U.S. Forest Service Alaska Region Long Range Transportation Plan

Appendix A Summary of FS Transportation Regulatory and Planning Framework

Regulatory Framework and Planning

FS transportation planning is divided into two distinct frameworks: one for Forest Highways and another for non-Forest Highway-related road and trail transportation systems. This distinction between transportation assets is driven by regulations, funding sources, ownership, and purposes.

This chapter describes the laws, policies, and regulatory framework that shape the FS transportation system. This chapter also describes how current FS and State planning efforts influence this LRTP. The FS Tribal Government relationship, the FS public involvement process, and FS climate change initiatives are also discussed.

1. Regulatory Framework

Regulations are instrumental in forming the structure of FS transportation planning. The following subsections describe the general regulatory framework behind FS transportation planning in Alaska.

1.1 Forest Service Transportation System

The passage of the Federal Highway Act of 1921 defined two types of forest roads: "forest development roads" described forest roads that were needed primarily for management of the national forests, and "Forest Highways" were those forest roads that serve the national forests and also serve the communities within and adjacent to the national forests. During the first 50 years of the program, most of the funds were expended on routes that were of primary importance to States, counties, or communities within or adjacent to national forests. Most of those routes were of statewide importance and were then, or later became, State Primary Highways.

The 1978 Surface Transportation Assistance Act changed the direction of the Forest Highway Program by redefining forest roads, forest development roads, and Forest Highways. Still used today, those definitions are:

- The term "forest road" or "forest trail" refers to a road or trail wholly or partly within, or adjacent to and serving the National Forest System that the Forest Service determines is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources (36 Code of Federal Regulations [CFR] 261.2).
- The terms "National Forest System Road and National Forest System Trail" refer to a forest road or trail other than a road or trail which has been authorized by a legally documented right-ofway held by a State, county, or other local public road authority [36 CFR 212.1])
- The term "Forest Highway" refers to a forest road under the jurisdiction of, and maintained by, a public authority, and open to public travel (23 CFR 660.103).

Planning for National Forest System roads and trails is influenced by a series of rules and regulations. A general illustration of this structure is in Figure 1, and is described in greater below.

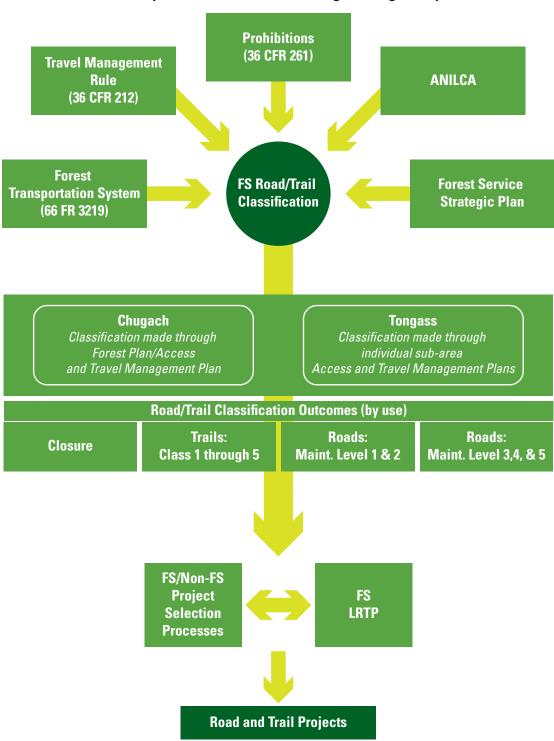


Figure 1 National Forest System Road and Trail Planning and Regulatory Framework

1.2 National Forest System Roads

In 2001, FS adopted a policy governing the National Forest System roads. The policy was adopted to achieve several transportation-related goals:

- Support for public uses
- Support for safe public access and travel
- Allow for economical and efficient management
- Address ecological impacts associated with roads
- Meet all other current and future land and resource management objectives

The policy created a structure for transportation decisions to be grounded by science-based analyses. This focus allowed for issues such as maintenance costs, new versus reconstruction trade-offs, and road classification to effectively factor into transportation decision-making processes. Policy requires that forest road analyses determine road designations. The following issues are factored into these analyses:

- Environmental issues potentially affected by road management proposals, such as soil and water resources, ecological processes, invasive species spread, and biological communities
- Social issues potentially affected by road management proposals such as socio-economic impacts, public access, and accessibility for handicapped persons
- Transportation right-of-way acquisition
- The interrelationship of State, borough, tribal, and other Federal agency transportation facility effects on land and resource management plans and resource management programs
- Transportation investments necessary for meeting resource management plans and programs
- Current and likely funding levels available to support road construction, reconstruction, maintenance, and decommissioning

Roads analyses are important because they provide a context for road management in the broader framework of managing all forest resources. Roads analyses have been completed for the Chugach and Tongass. The Chugach completed its Access and Travel Management Plan (ATM plan) in conjunction with its forest plan; whereas the Tongass completed ATM plans for seven subareas within the forest.

1.3 National Forest System Trails

The Forest Service Manual (FSM), Chapter 2350, sets objectives for National Forest System trails while also providing context and details for trail administration and management. Nationally, the FS objectives for trails are:

- Provide trail-related recreation opportunities that serve public needs and that meet land management and recreation policy objectives.
- Provide trail-related recreation opportunities that emphasize the natural setting of National Forest System lands and that are consistent with land capability.
- Provide trail access for management and protection of National Forest System lands.

These objectives are achieved through implementation of the following policies (FSM 2353.03):

- 1. Manage National Forest System (NFS) trails to achieve the Trail Management Objectives identified for each trail (FSM 2353.12).
- 2. Provide a variety of trail opportunities, settings, and modes of travel consistent with the applicable land management plan.
- 3. Establish outstanding and qualified trails or trail networks as components of the National Trails System.
- 4. Emphasize long-term cost effectiveness and need when developing or rehabilitating trails.
- 5. Where needed, provide trail access for resource management and protection.
- 6. Inventory and include all NFS trails in the forest transportation atlas. Forest trails that are not under the jurisdiction of the FS may also be included.
- 7. Provide a trail system that is environmentally, socially, and financially sustainable.

- 8. Designate trails for motor vehicle use, following the process identified in 36 CFR 212, Subpart B, and FSM 7710.
- 9. Ensure that motor vehicle use of trails is in accordance with designations established under 36 CFR 212.51, any restrictions and prohibitions on over-snow vehicle use established under 36 CFR 212.81, and FSM 7710.
- 10. Issue a recreation event permit involving competitive use of National Forest System roads, trails, and areas on National Forest System lands only when the event is appropriate for the National Forest System setting (FSM 2302 and 2303).
- 11. Use signing as necessary and in accordance with engineering management publications (7100-15) as well as in coordination with local, State, and other Federal trail managers and law enforcement officers.
- 12. Ensure that all new or altered trails are Designed Use of Hiker/Pedestrian that connect directly to a trailhead and currently accessible trails comply with Federal and Forest Service Trail Accessibility Guidelines (FSM 2353). The guideline establishes an equal or higher standard than federal accessibility standards (FSM 2353.01b).

1.4 National Trails System Act

The National Trails System Act establishes a National Trails System containing National Recreation, National Scenic, and National Historic Trails and connecting trails for the purpose of providing recreation opportunities and enjoyment of nationally significant scenic, historic, natural, or cultural qualities of the areas through which these trails pass. The act addresses trail development and administration and encourages the use of volunteers in the FS trail program. The act also authorizes agreements to carry out its purposes.

The Chugach includes two nationally designated trails: the southernmost 186 miles of the Iditarod National Historic Trail, and the 38-mile-long Resurrection Pass National Recreation Trail.

1.5 Travel Management Rule

The Travel Management Rule (36 CFR 212) establishes requirements for administration of the forest transportation system, including roads, trails, and airfields, and contains provisions for the acquisition of right-of-way. The rule also requires identification of the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of FS lands and use of a science-based roads analysis at the appropriate scale in determining the minimum road system. The rule provides for regulation of use of oversnow vehicles on forest roads, on trails, and in other FS areas. ATM plans reflect these travel management rules as they apply to individual forests.

The rule also describes the requirements for designating roads, trails, and areas for motor vehicle use and for identifying designated roads. trails, and areas on a motor vehicle use map (MVUM). The MVUM displays official NFS roads and trails or areas designated as open to motorized travel. The MVUM also displays allowed uses by vehicle class (for example, highway-legal vehicles, vehicles less than 50 inches wide, and motorcycles), seasonal allowances, and distance allowances, and provides information on other travel rules and regulations. Routes not shown on the MVUM are not open to public motor vehicle travel. Routes designated for motorized use may not always be signed, but they will be identified on the MVUM. It is the public's responsibility to reference the MVUM to stay on designated routes for motor vehicle use. The MVUM is updated annually to correct mapping errors or discrepancies and to update travel decisions.

1.6 Prohibitions

Prohibitions (36 CFR 261) are necessary to manage and control use, including use of forest trails. In particular, these regulations include a prohibition on the use or possession of a motor vehicle on FS lands other than in accordance with designations established under 36 CFR 212.51 and a prohibition on the use or possession of an over-snow vehicle on FS lands in violation of a restriction or prohibition established under 36 CFR 212.81.

1.7 Alaska National Interest Lands Conservation Act

Subsistence hunting and fishing is both the livelihood and a way of life for many Alaska residents. Subsistence activities are protected by the 1980 Alaska National Interest Lands Conservation Act (ANILCA). ANILCA Section 811 (a) states, "The Secretary shall ensure that rural residents engaged in subsistence uses shall have reasonable access to subsistence resources on the public lands." Section 811 (b) states, "Notwithstanding any other provision of this Act or other law, the Secretary shall permit on the public lands appropriate use for subsistence purposes of snowmobiles, motorboats, and other means of surface transportation traditionally employed for such purposes by local residents, subject to reasonable regulation." Federal jurisdiction over subsistence hunting and fishing extends to 60 percent of the State, including Tongass and Chugach.

Subsistence management is unique to the Alaska Region FS and is an important part of the region's mission. The Alaska Region Subsistence Program performs unique roles such as management of wildlife and fisheries. Traditionally, the FS focuses on habitat management, while States coordinate wildlife and fishery population management. In Alaska, the FS has a substantial role in developing harvest regulations for subsistence wildlife and fish on all Federal lands and waters within the State of Alaska while also enforcing subsistence regulations on FS lands.

The FS is committed to fulfilling its responsibilities to subsistence users and resources and has made significant progress toward meeting this commitment over the past decades. Achievements include developing staff infrastructure and garnering the expertise needed to carry out critical subsistence management functions. The FS has also established a regional advisory council to facilitate the meaningful participation of subsistence users. Relationships with other FLMAs who also share subsistence responsibilities have proven beneficial to achieving subsistence goals. The FS has also implemented a law enforcement program for protecting fish and wildlife resources to ensure their abundance for subsistence purposes.

Sustainable management of subsistence hunting and fishing requires accurate and timely information about the abundance, health, and distribution of fish stocks and wildlife populations. Much of this needed information is developed through service contracts with tribes and other native organizations that undertake harvest monitoring, traditional ecological knowledge, and stock assessment field projects. In addition to providing essential biological data, these contracts create local jobs, build capacity within communities, and involve subsistence users in meaningful stewardship roles.

1.8 Roads to Resources

Section 6 of the National Forest Roads and Trails Act (16 U.S.C. 537) authorizes the FS to require users of NFS roads to maintain roads commensurate with their use and to reconstruct roads when necessary to accommodate their use. FS policy direction requires commercial haulers using NFS roads to acquire a permit and to perform maintenance in accordance with their commensurate share. The FS is also authorized to provide construction and maintenance of NFS roads through cooperative financing with other public agencies and with private agencies or persons. Under Section 4 of the Act, cost recovery is a form of investment sharing that occurs when a facility has been constructed by the FS and no additional work is required to accommodate the permittee's use. Cost recovery may also be necessary when a permittee is unwilling to contribute to the construction or reconstruction of roads to the standards necessary to accommodate both the permittee and the FS.

2. Planning Process

The following planning processes influence transportation decision-making. The recommendations made in this LRTP are intended to complement and strengthen the desired results of these plans by ensuring that transportation improvements build toward stated agency goals over time.

2.1 Forest Service Strategic Plan

Nationally, the FS has developed a strategic plan that guides the agency in delivering its mission. The plan addresses the core principles by which the FS functions and the major issues and goals the FS will focus on for fiscal years 2007 to 2012. FS programs and budget are aligned with the goals and objective in the strategic plan. The seven goals and objectives are:

- Restore, sustain, and enhance the nation's forests and grasslands.
- Provide and sustain benefits to the American people.
- Conserve open space.
- Sustain and enhance outdoor recreation opportunities.
- Maintain basic management capabilities of the FS.
- Engage urban America with FS programs.
- Provide science-based applications and tools for sustainable natural resources management.

The strategic plan is also the source for the performance measures used in this LRTP. These performance measures are discussed in Chapter 6 of this document.

2.1.1 Chugach National Forest

In response to the FS Strategic Plan, Chugach identified a global responsibility to maintain fully functioning ecosystems through multiple use and sustained yield and to create environmental awareness through interpretation and education while providing opportunities to experience Alaska. This vision is represented in the revised Chugach Forest Plan. This long-range guide coordinates sustainable management of all resources on the forest. Its scope is broad-scale and long-term. The Chugach stewardship priorities are focused on partnerships for access, conservation and restoration, collaborative community-based problem solving, international connections, and organizational effectiveness. The plan challenges the Chugach to enhance public access, engage in conservation and restoration projects, leverage their international role, be increasingly relevant to their communities, and continuously strive to establish a culture of business acumen in the work they accomplish.

2.1.2 Tongass National Forest

Tongass strategic goals respond to national goals and objectives through its Tongass Strategic Plan. The plan sets a 10-year focus for its transportation system based on five strategic focus areas:

Priority 1: An Integrated Approach to Restoration and Enhancement.

Tongass has a robust and integrated resource program of management, enhancement, and restoration projects that contribute to overall ecosystem health while balancing ecological, social, and economic sustainability.

Priority 2: Our Role in Addressing Climate Change.

Tongass is actively and robustly addressing climate change in terms of adaptation and mitigation. Forest planning and decisions are opportunities to mitigate climate change and evaluate the potential for enhancing ecosystem resistance, resilience, and response to climate change impacts on ecosystem services.

Priority 3: Recreation and Wilderness Management and Public Programs.

Deliver day-use and remote-backcountry recreation opportunities and a strong interpretation program that helps people experience the extraordinary place that is the Tongass National Forest.

Priority 4: Sustainable Forest Management for Community Stability and Economic Diversity.

Timber resources are managed with the trust and confidence of the public through responsible forest stewardship. Manage the forest in accordance with the principles of ecosystem management and with understanding of social and ecological responsibilities.

Priority 5: Telling Our Story.

Share the community, partnership, and organizational support received by Tongass in its projects. Reintroduce "America's Rainforest" to students and educators locally and across the country through interpretation and conservation education.

2.2 Forest Management Plans

Forest land resource management plans and revised forest plans are prepared according to Department of Agriculture regulations (36 CFR 219), which are based on the Forest and Rangeland Renewable Resources Planning Act as amended by the National Forest Management Act of 1976. Forest plans are also developed in accordance with regulations

(40 CFR 1500) for implementing the National Environmental Policy Act (NEPA) of 1969 and other laws and Federal regulations.

Generally, forest plans guide natural resource management activities and establish management standards and guidelines for national forests. The plans describe resource management practices, levels of resource production and management, and the availability and suitability of lands for different types of resource management. The forest plans embody the provisions of the National Forest Management Act, the implementing regulations, and other guiding documents. The multiple-use goals and objectives, and the land use prescriptions and standards and guidelines, constitute a statement of the forest plan's management direction. Nevertheless, the projected outputs and pace of implementation are dependent on the annual budget process and other factors.

The forest supervisor is required to review land conditions every 5 years to determine whether forest plan revision is necessary. If monitoring and evaluation indicate that immediate changes are needed, and these needed changes cannot be addressed by amendment, then revision of the forest plan becomes necessary.

Forest Management Act regulations require that each forest plan be revised every 10 to 15 years (36 CFR 219.10[g]). Because revisions to forest plans are considered a major Federal action significantly affecting the environment, environmental impact statements (EIS) are prepared as required by NEPA and 36 CFR 219.

NEPA ensures that environmental information is made available to public officials and citizens before decisions are made and before actions are taken. This disclosure helps public officials make decisions based on an understanding of environmental consequences and then take appropriate actions to protect, restore, and enhance the environment. Essential to the NEPA process are accurate scientific analyses, expert agency input, and public involvement. The EIS is the environmental disclosure for forest plans.

2.2.1 Chugach National Forest Management Plan

The Revised Land and Resource Management Plan (*Chugach NF Plan*) (maps.fs.fed.us/chugach) Record of Decision was signed on May 31, 2002. A primary goal of the *Chugach NF Plan* is to provide for the sustainability of forest resources, while also directing the coordination of multiple uses, such as outdoor recreation, timber, wildlife, fish, water wilderness, and minerals. To accomplish this goal, the Chuqach NF Plan uses an array of land allocations ranging from allowing no resource development to allowing substantial resource development. The plan establishes a set of standards and guidelines that ensures that management objectives for these land allocations are met. Recognizing that conditions in Chugach do not remain static, the Chugach NF Plan also contains a monitoring and evaluation plan and identifies additional information needs.

The *Chugach NF Plan* sets the direction for the management of FS roads and trails. The EIS process solicited more than 33,000 cards, letters, and emails of input. The FS has documented, analyzed, and responded to the public comments received on the draft EIS and the Proposed Revised Forest Plan. Information gained through public comment and interdisciplinary team review provided the basis for modifying the preferred alternative, improving or modifying the environmental analysis, supplementing and changing the plan, and finalizing both documents. The *Chugach NF Plan* and the final EIS provide strategic, forest-wide direction for 10 to 15 years. The *Chugach NF Plan* includes a road analysis and

ATM plan in its appendices. The result is a forest-wide MVUM.

2.2.2 Tongass National Forest Plan

In 2008, Tongass completed a comprehensive review of the Tongass Land and Resource Management Plan (*Tongass NF Plan*) (www.fs.fed. us/r10/tongass/projects/tlmp). The plan's objectives are:

- Address any deficiencies in the previous plan and to incorporate new information.
- Balance competing demands for forest resources.
- Ensure that Tongass would be managed in a sustainable manner.

Because this most recent assessment completes the mandatory periodic review prescribed by the National Forest Management Act, the updated plan does not need further review for 10 to 15 years, unless changes in conditions warrant.

The plan includes a section of management prescriptions for transportation and utility systems as well as a chapter of standards and guidelines for transportation. The plan marked a historic partnership between the Alaska Department of Transportation and Public Facilities (ADOT&PF) and the FS. In the plan, the FS reserves 34 essential transportation and utility corridors throughout the Tongass for ADOT&PF transportation and utility purposes. Details about these routes and corridors are documented in the ADOT&PF 2004 Southeast Alaska Transportation Plan, which is included as an addendum to this appendix (Chapter 6, on page 19).

Unlike the *Chugach NF Plan*, the *Tongass NF Plan* defers to individual sub-areas to develop ATM plans and their resulting MVUM designation. The plan, however, provides direction, and priorities are reflected in subsequent MVUM maps and route designations (www.fs.fed.us/r10/tongass/MVUM/ mvum_all.shtml).

2.3 Transportation Planning Related Activities

Transportation planning-related activities are important inputs to this LRTP and other plans described throughout this document. The FS transportation related activities are:

- Road Management Objectives and Trail Management Objectives. These objectives document the intended purpose, design criteria, and operation and maintenance criteria for each NFS road, and trail. In Alaska, Road Management Objectives have been documented for all NFS roads, and Trail Management Objectives have been documented for most NFS trails.
- Motor vehicle use maps. MVUMs, which are updated annually, identify roads, trails, and areas designated for motor vehicle use including type of vehicles and time of year. Motor vehicle use inconsistent with the designations is illegal. All units on the Tongass and Chugach have MVUMs available on their websites or at their district offices. Both forest websites can be accessed through the Alaska Region website (www.fs.fed. us/r10/).
- Travel management atlases. These atlases document and display the official inventory of NFS roads, NFS trails, airfields, and associated transportation facilities. The transportation atlas is stored in the Infra database and corresponding geographic information systems (GIS) spatial layers. The atlas reflects Road and Trail Management Objectives, identified needed and unneeded roads, and travel management decisions. These atlases are updated as needed to reflect changes in inventory and management prescriptions. Refer to the Infra database and corresponding GIS transportation layer for current inventories.
- **Travel analysis.** This analysis assesses the current forest transportation system and identifies issues, benefits, problems, and risks. The assessments inform minimum road system decisions per 36 CFR 212.5(b)(1) and the designation of roads, trails, and areas for motor vehicle use. Travel analysis is not a decision-making process; rather, it identifies proposed changes and informs travel management decisions.

- Travel management decisions. These decisions provide guidance and direction regarding the management of FS travel routes and systems including the addition or removal of routes from the forest transportation system; the construction, modification, or decommissioning of an NFS road or trail; the acquisition of a forest route; and the approval or prohibition of a route or area for motor vehicle use and the identification of associated motor vehicle classes and season of use.
- Sustainable Recreation Framework. This national strategy, launched in 2011, is intended to help unite diverse interests, create and strengthen partnerships, focus scarce resources on missiondriven priorities, connect recreation benefits to communities, provide for changing urban populations, and most importantly, sustain and expand the benefits to America that quality recreation opportunities provide. This integrated and collaborative approach is aimed at identifying and implementing a trail system and associated recreation sites and facilities that are socially, environmentally, and economically sustainable. At the time of publication of this LRTP, two ranger districts have initiated planning efforts using this strategy, and other districts are anticipated to undertake similar efforts in upcoming years. Recreation facility analysis was used to assist forests in creating a sustainable program that aligns recreation sites with visitors' desires, expectations, and use between 2000 and 2010. Recreation facility analysis helped ensure that recreation sites and facilities provide the appropriate mix of opportunities within the special characteristics of each national forest. Currently, this approach is being transitioned to and incorporated within the agency's Sustainable Recreation Framework approach for ensuring socially, environmentally, and economically sustainable recreation facilities and trails.

2.4 Access and Travel Management Plans

ATM plans are critical components of FS transportation planning and feed into LRTPs. ATM plans designate which roads, trails, primary marine access facilities, and areas are open to public motor vehicle use. ATM plans prescribe uses by classifications, seasonal allowances, and distance allowances, and provide information on associated travel rules and regulations. The plans also categorize roads in terms of their maintenance level and trails in terms of their Trail Class or development scale, as well as characterize the intended intensity of use (from prohibited to encourage use). In the Alaska Region, ATM plans achieve the following:

- Identify a sustainable, safe, and efficient transportation system
- Designate a system of roads, trails, and areas for motorized use
- Limit resource damage caused by motor vehicle use by closing some roads
- Consider the effects to subsistence and subsistence access
- Close roads that are used intermittently or are not needed for long-term management
- Provide a NEPA decision for travel management

The *Chugach NF Plan* described in Subsection 2.2.2 includes a road analysis and ATM plan. These products led to the completion of an MVUM as required of the 2005 Final Travel Management Rule, 36 CFR 212, Subpart B. The 2002 revision of the *Chugach NF Plan* and other travel management decisions across the forest use the MVUM.

Unlike the *Chugach NF Plan*, the *Tongass NF Plan* deferred development of ATM plans to seven sub-areas districts within the forest. Nevertheless, the *Tongass NF Plan* provides direction and priorities that are to be reflected in subsequent MVUMs and route designations.

As ATM plans define road classifications and uses. The FS uses the following management strategies for its transportation assets where appropriate. These definitions are in FS Manual 7731.11:

- **Encourage Use**. Encourage use consistent with the condition of the road and its road management objectives.
- Accept Use. Accept, but do not encourage, use by vehicles that are suitable for the road.
- **Discourage Use.** Discourage some or all classes of motor vehicle use.
- Eliminate Use. Eliminate use by blocking access to the road when enforcement is not feasible or intended to be actively conducted.

• **Prohibit Use**. Prohibit motor vehicle use when enforcement is feasible or intended and can be actively conducted.

As detailed in Chapter 4, Priority Transportation System, the chief focus of roads included in this LRTP consists of those that encourage use. These roads typically serve to access recreational destinations and connect communities. They are typically maintained as maintenance level three, four, or five.

Because most of the roads in Tongass were not developed for passenger vehicles, the majority of roads in the region fall into maintenance level one and two categories. Roads that fall into maintenance level three, four, and five categories are usually Forest Highways, and some are under State jurisdiction. Definitions of the maintenance levels are shown below.

Maintenance Level One. Roads have been placed in storage between intermittent uses. The period of storage must exceed 1 year. Basic custodial maintenance is performed to prevent damage to adjacent resources and to perpetuate the road for future resource management needs. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level. Appropriate traffic management strategies are "prohibit" and "eliminate" all traffic. These roads are not shown on an MVUM.

Roads receiving level one maintenance may be of any type, class, or construction standard, and may be managed at any other maintenance level during the time they are open for traffic. While being maintained at level one, they are closed to vehicular traffic, but may be available and suitable for non-motorized uses.

Maintenance Level Two. Roads are open for use by high clearance vehicles. Passenger car traffic, user comfort, and user convenience are not considerations for these roads. Warning signs and traffic control devices are not provided with the exception of some signing, such as "No Traffic" signs, which may be posted at intersections. Motorists should have no expectations of being alerted to potential hazards while driving on these roads. Traffic is normally minor, usually consisting of a combination of administrative, permitted, dispersed recreation, or other specialized uses. Log haul may occur on maintenance level two roads. Appropriate traffic management strategies for these roads are either to "discourage" or "prohibit" passenger cars, or "accept" or "discourage" high clearance vehicles.

- Maintenance Level Three. These roads are open and maintained for travel by standard passenger cars. User comfort and convenience are not considered priorities. The Manual on Uniform Traffic Control Devices applies to these roads, and warning signs and traffic control devices are provided to alert motorists of situations that may violate expectations. Roads in this maintenance level are typically low speed with single lanes and turnouts. Appropriate traffic management strategies are either "encourage" or "accept."
 "Discourage" or "prohibit" strategies may be employed for certain classes of vehicles or users.
- Maintenance Level Four. These roads provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are two lanes (although some roads may be single lane) and aggregate surfaced. Some roads may be paved and/or dust abated. The Manual on Uniform Traffic Control Devices is applicable to maintenance level four roads. The most appropriate traffic management strategy for these roads is "encourage"; however, the "prohibit" strategy may apply to specific classes of vehicles or users at certain times.
- Maintenance Level Five. These roads provide a high degree of user comfort and convenience. These roads are normally two lane, paved facilities although some may be aggregate surfaced and dust abated. The Manual on Uniform Traffic Control Devices is applicable to maintenance level five roads. The appropriate traffic management strategy is "encourage."

2.4.1 Trail System Management

Direction for the trail system on a national forest is found in forest plans and travel management plans. Decisions regarding trails are reflected in Trail Management Objectives (TMO), which document the intended purpose and management of an NFS trail based on management direction, including access objectives. The TMO is based on applicable land management plan direction, travel management decisions, trail-specific decisions, and other related direction, as well as management priorities and available resources. The TMO identifies the five Trail Fundamentals: Trail Type, Trail Class, Managed Use, Designed Use, and Design Parameters:

- **Trail Type** is a category that reflects the predominant trail surface and general modes of travel accommodated by a trail. The three Trail Types are:
 - Standard Terra Trail. A trail that has a surface consisting predominantly of the ground and that is designed and managed to accommodate use on that surface.
 - Snow Trail. A trail that has a surface consisting predominantly of snow or ice and that is designed and managed to accommodate use on that surface.
 - Water Trail. A trail that has a surface consisting predominantly of water (but may include land-based portages) and that is designed and managed to accommodate use on that surface.
- **Trail Class** is the prescribed scale of development for a trail, representing its intended design and management standards. The five Trail Classes range from the least developed (Trail Class 1) to the most developed (Trail Class 5):
 - Trail Class 1: Minimally Developed
 - Trail Class 2: Moderately Developed
 - Trail Class 3: Developed
 - Trail Class 4: Highly Developed
 - Trail Class 5: Fully Developed

- **Managed Use** is the mode of travel that is actively managed and appropriate on a trail, based on its design and management.
- **Designed Use** is the Managed Use of a trail that requires the most demanding design, construction, and maintenance parameters and that, in conjunction with the applicable Trail Class, determines which Design Parameters will apply to a trail.
- **Design Parameters** are technical guidelines for the survey, design, construction, maintenance, and assessment of a trail, based on its Designed Use and Trail Class.

Road and trail miles by maintenance levels, classifications, and strategy designations within the Tongass and Chugach are summarized in Chapter 3 and narrowed to a more select group in Chapter 4. These designations serve as the baseline for forest roads and trails.

2.5 State of Alaska Transportation Plans

FS transportation planning considers ADOT&PF plans and initiatives. These plans and their relevance to the FS and other FLMAs are outlined in the Alaska Federal Lands LRTP.

U.S. Forest Service Alaska Region Long Range Transportation Plan

Appendix B

Excerpt from ADOT&PF Southeast Alaska Transportation Plan

APPENDIX A. ESSENTIAL STATE TRANSPORTATION AND UTILITY CORRIDORS

Essential Transportation and Utility Corridors

The Southeast Alaska Transportation Plan (SATP) identifies 34 essential highway and utility corridors to be reserved and protected to meet future transportation needs. These corridors are required to connect communities to the regional transportation system and to establish a regional power grid. The state requests that the Forest Service incorporate all of these highway and utility corridors into the Tongass Land Management Plan and reserve and protect these corridors for these purposes. Adoption of this plan is an official expression of state policy that no other action by any other party should be taken (such as designations of wilderness areas) that would interfere with public use of any of the mapped corridors. In addition, the state requests that the Forest Service contribute to state efforts by improving and connecting forest roads that are located within essential road corridors identified by the state. Corridors of particular interest are Kake – Petersburg, Kake – Totem Bay, and North Prince of Wales Island Road – Red Bay.

In a region as rugged as Southeast Alaska, valleys and mountain passes represent invaluable corridors for highway routes and utility transmission lines. Maps 16 to 23 identify the transportation and utility corridors considered essential to the state. These corridors are identified below.

Corridor Descriptions

Lynn Canal Corridors — Juneau to Haines and Skagway

- 1. From Echo Cove northerly along the shore of Berners Bay and Lynn Canal to Skagway with a ferry terminal near the mouth of the Katzhin River.
- 2. From Skagway southerly along Taiya Inlet to Taiya Point, then northwesterly along Lutak Inlet to Haines.
- 3. From Haines across the Chilkat River/Inlet at or above Pyramid Island, then southerly along the west shore of Lynn Canal to a suitable ferry terminal site on William Henry Bay.

Taku River Corridors

- 4. From Thane Road southeasterly along Gastineau Channel to Bishop Point, then northeasterly along Taku Inlet to a suitable bridge crossing at Grizzly Bar.
- 5. From Jaw Point northeasterly along the southeast shore of Taku Inlet and River to the Canada border to provide ferry crossing options.

Mansfield Peninsula Crossing, Admiralty Island, Corridor

6. From Young Bay to Greens Creek, Hawk Inlet.

Chichagof Island Corridors

- 7. From a suitable ferry terminal site on Whitestone Harbor to Hoonah.
- 8. From Hoonah to a suitable ferry terminal site on Tenakee Inlet.
- 9. Pelican cut-off road from Tenakee Inlet Road to Pelican.
- 10. Kadashan Road from a suitable ferry terminal site on Tenakee Inlet southeasterly along the Kadashan River to a suitable ferry terminal site on the north shore of Peril Strait across from Rodman Bay.

Baranof Island Corridors

- 11. From the end of Halibut Point Road to a suitable ferry terminal site on Rodman Bay.
- 12. From the end of Sawmill Creek Road to a suitable ferry terminal site on Warm Springs Bay.

Kuiu Island Corridor

13. From a suitable ferry terminal site on Security Bay to a suitable ferry terminal site on Reid Bay for crossing Sumner Strait to Labouchere Bay on Prince of Wales Island.

Kupreanof Island Corridors

- 14. From Kake to a suitable ferry terminal site in Kupreanof for crossing the Wrangell Narrows.
- 15. From Kake to a suitable ferry terminal site in Totem Bay for crossing Sumner Strait to Red Bay on Prince of Wales Island.

Prince of Wales Island Corridors

16. North Prince of Wales Island Road from the intersection with Coffman Cove Road to a suitable ferry terminal site in the vicinity of Red Bay on Sumner Strait.

- 17. Neck Lake Road from North Prince of Wales Island Road easterly along Neck Lake to Wale Pass.
- 18. Cavern Lake Road from Wale Pass westerly to North Prince of Wales Island Road.
- 19. Caulder Road from North Prince of Wales Island Road near El Capitan northwesterly to a suitable ferry terminal site on Labouchere Bay.
- 20. North Prince of Wales Island Road north, then west from Cavern Lake Road to a suitable ferry terminal location on Labouchere Bay.
- 21. Sandy Beach Road from Thorne Bay north to Ratz Harbor, then along the east shore of Prince of Wales Island to Coffman Cove.

Mid-Region Access Corridors

- 22. Stikine Delta Causeway to South Mitkof Island to Rynda Island to Kadin Island to mainland, near Green Point, then along the eastern side of Eastern Passage to a bridge crossing point at "the Narrows."
- 23. Stikine River Corridor (according to the Alaska National Interest Lands Conservation Act [ANILCA], Section 1113).
- 24. A bridge crossing Eastern Passage at the Narrows between Wrangell Island and the mainland.
- 25. East side of Eastern Passage from the Narrows south to Bradfield Canal, then east along the north side of Bradfield Canal to the Bradfield River at the head of the Bradfield Canal.
- 26. Bradfield Road from the head of the Bradfield Canal along the North Fork of the Bradfield River to the Canada border at the Craig River.
- 27. From the head of Bradfield Canal along the south side of the Bradfield Canal west to Duck Point (or other suitable ferry terminal site on the Bradfield Canal).

Wrangell Island Corridors

- 28. From Zimovia Highway easterly along McCormack Creek, to Eastern Passage, then southerly to a suitable ferry terminal site on Fools Inlet.
- 29. From Zimovia Highway easterly along McCormack Creek to Eastern Passage, then to the Narrows bridge crossing site.

Cleveland Peninsula Corridors

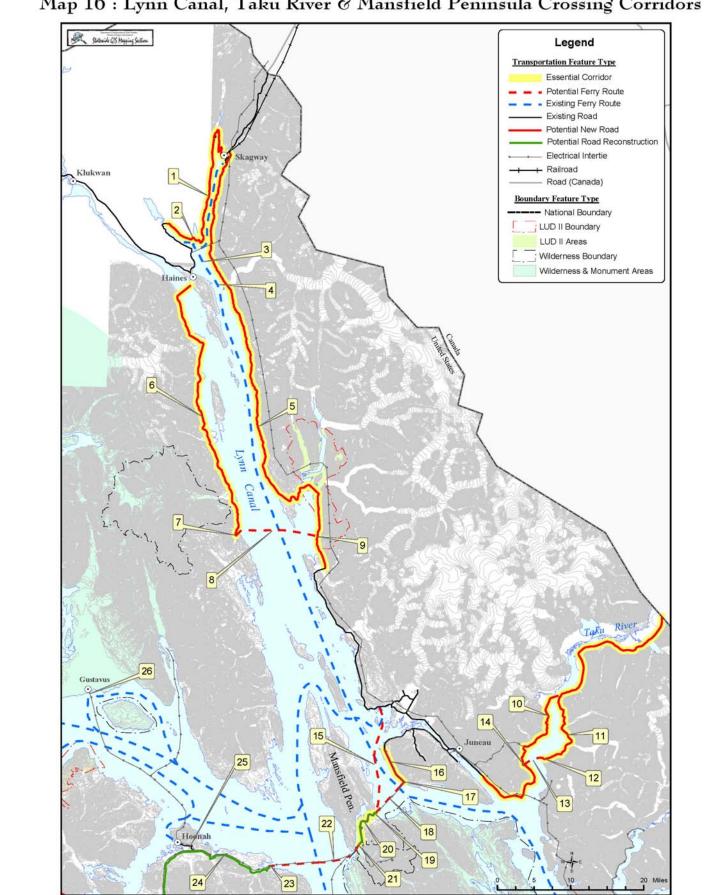
30. Upper Cleveland Peninsula crossing from Bradfield Canal southeasterly along Eagle River to Point Lees to a suitable ferry terminal on the Behm Canal.

Lower Cleveland Peninsula crossings:

- 31. From a suitable ferry terminal site on Santa Anna Bay southeasterly to a suitable ferry terminal site on Spacious Bay.
- 32. From a suitable ferry terminal site on Frosty Bay south to Santa Anna Bay, then southeasterly to Spacious Bay, then south to Port Stewart and along the southwest shore of Port Stewart to a suitable ferry terminal site on Helm Bay.

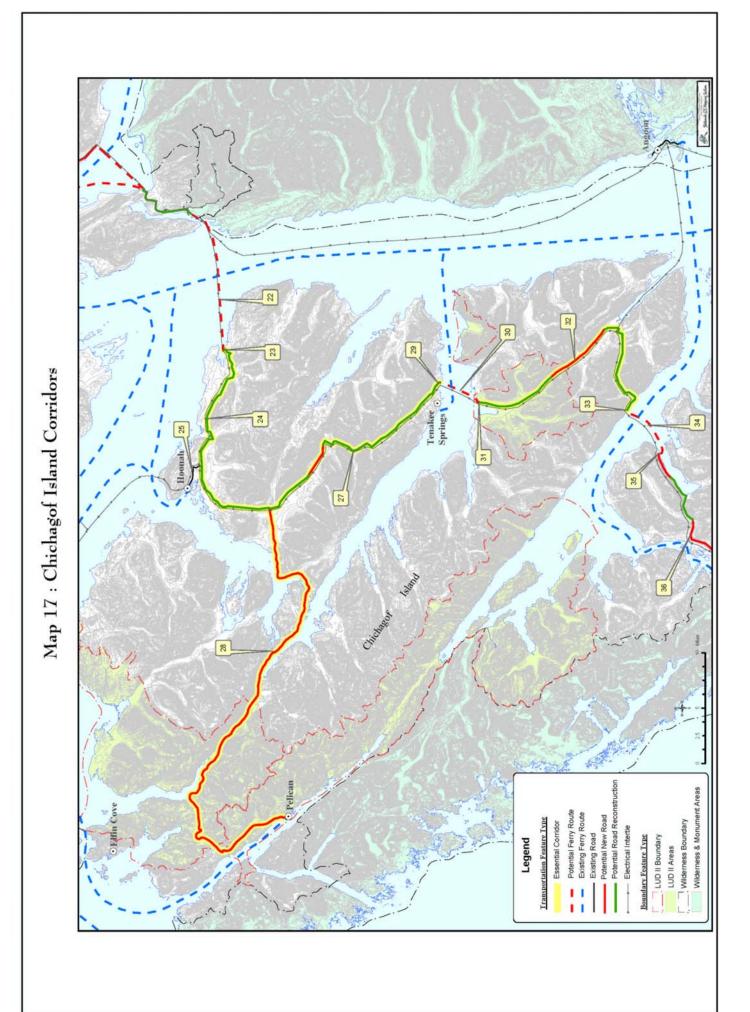
Revillagigedo Island Corridors

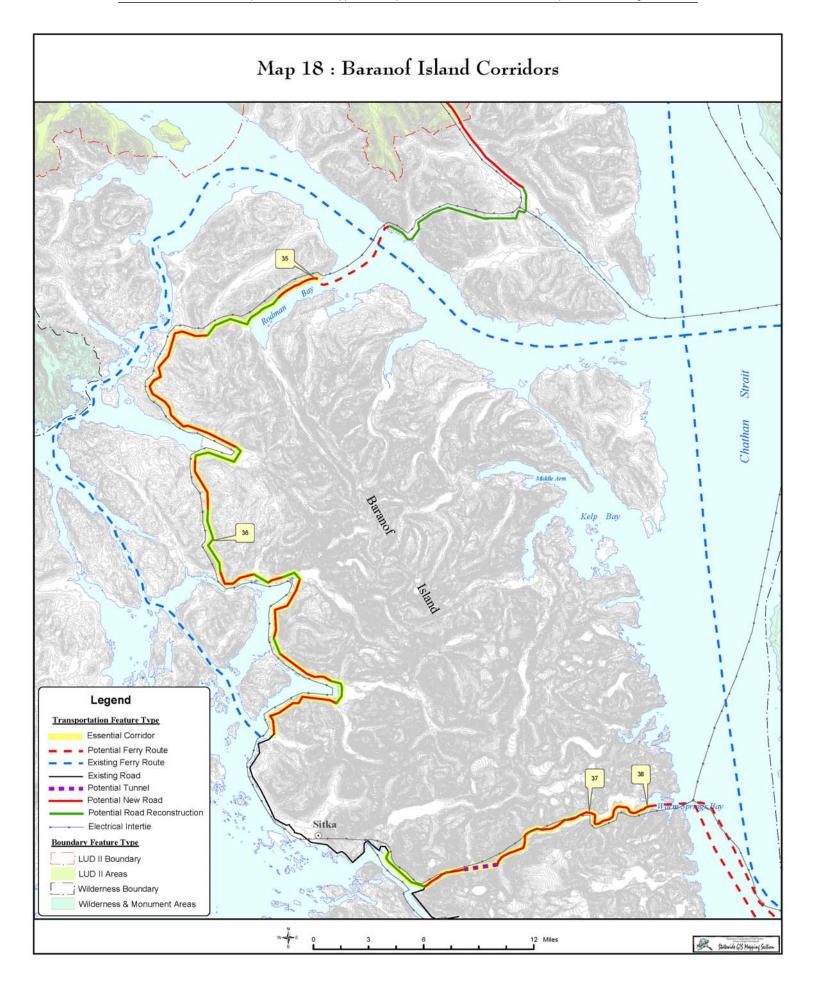
- 33. From a suitable ferry terminal site at or near Claude Point, then southwesterly via Benrer and Klam creeks to Shrimp Bay, then easterly to Cedar Lake and Orchard Creek, then southeasterly along Orchard Creek to a south branch extending toward Carroll Creek, then south to Carroll Inlet, then south along the west shore of Carroll Inlet to Shelter Cove, then westerly to the head of George Inlet to Ward Lake Road.
- 34. From the head of George Inlet south along the west shore of George Inlet to the end of South Tongass Highway.

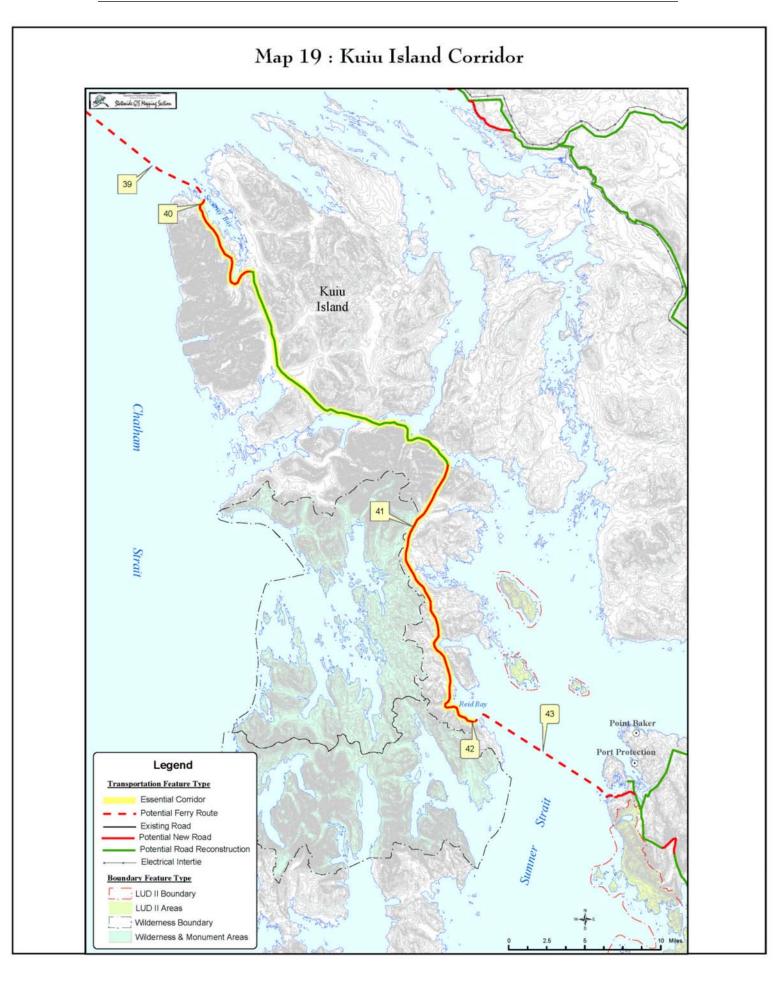


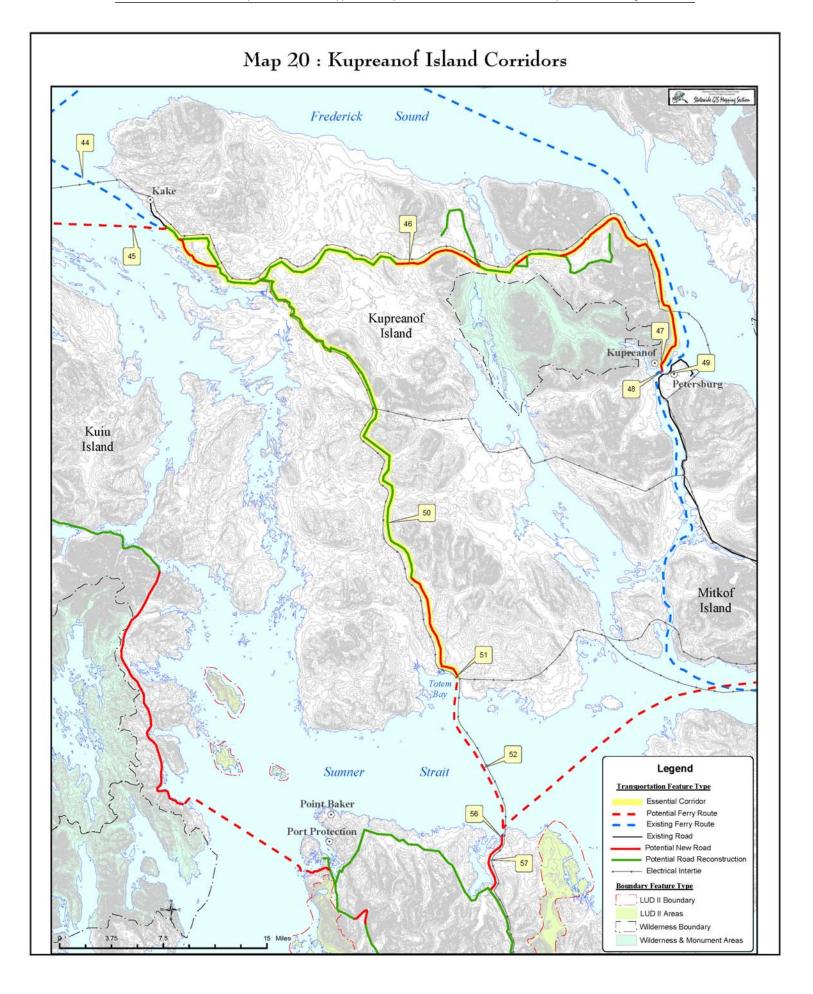
Map 16 : Lynn Canal, Taku River & Mansfield Peninsula Crossing Corridors

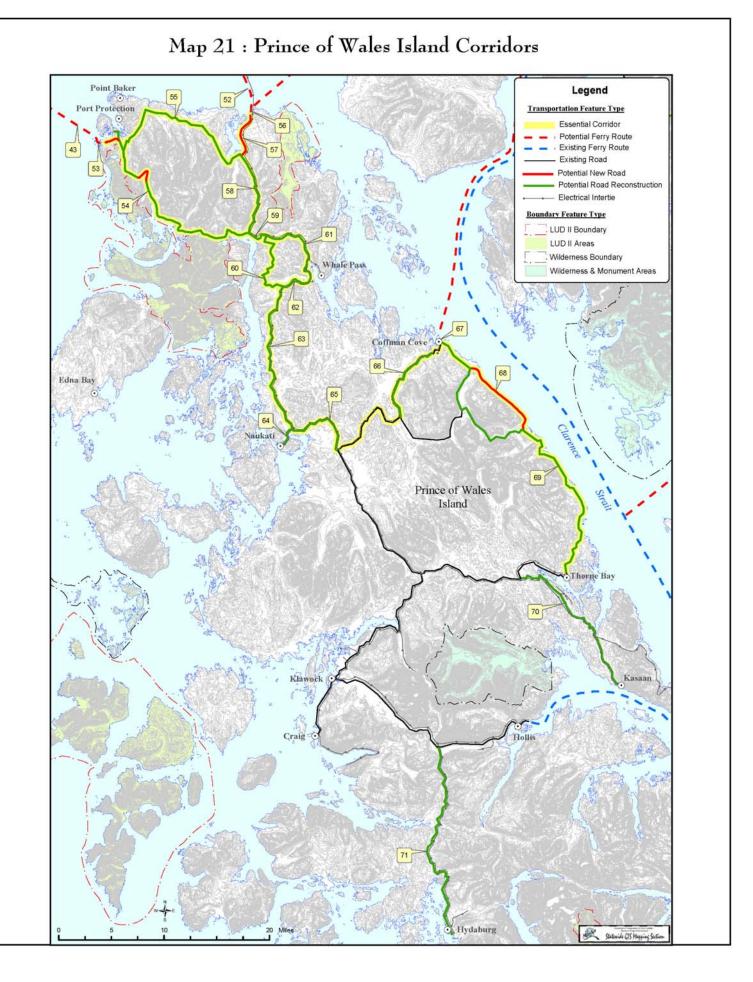


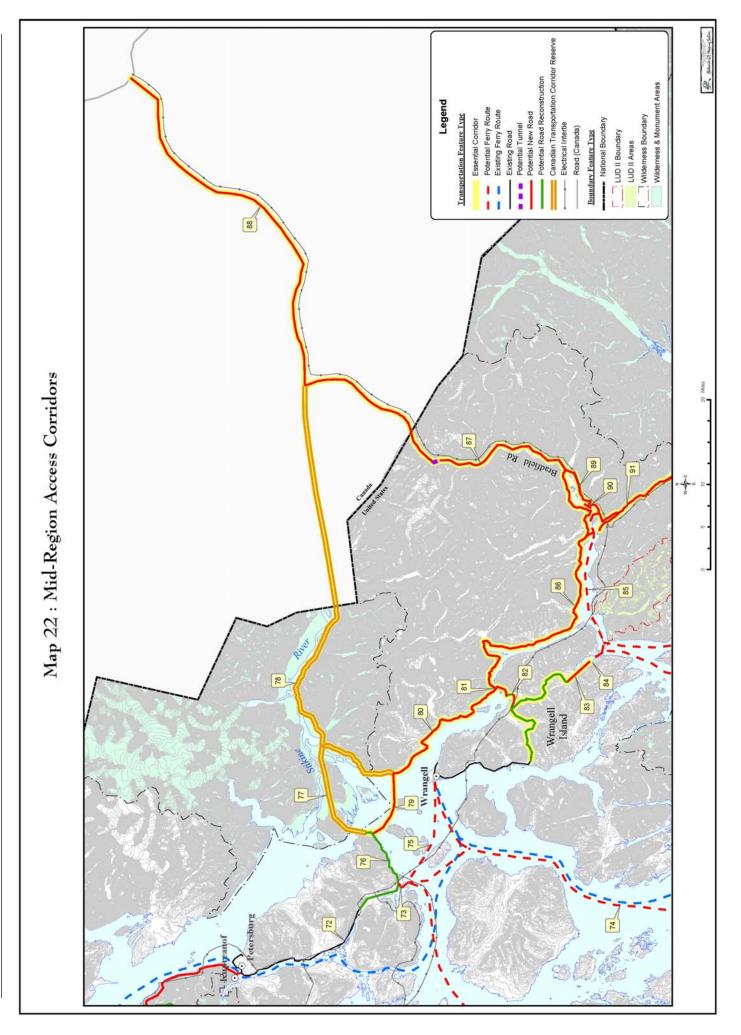


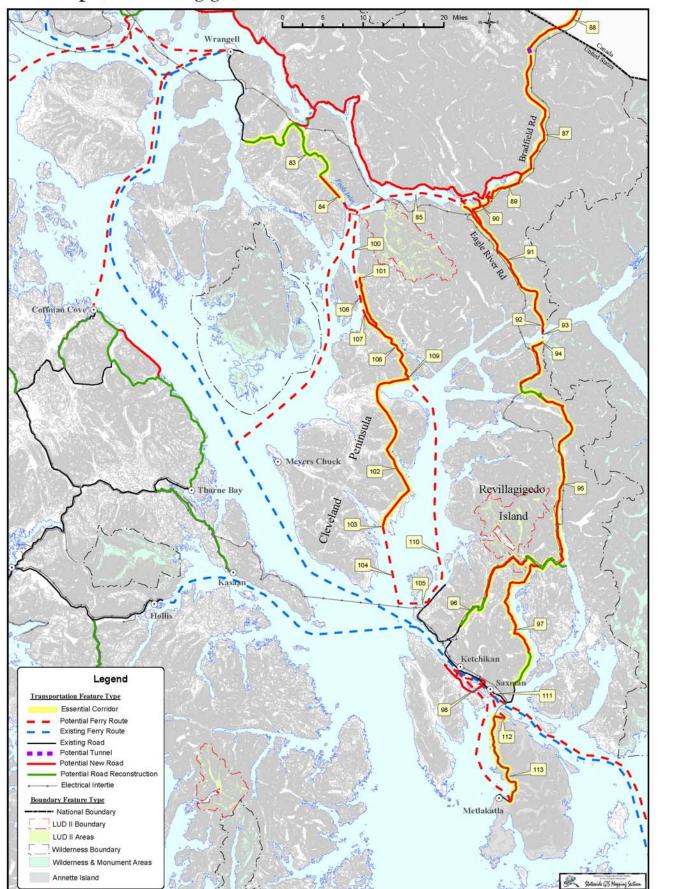












Map 23 : Revillagigedo Island & Cleveland Peninsula Corridors

Transportation Component Cost Estimates

Table A-1 provides descriptive information and estimates of construction and annual operation and maintenance costs for the principal transportation components considered for each corridor. The cost estimates are based on the assumptions described below.

Marine Components

Cost estimates are based on six classes of vessels as follows:

- 1. The fast vehicle ferry with 36.8-mile-per-hour- (mph) service speed and a capacity of 35 cars. The *Fairweather* will be the lead ship in the Fairweather class of fast vehicle ferries.
- 2. The Inter-Island Ferry Authority's design with 17.3-mph speed and a capacity of 30 cars.
- 3. A modified 235-foot LeConte class with 17.3-mph speed and a capacity of 35 cars.
- 4. A small "double ender" design like the Ketchikan Airport ferry with 13.8-mph speed and a capacity of 20 cars.
- 5. The Lituya class with 13.8-mph service speed, a capacity of 18 cars, and an open car deck. The *Lituya* began service between Metlakatla and Ketchikan in spring 2004.
- 6. A new "mainliner" ferry with 19.0-mph speed and a capacity of at least 100 vessels.

Highway Components

This study assumes the Alaska Department of Transportation and Public Facilities (department or ADOT&PF) would first build lower-speed roads — interim typical sections — that could be upgraded later. These interim typical sections are shown in Figure A-1.

As can be seen, these roads would be narrow. They would be paved and posted for moderate speed. The average total cost of the roads would range from \$2.3 million per mile for design and construction of roads that would travel over gentle country to more than \$4 million per mile for roads that would cross rugged country.

Table A-1 also includes the 113 components shown on Maps 16 to 23. In addition to cost estimates for each component, basic features are provided.

Segment Map Ref. Number	Description	Recommended Interim Typical Section or Vessel (capacity)	Estimated Interim Average Speed (mph)	Segment Length Statute (miles)	Ferry Service Frequency (trips per day)	Total Estimated Capital Cost (\$ 000)	Total Annual Estimated M&O Cost (\$ 000)		
Lynn Canal Corridor (See Map 16)									
1	Haines - Skagway Road	Arterial	40	35		130,000	400		
2	Haines Ferry Terminal Improvements					7,000	10		
3	Haines - Katzehin Shuttle Ferry (<i>Aurora</i>)	Aurora	16.7	6.5	9	5,000	2,900		
4	Katzehin Ferry Terminal					15,700	25		
5	Lynn Canal Road (Echo Cove to Skagway)	Arterial	45	68		265,000	1,500		
6	West Lynn Canal Road (Haines to William Henry Bay)	Arterial	45	39		179,000	1,200		
7	William Henry Bay Ferry Terminal					14,300	25		
8	Shuttle Ferry Link: William Henry Bay - Berners Bay	2 Car Ferries (42)	17.3	13	12	59,000	4,900		
9	Berners Bay Ferry Terminal					16,700	25		
Taku Riv	er Corridor (See Map 16)								
10	Taku Highway Route (Bridge crossing of Taku River)	Arterial	45	49		290,000	442		
11	Taku Highway Route (Ferry crossing of Taku Inlet - see 12-14)	Arterial	45	49		160,000	428		
12	West Taku Ferry Terminal (Lag Point)					7,000	10		
13	Taku Inlet Shuttle Ferry	Mod- <i>LeConte</i> (35)	17.3	3.1	6	25,000	1,692		
14	East Taku Ferry Terminal (South side of Jaw Point)					7,000	10		
Mansfiel	d Peninsula Crossing (See Map 16)								
15	Ferry Link: Auke Bay/Young Bay Ferry	Mod- <i>Lituya</i> (20)	13.8	15.3	3	12,000	1,263		
16	Douglas Highway Extension to Middle Point	Island Arterial	35	5.29		14,630	47		
17	Middle Point Ferry Terminal					7,000	10		
18	Ferry Link: Middle Point/Young Bay Ferry	Mod- <i>Lituya</i> (20)	13.8	6.4	6	12,000	1,263		
19	Young Bay Ferry Terminal					7,000	10		
20	Hawk Inlet Road	Island Collector	30	6.31		14,490	52		
21	Hawk Inlet Ferry Terminal					7,000	10		

Table A-1. Descriptions of and Cost Estimates for SATP Components

Segment Map Ref. Number	Description	Recommended Interim Typical Section or Vessel (capacity)	Estimated Interim Average Speed (mph)	Segment Length Statute (miles)	Ferry Service Frequency (trips per day)	Total Estimated Capital Cost (\$ 000)	Total Annual Estimated M&O Cost (\$ 000)	
Chichag	Chichagof Island Corridors (See Map 17)							
22	Ferry Link: Hawk Inlet/Whitestone Harbor	Mod- <i>Lituya</i> (20)	13.8	15.0	3	12,000	1,263	
23	Whitestone Harbor Ferry Terminal					7,000	10	
24	Whitestone Harbor Road to Hoonah Cutoff Road	Island Collector	30	12.96		29,900	106	
25	Hoonah Cutoff Road	Island Collector	30	2.88		4,310	15	
26	Gustavus Ferry Terminal					11,000	50	
27	Hoonah - Tenakee Inlet Road: Hoonah Cutoff to Tenakee Inlet	Island Collector	30	30.64		70,470	251	
28	Pelican Cutoff Road	Island Collector	30	47.64		138,230	391	
29	Tenakee Inlet Ferry Terminal					7,000	10	
30	Ferry Link: Tenakee Inlet Ferry	Double end (20)	13.8	2.7	10	8,000	864	
31	Kadashan Ferry Terminal					7,000	10	
32	Kadashan Road	Island Collector	30	24.15		64,010	198	
33	Peril Strait Ferry Terminal					7,000	10	
34	Ferry Link: Peril Strait Ferry	Double end (20)	13.8	6.2	5	8,000	864	
Baranof	Island Corridors (See Map 18)				1			
35	Rodman Bay Ferry Terminal					12,000	135	
36	Rodman Bay Road	Island Arterial	35	48.83		148,950	869	
37	Warm Springs Bay Road (Sawmill Creek Road to Warm Springs Bay)	Island Arterial	35	18.01		234,410	950	
38	Warm Springs Bay Terminal					15,000	135	
Kuiu Isla	nd Corridor (See Map 19)							
39	Ferry Link: Warm Springs Bay - Kuiu Island Ferry	Mod- <i>LeConte</i> (35)	17.3	25.3	2	25,000	1,692	
40	Security Bay Ferry Terminal					7,000	10	
41	Kuiu Road: Security Bay to Reid Bay	Island Collector	30	48.7		115,920	399	
42	Reid Bay Ferry Terminal					7,000	10	
43	Ferry Link: Sumner Strait Ferry (Reid Bay to Labouchere Bay)	Mod- <i>Lituya</i> (20)	13.8	11.5	5	12,000	1,263	
Kuprean	of Island Corridors (See Map 20)						•	
44	Ferry Link: Rodman Bay - Kake Ferry	Mod- <i>LeConte</i> (35)	17.3	82	2	25,000	1,692	
45	Ferry Link: Warm Spring Bay - Kake Ferry	Mod- <i>LeConte</i> (35)	17.3	37.4	2	25,000	1,692	
46	Kake - Petersburg Road	Island Collector	30	50.61		131,560	415	
47	Kupreanof Ferry Terminal					4,000	10	

Table A-1. Descriptions of and Cost Estimates for SATP Components

Segment Map Ref. Number	Description	Recommended Interim Typical Section or Vessel (capacity)	Estimated Interim Average Speed (mph)	Segment Length Statute (miles)	Ferry Service Frequency (trips per day)	Total Estimated Capital Cost (\$ 000)	Total Annual Estimated M&O Cost (\$ 000)
48	Ferry Link: Kupreanof Ferry (Wrangell Narrows)	Double end (20)	13.8	1.2	10	4,000	738
49	Petersburg Ferry Shuttle Terminal					4,000	10
50	Kake - Totem Bay Road	Island Collector	30	45.65		105,000	374
51	Totem Bay Ferry Terminal					7,000	10
52	Ferry Link: Sumner Strait Ferry to Red Bay	Mod- <i>Lituya</i> (20)	13.8	12.3	3	12,000	1,263
Prince of	f Wales Island Corridors (See Map 2	21)					
53	Labouchere Bay Ferry Terminal					7,000	10
54	Calder Road: Labouchere Bay to NPOWI Road near El Capitan	Island Collector	30	22.03		59,870	181
55	NPOWI Road: Labouchere Bay to Red Bay Cutoff	Island Collector	30	16.75		38,520	137
56	Red Bay Terminal					7,000	10
57	Red Bay Cutoff	Island Collector	30	4.51		10,370	37
58	NPOWI Road: Red Bay Cutoff to Calder Road Intersection	Island Collector	30	8.07		18,560	66
59	NPOWI Road: Calder Road Intersection to Cavern Lake Rd.	Island Collector	30	2.14		6,460	18
60	NPOWI Road: Cavern Lake Road to Neck Lake Road Inters.	Island Collector	30	7.83		18,010	64
61	Cavern Lake Road: NPOWI Road to Whale Pass	Island Collector	30	5.87		19,320	48
62	Neck Lake Road: Whale Pass to NPOWI Road	Island Collector	30	5.7		13,800	47
63	NPOWI Road: Neck Lake Road to Naukati Cutoff	Island Collector	30	15.11		34,750	124
64	Naukati Cutoff	Island Collector	30	2.25		5,180	18
65	NPOWI Road: Naukati Cutoff to Coffman Cove Road	Island Collector	30	7.48		17,200	61
66	Coffman Cove Road: NPOWI Rd. Intersection to Coffman Cove	Island Collector	30	17.52		18,400	144
67	Coffman Cove Terminal					9,400	25
68	Sandy Beach Road: Ratz Harbor to Thorne Bay	Island Collector	30	17.63		40,550	145
69	Sandy Beach Road: Coastal Corridor Coffman C. to Ratz Harbor	Island Collector	30	12.25		28,180	100
70	Kasaan Road (Thorne Bay Rd. to Kasaan)	Island Collector	30				
71	Hydaburg Road	Island Collector	30	21		36,220	0
72	South Mitkof Hwy. Reconstruction: Crystal Lake to Blind Slough	Island Collector	35	6.99		10,920	57
73	South Mitkof Ferry Terminal					14,500	10

Table A-1. Descriptions of and Cost Estimates for SATP Components

Segment Map Ref. Number	Description	Recommended Interim Typical Section or Vessel (capacity)	Estimated Interim Average Speed (mph)	Segment Length Statute (miles)	Ferry Service Frequency (trips per day)	Total Estimated Capital Cost (\$ 000)	Total Annual Estimated M&O Cost (\$ 000)
74	Ferry Link: IFA Ferry, South Mitkof/Wrangell/Coffman Cove	IFA (30)	17.3	49.5	1	17,000	1,276
75	Ferry Link: South Mitkof to Wrangell Shuttle Ferry	IFA (30)	17.3	13.8	1	17,000	1,276
76a	South Mitkof Hwy. Reconstruction: Blind Slough to Causeway	Island Collector	30	5.9		9,300	50
76b	South Mitkof Hwy. Reconstruction: Blind Slough to Dry Straits Crossing	Island Arterial	35	8		13,600	67
77	Stikine Highway: Dry Straits & Stikine River Crossing	Island Arterial	35	12.25		187,000	150
78	Stikine Highway: Eastern Passage Narrows Bridge to Border	Island Arterial	35	47.64		110,000	391
79	Stikine Causeway	Island Collector	30	8.26		460,000	83
80	Eastern Passage Highway to Narrows Bridge	Island Collector	30	18.45		42,320	151
81	Narrows Bridge	Island Collector	30	0.8		75,000	40
82	Wrangell Cutoff: Narrows Bridge to Fools Inlet Road	Island Collector	30	4.81		11,060	39
83	Fools Inlet Road: Zimovia Highway to Fools Inlet	Island Collector	30	22.08		50,830	181
84	Fools Inlet Ferry Terminal					7,000	10
85	Bradfield Ferry: Fools Inlet to Bradfield Canal Duck Point Terminal	Mod- <i>LeConte</i> (35)	17.3	17.3	5	25,000	1,692
86	Eastern Passage Hwy: Narrows Bridge to Bradfield Road Junction	Island Collector	30	41.54		123,140	341
87	Bradfield Road: Bradfield Road Junction to Canada Border	Rural Collector	30	24.13		220,000	240
88	Bradfield Road: Canada Border to Iskut &Cassiar Hwy. #37	N/A	N/A	48		N/A	N/A
89	Bradfield Road: Bradfield Road Junction to Duck Point Term.	Rural Collector	30	8.02		30,000	66
90	Duck Point Ferry Terminal					7,000	10

Table A-1. Descriptions of and Cost Estimates for SATP Components

Segment Map Ref. Number	Description	Recommended Interim Typical Section or Vessel (capacity)	Estimated Interim Average Speed (mph)	Segment Length Statute (miles)	Ferry Service Frequency (trips per day)	Total Estimated Capital Cost (\$ 000)	Total Annual Estimated M&O Cost (\$ 000)			
Revillagi	Revillagigedo Island and Upper Cleveland Peninsula Corridors (See Maps 22 & 23)									
91	Eagle River Road: Bradfield Canal Duck Point to Behm Canal	Island Collector	30	19.53		50,400	160			
92	Point Lees Ferry Terminal					7,000	10			
93	Ferry Link: Behm Canal Ferry	Double end (20)	13.8	2.3	9	8,000	864			
94	Claude Point Ferry Terminal					7,000	10			
95	Revillagigedo Highway: Behm Canal to George Inlet	Island Arterial	35	43.5		130,180	387			
96a	Harriet Hunt Lake Road: George Inlet to Harriet Hunt Lake	Island Arterial	35	10.98		30,300	98			
96b	Harriet Hunt Lake/Ward Lake Road Upgrade	Island Arterial	35	6		10,350	53			
97a	George Inlet Road: Head of George Inlet to South Tongass Hwy.	Island Arterial	35	14.3		42,690	127			
97b	South Tongass Highway Reconstruction & Paving	Island Arterial	35	4.55		7,940	40			
98	Bridge to Gravina Island	Arterial	35			230,000	100			
99	Lower Cleveland Peninsula Corrid	ors								
100	Ferry Link: Fools Inlet/Frosty Bay Ferry	Mod- <i>Lituya</i> (20)	13.8	10.4	5	12,000	1,263			
101	Frosty Bay Ferry Terminal					7,000	10			
102	Cleveland Peninsula Road: Frosty Bay to Helm Bay	Island Collector	30	39.57		10,670	324			
103	Helm Bay Ferry Terminal					7,000	10			
104	Ferry Link: Helm Bay Ferry to North Tongass Hwy. Terminal	Mod- <i>Lituya</i> (20)	13.8	13.0	4	12,000	1,263			
105	North Tongass Hwy. Ferry Terminal					7,000	135			
106	Ferry Link: Fools Inlet/Santa Anna Inlet Ferry	Mod- <i>Lituya</i> (20)	13.8	15.4	3	12,000	1,263			
107	Santa Anna Ferry Terminal					7,000	10			
108	Cleveland Peninsula Cutoff: Santa Anna to Spacious Bay	Island Collector	30	10.62		24,380	87			
109	Spacious Bay Ferry Terminal					7,000	10			
110	Ferry Link: Spacious Bay Ferry to North Tongass Hwy. Terminal	Mod- <i>LeConte</i> (35)	17.3	33.4	2	25,000	1,692			

Table A-1. Descriptions of and Cost Estimates for SATP Components

Segment Map Ref. Number	Description	Recommended Interim Typical Section or Vessel (capacity)	Estimated Interim Average Speed (mph)	Segment Length Statute (miles)	Ferry Service Frequency (trips per day)	Total Estimated Capital Cost (\$ 000)	Total Annual Estimated M&O Cost (\$ 000)
Metlakatla Access Corridor (See Map 23)							
111	Saxman Ferry Terminal					7,500	10
112	Annette Bay Ferry Terminal					7,000	10
113	Walden Point Road	Rural Arterial	45	14.29		55,000 ¹	N/A
= Road							
	= Ferry terminal						
	= Ferry links						

Table A-1. Descriptions of and Cost Estimates for SATP Components

IFA = Inter-Island Ferry Authority

M&O = Maintenance and operations

N/A = Not available

NPOWI = North Prince of Wales Island

Mod- = Modified vessel type

= Total

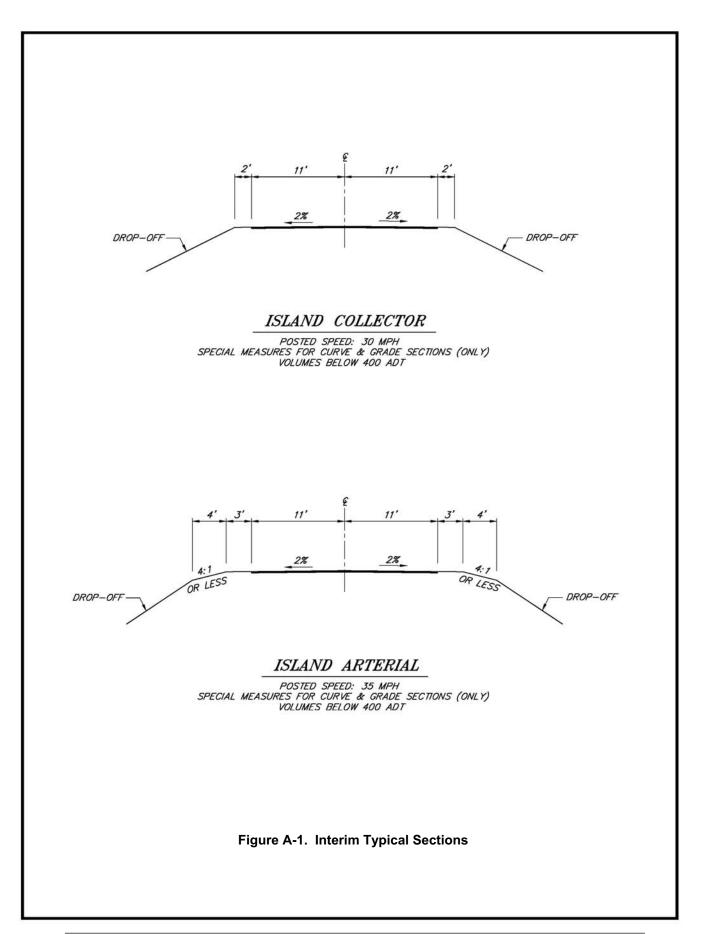
¹ Walden Point Road capital dollar estimate represents funding needed to complete the road in addition to the military training program.

Notes:

All costs are preliminary and include design costs. Values are expressed in current (2003) dollars.

Island collector indicates a rural road expected to have lower traffic volumes.

Island arterial indicates a road reachable from a large community that is expected to have higher traffic volumes.



Proposed Highway System Designations

This part of Appendix A identifies how the changes in the SATP will require revisions and additions to the National Highway System (NHS), the Alaska Highway System (AHS), and Forest Highway (FH) designations. In summary, a number of routes already identified as AHS would be added to the NHS, other routes would be added to the AHS, and several routes would be designated as FH routes.

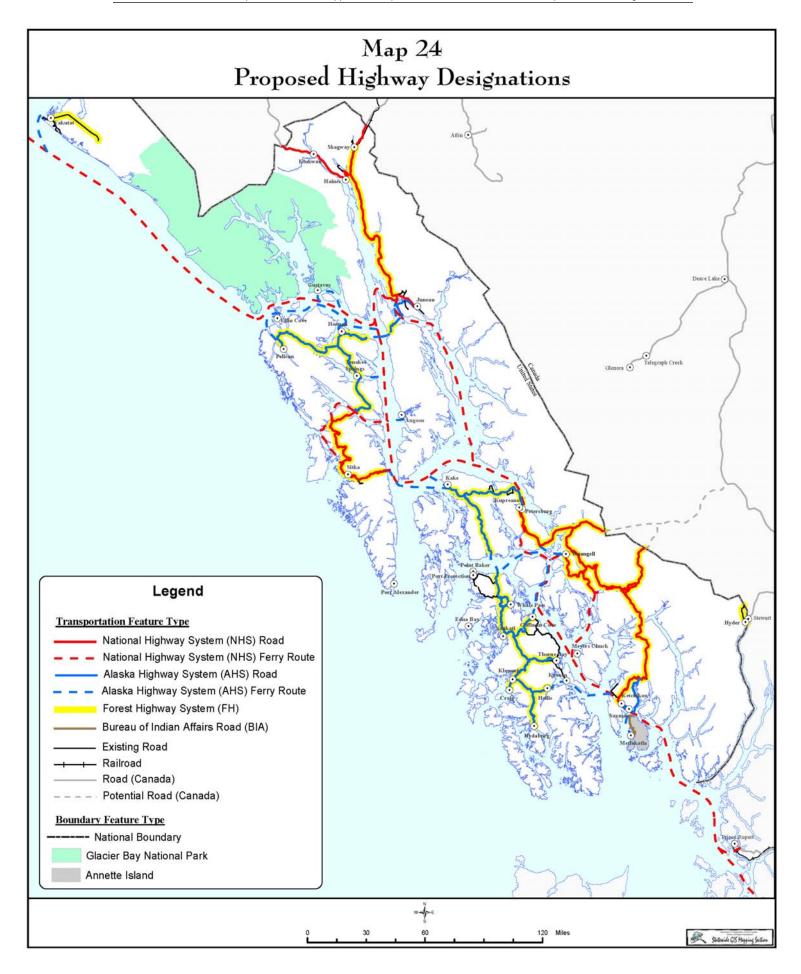
Map 24 depicts proposed highway system designations for SATP highway corridors. Ferry terminals at the end of NHS routes are designated NHS terminals, and those at the end of AHS routes are designated AHS terminals. Ferry routes connecting NHS terminals are designated NHS routes, and those connecting AHS terminals are designated AHS routes. Marine shuttle-ferry routes and ferry terminals connecting FH routes to the regional transportation system are included in FH route designations.

One aspect of bringing a comprehensive transportation network to Southeast Alaska is that the region can be more fully integrated into the NHS. Currently, two segments of the NHS end at tidewater on Lynn Canal, but there is no through highway link to Juneau or other principal destinations south of Skagway and Haines. Because the NHS consists of routes important to interstate travel, national defense, and the nation's commerce, it makes sense to extend these types of highway links into Southeast Alaska and to the state capital.

The SATP preferred alternative for Juneau Access would construct 68 miles of new NHS route that would connect the Klondike Highway, an NHS route, with the end of the Glacier Highway at Echo Cove. The 26-mile segment of Glacier Highway from Echo Cove to Auke Bay Terminal would become an NHS route, and would connect to the existing 14-mile NHS route that extends from the Auke Bay Terminal past the airport to downtown Juneau.

In southern Southeast Alaska, Mid-Region Access would construct a new highway west from the continental highway system in Canada. This NHS route would connect to the road system in Ketchikan, the region's second most populous community. In combination with Gravina Access, Mid-Region Access would provide a through highway link to the Ketchikan International Airport. There would also be a connection from Mid-Region Access to Wrangell and Petersburg. This connection would be part of the NHS route that connects Ketchikan to Sitka and Juneau.

As part of the through highway connection between Ketchikan, Sitka, and Juneau, a segment of the Mitkof Highway would be an NHS route because it connects ferry terminals on both sides of Wrangell Narrows. For funding



purposes, this 26-mile segment is already treated as NHS in the Statewide Transportation Improvement Program (STIP).

The construction of the two new NHS routes would connect the two largest population centers in Southeast Alaska with the continental highway system.

On Baranof Island, an eight-mile NHS route runs from the airport through town to the existing site for the ferry terminal. A new highway would be constructed to a new location for the ferry terminal on or near Chatham Strait. Depending on the selected alignment, the NHS route would be either an extension of the existing route or would tie to the existing route in the downtown vicinity.

The AHS complements the NHS, and includes those routes of statewide significance that are not part of the NHS. Several routes discussed above are already part of the AHS, including the Glacier Highway beyond the Auke Bay Terminal, part of the Mitkof Highway and the two trunk highways of the Ketchikan road system. In Ketchikan, the future NHS link would include the connection to Gravina Island, and would extend along either the North Tongass Highway or South Tongass Highway from the existing NHS segment (three miles in length), which serves the Ketchikan core.

On Prince of Wales Island, 81 miles of AHS routes link the island's three most populous communities with each other and transportation gateways (ferry and airport) for travel to and from the island. This network needs to be expanded. The road south to Hydaburg, which requires a major upgrade to current standards, needs to be added to the AHS. North from Control Lake junction, the AHS includes 15 miles of state highway. It is recommended that this designation be extended (along with state maintenance) to a ferry terminal in Coffman Cove. In addition the existing FH 43 on Prince of Wales Island, which reaches El Capitan Junction, needs to be extended north to a ferry terminal site near Red Bay, across Sumner Strait from Totem Bay. The connecting routes to Whale Pass via Cavern Lake and Neck Lake roads are recommended for inclusion in the AHS with the route to Red Bay.

On Kupreanof Island, the proposed road east from Kake to Petersburg is partially constructed, and already designated as FH. This route, part of which is not built, needs to be added to the AHS. Addition of this route to the AHS would recognize that this route is of statewide significance because it connects two communities and extends the regional highway system, along with providing access to recreational sites and areas of resource development. South from the constructed portion of the proposed road from Kake to Petersburg, an existing road extends toward Totem Bay at the south end of Kupreanof Island. The constructed and unconstructed portions of this route need to be added to the AHS. This route is of statewide significance because it provides a direct connection between Kake and Prince of Wales Island and offers an alternative regional route between Ketchikan and the communities in the Northern Panhandle.

The roads and corridors identified as essential by the SATP on Chichagof Island between Hoonah, Whitestone Harbor, Pelican, and Tenakee Inlet, including the road up Kadashan to Peril Strait, are recommended for addition to the AHS. Other routes recommended for inclusion in the AHS are North Douglas Highway and its extension to Middle Point and the road between Young Bay and Hawk Inlet. All of these roads, with the exception of the North Douglas Highway, are recommended additions to the FH system.

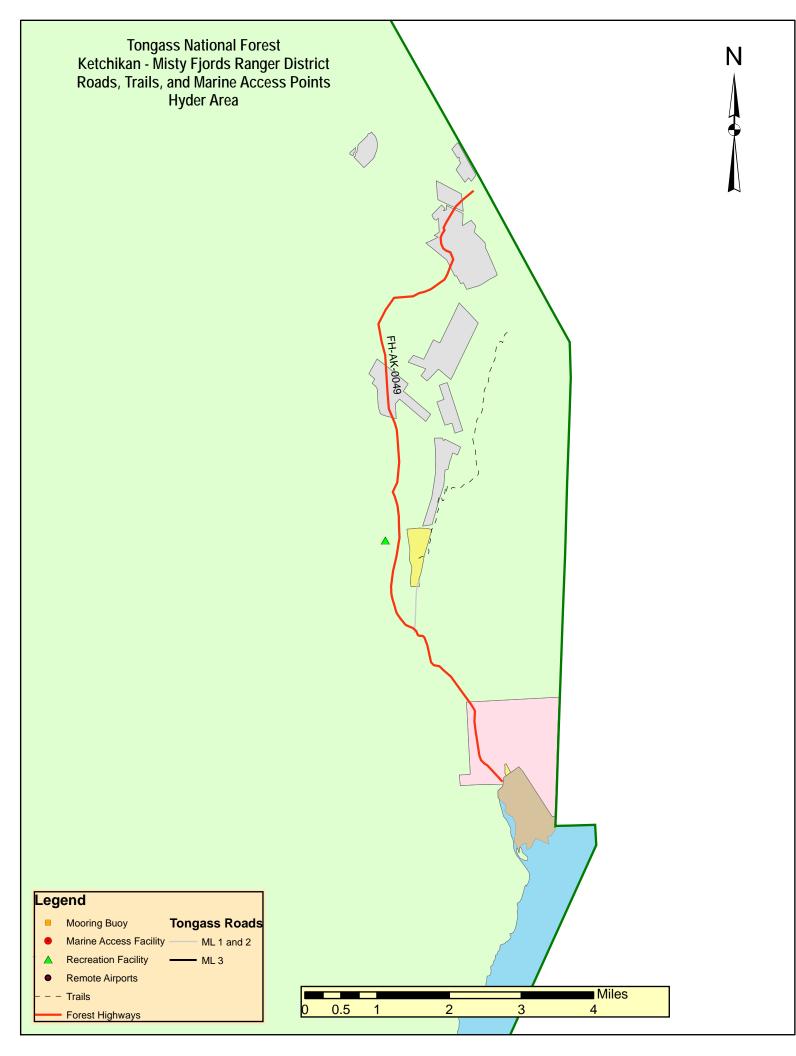
FH designations are established and administered by the Federal Highway Administration (FHWA), Western Federal Lands Highway Division, through a tri-agency process that coordinates efforts of representatives from FHWA, the Forest Service, and ADOT&PF. Representatives of the three agencies meet annually (at a minimum) to report progress, reach decisions on the FH program, and discuss project development issues. FH designations are primarily for funding purposes, and overlay other highway designations.

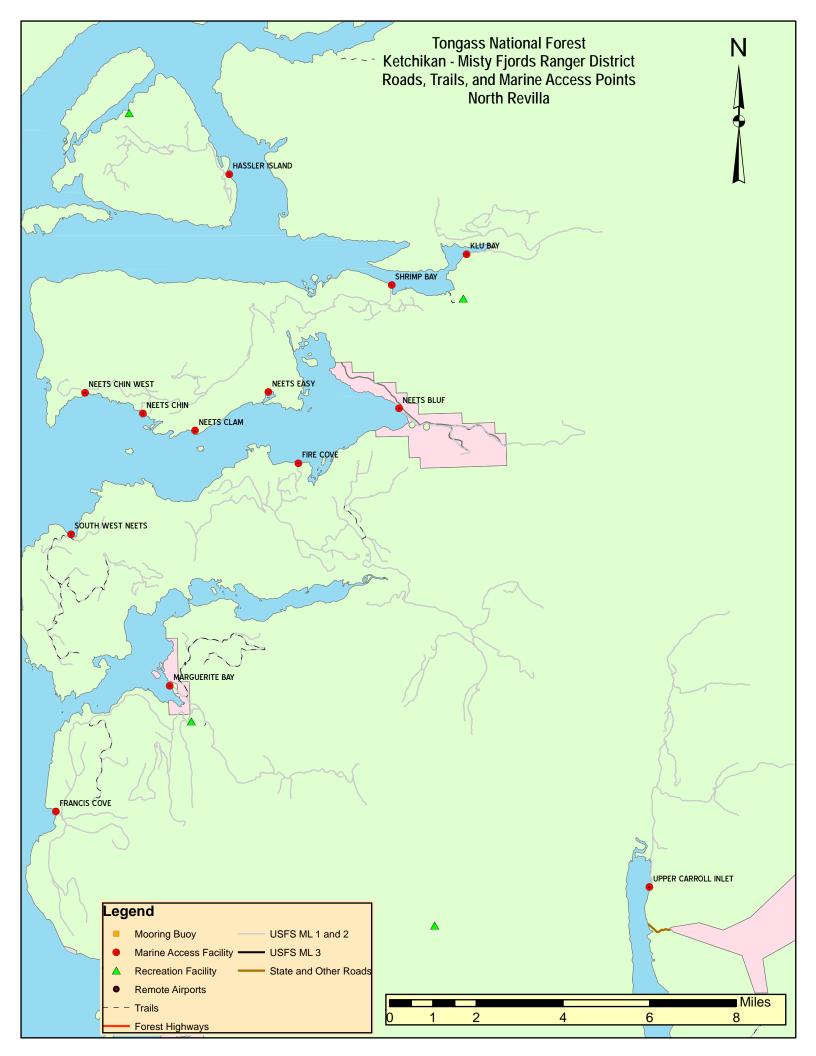
South from the constructed portion of the proposed road from Kake to Petersburg, an existing road extends toward Totem Bay at the south end of Kupreanof Island. The constructed and unconstructed portions of this route need to be designated as FH. Similarly, existing FH 43 on Prince of Wales Island, which reaches El Capitan Junction, needs to be extended north to a ferry terminal site near Red Bay, which is across Sumner Strait from Totem Bay. In addition, the connecting routes to Whale Pass via Cavern Lake and Neck Lake roads are recommended FH routes.

In conjunction with major access improvements to and between Juneau, Ketchikan, and Sitka, four extensions of existing FH routes are needed. North of Juneau, FH 2 (Glacier Highway) extends from Auke Bay Terminal north for 31 miles, including an unconstructed portion to Sawmill Creek. This designation needs to be extended to the junction with the Klondike Highway in Skagway. In Ketchikan, FH 39 (Ward Lake Road) traverses 24 miles to Shelter Cove, and needs to be extended to the Canadian border. South from Wrangell, FH 16 (Zimovia Highway) reaches the national forest boundary, and needs to be extended to Fools Inlet. Finally, FH 11 crosses Starrigavan Creek near the Sitka Terminal, and needs to be extended to Rodman Bay. East from Sitka, the proposed road to Warm Spring Bays is already designated FH 47.

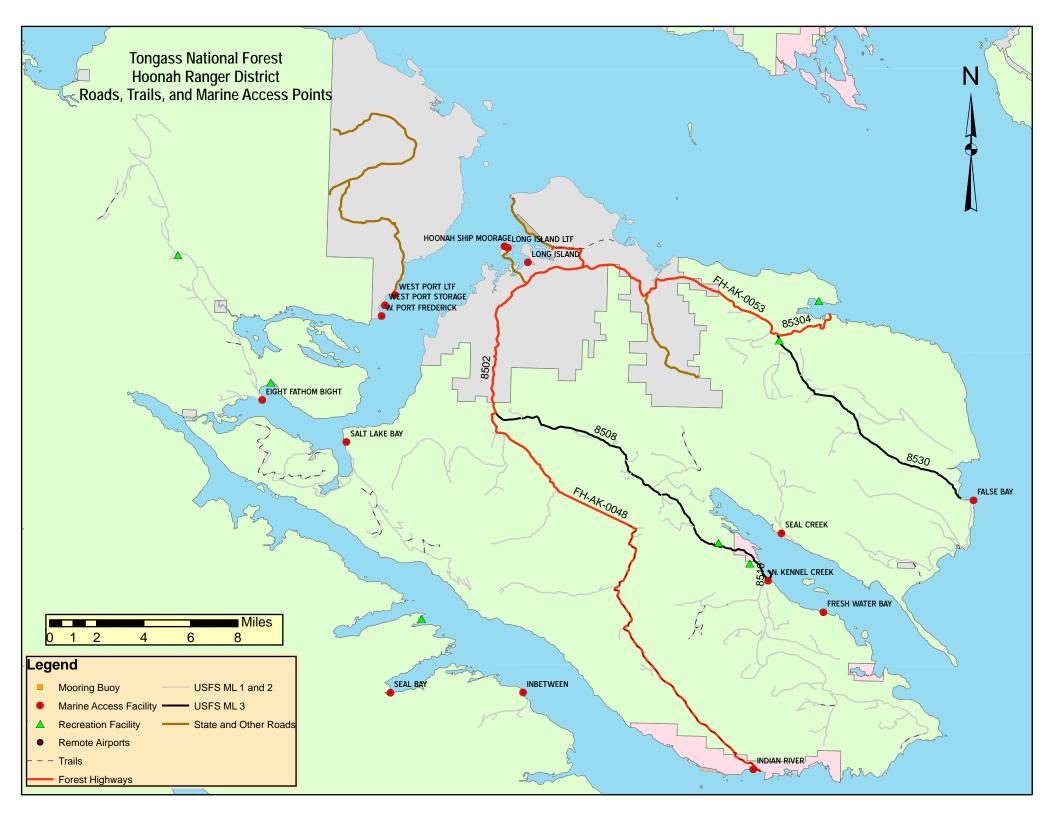
U.S. Forest Service Alaska Region Long Range Transportation Plan

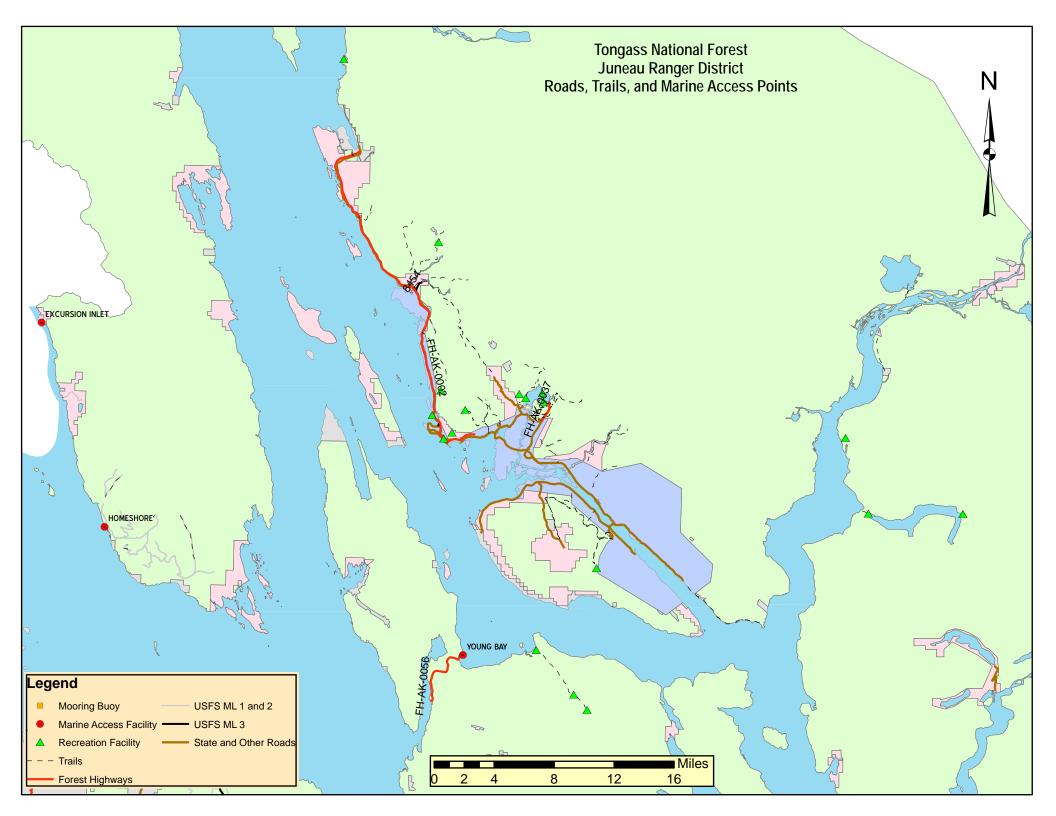
Appendix C *Alaska Region Transportation System Maps*

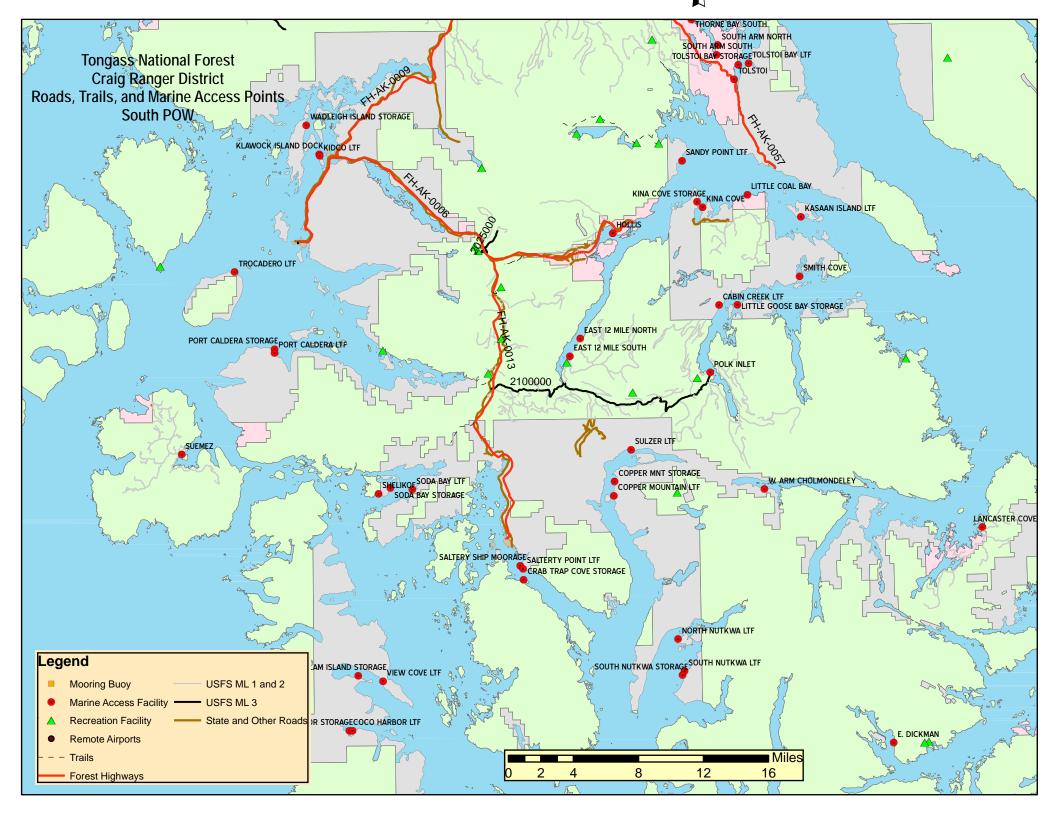


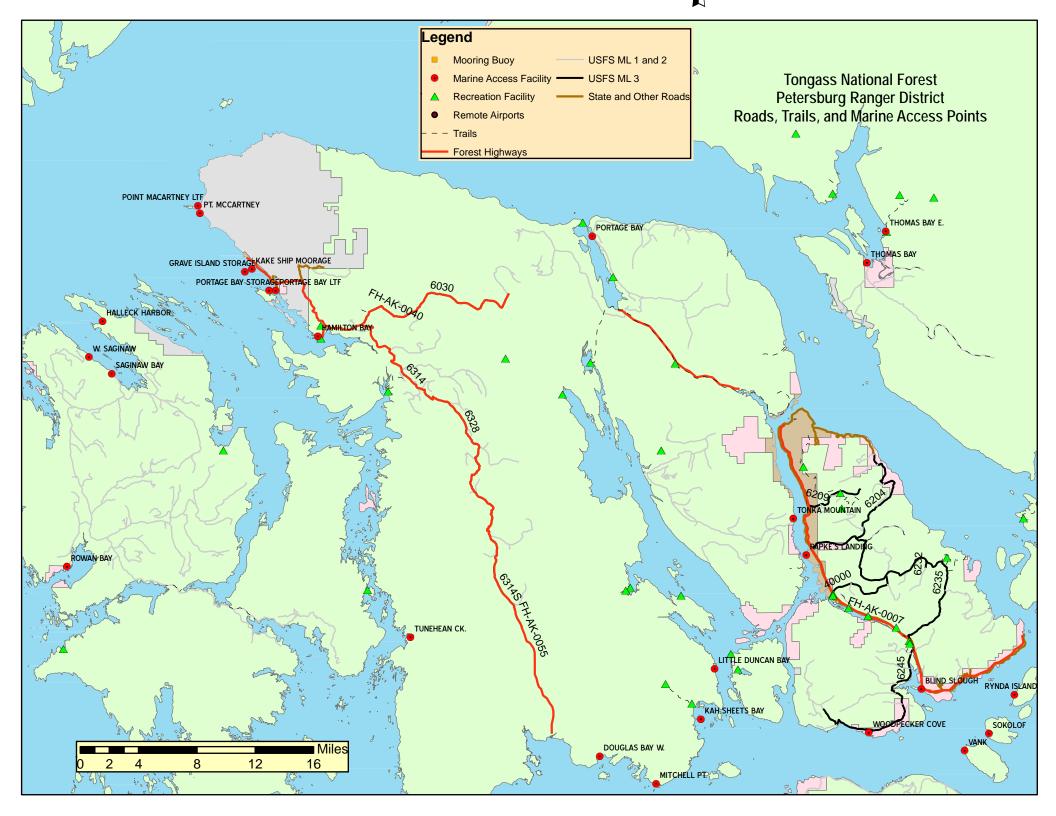


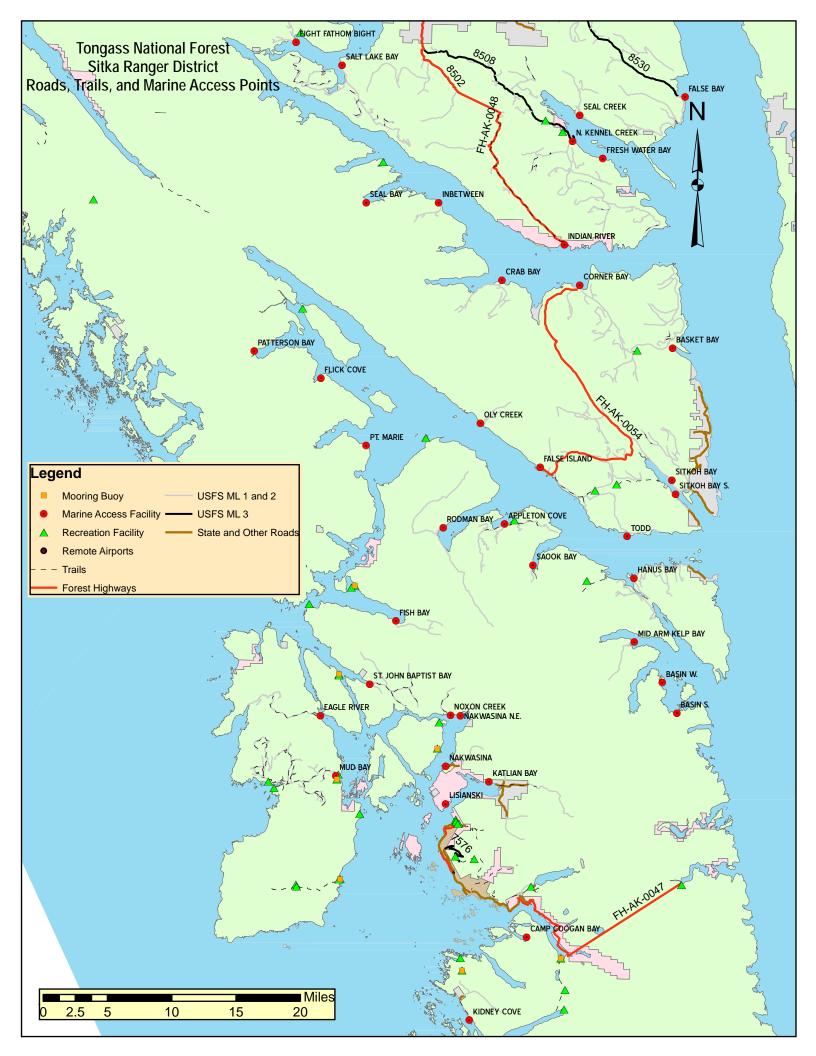


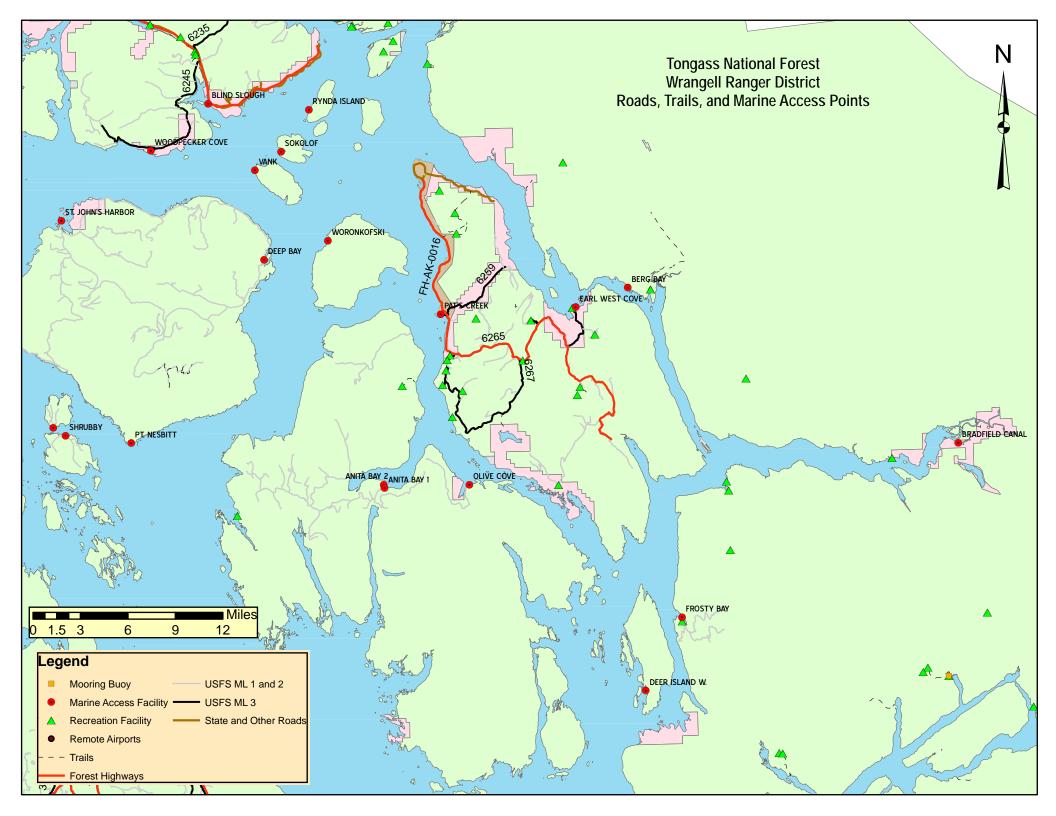


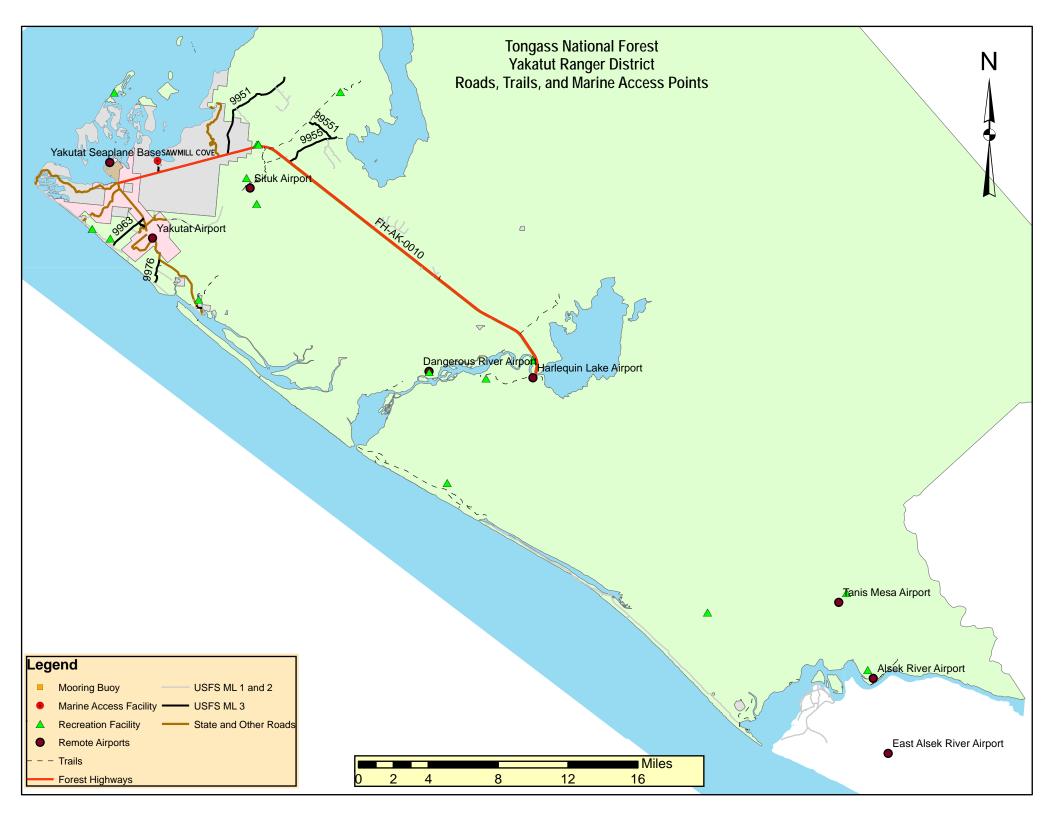


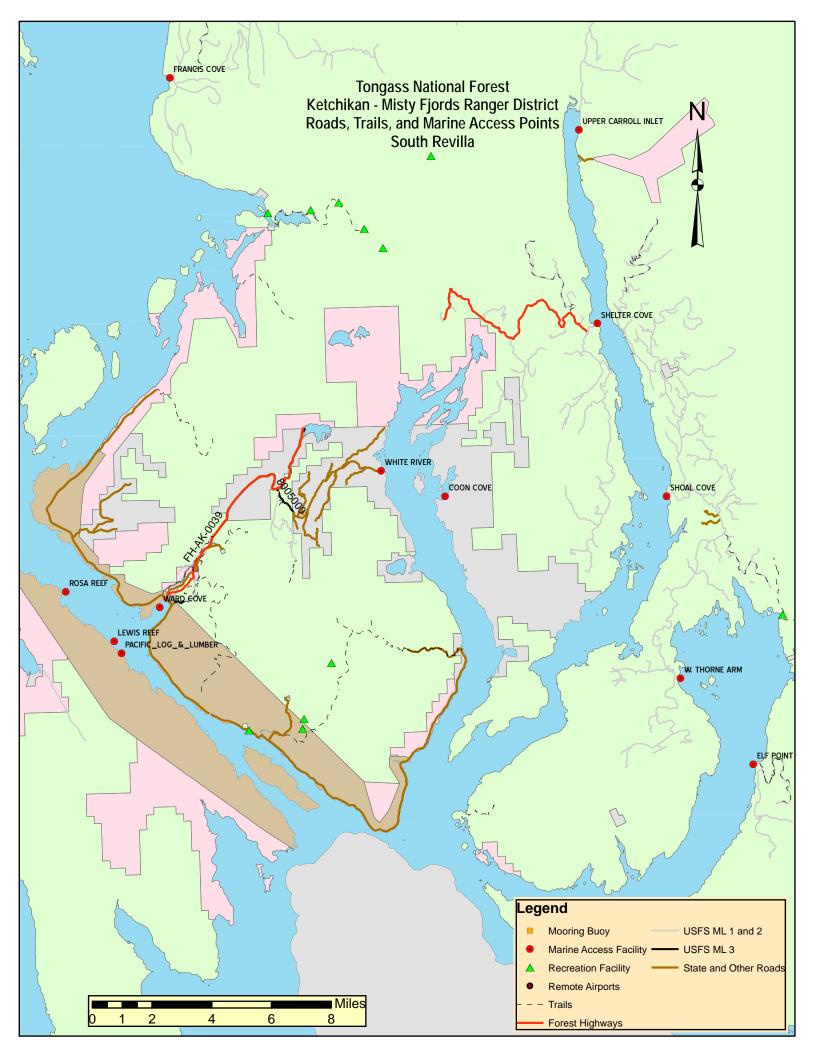


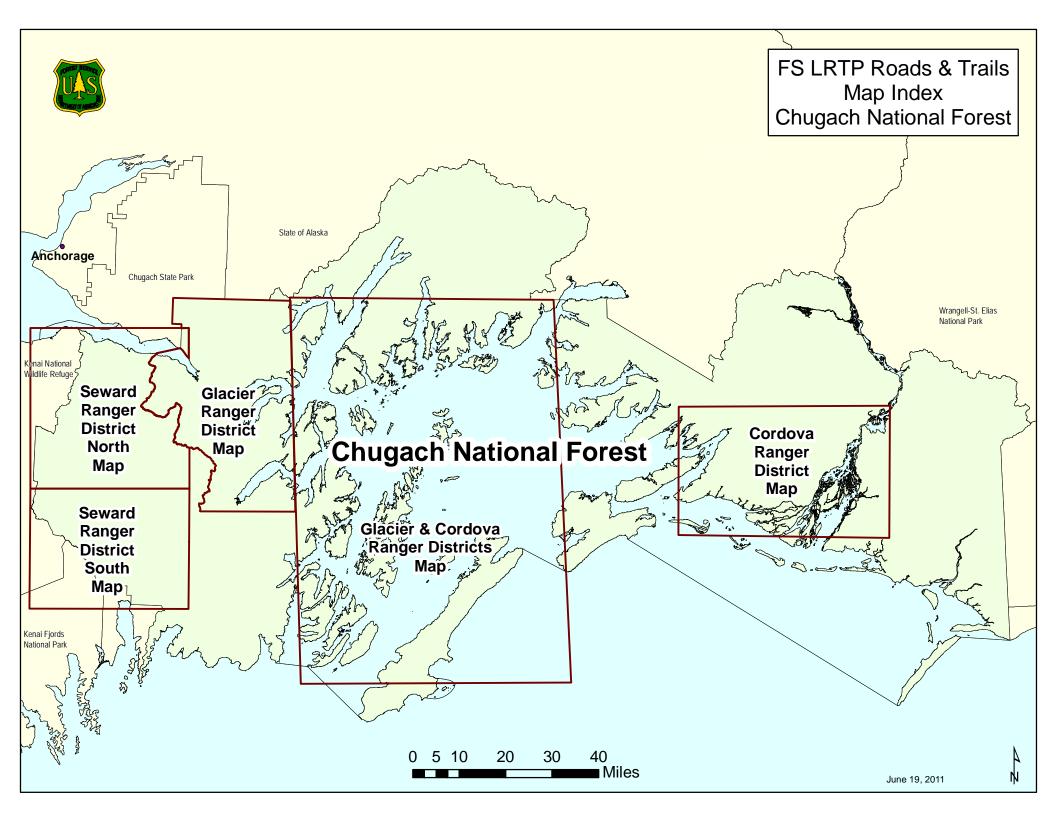


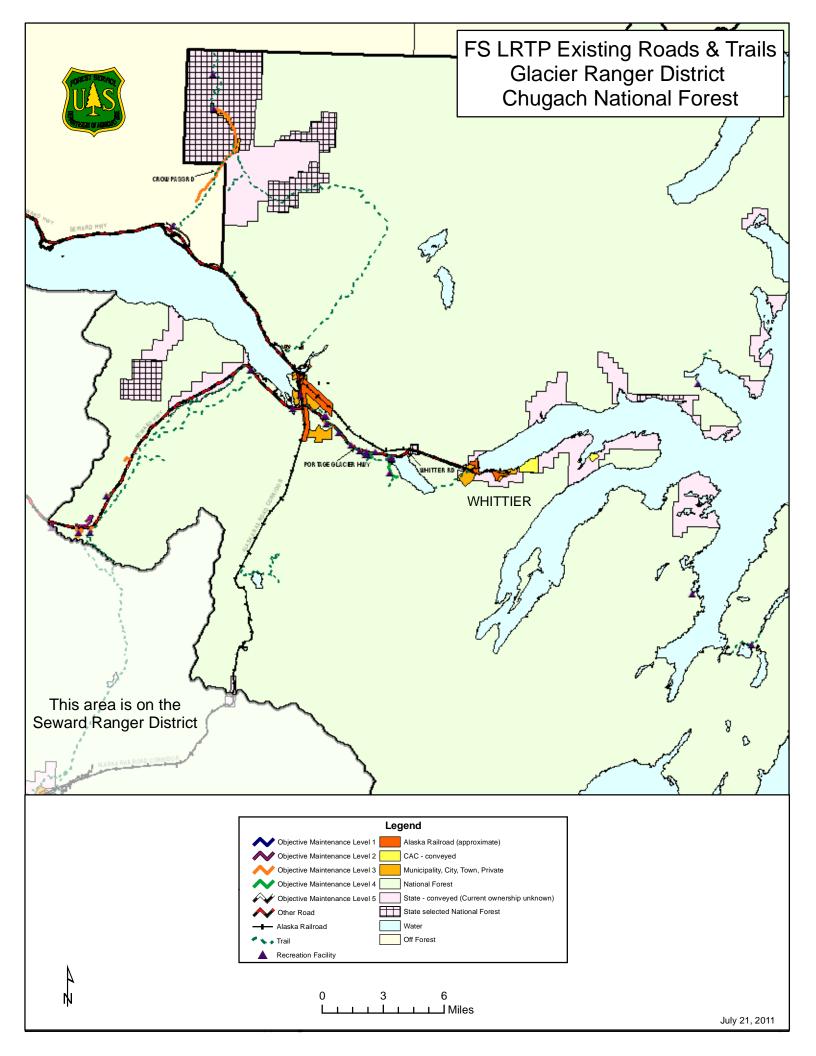


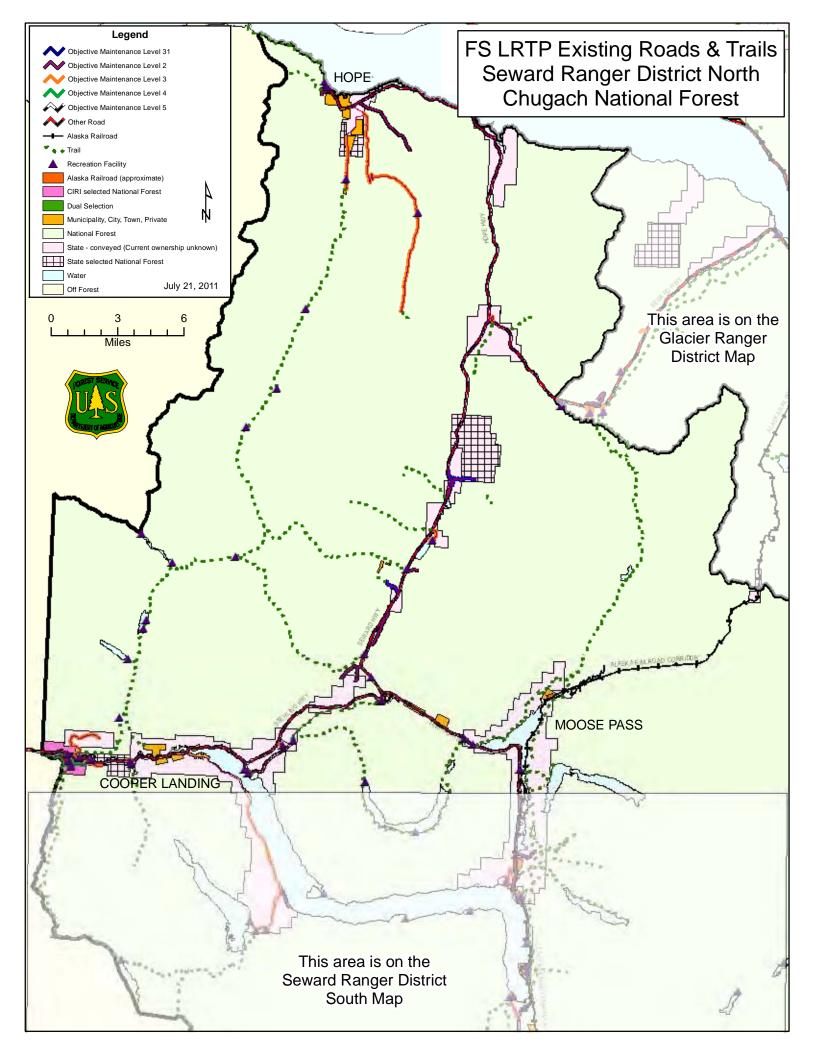


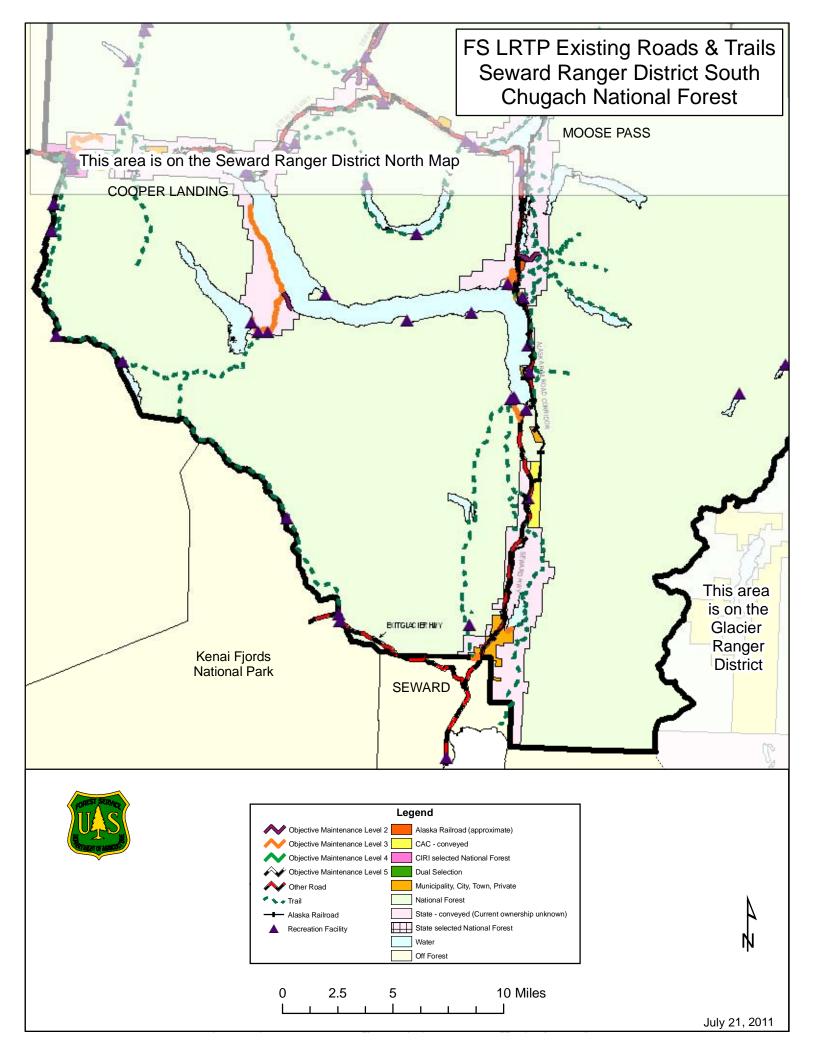


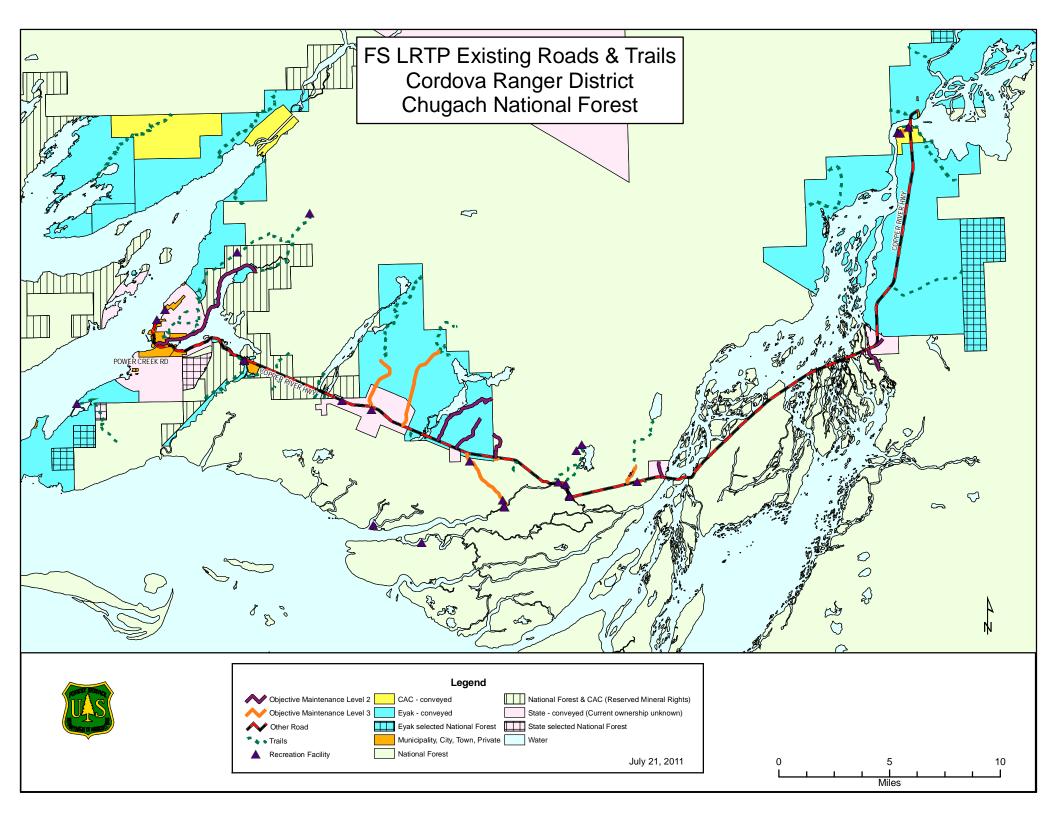






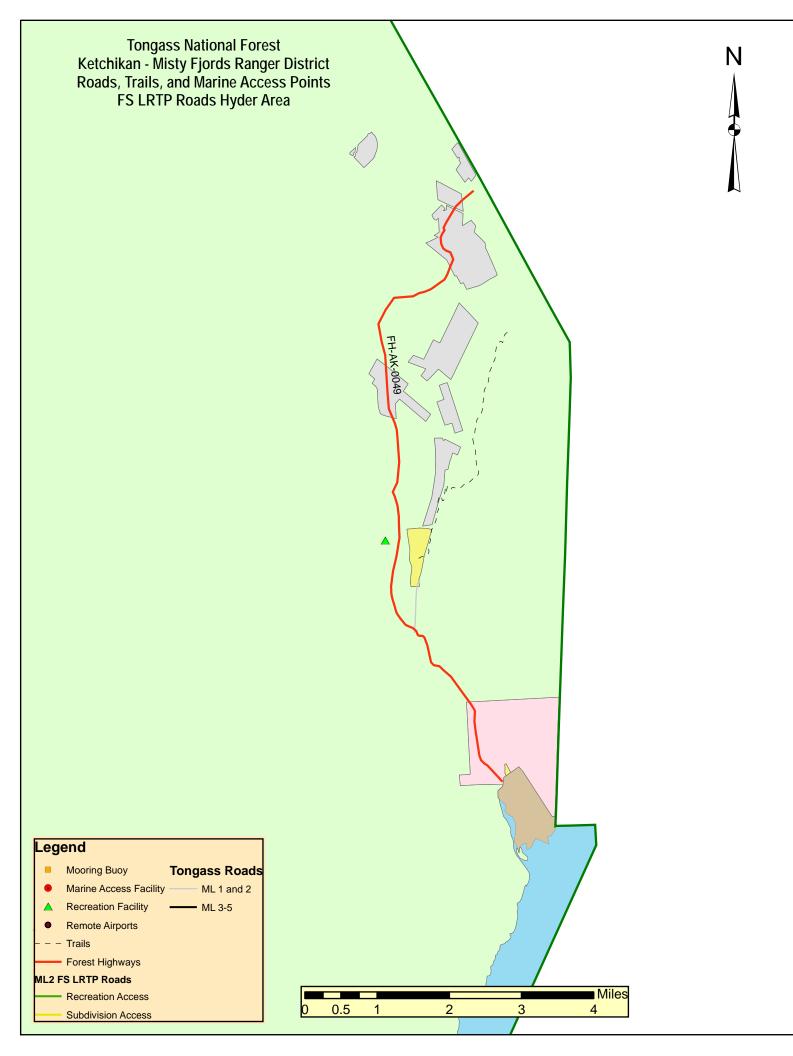


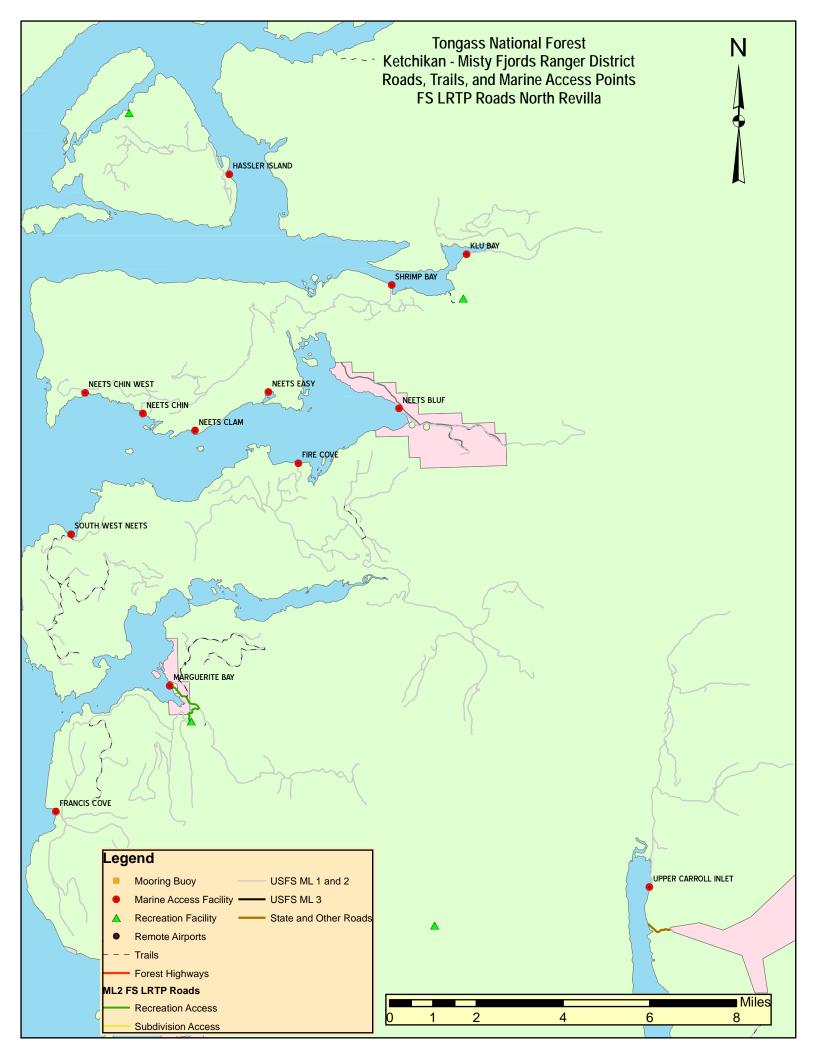


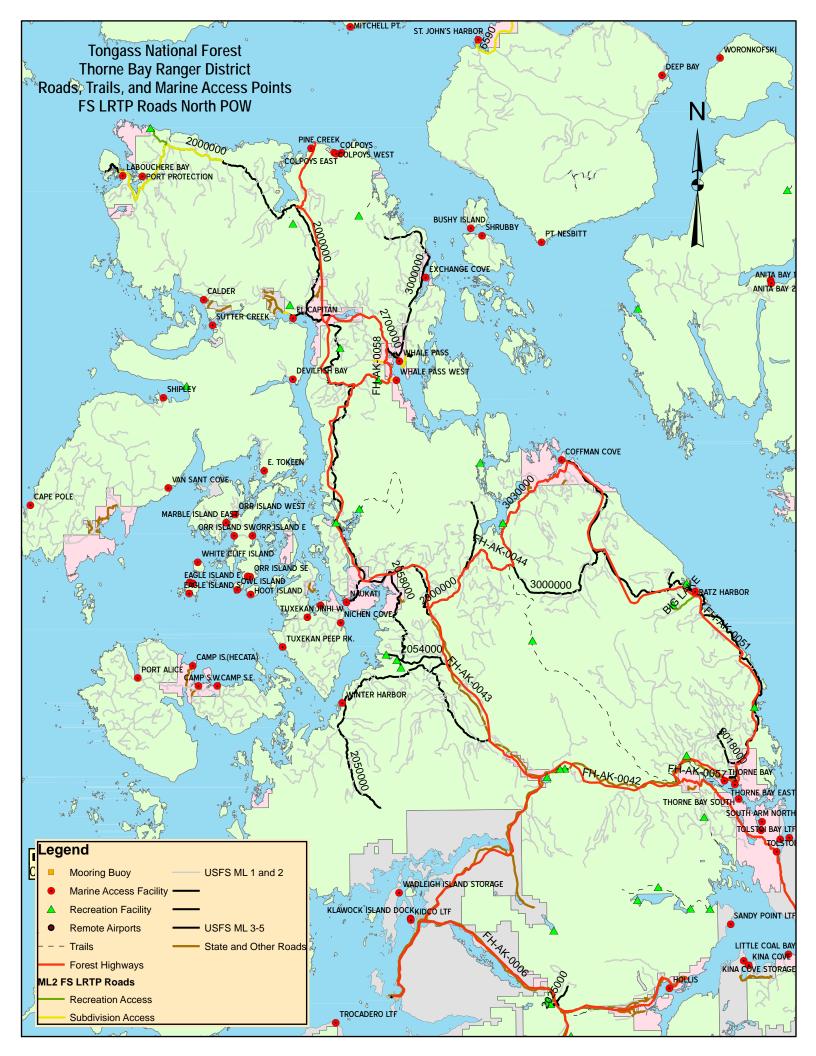


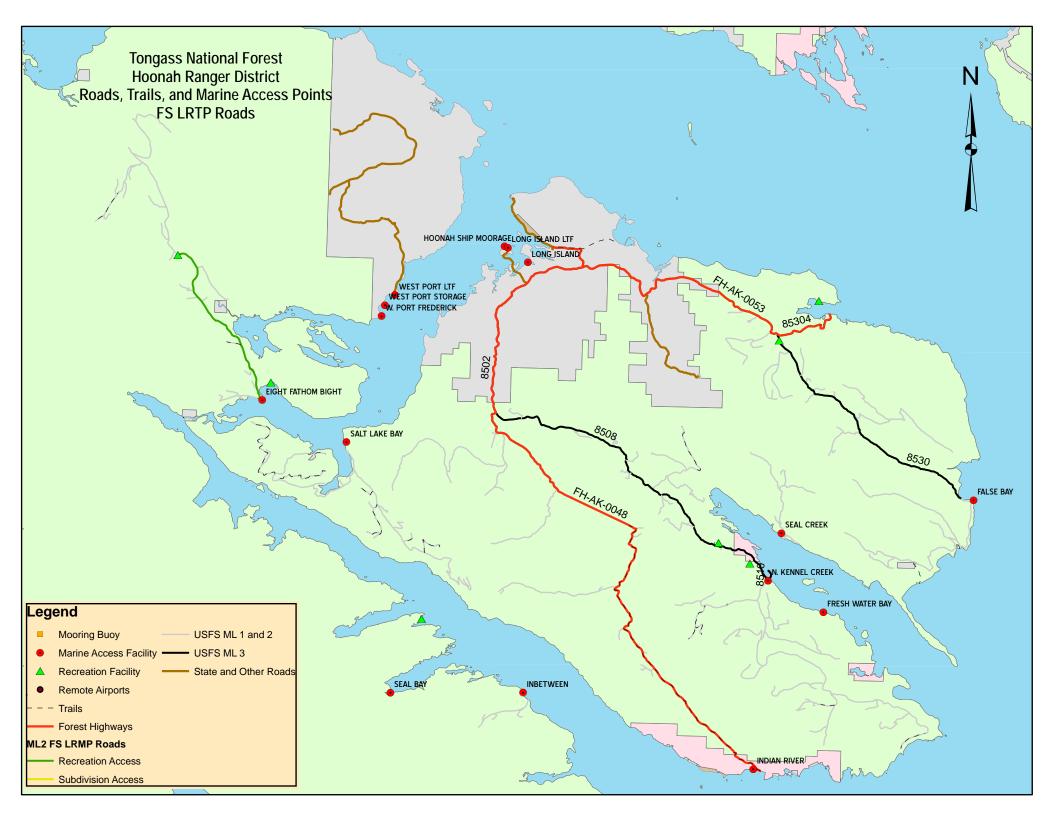
U.S. Forest Service Alaska Region Long Range Transportation Plan

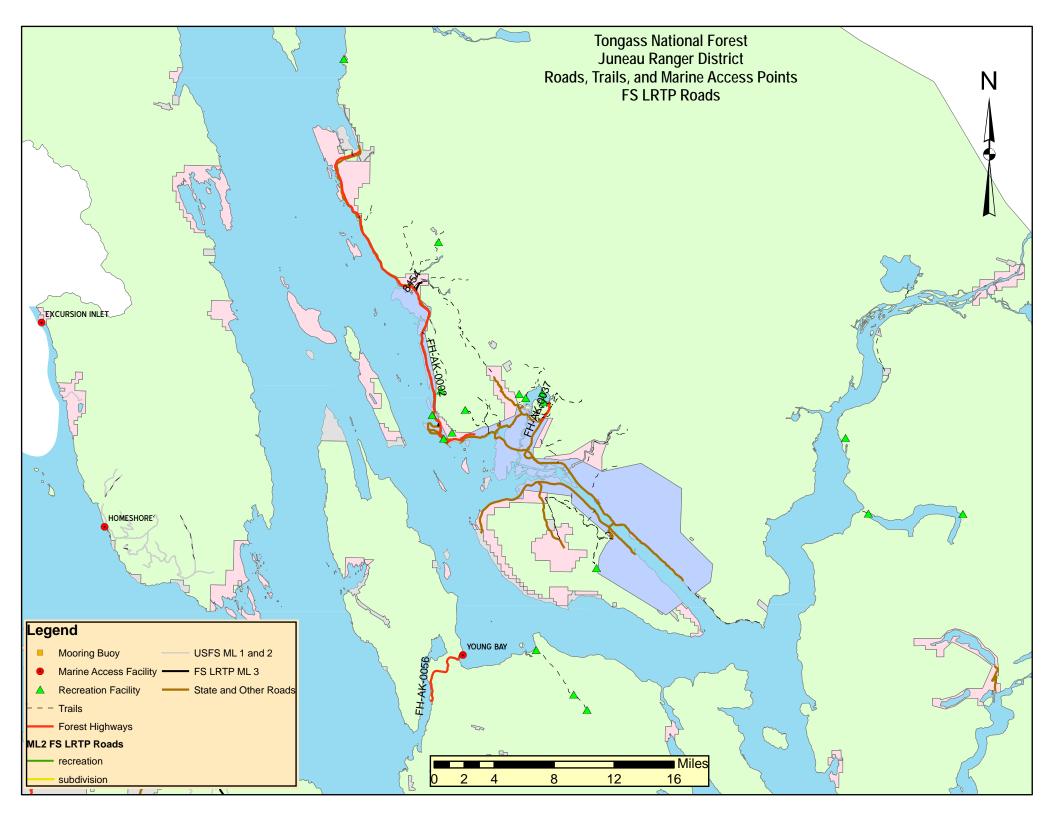
Appendix D Alaska Region LRTP Priority Transportation System Maps

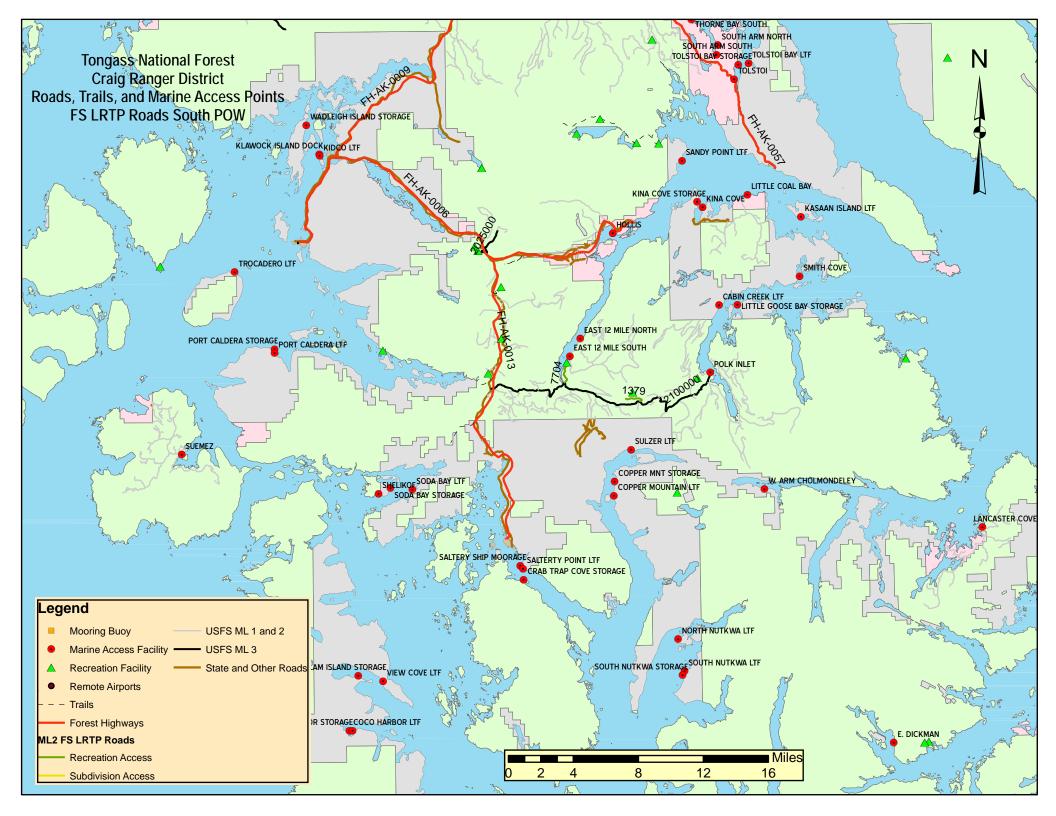


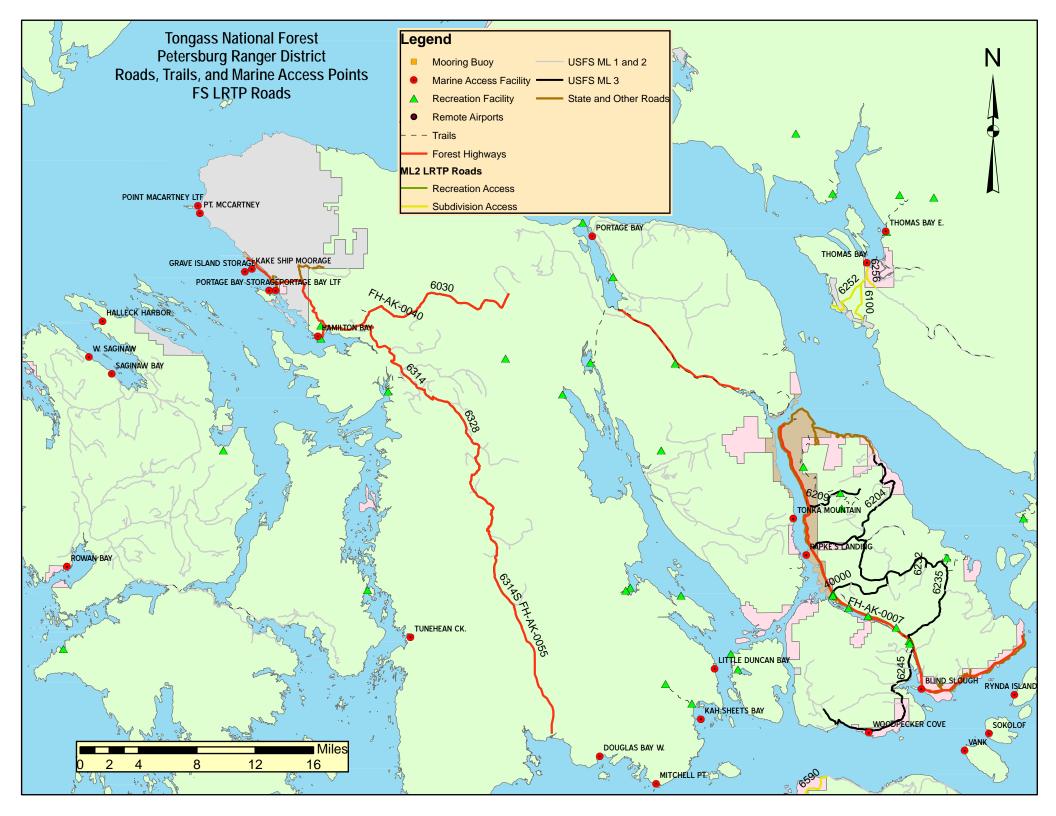


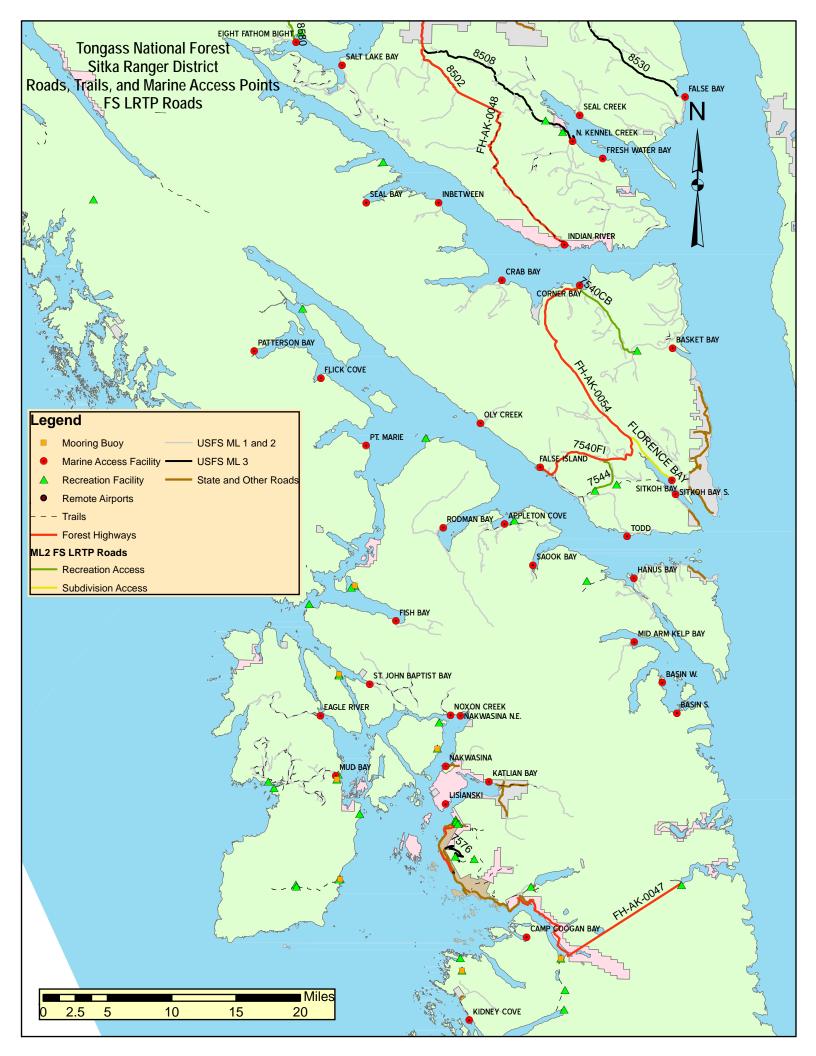


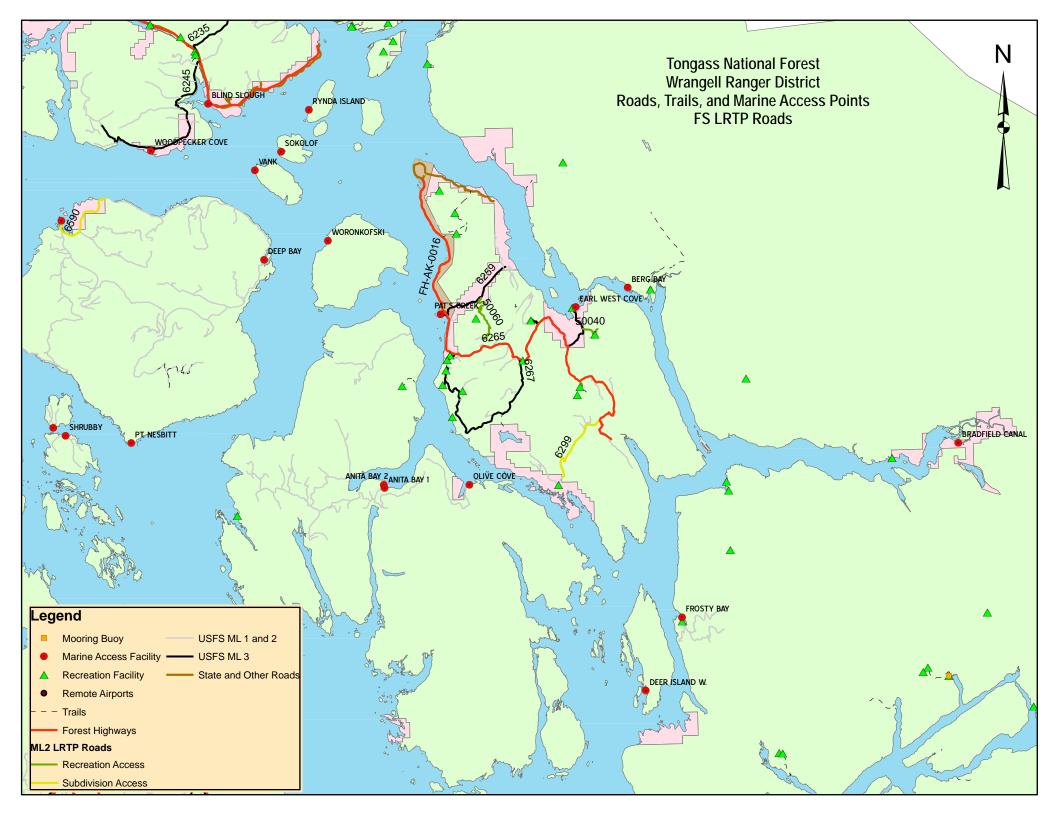


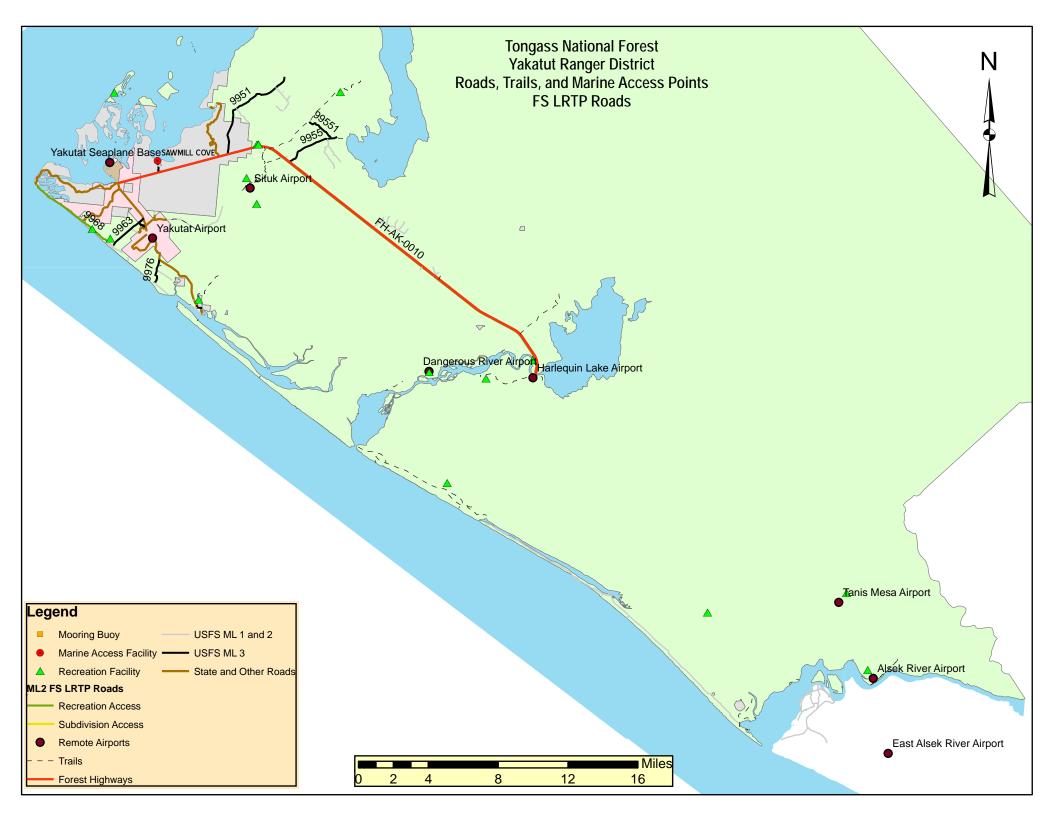


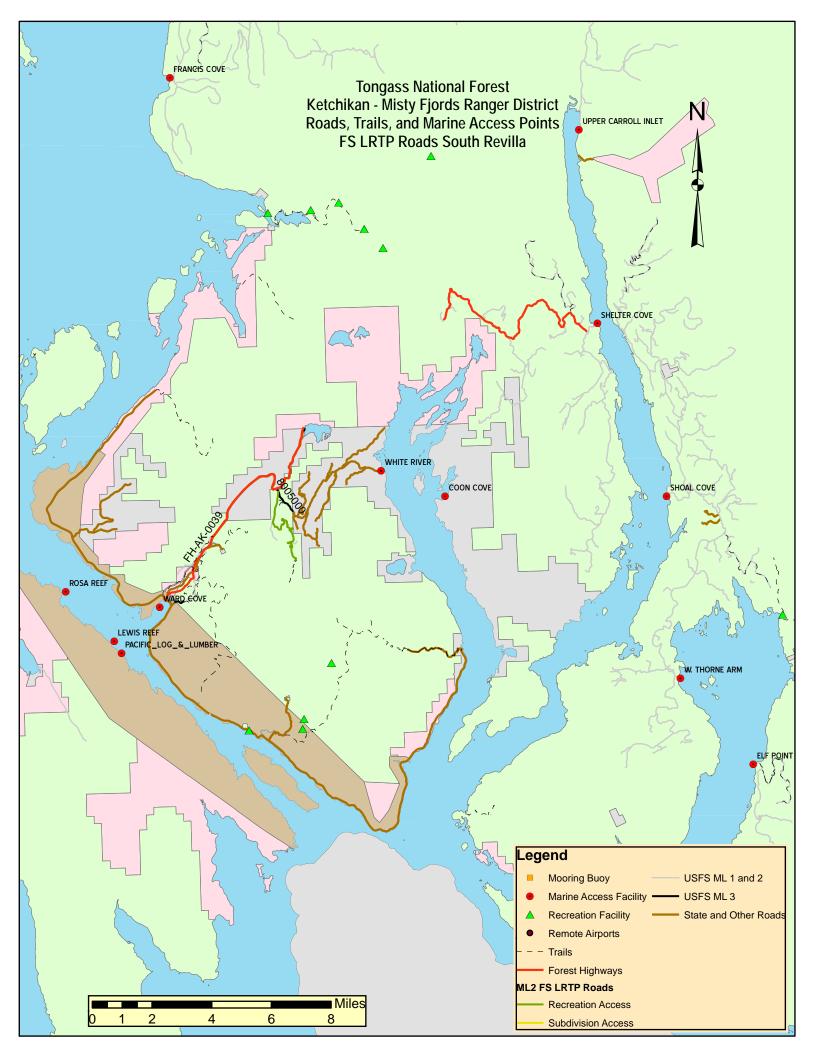


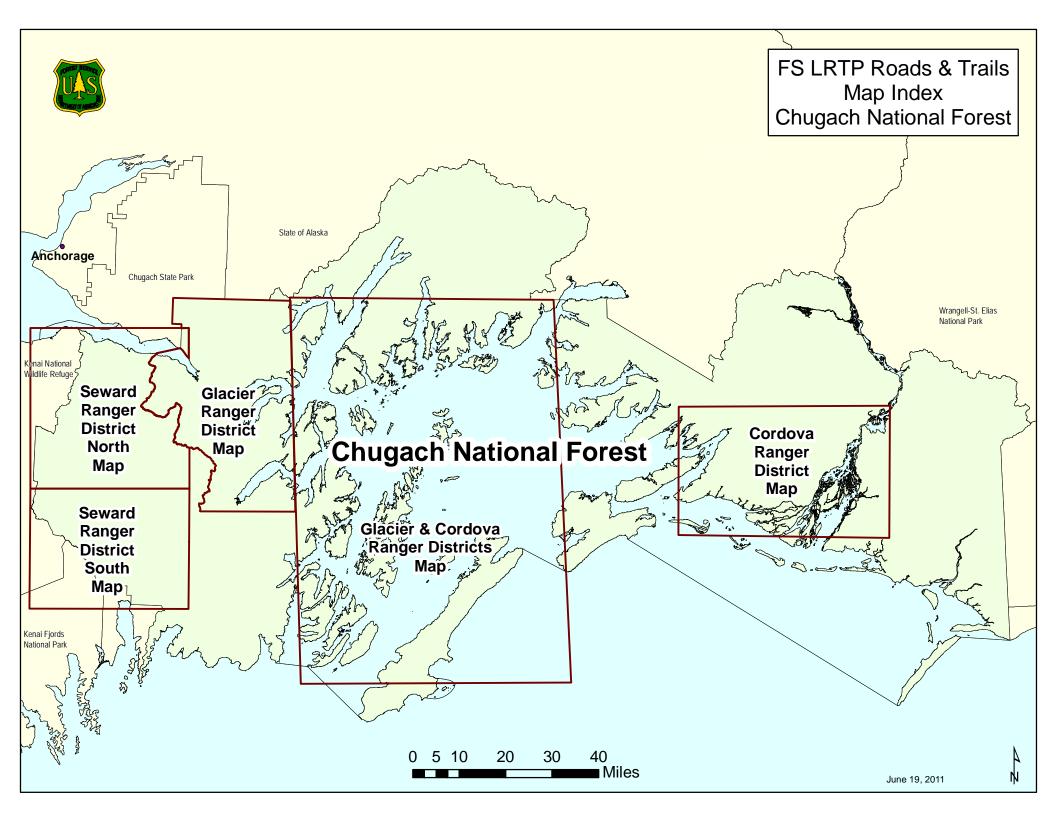


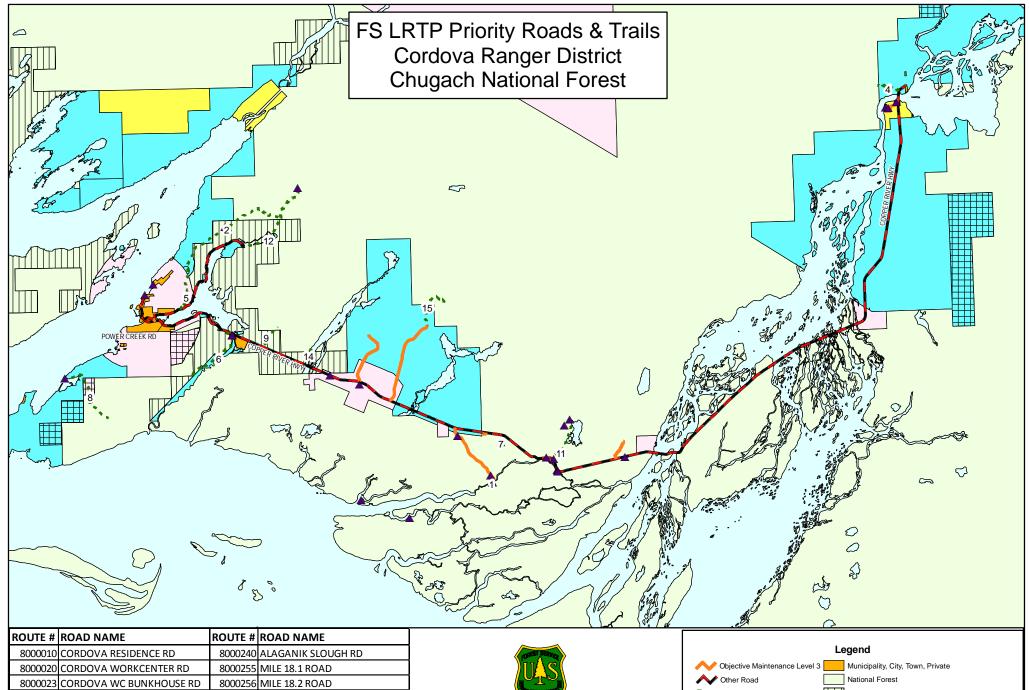








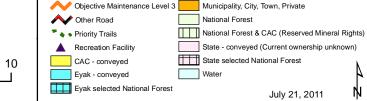


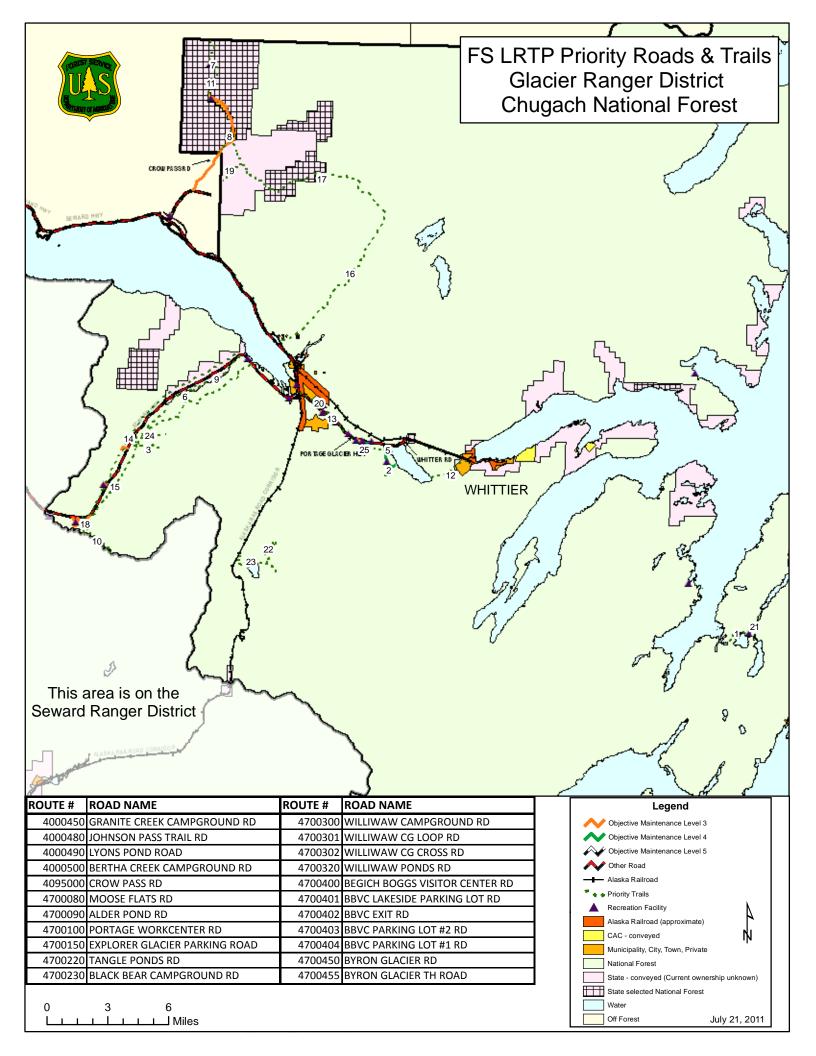


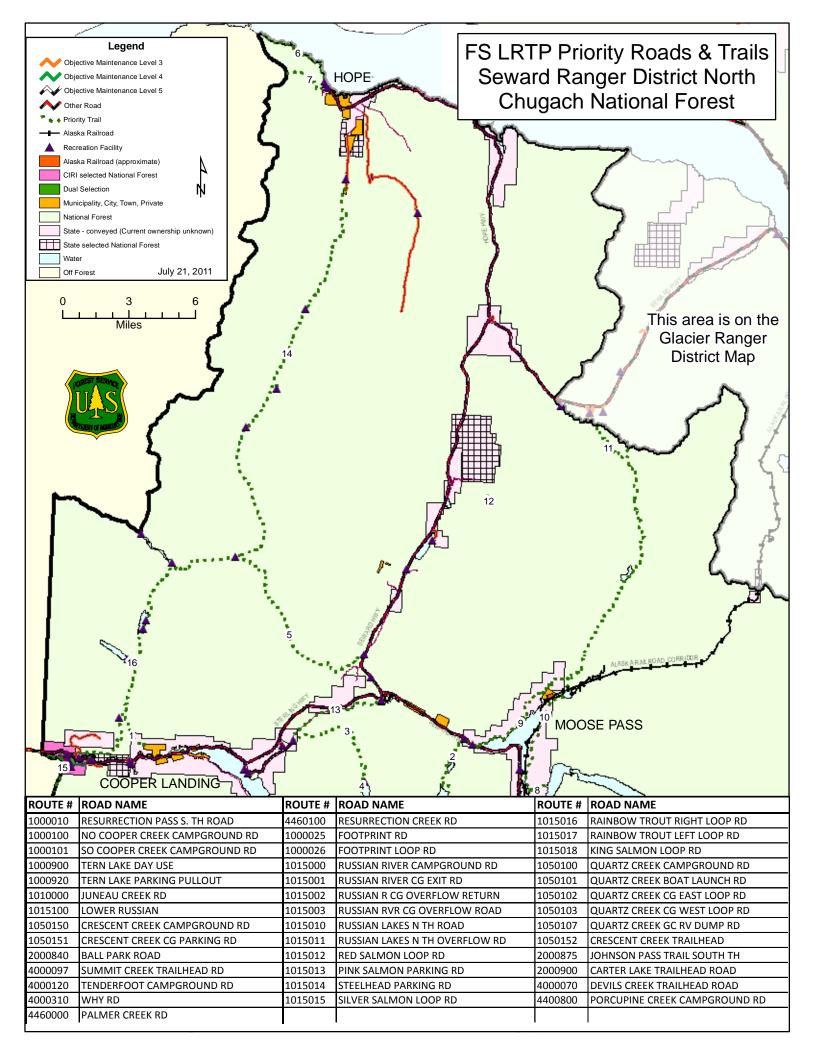
Miles

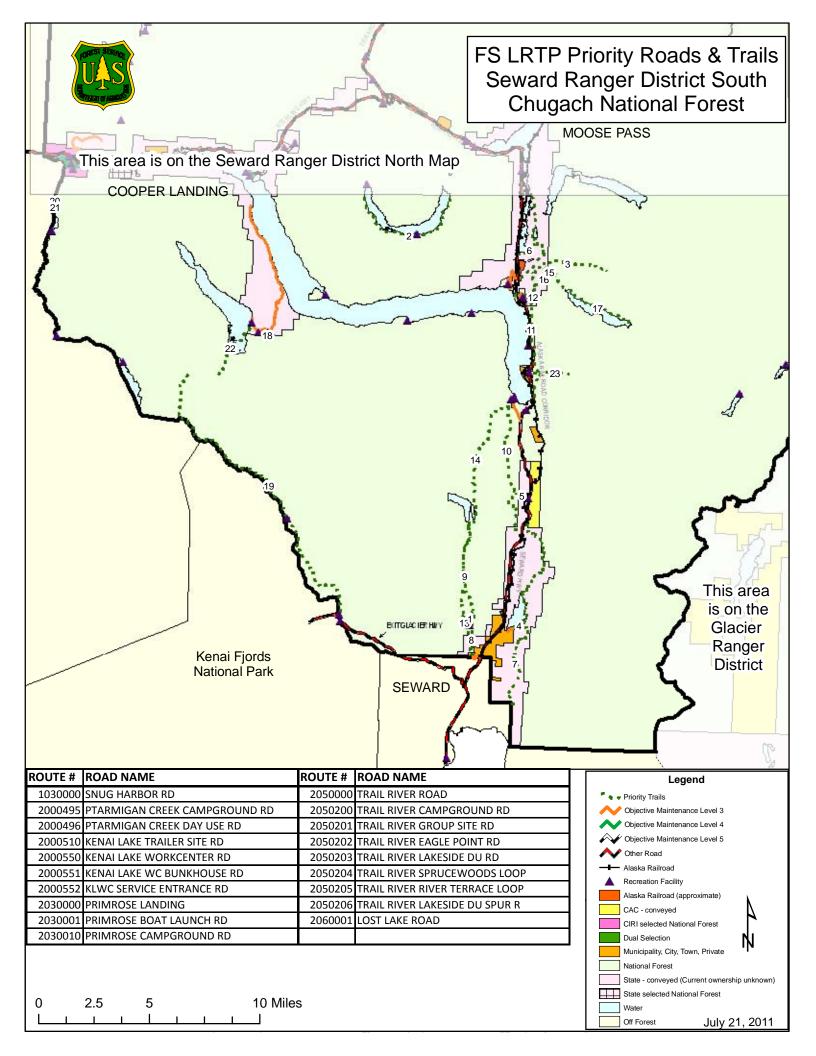
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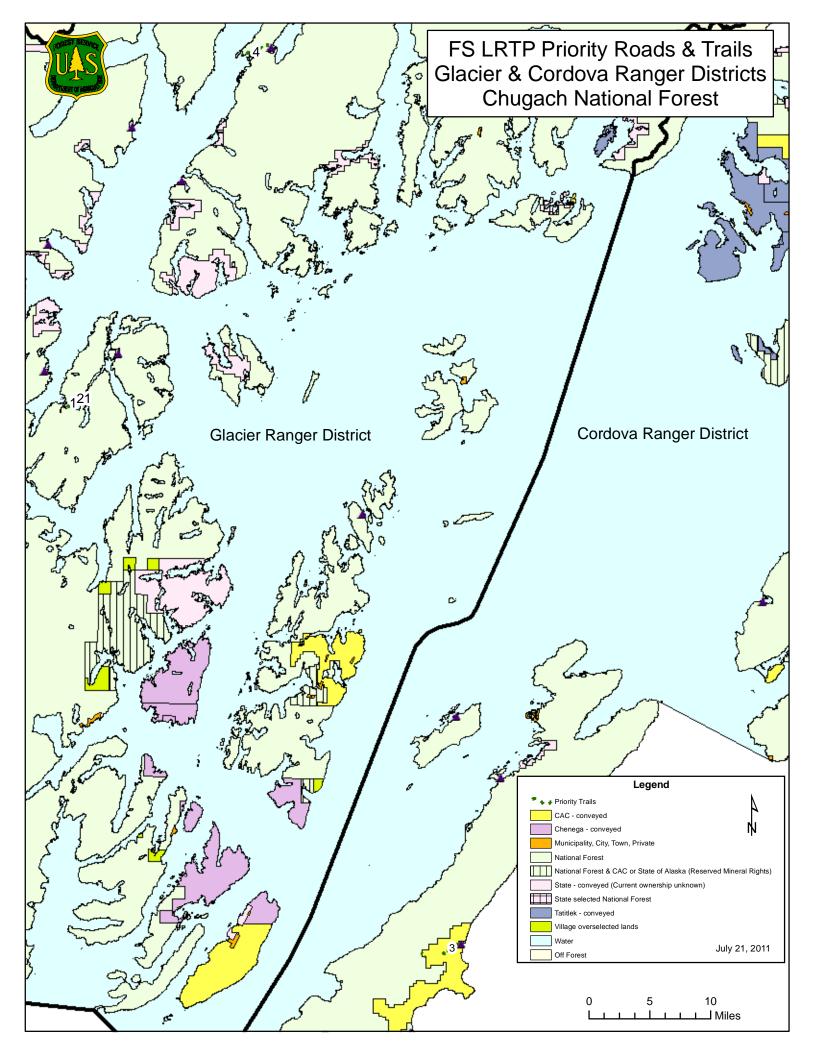
	8000020	CORDOVA WORKCENTER RD	8000255	MILE 18.1 ROAD
	8000023	CORDOVA WC BUNKHOUSE RD	8000256	MILE 18.2 ROAD
	8000027	CORDOVA WC FOURPLEX RD	8000285	MILE 22 DAY USE ROAD
	8000100	EYAK BOAT RAMP ROAD	8000286	ALAGANIK SL BOAT LAUNCH RD
	8000101	EYAK BOAT RAMP PARKING RD	8000330	SADDLEBAG GLACIER RD
	8000200	CABIN LAKE RD	8000550	CHILDS GLACIER RD
ſ	8000210	SHERIDAN GLACIER RD		











Glacier Ranger District Priority Trails		
	See the Glacier Ranger District map	
Map Label	Trail Name	
1	3 FINGER - SHRODE LAKE TRAIL	
2	BYRON GLACIER TRAIL	
3	CENTER RIDGE TRAIL	
5	GARY WILLIAMS MORAINE TRAIL	
6	INHT ACCESS: INGRAM CREEK TRAIL	
7	INHT: CROW PASS TRAIL	
8	INHT: GIRDWOOD IDITAROD TRAIL	
9	INHT: INGRAM CREEK TRAIL	
10	INHT: JOHNSON PASS TRAIL	
11	INHT: MONARCH MINE SPUR TRAIL	
12	INHT: PORTAGE PASS TRAIL	
13	INHT: TRAIL OF BLUE ICE	
	INHT: TURNAGAIN PASS SNOWMACHINE TRAIL	
14	(SNOW)	
15	INHT: TURNAGAIN PASS TRAIL	
16	INHT: TWENTYMILE TRAIL	
17	INHT: UPPER WINNER CREEK TRAIL	
18	INHT: WAGON ROAD TRAIL	
19	INHT: WINNER CREEK TRAIL	
20	MOOSE FLATS WETLAND TRAIL	
21	SHRODE LAKE TRAIL	
22	SPENCER BENCH TRAIL	
23	SPENCER GLACIER TRAIL	
24	TINCAN MOUNTAIN SKI TRAIL	
25	WILLIWAW NATURE TRAIL	

Cordova Ranger District Priority Trails		
See the Cordova Ranger District map		
Map Label	Trail Name	
1	ALAGANIK BOARDWALK	
2	ALICE SMITH INTERTIE TRAIL	
4	CHILDS GLACIER NORTH TRAIL	
5	CRATER LAKE TRAIL	
6	EYAK RIVER TRAIL	
7	HAYSTACK TRAIL	
8	HENEY RIDGE TRAIL	
9	IBECK SLOUGH NORTH TRAIL	
10	LOG JAM BAY CABIN TRAIL	
11	MCKINLEY LAKE TRAIL	
12	POWER CREEK TRAIL	
13	SAN JUAN BAY CABIN TRAIL	
14	SAND TRAIL	
15	SHERIDAN MOUNTAIN TRAIL	

	These trails are on the Glacier & Cordova Ranger Districts map				
4	COGHILL LAKE TRAIL			3	BEACH RIVER CABIN TRAIL

Seward Ranger North District Priority Trails			
See	See the Seward Ranger District North map		
Map Label	Trail Name		
1	BEAN CREEK TRAIL		
2	CARTER LAKE TRAIL		
3	CRESCENT CREEK TRAIL		
4	CRESCENT LAKE TRAIL		
5	DEVIL'S CREEK TRAIL		
6	GULL ROCK TRAIL		
7	HOPE POINT TRAIL		
8	INHT ACCESS: GRANT LAKE PORTAGE TRAIL		
9	INHT: JOHNSON PASS TRAIL		
10	INHT: MOOSE PASS TRAIL		
11	INHT: WAGON ROAD TRAIL		
12	MILLS CREEK TRAIL		
13	OLD STERLING HIGHWAY TRAIL		
14	RESURRECTION PASS TRAIL		
15	RUSSIAN RIVER ANGLERS TRAIL		
16	TROUT LAKE CABIN		

These maps do not include short access trails to cabins, some day use sites, winter routes, and trails planned but not yet constructed, which are or will be considered part of the priority transportation system. Refer to the current FS Transportation Atlas as recorded in Infra, for the official FS trail inventory

Seward	Ranger South District Priority Trails	
See the Seward Ranger District South map		
Map Label	Trail Name	
1	CLEMENS CABIN ACCESS TRAIL	
2	CRESCENT LAKE TRAIL	
3	FALLS CREEK ORV TRAIL	
4	INHT ACCESS: BEAR LAKE TRAIL	
5	INHT ACCESS: MERIDIAN LAKES TRAIL	
6	INHT ACCESS: VAGT LAKE TRAIL	
7	INHT: BEAR LAKE TRAIL	
8	INHT: LOST LAKE TRAIL (SNOW)	
9	INHT: LOST LAKE TRAIL (SNOW)	
10	INHT: MERIDIAN LAKES TRAIL	
11	INHT: MOOSE PASS TRAIL	
12	INHT: MOOSE PASS TRAIL	
13	LOST LAKE TRAIL	
14	PRIMROSE TRAIL	
15	PTARMIGAN CREEK CUTOFF TRAIL	
16	PTARMIGAN CREEK TRAIL	
17	PTARMIGAN LAKE TR	
18	RAINBOW LAKE TRAIL	
19	RESURRECTION RIVER TRAIL	
20	RUSSIAN RIVER ANGLERS TRAIL	
21	RUSSIAN RIVER FALLS TRAIL	
22	UPPER RUSSIAN WINTER ROUTE	
23	VICTOR CREEK TRAIL	