Appendix C: GLOSSARY

Americans with Disabilities Act of 1990 (ADA) – A federal law prohibiting discrimination against people with disabilities. Requires public entities and public accommodations to provide accessible accommodations for people with disabilities.

All-Terrain Vehicle (ATV) – See Off-Highway Vehicle (OHV).

Accessible – A term used to describe a site, building, facility, or trail that complies with the Americans with Disabilities Act (ADA) Accessibility Guidelines and can be approached, entered, and used by people with disabilities.

Bench (Full, Half, Partial) Cut – The excavation cut into a slope to provide support for the trail tread surface. “Full” refers to the bench being constructed entirely on an excavated surface. “Partial” refers to the Bench being constructed in part on compacted fill.

Boat (or Vessel) – A device that is used or designed to be used for movement of people or goods in or on the water, whether manually or mechanically propelled, but does not include personal flotation devices, or other floats such as inner tubes, air mattresses, or surf boards. (11 AAC 20.990)

Best Trail Management Practices (BTMPs) – A series of management components developed to reflect the current “state-of-the-art” practices for effective and efficient trails management.

Climbing Turn – A wide, ascending curve that gradually reverses the direction of the trail while gaining elevation. Used in favor of Switchbacks on side slopes of less than 22% when possible.

Clinometer – A small, hand-held device used to measure grade (or slope) in terms of degrees or percent. In trails and roads, grade or slope is referred to in percent (%).

Compaction – The compression of aggregate, soil, or fill material by tamping or trail traffic.

Contour Trail (also a Curvilinear or Traverse Trail) – Concept whereby the trail is designed to rise and/or descend gradually along natural contours. The alignment crosses the contours at a shallow angle so that the natural drainage patterns are easily maintained during the construction process.
Control Point – A specific point, area, or feature that is important in trail layout. Positive Control Points are places you want the trail to go to or near (such as trailheads, scenic points, good water crossings, other trails, etc.). Negative Control Points are places you want to stay away from (such as hazards, sensitive habitat, private property, etc.).

Crib (or Crib Wall) – A retaining device used to support the trail tread or backslope, typically composed of wood or rock.

Critical Edge – The outside (downslope) edge of the tread, most pronounced on a bench cut.

CSP – Chugach State Park.

Culvert – A pipe or box-like structure of wood, metal, plastic, concrete, or rock that conveys a water course under a tread.

Curvilinear (Trail) Layout – Concept whereby the trail layout is designed to rise or descend gradually along natural contours. The alignment crosses the contours at a shallow angle so that the natural drainage patterns are easily maintained during the construction process. See also Contour Trail.

Design Parameters – Technical specifications for trail construction and maintenance, based on the Designed Use and Trail Class.

Designed Use – The intended use that controls the desired geometric design of the trail, and determines the subsequent maintenance parameters for the trail.

Difficulty Level -- The degree of challenge a trail presents to an average user's physical ability and skill, based on trail condition and route location factors such as alignment, steepness of grades, gain and loss of elevation, and amount and kind of natural barriers that must be crossed.

Easement – An interest in land, of specified dimensions, owned by another that entitles its holder to a specific limited use.

Fall-line – The path water flows down a slope under most circumstances.

Full Bench (Construction) Cut – Trail structure used to create a tread along a Contour Trail, whereby the tread is built entirely on an excavated surface (no fill) which is less subject to compaction, erosion and surface slumping. It is the preferred method of bench construction on trails construction on side slopes >30%. See also Partial Bench Cut.

GeoBlock – A trademark name structural geogrid material (see Porous Pavement Panel).
**Geotextile (Geofabric, Filter Fabric)** – A pervious, woven or non-woven, petrochemical fabric that provides a stable base and separation layer used in a variety of applications including aggregate capping.

**Grade** – Relative steepness (rise and fall) of the trail as compared to a flat horizontal plane. Trail steepness is measured in grade as a percentage.

**Grade Control** – Fundamental part of Sustainable Trail construction whereby strict trail grade restrictions are placed in the design parameters, primarily to minimize erosion due to natural forces and trail users.

**Grade Reversals (or Grade Dip)** – A short change from positive (climbing) grade, to negative (descending) grade for approximately 6 to 12 feet designed into the trail alignment to shed water. Grade reversals are an important component in Contour Trail construction. See also Rolling Grade Dip.

**Green Infrastructure** – An interconnected network of green space (hubs + corridors) that conserves natural ecosystem values and functions and provides associated benefits to human populations.

**Half Rule** – A trail’s grade should not exceed half the grade of the sideslope. If the grade is steeper than half the grade of the sideslope, it is considered a Fall-line trail.

**Hardening** – Any number of methods of strengthening a tread surface in response to degradation or to better accommodate a particular type of use. Examples include: aggregate capping, boardwalk or puncheon construction, turnpiking, or the use of porous pavement panel.

**Integrated Water Control** – Instituting water management into basic trail design, usually during construction. Primary components include Grade Reversals and Outslope.

**Knicks** – A semi-circular, shaved down section of trail, about 5 -10 feet in length, and canted to the outside with exaggerated outslope. Most commonly employed as a maintenance action on existing low gradient trail sections. A Knick is smooth and subtle, often an unnoticeable feature to users.

**Logging Out** – Clearing a trail of fallen trees.

**Managed Trail** – A state park trail that has some type or level of Managed Use. To qualify as a Managed Trail, one or more of the following must apply: 1) The trail is depicted on a state park map distributed for public use; 2) The trail is maintained by park staff or volunteers on a regular schedule (up to several years interval) for public use purposes; 3) The trail is, or was, constructed for public use; 4) The trail is abandoned or closed to public use but is used for administrative purposes; or 5) The trail is signed or marked by state parks for public use.
Managed Use – The type of use that is actively managed and appropriate on a trail, considering the design and management intent.

Maximum Trail Grade – A defined maximum tread grade that can be constructed along the trail.

MOA – Municipality of Anchorage.

Obstacles (Natural) – Objects that add challenge by impeding travel. They include: rocks, roots, logs, holes, ledges, drop-offs, etc.

Off-Highway Vehicle (OHV) – A motorized mechanical device used for carrying persons or objects over land or water, including automobiles, motorcycles, snowmachines, all-terrain vehicles, and motorized boats. May also be referred to as: All-Terrain Vehicle (ATV), or Off Road Vehicle (ORV).

Organic Soils – The term is also used to refer to the upper most layer of dark surface soil that has a high organic material content. Organic soils have a propensity of readily absorbing and holding water and are poorly suited as a trail tread material.

Outslope – The amount the tread slopes from side-to-side to promote drainage off the trail instead of down the trail.

Partial Bench Cut – A trail structure used to support the tread along a Contour Trail, whereby the tread is partially supported by an excavated bench cut into a side slope and partially supported by a fill section of compacted excavated material. See also Full Bench Cut.

Porous Pavement Panel – A permeable, rigid, multi-pocketed structural geogrid, typically plastic, that is used to harden areas of saturated or unstable soils without the use of gravel infill, bridges, or boardwalks. e.g. GeoBlock

Retaining Wall (Revetment) – See Crib.

Rolling Grade Dip – A trail structure that utilizes a ramp-like excavation, a flat-bottomed drain, and a built up compacted soil dam to direct water off the tread. Typically utilized as a maintenance structure on existing trails.

Short Pitch Maximum – See Maximum Trail Grade.

Sideslope – See Slope.
Slope – Refers to the relative steepness of the natural terrain. Slope can be calculated by determining the vertical rise over a given horizontal distance, but is more often directly read from a slope measurement instrument called a Clinometer. Slope can be expressed in degrees, but for trail use is more commonly expressed as a percentage.

Social Trail – An unplanned, usually unmaintained and typically undesirable trail alignment that develops informally as a result of public route pioneering, overuse, degraded trail avoidance, or generally poorly planned trail design.

Sustainable Trail – A trail that conforms to its terrain and environment, is capable of handling its intended use without serious degradation, and requires minimal maintenance.

Switchback – A sharp turn in the tread alignment, often 180 degrees, used to gain elevation on steep side slopes (typically required on slopes above 22%).

Snowmobile (snowmachine) – A self-propelled vehicle intended for off-road travel on snow, having a maximum width of 50 inches and a curb weight of not more than 1,000 pounds, driven by one or more tracks and steered by one or more skis.

Snow Trails – Trails that have a surface consisting predominantly of snow or ice, which are designed and managed to accommodate use on that surface.

Ten-Percent Average Grade Guideline – Refers to the practice of keeping the average trail grade or overall trail grade from exceeding 10% along the alignment of the trail.

TMO – See Trail Management Objective.

Terra Trails – Trails that have a tread surface consisting predominantly of native soil or rock, which are designed and managed to accommodate use on that surface. A Terra Trail may also have sections of boardwalk, or other hardened tread.

Trail – A linear route managed for human-powered, stock, boats, or OHV forms of transportation or for historic, heritage or commercial values.

Trail Class – The prescribed scale of trail development, representing the intended design and management standards of the trail.

Trail Corridor – The total cleared area on both sides of a trail.

Trail Hardening – A technique to improve the surface characteristics of a tread. Usually applied in wet or boggy ground or to enhance ADA characteristics.
Trail Management Objective (TMO) – Documentation of the management intention of a trail based on its Designed Use, Design Parameters, and special considerations. TMOs provide basic reference information for trail planning, management, condition surveys, and reporting.

Trail Segment – A specific section of a trail with identified starting and ending points.

Trail Standards – Trail maintenance specifications that define the level of quality and service the agency intends to provide for the public.

Trail Structures – Any component of a trail that has been purposely constructed. This would include: developed treadway, bench cuts, switchbacks, retaining walls, drainage devices, culverts, bridges, hand railings, boardwalks, trail signs and posts, etc.

Trail Type – A category that reflects the predominant trail surface and general mode of travel accommodated by a trail. There are three Trail Types: Terra, Water, and Snow Trails.

Tread – The wear surface of the trail upon which a user travels. The tread, or treadway, is the most fundamental component of a trail.

Tread Creep – Areas along a contour trail where the tread is sliding downslope due to compaction, slope failure, or fill failure of a Partial Bench Cut. May be caused by trailside features such as trees, bushes, roots, or another projection that forces traffic onto the Critical Edge, compacting it downslope.

Vehicle – A mechanical device used for carrying persons or objects over land, water, or through the air, including automobiles, motorcycles, bicycles, snowmachines, all-terrain vehicles, motorized boats, and aircraft. Vehicle does not include non-motorized sailboats, canoes, kayaks, rafts, sailboards, hang gliders, gliders, or parasails.

Waterbar – A trail structure typically constructed of wood, rock, or reinforced rubber and soil that is set at an angle across tread to direct water off the treadway. Generally being phased out in favor of Grade Reversals and Outslope integrated into new construction, and Outslope and Rolling Grade Dips retrofit into existing construction.

Water Trail – Trails that have a surface consisting predominantly of water, which are designed and managed to accommodate use on that surface, and which may include land-based portages.