the edge stripe. Shoulder bikeways are more common in rural areas; they accommodate cyclists with few conflicts with motor vehicles.

Separated Path (or Trail): a facility physically separated from the roadway and intended for non-motorized use. The trail may be within the right-of-way or adjacent to it, or in a greenbelt. Separated trails usually are paved, but they may be unpaved as well. While thin-wheeled bicycles are better accommodated by paved bikeways, unpaved trails are suited for wide-tired bicycles such as mountain bikes as well as other users such as equestrians or walkers.

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Pedestrian-oriented transportation facilities are common to all parts of our transportation system. Generally, we think of these facilities as being limited to sidewalks, but they can also include such features as public telephones and roadside emergency call stations, view points and rest areas, trails and bike paths, and tourist information centers. Other pedestrian-oriented facilities include bus stops and shelters, pedestrian overpasses and underpasses, and restroom facilities at roadside rest areas.

There does not exist a complete, current inventory of bicycle and pedestrian facilities in Alaska. The larger urban communities in the state have, at one time or another, inventoried trails, paths and lanes within their boundaries, usually with an eye toward recreational use of these facilities. In 1992 and 1993 DOT&PF completed inventories of state-owned pedestrian facilities to gauge compliance with ADA requirements.

In addition to the bikeways noted above, other facilities of interest to cyclists and pedestrians will be types and conditions of rail crossings, pedestrian over- and under-crossings, crosswalks, boardwalks, parking facilities for bikes, and bike and/or ski racks on public transit vehicles.

THE PROBLEMS

The Alaska Department of Transportation and Public Facilities (DOT&PF) held a series of public meetings in Anchorage, Fairbanks and Juneau in May, 1994, as part of its effort to develop this plan. An additional meeting with Sitka bicyclists was held in September. DOT&PF also solicited comments by phone, fax, mail and personal contacts. A summary of the comments received can be found in Addendum A.

Briefly, the problems raised through the public participation process fall into the following broad categories:

Safety

Pedestrians and cyclists are particularly concerned about safety; in conflicts with autos or trucks, pedestrians and cyclists usually come out on the losing end. Safety concerns underlie many of the problem areas listed below.

Lack of direct facilities

Like motor vehicles, users of muscle-power, pedestrians and cyclists, are most efficient when they can travel directly to a destination. Unlike motor vehicles, long detours are more likely to discourage cyclists and pedestrians, forcing them to use motor vehicles when they might otherwise cycle or walk.

Barriers to bicycle or pedestrian use

Barriers come in many forms, including: narrow lanes that create conflicts between cyclists and motor vehicles, roads with high motor vehicle traffic levels that intimidate novice riders, sidewalks that abruptly end, or snow blocking sidewalks or crossings.

Design problems

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Design problems were among the most common problems mentioned during the public participation. Comments ranged from dangerous drainage grates to lack of consideration of bicycle or pedestrian needs during the design process.

Winter use designs

Of particular concern among many were designs better suited to warm, dry Southern California than cold, snowy Alaska. Specifically, roads are designed with no storage space for snow except sidewalks and bikeways.

Maintenance

Maintenance was another area which triggered substantial discussion. Pedestrians and cyclists believe their needs come last, especially with respect to winter maintenance. They complain of blocked sidewalks or pathways, and snow piled in crosswalks and at bus stops.

Security

Some participants voiced concern about bike paths and walkways visually separated from roads, or with overgrown brush offering hiding places for muggers or assailants.

Parking

While bicycle use has apparently grown in recent years, secure parking has not kept pace. Cyclists make their way to shopping centers or employment centers only to find no place to properly and safely park their bikes.

Education

Ignorance of rules, regulations, rights, and responsibilities too often results in accidents or injuries. Motorists, cyclists and pedestrians need more and better training in the "rules of the road."

Lack of enforcement

Participants in the public participation process suggested stronger law enforcement of bicyclists and pedestrians as well as motorists will result in safer conditions for all.

Lack of encouragement

Cyclists and pedestrians receive little encouragement to cycle or walk. Impediments come in road design, motorists' attitudes, maintenance practices, and parking availability.

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Use conflicts

A few people mentioned use conflicts on trails, such as between mountain bikers and hikers. Others mentioned problems of cyclists attempting to mesh with motor vehicle traffic on narrow or heavily traveled roads without bike lanes, wide shoulders, or bike trails.

Zoning/Land use

Like many western states, Alaskan cities have developed around the motor vehicle. Cities are spread out over broad areas, making it difficult not to use a motor vehicle to get around. Better zoning or land use decisions at the local level could decrease dependence on the auto and make cycling and walking more feasible.

Bureaucracy

Several participants complained of difficulty in contacting the right government agency or person to deal with particular problems, and of an inability for local citizens to participate in trails and transportation planning.

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II. MISSION, GOALS AND OBJECTIVES

THE MISSION

The mission of the Alaska Bicycle/Pedestrian program is to provide a safe, well-designed, well-maintained, affordable all-season multimodal transportation system that affords users convenient access to neighborhoods, schools, recreation, commercial and industrial areas while protecting the integrity of communities and the environment to the extent practicable.

This vision of Alaska's transportation system was derived from department policy and a series of public meetings in the spring of 1994.

GOAL 1.

Establish a baseline to measure bicycle and pedestrian use in Alaska.

According to the 1994 National Bicycling and Walking Study, 7.9% of all travel trips nationwide are now made by bicycling and walking. Overall, 7.2% of all trips were by walking and 0.7% by bicycling. The national goal set by the study is to increase the combined rate of the two modes to 15.8%.

We were unable to find comparable figures for Alaska. The size of the 1990 Personal Transportation Survey sample in Alaska was too small to provide meaningful numbers for analysis of our situation. Given our climate and the sprawling nature of our largest cities, we can assume that the total percentage of trips in Alaska made by bicycles and pedestrians now is somewhat lower than the national average, probably in the 4-5% range.

Essential to achieving the goal of making Alaska more bicycle & pedestrian friendly is the construction of bicycle- and pedestrian-friendly roads and streets, elimination of barriers, and completion of trails and connections. But we must know what we have before we can measure our progress.

Objective 1.1

Develop a system to measure the extent and characteristics of non-motorized travel within the state.

- A. Determine sources of travel measurements (such as DOT&PF Division of Planning, Alaska Marine Highway, DCED Division of Tourism, DNR Division of Parks, etc.) and the nature of those measurements.
- B. Determine which measures of bicycle and pedestrian travel give the most accurate picture at a reasonable cost.
- C. Establish baseline data to identify numbers and percentages of total travel trips.

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- D. Publish a "report card" biennially explaining our progress on increasing the number of bicycle and pedestrian trips.

Objective 1.2

Inventory the extent and condition of non-motorized transportation facilities within the state.

- A. Determine sources of non-motorized transportation facility data.
- B. Develop system to measure length and condition of non-motorized transportation facilities.
- C. Publish a "report card" biennially explaining our progress on improving the non-motorized transportation system, in terms of both quantity and quality of facilities.

GOAL 2.

Provide a more bicycle- and pedestrian-friendly transportation network.

Objective 2.1

DOT&PF and local governments will work together to create a seamless network of improvements that allow bicyclists and pedestrians to reach important destinations easily and safely. Where appropriate:

- A. Provide low-volume/low-stress connectors through major travel corridors and to important destinations.
- B. Provide relevant bicycle- and pedestrian-related improvements on urban arterial and collector network.
- C. Provide relevant bicycle- and pedestrian-related improvements on local streets.
- D. Provide relevant bicycle- and pedestrian-related improvements on rural highway and road network.
- E. Provide relevant bicycle- and pedestrian-related improvements to transit systems.
- F. Create a network of trails using corridors and greenways such as rivers, creeks, lake and ocean shores, and utility easements and barrier-breaking structures (bridges, overpasses, tunnels, underpasses, etc.).

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Objective 2.2

DOT&PF and local governments will work together to require consideration of relevant bicycle and pedestrian elements in all surface transportation projects.

A. Roadway network

- (1) Require each urban street project to include consideration of the width, traffic control, and surface requirements for bicycling.
- (2) Require each urban street project to include consideration of the sidewalk and crossing needs of pedestrians.
- (3) Require each rural highway project to include consideration of bicyclist and pedestrian needs.

B. Transit systems

- (1) Require each transit site project to consider provisions for bicycle parking and improved bicycle and pedestrian access.
- (2) Require transit system improvements to consider bicycle and pedestrian elements (e.g., bike racks on buses).

C. General Policies

- (1) Review new developments or major transportation projects to minimize the creation of new barriers to non-motorized transportation.
- (2) Adopt and use bicycle-and pedestrian-friendly design standards as part of roadway design standards, subdivision regulations, and other appropriate standards and ordinances.
- (3) Create a framework for eliminating small-scale environmental problems that impact bicycling and walking.
 - (a) Develop a spot-improvement program that allows the public to identify small-scale problems and barriers - such as potholes, and lack of curb cuts - and bring them to the attention of the appropriate local agency.
 - (b) Require bicycle and pedestrian facilities to be fully restored when agencies or private concerns do utility work in the public right of way.
 - (c) Eliminate major barriers to non-motorized travel.
 - (i) Encourage new developments or major projects to break current non-motorized barriers.
 - (ii) Create "barrier-breaking" projects where opportunities to piggy-back projects do not exist.

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Objective 2.3

DOT&PF will encourage development patterns more compatible with non-motorized travel by providing technical assistance to local governments in the following areas.

- A. Encourage compact and mixed land uses
 - (1) Encourage neighborhood-oriented commercial uses, parks, and schools in or within safe and easy walking or bicycling distance from residential areas.
 - (2) Encourage siting commercial and institutional developments adjacent to the street/sidewalk, rather than centered in (or at the rear of) a large parking lot.
- B. Business/Employment
 - (1) Encourage major developments to include plans for non-motorized travel, in terms of internal circulation and external access (including access to transit connections).
 - (2) Encourage new employment centers to include plans for bicycle parking, showers, and lockers.
 - (3) Encourage well-located, secure bicycle parking in business districts and other public sites.

Objective 2.4

Provide institutional encouragement for non-motorized travelers.

- A. Require non-motorized elements in Transportation Demand Management programs, Transportation Management Associations, and other air quality and congestion mitigation initiatives.
- B. Encourage the elimination of employee parking subsidies and other pro-SOV measures and the creation of incentives for using non-motorized modes

GOAL 3.

To reduce by ten percent the number of bicyclists and pedestrians killed and/or injured in traffic accidents on public roadways by the year 2015

According to the DOT&PF report "1993 Alaska Traffic Accidents," 18 pedestrians were killed in 1993 traffic accidents, 21 received major injuries, and 158 received minor injuries. The number of pedestrian fatalities in 1993, 18, represents a marked increase compared to a seven-year mean of 15 fatalities. According to the 1995 Highway Safety Plan, "the ratio, in Alaska, of pedestrian deaths to all traffic deaths is unpredictable, but it is generally higher than that of the rest of the nation."

Also during 1993, 6 bicyclists were killed, 22 received major injuries, and 132

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received minor injuries. On a per-capita basis, Alaska's 1993 bicycle fatality rate was the worst in the nation, more than three times the national average. Before too much is read into a single year's statistics (Alaska had no bicycle fatalities in 1992) it should be noted that according to a 1993 Johns Hopkins Injury Prevention Center study, the per-capita rate of bicycle-related deaths in Alaska increase from slightly below the national average in the early 1980s. Figures for the late 1980s and early 1990s were not readily available to determine if that trend continues.

These statistics may be incomplete in that they represent only those accidents reported on public roadways. Bicycle and pedestrian accidents occurring on private property or on separated paths are not tabulated by the present accident data collection system. Like the second goal, a key objective to achieve our third goal should be the development of a data collection and analysis system to better measure our progress.

Objective 3.1

DOT&PF will work with appropriate agencies to develop a system to measure the extent and characteristics of non-motorized accidents and injuries within the state.

- A. Review current data collection efforts to determine the relevance and accuracy of information collected regarding bicycle and pedestrian accidents and injuries, and their causes.
- B. Add bicycle and pedestrian accident data collection to existing procedures where needed.
- C. Collect additional accident data from other agencies as needed.
- D. Analyze data and report on at least an annual basis.

Objective 3.2

DOT&PF will work with other state and local agencies to target and eliminate key behaviors that lead to crashes, injuries, and deaths (e.g., wrong-way riding, motorist failure-to-yield, jaywalking).

- A. Encourage schools, safety organizations, and law enforcement agencies to deal with bicycle and pedestrian safety issues and to focus on the most important problems.
- B. Support the development of public awareness campaigns key to the most important causes of accidents, injuries, and deaths.

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Objective 3.3

Encourage the use of safety equipment among bicyclists (e.g., lights, horns or bells, helmets, reflectors).

- A. Encourage safety groups to develop programs promoting the purchase and use of both legally required and additional safety equipment among the bicycling public.

GOAL 4.

DOT&PF will develop a model program of "bicycle- and pedestrian-friendly" incentives for employers.

Objective 4.1

Investigate ways to increase non-motorized trips among employees, such as:

- A. Incentives for non-motorized commuters.
- B. Providing bicycles for use on agency business.
- C. Providing reimbursement for use of employees' bicycles on agency business where appropriate.

Objective 4.2

Enhance bicycle and pedestrian access to state agency offices.

- A. Provide secure bicycle parking for employees and visitors at state offices.
- B. Provide safe and convenient ADA-compliant pedestrian access to all offices.

Objective 4.3

Reduce the number of bicycle- and pedestrian-related accidents, injuries, and deaths among state agency staff.

- A. Provide training and awareness programs for employees.
- B. Encourage staff to use bicycle safety equipment.

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III. DEVELOPING A FRIENDLY ALASKA FOR BICYCLISTS AND PEDESTRIANS

Alaska State law generally provides that bicycles are vehicles and that, with a few exceptions, bicyclists have the same general rights and obligations as motorists. For example, like other vehicles, bicyclists are required to ride on the right side of the road. To varying extents, bicycles will be ridden on all highways where they are permitted. Bicyclists and pedestrians are prohibited on some highways where traffic volume, speed, and makeup together or separately create hazardous conditions for bicyclists, pedestrians and/or motor vehicles. All new highways, including those being reconstructed or rehabilitated but excepting those where bicyclists will be legally prohibited, should be designed and constructed taking into consideration the needs of bicyclists.

Virtually all transportation trips involve, at some point, a pedestrian element. With better highway designs, better land-use decisions, and encouragement, many trips now made by motorized vehicles could be made by foot - relieving traffic congestion, improving air quality, decreasing fuel use, and generally improving the health and well-being of the state.

ENGINEERING GOOD DESIGNS

1. Design Standards

The Alaska Department of Transportation and Public Facilities (DOT&PF) has adopted, with minor changes, the geometric design elements in the American Association of State Highway and Transportation Officials' (AASHTO) "Guide for Development of Bicycle Facilities." As more experience is gained with these guidelines, the department should re-evaluate their effectiveness in our northern climate. Areas to pay particular attention to include: pavement markings, rumble strips, snow storage area, signs/signals, drainage, rail crossings, pavement structure, and special designs for winter use.

The Alaska DOT&PF Highway Preconstruction manual states that during the development of each project the needs of bicyclists and pedestrians shall be addressed in the design study report. Specific mention of bicycle/pedestrian facilities in the project scope is not needed to consider such facilities in the design study report. The Preconstruction manual sets guidelines for the provision of appropriate facilities. As more experience is gained, these guidelines should be reviewed to ensure their suitability for Alaska's needs. Should the design process indicate that bicycle and/or pedestrian facilities are appropriate, then waivers exempting bicycle facilities from projects must be the exception, and then only with overriding justification.

2. Road and Trail Planning

DOT&PF will work with local governments and other agencies to analyze the existing system to identify and program improvements through the Needs List and

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STIP process which will provide a more bicycle- and pedestrian-friendly transportation system. (See Section IV, Paying For It.)

- a. Arterial and collector network: make the major road network compatible with pedestrian and bicycle travel needs.
 - (1) For bicyclists, add width (striped or unstriped) to through lanes and replace dangerous elements (unsafe grates, insensitive signals).
 - (2) For pedestrians, add or improve sidewalks, create safe crossings, add ADA-compliant ramps, and modify signalization and intersections where needed.
 - (3) Widen and pave shoulders for use of bicyclists and pedestrians where appropriate; provide alternative routes where necessary.
- b. Low-volume connector network: provide a network of low volume streets and roads for through bicycle and pedestrian travel.
 - (1) Analyze land use, demographics, existing facilities, and barriers to bicycle and pedestrian travel.
 - (2) Improve routes that provide alternatives to use of major arterials; include destination signing and marking, ADA-compliant curb ramps, motor traffic diverters.
- c. Local street network: work with local governments to solve traffic problems in neighborhoods. Install sidewalks, eliminate hazards (e.g., sight distance restrictions), add traffic calming measures as needed.
- d. Major barriers to non-motorized travel: eliminate major barriers to bicycling and walking. Where potential use and/or ADA access needs warrant, provide access through, around, over, or under major barriers. Pay particular attention to major projects such as bridges and tunnels.
- e. Transit systems: provide for bikes and/or skis on transit systems where appropriate. Include bike and/or ski racks on buses, special bike pass systems on transit lines, etc. Provide appropriate long-term bicycle parking and bicycle/pedestrian access at transit stops, including safe lockers and/or supervised and secure parking, adequate sidewalks, curb cuts and crossings, non-motorized access from low-volume connectors.
- f. Special bicycle and pedestrian facilities.
 - (1) Bicycle lanes and routes shall comply with DOT&PF-approved guidelines. The department will strive to ensure connectivity through additions on road network as identified above.
 - (2) Trails network and independent structures: Paths and structures shall comply with DOT&PF-approved guidelines. The department will strive to ensure connectivity through addition of missing links.

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3. Construction Practices

In addition to providing for safe detours for motor vehicles during construction, DOT&PF crews and contractors must ensure that appropriate provisions are made for bicycles and pedestrians. Cones, warning signs, equipment, etc. should not be placed so that they block bike lanes, trails, sidewalks etc.

4. Maintenance

Proper maintenance needs to be addressed before construction of new bicycle and pedestrian facilities begins. Declining State revenues make it difficult for DOT&PF to take on new maintenance responsibilities. DOT&PF has adopted the policy of requiring local governments or organizations to agree to maintain new facilities before they are constructed. Maintenance needs of existing facilities should be examined with the following in mind.

- a. Debris removal. By their nature bicycles are more sensitive than motor vehicles to gravel, leaves, glass and other debris on the roadway. Maintenance schedules and practices should take into account the need for a smooth, clean, regularly swept path. The same argument can be made for ADA accessible pedestrian pathways and their use by wheelchairs.
- b. Winter use. Winter maintenance of transportation facilities must take into account continual use by pedestrians and, to a lesser extent, bicycles. Snow removal practices should be examined and revised where needed to ensure continued access and use of pedestrian and bicycle facilities. Snow should not be stored in bike lanes or on sidewalks. The Americans with Disabilities Act requires that ADA accessible facilities be maintained in accessible condition. This may be interpreted to include winter accessibility. Where permitted, use by snowmobiles must also be considered.
- c. Utilities. Bicycle and pedestrian facilities should be fully restored when agencies or private concerns do utility work in the public right of way.

ENFORCING THE RULES OF THE ROAD

During the public participation process DOT&PF received numerous suggestions relating to the enforcement of traffic laws and regulations affecting bicycles and pedestrians. (See Addendum A for a summary of public comments.) DOT&PF does not have primary jurisdiction to enforce traffic laws and regulations. DOT&PF will work with Department of Public Safety and local governments to improve enforcement of laws and regulations affecting bicycles and pedestrians.

ENCOURAGING WALKING AND BICYCLING

During the public participation process DOT&PF received numerous suggestions to encourage walking and bicycle use. (See Addendum A for a summary of public comments.) DOT&PF will work with state agencies and local governments to encourage walking and bicycling.

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EDUCATION, EDUCATION, EDUCATION

During the public participation process DOT&PF received numerous suggestions to improve bicycle and pedestrian education programs. (See Addendum A for a summary of public comments.) DOT&PF will work with state agencies, local governments and educators to develop and improve bicycle and pedestrian education programs. Bicycle and pedestrian education programs can be grouped into two areas: design and safety.

1. Design Education

A 1992 paper prepared for the National Bicycle and Walking Study found no college transportation planning and engineering program in the United States which offered complete courses on non-motorized transportation. The authors of the paper (Case Study No. 2; The Training Needs of Transportation Professionals Regarding the Pedestrian and Bicyclist) proposed a syllabus to use in the development of a course in non-motorized transportation. While it is beyond the scope of this plan to develop a training course in non-motorized transportation, the department should monitor advances in the study of non-motorized transportation and make it available to transportation professionals in the state. Other steps which can be taken at the state and local level include encouraging project planners, designers and engineers to ride a bike through their completed projects to evaluate their bicycle friendliness. Similarly, they should be encouraged to use the pedestrian facilities.

2. Safety Education

Nationally, safety education programs have proven that they make a significant difference in reducing accidents and injuries among bicyclists and pedestrians. Bicycle and pedestrian safety programs were added in 1991 to the federal list of "most effective" or National Priority program areas. This permits an expedited procedure in their funding by the federal "Section 402" program. (See Section IV, Paying For It.) Observations and comments by Alaska bicycle clubs, advocates and educators suggest safety education programs should be directed not only at cyclists and pedestrians, but motor vehicle drivers too. Drivers need to know that bicycles are regarded as vehicles and have the right to use the road (with some exceptions). Bicyclists, in particular, need programs that deal with legal rights and responsibilities, proper equipment, signaling, visibility, and safety practices. Local bicycle clubs in Alaska routinely sponsor safety education programs, but their reach is limited by lack of funds, and the willingness and ability of volunteers. Programs should be directed not only to school-aged children, but adults as well.

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IV. PAYING FOR IT

FEDERAL SOURCES

All of the major funding programs created under ISTEA include bicycle and walking facilities and programs as eligible activities. Since enactment of ISTEA, many of these funding programs have been the subject of policy memorandum, guidance notes and regulations issued by the Federal Highway Administration and Federal Transit Administration. In order to use these federal funds, states must develop and use a systematic planning process as outlined below.

1. Planning and Programming

a. Long Range Plan

In order to receive federal transportation funds, ISTEA requires that each state develop a long-range statewide transportation plan. Briefly, the plan must cover at least a 20-year period and encompass all areas of the state and all modes of transportation. The plan must be developed in cooperation with metropolitan planning organizations. In addition, ISTEA specifically requires the state to develop a long-range plan for bicycle transportation and pedestrian walkways for appropriate areas of the state. The bicycle/pedestrian element must be incorporated into the long-range plan.

This Alaska Bicycle & Pedestrian Plan is intended to meet the federal requirements contained in Title 23, Section 135, United States Code. This plan is an integral part of *Vision 2020: Alaska's Long-Range Statewide Transportation Plan, 1995*.

b. Statewide Transportation Improvement Program (STIP)

To program the federal funds it is eligible to receive, the state must produce a Statewide Transportation Improvement Program (STIP). The STIP must be financially constrained, show all projects for which federal ISTEA funds are sought, and cover at least a three-year period. The STIP must be updated at least every two years. The STIP may contain only projects which are consistent with the long-range plan. DOT&PF includes in the STIP only projects that have been identified in the Department's "Transportation Needs and Priorities in Alaska," known as the "Needs List." A more complete description of the decision-making process is found in *Vision: 2020, the Alaska Transportation Plan*. To use any of the Federal funds listed on the following pages, the state must first identify the project in the STIP. Any person, group or community seeking Federal funding for a project must first go through DOT&PF's Needs List process.

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2. Funding Programs

a. National Highway System (NHS)

Alaska has identified 1,610 miles of road plus some Alaska Marine Highway System routes to be a part of the NHS.

Among the list of eligible activities for NHS funds are bicycle transportation facilities and pedestrian walkways. Two distinct types of project activity are covered by this general statement of eligibility. First, bicycle and pedestrian facilities that are an incidental part of a larger NHS project, such as trail facilities constructed along NHS roads. These facilities usually are within the right-of-way of the highway and are constructed at the same time as the larger project. Second, facilities that are constructed adjacent to an NHS route, but are built as an independent project, are eligible.

b. Surface Transportation Program (STP)

At the end of 1993, Alaska had nearly 14,000 miles of public road.

The STP is the largest single funding program under ISTEA. It gives states broad latitude in the variety of transportation activities they may fund with this money. Alaska was given even broader latitude than other states; these funds may be used on any public road, not just those on the federal system. As with the NHS, bicycle transportation facilities and pedestrian walkways are specifically listed as eligible activities under STP. In addition to bicycle and pedestrian facilities, this program may be used to fund education and safety programs.

c. Transportation Enhancements (TE)

At least ten percent of STP funds (over the six-year life of the ISTEA legislation, 1991-1997) must be allocated to a range of 10 specific types of projects known as Transportation Enhancements. Bicycle and pedestrian projects and the conversion of abandoned railroad corridors to trails are two of the ten activities.

d. Congestion Mitigation and Air Quality Program (CMAQ)

The CMAQ program is a completely new category of funding created by ISTEA. The funds are directed toward metropolitan areas that have not yet attained clean air standards set under the Clean Air Act, as amended. The Federal Highway Administration has issued a number of documents related to the implementation of the CMAQ program. The first CMAQ guidance note issued by FHWA in 1992 specifically listed bicycle and pedestrian projects as eligible activities, both in their own right, and as part of the list of transportation control measures approved by the Clean Air Act as being beneficial to air quality. A subsequent guidance note again listed bicycle and pedestrian facilities as eligible activities, and notes that they are limited to an 80 percent federal share and 20 percent state match, unlike some other eligible activities which qualify for a higher federal share.

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e. Federal Lands Highways Program

Provision for pedestrians and bicycles is listed as an eligible activity for the use of highway funds allocated to the Federal land management agencies such as the National Park Service, U.S. Forest Service, Bureau of Land Management and Bureau of Indian Affairs. These agencies manage a considerable amount of public land over which highways travel. Of the nearly 14,000 miles of public road in Alaska over 2,600 are maintained by these federal agencies. As these funds are allocated to other Federal agencies, there is no matching requirement.

f. National Recreational Trails Fund

This small funding source was created to earmark funds for the development of motorized and non-motorized recreational trails, and was made subject to annual appropriation by Congress. In FFY 93, the first year of funding, \$15 million was appropriated for use nationwide. No funds were appropriated in FFY 94 or 95.

g. Scenic Byways

A small grant program was created by ISTEA to support the development of state and national scenic byways. Bicycle and pedestrian facilities developed as part of these projects and programs are eligible for the use of these funds. \$30 million was authorized for the grant program in the first three years of ISTEA, nationwide.

As of 1994, Alaska has only one state-designated scenic byway: the Seward Highway. In 1993 Alaska applied for, and received, a grant for a project at McHugh Creek. In late 1994, the state applied for a project at Bird Point. Both projects will enhance pedestrian activities at the sites.

h. Federal Transit Act

Projects such as shelters, parking, and lockers that provide access for bicycles to mass transportation facilities, or to install racks or other equipment for transporting bicycles on mass transportation vehicles are eligible for Federal Transit Administration funding under 49 U.S.C. 5309 (Capital Program, "Sections 3"); U.S.C. 5307 (Urbanized Area Formula Program, "Section 9"); U.S.C. 5310 (Elderly and Persons with Disabilities Program, "Section 16"); and U.S.C. 5311 (Nonurbanized Area Formula Program, "Section 18") of the Act. The Federal share for such projects is 90 percent. The remaining 10 percent must come from sources other than Federal funds or fare-box revenues.

Capital Program funds (49 U.S.C. 5309) are available annually by application from the FTA. Only State and Local governmental agencies are eligible. Urbanized Area Formula Program (U.S.C. 5307) funds are available to the Municipality of Anchorage. Both the Elderly and Persons with Disabilities Program (U.S.C. 5310) and the Nonurbanized Area Formula Program (U.S.C. 5311) are open to applications annually through DOT&PF.

i. Metropolitan Planning (PL)

Each state is authorized a small percentage of its funds for planning and research. A

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set portion of that, called Metropolitan Planning funds, is allocated to metropolitan areas for their transportation planning. With metropolitan defined as places with populations over 50,000, Anchorage is the only metropolitan area in Alaska. Minimum allocation states, like Alaska however, may use some of the PL funds for transportation planning outside the metropolitan areas. Alaska has developed a program to share its PL funds with other urban areas. In recent years PL funds have been used by Fairbanks and Juneau to develop or update Bicycle Plans for each community.

j. Section 402 - Safety

The highway safety program is a non-capital safety project grant program under which States may apply for funds for certain approved safety activities. There is a priority list of projects for which an expedited funding mechanism has been developed. In 1991, bicycle and pedestrian safety programs were added to this federal list of "most effective" or National Priority program areas. The "Section 402" program in Alaska is administered by the Highway Safety Planning Agency in the Department of Public Safety. Bicycle and Pedestrian Education and Safety programs identified in this plan are eligible to use Section 402 funds.

Alaska's Section 402 program received an extra \$2.9 million in FFY 95 than previous years. That's because Alaska does not have a motorcycle helmet law which conforms to federal law, as a "penalty" a portion of the transportation construction funds is diverted to the Section 402 program. If Alaska does not adopt a motorcycle helmet law, the "penalty" will double to \$5.8 million in FFY 96.

k. Spot Improvement Program

This would be based on a nationally-recognized Seattle program. DOT&PF will develop a program that meets Alaska's needs in which each region is allocated funds annually for the identification, design, and construction of small scale construction and signing projects to enhance bicycle and pedestrian access and safety. Typical improvements would include curb ramps, paved shoulders, connector paths, rechannelization, drain grate installation, railroad crossing improvements, bike storage and parking racks, signing and striping. Problem areas would be identified through cards distributed through municipalities, bike/trail clubs, bike shops, advocacy groups, and regional offices.

STATE SOURCES

State funding for bicycle and pedestrian facilities falls into two general categories: the capital budget and the operating budget. Before the state can spend any funds, including the federal funds it receives, the legislature must approve their use in the capital or operating budget.

1. Capital Budget

The capital budget is used to fund or provide state authorization to spend federal funds on all phases of construction projects, including the planning, environmental and location studies, designing, engineering, right-of-way acquisition, utility relocation as well as actual construction. This would include reconstruction,

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rehabilitation, safety and other projects that may take place after a capital improvement (road, airport, harbor, building, etc.) is first constructed.

a. State Funds as Federal Match

Most federal programs require that the state put up a portion of the total cost of the project. This state match must be appropriated by the legislature, usually out of the state's general fund revenues. Most federal programs prohibit the use of other federal funds for the match.

The ISTEA legislation set the match ratio for most of its programs at 80 percent federal, 20 percent state. States like Alaska, with high percentages of their lands in federal ownership or control, were given a break on the required match on many programs. The ratio varies with the amount of land under federal control. For Alaska in FFY 1995 the ratio was 90.97 percent federal, 9.03 percent state. Bicycle and pedestrian projects, however, are excepted from receiving the lower state match. 23 U.S.C. 217 specifically states that bicycle and pedestrian projects are to be funded at the 80/20 ratio.

b. Legislative Discretionary Funding

In the early 1980's when the State enjoyed high revenues from the North Slope oil fields the legislature funded many projects solely with state funds. But in recent years as State oil revenues declined, the legislature has been less free to commit 100% state funds for complete project funding. When the legislature passed the FY 95 budget, it appropriated only enough funds to meet the minimum required federal match. Barring any unforeseen windfalls, this practice can be expected to continue in the coming years.

c. Local Service Roads and Trails (LSR&T)

The Local Service Roads and Trails (LSR&T) program is not active; it has not been funded by legislature since the mid-eighties. With the enactment of ISTEA, most, if not all, of the types of projects formerly funded by the LSR&T program can now be funded using Federal Surface Transportation Program (STP) funds. The LSR&T was intended to "provide for the acquisition and construction of local service roads and trails that are not included in the approved federal-aid primary highway systems eligible for federal-state matching funds" (AS 19.30.111). As noted earlier, in Alaska STP funds now may be used on any public road - not just the former federal-aid system.

d. Trails, Footpaths and Campsites

This State program, also largely unfunded since the mid-eighties, authorizes funding for grants to eligible cities and boroughs for "trails, footpaths and shelter construction and maintenance," and to the Department of Transportation and Public Facilities for the "establishment and maintenance of footpaths, bridle paths, bicycle paths, ski trails, dog sled trails, motorized vehicle trails and other paths, and trails along certain designated existing highways, or when a highway, road or street is being constructed, reconstructed or relocated" (ASS 41.21.866). Many of the types of projects formerly funded by this program can be funded by the

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Transportation Enhancements program of ISTEA, or could be funded by the National Recreational Trails Fund if funded by Congress.

2. Operating Budget

The operating budget is used to fund the day-to-day general operating expenses of state government. As far as the bicycle/pedestrian program is concerned, the operating budget primarily funds the maintenance and operation of the state's transportation system. With a few exceptions, federal funds may not be used to maintain or operate the state transportation system. It falls upon the state to fully fund maintenance and operation of the facilities under its jurisdiction.

LOCAL SOURCES

The majority of facilities, provisions, and programs for bicyclists and pedestrians are implemented at the city and borough level, rather than the State or Federal level. Most projects are funded from a mixture of Federal, State and local funds, while maintenance is predominantly a State and local affair. Most Federal sources of funding require a certain level of State or local matching funds, and that project recipients assume the responsibility for the maintenance of the facilities constructed with these moneys.

DOT&PF has adopted the policy of requiring local governments or organizations to agree to maintain new facilities before they are constructed. Declining State revenues make it difficult for DOT&PF to take on new maintenance responsibilities.

PRIVATE SOURCES

Individuals and corporations can promote bicycling and walking in a number of ways, many of which will reap benefits for the individual or corporation as well as the community. Low-cost bicycle racks in convenient locations at retail establishments encourage customers to ride their bicycles and reduce the need for parking. Right-of-way donations for bike trails or pedestrian walkways sometimes open new access routes to businesses, opening new markets. Employee amenities such as showers, lockers and bicycle lockers reduce the need for vehicle parking while generally improving the employee's health and on the job performance. These and other actions should be encouraged and assisted whenever possible.

CLUBS / GROUPS / VOLUNTEERS

Nationally, bicycle rides and walking events are among the two greatest sources of funds for charitable organizations such as the American Lung Association and American Heart Foundation. A small number of these events have been used to generate funds for local programs and have been very successful.

Clubs, groups and volunteers take key roles in an effective bicycle and pedestrian program in a number of ways. One very effective area is in safety education. For several years Alaska bicycle clubs have sponsored safety education classes and seminars for their members and the general public. These programs should continue with whatever

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encouragement and assistance the department can provide.

Another area worth exploring is an Adopt-a-Trail program similar to the Adopt-a-Highway program now common in Alaska and other states. Since maintenance of trails/paths is a key concern, and state maintenance funds are drying up, this is an area where volunteers can help. Tasks can include:

- Litter pickup - collect litter along trails and rights-of-way. Bag for pickup by DOT&PF and/or local crews.
- Brushing - trim back bushes, limbs from trails. Clear brush around warning signs. Improve sight distances, improve safety from collisions, reduce possibility of assault by improving visibility.
- Sweeping - remove debris from trail. Improve safety by removing loose material that could precipitate skids, falls. Improve access for hard-wheeled wheelchairs, strollers.
- Hazard identification - note hazardous conditions on trail for maintenance crew repair/correction.
- Landscaping - some volunteers may wish to do minor landscaping around trails. Plant & tend flower beds, hedges, etc.

ADDENDUM A

ALASKA BICYCLE AND PEDESTRIAN PLAN PUBLIC PARTICIPATION SUMMARY

State Bicycle/Pedestrian Coordinator Robert Laurie held public meetings in Anchorage May 7, Fairbanks May 9, and Juneau May 12, 1994, to develop the Alaska Bicycle and Pedestrian Plan, an element of Vision: 2020, Alaska's Long-Range Statewide Transportation Plan. This is a summary of the comments received at those meetings, from comments received at the Anchorage Bike Day May 22, from an informal meeting with Sitka bicyclists September 8, and from letters, fax, phone and personal contacts.

DOT&PF was assisted at the Anchorage meeting by independent facilitator Nicole Faghin of Reid Middleton, Inc. Excerpts from her meeting summary are included here.

A wide variety of interests were represented at the meetings. In addition to strong turnouts by bicyclists (including mountain, commuter, and recreational road and trail riders) walkers, equestrians, snowmobilers, snowshoers, runners, skiers, and the physically challenged were represented.

The following list is a distillation of the comments received. We have grouped the comments by general categories and edited them for clarity and to reduce redundancy. This material was considered in the development of the Alaska Bicycle and Pedestrian Plan.

Problems / Opportunities

At the meetings in May the participants were asked a series of questions intended to get them to identify problems now inhibiting bicycle/pedestrian use, and to identify opportunities to improve conditions for bicyclists and pedestrians.

The questions:

- Why isn't your community bicycle friendly and walkable?
- What are the barriers? (both physical and institutional)
- What is stopping people from bicycling and walking more?
- What opportunities exist in Anchorage (Fairbanks, Juneau)? In the rest of the state?

1. Safety

- Narrow roads with narrow lanes & shoulders make it difficult for motorists to safely pass cyclists.
- Planning for bicycle/pedestrian uses should consider different needs of the various users, for example: safety for walkers from high-speed bicyclists.

2. Lack of Direct Facilities

- Lack of direct routes suitable for bicycles and pedestrians.

- Lack of bikeable shoulders on rural highways.
- Existing trail systems must be improved to provide continuous links.

3. Barriers to Bicycle or Pedestrian Use

- Not enough routes or paths suitable for bicyclists or pedestrians.
- Lack of sidewalks, and those that do exist are in poor condition.
- Narrow roads with no provisions for bicyclists or pedestrians.
- We need more connections between trails, paths and lanes.
- Poor access to boat harbors and other public facilities for bicyclists & pedestrians.

4. Design

- Paths are built too close to road. In wet weather, pedestrians and bicyclists are splashed by passing motor vehicles.
- Pedestrians/bicyclists often are required to cross protected right-turn lanes to get to crossing signal button. Motorists fail to slow down or stop for crossing pedestrians.
- Poor curb cuts. Some are too narrow, or angled to direct bicyclists into traffic.
- Some drainage grates are not bicycle friendly, with openings that trap narrow wheels, or are not flush with pavement surface.
- Poor or non-existent signs along bicycle paths/lanes.
- Where roads are closed to bicyclists or pedestrians, better signs are needed to direct bicyclists to nearby trails.
- Lack of signs warning motorists making protected right turns to watch for crossing pedestrians.
- Expressways and freeways designed with no or poor provisions for bicyclists.
- DOT&PF attitude towards bicycles & alternative modes of transportation as an "embellishment" rather than basic, legitimate transportation.
- Lack of design consideration for bicycle & pedestrian commuter, training and multiple-use recreation needs.
- Bicycle-& pedestrian-friendly designs missing in road projects.
- Design engineers appear to be ignorant of the needs of both pedestrians and bicyclists.

5. Poor Design for Winter Pedestrians

- Planning in Alaska should take into account issues pertaining to winter use of trails, streets, or sidewalks.
- Lack of northern engineering in Alaska road & street design & construction - specifically, roads appear to be designed for southern California with no place for snow storage except bicycle or pedestrian ways.

6. Maintenance

- Poor shoulder, bike lane, path maintenance. Snow piled on bike lanes, trails and sidewalks, blocking use. Bike trails and lanes not swept regularly, allowing gravel, broken glass and other debris to create hazards for cyclists.
- Poor maintenance practices prevent sidewalk use 365 days a year, especially in winter.
- Loose gravel piles at intersections leftover from winter melt. Gravel not removed quickly enough after snow melts in spring.
- Bikeways in disrepair; potholes, paths unrepaired after utility work.
- Crosswalks not painted routinely.
- Traffic signal pedestrian crossing buttons in disrepair or missing. Signs indicating button location or button direction (which button controls which crossing) missing or poorly placed.
- Snow berms block access to signal buttons, pedestrian crossings.
- Pedestrians forced into streets because of lack of snow removal.

7. Security

- Separated trails offer hiding places for potential assailants.
- Poorly brushed trails hide warning signs, restrict views around corners.

8. Parking

- Lack of secure parking or storage places to leave bikes while shopping or working.
- No bike lockers available in wet or snowy climates.

9. Lack of Education

- Uneducated bicyclists & motorists.
- Ignorance of rules and regulations, rights and responsibilities.
- Bicyclists often ride on wrong side of road.

10. Lack of Enforcement

- Motorists fail to stop at pedestrian crossings.
- Bicyclists often ride on wrong side of road.

11. Lack of Encouragement

- Lack of Park & Ride lots with secure parking areas for bicycles.
- Lack of bike racks on buses.
- DOT&PF fails to provide alternative routes/paths for bicyclists/pedestrians during road construction.

- Bicycles/pedestrians have low priority when planning, designing and constructing transportation systems. Any discussion of bicycle/pedestrian issues should recognize that many people rely upon bicycles/walking for their form of commuting to work.
- Trails and facilities for bicycles/pedestrians should not be planned/designed only for recreational purposes but should consider these uses as legitimate forms of transportation.

12. Use Conflicts

- Hikers vs. mountain biker conflicts on some back country trails.
- Snow machines running at excessive speeds or in packs create unsafe conditions for winter users of trails, (but also pack down paths so they can be used by pedestrians).
- Paved paths limit use by other users such as horses, joggers. Firmly-packed gravel paths could be used by bicyclists and other users.
- The many different types of trail users, such as snowmobilers, equestrians, dog sledders, pedestrians, bikes, joggers, in-line skaters, etc., should be considered when designing trails and developing signage systems for those trails and bicycle/pedestrian facilities.

13. Zoning / Land Use

- Residential/retail/commercial areas spread out - local zoning is designed for cars, not non-motorized transportation or transit.

14. Bureaucracy

- It's difficult to find out who to contact about problems.
- Money is not allocated to bicycle/pedestrian facilities. Legislative barriers to greater allocation of resources to non-motorized transportation.
- More input needed into local trails planning.
- More emphasis needs to be placed upon ensuring that bicycle/pedestrian facilities that are planned or designed are actually constructed.

15. Specific Problems

- Auke Recreation area danger mile - narrow highway with no shoulders.
- Brotherhood Bridge, narrow lanes, sidewalk.
- Narrow, dangerous path above Channel Marine.
- Heavy traffic along Tongass Avenue creates numerous hazards for bicyclists.
- No bike path/lane from Main St. to Douglas bridge.
- No crossings on Douglas side of Juneau-Douglas bridge.
- Bikeways in disrepair; potholes, paths unrepaired after utility work, in particular: College Road path near Beaver Sports.

Strategies and Actions

Another question was designed to develop a list of possible strategies or actions to overcome the problems or take advantage of any opportunities in order to realize the vision.

The question:

- What needs to change to make Anchorage (Fairbanks, Juneau) and the rest of the state more bicycle friendly and walkable?

1. Planning, Design, Engineering

- When planning transportation systems and land use development, include consideration of non-motorized vehicles and pedestrians. Non-motorized transportation should receive full consideration as a legitimate form of transportation. Develop convenient, safe routes to all places (schools, retail, office, harbors, etc.).
- Remove hurdles or barriers to non-motorized transportation, e.g. narrow bridges, dead-end bike lanes/trails, lack of convenient pedestrian crossings on wide thoroughfares.
- Include provisions for bicycles and pedestrians along every road.
- If bicycle/pedestrian facilities are not constructed concurrent with a municipal street project, sufficient right-of-way should be acquired and dedicated for later construction.
- Identify highest use corridors and prioritize bicycle/pedestrian/multi-use projects.
- Establish task force of state & local individuals to establish bicycle/pedestrian commuter routes & standards.
- Identify and preserve existing & future corridors for non-motorized transportation.
- Bike lanes should be given priority over separated bike trails, but provision of bike lanes on the roadway should not preclude construction of separated bike trails if warranted. Conversely, the existence of a separated bike trail should not preclude addition of bike lanes along adjacent roadways if warranted.
- Separated bike trails generally serve more than just bikes; consider referring to separated trails as "multi-purpose side paths" to recognize other users.
- Plan, design and build separate facilities for high-speed bicyclists and pedestrians.
- Design and build facilities that are low maintenance.
- Require six foot paved shoulders on paved rural highways.
- Design for community desires.

2. Pavement Markings

- Clearly mark with pavement paint and signs all pedestrian and bicycle crossings.

3. Signs / Signals

- Set traffic lights for cyclists.
- Make spot improvements (bike sensors at intersections, lights, signs, controlled access, etc.).

4. Special Designs for Winter Use

- Plan and design for ever-increasing winter use of bicycles.
- Revise design standards to set-back sidewalks from roadways, allow ditch for winter snow collection, keep sidewalks clear of snow.
- Develop & implement a local transportation plan that includes all modes of transportation, include winter city design criteria.

5. Enforcement

- Enforce all violations, by motorists, bicyclists, pedestrians and other users, as well as those who block or damage bicycle or pedestrian ways (illegal parking, construction equipment, gravel or debris in ways).
- Review and amend local ordinances to ensure they consider bicyclists & pedestrians.
- Make cyclists accountable by citing them for infractions of traffic laws.
- Make a portion of ISTEA funds available to municipalities to hire bicycle cops.

6. Encouragement

- Provide safe, covered bicycle parking at public buildings such as city parking garages, state buildings, etc.
- Convenience - Directness & Connection.
- Encourage bicycle/pedestrian use. Encourage bicycle tourism. Maximize use of recreational/tourist loops for summer & winter use.
- Conduct continual public relations campaigns to keep safe cycling in the public eye, including frequent editorials, radio & TV PSAs. Develop public information campaign for tolerance and safe use of trails.
- Promote safe cycling at times when air quality is diminished - to encourage people not to use motor vehicles.
- Improve maintenance. Sweep, pack or plow trails & sidewalks concurrently with roads. Clear paths in winter for pedestrian use.
- Add racks for bikes on public transit buses.
- All public facilities should be designed to accommodate bikes and other non-motorized users. Transit stations, rail, airport and ferry terminals should provide bike storage.
- Encourage Bicycle/Transit combo's by providing parking racks or storage lockers for bikes at park & ride areas, as well as bike racks on buses.
- Provide park & ride lots on outskirts of central business district to encourage alternative transportation choices, avoid destruction of historic downtown structures.

7. Education

- A campaign to educate the public about safe bicycling practices should begin now. Enclose a safe cycling pamphlet with motor vehicle renewals or permanent fund dividends. Hand out material to school children, purchase safe cycling spots on radio and TV and use PSAs. Place ads in newspapers. Include signage as part of public information campaign.
- Review existing public service "spots" for appropriateness.
- Approach user groups to brainstorm "educational wish list" for future public service announcements.
- Bicycle safety programs for schools should be developed. Make available to teachers a list of resources available to educate kids on bicycle/pedestrian safety.
- Cyclists should make every effort to be visible to motorists and to use good sense in their choice of routes.
- Educate DOT&PF and local planning/design/construction personnel regarding non-motorized transportation use & safety; e.g. tour of bad trails, bike to a BBQ, bike to work.
- Train engineers to design facilities for pedestrians, bicyclists and other alternative transportation.

8. Funding

- Register cyclists (or bicycles), increase the state tax on fuels.
- Provide federal funds to local agencies.
- Amend ISTEA to allow Federal funds to be used for maintenance.
- Distribute federal funds in accordance with Borough Transportation Program plan, share more federal funds with local agencies.
- Pursue all available funding.
- Develop fair system to allocate funding between communities.
- Use maximum possible amounts of state and federal moneys to promote, develop and maintain bicycling facilities, both off-road (separated trails, paths) and on-road (bike lanes, wide shoulders). Both are necessary for different uses and users.
- Ensure that designated non-motorized funds are used on non-motorized projects/facilities; if a problem develops on original project, use alternative non-motorized selections.
- Tax fuels to represent the true cost of driving.
- Don't subsidize motor-vehicle use by providing free car parking.
- Develop system to charge uniform user fees (real costs for all).

9. Bicycle / Pedestrian Coordinator

- Improve walker/bicyclist input to transportation planning and project development by appointing a full-time Bicycle/Pedestrian Coordinator at the Statewide level. In

addition, identify a contact person, a bicycle/pedestrian coordinator, at each of the department's regions and at the local (municipal) level.

- Coordinate trail development between all agencies; federal, state, local, and non-profit.
- Bicycle/Pedestrian coordinator (or some other position) should review all transportation projects to ensure they include safe, well-designed bicycle/pedestrian facilities.
- Coordinate existing bicycle facilities with future plans so a bicycle map of usable trails can be published.
- Survey bicycle/pedestrian use.
- Survey visiting cyclists to determine needs, impressions of local facilities, ideas, suggestions for improvements.
- Classify bike routes, systems & signage.
- Existing and potential pedestrian corridors should be identified and facilities constructed to meet demand.
- Contact local bike clubs for resources on current riding conditions and trouble spots.

10. Legislative / Local Ordinances

- Develop a trip reduction ordinance for DOT&PF and municipal transportation planning/design staff.
- Close downtown Juneau to motorized traffic.
- Change ordinances to protect bicyclists.
- Change zoning/land use to encourage like uses - human power transportation (HPT)
- Disallow design exemptions unfavorable to bicycle/pedestrians, etc.
- Regulate conduct on roads.
- Designated seats on Planning & Zoning, etc. for bike/peds.
- Mandatory helmet law for those under 18 - use Arizona's new law as a model - parents fined \$50.00 per violation.
- Change state laws & regulations to require every transportation project to include non-motorized multi-user routes.
- Require DOT&PF to follow local trail plans and pedestrian standards (i.e. improve coordination with local plans).
- Adopt legislation that prohibits operators or occupants of motor vehicles from harassing bicyclists.
- Pass legislation requiring that when planning, designing and constructing highways, provide for the safe use of those highways by bicycles as a basic means of transportation.
- Pass legislation requiring that DOT&PF develop facilities and programs that encourage the safe use of bicycles as a basic means of transportation.

11. Controlled Access Use

- Allow bicycle use of controlled access roads.
- Pass legislation to open all highways, including those presently closed to bicycles, to bicycle use.
- Open Egan Expressway to bicycle commuters.
- Review current signage on bicycle-prohibited highways to ensure adjacent bike routes are clearly marked for visiting cyclists.

12. Action

- Improve downtown Fairbanks to University connection.
- Construct clear, unobstructed pedestrian walkway along with Ketchikan Tongass Ave. project.
- Impose moratorium on road construction not meeting HPT standards.
- Move ferry terminal closer than 15 miles from Juneau city center.
- Don't bother paving lightly traveled rural roads (e.g. McCarthy Road, Petersville Road, Denali Highway, Elliott, Steese, Taylor and Denali Park road), use the funds on high use urban roads and major highways.
- Convert old Copper River Railroad bed to trail, not highway.
- Construct separated bike path along College Road between Beaver Sports and Fish & Game.
- Use funds that would go to Chena River bike path for higher use transportation corridors such as University Avenue and College Road.
- Construct bike lane for University Avenue Bridge in Fairbanks.

ADDENDUM B

BICYCLE-PEDESTRIAN COORDINATOR DUTIES

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) broadly described the duties of State Bicycle and Pedestrian Coordinators. This job description is found in 23 U.S.C. Section 217(d):

STATE BICYCLE AND PEDESTRIAN COORDINATORS. Each State receiving an apportionment under sections 104(b)(2) and 104(b)(3) of this title shall use such amount of the apportionment as may be necessary to fund in the State department of transportation a position of bicycle and pedestrian coordinator for promoting and facilitating the increased use of non-motorized modes of transportation, including developing facilities for the use of pedestrians and bicyclists and public education, promotional, and safety programs for using such facilities.

The full text of 23 U.S.C. 217 is included in Addendum C.

The Bicycle/Pedestrian Coordinator is a relatively new position in the Alaska Department of Transportation and Public Facilities. The position was appointed after enactment of the Intermodal Surface Transportation Efficiency Act of 1991. Initially, the position was located in the Division of Engineering and Operations Standards at DOT&PF Headquarters in Juneau. One of the first actions of the position was to update the Alaska Highway Preconstruction Manual to include provisions for design of bicycle facilities in road projects. The department adopted, with minor changes, the AASHTO bicycle facility design guidelines.

Little more was done with the position in 1992 and 1993 as it was assigned to different personnel first in the Commissioner's Office of Strategic Management, Policy and Planning, then through several departmental reorganizations to the Division of Plans, Programs and Budget, later re-named the Division of Statewide Planning. In the Spring of 1994 work began in earnest on the Alaska Bicycle/Pedestrian Plan.

The individual assigned as the Alaska Bicycle/Pedestrian Coordinator is currently expected to devote about one-quarter of his/her time to bicycle/pedestrian duties. ISTEA requires only that each state assign an individual to the position, it sets no minimum allocation of resources. The States may use STP funds to fund the position and its programs on an 80/20 match.

Shortly after enactment of ISTEA in late 1991, the FHWA distributed the following guidance suggesting the typical duties of state bicycle & pedestrian coordinators, prepared by the Bicycle Institute of America.

- A. Plan and manage new programs in the areas of non-motorized accommodations, safety, educational materials, enforcement materials, courses and recreation.

- B. Assist in development of State and MPO level bicycle and pedestrian facility plans.
- C. Develop safety and promotional information through printed materials, videos, TV spots, press releases, interviews, and promotional activities.
- D. Develop guidelines to assist all metropolitan areas in developing a comprehensive pedestrian/bicycle plan and provide assistance to local jurisdictions in the development of plans and programs.
- E. Develop (or prepare) printed materials such as quarterly newsletters, maps showing bicycle and pedestrian routes, safety information, and answer inquiries from citizens.
- F. Arrange for special displays and events, including conferences, workshops, and other public and technical information presentations.
- G. Develop (if necessary), review, and update State's Comprehensive Bicycle and Pedestrian Transportation Plan.
- H. Serve as principal contact with Federal, state and local agencies, the press, citizen organizations, and individuals on matters relating to bicycles and pedestrians.
- I. Coordinate and maintain budget and forecast budgetary needs.
- J. Review projects for conformity with design standards and the state's comprehensive plan as it relates to bicycle and pedestrian facilities.
- K. Identify legislative requirements and recommend appropriate changes in state law to facilitate maximum utilization of the bicycle and pedestrian modes for transportation purposes.
- L. Maintain current knowledge of sources of funding for program. Work with appropriate offices to fully integrate bicycle and pedestrian projects in programming decisions.
- M. Serve as bicycle and pedestrian advisory committee member (if applicable).
- N. Develop priorities for special studies in areas such as:
 - 1. cause of accidents
 - 2. locations of accidents
 - 3. effectiveness of new facility designs
 - 4. needs analysis
 - 5. barrier removal analysis
 - 6. origin and destination surveys
- O. Monitor pedestrian and bicycle use, provide recommendations for system improvement and develop usage data.

ADDENDUM C

BICYCLE AND PEDESTRIAN LAWS AND REGULATIONS

Federal Statutes Title 23 United States Code

Sec. 217. Bicycle transportation and pedestrian walkways

(a) USE OF STP AND CONGESTION MITIGATION PROGRAM FUNDS.--

Subject to project approval by the Secretary, a State may obligate funds apportioned to it under sections 104(b)(2) and 104(b)(3) of this title for construction of pedestrian walkways and bicycle transportation facilities and for carrying out non-construction projects related to safe bicycle use.

(b) USE OF NATIONAL HIGHWAY SYSTEM FUNDS.-- Subject to project approval by the Secretary, a State may obligate funds apportioned to it under section 104(b)(1) of this title for construction of bicycle transportation facilities on land adjacent to any highway on the National Highway System (other than the Interstate System).

(c) USE OF FEDERAL LANDS HIGHWAY FUNDS.-- Funds authorized for forest highways, forest development roads and trails, public lands development roads and trails, park roads, parkways, Indian reservation roads, and public lands highways shall be available, at the discretion of the department charged with the administration of such funds, for the construction of pedestrian walkways and bicycle transportation facilities in conjunction with such trails, roads, highways, and parkways.

(d) STATE BICYCLE AND PEDESTRIAN COORDINATORS.-- Each State receiving an apportionment under sections 104(b)(2) and 104(b)(3) of this title shall use such amount of the apportionment as may be necessary to fund in the State department of transportation a position of bicycle and pedestrian coordinator for promoting and facilitating the increased use of non-motorized modes of transportation, including developing facilities for the use of pedestrians and bicyclists and public education, promotional, and safety programs for using such facilities.

(e) BRIDGES.-- In any case where a highway bridge deck being replaced or rehabilitated with Federal financial participation is located on a highway, other than a highway access to which is fully controlled, on which bicycles are permitted to operate at each end of such bridge, and the Secretary determines that the safe accommodation of bicycles can be provided at reasonable cost as part of such replacement or rehabilitation, then such bridge shall be so replaced or rehabilitated as to provide such safe accommodations.

(f) FEDERAL SHARE.-- For all purposes of this title, construction of a pedestrian walkway and a bicycle transportation facility shall be deemed to be a highway project and the Federal share payable on account of such construction shall be 80 percent.

(g) PLANNING.-- Pedestrian walkways and bicycle transportation facilities to be constructed under this section shall be located and designed pursuant to an overall plan to be developed by each metropolitan planning organization and State and incorporated into their comprehensive annual long-range plans in accordance with sections 134 and 135 of this title, respectively. Such plans shall provide due consideration for safety and contiguous routes.

(h) USE OF MOTORIZED VEHICLES.-- No motorized vehicles shall be permitted on trails and pedestrian walkways under this section, except for--

- (1) maintenance purposes;
- (2) when snow conditions and State or local regulations permit, snowmobiles;
- (3) when State and local regulations permit, motorized wheelchairs; and
- (4) such other circumstances as the Secretary deems appropriate.

(i) TRANSPORTATION PURPOSE.-- No bicycle project may be carried out under this section unless the Secretary has determined that such bicycle project will be principally for transportation, rather than recreation, purposes.

(j) BICYCLE TRANSPORTATION FACILITY DEFINED.-- For purposes of this section, a "bicycle transportation facility" means new or improved lanes, paths, or shoulders for use by bicyclists, traffic control devices, shelters, and parking facilities for bicycles.

Alaska Bicycle Statutes

Sec. 28.10.011. Vehicles subject to registration.

Every vehicle driven, moved, or parked upon a highway or other public parking place in the state shall be registered under this chapter except when the vehicle is

- (5) moved by human or animal power;

Sec. 28.40.100. Definition for title.

(a) Unless otherwise specifically defined or unless the context otherwise requires, in this title and in regulations adopted under this title

- (4) "driver" means a person who drives or is in actual physical control of a vehicle;
- (6) "highway" means the entire width between the boundary lines of every way that is publicly maintained when a part of it is open to the public for purposes of vehicular travel, including but not limited to every street and the Alaska state marine highway system but not vehicular ways or areas;
- (7) "motor vehicle" means a vehicle which is self-propelled except a vehicle moved by human or animal power;
- (11) "owner" means a person, other than a lien holder, having the property in or title to a vehicle, including but not limited to a person entitled to the use and possession of

a vehicle subject to a security interest in another person, but exclusive of a lessee under a lease not intended as security;

(13) "roadway" means that portion of a highway designed or ordinarily used for vehicular travel, exclusive of the sidewalk, berm, or shoulder, even though the sidewalk, berm, or shoulder is used by persons riding bicycles or other human powered vehicles; and in the event that a highway includes two or more separate roadways, the term refers to each roadway separately but not to all such roadways collectively;

(15) "traffic" means pedestrians, ridden or herded animals, vehicles, and other conveyances either singly or together while using a highway or vehicular way or area that is open to public use for purposes of travel;

(17) "vehicle" means a device in, upon, or by which a person or property may be transported or drawn upon or immediately over a highway or vehicular way or area except devices used exclusively upon stationary rails or tracks; and

(18) "vehicular way or area" means a way, path, or area, other than a highway or private property, that is designated by official traffic control devices or customary usage and that is open to the public for purposes of pedestrian or vehicular travel, and which way or area may be restricted in use to pedestrians, bicycles, or other specific types of vehicles as determined by the department or other agency having jurisdiction over the way, path, or area.

Alaska Bicycle & Pedestrian Regulations

13 AAC 02.095. USE OF DIVIDED AND CONTROLLED-ACCESS HIGHWAY RESTRICTIONS.

(b) When the Department of Transportation and Public Facilities or a municipality, with respect to a controlled-access highway under its jurisdiction, prohibits or limits the use of the highway to certain types of vehicles or traffic, it must erect and maintain signs on the highway notifying drivers of the limitations.

13 AAC 02.150. PEDESTRIAN OBEDIENCE TO TRAFFIC CONTROL DEVICES AND TRAFFIC REGULATIONS.

(a) Pedestrians must comply with traffic and pedestrian-control signals as provided in secs. 10 and 15 of this chapter and are subject to the applicable restrictions in this chapter.

(b) No pedestrian may enter or remain upon a bridge or its approach beyond the bridge signal, gate, or barrier after a bridge-operations signal indication has been given; nor may a pedestrian pass through, around, over, or under a crossing gate or barrier at a railroad grade crossing or bridge while the gate or barrier is closed or is being opened or closed.

13 AAC 02.155. PEDESTRIAN RIGHT-OF-WAY IN SAFETY ZONES.

- (a) Except as provided in sec. 195 of this chapter, when traffic-control signals are not in place or not in operation, the driver of a vehicle shall yield the right-of-way to a pedestrian who is on a sidewalk, vehicular way or area, or who is crossing a roadway within a crosswalk when the pedestrian is upon the half of the roadway as to be in danger.
- (b) No pedestrian may leave a curb or other place of safety and walk or run into the path of a vehicle which is so close as to constitute an immediate hazard.
- (c) When a vehicle is stopped at a marked crosswalk or at an unmarked crosswalk at an intersection to permit a pedestrian to cross the roadway, no driver of another vehicle approaching from the rear may overtake and pass the stopped vehicle.
- (d) Pedestrians shall move, whenever practicable, upon the right half of the crosswalk.
- (e) No vehicle may be driven through or within a safety zone.

13 AAC 02.160. CROSSING AT OTHER THAN CROSSWALKS.

- (a) A pedestrian crossing a roadway at a point other than within a marked crosswalk or within an unmarked crosswalk at an intersection shall yield the right-of-way to all vehicles upon the roadway, except as provided in sec. 260(d) of this chapter.
- (b) No pedestrian may cross a roadway at a point where a pedestrian tunnel or overhead pedestrian crossing has been provided and which is accessible at road level at or near the point of crossing, unless a marked crosswalk is also provided at that point. If a pedestrian overpass or tunnel is not accessible and if no marked crosswalk is provided, a pedestrian crossing the roadway must yield the right-of-way to all vehicles on the roadway which are so close as to constitute a hazard.
- (c) Between adjacent intersections in a business or residence district in which traffic-control signals are in operation, no pedestrian may cross except in a marked crosswalk.
- (d) No pedestrian may cross a roadway intersection diagonally or otherwise than at a right angle unless authorized by an official traffic-control device. When authorized to cross diagonally, pedestrians must cross in accordance with the official traffic-control device.
- (e) No pedestrian may cross a roadway where an official traffic control device specifically prohibits the crossing.
- (f) Except as provided in (d) of this section, a pedestrian must cross a roadway at a right angle to the roadway or by the shortest route to the opposite side of the roadway.

13 AAC 02.175. PEDESTRIANS ON HIGHWAYS.

(a) Where a sidewalk is provided and its use is practicable, a pedestrian may not walk upon an adjacent roadway except when crossing the roadway.

(b) Where a sidewalk is not available, a pedestrian walking upon a highway shall walk on a shoulder as far as practicable from the edge of the roadway. Where neither a sidewalk nor a shoulder is available, a pedestrian walking on a highway shall walk as near as practicable to the outside edge of the highway and , if walking along a two-way roadway, shall walk only on the left side of the roadway. No pedestrian may walk on a controlled-access highway except in an emergency.

(c) Repealed 6/28/79

(d) No pedestrian may be upon or along a roadway in such a manner as to create an unreasonable risk of danger to himself or interfere with the normal flow of traffic.

(e) No pedestrian may sleep or loiter upon a highway or, without lawful permit, obstruct free passage upon a highway.

13 AAC 02.180. PEDESTRIANS SOLICITING RIDES OR BUSINESS.

No person may solicit a ride in a manner which distracts a driver's attention, nor may a pedestrian upon a highway solicit employment, business, or contributions from the occupant of a vehicle.

13 AAC 02.190. BLIND PEDESTRIAN DEVICES AND RIGHT-OF-WAY.

(a) Every driver of a vehicle shall yield the right-of-way to a blind pedestrian carrying a visible white cane or accompanied by a guide dog.

(b) A person who is not legally blind may not use a white cane or a guide dog for the purpose of securing the right-of-way provided by this section.

13 AAC 02.195. PEDESTRIANS YIELD TO AUTHORIZED EMERGENCY VEHICLES.

(a) A pedestrian shall yield the right-of-way upon the approach of an authorized emergency vehicle making use of an audible signal as provided in 13 AAC 04.210(d), or a visual signal as provided in 13 AAC 04.090 or upon the approach of a vehicle making use of a flashing blue light as provided in 13 AAC 04.100.

(b) This section does not relieve the driver of an authorized emergency vehicle or a vehicle displaying a flashing blue light from the duty to exercise care to avoid colliding with a pedestrian.

13 AAC 03.155. PEDESTRIAN RIGHT-OF-WAY IN SAFETY ZONES.

- (a) Except as provided in 13 AAC 02.195, when a traffic-control signal is not in place or not in operation, the driver of a commercial motor vehicle shall yield the right-of-way to a pedestrian who is on a sidewalk, in a vehicular way or area, or who is crossing a roadway within a crosswalk and who is upon the same half of the roadway upon which the commercial motor vehicle is traveling or is approaching so closely from the opposite half of the roadway as to be in danger.
- (b) A pedestrian may not leave a curb or other place of safety and walk or run into the path of a commercial motor vehicle that is so close as to constitute an immediate hazard.
- (c) When a motor vehicle is stopped at a marked crosswalk or at an unmarked crosswalk at an intersection to permit a pedestrian to cross the roadway, the driver of a commercial motor vehicle approaching from the rear may not overtake and pass the stopped vehicle.
- (d) A pedestrian shall move, whenever practicable, upon the right half of the crosswalk.
- (e) A commercial motor vehicle may not be driven through or within a safety zone.

13 AAC 02.385. APPLICABILITY OF REGULATIONS TO BICYCLES.

- (a) Every person operating a bicycle upon a roadway has all the rights and is subject to all the duties applicable to the driver of any other vehicle as set out in this chapter, in addition to special regulation in secs. 385 - 420 of this chapter, except as to those provisions of this chapter which by their nature have no application.
- (b) No person may violate the provisions of secs. 385 - 420 of this chapter. The parent or guardian of a child may not authorize or knowingly permit a child to violate a provision of this chapter.
- (c) When signs are erected indicating that no right, left, or U-turn is permitted, no person operating a bicycle may disobey the direction of the sign unless first pulling to the extreme right or shoulder of the road, dismounting and making the turn as a pedestrian.

13 AAC 02.395. RIDING ON BICYCLES AND CERTAIN NON-MOTORIZED CONVEYANCES.

- (a) Repealed 6/28/79.
- (b) No person operating a bicycle upon a highway may carry a person other than the operator, unless the bicycle is equipped with a seat for the passenger, except that an adult rider may carry a child securely attached to his person in a backpack or sling.
- (c) No person operating a bicycle or other non-motorized conveyance may attach, hold on by hand or otherwise secure the bicycle or conveyance or himself to another vehicle so as to be towed or pulled.
- (d) A person operating a bicycle upon a highway shall maintain control of the bicycle and shall at all times keep at least one hand upon the handlebars of the bicycle.

(e) No person may operate a unicycle, coaster, roller skates, or a similar device on a roadway.

(f) This section does not apply upon a roadway closed to motorized vehicle traffic.

13 AAC 02.400. RIDING BICYCLES ON ROADWAYS AND BICYCLE PATHS.

(a) A person operating a bicycle upon a roadway shall ride as near to the right as practicable and shall give way to the right as far as practicable to a motor vehicle proceeding in the same direction when the driver of the motor vehicle gives audible signal.

(b) Persons riding bicycles on a roadway may not ride more than two abreast except on paths or parts of roadways set aside for the exclusive use of bicycles. Persons riding bicycles two abreast may not impede traffic and, in laned roadway, shall ride within the farthest right lane.

(c) When a shoulder of the highway is maintained in good condition, an operator of a bicycle shall use the shoulder of the roadway.

(d) A person operating a bicycle on a trail, path, sidewalk, or sidewalk area shall

- (1) exercise care to avoid colliding with other persons or vehicles;
- (2) give an audible signal before overtaking and passing a pedestrian; and
- (3) yield the right-of-way to any pedestrian.

(e) Repealed 6/28/79 (Mandatory side path rule.)

(f) A person riding a bicycle intending to turn left shall, unless he dismounts and crosses as a pedestrian, comply with the provisions of sec. 200 of this chapter. The operator of a bicycle must give a signal by hand and arm continuously during the last 100 feet traveled unless the hand is needed in the control or operation of the bicycle. When stopped to await an opportunity to turn, a hand and arm signal must be given continuously by the operator.

(g) No person may ride a bicycle upon a sidewalk in a business district or where prohibited by an official traffic-control device.

(h) No bicycle race may be conducted upon a roadway, except as provided under AS 05.35.

13 AAC 02.420. PARKING OF BICYCLES.

- (a) No person may park a bicycle on a street or sidewalk in a manner which obstructs pedestrian traffic or the parking and driving of motor vehicles.
- (b) No person may secure a bicycle to any of the following publicly owned facilities:
 - (1) fire hydrants;
 - (2) police and fire callboxes;
 - (3) electric traffic signal poles;
 - (4) stanchions or poles located within bus zones or stands;
 - (5) stanchions or poles located within 25 feet of an intersection; or
 - (6) trees under 10 inches in diameter.
- (c) A bicycle parked on a highway must comply with the provisions of this chapter regulating the parking of vehicles.

13 AAC 02.487. DRIVING ON SIDEWALK.

No person may drive a vehicle on a sidewalk or sidewalk area other than upon a permanent or temporary driveway, except as a municipality allows the riding of bicycles on sidewalks outside of a business district.

13 AAC 02.560. APPLICATION OF TRAFFIC REGULATIONS.

The traffic regulations apply exclusively to the equipping, condition, movement or operation of a vehicle, bicycle, motorcycle, motor-driven cycle, person or animal upon a highway or a state-operated and maintained ferry facility except where a limited application or a different place is specifically referred to in a section.

13 AAC 02.482. LIMITED USE OF VEHICULAR WAYS AND AREAS.

- (a) No pedestrian, rider of a bicycle, or driver of a vehicle may travel on a vehicular way or area as defined in 13 AAC 40.010 when it is designated for use by a different mode of travel than that used by the pedestrian, rider of a bicycle, or driver of a vehicle.
- (b) A driver of a non-motorized vehicle traveling upon a vehicular way or area shall, regardless of whether an official traffic-control device is present, yield the right-of-way in the manner specified in sec. 130(c) of this chapter to any traffic using a roadway, driveway, or vehicular way or area on which motor vehicle traffic is authorized.

13 AAC 04.004. SALE OR USE OF EQUIPMENT.

- (c) No person engaged in the business of selling bicycles at retail may sell a bicycle unless the bicycle has an identifying number permanently stamped or cast on its frame.

13 AAC 04.320. HEADLIGHTS.

(c) A bicycle, when ridden at the times when lights are required under 13 AAC 04.010, must be equipped with at least one light in front of the bicycle, emitting white light visible from a distance of at least 500 feet in front of the bicycle under normal atmospheric conditions.

13 AAC 04.325. TAILLIGHTS.

(a) A bicycle must be equipped with a taillight which displays a red light visible 500 feet to the rear of the bicycle.

13 AAC 04.335. REFLECTORS.

(b) Every bicycle, when ridden at the time when lights are required under 13 AAC 04.010, must be equipped with a red reflector on the rear of the bicycle and reflective material visible from the sides of the bicycle meeting the visibility requirements of 13 AAC 04.030(a). Nothing in this subsection prohibits the use of additional reflectors or reflective materials upon a bicycle.

13 AAC 04.340. BRAKES.

(b) Every bicycle must be equipped with a brake system, maintained in good working condition, which will enable its driver to stop the bicycle within 25 feet from a speed of 10 miles per hour on dry, level, clean pavement.

13 AAC 40.010. DEFINITIONS. (Selected excerpts)

In chapters 02, 04, 06, and 08 of this title, and in AS 28, unless otherwise provided

- (1) "alley" means a street or highway intended to provide access to the rear or side of lots or buildings in urban districts and not intended for use by through vehicular traffic;
- (2) "arterial street" means a U.S. or state numbered route, controlled-access highway, or other major radial or circumferential street or highway designated by a municipality within its respective jurisdiction as part of an interlocking system of streets or highways;
- (5) "bicycle" means a vehicle propelled exclusively by human power upon which a person may ride, having two tandem wheels or three wheels in contact with the ground, except scooters and similar devices;
- (9) "controlled-access highway" means every highway, street, or roadway where access to or from the highway is determined by the public authority having jurisdiction over the highway, street or roadway;
- (11) "crosswalk" means that portion of a roadway at an intersection which is between an extension of a sidewalk which ends on the opposite side of the roadway or, in the absence of a sidewalk, that portion of the roadway which is an extension of the edge of the roadway to the opposite side of the roadway and between a parallel line 10 feet from that extension in a direction away from the intersection, except as modified by a marked

crosswalk on a portion of a roadway at an intersection or elsewhere which is distinctly indicated by lines or other markings on the surface of the roadway;

(33) "pedestrian" means any person afoot; it includes a person on skis or snowshoes;

(45) "safety zone" means the area of space officially set apart within a roadway for the exclusive use of pedestrians, and which is protected or marked by signs which are plainly visible at the time it is used as a safety zone;

(48) "sidewalk" means that portion of a street between the curblines or the lateral lines of a roadway and the adjacent property lines, and intended for use by pedestrians;

(55) "street" means a highway as defined in AS 28;

(56) "through highway" means a highway or portion of highway on which vehicular traffic has preferential right-of-way, the entrances to which vehicular traffic from intersecting highways is required by law to yield the right-of-way to vehicles on the highway in obedience to a stop sign, yield sign, or other official traffic-control device;

11A AAC 20.490. BICYCLES.

The use of a bicycle in the Chena River State Recreational Area is allowed only in campgrounds and in the following areas:

- (1) Chena Hot Springs Road;
- (2) picnic areas; and
- (3) trails designated as open to off-highway vehicles.