TRAILS PRIMER

A Glossary of Trails, Greenway, and Outdoor Recreation Terms and Acronyms

South Carolina STATE TRAILS Program

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South Carolina Department of Parks, Recreation and Tourism

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www.SCTrails.net
Acknowledgments

I would like to thank the many trail coordinators, managers, and advocates for their careful review, and thoughtful comments that helped make this a better publication.

I am also grateful to the wonderful staff of the South Carolina State Library who have helped by tracking down the many trails and greenways publications that I've requested over the years.

In order to insure the accuracy of this primer I relied heavily on the assistance of Bob Swanson and Eileen Hart to proofread and offer corrections.
This *Trails Primer* was generated by the need of trail and greenway managers and advocates for definitions. It is meant as a handy reference tool. Over 800 terms and 200 acronyms are listed in alphabetical order, so definitions of interest can be found quickly.

The process of compiling the terms and acronyms, researching the definitions, and producing a book turned out to be far more complex than it first appeared. What amazed me was the incredible breadth of what trail and greenway managers and advocates are expected to know and have to deal with on a daily basis.

The definitions in this primer clearly point the way to the intersection of trails and greenway work with numerous other disciplines and professions. I think that everyone involved with trails and greenway development will find that this is not just a useful list of terms, but that spending some time with this book will provide quite an education about the various professions and their terminology.

This glossary does not pretend to contain the most exhaustive list of terms and acronyms or the best (or most acceptable or locally appropriate) definitions. The terms and acronyms range from the mundane to the highly technical.

The end result of this work is a starting point—a glossary of terms and acronyms that will get trail managers and advocates thinking about and sharing definitions.

The definitions have been taken primarily from glossaries and terms found in dozens of trail and
greenway publications published in the last forty years. A draft was sent to over a hundred trail and greenway managers and advocates for their edits and suggestions.

Ideally, users will edit the definitions found here to make them better before they use them. In other words, use them only as a reference to create something new and suitable; do not just copy these definitions without thought.

This glossary can be read quickly, understood easily, and applied immediately. I hope that this publication will be a valuable resource for all who work to develop trails and greenways.

If you don’t find the word or acronym you need, if you know of an important word or acronym that is not included, or if you think the definition of a word or acronym misses the mark or is lacking in clarity, please drop me a note. I’ll fix it in the next edition.

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Abney Level: Hand-held instrument that is adjusted like a sextant and used for measuring angles of elevation or inclination of trail.

Abutment: Structure at either extreme end of a bridge that supports the superstructure (sill, stringers, trusses, or decks) composed of stone, concrete, brick, or timber.

Access Points: Designated areas and passageways that allow the public to reach a trail from adjacent streets or community facilities.

Access Trail: Any trail that generally connects the main trail to a road or another trail system.

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.

Acclimatization: The gradual process of becoming physiologically accustomed to high altitude.

Acquisition: The act or process of acquiring fee title or interest of real property.

Acute Mountain Sickness (AMS): A condition characterized by shortness of breath, fatigue, headache, nausea, and other flu-like symptoms. It occurs at high altitude and is attributed to a shortage of oxygen. Most people don’t experience symptoms until they reach heights well above 5,000 feet.

Adopt-A-Trail: A program in which groups or businesses “adopt” trails, providing volunteer work parties at periodic intervals to help maintain the trail. Though no special trail privileges are granted, the trail manager generally acknowledges that a trail has been “adopted” by erecting signs saying the trail is part of an Adopt-A-Trail program and including the name of the adopter.

Adz (Adze): An ax-like tool for dressing wood.

Aggregate: Surface material made up of broken stone, gravel, and sand.
Alignment: The layout of the trail in horizontal and vertical planes. This is to say, the bends, curves, and ups and downs of the trail. The more the alignment varies, the more challenging the trail.

All-Terrain-Vehicle (ATV): A small four-wheeled vehicle equipped with low-pressure balloon tires and intended for off-highway use only.

Altimeter: An instrument for measuring altitude.

Altitude: The height of a thing or place above sea level.

Amenities: Any element used to enhance the user's experience and comfort along a trail.

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.

Americans with Disabilities Act Accessibility Guidelines (ADAAG): Design guidelines for providing access to a range of indoor and outdoor settings by people with disabilities.

Angle: Angle is measured with a straight vertical as 90° and a straight horizontal as 0°. A grade of 100% would have an angle of 45°.

Appraisal: An estimate and opinion of value, usually a written statement of the market value of an adequately described parcel of property as of a specified date.

Apron: One of the three main elements of a waterbar. It catches water running down the trail and directs it off. Apron is also the transition area on a switchback (also called the “landing”).

Arborist: An individual trained in arboriculture, forestry, landscape architecture, horticulture, or related fields and experienced in the conservation and preservation of native and ornamental trees.
Archaeological Resources (Cultural, Heritage): Any material of past human life, activities, or habitation that are of historic or prehistoric significance. Such materials include, but are not limited to, pottery, basketry, bottles, weapon projectiles, tools, structures, pit houses, rock paintings, rock carvings, graves, skeletal remains, personal items and clothing, household or business refuse, or any piece of the foregoing.

Archaeological Site: A concentration of material remains of past human life or activities that is of historic or prehistoric significance and that has been surveyed by a qualified archeologist.

Armoring: Reinforcement of a surface with rock, brick, stone, concrete, or other "paving" material.

Aspect: The particular compass direction a trail or site faces. Aspect affects the amount of solar radiation and year-round moisture to which a site is subjected.

Asphalt (Macadam): Petroleum-based surface material that provides a smoothly paved surface that is suitable for bicycles and in-line skates. It is preferred in urban areas where trails are often used for commuting to and from work or school.

Assessment, Trail or Corridor: Physical assessments are undertaken to better understand a trail or corridor. Assessments include an accurate description and documentation of native elements and an inventory of built structures along the trail or corridor.

At-Grade Crossing: A trail crossing a roadway on the same elevation. Ideally, a safe at-grade crossing has either light automobile traffic or a traffic signal that can be activated by trail users.

Axe (Ax): A tool with a long handle and bladed head (single bit – one sharp side or double bit – two sharp sides) for chopping deadfall from trails, shaping stakes for turnpikes and waterbars, and cutting notches for structures made of timber.
**Backcountry:** An area where there are no maintained roads or permanent buildings—just primitive roads and trails.

**Backcut:** The vertical part of a bench cut that is blended into the backslope.

**Backfill:** Material used to refill a ditch or other excavation, or the process of doing this action.

**Backpack (Backpacking):** A large pack worn on the back to carry camping supplies; to go on an overnight hike carrying your supplies in a backpack.

**Backslope:** The cut bank along the uphill side of the trail extending upward from the tread. Usually sloped back by varying degrees, depending on bank composition and slope stability.

**Bald:** Mountain with an open, grassy summit that's void of trees.

**Ballast:** Stone, cinders, gravel, or crushed rock fill material used to elevate a railroad bed above the surrounding grade, to provide proper drainage and a level surface for the ties and rails.

**Bank (Embankment):** The part of the soil next to a stream, lake, or body of water where the soil elevation adjacent to the water is higher than the water level.

**Bar:** A sand or gravel deposit in a streambed that is often exposed only during low water periods.

**Bark Spud:** A tool with a 1- to 4-foot long wood handle and a dished blade used to remove bark from logs by sliding between the bark and the wood.

**Barricade:** A portable or fixed barrier having object markings, used to close all or a portion of the trail right-of-way to traffic.

**Barrier-Free Design:** A trail design that promotes the elimination of physical barriers that reduce access by people with disabilities.
**Base:** The primary excavated bed of a trail upon which the tread, or finished surface lies.

**Base Course:** The layer or layers of specified material of designed thickness placed on a trailbed to support surfacing.

**Base Map:** A map showing the important natural and built features of an area. (Such maps are used to establish consistency when maps are used for various purposes.)

**Batter:** The angle at which an abutment or rock wall is inclined against the earth it retains.

**Bed:** The excavated surface on which a trail tread lies.

**Bed:** The bottom of a channel, creek, river, stream, or other body of water.

**Bedrock:** Solid rock material that is exposed when topsoil is eroded or cut away.

**Bench:** A long seat (with or without a back) for two or more people.

**Bench, Full:** Where the total width of the trail tread is excavated out of the slope and the trail tread contains no compacted fill material.

**Bench, Half:** Where half the width of the trail tread is excavated out of the slope and the outside of the trail tread contains the excavated and compacted material.

**Bench, Partial:** Where part of the width of the trail tread is excavated out of the slope and the rest of the trail tread is made up of fill material.

**Bench Cut:** A relatively flat, stable surface (tread) on a hillside occurring naturally or by excavation. When excavated often referred to as full, half, or partial bench.

**Benefits-Based Approach:** An approach to evaluating the delivery of park, recreation, and trail resources, facilities, and services which focuses on identifying the economic, environmental, and social benefits specifically and directly attributable to the cost of providing the opportunities from which the benefits are derived.
**Bent:** Structural member or framework used for strengthening a bridge or trestle transversely.

**Berm:** The ridge of material formed on the outer edge of the trail that projects higher than the center of the trail tread.

**Bike Lane:** A portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists.

**Bike Path (Bike Trail, Multi-use Path/Trail):** Any corridor that is physically separated from motorized vehicular traffic by an open space or barrier. It is either within the highway right-of-way or within an independent right-of-way. Due to a lack of pedestrian facilities, most bike paths/trails are commonly designed and referenced as multi-use paths and trails.

**Bike Route:** A roadway segment designated with appropriate “bike route” directional and informational markers.

**Bikeways:** Any road, path, or way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes.

**Biodegradable:** Able to decompose when exposed to biological agents and soil chemicals.

**Birdcage:** Wire rope that has begun to unwrap individual strands of wire.

**Bivouac:** To spend a night out without a tent.

**Bivouac Sack (Bivy Sack):** A lightweight, unfilled, waterproof bag that can cover a sleeping bag.

**Blaze:** A trail marker. Blazes can be made on a tree by scraping away some of the bark and painting a 2-inch by 6-inch vertical rectangle. Plastic or metal triangles or diamonds (known as blazes) with the name of the trail or a directional arrow imprinted can be purchased and nailed to trees to mark a trail route.
Blaze, Blue/White: On the Appalachian Trail a blue blaze almost always means a side trail to a campsite or a town. White blazes are generally used for the main or trunk trail. Many other trails follow the Appalachian Trail example.

Blaze, Double: Two blazes (vertical alignment) that denote a change in direction or junction in the trail ahead.

Bleeder (Kick Outs, Diversion Dips): Graded depression angled to drain water sideways off the treadway.

Blister: A thin, round swelling of the skin, filled with water, caused by rubbing.

Block: Pulley in which a rope or cable is thread through.

Block, Snatch: Pulley with hinged side plate allowing attachment anywhere along a fixed rope.

Blowdown (Windfall): Anything (trees, limbs, brush, etc.) blown down on the trail by the wind.

Bluff: A steep headland, promontory, riverbank, or cliff.

Boardwalk: A fixed planked structure, usually built on pilings in areas of wet soil or water to provide dry crossings.

Bog(s): A muddy area where little direct sunlight reaches the trail, or where there are flat areas that are difficult to drain.

Bollard: A barrier post, usually 30 to 42 inches in height, used to block vehicular traffic at trail access points. Should be installed in odd numbers (one or three).

Borrow: Fill material required for on-site trail construction and obtained from other nearby locations.

Borrow Pit: Area where soil, gravel, or rock materials are removed to be used on the trail for tread, embankments, or backfilling.

Bow Saw: A 16-, 21-, or 36-inch thin bladed saw with a curved handle used to cut brush or trim small branches.
**Braiding (Braided Trail):** The process of numerous parallel routes being created; identified by worn and eroded vegetation.

**Bridge:** A structure, including supports, erected over a depression (stream, river, chasm, canyon, or road) and having a deck for carrying trail traffic. If the bridge is over two feet above the surface, it should have railings.

**Bridleway (Bridle Path):** Public way designed and maintained primarily for equestrian use. Other nonmotorized uses may be permitted.

**Brush:** Vegetation or small flora.

**Brushing:** To clear the trail corridor of plants, trees, and branches which could impede the progress of trail users.

**Brushing-In (Obliteration):** To pile logs, branches, rocks, or duff along the sides of the tread to keep users from widening the trail, or to fill in a closed trail with debris so that it will not be used.

**Buffer (Buffer Zone):** Any type of natural or constructed barrier (like trees, shrubs, or wooden fences) used between the trail and adjacent lands to minimize impacts (physical or visual).

**Bush Hook (Bank Blade):** These tools are used for clearing brush, briar, or undergrowth too heavy for a scythe and not suited for an ax. The Bush Hook with a 36-inch handle and 12-inch blade (sharpened on one side) cuts easily on the “pull” stroke. The Bank Blade is similar to a Bush Hook, but its blade is sharpened on both sides.

**Bushwhack:** Off-trail hiking (originally where the going was difficult, where many bushes had to be whacked). Now it is often used to mean off-trail travel regardless of whether the going is difficult or not.
Cable, Wire: A thick, heavy rope, made of wire strands.

Cable Fly Zone: The hazardous area a cable can potentially move to when it comes under tension or is suddenly released from tension.

Cable Gripper: A device that clamps onto a cable when tension is applied to the attachment point.

Cable Strap: A pre-cut length of wire rope (that may have eyes on both ends), which is used in rigging applications.

Cache: A supply of food, water, or tools, usually buried or hidden.

Cairn: A constructed mound of rock located adjacent to a trail used to mark the route. Often used in open areas where the tread is indistinct.

Call Box: An emergency telephone system installed along a trail with direct connection to the local 911 network.

Camp (Camping): Site where overnight stays are permitted.

Canal: An artificial waterway for transportation or irrigation. Canal and irrigation ditch banks are often used as trails.

Canopy: The leaf cover in a forest stand, consisting of its upper layers.

Cap Rock: Rock placed in the top or uppermost layer in a constructed rock structure, such as a rock retaining wall.

Capacity (Carrying Capacity): Maximum number of trail users that can pass through a given trail section during a given time period under existing trail conditions. Also refers to the amount of use a given resource can sustain before an irreversible deterioration in the quality of the resource begins to occur.

Carabiner: An oblong metal clip with a spring gate used to attach slings to ropes or ropes to anchors.

Catch Point: The outer limits of a trailway where the excavation and/or embankment intersect with the ground line.
Categorical Exclusion (CE): A technical exclusion for federal projects that do not result in significant environmental impacts. Such projects are not required to prepare environmental reviews.

Causeway: Elevated section of trail contained by rock, usually through permanently or seasonally wet areas.

Center Line: An imaginary line marking the center of the trail. During construction, the center line is usually marked by placing a row of flags or stakes.

Certificate of Interim Trail Use (CITU): A document issued by the STB in regular (non-exempt) abandonment proceedings where a railroad and a trail manager have expressed a mutual willingness to negotiate a railbanking agreement. It permits interim trail use and allows the railroad to discontinue service, cancel tariffs, and salvage track and materials 30 days after it is issued. It further provides for a 180-day period for negotiation of a final agreement which, if reached, delays the effective date of full abandonment during the period the agreement is in effect.

Certification: The process by which sites and segments of national historic (and some national scenic) trails are officially recognized by the administering federal agency.

Chain Saw: A portable, gas-operated saw with a loop chain carrying cutting teeth.

Charrette: A public design workshop in which designers, property owners, developers, public officials, environmentalists, citizens, and other persons or groups of people work in harmony to achieve an agreeable trail or greenway project.

Check Dam: Log, rock, or wood barrier placed across deeply eroded trails or erosion channels to slow the flow of water enough to allow accumulation of fine fill material behind the structure to fill in the trail tread.

Chigger (Redbug): The tiny, red larva of certain mites, whose bite causes itching and red welts.

Choker: Loop of rope or cable cinched around a load so it gets tighter, or "chokes" the load under pressure.
Chromated Copper Arsenate (CCA): A well-known wood preservative for boardwalks, decks, and other common trail applications where treated lumber is used.

Circle of Danger: The area surrounding a trail worker that is unsafe due to tool use. The inner (or primary) circle of danger is the area the tool can reach while being used. The outer circle of danger is the area the tool could reach if the trail worker lost control or let go of the tool.

Classification: The designation indicating intended use and maintenance specifications for a particular trail.

Clearcut (Clear-cutting): Removal of all trees and shrubs, not just mature growth.

Clearing: Removal of windfall trees, uproots, leaning trees, loose limbs, wood chunks, etc. from both the vertical and horizontal trail corridor.

Clearing Height (Vertical Clearance): The vertical dimension which must be cleared of all tree branches and other obstructions that would otherwise obstruct movement along the trail.

Clearing Title (Curing Defects to Title): Defects in title are such things as mortgages, reversions, liens for payment of work done on the property, or easements across a property which would otherwise be held in fee simple. Curing means removing these defects (e.g. buying out or condemning the easement or reversion).

Clearing Width (Limit): The outer edges of clearing areas (cleared of trees, limbs, and other obstructions) as specified by trail use.

Clevis (Shackle): A U-shaped metal piece with holes in each end through which a pin or bolt is run. Used to attach two objects together.

Climbing Turn: A turn which is constructed on a grade of 20% or less when measured between the exterior boundaries of the turn and follows the grade as it changes the direction of the trail 120 to 180 degrees.

Clinometer: A hand-held instrument used for measuring angles of terrain elevation or percent of trail grade.

Cobble (Cobblestone): Loose rock over 2 1/2 inches in diameter.

Col: A pass between two mountain peaks; or a low spot in a mountain ridge.
**Collector Ditch:** A drainage structure that intercepts water flowing toward a trail and channels it underneath the trail through a culvert.

**Come-along:** A strong cable fitted with a ratchet to gain mechanical advantage for moving heavy objects over the ground with comparative ease. It is often used in trail work to move large rocks or bridge timbers.

**Compacted:** The degree of soil consolidation that is obtained by tamping with hand tools or heavy equipment.

**Compaction:** The compression of aggregate, soil, or fill material into a more dense mass by tamping.

**Compass:** A direction-indicating device that is used with a map to plot a route or check your position.

**Concrete:** A composition of coarse and fine aggregates, portland cement, and water, blended to give a hard, unyielding, nearly white pavement, which can be finished to any degree of smoothness. Concrete is most often used in urban areas with anticipated heavy trail use, or in areas susceptible to flooding.

**Condemnation:** The taking of private property by government for public use, when the owner will not relinquish it through sale or other means; the owner is compensated by payment of market value. The power to take the property is based on the concept of eminent domain.

**Conflict Resolution:** Resolution is an outcome that develops from complete analysis and meets the needs of all concerned parties. Inherent in the process is clear and open communication, mutual respect, shared exploration, an orientation to collaborative problem solving, and a commitment to resolution.

**Connectivity:** The ability to create functionally contiguous blocks of land or water through linkage of similar native landscapes; the linking of trails, greenways, and communities.

**Conservation:** Controlled use and protection of natural resources.

**Construct (Construction):** Building a trail where no trail previously existed.

**Contour Line(s):** A line on a topographic map connecting points of the land surface that have the same elevation.
Contour Trail: Trail constructed such that it follows a contour, with its elevation remaining constant.

Control Points (Targets): Features that trail users will want to naturally head towards or try to avoid (views, obstacles, etc.). These features should be flagged and used to help layout a trail.

Corduroy: A rustic form of puncheon using native logs (3 to 5 feet in length) laid parallel on wet saturated ground and covered with a tread of soil. Corduroy typically rots out quickly.

Corridor, Scenic: Land set aside on either side of a trail to act as a buffer zone protecting the trail against impacts such as logging or development, which would detract from the quality and experience of a trail.

Corridor, Trail: The full dimensions of a route, including the tread and a zone on either side (2 to 3 feet) and above the tread from which brush will be removed.

Course: An even layer of stones, similar to a course of bricks, that forms a foundation, intermediate layer, or cap stone layer in a stonewall.

Cover (Ground Cover): Vegetation or other material providing protection to a surface: area covered by live above ground parts of plants.

Cradle Timber: A mid-span timber used to transfer the load of the bridge to the truss system.

Creek: Those areas where surface waters flow sufficiently to produce a defined channel or bed.

Creep: Slow mass movement of soil down relatively steep slopes, primarily by gravity and water.

Critical Point: The outside edge of the trail. It's called the critical point because this is where trail maintenance problems (usually related to drainage) begin. Rounding the outside edge helps water to leave the edge of the trail.

Cross Section (Typical Cross Section or Typical, Profile): Diagrammatic presentation of a trail or path profile, which is at right angles to the centerline at a given location.

Crosscut Saw: A long saw that was favored a century ago by loggers felling trees. Used today in federally designated Wilderness Areas or by those who prefer not to use chainsaws.
Crosswalk: Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface.

Crowned Trail: A trail bed built up from the surrounding area and sloped for drainage (usually by excavating trenches parallel to the trail).

Crusher Fines (Crusher Run, Crushed Stone, Limestone Fines): Any limestone, granite, or gravel that has been run through a crusher, which once wetted and compacted creates a smooth hard trail surface for high-use areas.

Cryptosporidiosis: A disease of the intestinal tract caused by the parasite Cryptosporidium parvum occurring in untreated backcountry water sources. Common symptoms include stomach cramps and diarrhea.

Culvert, Cross Drainage: Pipe- or box-like construction of wood, metal, plastic, or concrete that passes under a trail to catch surface water from side ditches and direct it away from a trail.

Culvert, Stream Bed: Pipe- or box-like construction of wood, metal, plastic, or concrete to convey a stream under a trail without constricting waterflow.

Curb Cut: A cut in the curb where a trail crosses a street. The curb cut should be the same width as the trail.

Curvilinear: A free-flowing trail layout pattern characterized by the general absence of straight trail segments allowing for ease of trail user movement.

Cushion Material: Native or imported material, generally placed over rocky sections of unsurfaced trail to provide a usable and maintained travel way.

Customer: The user, consumer, patron, guest, stakeholder, or visitor who consumes a product, resource, or service provided "free," at some level of fee or user charge below the true cost, or at full cost from a park and recreation agency or private concessionaire operating under the control of the park and recreation agency.

Cut and Fill: The process of removing soil from one area and placing it elsewhere to form a base for any given activity.

Cut Slope: An earthen slope that is cut. For example, a trail built lower than the existing terrain would result in a cut slope.
**Day Pack:** A soft pack (smaller than a backpack), favored by day hikers and trail workers for carrying food, water, and other supplies.

**Daylighting:** Clearing a ditch or drain so that water can run freely, or all the way to "daylight."

**Deadfall:** A tangled mass of fallen trees or branches.

**De-berming:** Removing the high ridge of material that has formed along the outer edge of a trail allowing water to once again flow off the trail instead of down the trail.

**Debris:** Any undesirable material that encroaches on a trail and hinders the intended use.

**Decking (Flooring):** That part of a bridge, puncheon, or boardwalk structure that provides direct support for trail traffic.

**Declination:** The measurement describing the difference between true north and magnetic north.

**DEET:** The active ingredient (chemical name N, N-diethyl-meta-toluamide) used in many insect repellents to repel biting pests such as mosquitoes and ticks.

**Dehydration:** A depletion of body fluids that can hinder the body's ability to regulate its own temperature.

**Demand, Latent:** That demand for goods or services that cannot be met because of a lack of market capacity to respond to the demand. Demand for trails and greenways that cannot be satisfied with the existing facilities.

**Designated Trail:** A trail that is approved and maintained by an agency.

**Destination Trail:** A trail that connects two distinct points (A to B) rather than returning the user to the original beginning point.
Difficulty Rating: A subjective rating of trail difficulty based on an average user with average physical abilities. For example the US Forest Service uses Easy, More Difficult, Most Difficult. Many other agencies use the following:

- Easy is defined as relaxing, posing minimal difficulties and able to be traveled with little physical effort.
- Moderate is defined as not requiring excessive or extreme physical effort.
- Difficult is defined as physically strenuous requiring excessive or extreme physical effort.

Digging-Tamping Bar: A long bar with a small blade at one end for loosening compacted or rocky soil and a flattened end for tamping.

Dike (Tramway, Tram, Levee): An embankment or dam made to prevent flooding by the sea, a river/stream, or lake. The embankment is often used as a trail.

Dispersed Recreation: Recreation activities that occur outside of developed recreation facilities away from maintained roads. Also referred to as backcountry recreation.

Disturbed Area: Area where vegetation or topsoil has been removed, or where topsoil, spoil, or waste has been placed.

Ditch: A long, narrow trench used to improve drainage.

Ditching, Sidehill: A ditch which parallels the treadway on the uphill side to collect water seeping into the trail, usually ends in a drainage ditch which allows the water to cross the trail.

Double-Track Trail: A trail that allows for two users to travel side by side or make passes without one user having to yield the trail. Double-track trails are often old forest roads.

Down and Out: The correct position of a carabiner gate when it is connected to an anchor.

Down Tree: Fallen tree that blocks the trail.

Downslope: The downhill side of a trail.
Drain, Cobble: A cobbled improvement to the trail surface that allows drainage (usually from an intermittent wet seep) across the trail for continued passage along the trail without damage to the soil.

Drainage, Cross: Running water in swamps, springs, creeks, drainages, or draws that the trail must cross.

Drainage, Sheet: Desirable condition in which water flows in smooth sheets rather than rivulets; slower flow and less concentration results in less erosion.

Drainage, Surface: Rain or snow runoff from the surface of the tread.

Drainage Ditch (Ditching): Open ditches running parallel to the trail tread that collect water and carry it away from the site. A drainage ditch is also an element of a waterbar, providing an escape route for water diverted from the trail by the bar.

Drains, French: Stone filled ditches that can have a porous pipe laid along the base to collect the water and carry it away from the site. The top must be kept clear of the surfacing material; allowing water to run freely into the drain.

Drawings: Documents showing details for construction of a trail or trail-related facility, including but not limited to straight-line diagrams, trail logs, standard drawings, construction logs, plan and profile sheets, cross-sections, diagrams, layouts, schematics, descriptive literature, and similar materials.

Drawknife: A tool with a sharp blade and handles at both ends used to strip bark from small-diameter logs.

Drop-off: Slope that falls away steeply.

Duff (Humus): A layer of decaying organic plant matter (leaves, needles, etc.) on the ground. It is highly absorbent and quickly erodes under traffic.

Dunes: Ridges or mounds of loose, wind-blown material, usually sand.

Duty of Care: The legal “duty of care” that a landowner owes a member of the general public varies from state to state, but generally liability depends on the status of the injured person. Liability increases from the lowest risk for a “trespasser,” then “licensee,” “invitee,” with highest owed to a “child.”
Easement: Grants the right to use a specific portion of land for a specific purpose or purposes. Easements may be limited to a specific period of time or may be granted in perpetuity; or the termination of the easement may be predicated upon the occurrence of a specific event. An easement agreement survives transfer of land ownership and is generally binding upon future owners until it expires on its own terms.

Easement, Conservation: Places permanent restrictions on property in order to protect natural resources.

Easement, Construction: An additional temporary area or corridor needed to construct a trail or facility.

Easement, Maintenance: An additional permanent area or corridor (not open to the public) needed to maintain trail drainage, foliage, and recurring maintenance needs.

Easement, Recreation: Provides public access to private property while limiting or indemnifying the owner's public liability.

Easement, Scenic: Places permanent restrictions on a property in order to protect the natural view.

Ecosystem: A system formed by the interaction of living organisms, including people, with their environment. An ecosystem can be of any size, such as a log, pond, field, forest, or the earth's biosphere.

Eco-tourism (Eco-recreation, Nature-based Tourism): Purposeful travel to natural areas to understand the culture and natural history of the environment, taking care not to alter the integrity of the ecosystem, while producing economic opportunities that make the conservation of natural resources beneficial to local people.

Elevation: The height of a place above sea level.

Elliptical Triangle (Pregnant Triangle): Shape of signs and blazes that mark trails in the National Trails System.

Embankment: Structure made from soil used to raise the trail, railbed, or roadway above the existing grade.
Eminent Domain: The authority of a government to take (usually by purchase) private property for public use.

Endangered Species: A species of animal or plant is considered to be endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes.

Enhancement Funds: Under TEA-21, independent funds available for bicycling and walking facilities, rail-trails, and eleven other activities.

Entrenchment: Sunken tracks or grooves in the tread surface cut in the direction of travel by the passage of water or trail users.

Environmental Assessment (EA): A document prepared early in a planning process (federal) that evaluates the potential environmental consequences of a project or activity. An assessment includes the same topical areas as an EIS, but only assesses the effects of a preferred action, and in less detail than an EIS. An EA results in a decision, based on an assessment of the degree of impact of an action, that an EIS is necessary, or that an action will have no significant effect and a finding of no significant impact (FONSI) can be made.

Environmental Education: Activities that use a structured process to build knowledge, in students and others, about environmental topics.

Environmental Impact Statement (EIS): An EIS is a full disclosure, detailed federal report which, pursuant to Section 102(2)C of the National Environmental Policy Act (NEPA), establishes the need for the proposed action, identifies alternatives with the potential to meet the identified need, analyzes the anticipated environmental consequences of identified alternatives, and discusses how adverse effects may be mitigated. An EIS is prepared in two stages: a draft statement which is made available to the public for review and a final statement which is revised on the basis of comments made on the draft statement.

Ephemeral Creek: A temporary or short-lived water flow, especially after a heavy rain. Most of the year it's a dry creek bed.
Erosion: Natural process by which soil particles are detached from the ground surface and moved downslope, principally by the actions of running water (gully, rill, or sheet erosion). The combination of water falling on the trail, running down the trail, and freezing and thawing, and the wear and tear from traffic create significant erosion problems on trails.

Erosion, Gully (Gullying): Where concentrations of runoff water cut into the soil forming single or numerous channels greater than one foot below post-construction tread depth usually on steep terrain.

Erosion, Rill: Removal of soil particles from a bank slope or trail tread by surface runoff moving through relatively small channels.

Erosion, Sheet: The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and runoff water.

Erosion, Splash: The spattering of small soil particles caused by the impact of raindrops on wet soils. The loosened and spattered particles may or may not be subsequently removed by surface runoff.

Erosion, Wind: Removal of soil particles by wind, causing dryness and deterioration of soil structure; occurs most frequently in flat, dry areas covered by sand or loamy soils.

Erosion Control: Techniques intended to reduce and mitigate soil movement from water, wind, and trail user traffic.

Escarpment: An inland cliff formed by the erosion of the inclined strata of hard rocks.

Exotic Species: A plant introduced from another country or geographic region outside its natural range.

Exposure: The relative hazards encountered when one takes into consideration obstacles, alignment, grade, clearing, tread width, tread surface, sideslope, isolation, and proximity to steep slopes or cliffs.

Extended Trail: Trails over 100 miles in length (as defined in the National Trails System Act).
**Facen:** Structural member in retaining walls and abutments that is placed at right angle to the structure or trail tread.

**Fall Line:** Direction water flows down a hill. A trail should never be constructed on the fall line.

**Fascines (Wattles):** Stems and branches of rootable plant material (willow, dogwood, and alder, for example) that are tied together in long bundles, placed in shallow trenches on contour, and staked down to stabilize erodible slopes.

**Fault:** A fracture in rock along which movement can be demonstrated. A fracture in the earth's crust forming a boundary between rock masses that have shifted.

**Fauna:** The animal populations and species of a specified region.

**Fee (Fee Simple, Fee Simple Absolute):** An interest in land in which the owner is entitled to the entire property without limitation or restriction, and with unconditional power of disposition.

**Fee Simple Determinate:** Similar to Fee Simple Absolute, but states condition(s) under which the property will revert to the original owner/grantor.

**Feeder Trail:** A trail designed to connect local facilities, neighborhoods, campgrounds, etc. to a main trail.

**Fence:** A constructed barrier of wood, masonry, stone, wire, or metal, erected to screen or separate areas.

**File:** A hand-held 10- to 12-inch flat steel tool with a rough, ridged surface for smoothing or grinding. Used to keep trail tools sharp.

**Fill (Material):** Gravel or soil used to fill voids in trail tread and to pack behind retaining walls and other structures.

**Fill Slope:** Area of excavated material cast on the downslope side of trail cut (also called embankment).
**Fines, Soil:** Smallest soil particles important for binding the soil together; silt fines are often the first particles to move when erosion takes place.

**Fire Rake:** A tool with triangular tines used to cut duff and debris from fire breaks or trail corridors.

**Firebreak:** A strip of forest or prairie land cleared or plowed to stop or prevent the spread of fire.

**Fiscal Year (FY):** Annual schedule for keeping financial records and for budgeting funds. The Federal fiscal year runs from October 1 through September 30, while most state fiscal year’s run from July 1 through June 30.

**Fixed Rope (Cable):** A rope or cable that is set in place to assist in moving large objects.

**Flagging:** Thin ribbon used for marking during the location, design, construction, or maintenance of a trail project.

**Flagline:** Flagging, tied to trees, indicating the intended course of a trail prior to construction.

**Flags, Wire:** Wire wands with square plastic flags at one end for field layout and marking of new trail or relocations of trail sections.

**Floodplain:** The flat, occasionally flooded area, bordering streams, rivers, or other bodies of water, susceptible to changes in the surface level of the water.

**Floodway:** The channel of a river or stream where the annual rising or lowering of water occurs.

**Flora:** The plant populations and species of a specified region.

**Flushcut:** Branch or sapling cut flush with the trunk or ground.
Flushes: An area of soil enriched by transported soil minerals brought by water from elsewhere (opposite of leaching).

Fly Ash: Waste material from coal-burning power plants. May be mixed with lime and earth as a combined base and surface material for trail tread.

Footpath: A path over which the public has a right-of-way on foot only. Wheelchairs are also permitted, although this may not be practical due to surface or slope.

Ford: A natural water level stream crossing; which can be improved (aggregate mix or concrete) to provide a level, low velocity surface for trail traffic.

Friction Pile: Post hammered into muck until friction prevents further penetration; foundation for puncheon or boardwalk.

Friends of the Trail: A private, non-profit organization formed to advocate and promote a trail. They can provide assistance, whether muscle power or political power, that augments management of a trail by a public agency.

Friendly Taking: This means that the person whose land is being "taken" by eminent domain or action in condemnation is basically supportive of the action.

Frostbite: The freezing of skin and the tissue beneath.
**Gabion Baskets:** Rectangular containers (usually made of heavy galvanized wire) that can be wired together, and then filled with stones to make quick retaining walls for erosion control.

**Gaiters:** Coverings that zip or snap around the ankles and lower legs to keep debris and water out of your boots.

**Gate:** Structure that can be swung, drawn, or lowered to block an entrance or passageway.

**Geographic Information System (GIS):** A spatial database mapping system (computer and software) that contains location data for trails and other important features.

**Geotextile (Geo-synthetic, Geofabric, Filter Fabric):** A semi-impermeable nonwoven petrochemical fabric cloth that provides a stable base for the application of soil or gravel. Most common use is in the construction of turnpikes.

**Giardiasis:** An intestinal illness (diarrhea, excess gas, and abdominal cramping) caused by the protozoan parasite *Giardia lamblia* occurring in untreated backcountry water sources.

**Glade:** An open space in a forest.

**Glacier:** A huge mass of ice, formed on land by the compaction and re-crystallization of snow, that moves very slowly down slope or outward due to its own weight.

**Global Positioning System (GPS):** A system used to map trail locations using satellites and portable receivers. Data gathered can be downloaded directly into GIS database systems.

**GORP:** A high-carbohydrate snack food made primarily from nuts and dried fruit, an acronym for “good ol’ raisins and peanuts.”

**Grade:** Slope expressed as a percentage (feet change in elevation for every 100 horizontal feet, commonly known as “rise over run”). A trail that rises 8 vertical feet in 100 horizontal feet has an 8% grade. Grade is different than angle; angle is measured with a straight vertical as 90° and a straight horizontal as 0°. A grade of 100% would have an angle of 45°.
Grade, Maximum: The steepest grade permitted on any part of a trail.

Grade, Negative: Trail runs downhill.

Grade, Positive: Trail runs uphill.

Grade, Reverse: A short rise in the trail, which traverses a slope that forces any water on the trail to drain off to the side.

Grade, Sustained: The steepest grade permitted over the majority of the trail length.

Grade Dip (Drainage Dip, Rolling Dip, Coweta Dip): A reverse or gradual dip in the grade of the trail, 20 to 40 feet long, followed by a gradual rise of 2 to 3 feet with the rise at an angle to the outslope to divert water off the trail. This accomplishes the same effect as a waterbar but will last longer due to the gentle dip and rise of the trail grade.

Grade-Separated Crossing: Overpasses or tunnels that allow trail users to cross a railroad right-of-way or street at a different level than trains or traffic.

Graffiti: Any writing, printing, marks, signs, symbols, figures, designs, inscriptions, or other drawings that are scratched, scrawled, painted, drawn, or otherwise placed on any surface of a building, wall, fence, trail tread, or other structure on trails or greenways and which have the effect of defacing the property.

Grassroots (Support): Efforts at the local level utilizing public interest groups and communities in support of trails or greenways.

Grate: A framework of latticed or parallel bars that prevents large objects from falling through a drainage inlet, but permits water and some sediment to fall through the slots.

Gravel: Soil particles ranging from 1/5 to 3 inches in diameter.

Green: An open space available for unstructured recreation consisting of grassy areas and trees.
Green Infrastructure: The sum of the public and private conservation lands including native landscapes and ecosystems, greenspaces, and waters.

Greenbelt: A series of connected open spaces that may follow natural features such as ravines, creeks, or streams. May surround cities and serve to conserve and direct urban and suburban growth.

Greenspace: Natural areas, open spaces, trails, and greenways that function for both wildlife and people.

Greenway: A linear open space established along a natural corridor, such as a river, stream, ridgeline, rail-trail, canal, or other route for conservation, recreation, or alternative transportation purposes. Greenways can connect parks, nature preserves, cultural facilities, and historic sites with business and residential areas.

Greenway, Community: Safe, off-road corridor of open space that connects neighborhoods, schools, parks, work places, and community centers via paths and trails.

Greenway, Conservation: Open space corridor that protects biodiversity and water resources by connecting natural features such as streams, wetlands, forests, and steep slopes.

Griphoist: A brand name for a manually operated hoist that pulls in a cable at one end and expels it from the other end; used to move rock or timber needed for trail structures.

Groundwater Flow: Water that moves through the subsurface soil and rocks.

Groundwater Table: The depth below the surface where the soil is saturated (the open spaces between the individual soil particles are filled with water).

Grub (Grubbing): To dig or clear roots and tree stumps near or on the ground surface of the trail tread.

Grub Hoe: A tool with a blade (various weights) set across the end of a long handle used in building and repairing trail tread and digging trenches.
Habitat: A place that supports a plant or animal population because it supplies that organism's basic requirements of food, water, shelter, living space, and security.

Hammock: A cluster of trees, often hardwoods on higher ground.

Hard Surface (Paved) Trail: A trail tread surfaced with asphalt, concrete, soil cement, or other hard, stabilized material.

Hardening: The manual, mechanical, or chemical compaction of the trail tread resulting in a hard and flat surface that sheets water effectively and resists the indentations that are created by use.

Hardening Block (Turf Support Block, Turf Stone, Grass Grid, Tri-Lock Block): All can be used for hardening of the trail tread, but each has unique characteristics which lend themselves to different applications.

Hardhat: A hard shell worn on the head as protection during trail work.

Hardpan: A layer of rock, or compacted clay layer of soil that forms a durable and generally erosion-free trail surface.

Hazard Tree (Widow Maker): Tree or limb that is either dead, or has some structural fault, that is hanging over, or leaning towards the trail or sites were people congregate.

Header, Stone: A long, uniform stone laid with its narrow end towards the face of a retaining wall or crib used intermittently to structurally tie in the other rocks laid in the wall.

Headwall: Support structure at the entrance to a culvert or drainage structure.

Heat Exhaustion: The body's reaction to overheating, which includes salt-deficiency and dehydration.

Heatstroke: A severe illness in which the body's temperature rises way above normal; also called sunstroke.

Height: Measure of the vertical dimension of a feature. May also be the depth of a rut or dip.
Helical Pier: Steel post with auger-shaped bit-end that is screwed into wet soils either by hand, or with the aid of specialized hydraulic tools to establish a foundation for puncheon or boardwalk.

Helmet: A hard shell protective device worn on the head while riding OHVs, mountain bikes, horses, etc., or while in-line skating.

High Potential Site (or Segment): Historic sites or trail segments which afford high quality recreation or interpretation opportunities.

Highway: A general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way.

Hiker-Biker Trail: An urban paved trail designed for use by pedestrians and bicyclists.

Hiking Trail: Moderate to long distance trail with the primary function of providing long-distance walking experiences (usually two miles or more).

Hogback: A rounded ridge.

Hunt (Hunting) Camp: Areas set up to be used by seasonal hunters for camping. May also act as a trailhead.

Hydric Soil: Soil that is saturated or flooded during a sufficient portion of the growing season with anaerobic conditions in the upper soil layers.

Hydrology: The properties, distribution and circulation of water on the surface of the land, in the soil and underlying rocks, and in the atmosphere.

Hypothermia: Lowering of the body's core temperature to dangerous levels. Wet conditions, wind, and exhaustion can bring on hypothermia.
Impact Fee: A fee levied on the developer or builder of a project by a public agency as compensation for otherwise unmitigated impacts the project will produce. Impact fees can be designated to pay for publicly owned parks, open space, trails, or recreational facilities.

Impacts: Encompasses all physical, ecological, and aesthetic effects resulting from the construction and use of trails (both negative and positive). Many studies have been concerned with environmental and social impacts of different users, such as tread wear, littering, conflicts between users, or vandalism.

Impermeable Material: A soil or material whose properties prevent movement of water.

Impervious Surface: Hard surfaces that do not allow absorption of water into the soil and that increase runoff. Examples of such surfaces include concrete or asphalt paved trails and parking areas.

Indemnify (Indemnification): To insure against or repay for loss, damage, etc.

Infill: The stone or soil material used to fill gaps in trail or wall construction/revetment work.

Infiltration: The portion of rainfall or surface runoff that moves downward into the subsurface rock and soil.

Infrastructure: The facilities, utilities, and transportation systems (road or trail) needed to meet public and administrative needs.

Inslope (Insloping): Where the trail bed is sloped downward toward the backslope of the trail; causes water to run along the inside of the trail.

Install (Construct): To set in position for use; to build a bridge or structure.

Intermodal: Connections between modes of transportation, such as automobile, transit, bicycle, or walking.

Intermodalism: The use of multiple types of transportation to reach one destination; includes combining the use of trains and buses, automobiles, bicycles, and pedestrian transport on a given trip.

Interpretation: Communicating information about the natural and/or cultural resources and their associated stories and values found at a specific site or along a trail. Tours, signs, brochures, and other means can be used to interpret a particular resource.

Interpretive Sign or Display: An educational sign or display that describes and explains a natural or cultural point of interest on or along the trail.

Interpretive Trail: Short to moderate length trail (1/2 to 1 mile) with concentrated informational stops to explain associated views, natural flora and fauna, and other features.

Intersection (Junction): Area where two or more trails or roads join together.

Invasive Exotic: Non-native plant or animal species that invades an area and alters the natural mix of species.

Invitee: A person on the owner's land with the owner's permission, expressed or implied, for the owner's benefit, such as a paying customer. This is the highest level of landowner responsibility and therefore carries the highest level of liability.
Kiosk (Sign): A freestanding bulletin board consisting of three to five sides housing informational or interpretive displays.

Knob: Prominent rounded hill or mountain.

Lake: Large inland body of water.

Land Ethic: The desire humans have to conserve, protect, and respect the native landscape and other natural resources because their own well being is dependent upon the proper functioning of the ecosystem.

Land Management Agency: Any governmental agency that manages public lands—many managed as recreation and/or wilderness areas. Examples include federal agencies such as the USDA Forest Service, the USDI National Park Service, and the USDI Bureau of Land Management, as well as state and local park system agencies.

Land Manager: Any person who makes decisions regarding land use.

Land Trust: A private, nonprofit conservation organization formed to protect natural resources such as forestland, natural areas, and recreational areas. Land trusts purchase and accept donations of conservation easements.

Land Use: The way a section or parcel of land is used. Examples of land uses include industrial, agricultural, and residential.

Land Use Plan: An official document that establishes a program for the future use of land.

Landscape: The earth's surface at different scales, including all human and natural features, and containing numerous interacting ecosystems such as forests, fields, waterways, and human settlements.

Landslide: Dislodged rock or earth that has slipped downhill under the influence of gravity and obstructs passage on a trail.

Leaching: The loss of soil minerals from upper layers of the soil to lower layers by water drainage.

Lean-to: Another word for a trail shelter, this term is used primarily in New England.
Lease: The temporary grant of an interest in land upon payment of a determined fee. The fee does not have to be monetary, but some consideration must be given for the right to use the land, or the lease will not be legally binding.

Leave No Trace (LNT): Educational program designed to instill behaviors in the outdoors that leave minimum impact of human activities or occupation (www.LNT.org).

Legislation: Written and approved laws. Also known as “statutes” or “acts.”

Leisure Time: The free or discretionary time available for people to use as they choose after meeting the biological and subsistence requirements of existence.

Length: Dimension of a feature measured parallel to the direction of travel.

Liability (Liable): In law, a broad term including almost every type of duty, obligation, debt, responsibility, or hazard arising by way of contract, tort, or statute. To say a landowner or person is “liable” for an injury or wrongful act is to indicate that they are the person responsible for compensating for the injury or wrongful act.

License: Allows the licensed party to enter the land of the licensor without being deemed a trespasser.

Licensee: Person using a property for their benefit (i.e. hunting, hiking, etc.) with the implied or stated consent of the owner, but not for the benefit of the owner.

Limits of Acceptable Change (LAC): A planning framework that establishes explicit measures of the acceptable and appropriate resource and social conditions in recreation settings as well as the appropriate management strategies for maintaining or achieving those desired conditions.

Linkage: Connections that enable trails and greenway systems to function and multiply the utility of existing components by connecting them together like beads on a string.
Litter: The uppermost layer of decaying organic matter in any plant community, or carelessly discarded trash on the trail.

Load, Dead: The total physical weight of a bridge or structure, equal to the combined weight of all structural components.

Load, Design: The maximum weight a trail tread can carry at any point along its length. Service and emergency vehicles need to be considered when determining the design load of trails and structures.

Load, Live: The active forces and weights that a bridge or structure is designed to support, including people, service vehicles, flood waters, floating debris contained within flood waters, wind, snow, and ice.

Loam: An easily crumbled soil consisting of a mixture of clay, silt, and sand.

Log, Trail: An inventory of physical features along or adjacent to a trail. An item-by-item, foot-by-foot record of trail features and facilities or improvements on a specific trail.

Logged Out Tree: Down tree across the trail with sections already removed to permit passage.

Long Distance Trail: In general best characterized by length (more than 50 miles), linearity (follows a linear feature), and diversity (geographic and political).

Loop Trails: Trail systems designed so that the routes form loops, giving users the option of not traveling the same section of trail more than once on a trip.

Loppers (Pruning Shears): A long-handled tool with two opposing blades (by-pass or anvil) used for cutting heavy vegetation (limbs of 1 to 1 3/4 inches in diameter).

Lyme Disease: An infection caused by a spiral-shaped bacterium called a spirochete carried by deer ticks. Symptoms associated with the early stages—fever, headache, stiffness, lethargy, and myriad other mild complaints—are often dismissed as the flu.
Machete: A large knife used to clear succulent vegetation.

Magnetic North: A spot in northern Canada, overlying the earth's magnetic North Pole, toward which the red needle of a compass points.

Maintenance: Work that is carried out to keep a trail in its originally constructed serviceable condition. Usually limited to minor repair or improvements that do not significantly change the trail location, width, surface, or structures.

Maintenance (Annual): Involves four tasks done annually or more often as needed: cleaning drainage, clearing blowdowns, brushing, and marking.

Marsh: An area of wet or periodically submerged land, generally treeless and usually characterized by grasses and other low vegetation.

Master Plan: A comprehensive long-range plan intended to guide greenway and trail development of a community or region. Includes analysis, recommendation, and proposals of action.

Mattock: A sturdy two-bladed tool with an adz blade that can be used as a hoe for digging in hard ground. The other blade may be a pick (pick mattock) for breaking or prying small rock or a cutting edge (cutter mattock) for chopping roots.

Maximum Pitch: The highest percent of grade on a trail.

Maximum Sustained Pitch: The highest percent of grade on a trail that is sustained for a significant distance.

McLeod: A forest fire tool looking like an over-sized hoe with tines on the opposite blade. In trail work it is used to remove slough and berm from a trail and to smooth the tread.

Meadow: Tract of grassland.

Measuring Wheel (Cyclometer): A device that records the revolutions of a wheel and hence the distance traveled by the wheel on a trail or land surface.

Mechanical Advantage: Multiplication of work force with the use of simple machines such as the lever, the inclined plane, the wheel, and the pulley.
Memorandum of Understanding/Agreement (MOU/MOA): A signed, written agreement entered into by various governmental agencies and nonprofit groups to facilitate the planning, coordination, development, and maintenance of a trail or trails system.

Mesa: Flat-topped elevation with one or more cliff-like sides.

Mineral Soil: The layers of the subsoil relatively free of organic matter.

Minor Field Adjustments: Deviations of the trail alignment made during the course of normal construction or maintenance as determined by the supervisor or crew leader, and not part of an original survey.

Mitigate (Mitigation): Actions undertaken to avoid, minimize, reduce, eliminate, or rectify the adverse impact from a management practice or impact from trail users.

Mode: A particular form of travel, such as walking, bicycling, operating a vehicle, etc.

Monitor: Check systematically or scrutinize for the purpose of collecting specific data along a trail in relation to a set of standards.

Moraine: A ridge or pile of boulders, stones, and other debris carried along and deposited by a glacier.

Motorized: Off-highway recreation using motorized vehicles (motorcycle, ATV, snowmobile, four-wheel drive) on trails.

Mountaineering (Mountain Climbing, Alpinism): Climbing high mountains (for sport) where skill and gear to enable belaying, rappelling, glacier travel, and climbing over rock, snow, and ice are needed.

Mulch: Organic matter spread on newly constructed trail work to help stabilize soils and protect them from erosion.

Multimodal: Facilities serving more than one transportation mode, or a transportation network comprised of a variety of modes.

Multiple Use Area: A land management objective seeking to coordinate several environmental, recreational, economic, historical, cultural and/or social values in the same geographic area in a compatible and sustainable manner.

Multiple-Use (Multi-Use) Trail: A trail that permits more than one user group at a time (equestrian, OHVer, hiker, mountain bicyclist, etc.).
National Environmental Policy Act (NEPA): Established by Congress in 1969, NEPA requires public involvement and assessment of the biological and cultural resources in the location of any ground-disturbing activity on federal land.

National Historic Trail: Federally designated extended trails, which closely follow original routes of nationally significant travel (explorers, emigrants, traders, military, etc.). The Iditarod, the Lewis and Clark, the Mormon Pioneer, and the Oregon trails were the first to be designated as National Historic Trails in 1978.

National Recreation Area: Federal areas that have outstanding combinations of outdoor recreation opportunities, aesthetic attractions, and proximity to potential users. They may also have cultural, historical, archaeological, pastoral, wilderness, scientific, wildlife, and other values contributing to public enjoyment.

National Recreation Trail: Existing local trails (over 800) recognized by the federal government as contributing to the National Trails System.

National Monument: Area of unique ecological, geological, historical, prehistoric, cultural, and scientific interest.

National Scenic Area: Area that contains outstanding scenic characteristics, recreational values, and geological, ecological, and cultural resources.

National Scenic Trail: Federally designated extended trails, which provide for the maximum outdoor recreation potential and for the conservation and enjoyment of the significant qualities of the areas through which they pass. The Appalachian and the Pacific Crest trails were the first to be designated as National Scenic Trails in 1968.

National Trails System: A network of trails (National Scenic, Historic, or Recreation) throughout the country authorized by the 1968 National Trails System Act (16 U.S.C. 1241-51).
**Native Species:** An indigenous species (a basic unit of taxonomy) that is normally found as part of a particular ecosystem; a species that was present in a particular area at the time of the Public Land Survey (1847-1907).

**Natural Surface (Trail):** A tread made from clearing and grading the native soil with no added surfacing materials.

**Nature Trail:** Moderate length trail (3/4 to 2 miles) with primary function of providing an opportunity to walk and study interesting or unusual plants or natural features at user's pleasure. The ideal nature trail has a story to tell. It unifies the various features or elements along the trail into a related whole.

**Nonmotorized:** Trail recreation by modes such as bicycle, pedestrian, equestrian, skate, ski, etc.

**Notice of Interim Use (NITU):** A document issued by the STB in Notice of Exemption for rail line abandonments (lines out of service for two or more years). It has the same effect as a CITU.

**Noxious Plant:** Plant that poses a hazard to humans or animals, such as poison oak or ivy, cacti, stinging nettles, etc.

**Nylon Strap:** Heavy duty woven strap of wide nylon with eyes sewn in both ends. May be set basket style or choker style. Used mainly as anchor ties for a Griphoist or block attached to live trees, as their wider load-bearing surface does less bark damage and eliminates the need for the use of shims.
**Obligate:** The way project sponsors spend money, typically by putting their project under contract for construction. Grant programs often require project sponsors to obligate funds in a timely manner or lose the funds.

**Obstacles:** Physical objects large enough to significantly impede or slow travel on a trail. Logs, large rocks, and rock ledges are common obstacles.

**Off-Highway Vehicle (OHV):** Any motorized vehicle used for travel in areas normally considered inaccessible to conventional highway vehicles. OHVs generally include dirt motorcycles, dune buggies, jeeps, 4-wheel drive vehicles, snowmobiles, and ATVs.

**Old Growth:** Forests that have never been logged or have not been logged for many decades; characterized by a large percentage of mature trees.

**Open and Flowing:** A type of trail design that allows for sweeping turns, higher speeds, and better sight lines.

**Open Space:** Areas of natural quality, either publicly or privately owned, designated for protection of natural resources, nature-oriented outdoor recreation, or trail-related activities.

**Operating and Maintenance Costs (O&M):** Funds for day-to-day costs of operating and maintaining a trail or greenway. Costs include worker's salaries, equipment upkeep, etc.

**Optimum Location Review (OLR):** A review of the optimum trail location when acquiring property rights (purchase, lease, easement, right-of-way). Factors considered include terrain, connections to the rest of the trail, property ownership, ability to acquire the lands, etc. In short, all of the environmental, social, and economic impacts which would lead to selecting the optimum lands for location of a trail are considered.

**Option:** The right to purchase or lease a property at a certain price for a certain designated period; for which right a consideration is paid.
**Organic Soil:** Soil that is made up of leaves, needles, plants, roots, bark, and other organic material in various stages of decay, and has a large water/mass absorption ratio.

**Outcrop:** A rock formation that protrudes through the level of the surrounding soil.

**Outdoor Recreation:** Leisure activities involving the enjoyment and use of natural resources primarily outdoors.

**Outdoor Recreation Access Route (ORAR):** A continuous unobstructed path designated for pedestrian use that connects accessible elements within a picnic area, campground, or designated trailhead.

**Outflow (Outwash):** The off-treadway ditch portion of a drainage structure, intended to remove all water from the trail.

**Outrun (Run-out):** That section of a trail, usually at or near the base of a descent which provides adequate length and grade reduction in order for the user to safely stop or negotiate turns, intersections, or structures. Outruns are usually associated with ski touring.

**Outslope (Outsloping):** A method of tread grading that leaves the outside edge of a hillside trail lower than the inside to shed water. The outslope should be barely noticeable—usually no more than about one inch of outslope for every 18 inches of tread width.

**Ownership-In-Fee (Fee Purchase, Fee Simple):** A complete transfer of land ownership from one landowner to another party, usually by purchase.
Panier (Pannier, Saddlebag): One of a pair of containers carried on either side of a pack animal, bicycle, or motorcycle.

Parallel Ditching: A lateral drainage ditch constructed adjacent to the trail tread to catch surface water sheeting from the tread surface and divert it away from the trail. Generally this drainage system is utilized in low flat areas or areas where multiple entrenched trails have developed.

Parcourse (Vita course): A series of exercise stations located along a fitness trail. Each station is designed to exercise a different set of muscles.

Park: Any area that is predominately open space with natural vegetation and landscaping used principally for active or passive recreation.

Park, Linear: A linear open space established along a natural corridor, such as a river, stream, ridgeline, rail-trail, canal, or other route for passive recreation, education, and scenic purposes.

Parkway: A broad roadway bordered with (and often divided by) plantings of trees, shrubs, and grass.

Pass: Narrow low spot between mountain peaks; lowest point along a mountain crest. Pass is generally used in the West, while “gap” is used in the South, and “notch” in New England.

Path (Pathway): This is a temporary or permanent area that is normally dirt or gravel, although some paths are asphalt or concrete. A path typically indicates the common route taken by pedestrians between two locations.

Pathfinder: One that discovers a way; explores untraveled regions to mark a new route. Someone who promotes a new process or procedure.

Paved Dip: A swale crossing paved with stones to enable water to run across a trail without erosion.

Pavement: That part of a trail having a constructed hard paved surface for the facilitation of wheeled trail traffic.

Peak: The pointed summit of a mountain.

Peak-Bagging: Reaching the tops of as many peaks as possible and keeping a record of the accomplishment.
Peat: Partially carbonized organic matter, usually mosses, found in bogs and used as fertilizer or fuel.

Pedestrian: Any person traveling by foot, or any mobility-impaired person using a wheelchair, whether manually operated or motorized.

Pick (Pick-ax, Pick-axe): A tool with a 36-inch handle and a head that has a point at one end and a chisel-like edge at the other used to loosen soil or rock.

Picnic Area: Day-use area with one or more picnic tables where meals can be eaten outdoors.

Pier: Intermediate bridge supports located between two adjacent bridge spans.

Pile (Piling): A long, heavy timber, pipe, or section of concrete or metal to be driven or jetted into the earth or streambed to serve as a support for a bridge.

Pitch: An increase in the prevailing grade of a trail, used during construction to avoid an obstacle, to catch up with the intended grade, or to meet a control point.

Piton: A spike driven into rock and to which ropes are attached during climbing or rigging.

Plan and Profile Sheets: Drawings (usually prepared for trail construction) used to record horizontal and vertical geometry of a trail alignment as well as other required improvements to the trail corridor.

Planimetric map: A map that shows features such as roads, trails, and mountains, but without contour lines showing elevation changes.

Pole Saw (Tree Pruner): A pruning saw with a telescoping handle to trim branches that would otherwise be out of arm’s reach. Some models have built-in loppers that can be operated from the ground with a rope.

Pond: Still body of water smaller than a lake.

Portage: A situation that exists when a paddler must temporarily leave a river or stream to carry the boat and gear around hazards such as dams, downed trees, or dangerous whitewater.

Potable (Water): Safe to drink from the source without treating.
**Pre-field:** Performing a physical examination of the project work site in order to evaluate solutions to trail deficiencies, select the appropriate course of action, formulate the design and quantify the material, equipment, and person hour requirements.

**Prescribed Burn:** Formerly called “controlled burns,” these are periodic, intentional fires conducted to clear underbrush in an effort to control “wildfire,” open areas to wildlife, and promote germination of some species of flora.

**Preservation:** Maintaining an area or structure intact or unchanged.

**Primary Trails:** Continuous through routes that originate at trailheads. Primarily for directing users through an area while promoting a certain type of experience.

**Prism:** The trail cross-section as a whole.

**Public Use Condition (PUC):** A condition attached to an STB-approved rail line abandonment authorization prohibiting the railroad from disposing of rail assets for a period of up to 180 days after such authorization unless the properties have first been offered, on reasonable terms, for sale for public purposes.

**Puddle:** A small pool of water usually a few inches deep and from several inches to several feet across.

**Pulaski:** Developed to grub and chop duff during forest fires, the Pulaski combines the axe bit with an adz-shaped grub hoe.

**Puncheon (Bog Bridge):** A log or timber structure built on the ground for the purpose of crossing a boggy area. Usually consists of sills, stringers, decking, and often a soil or loose gravel tread laid on top of the decking.

**Put-in/Take-out Point:** A defined area which provides public access/egress to water trails.

**Quadrangle:** A tract of land represented by one US Geological Survey map.

**Quiet Title:** An action brought in state court to establish legal rights to property.

**Quit-Claim Deed:** Deed of conveyance whereby whatever interest the grantor has in the property described in the deed is conveyed to the grantee without warranty of title.
Radius: An arc or curve that connects two straight trail segments in order to provide smooth horizontal and vertical alignment.

Rail Corridor: The path of a railroad right-of-way, including the tracks and a specified tract of land on either side of the tracks (generally one hundred feet wide).

Rail-Trail (Rail-to-Trail): A multi-purpose public path (paved or natural) created along an inactive rail corridor.

Rail-with-Trail: A trail that shares the same corridor with active rail traffic.

Railbank(ing): Retaining a rail corridor for future railroad uses after service has been discontinued. The National Trails System Act, Sec. 8d, provides for interim public use of the corridor, allowing the establishment of recreational trails.

Railing (Handrail): Horizontal or diagonal structural member which is attached to vertical posts for the purpose of delineating trails, protecting vegetation, providing safety barriers for trail users at overlooks and assisting users when crossing bridges or using steps.

Rain: Water falling to earth in drops that have been condensed from moisture in the atmosphere.

Ravine: Deep, narrow gouge in the earth's surface, usually eroded by the flow of water.

Read: To predetermine a course by studying obstacles and a possible path through.

Rebar: Steel reinforcing rod that comes in a variety of diameters, useful for manufacturing pins or other trail anchors.

Reconnaissance (Recon): Scouting out alternative trail locations prior to the final trail route location being selected.

Reconstruct (Reconstruction, Renovate): To replace or rebuild a trail structure (switchback, waterbar, bridge, etc.) that is no longer safe to use.

Record of Decision (ROD): Also called a decision memo. The portion of a Final Environmental Impact Statement that identifies the proposed action, signed by the appropriate deciding officer.
Recreation: The refreshment of body and mind through forms of play, amusement, or relaxation; usually considered any type of conscious enjoyment that occurs during leisure time.

Recreation, Passive Outdoor: Recreational uses conducted almost wholly outdoors that generally do not require a developed site, including hiking, horseback riding, mountain biking, and birdwatching.

Recreation Opportunity Spectrum (ROS): A means of classifying and managing recreational opportunities based on physical, social, and managerial settings.

Recreational Stock: Pack and saddle stock used primarily for transporting recreationists and their gear. Commercial pack stock and individual stock are included. Usually horses or mules, but may also be llamas or goats.

Recreational Trails Program (RTP): First established in 1991 and then reauthorized as part of TEA-21, RTP returns a portion of federal gasoline taxes, generated by non-highway recreation, to the states, which in turn provide grants for trail-related purposes to private organizations, state and federal agencies, and municipalities (www.fhwa.dot.gov/environment/rectrail.htm).

Recreational Use Statue (RUS): State law (in all 50 states) designed to limit the liability of public organizations, easement donors, landowners, and others who open their lands for public recreation use without charge.

Rehabilitation: All work to bring an existing trail up to its classification standard, including necessary relocation of minor portions of the trail.

Relocation (Relo, Realignment, Reroute): To alter the path of an existing trail to better follow land contours, avoid drainage sites, bypass environmentally sensitive areas, improve views, or for other landowner or management reasons.

Remove: To move from a position occupied; to take away.

Request for Proposals (RFP): Allows a number of consultants to bid on a project by outlining their plans and associated costs. A detailed RFP will help weed out unqualified consultants.

Restroom (Comfort Station, Pit Privy, Vault Toilet, Composting Toilet, Chemical Toilet, Port-a-John): Facility for human waste disposal that meets public health standards.
Retaining Wall (Revetment, Cribwall, Cribbing): Structure used at a grade change to hold the soil on the up-hill side from slumping, sliding, or falling, usually made of log or stone. Also used to provide stability and strength to the edge of a trail.

Retaining Wall, Sutter: A patented prefabricated component retaining wall using rebar, “H” posts, and 2-inch lumber. For information call Sutter Equipment at 415-898-5955.

Revegetation: Process of restoring a denuded and/or eroded area close to its original condition.

Reversionary Interest: The right of a property owner to the future enjoyment of property presently in the possession or occupancy of another.

Rhizome: A below ground stem capable of growing a new plant.

Ridge: A hill that is proportionally longer than it is wide, generally with steeply sloping sides.

Ridgeline: A line connecting the highest points along a ridge and separating drainage basins or small-scale drainage systems from one another.

Rigging, Cable: Cable works and hoists used to lift and move large, heavy rocks or logs.

Right-of-First Refusal: A property interest in which the holder of the right has first option to purchase the property at the price of a bona fide offer made to the property owner by a third party. If not exercised within a set time period after the offer is made, it expires, and the owner is free to sell to the offeror.

Right-of-Way: A strip of land held in fee simple title, or an easement over another’s land, for use as a public utility for a public purpose. Usually includes a designated amount of land on either side of a trail that serves as a buffer for adjacent land uses.

Right of Way: The right of one trail user or vehicle to proceed in a lawful manner in preference to another trail user or vehicle.

Rill: A steep-sided small channel resulting from accelerated erosion; the most common form of erosion.
Riparian Habitat: A habitat that is strongly influenced by water and that occurs adjacent to streams, shorelines, and wetlands.

Riparian Vegetation: Plant species growing adjacent to freshwater courses, including perennial and intermittent streams, lakes, and other bodies of fresh water.

Riparian Zone: The land and vegetation immediately adjacent to a body of water, such as a river, lake, or other natural perpetual watercourse.

Riprap: A layer of stones placed randomly on a bank to provide support and prevent erosion; also the stone so used.

River: A large natural stream of water.

Road-to-Trail Conversion: Involves narrowing an old logging road to provide a meandering trail with a solid trail tread for users.

Rock: Soil particles greater than 3 inches in diameter.

Rock Bar (Pry Bar): A four-foot bar of steel weighing 16 to 18 pounds with a beveled end used to move rocks.

Root: The part of a plant/tree, usually underground, that anchors the plant/tree. Can be a hazard to trail users when they protrude through the tread surface.

Root Ball (Root Wad): Earth and soil that is lifted up when a tree and its roots fall over.

Rubble: Rough, irregular fragments of broken rock or concrete.

Run (Running) Plank: Usually wood planks laid lengthwise on top of bridge decking used as the tread surface.

Runoff: Water (not absorbed by the soil) that flows over the land surface.

Rut: Sunken groove in the tread, perpendicular to the direction of travel, and less than two feet in depth.
Safety Harness: A body belt or strap, usually made of nylon, for use while working near steep drop-offs. Must be of approved construction and design, and in good repair, and attached to a secure anchor point with carabiners and approved climbing rope.

Sand: Soil particles ranging from 0.5 to 2.0 mm in diameter; individual particles are visible to the unaided human eye.

Scenic View (Vista): A long-distance view that is pleasant and interesting.

Scenic Viewpoint: A designated area developed at a key location to afford trail users an opportunity to view significant landforms, landscape features, wildlife habitat, and activities.

Scoping: The procedures by which a federal agency determines the extent of (NEPA) analysis necessary for a proposed action.

Scour (Scouring): Soil erosion through the force of moving water.

Scree: Gravel-size loose rock debris, especially on a steep slope or at the base of a cliff, formed as a result of disintegration largely by weathering.

Secondary Trails: Short trails used to connect primary trails or branchings of primary trails. They encourage movement between two primary trails or facilitate dispersal of use through secondary branching.

Section 8(d): Common reference to U.S.C. 1247(d), the section of the National Trails System Act which provides for interim trail use when a surplus railroad line is placed in the federal railbank.

Sediment: Soil particles that have been transported away from their natural location by wind or water action.

Sediment Deposition: The accumulation of soil particles on the trail tread and banks.

Seep (Seepage): An area which slowly passes water out of the ground to the surface; groundwater emerging on the trail tread or bank.

Segment (Passage): A portion of a trail. Changes in geographic features, jurisdiction and/or political boundaries often distinguish segments (passages).
Shared Use: A process where land managers and trail user groups work together to identify common goals and share in the process to achieve them. It means sharing of knowledge, tools, trailheads, grant funds, labor, and other resources in an area. In some instances it means sharing the same trail, but doesn’t always require multiple-use trails.

Shear: Force parallel to a surface as opposed to directly on the surface. An example of shear would be the tractive force that removes particles from a trail as flow moves over the surface of the slope.

Sheath: Protective covering made of leather or plastic used to cover sharp blades of tools while in storage or when the tools are transported.

Sheetwash: The widespread removal of surface debris by the steady and continuous flow of water on low gradient slopes. Generally at slow speeds and over long periods.

Shelter: Open front structure that includes a sleeping platform and roof.

Shoulder: Usually paved portion of a highway, which is contiguous to the travel lanes, allowing motor vehicle use in emergencies. They can also be for specialized use by pedestrians and bicyclists.

Shovel: A tool with a broad scoop and a long handle for lifting and moving loose material.

Shrub: A woody plant that usually remains low and produces shoots or trunks from the base; it is not usually tree-like or single stemmed.

Shy Distance: The distance between the trails edge and any fixed object capable of injuring someone using the trail.

Side Trails: Dead-end trails that access features near the main trail.

Sidehill: Where the trail angles across the face of a slope. The tread is often cut into the slope.

Sidehilling: Process of excavating or cutting a bench across the slope.

Sideslope: The natural slope of the ground measured at right angles to the centerline of the trail, or the adjacent slope, which is created after excavating a sloping ground surface for a trailway, often termed a cut-and-fill-slope, left and right of the trail tread.
**Sidewalk:** A paved strip (typically concrete four feet in width) which runs parallel to vehicular traffic and is separated from the road surface by at least a curb and gutter. Sidewalks are common in urban areas and in suburban residential areas.

**Sight Distance:** The visible and unobstructed forward and rear view seen by a trail user from a given point along the trail.

**Sign:** A board, post, or placard that displays written, symbolic, tactile, or pictorial information about the trail or surrounding area.

**Significant:** As used in NEPA, requires consideration of both context and intensity. Context means that the significance of an action must be analyzed in several contexts such as society as a whole, and the affected region, interests, and locality. Intensity refers to the severity of impacts.

**Sill:** A crosswise member at the top of an abutment or pier that supports the stringers, beams, or trusses.

**Silt:** Noncohesive soil whose individual particles are not visible to the unaided human eye (0.002 to 0.05 mm). Silt will crumble when rolled into a ball.

**Silt Fence:** Temporary sediment barrier consisting of filter fabric, sometimes backed with wire mesh, attached to supporting posts and partially buried.

**Single-Jack Hammer:** A short handled hammer with a 3- to 4-pound head. Can be used alone to drive timber spikes, or with a star drill to punch holes in rock.

**Single-Track Trail:** A trail only wide enough for one user to travel and requires one user to yield the trail to allow another user to pass.

**Single-Use Trail:** One that is designed and constructed for only one intended user (i.e. hiker use only).

**Sinkhole:** A natural occurrence when the limestone crust of the earth collapses and creates a crater. Old sinkholes are often filled with water and resemble ponds.

**Sinks:** A term given to areas where underground rivers emerge at the ground surface. Areas surrounding sinks are generally lush with vegetation.
Skew Angle: Less than at right angle to a trail. Usually an oblique angle of 45 degrees or less.

Skiing, Cross-country, (Nordic): In simplest terms – skiing across the countryside.

Skirt: To construct a trail around a mountain, often at an even grade, instead of climbing over the mountain.

Skyline: Rigging system with a highline in which a load is moved via a pulley, pulled by a separate rope.

 Slackline: Rigging system with a highline, which is lowered to pick up a load, then tightened to move the load.

 Slackpack (Slackpacking, Slackpacker): Hiking a section of a long distance trail without a backpack.

 Sledgehammer: A long handled heavy hammer with a 6- to 8-pound head, usually held with both hands.

 Slide: Material that has slid onto the trail tread from the backslope and possibly in quantities sufficient to block the trail.

 Slope: Rising or falling ground.

 Slope, Cross: The slope that is perpendicular to the direction of the trail.

 Slope, Cut: The exposed ground surface resulting from the excavation of material on the natural terrain.

 Slope, Fill: The exposed ground surface resulting from the placement of excavated material on the natural terrain.

 Slope, Percent: Number of feet rise (vertical) divided by feet of run (horizontal) times 100 to get percent slope; example: 15-feet of rise over 100-feet of run is a 15% slope.

 Slope, Running: The slope that is in the same direction as the trail.

 Slough (pronounced “Sloo”): Ingress, egress, or backflow from a creek or river. Usually areas full of soft, deep mud.
Slough (pronounced "Sluff"): Material from the backslope that has been deposited on the trailbed and is higher than the center of the trail tread.

Slump (Slumping): When the trail bed material has moved downward causing a dip in the trail grade.

Snowmobile: A motorized vehicle that operates on skis, pontoons, tracks, rollers, wheels, air cushion, or any other device which is designed for travel in, on, or over snow.

Sod: Plugs, squares, or strips of turf with the adhering soil.

Social Trail (Wildcat, Way, Informal): Unplanned/unauthorized trails that develop informally from use and are not designated or maintained by an agency; often found cutting switchbacks or between adjacent trails.

Soft Surface Trail: An unsurfaced natural trail or trail surfaced with compacted earth, crusher fines, bark, or gravel.

Soil: The surface material of the continents, produced by disintegration of rocks, plants, and animals and the biological action of bacteria, earthworms, and other decomposers.

Soil Auger: T-shaped tool with a spiral tip for turning into soil to probe its content.

Soil Cement (cement-treated base): A mixture of pulverized soil combined with measured amounts of portland cement and water and compacted to a high density. As the cementing action occurs through hydration, a hard, durable semi-rigid material is formed. It must have a seal coat to keep out moisture and a surface that will take wear.

Soil Profile: Site-specific arrangement of soil layers from surface to bedrock.

Soil Stabilization: Measures that protect soil from the erosive forces of raindrop impact and flowing water. They include, but are not limited to, vegetative establishment, mulching, and the application of soil stabilizers to the trail tread.
**Soil Stabilizer:** Material, either natural or manufactured, used to hold soil in place and prevent erosion from water, gravity, or trail users. Stabilizers include soil cement, geogrid, etc.

**Spall:** Stone chip or fragment; to break up into chips or fragments.

**Specifications:** Written standards of work and type of materials to which trails (tread, clearing, grade) and trail structures (bridge, culvert, puncheon) are built and maintained according to type of use.

**Spike (Camp):** To campout while working on a trail.

**Spine Trail:** A regional trail that acts as a “backbone” to a regional trail system.

**Sprawl:** Low-density land-use patterns that are automobile-dependent, energy and land consumptive, and require a very high ratio of road surface to development served.

**Spur Trail:** A trail that leads from primary, secondary, or spine trails to points of user interests—overlooks, campsites, etc.

**Staging Area:** An area at which users can congregate, park, and begin or end a trip. Designed and managed for day use whereas a trailhead usually caters to those embarking on an overnight or long-distance trip.

**Stakeholder:** Group or individual who can affect, or is affected by, the achievement of the organization’s mission; examples include managers, employees, policy makers, suppliers, vendors, citizens, and community groups.

**Stakes, Grade or Slope:** Temporary stakes set by the trail locator to establish the elevation and cross section of the completed tread.

**Stakes, Line:** Temporary stakes set by the trail locator to establish the centerline of the trail.

**Standards, Design:** Values selected and documented from the design criteria become the standards for a given trail or greenway project.
**Star Drill:** A foot-long tool, weighing about a pound, used with a single-jack hammer to punch holes in rock or open a seam/crack.

**Station:** One hundred feet measured along the centerline of the trail or road; used in surveying and construction.

**Steel Rungs:** Placed on rock faces or ledges to provide ladder-like access in steep terrain.

**Step:** Structure (stone or wood) that provides a stable vertical rise on the trail, usually in sets.

**Step, Pinned:** Step held in place on a ledge or a rock slab by steel pins set in holes drilled in the rock.

**Stepping Stones:** Large rocks (preferably greater than two hundred pounds) set in boggy areas or shallow stream crossings to provide passage for hikers.

**Stile:** A step or set of steps for hikers to pass over a fence or wall without allowing livestock to escape.

**Stob (Stub):** Projecting (and hazardous) piece of a branch, root, or sapling not cut flush with the trunk or ground.

**Stolon:** An above-ground stem capable of growing a new plant.

**Stone:** A rock put to human use.

**Straw Bale:** Temporary barriers made from bales of straw that are sometimes installed across a slope or around the perimeter of a construction site to intercept and detain sediment transported by runoff.

**Stream:** Small body of running water moving in a natural channel or bed.

**Stream, Intermittent:** Channels that naturally carry water part of the year and are dry the other part.

**Stream, Perennial:** Stream channels that carry water year round.

**Stream Crossing:** A trail crossing a body of running water at grade without the use of a developed structure or bridge.
Streamflow: The movement of water through a channel.

Stringer: The lengthwise member of a structure, usually resting on sills, that spans wet areas and supports the decking.

Structure: Anything constructed or erected that requires location on the ground such as a bridge, wall, steps, etc. on or near a trail.

Stuff Sack: A water-repellent or waterproof bag with a drawstring, used for compact storage of gear.

Sub-base: On paved trails the sub-base lies between the sub-grade and the trail surface, and serves as a secondary, built foundation for the trail surface (concrete or asphalt). The purpose of the sub-base is to transfer and distribute the weight from the trail surface to the sub-grade. The sub-base consists of four- to six-inch graded aggregate, which provides bearing strength and improves drainage.

Sub-grade: Is the native soil mass that makes up the primary foundation of the trail that supports the tread surface. Topography, soils, and drainage are the key factors comprising the sub-grade.

Substrate: Underlying layer of loose/soft material below topsoil and overlying bedrock.

Subsurface Rights: The right to use or control land below the trail surface. Subsurface rights may be leased for water, sewer, or fuel pipelines; or electrical, telephone, or fiber-optic cables.

Summit: The highest point (top) of a mountain.

Super-Elevated (Superelevation, Bermed, Banked): Slope or bank of a curve or climbing turn expressed as the ratio of feet of vertical rise per foot of horizontal distance. The outside edge of a trail is raised or banked for the purpose of overcoming the force causing a vehicle (bicycle or OHV) to skid when maintaining speed in a curve.

Surfacing: Material placed on top of the trailbed or base course that provides the desired tread. It lessens compaction of soil, provides a dry surface for users, and prevents potential erosion and abrasion.
**Survey:** A physical field assessment of the trail or proposed trail, to determine alignment, maintenance tasks, hazards, impact, etc., prior to work, or as part of ongoing trail maintenance.

**Sustainability:** Community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.

**Sustainable Development:** Development that maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which people and economies depend. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs.

**Swale:** A linear low-lying natural topographic drainage feature running downhill and crossing the trail alignment in which sheet runoff would collect and form a temporary watercourse. A low-lying ground drainage structure (resembling a swale) can be constructed to enhance drainage across the trail.

**Swamp:** A piece of wet, spongy land; bog, marsh.

**Swedish Safety Brush Axe (also known as a Sandvik):** A machete-like tool with a protected short, replaceable blade and 28-inch handle used to cut through springy hardwood stems.

**Switchback:** A sharp turn in a trail (usually constructed on a slope of more than 15%) to reverse the direction of travel and to gain elevation. The landing is the turning portion of the switchback. The approaches are the trail sections upgrade and downgrade from the landing.

**System:** Set of interconnected components that function as a whole and thereby achieve a behavior or performance that is different than the sum of each of the components taken separately.
**Tackifier:** Material sprayed onto a soil surface to bind soil particles and prevent erosion.

**Tailings:** The dump at a mineral processing plant; material remaining after metal is extracted from ore.

**Taking:** A real estate term traditionally used to mean acquisition by eminent domain but broadened by the US Supreme Court to mean any government action that denies economically viable use of property.

**Talus:** Large rock debris on a slope. The rocks are larger and have sharper edges than those found on scree slopes.

**Tent platform:** Wooden platform used to minimize damage to fragile alpine or wetlands areas, or to reduce impact on a heavily used, erosion-prone campsite.

**Terminus:** Either the beginning or end of a trail.

**Texture:** Relative proportions of clay, silt, and sand in soil.

**Thru-Cut Climbing Turn:** A turn which is constructed on a sidehill of 20% or more when measured between the exterior boundaries of the turn, and which cuts through the sidehill grade as it changes the direction of the trail 120 to 180 degrees.

**Tie Log:** Structural member notched into the horizontal facer and wing walls used to secure the facer and wings by utilizing the mass of the backfill.

**Tight and Technical:** A type of trail design that allows for tight turns and slow speeds, while using natural features as technical obstacles.

**Timber Carrier:** A tool, with a long handle and hooks, that allows two people on each side of the carrier to transport logs or timber.

**Title Search:** A legal review of deeds of record in the chain of title to a piece of property analyzing all encumbrances or prior sales of the property.

**Toe:** The break in slope at the foot of a bank where the bank meets the bed.
Top Bank: The break in slope between the bank and the surrounding terrain.

Topography (Topo): The elevation and slope of the land as it exists or is proposed. It is represented on drawings by lines connecting points at the same elevation. Typically illustrated by dashed lines for existing topography and solid lines for proposed.

Track: Mark left by something that has passed along; footprint or wheel rut. A pair of parallel metal rails on which trains run.

Track, Fitness (Jogging Track): Path or course laid out for exercise (walking, jogging, running). Usually no more than a mile and laid out in an oval.

Track Tie Memory: On rail-trails the removed railroad cross ties can leave an imprint (or memory). To remove this "memory" the ballast needs to be graded and compacted before laying a trail surface.

Trail: Linear route on land or water with protected status and public access for recreation or transportation purposes such as walking, jogging, motorcycling, hiking, bicycling, ATVing, horseback riding, mountain biking, canoeing, kayaking, and backpacking.

Trail Access Information: Objective information reported to trail users through signage about the grade, cross slope, tread width, and surface of a trail.

Trailbed: The finished surface on which base course or surfacing may be constructed. For trails without surfacing, the trailbed is the tread.

Trailhead: An access point to a long distance trail often accompanied by various public facilities, such as a horse or OHV unloading dock or chute, parking areas, toilets, water, directional and informational signs, and a trail use register. Designed and managed for those embarking on an overnight or long-distance trip, whereas a staging area caters to trail day use.

Trailway: The portion of the trail within the limits of the excavation and embankment.
Trample (Trampling): To tread heavily so as to bruise, crush, or injure; refers to the process of vegetation being destroyed by trail users.

Transportation Enhancement: Projects that include: providing bicycle and pedestrian facilities; converting abandoned railroad rights-of-way into trails; preserving historic transportation sites; acquiring scenic easements; mitigating the negative impacts of a project on a community by providing additional benefits; and other nonmotorized projects.

Transportation Equity Act for the 21st Century (TEA-21): Federal legislation authorizing highway, highway safety, transit, and other surface transportation programs from 1998 through 2003. It provides funding opportunities for pedestrian, bicycling, and public transit facilities, and emphasizes intermodalism, multimodalism, and community participation in transportation planning initiated by ISTEA.

Travelway: The trail as a whole, including the trail tread and the cleared areas on either side of the trail.

Traverse: To ascend a slope diagonally up and across in lieu of the more direct up and over approach.

Tread (Treadway): The actual surface portion of a trail upon which users travel excluding backslope, ditch, and shoulder. Common tread surfaces are native material, gravel, soil cement, asphalt, concrete, or shredded recycled tires.

Tread Creep: When the loose soil of the trail tread moves (sags or slides) down hill during use.

Tread Lightly!: Educational program designed to instill outdoor ethics of responsible behavior when participating in outdoor activities (www.treadlightly.org).

Tread Width: The width of the portion of the trail used for travel.

Tree: Any woody plant that normally grows to a mature height greater than 20 feet and has a diameter of four inches or more at a point four feet above the ground.
**Tree Line (Timber Line):** The farthest limit, either in altitude on a mountain, or the farthest north in the northern hemisphere, in which trees are able to grow. Beyond this line, the environment is too harsh for trees to survive.

**Trek:** To hike a long way. Trekkers are long-distance hikers.

**Trespasser:** Person who uses property without the owner’s implied or stated permission and not for the benefit of the property owner. Due the least duty of care and therefore pose the lowest level of liability risk.

**Trestle:** Mid-span support for a bridge.

**Triangulation:** System of equating compass and maps to a known landmark.

**Trio Maintenance:** Three-step function of removing slough, berm, and brush. Also called fire line trail maintenance.

**True North:** The direction toward the geographic North Pole. Most maps are oriented to True North.

**Tumpline:** A strap slung over the forehead, to anchor a backpack.

**Turnout:** A place where the trail is widened to permit trail traffic traveling in opposite directions to pass.

**Turnpike (Turnpiking):** Technique of raising the trail bed above wet, boggy areas by placing mineral soil over fabric between parallel side logs or rocks (along edge of tread). The tread must be “crowned” and ditches dug alongside the logs or rocks to provide drainage.
**Understory:** All forest vegetation growing under the canopy or upper layers of forest vegetation.

**Undulating Trail:** One that follows a wavelike course, often going in and out of gullies.

**USGS Topo (Topographic, Contour) Map:** Maps published by the United States Geological Survey, indicating built and natural features (buildings, roads, ravines, rivers, etc.) as well as elevation changes and land cover. Available from many government offices, outdoor shops, and map stores; or digitized versions on the Internet.

**Universal Design:** Few if any barriers exist to inhibit accessibility.

**Universal Trail Assessment Process (UTAP):** An inventory process that can be used by trail managers to assess a trail to determine compliance with design guidelines and to provide objective information to trail users regarding grade, cross slope, tread width, surface, and obstacles.

**Unravel:** To lose material from the edges of a retaining wall (revetment, cribbing).

**Urban:** Places within boundaries set by state and local officials having a population of 5,000 or more.

**Viewshed:** Land that comprises a view.

**Volunteer:** Person who works on a trail or for a trail club without pay.
Walkway: An area for general pedestrian use (other than a sidewalk or path) such as courtyards, plazas, and pedestrian malls.

Wash: Removal or erosion of soil by the action of moving water. A natural watercourse, wet or dry.

Water Course: Any natural or built channel through which water naturally flows or will collect and flow during spring runoff, rainstorms, etc.

Water Trail (River Trail, Canoe Trail, Blueway): A recreational waterway on lake, river, or ocean between specific points, containing access and day use and/or camping sites for the boating public.

Waterbar: A drainage structure (for turning water) composed of an outsloped segment of tread leading to a barrier placed at a 45° angle to the trail; usually made of logs, stones, or rubber belting material. Water flowing down the trail will be diverted by the outslope or, as a last resort, by the barrier. Grade dips are preferred on multi-use trails instead of waterbars.

Waterfall: Steep descent of water from a height.

Watershed: A region or area bounded peripherally by a water parting formation (i.e. ridge, hill, mountain range) and draining ultimately to a particular watercourse or body of water.

Weed Cutters (Weed Whip, Swizzle Stick, Swing Blade): Tool with a serrated blade at the end of a wooden handle, used to clear trail corridors of succulent vegetation.

Weephole: Opening left in a retaining wall (revetment, cribbing) to allow groundwater drainage.

Wetland(s): A lowland area, such as a marsh or swamp, which is saturated with water, creating a unique, naturally occurring habitat for plants and wildlife.

Wheel Guard: Narrow logs, poles, or lumber installed along the edges of bridge or puncheon decking designed to help keep wheeled equipment (wheelchair, bicycle, OHV) from running off the edge of the structure.
Wheelbarrow: A shallow open box with a wheel under the front and two handles in the rear; used for moving small loads.

Wheelchair: Mobility aid, designed for and used by individuals with mobility impairments; may be manually operated or motorized.

Weir: A natural dam.

Wilderness: Undeveloped land and associated water resources retaining their primeval character and influence.

Wilderness Act of 1964 (16 U.S.C. 1131-1136): Act of Congress that established federal Wilderness Areas. As defined, Wilderness Areas are undeveloped federal lands without permanent improvements or human habitation that are protected and managed so as to preserve natural conditions. The Act prohibits the use of mechanized vehicles and construction in Wilderness Areas.

Wilderness Area: Uninhabited and undeveloped federal land that Congress has voted to grant special status and protection under authority of the Wilderness Act of 1964.

Wilderness Study Area (WSA): An area possessing wilderness characteristics as defined in the Wilderness Act. These areas are maintained in their original condition and evaluated for possible inclusion in the National Wilderness Preservation System.

Wildlife: Any non-domesticated animal species living in its natural habitat.

Wildland(s): Ecologically healthy lands that are not dedicated for such uses as agriculture, urban development, mining, or recreation.

Winch: Applicable to a broad array of devices that use a drum, driven by a handle and gears, around which a cable is wound, so as to provide mechanical advantage for moving heavy objects.

Windchill: The cooling effect that results from wind—especially dramatic if wearing wet clothes.
Wing: Angled barriers at a bridge approach used to channel traffic and prevent trail users from inadvertently plunging over embankment.

Wing Wall (Wingwall): A structural component of a retaining wall which is interlocked with the facer or front of the wall. The wing generally intersects with the facer at a 45° angle, but may be at an angle between 1 and 90°. This component is anchored by tie logs and both assists the facer in retaining the fill material, and helps prevent flanking.

Wood Chips: Chipped wood, often available from tree trimming operations; produces a soft, spongy trail surface, and is used on many nature trails.

Zero-Mile Mark: The point at which a measured trail starts.

Zipline: Rigging system with a taut, stationary wire rope highline for moving loads on a movable pulley.

Zoning: Specifying use or restrictions on land. Zoning can effectively protect trail corridors from development adjacent to the trail that might block views, destroy sensitive habitat, create traffic problems, and generally diminish a trail experience.
## Acronyms

The following list of commonly used acronyms can assist trails and greenway managers and advocates decipher the “alphabet soup” of trail development.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AMS</td>
<td>Acute Mountain Sickness</td>
</tr>
<tr>
<td>ATV</td>
<td>All-terrain Vehicle</td>
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<tr>
<td>AASHTO</td>
<td>American Association of State Highway &amp; Transportation Officials</td>
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<tr>
<td>AERC</td>
<td>American Endurance Riders Conference</td>
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<tr>
<td>AHRI</td>
<td>American Heritage Rivers Initiative</td>
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<tr>
<td>AHS</td>
<td>American Hiking Society</td>
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<tr>
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<td>American Horse Council</td>
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<td>American Motorcyclist Association</td>
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<td>American National Standards Institute</td>
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<td>ARC</td>
<td>American Red Cross</td>
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<tr>
<td>AT</td>
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<tr>
<td>ARRA</td>
<td>Americans for Responsible Recreation Access</td>
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<tr>
<td>ADA</td>
<td>Americans with Disabilities Act</td>
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<tr>
<td>ADAAG</td>
<td>Americans with Disabilities Act Accessibility Guidelines</td>
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<td>ALDHA</td>
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<tr>
<td>ATC</td>
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<td>ACEC</td>
<td>Area of Critical Environmental Concern</td>
</tr>
<tr>
<td>ACE</td>
<td>Army Corps of Engineers (US)</td>
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<tr>
<td>BCHA</td>
<td>Backcountry Horsemen of America</td>
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<tr>
<td>BMP</td>
<td>Best Management Practice</td>
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<td>BRC</td>
<td>BlueRibbon Coalition</td>
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<td>BIA</td>
<td>Bureau of Indian Affairs</td>
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<tr>
<td>BLM</td>
<td>Bureau of Land Management</td>
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<tr>
<td>CDCA</td>
<td>California Desert Conservation Area</td>
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<tr>
<td>CNHT</td>
<td>California National Historic Trail</td>
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<tr>
<td>CIP</td>
<td>Capital Improvement Program</td>
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<tr>
<td>CE</td>
<td>Categorical Exclusion (NEPA process)</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>CITU</td>
<td>Certificate of Interim Trail Use</td>
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<td>CCS</td>
<td>Challenge Cost Share agreement (federal)</td>
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<td>CCA</td>
<td>Chromated Copper Arsenate (wood preservative)</td>
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<tr>
<td>CCC</td>
<td>Civilian Conservation Corps</td>
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<tr>
<td>CRT</td>
<td>Coalition for Recreational Trails</td>
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<td>CFR</td>
<td>Code of Federal Regulations</td>
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<tr>
<td>CMAQ</td>
<td>Congestion Mitigation and Air Quality</td>
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<td>CARA</td>
<td>Conservation and Reinvestment Act</td>
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<td>Continental Divide National Scenic Trail</td>
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<td>CDTA</td>
<td>Continental Divide Trail Alliance</td>
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<td>CMP</td>
<td>Coordinated Management Plan (BLM)</td>
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<tr>
<td>Corps</td>
<td>Corps of Engineers (United States Army)</td>
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<tr>
<td>COG</td>
<td>Council of Governments</td>
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<tr>
<td>CEQ</td>
<td>Council on Environmental Quality</td>
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<tr>
<td>CFS</td>
<td>Cubic Feet per Second</td>
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<tr>
<td>CY</td>
<td>Cubic Yard(s)</td>
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<tr>
<td>DB</td>
<td>Decibels</td>
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<tr>
<td>DEET</td>
<td>N, N-diethyl-meta-toluamide</td>
</tr>
<tr>
<td>DOI</td>
<td>Department of Interior</td>
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<tr>
<td>DNR</td>
<td>Department of Natural Resources</td>
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<tr>
<td>DOT</td>
<td>Department of Transportation (federal or state)</td>
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<tr>
<td>DBE</td>
<td>Disadvantaged Business Enterprises</td>
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<tr>
<td>EMT</td>
<td>Emergency Medical Technician</td>
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<td>EA</td>
<td>Environmental Assessment</td>
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<td>Environmental Impact Statement</td>
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<td>Environmental Protection Agency</td>
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<td>Equal Employment Opportunity Commission</td>
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<tr>
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<td>FO</td>
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<td>FONSI</td>
<td>Finding of No Significant Impact</td>
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<tr>
<td>FY</td>
<td>Fiscal Year (Federal FY is from October 1 to September 30)</td>
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<tr>
<td>FNST</td>
<td>Florida National Scenic Trail</td>
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<td>FTA</td>
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<td>Forest Service (US Department of Agriculture)</td>
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<td>4-WD</td>
<td>Four-Wheel Drive Vehicle</td>
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<td>FOIA</td>
<td>Freedom of Information Act</td>
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<tr>
<td>FOB</td>
<td>Friends of the Earth</td>
</tr>
<tr>
<td>GAO</td>
<td>General Accounting Office (United States)</td>
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<tr>
<td>GIS</td>
<td>Geographical Information System</td>
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<tr>
<td>GPS</td>
<td>Global Positioning System</td>
</tr>
<tr>
<td>CORP</td>
<td>Good Old Raisins and Peanuts</td>
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<td>Green Mountain Club</td>
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<td>IANST</td>
<td>Ice Age National Scenic Trail</td>
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<tr>
<td>INHT</td>
<td>Iditarod National Historic Trail</td>
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<tr>
<td>IGA</td>
<td>Intergovernmental Agreement</td>
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<td>ISTEA</td>
<td>Intermodal Surface Transportation Efficiency Act of 1991</td>
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<td>ICC</td>
<td>Interstate Commerce Commission (replaced by the STB)</td>
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<tr>
<td>ICOs</td>
<td>Issues, Concerns, and Opportunities</td>
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<td>Juan Bautista de Anza National Historic Trail</td>
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<tr>
<td>LWCF</td>
<td>Land and Water Conservation Fund</td>
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<tr>
<td>LNT</td>
<td>Leave No Trace</td>
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<td>LCNHT</td>
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<td>LAC</td>
<td>Limits of Acceptable Change</td>
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<tr>
<td>MUTCD</td>
<td>Manual of Uniform Traffic Control Devices</td>
</tr>
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<td>MM</td>
<td>Meaningful Measures (Forest Service)</td>
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<tr>
<td>MOA</td>
<td>Memorandum of Agreement</td>
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<td>MOU</td>
<td>Memorandum of Understanding</td>
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<tr>
<td>MPO</td>
<td>Metropolitan Planning Organization</td>
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<tr>
<td>MSA</td>
<td>Metropolitan Statistical Area</td>
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<tr>
<td>MPH</td>
<td>Miles Per Hour</td>
</tr>
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<td>MPNHT</td>
<td>Mormon Pioneer National Historic Trail</td>
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<tr>
<td>MIC</td>
<td>Motorcycle Industry Council</td>
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<tr>
<td>NTNST</td>
<td>Natchez Trace National Scenic Trail</td>
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<tr>
<td>NASORLO</td>
<td>National Association of Outdoor Recreation Liaison Officers</td>
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<tr>
<td>NARRP</td>
<td>National Association of Recreation Resource Planners</td>
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<tr>
<td>NASCC</td>
<td>National Association of State Conservation Corps</td>
</tr>
<tr>
<td>NASTA</td>
<td>National Association of State Trail Administrators</td>
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<td>NCCC</td>
<td>National Civilian Conservation Corps</td>
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<td>Full Form</td>
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<tr>
<td>NF</td>
<td>National Forest</td>
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<tr>
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<td>National Forest System</td>
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<td>NHI</td>
<td>National Highway Institute</td>
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<td>National Historic Preservation Act</td>
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<td>NHT</td>
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<td>NOHVCC</td>
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<td>National Off-Road Bicycling Association</td>
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<td>National Trails Day</td>
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<td>National Trails System Act (16 USC 1241 et seq.)</td>
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<td>National Wildlife Refuge</td>
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<td>NRCS</td>
<td>Natural Resources Conservation Service (formerly the Soil Conservation Service) under the USDA</td>
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<td>Nez Perce National Historic Trail</td>
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<td>NPNHTF</td>
<td>Nez Perce National Historic Trail Foundation</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<td>NAWTA</td>
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<td>NCNST</td>
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<td>NIMBY</td>
<td>Not in My Back Yard</td>
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<tr>
<td>NITU</td>
<td>Notice of Interim Trail Use</td>
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<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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<tr>
<td>OHM</td>
<td>Off-Highway Motorcycle</td>
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<tr>
<td>ORV</td>
<td>Off-Road Vehicle</td>
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<tr>
<td>OMB</td>
<td>Office of Management &amp; Budget (federal)</td>
</tr>
<tr>
<td>O&amp;M</td>
<td>Operating and Maintenance costs</td>
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<td>OLR</td>
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<td>Pacific Crest National Scenic Trail</td>
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<td>PCTA</td>
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<tr>
<td>Acronym</td>
<td>Definition</td>
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<tr>
<td>POST</td>
<td>Parks, Open Space and Trails</td>
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<tr>
<td>PB&amp;J</td>
<td>Peanut Butter and Jelly (sandwich)</td>
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<td>PPE</td>
<td>Personal Protection Equipment</td>
</tr>
<tr>
<td>PAOT</td>
<td>Persons at One Time (Forest Service)</td>
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<tr>
<td>PUDs</td>
<td>Pointless Ups and Downs (where a climb leads to no view)</td>
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<tr>
<td>PSF</td>
<td>Pounds Per Square Foot</td>
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<tr>
<td>PSI</td>
<td>Pounds Per Square Inch</td>
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<td>PMO</td>
<td>Primary Management Objective (Forest Service)</td>
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<td>PLH</td>
<td>Public Lands Highways</td>
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<td>PUC</td>
<td>Public Use Condition</td>
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<td>Public Utilities Commission</td>
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<td>Rail-Trail</td>
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<td>Rails-to-Trails Conservancy</td>
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<td>RD</td>
<td>Ranger District (Forest Service)</td>
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<td>ROD</td>
<td>Record of Decision (NEPA process)</td>
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<td>RIM</td>
<td>Recreation Information Management (Forest Service)</td>
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<td>ROS</td>
<td>Recreation Opportunity Spectrum</td>
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<td>Recreation Resource Information System (Forest Service)</td>
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<td>Recreation Visitor Day (Forest Service)</td>
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<td>Recreational Equipment, Inc.</td>
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<td>Recreational Trails Program (Federal grant program)</td>
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<td>RUS</td>
<td>Recreational Use Statute</td>
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<td>Regional Office (Forest Service)</td>
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<td>RFP</td>
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<td>RFQ</td>
<td>Request for Qualifications</td>
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<td>Research &amp; Development</td>
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<td>RSVP</td>
<td>Retired Senior Volunteer Program</td>
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<td>RPM</td>
<td>Revolutions Per Minute</td>
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<td>Right-of-Way</td>
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<td>SCORE</td>
<td>Service Corps of Retired Executives</td>
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<td>SCHC</td>
<td>South Carolina Horsemen’s Council</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
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<tr>
<td>SCORE</td>
<td>South Carolina Off-Road Enthusiasts</td>
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<td>SORBA</td>
<td>Southern Off-Road Bicycle Association</td>
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<td>SLUP</td>
<td>Special Land Use Permit</td>
</tr>
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<td>SVIA</td>
<td>Specialty Vehicle Institute of America</td>
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<td>SHPO</td>
<td>State Historic Preservation Office</td>
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<tr>
<td>SIP</td>
<td>State Interim Plan</td>
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<td>SCORP</td>
<td>Statewide Comprehensive Outdoor Recreation Plan</td>
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<td>STIP</td>
<td>Statewide Transportation Improvement Program</td>
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<td>SCA</td>
<td>Student Conservation Association</td>
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<td>SO</td>
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