Transportation

Goals

Support Plan Designations. Through coordination with other state agencies, develop a transportation system needed to implement this plan and integrate it with other areawide transportation needs.

Minimize Costs. Design a transportation system that minimizes the long run costs, including construction, operations, and maintenance.

Minimize Adverse Impacts. Provide for a transportation system with minimal adverse impacts on local residents, the environment, fish and wildlife resources, and aesthetic and cultural features.

Promote Efficiency. Provide for a transportation system that uses land and energy resources efficiently and encourages compact, efficient development patterns. Avoid unnecessary duplication of transportation facilities.

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

Management Guidelines

- A. Access for Land Offerings, Townsite Development, or Resource Development Projects. The development of road access to new town sites, resource development projects, and some areas of land disposal may be necessary. Such access development is recognized as appropriate. Specific route alignment decisions are to be made at the time of route analysis that precedes road construction. Before a land offering or the start of a resource development project, DNR will work with DOT/PF to identify appropriate locations for access to the State Highway system and identify responsibilities for design, construction, and maintenance of any proposed transportation facilities. Access plans will be developed in consultation with affected local governments.
- **B.** Joint Use and Consolidation of Surface Access. Joint use 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.
- **C. 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.

- 1. Minimize 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, consistent with good road alignment practices. Stream crossings should be made at stable sections of the stream channel.
- 2. Minimize 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. Design 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 50-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. DOT/PF will be consulted for design requirements and best management practices.
- **4. Rehabilitate Disturbed Stream Banks.** Disturbed stream banks will be recontoured, revegetated, or protected by other measures to prevent 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.
- **D. 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.
- **E. Road Pull-Outs.** Where road corridors intersect streams, habitat corridors, or other areas of expected recreational use and tourism, sufficient acreage should be retained in public ownership to accommodate public access, safety requirements, and expected recreational and tourism 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.
- **F. Timber Salvage from Right-of-Way.** See *Forestry Guideline D*, "Timber salvaged from land cleared for non-forest use." All timber having high value for commercial or personal use should be salvaged on rights-of-way to be cleared for construction.
- **G. Scenic Resources.** Scenic resources should be considered during planning for transportation needs to avoid significant degradation to visual quality along these routes.
- **H. Other Guidelines Affecting Transportation.** Other guidelines may affect transportation. Sections in this chapter that should also be referred to include but are not limited to:

Forestry Materials Recreation and Tourism Settlement Stream Corridors, Shorelands and Instream Flow Subsurface Resources