

TRANSPORTATION

1. GOALS

These goals pertain to all forms of surface, air and water transportation and all forms of utility or resource transportation corridors.

A. Support Plan Designations. Develop a transportation system that supports the land use designations made by this plan and is integrated with other area-wide transportation needs.

B. Minimize Costs. Develop a transportation system having the lowest possible long run costs, including construction, operations and maintenance.

C. Minimize Adverse Impacts. Develop a transportation system with minimal adverse impact on the aquatic environment, the terrestrial environment, and aesthetic and cultural features.

D. Promote Efficiency. Develop a transportation system that uses energy efficiently and encourages compact, efficient development patterns.

E. Ensure Public Safety. Develop a transportation system with a high standard of public safety.

2. MANAGEMENT GUIDELINES

A. Identification of Potential Transportation Routes. This plan provides general recommendations for transportation routes necessary to support the land use designations made. However, more detailed route alignment and feasibility analysis must be completed before the routes can be considered final.

To the extent feasible and prudent, DNR will avoid actions incompatible with the eventual construction of potential transportation routes identified in this plan until final decisions are made on the feasibility of these routes.

B. Access Plans for Land Disposals or Resource Development Projects. Prior to a land disposal or the initiation of a resource development project DNR will identify appropriate means of access and responsibilities for design, construction and maintenance of any proposed transportation facilities. Access plans will be developed in consultation with DOT/PF and affected local governments.

C. Joint Use and Consolidation of Surface Access. Joint use and consolidation of surface access routes and facilities will be encouraged wherever it is feasible and prudent to do so. Surface access also should be sited and designed to accommodate

future development and avoid unnecessary duplication. The feasibility of using an existing route or facility should be evaluated before the use of a new route or facility is authorized.

D. Protection of Hydrologic Systems. Transportation facilities will, to the extent feasible and prudent, be located to avoid significant effects on the quality or quantity of adjacent surface water resources, or detracting from recreational use of the waterway.

1. Stream crossings should be avoided. When it is necessary to cross a stream in road construction, the crossing should be as close as possible to a 90 degree angle to the stream. Stream crossings should be made at stable sections of the stream channel.
2. Construction in wetlands, flood plains and other poorly drained areas should be minimized, and existing drainage patterns maintained. Culverts should be installed where necessary to enable free movement of fluids, mineral salts, nutrients, etc.
3. Bridges and culverts should be large enough to accommodate or positioned to avoid 1) altering direction and velocity of stream flow, and 2) interfering with migrating or spawning activities of fish and wildlife. Bridges and culverts should span the entire nonvegetated stream channel and be large enough to accommodate the 25-year peak discharge (where known). Bridges and culverts should provide adequate clearance for boat, pedestrian, horse and large game passage whenever these uses occur or are anticipated at significant levels.
4. Recontouring of disturbed streambanks and revegetation or other protective measures should occur to prevent soil erosion into adjacent waters.
5. During winter, snow ramps, snow bridges or other methods should be used to provide access across frozen rivers, lakes and streams to avoid the cutting, eroding or degrading of banks. These facilities should be removed immediately after final use.
6. All transportation facility construction and maintenance should comply with water quality standards of the State of Alaska.

E. Protection of Fish and Wildlife Resources. Important fish and wildlife habitats such as riparian areas, wildlife movement corridors, important wintering or calving areas, and threatened or endangered species habitat should be avoided in siting transportation routes unless no other feasible and

prudent alternatives exist. Location of routes and timing of construction should be determined in consultation with the Department of Fish and Game.

F. Protection of Cultural Resources. Known historic and archaeological sites should be avoided during construction of transportation facilities unless no feasible and prudent alternative exists.

G. Road Pull-Outs. Where road corridors contact streams, habitat corridors or other areas of expected recreational use, sufficient acreage should be retained in public ownership to accommodate public access, safety requirements, and expected recreational use. The size and location of pullouts should be determined in consultation with the Division of Parks and Outdoor Recreation, Department of Transportation and Public Facilities and Department of Fish and Game.

H. Timber Salvage From Rights-of-Way. All timber having high value for commercial or personal use should be salvaged on rights-of-way to be cleared for construction.

I. Material Sites. To minimize the construction and maintenance costs of transportation facilities, material sites should be located as near to material use as practicable. It is recommended that the State Division of Geological and Geophysical Surveys and the Department of Transportation inventory and analyze potential gravel sources near proposed transportation corridors to locate the required material sites.

Material sites should be screened from roads, residential areas, recreational areas and other areas of significant human use. Sufficient land should be allocated to the material site to allow for such screening. Where appropriate, rehabilitation of material sites will be required.

For additional guidelines affecting material extraction see policies under the section on subsurface resources.

J. Off-Road Vehicle Activity. Most off-road vehicle activity does not require a permit on state lands. By statute and regulation, off-road use of vehicles such as snowmachines, jeeps and small all-terrain vehicles does not require a permit if it takes place on open public domain land and is occasional and infrequent or intermittent. Such activity may require a permit on lands designated by the Department of Natural Resources as "special use" lands (depending on the restrictions made for each particular area) and usually requires a permit on state park system lands, fish and game sanctuaries, refuges and critical habitat areas and for crossing anadromous fish streams. In addition, repeated off-road vehicle

activity in a given area and activity by larger vehicles may require a permit on any state lands.

When permits are issued for vehicle use off roads, they will require that disturbance of soils, vegetation, fish and wildlife populations, drainage patterns, water quality and authorized land uses be minimized. Operations should be scheduled when adequate snow and ground frost are available to protect the ground surface, or should require the use of low ground pressure vehicles, avoidance of problem areas, or other techniques to protect areas likely to be damaged. (See also Wetlands Management Guidelines, this chapter.) Before issuing permits the land manager will consult with affected agencies.

In addition, off-road vehicle permits generally should not be given for vehicle use in important wildlife habitats during sensitive periods. If such vehicle activity is essential and there is no practical alternative, it should be allowed only as an occasional use. This policy will be applied only when significant wildlife populations are likely to be present. The Department of Fish and Game will be consulted to help identify important habitat areas and sensitive periods that might warrant this restriction.

K. Roadless Areas. Some areas may be designated by the state and local governments as roadless and managed to exclude construction of new roads, in order to protect particular resources or forms of resource use. Settlement projects may be included in roadless areas. Roadless areas would be designated in the course of transportation planning, the disposal project review process, or other interagency decision process conducted with public participation.

L. Scenic Highways. The studies, *Scenic Resources along the Parks Highway* (ADNR, 1981) and *Denali to Wrangell-St. Elias* (ADNR, 1982) should be consulted for additional information on scenic resources during planning for management activities that are likely to result in significant changes to visual quality along these routes.

M. Other Design Standards. For other guidelines affecting the design of transportation structures see DOT/PF's "Preconstruction Guidelines."

N. Other Guidelines Affecting Transportation. A number of other guidelines may affect transportation. For details of these guidelines, see the following sections of this chapter:

Agriculture
Fish and Wildlife Habitat
Forestry
Recreation
Settlement

Subsurface Resources and Materials
Public Access
Stream Corridors
Trail Management
Wetlands Management
Resource Management and Borough Land Bank