## TRANSPORTATION

## Goals

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

Support Plan Designations. Provide for a transportation system that supports the land use designations made by this plan and is integrated with other areawide transportation needs.

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

Minimize Adverse Impacts. Provide for a transportation system with minimal adverse impacts on the aquatic environment, the terrestrial environment, and aesthetic and cultural features.

**Promote Efficiency.** Provide for a transportation system that uses energy efficiently and encourages compact, efficient development patterns.

Ensure Public Safety. Provide for a transportation system with a high standard of public safety.

## Management Guidelines

A. Identification of Potential Transportation Routes. This plan provides general recommendations for transportation routes necessary to support the land use designations. 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 any potential transportation routes identified in this plan until final decisions are made on the feasibility of these routes.

B. Access Plans for Land Offerings or Resource Development Projects. Before a land disposal or the start of a resource development project, DNR will work with DOT&PF to identify appropriate locations for access and will also identify 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 of surface access routes and facilities will be encouraged wherever it is feasible and prudent. 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 authorizing a new one.
- D. Protection of Hydrologic Systems. Transportation facilities will to the extent feasible and prudent be located to avoid significant adverse effects on quality or quantity of adjacent surface water resources, or to avoid detracting from recreational use of the waterway.
  - Minimizing the Number of Stream Crossings. Stream crossings should be minimized.
     When it is necessary to cross a stream for road construction, the crossing should be as close as possible to a 90° angle to the stream. Stream crossings should be made at stable sections of the stream channel.
  - 2. Minimizing Construction in Wetlands. Construction in wetlands, floodplains, and other poorly drained areas should be minimized, and existing drainage patterns maintained. Culverts should be installed where necessary to enable free movement of water, mineral salts, and nutrients.
  - 3. Designing Bridges, and Culverts. Bridges and culverts should be large enough to accommodate, or be positioned to avoid altering direction and velocity of stream flow, or interfering with migrating or spawning activities of fish and wildlife. Bridges and culverts intended for permanent use should be large enough to accommodate the 25-year peak discharge (where known). Bridges should provide adequate clearance for boats, pedestrian, horse, and large game passage whenever these uses occur or are anticipated at significant levels.
  - 4. Rehabilitating Disturbed Stream Banks. Disturbed stream banks will be recontoured, revegetated, or rehabilitated by other measures to minimize soil erosion into adjacent waters.

- 5. Winter Stream and Lake Crossing. During winter, snow ramps, snow bridges, or other methods should be used to provide access to frozen rivers, lakes, and streams to avoid cutting, eroding, or degrading banks.
- 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. 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 pull-outs 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.
- G. Timber Salvage from Right-of-Way. See Forestry Guideline B, Timber Salvage, page 2-10.
- H. Materials. See the guidelines on materials, page 2-13.
- I. Off-Road Vehicle Activity. Off-road use of such vehicles as snowmachines, jeeps, and small all-terrain vehicles are a generally allowed activity on state land. However, such activity may require a permit for 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, 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 for any state lands.

Permits issued for vehicle use off roads under 11 AAC 96 or in specially designated areas, 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 Wetland Management Guidelines, page 2-35). Before issuing permits the land manager will consult with affected agencies.

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

- J. Roadless Areas. Some areas may be designated by the state and local governments as roadless and may be managed to exclude construction of new roads, to protect particular resources or forms of resource use. Settlement projects may be included in roadless areas. Roadless areas would be designated during transportation planning, the disposal project review process, or other interagency decision process conducted with public participation.
- K. Scenic Resources. The studies, Scenic Resources Along the Parks Highway (DNR, 1981) and Denali to Wrangell-St. Elias (DNR, 1982) should be consulted for additional information on scenic resources during planning for management activities that are likely to result in significant degradation to visual quality along these routes.
- L. Other Design Standards. For other guidelines affecting transportation structures see DOT&PF's "Preconstruction Manual".
- M. Other Guidelines Affecting Transportation.

  Other guidelines may affect transportation. See in particular the following sections of this chapter:

Agriculture and Grazing
Fish and Wildlife Habitat and Harvest
Forestry
Materials
Public Access
Recreation and Tourism
Settlement
Stream Corridors and Instream Flow
Subsurface Resources
Trail Management
Wetland Management