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Federal Trail Data Standards

Federal Trails Data Standards Team
Federal Geographic Data Committee

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Federal Geographic Data Committee

Established by Office of Management and Budget Circular A-16, the Federal Geographic Data Committee (FGDC) promotes the coordinated development, use, sharing, and dissemination of geographic data.

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1 Introduction

1.1 Objective of Standard

Trails of all kinds, including Congressionally and secretarially-designated trails, are strongly recognized by the public and governmental agencies as important recreational and cultural resource corridors. The National Park Service (NPS), the Bureau of Land Management (BLM), the United States Fish and Wildlife Service (FWS), and the United States Forest Service (USFS) have worked for many years with each other and with States, local governments and trail organizations to promote and develop trails for the benefit of the public.

Universal trail data standards will enable national, regional, state, and trail-level managers and the public to use mutually understood terminology for recording, retrieving and applying spatial and tabular information. Data standards will make it easier for trail information to be accessed, exchanged and used by more than one individual, agency or group. Ease in sharing data increases the capability for enhanced and consistent mapping, inventory, monitoring, condition assessment, maintenance, costing, budgeting, information retrieval, and summary reporting for most internal and external needs.

The collection, storage, and management of trail-related data are important components of everyday business activities in many Federal and State land-managing agencies, trail organizations, and businesses. From a management perspective, trail data must often mesh closely with other types of infrastructure, resource, and facility enterprise data. For the public using paper maps, the internet, GPS or other instrumentation, standard data formats enable users to consistently and predictably identify specific trails and a core set of corresponding information. Today, digital trail data are a necessity throughout a trail data management life-cycle, from trail planning through design, construction, operation, and maintenance. Automating, sharing, and leveraging trail data through a widely-accepted standard can provide a variety of important benefits:

- **Efficiency** – creating and gathering trail data that are standardized and readily usable.
- **Compatibility** – compiling data from one project or discipline that can be compatible with other applications;
- **Consistency** – using the same standards, meshing data produced by one organization with that developed by another;
- **Speed** – hastening the availability of data through a reduction in duplicative efforts and lowered production costs (Applications can be developed more quickly and with more interoperability by using existing standards-compliant data);
- **Conflict resolution** – resolving conflicting trail data more easily if compliant to the same standards;
- **Reliability** – improving the quality of shared trail data by increasing the number of individuals who find and correct errors; and

- **Reusability** – allow maximum reuse across agencies and support objectives of E-Government (E-Gov) initiatives and enterprise architecture.

1.2 Scope of Standard

The functional scope of the standard includes the definition of a core set of trail data attributes, corresponding values, and definitions. These standards reflect tabular and spatial trail data applicable only to trails within the United States, including all U.S. territories and outlying possessions.

1.3 Applicability

Trail data are used for many purposes including planning and management, mapping and condition assessment, routing and navigation, public information, emergency response, and research. These standards cover the core set of questions and data attributes identified in the Federal Trail Data Standards (FTDS) Version 1 and are applicable to trails of all kinds, including National Historic Trails and National Scenic Trails. They do not cover all possible trail data or agency-specific data needs, but concentrate on a core set of inter-jurisdictional management and administrative trail data needs.

1.4 Related Standards

Basic Federal trail authorities are found in the National Trails System Act of 1968, as amended (16 USC 1241-1251). Heretofore, there have been no universal standards within the United States for trail terminology and data attributes. However, inter-jurisdictional trails, management, and corresponding public information all suggest the need for universal data standards.

1.5 Standard Development Procedures

In 2001, the Federal Interagency Council on Trails (FICT), based on a provision in the January, 2001, *Memorandum of Understanding for the Administration and Management of National Historic and National Scenic Trails*, set in motion the development of national-level interagency trail data standards. This action stemmed from a collective need to inventory, assess, and map trail locations and trail resources across multiple jurisdictions throughout the United States. An interagency team of trail, data, and subject-matter specialists was assembled. Over the following six years, the team developed the Interagency Trail Data Standards (ITDS) for trails of all kinds. The ITDS Version 1 underwent internal and external review in 2003 and 2004, followed by refinement and development of FTDS Version 1 (Appendix E).

The FTDS Team is responsible for the subsequent validation, revision and refinement of the FTDS to reflect current and potentially expanded interagency data needs (e.g. additional National Scenic Trail-specific data, visitor information, etc.). Any revisions proposed by the FTDS Team will be subject to review, comment and publication through the FGDC data standard publication process.

1.6 Maintenance Authority

The maintenance authority for this standard has been defined by the FICT as a shared authority by the National Park Service and U.S.D.A. Forest Service.

2 Rationale for the Design

2.1 Key Points

- The Federal Trail Data Standards (FTDS) identify a common set of standardized terminology that can be consistently applied to a core set of trails information.
- The FTDS are not a database.
- The FTDS can be incorporated into existing databases and/or used to crosswalk existing agency data to provide combined or shared information at a Federal/multi-jurisdictional level.
- The FTDS are the foundation for these FGDC-published Trail Data Standards.
- This is one step in the Federal Government's ongoing process of data standards definition and adoption.

2.2 Legal Underpinnings of the Federal Trail Data Standards Project

The following mandates and directives recognize the need for the development of data standards. These are relevant for the FGDC standards as well.

- The Paperwork Reduction Act of 1995 (P. L. 104-13)
- The Government Performance and Results Act of 1993 (GPRA) (P. L. 103-62)
- The Presidential E-Government Initiatives (including Recreation One-Stop)
- The National Trails System Memorandum of Understanding (for 2006-2016)
- Executive Order 13195, *Trails for America in the 21st Century*
- "GIS for the National Trails System - An Action Plan", NPS, 2001, as requested by Congress

2.3 Underlying Premises for Development of Trail Data Standards

2.3.1 Federal Definition of a Trail

Before attempting to identify and apply Federal Trail Data Standards, it is essential to have a clear definition of the term “trail” as used in this Federal context.

Trail: A linear route managed for human-powered, stock, or off-highway vehicle (OHV) forms of transportation or for historic or heritage values.

> Trails provide public access to opportunities for outdoor recreation as well as access to many significant prehistoric and historic sites.

Some portions of historic trails are accessible today, and provide recreational and other benefits, while others, more "virtual" in nature, provide a cultural and/or historic experience, but are not physically capable of being traversed or accessed. Historic trails can consist of a path, a route, a corridor, a road, a river/stream, etc. See Appendix B for more details.
(Refer to individual agency trail definitions for further agency-specific guidance or direction on defining a trail.)

The Federal definition is based on and encompasses individual agency definitions of a trail. This includes "standard" trails, National Scenic Trails (NSTs) and National Historic Trails (NHTs). The definition was adopted by the Interagency Trail Data Standards Team in July 2002.

2.3.2 Which Trails?

The FTDS core questions (Section 3 below) and FTDS data attributes (Section 2.3.5 below) can be applied to trails of all kinds, including National Scenic Trails and National Historic Trails. However, not every core question and attribute is applicable in every situation. The following trail categories have been incorporated in FTDS documentation to help clarify which core questions and data attributes are potentially applicable in various situations:

Trail Code	**Trail Category**
Reg. Trail	Regular Trail: any agency-managed trail not designated NST or NHT
NST	National Scenic Trail (Congressionally Designated)
NHT[1] (Desig)	Route(s) congressionally designated as the National Historic Trail
NHT[2] (HR)	NHT associated heritage resources (routes and/or sites)
NHT[3] (Rec)	NHT associated recreation or interpretive route and/or site

2.3.3 Factors Considered

Listed below are a few of the basic premises that were incorporated into development of the FTDS. They were also relevant for review of the FTDS as FGDC standards.

- **Federal Core Data Set:** Represents the minimum set of data that the agencies agree to provide for all agency-managed or administered trails (i.e. System Trails and/or Designated Trails).
- **Data Collection and Management:** Data are not cheap! Each piece of data that is collected and recorded represents a cost in terms of time, database capability, and available space. The subsequent and ongoing need to update certain data attributes represents an additional expense. The decision to collect, record, and manage specific data should always be done considering the benefits and value of the data versus the initial and future cost.
- **Standardized Terminology:** Strive to establish and/or use the same terminology among agencies for federal trail data standards. When this is not possible, provide crosswalk translation between the FTDS attribute terminology and definitions and those of the individual agency.

- **Existing Data Attributes:** If an identified FTDS attribute already exists as a standard attribute within one agency, but is not yet standardized and/or used by other agencies, consider adopting the attribute terminology and/or definition that is already in use to maximize efficiencies and minimize confusion or data re-work.
- **Field Verification:** To the extent possible, and when applicable, trail data should be based on field verification/inventory. Formal trail inventory and condition assessments should be performed, if they do not already exist.
- **Implementation:** The core standards will be implemented and data provided based on current agency priorities and budgets.

2.3.4 FTDS Selection Criteria

To focus on the most common trail data needs, eight criteria were used to choose the core set of questions and data attributes that are in the Federal Trail Data Standards.
*Does the Question or Data Attribute***…**

1. Apply to all affected agencies?
2. Directly relate to a FTDS Core Question (data output)?
3. Have national, regional or state-wide significance?
4. Contribute to the minimum data needed to provide a programmatic (heritage, maintenance, natural resources) snapshot of the trail (i.e. inventory, public information)?
5. Include the minimum data needed to comply with and reflect applicable laws, regulations, and/or policies?
6. Addresses key Congressional, Office of Management and Budget (OMB), and department-wide reporting requirements?
7. (Is the Data Attribute…) Currently available or obtainable?
8. Include those attributes that would set national precedence or affect nation-wide trail management?

2.3.5 FTDS Core Questions

The following set of core questions, common to all participating agencies and reflecting the FTDS Selection Criteria, were identified to help narrow the scope and identify the core set of Federal Trail Data Standards.

FTDS Core Trail Questions		Core Question Applies To These Trails[A]				
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)
FTDS Protocols (Common to all Data)						
	Metadata	X	X	X	X	X
	Agency Data Source	X	X	X	X	X
Trail Identification (Required for All Trail Records)						
	(Common attributes basic to all Core Questions)	X	X	X	X[B]	X
Basic Trail Information						
1	Where is the trail?	X	X	X	X	X
2	What is the total trail length? (in miles)	X	X	X	X[B]	X[B]
3	Who manages the trail?	X	X	X	X	X
4	What is the trail status?	X	X			X
5	What is the trail surface?	X	X			X
Trail Management & Use						
6	What agency-specific management direction exists for the trail?	X	X	X	X	X
7	What national designations exist for the trail?	X	X	X	X	X
8	Does the trail pass through a special management area and if so, which one?	X	X	X	X	X
9	What are the actively managed uses of the trail?	X	X			X
10	What is the accessibility status of the trail?	X	X			X
11	What is the condition or state of repair of the trail?	X	X			X
12	How much does it cost to manage the trail?	X	X			X
Additional Questions Specific Only to NSTs or NHTs						
Additional NST and/or NHT Basic Information						
13	Who administers the NST or NHT?		X	X		X
14	What Visitor Centers are specifically associated with the NHT or NST? (agency, non-agency)		X	X		X
NHT Heritage Resource Information						
15	Where is the NHT Auto-Tour Route?					X

FTDS Core Trail Questions		Core Question Applies To These Trails[A]				
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)
16	What known heritage resources are thematically associated with the NHT?				X	
17	What High Potential Sites are on the NHT?			X		
18	What High Potential Segments are on the NHT?			X		
19	What portions of the NHT have been Certified?			X		
20	What heritage resources are developed and/or used for public viewing/appreciation?			X	X	X
21	What is the physical condition rating of the portion(s) of the NHT route where historic use actually took place?				X	

A - **The type of trail (or aspect of an NHT) that the Core Question applies to:**

Regular Trail:	Any agency-managed trail that is not a designated NST or NHT

NST:	National Scenic Trail (Congressionally Designated)

NHT[1] (Desig):	Route/s Congressionally designated as the National Historic Trail
NHT[2] (HR):	NHT-associated heritage resources (routes and/or sites)
NHT[3] (Rec):	NHT-associated recreation or interpretive route and/or site

B - **Applicable to associated NHT heritage resource route or NHT recreation/interpretive route (trail or road).** Not applicable to associated NHT sites.

3 Data Standard

The metadata must be in a FGDC-compliant format (for both spatial and non-spatial data) as documented at http://www.fgdc.gov/metadata/geospatial-metadata-standards.

3.1 FTDS Attribute Overview

The table below provides a summarized overview of the FTDS attributes, grouped by functional category.

Attribute Name	Attribute Definition	Attribute Applies To[A]				
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)
FTDS Protocols (Common to all Data)						
(METADATA)	The metadata must be in a FGDC-compliant format (for both spatial and non-spatial data).	X	X	X	X	X
AGENCY DATA SOURCE	Each agency shall identify itself as the source of the FTDS data for the data it has in its database.	X	X	X	X	X
Basic Trail Information						
TRAIL NAME	The name that the trail or trail segment is officially or legally known by.	X	X	X	X	X
TRAIL NUMBER	The official numeric or alphanumeric identifier for the trail.	X	X	X		X
TRAIL TYPE	A category that reflects the predominant trail surface and general mode of travel accommodated by a trail.	X	X	X	X[B]	X[B]
INTERAGENCY IDENTIFICATION CODE	Identification code developed by interagency managers/administrators to relate data records for a trail which crosses agency boundaries.	X	X	X		X
TRAIL STATUS	Current physical state of being of the trail or trail segment.	X	X			X
TRAIL LENGTH	The length of the trail or trail segment in miles.	X	X	X	X[B]	X[B]
SHARED SYSTEM	Additional network(s) of travelways serving a common need or purpose; managed by an organization with the authority to finance, build, operate and maintain the routes.	X	X	X	X[B]	X[B]
TRAIL SURFACE	The predominant surface type the user would expect to encounter on the trail or trail segment.	X	X			X
Trail Administrative Unit & Location						
ADMIN ORG	The administrative unit within an agency where the trail or trail segment physically resides.	X	X	X	X	X
MANAGING ORG	The unit that has the long-term responsibility for the management of the trail or trail segment.	X	X	X	X	X
CONGRESSIONAL DISTRICT	The U.S. congressional district number in which the trail segment physically resides.	X	X	X	X	X

Attribute Name	Attribute Definition	Attribute Applies To[A]				
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)
COUNTY	County, Borough or Parish in which the trail or trail segment physically resides.	X	X	X	X	X
JURISDICTION	The legal right to control or regulate use of a trail. Jurisdiction requires authority, but not necessarily ownership. The authority to construct or maintain a trail may be derived from fee title, an easement, an agreement or some other similar method.	X	X	X	X	X
MUNICIPALITY	City, town or community that is adjacent to or nearby the trail or trail segment.	X	X			X
STATE	State (or Territory) where the trail or trail segment exists.	X	X	X	X	X
Trail Management and Use						
TRAIL SYSTEM	The travel network to which the trail or trail segment belongs.	X	X	X	X[B]	X[B]
ROAD SYSTEM	The road network to which the trail or trail segment belongs, in the case of trails occurring on system roads.	X	X	X	X[B]	X[B]
LAND USE PLAN	The agency planning document that provides management guidance.	X	X	X	X	X
PRIMARY TRAIL MAINTAINER	The agency or group having primary maintenance responsibility for the trail or trail segment.	X	X			X
TRAIL CLASS	The prescribed scale of development for a trail, representing its intended design and management standards.	X	X			X
DESIGNED USE	The Managed Use of a trail that requires the most demanding design, construction, and maintenance parameters and that, in conjunction with the applicable Trail Class, determines which Design Parameters or technical specifications will apply to a trail.	X	X			X
MANAGED USE	A mode of travel that is actively managed and appropriate on a trail, based on its design and management.	X	X			X
MOTORIZED PROHIBITED	Motorized use is prohibited year-round along the trail.	X	X			X
PROHIBITED USE	Mode of travel prohibited by official legal order. Applicable Code of Federal Regulations (CFR) is cited and implemented through appropriate enforcement, restriction devices, and signing.	X	X			X

Attribute Name	Attribute Definition	Attribute Applies To[A]				
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)
ACCESSIBILITY STATUS	Accessibility guideline compliance status for trail segments that are designed for hiker/pedestrian use.	X	X			X
Trail Management Considerations						
HISTORIC SIGNIFICANCE	The officially recognized historic significance of the trail segment, per evaluation criteria for the National Register of Historic Places.	X	X		X	X
NATIONAL TRAIL DESIGNATION	The national designation assigned to the trail or trail segment. This includes designations by federal statute for National Historic Trails (NHT), National Scenic Trails (NST), Connecting or Side Trails (C-S), and National Recreation Trails (NRT); and also includes National Millennium Trails (NMT) and Millennium Legacy Trails (MLT).	X	X	X	X	X
RIGHTS-OF-WAY	Right-of-way, permits, or easements that exist or are needed along the trail or trail segment.	X	X	X	X	X
SPECIAL MGMT AREA	Land area, that may be of special management concern or interest, through which the trail or trail segment crosses.	X	X	X	X	X
Trail Condition & Cost						
COST ANNUAL/CYCLIC MAINTENANCE	Annual or cyclic cost of work performed to maintain serviceability, or to repair failures during the year in which they occur. Includes preventive and/or cyclic maintenance performed in the year in which it is scheduled to occur.	X	X			X
COST ANNUAL/CYCLIC OPERATIONS	Annual or cyclic cost of operational activities related to the normal performance of the functions for which a fixed asset or component is intended to be used.	X	X			X
COST DEFERRED MAINTENANCE	Costs resulting from maintenance that was not performed when it should have been or when it was scheduled and which, therefore, was put off or delayed for a future period.	X	X			X
COST LAST UPDATED	Fiscal year that cost data was last updated.	X	X			X
COST IMPROVEMENT/ CONSTRUCTION	Cost of construction, installation, or assembly of a new fixed asset, or the significant alteration, expansion, or extension of an existing fixed asset to accommodate a change of purpose.	X	X			X

Attribute Name	Attribute Definition	Attribute Applies To[A]				
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)
TRAIL CONDITION	The physical status of the existing trail or trail segment.	X	X			X
Additional NST and/or NHT Basic Information (Attributes specific only to NHTs and NSTs)						
NHT NST TRAIL ADMINISTRATOR	The agency specifically charged with trailwide coordination of National Trails System Act provisions for a designated National Scenic Trail (NST) or National Historic Trail (NHT) by the Secretary of Interior or Agriculture.		X	X		X
NHT NST VISITOR CENTER NAME	The name of the visitor center that exists specifically to provide NHT or NST-related information and interpretation.		X	X		X
VISITOR FACILITY TYPE	Category of facility that accommodates visitor activities or provides visitor amenities.		X	X		X
NHT Heritage Resource Information (Attributes applicable only to NHT routes or associated heritage resource sites)						
TYPE OF ROUTE	The type of transportation route.			X	X[B]	X[B]
TYPE OF SITE	Type of site.			X	X	X
NHT AUTO-TOUR SURFACE	The predominant surface type the user would expect to encounter on the road or road segment of the NHT Auto-Tour route.			X		X
NHT CERTIFICATION STATUS	Status of NHT certification agreement for the trail segment on nonfederal land.			X		
NHT CONDITION CATEGORY	Interagency classification category designed to assess the comparative character of visible trail remnants of the NHT at the time of mapping.				X	
NHT HIGH POTENTIAL SEGMENT	NHT trail segment that has been identified as a NHT High Potential Segment as defined in the NHT Comprehensive Management Plan.			X		
NHT HIGH POTENTIAL SITE	NHT-associated heritage resource site that has been identified as a NHT High Potential Site as defined in the NHT Comprehensive Management Plan.			X		
NHT PUBLIC USE SEGMENT	NHT trail segment that is currently managed for public use, appreciation and/or viewing.			X	X	X
NHT PUBLIC USE SITE	NHT-associated heritage resource site that is currently managed for public use, appreciation and/or viewing.			X	X	X

Attribute Name	Attribute Definition	Attribute Applies To[A]				
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)
NHT SITE NAME	Name of the heritage site associated with a National Historic Trail.				X	X
NHT SITE NUMBER	Agency identifier for a heritage resource that is thematically associated with a National Historic Trail.				X	X
NRHP CRITERIA	Guideline(s) used to determine historic resource qualifications for listing in the National Register of Historic Places.				X	X
NRHP PROPERTY CATEGORY	Categories of historic properties as identified in the National Register of Historic Places.				X	X

A - **The type of trail (or aspect of an NHT) that the attribute applies to:**

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NST:	National Scenic Trail (Congressionally Designated)
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NHT[2] (HR):	NHT-associated heritage resources (routes and/or sites)
NHT[3] (Rec):	NHT-associated recreation or interpretive route and/or site

B - **Attribute applicable to associated NHT heritage resource route or NHT recreation/interpretive route (trail or road).** Not applicable to associated NHT sites.

3.2 FTDS Data Requirements and Data Parameters

3.2.1 FTDS Requirements and Quality Components

Generally Applicable Data Parameters

The following data parameters are generally applicable to all Federal Trail Data Standards.

Spatial Data Source:	Best available source with a target source scale of at least 1:24,000 for continental U.S., Puerto Rico, and Hawaii and 1:63,360 for Alaska.
Horizontal Accuracy:	Accuracy testing must use National Standards for Spatial Data Accuracy (NSSDA) testing guidelines or be reported based on compiled, published test reports appropriate for the data collection method and equipment. The method of determining accuracy should be documented in the process step of the dataset metadata record. If published accuracy results are used, use the statement 'Compiled to meet ___ (meters, feet) horizontal accuracy at 95% confidence interval' in the metadata record, and identify the testing source used. If accuracy is locally tested to NSSDA standards, the statement 'Tested to meet ___ (meters, feet) horizontal accuracy at 95% confidence interval' should be added to the metadata record. Accuracy for legacy data may be reported according to the accuracy standard in place at the time of data collection (typically National Map Accuracy Standards). Document the standard used in the metadata record. (For more information, see: http://www.fgdc.gov/standards/projects/FGDC-standards-projects/accuracy/part3/chapter3)
Spatial Reference Information:	Agency appropriate. A complete projection description in FGDC format is required including horizontal coordinate system, datum, and units of measure. Include vertical coordinate system information where necessary.
Feature Type:	Line (route and arc topology)
Precision:	Double precision

Attribute-Specific Data Parameters

The data variables, defined below by the FTDS Team, are subsequently specified as applicable for each FTDS attribute.

Data Parameter	Data Parameter Definition / Criteria
GIS Item Name	The name the attribute is called in the GIS layer (10 characters or less).
GIS Alternate Name (If Applicable)	If applicable, the GIS alias or crosswalk name for the FTDS attribute (not limited to 10 characters).
Width	Field width (excluding decimal point, as would be defined in Oracle database.)
Type	Text, Integer, Numeric (decimal), Date
Number of Decimals	Number of decimal places displayed when Type = Numeric.
Null / Not Null	Identification of whether a Null value or Not Null value is allowed: **Null:** The data field may have a null value (be left blank with no data recorded). **Not Null:** The data field must have a value entered for this attribute.
Unique / Not Unique	Identification of whether a data value is Unique or Not Unique: **Unique**: The values entered for this attribute field would be unique for every entry (row) in the database. This includes all participating agencies or entities that collect trails data. **Not Unique:** The values entered for this attribute field would not be unique for every entry (row) in the database. This includes all participating agencies or entities that collect trails data.

Additional Attributes Considered

Below is a listing of the FGDC Attributes considered, and the corresponding FTDS disposition as identified by the FTDS Team.

FGDC Attribute	Related FTDS Data Parameter or Disposition
Attribute Label	FTDS Data Parameter: GIS Item Name
Attribute Definition	FTDS: Attribution Definition
Attribute Definition Source	*FTDS Attributes Definitions were developed by ITDS Team (2002-2008)*
Code List	FTDS: List of Values (LOV)
Vertical Accuracy	*Not included in FTDS Data Parameters at this time because line features are not currently being modeled as 3D features. May be revisited if needed in the future.*

Below is a listing of additional ESRI Profile Attributes considered, and the corresponding disposition as identified by the FTDS Team.

ESRI Profile Attribute	Related FTDS Data Parameter or Disposition
Attribute Alias	FTDS Data Parameter: GIS Alternate Name
Attribute Type	FTDS Data Parameter: Type
Attribute Width	FTDS Data Parameter: Width
Attribute Precision	Double Precision (as identified under FTDS Generally Applicable Data Parameters)
Attribute Scale	Pre-defined under FTDS Spatial Data Source
Attribute Output Width	*Not included in FTDS since this attribute is software specific and/or reflects outdated technology*
Attribute Number of Decimals	FTDS Data Parameter: Number of Decimals
Attribute Indexed	*Not included in FTDS since this attribute is software-specific*
Sub-Type Information	*Not included in FTDS since this attribute is software-specific*
Relationship Class	*Not included in FTDS since this is software-specific and does not apply to basic GIS layers*

3.2.2 FTDS Data Parameters

The table below provides a summarized listing of each FTDS attribute, with corresponding data parameters

Attribute Name	Data Parameters (see FTDS Data Parameter Definition / Criteria for definition of each data parameter)										
	Overlap Allowed?[C]	Tabular Display	Spatial Display	Feature Type	GIS Item Name	GIS Alternate Name	LOV Width	LOV Type	LOV No. of Decimals	Attribute Null or Not Null[D]	LOV Unique or Not Unique[E]
FTDS Protocols (Common to all Data)											
(METADATA)											
AGENCY DATA SOURCE											
Federal Trail Data Standards: Attribute and Codes (LOVs)											
ACCESSIBILITY STATUS	No Overlap Allowed	X	X	Line	ACCESS_STA	ACCESSIBILITY_STATUS	40	Text	NA	Not Null (except NHT[1], NHT[2])	Not Unique
ADMIN ORG	No Overlap Allowed	X	X	Line (may be populated by overlay with a polygon)	ADMIN_ORG	ADMIN_ORG	16	Text	NA	Not Null	Not Unique
CONGRESSIONAL DISTRICT	No Overlap Allowed	X	X	Line (may be populated by overlay with a polygon)	CONG_DIST	CONGRESSIONAL_DISTRICT	4	Text	NA	Not Null	Not Unique
COST ANNUAL/CYCLIC MAINTENANCE	No Overlap Allowed	X	X	Line	COST_AM	COST_ANNUAL_CYCLIC_MAINTENANCE	10	Number	2	Null	Not Unique
COST ANNUAL/CYCLIC OPERATIONS	No Overlap Allowed	X	X	Line	COST_OPS	COST_ANNUAL_CYCLIC_OPERATIONS	10	Number	2	Null	Not Unique
COST DEFERRED MAINTENANCE	No Overlap Allowed	X	X	Line	COST_DM	COST_DEFERRED_MAINTENANCE	10	Number	2	Null	Not Unique
COST LAST UPDATED	No Overlap Allowed	X	X	Line	COST_FY	COST_LAST_UPDATED	4	Text	NA	Null	Not Unique
COST IMPROVEMENT/ CONSTRUCTION	No Overlap Allowed	X	X	Line	COST_IMP	COST_IMPROVEMENT_CONSTRUCTION	10	Number	2	Null	Not Unique
COUNTY	No Overlap Allowed	X	X	Line (may be populated by overlay with a polygon)	COUNTY	COUNTY	40	Text	NA	Not Null	Not Unique
DESIGNED USE	No Overlap Allowed	X	X	Line	DESIGN_USE	DESIGNED_USE	40	Text	NA	Not Null	Not Unique
HISTORIC SIGNIFICANCE	No Overlap Allowed	X	X	Line	HIST_SIGNF	HISTORIC_SIGNIFICANCE	40	Text	NA	Not Null	Not Unique
INTERAGENCY IDENTIFICATION CODE	No Overlap Allowed	X	X	Line	INTERAG_ID	INTERAGENCY_IDENTIFICATION_CODE	40	Text	NA	Null	Not Unique
JURISDICTION	No Overlap Allowed	X	X	Line	JURISDICT	JURISDICTION	40	Text	NA	Not Null	Not Unique
LAND USE PLAN	Allow Multiple Entries	X	NA	Line	LAND_PLAN	LAND_USE_PLAN	40	Text	NA	Null	Not Unique
MANAGED USE	Allow Multiple Entries	X	X	Line	MANAGD_USE	MANAGED_USE	40	Text	NA	Not Null (except NHT[1], NHT[2])	Not Unique
MANAGING ORG	No Overlap Allowed	X	X	Line	MANAG_ORG	MANAGING_ORG	16	Text	NA	Not Null	Not Unique

Attribute Name	Data Parameters (see FTDS Data Parameter Definition / Criteria for definition of each data parameter)										
	Overlap Allowed?[C]	Tabular Display	Spatial Display	Feature Type	GIS Item Name	GIS Alternate Name	LOV Width	LOV Type	LOV No. of Decimals	Attribute Null or Not Null[D]	LOV Unique or Not Unique[E]
MOTORIZED PROHIBITED	No Overlap Allowed	X	X	Line	MTR_PROHIB	MOTORIZED_PROHIBITED	3	Text	NA	Not Null (except NHT[1], NHT[2])	Not Unique
MUNICIPALITY	No Overlap Allowed	X	X	Point (may be populated by overlay with a polygon)	MUNICIPAL	MUNICIPALITY	40	Text	NA	Null	Not Unique
NHT NST TRAIL ADMINISTRATOR	No Overlap Allowed	X	X	Line	NHTNST_ADM	NHT_NST_TRAIL_ADMINISTRATOR	60	Text	NA	Null	Not Unique
NHT NST VISITOR CENTER NAME	No Overlap Allowed	X	X	Point	VISCTR_NAM	VISITOR_CENTER_NAME	100	Text	NA	Null	Not Unique
NHT AUTO-TOUR SURFACE	No Overlap Allowed	X	X	Line	NHTATRSURF	NHT_AUTO_TOUR_SURFACE	40	Text	NA	Null	Not Unique
NHT CERTIFICATION STATUS	No Overlap Allowed	X	X	Line	NHT_CERT	NHT_CERTIFICATION_STATUS	40	Text	NA	Null	Not Unique
NHT CONDITION CATEGORY	No Overlap Allowed	X	X	Line	NHT_COND	NHT_CONDITION_CATEGORY	10	Text	NA	Null	Not Unique
NHT HIGH POTENTIAL SEGMENT	No Overlap Allowed	X	X	Line	NHT_HP_SEG	NHT_HIGH_POTENTIAL_SEGMENT	40	Text	NA	Null	Not Unique
NHT HIGH POTENTIAL SITE	No Overlap Allowed	X	X	Point	NHT_HP_SIT	NHT_HIGH_POTENTIAL_SITE	40	Text	NA	Null	Not Unique
NHT PUBLIC USE SEGMENT	No Overlap Allowed	X	X	Line	NHT_PU_SEG	NHT_PUBLIC_USE_SEGMENT	40	Text	NA	Null	Not Unique
NHT PUBLIC USE SITE	No Overlap Allowed	X	X	Point	NHT_PU_SIT	NHT_PUBLIC_USE_SITE	40	Text	NA	Null	Not Unique
NHT SITE NAME	No Overlap Allowed	X	X	Point	NHT_SIT_NM	NHT_SITE_NAME	60	Text	NA	Null	Not Unique
NHT SITE NUMBER	No Overlap Allowed	X	X	Point	NHT_SIT_NR	NHT_SITE_NUMBER	40	Text	NA	Null	Not Unique
NRHP CRITERIA	Allow Multiple Entries	X	X	Line or Point	NRHP_CRIT	NRHP_CRITERIA	40	Text	NA	Null	Not Unique
NRHP PROPERTY CATEGORY	No Overlap Allowed	X	X	Point	NRHP_CAT	NRHP_PROPERTY_CATEGORY	40	Text	NA	Null	Not Unique
NATIONAL TRAIL DESIGNATION	Allow Multiple Entries	X	X	Line	NAT_TR_DES	NATIONAL_TRAIL_DESIGNATION	80	Text	NA	Null	Not Unique
PRIMARY TRAIL MAINTAINER	No Overlap Allowed	X	X	Line	PR_TR_MNTR	PRIMARY_TRAIL_MAINTAINER	40	Text	NA	Null	Not Unique
PROHIBITED USE	Allow Multiple Entries	X	X	Line	PROHIB_USE	PROHIBITED_USE	40	Text	NA	Null	Not Unique
RIGHTS-OF-WAY	No Overlap Allowed	X	X	Line	ROW	RIGHTS_OF_WAY	40	Text	NA	Null	Not Unique
ROAD SYSTEM	No Overlap Allowed	X	X	Line	ROAD_SYS	ROAD_SYSTEM	40	Text	NA	Null	Not Unique
SHARED SYSTEM	Allow Multiple Entries	X	X	Line	SHARED_SYS	SHARED_SYSTEM	40	Text	NA	Null	Not Unique
SPECIAL MGMT AREA	Allow Multiple Entries	X	X	Line (may be populated by overlay with a polygon)	SPC_MGT_AR	SPECIAL_MANAGEMENT_AREA	60	Text	NA	Null	Not Unique
STATE	No Overlap Allowed	X	X	Line (may be populated by overlay with a polygon)	STATE	STATE	2	Text	NA	Not Null	Not Unique
TRAIL CLASS	No Overlap Allowed	X	X	Line	TR_CLASS	TRAIL_CLASS	40	Text	NA	Null	Not Unique

Attribute Name	Data Parameters (see FTDS Data Parameter Definition / Criteria for definition of each data parameter)										
	Overlap Allowed?[C]	Tabular Display	Spatial Display	Feature Type	GIS Item Name	GIS Alternate Name	LOV Width	LOV Type	LOV No. of Decimals	Attribute Null or Not Null[D]	LOV Unique or Not Unique[E]
TRAIL CONDITION	No Overlap Allowed	X	X	Line	TR_COND	TRAIL_CONDITION	60	Text	NA	Null	Not Unique
TRAIL NUMBER	No Overlap Allowed	X	X	Line	TR_NUM	TRAIL_NUMBER	40	Text	NA	Not Null	Not Unique
TRAIL STATUS	No Overlap Allowed	X	X	Line	TR_STATUS	TRAIL_STATUS	40	Text	NA	Not Null (except NHT[1], NHT[2])	Not Unique
TRAIL SURFACE	No Overlap Allowed	X	X	Line	TR_SURFC	TRAIL_SURFACE	40	Text	NA	Null	Not Unique
TRAIL SYSTEM	No Overlap Allowed	X	X	Line	TR_SYS	TRAIL_SYSTEM	40	Text	NA	Null	Not Unique
TRAIL TYPE	No Overlap Allowed	X	X	Line	TRAIL_TYPE	TRAIL_TYPE	16	Text	NA	Not Null	Not Unique
TYPE OF ROUTE	Allow Multiple Entries	X	X	Line	TYPE_RTE	TYPE_OF_ROUTE	5	Text	NA	Null	Not Unique
TYPE OF SITE	No Overlap Allowed	X	X	Point	TYPE_SITE	TYPE_OF_SITE	50	Text	NA	Null	Not Unique
VISITOR FACILITY TYPE	Allow Multiple Entries	X	X	Point	VISFAC_TYP	VISITOR_FACILITY_ TYPE	50	Text	NA	Null	Not Unique

C - **Overlap Allowed?**

No Overlap Allowed: Only one attribute value or LOV code may be recorded at any given location along the trail or trail segment. Multiple segments may be identified, each with the appropriately corresponding LOV.

Overlap Allowed: More than one attribute value or LOV code may be recorded, if applicable, at any given location along the trail or trail segment. Multiple segments may be identified, each with the appropriately corresponding LOV(s).

The following data attributes may be recorded with more than one attribute code identified for the same location: Land Use Plan, Managed Use, National Trail Designation, NRHP Criteria, Prohibited Use, Shared System, Special Management Area, Type of Route, and Visitor Facility Type.

Example: For any particular stretch of trail, that portion of trail is physically located in only one County at that location, while that same location on the trail may have one or more Prohibited Uses. Therefore, there is no overlap allowed for the data attribute for County – only one County may be recorded for that specific location (either the trail segment, or entire trail if applicable). The data attribute for Prohibited Use, however, does allow the entry of multiple values, if more than one actively Prohibited Use is defined for any given stretch of trail. In this case, only one County (i.e. Mineral County) could be recorded in any single location, but all Prohibited Uses would be recorded for that same location (i.e. ATV, Motorcycle).

The Beginning Measure Point (BMP) and Ending Measure Point (EMP) would not necessarily be the same for these two data attributes. For example, the trail may be in Mineral County from BMP 0.00 to EMP 6.42 (recorded in miles), while the Prohibited Uses of Motorcycle and ATV may extend for the entire length of the trail from BMP 0.00 to EMP 16.75.

D - **Null / Not Null:** Identification of whether a Null value or Not Null value is allowed

Null: The data field may have a null value (be left blank with no data recorded)

Not Null: The data field must have a value entered for this attribute

E - **Unique / Not Unique**

Unique - The values entered for this attribute field would be unique for every entry (row) in the database. This includes all participating agencies or entities that collect trails data.

Not Unique - The values entered for this attribute field would not be unique for every entry (row) in the database. This includes all participating agencies or entities that collect trails data.

Attribute Color Coding:

Attribute applicable only to National Historic Trails (NHT)

3.3 FTDS Attributes

The section below lists each FTDS attribute alphabetically, with the corresponding attribute definition, list of values, value definitions, and corresponding business rules/clarifiers.

Attribute Name	Attribute Definition	Attribute Applies To[A]					List of Values (LOV) Attribute Code	LOV Definition	Notes Business Rules & Clarifiers
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)			
FTDS Protocols (Common to all Data)									
(METADATA)	The metadata must be in a FGDC-compliant format (for both spatial and non-spatial data).	X	X	X	X	X			For FGDC Metadata Standards, refer to: http://www.fgdc.gov/metadata/geospatial-metadata-standards
AGENCY DATA SOURCE	Each agency shall identify itself as the source of the FTDS data for the data it has in its database.	X	X	X	X	X	BIA - BUREAU OF INDIAN AFFAIRS		
							BLM - BUREAU OF LAND MANAGEMENT		
							BOR - BUREAU OF RECLAMATION		
							C - COUNTY, PARISH, BOROUGH		
							DOD - DEPARTMENT OF DEFENSE		
							DOE - DEPARTMENT OF ENERGY		
							FAA - FEDERAL AVIATION ADMINISTRATION		
							FS - FOREST SERVICE		
							FWS - FISH AND WILDLIFE SERVICE		
							L - LOCAL GOVERNMENT	Town, Township, Municipal Agency (City or other local civic government)	Township here refers to district or territory of a town; not the Public Land Survey System of Township, Range, Section
							NPS - NATIONAL PARK SERVICE		

							NGO - NONGOVERNMENTAL ORGANIZATION	Nonprofit organization	
							OF - OTHER FEDERAL AGENCY	Federal agency other than those specifically listed	
							P - PRIVATE	Nongovernment agency, entity, or individual	
							S - STATE		
							T - TRIBAL		
							USACE - US ARMY CORPS OF ENGINEERS		
Federal Trail Data Standards: Attribute and Codes (LOVs)									
ACCESSIBILITY STATUS	Accessibility guideline compliance status for trail segments that are designed for hiker/pedestrian use.	X	X			X	ACCESSIBLE	Trail meets current agency accessibility guidelines	
							NOT ACCESSIBLE	Trail determined ineligible to meet current agency accessibility guidelines	
							NOT EVALUATED	Trail not evaluated for accessibility	
ADMIN ORG	The administrative unit within an agency where the trail or trail segment physically resides.	X	X	X	X	X	(insert unit codes for USFS, NPS, BLM, & FWS)	USFS Numeric Codes = rrffdd (region, forest, district)	
								NPS Alpha Codes = 4 character park/unit code	
								BLM Alpha Codes = state, dist, field office	
								FWS Numeric Code = 5 number organization code	
							NA - NOT APPLICABLE	Nonfederal agency or entity	
CONGRESSIONAL DISTRICT	The U.S. congressional district number in which the trail segment physically resides.	X	X	X	X	X	(see agency standardized list)		
COST ANNUAL/CYCLIC MAINTENANCE	Annual or cyclic cost of work performed to maintain serviceability, or to repair failures during the year in which they occur. Includes preventive and/or cyclic maintenance performed in the year in which it is scheduled to occur.	X	X			X	$ (recorded in dollar amount)		Populate only if applicable. Protocol applicable for all four FTDS cost attributes: Each agency should use its own costing approach and be able to justify the results. There is no intention of developing an interagency costing approach. At the interagency level, this attribute provides agency lump sum costs, not a detailed cost break-down. Refer to agency definitions for annual maintenance tasks and associated costs.
COST ANNUAL/CYCLIC OPERATIONS	Annual or cyclic cost of operational activities related to the normal performance of the functions for which a fixed asset or component is intended to be used.	X	X			X	$ (recorded in dollar amount)		Populate only if applicable. Refer to agency definitions for operations tasks and associated costs.
COST DEFERRED MAINTENANCE	Costs resulting from maintenance that was not performed when it should have been or when it was scheduled and which, therefore, was put off or delayed for a future period.	X	X			X	$ (recorded in dollar amount)		Populate only if applicable. Refer to agency definitions for deferred maintenance tasks and associated costs.
COST LAST UPDATED	Fiscal year that cost data was last updated.	X	X			X	(yyyy)	Fiscal Year (4-character numeric: year)	Populate only if applicable. For example: 2006
COST IMPROVEMENT/ CONSTRUCTION	Cost of construction, installation, or assembly of a new fixed asset, or the significant alteration, expansion, or extension of an existing fixed asset to accommodate a change of purpose.	X	X			X	$ (recorded in dollar amount)		Populate only if applicable. Refer to agency definitions for trail improvement tasks and associated costs.
COUNTY	County, Borough or Parish in which the trail or trail segment physically resides.	X	X	X	X	X	(see agency standardized list)		

Attribute Name	Attribute Definition	Attribute Applies To[A]					List of Values (LOV) Attribute Code	LOV Definition	Notes Business Rules & Clarifiers
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)			
DESIGNED USE	The Managed Use of a trail that requires the most demanding design, construction, and maintenance parameters and that, in conjunction with the applicable Trail Class, determines which Design Parameters or technical specifications will apply to a trail.	X	X			X	ATV - ALL TERRAIN VEHICLE		Only one Designed Use can be identified per trail or trail segment. The Designed Use attribute is applicable to all trails, except for those NHT segments that are not managed for recreation trail traffic. Each agency will use its own technical construction and maintenance specifications for the identified Designed Use. USFS will not use NSPC as the identification of Designed Use is required for each USFS trail. NPS will not use 4WD as this is not a NPS Designed Trail Use. BLM will currently default populate Designed Use with NSPC - Not Specified
							BIKE - BICYCLE		
							DOG - DOG SLED		
							4WD - FOUR WHEEL DRIVE > 50" IN WIDTH		
							HIKE - HIKER/ PEDESTRIAN		
							MTRCYCL - MOTORCYCLE		
							NSPC - NOT SPECIFIED		
							PACK - PACK AND SADDLE		
							SNOMO - SNOWMOBILE		
							SNOWSHOE - SNOWSHOE		
							WCRAFT(MTR) - MOTORIZED WATERCRAFT		
							WCRAFT(NMTR) - NON-MOTORIZED WATERCRAFT		
							XSKI - CROSS COUNTRY SKI		
HISTORIC SIGNIFICANCE	The officially recognized historic significance of the trail segment, per evaluation criteria for the National Register of Historic Places.	X	X		X	X	ELIGIBLE	The trail segment has been evaluated and determined to meet the criteria for listing on the National Register of Historic Places, with State Historic Preservation Office / ACHP (SHPO/ACHP) concurrence.	
							NOT ELIGIBLE	The trail segment has been evaluated and determined to not meet the criteria for listing on the National Register of Historic Places, with SHPO/ACHP concurrence.	
							LISTED	The trail segment is listed on the National Register of Historic Places.	
							NOT EVALUATED	Site has not been evaluated against criteria for the National Register of Historic Places.	
INTERAGENCY IDENTIFICATION CODE	Identification code developed by interagency managers/administrators to relate data records for a trail which crosses agency boundaries.	X	X	X		X	(hand enter)		Optional, to be applied if applicable and when an interagency code has been agreed to by managers/administrators responsible for the trail. This attribute is primarily applicable to long-distance trails, NHTs, and NSTs.
JURISDICTION	The legal right to control or regulate use of a trail. Jurisdiction requires authority, but not necessarily ownership. The authority to construct or maintain a trail may be derived from fee title, an easement, an agreement or some other similar method.	X	X	X	X	X	BIA - BUREAU OF INDIAN AFFAIRS		Most commonly Trail System and Jurisdiction will match, but not always. There are situations where the agency may not have ownership, but does have jurisdiction.
							BLM - BUREAU OF LAND MANAGEMENT		
							BOR - BUREAU OF RECLAMATION		
							C - COUNTY, PARISH, BOROUGH		
							DOD - DEPARTMENT OF DEFENSE		
							DOE - DEPARTMENT OF ENERGY		

							FAA - FEDERAL AVIATION ADMINISTRATION		
							FS - FOREST SERVICE		
							FWS - FISH AND WILDLIFE SERVICE		
							L - LOCAL GOVERNMENT	Town, Township, Municipal Agency (City or other local civic government)	Township here refers to district or territory of a town; not the Public Land Survey System of Township, Range, Section
							NPS - NATIONAL PARK SERVICE		
							OF - OTHER FEDERAL AGENCY	Federal agency other than those specifically listed	
							P - PRIVATE	Nongovernment agency, entity, or individual	
							S - STATE		
							T - TRIBAL		
							UNK - UNKNOWN		
							USACE - US ARMY CORPS OF ENGINEERS		
LAND USE PLAN	The agency planning document that provides management guidance.	X	X	X	X	X	BLM - RESOURCE MANAGEMENT PLAN	(Note: This code for BLM Resource Management Plan also includes Management Framework Plans)	Populate only if applicable. One or more Land Use Plan values may be identified per trail or trail segment. When recording this attribute, also document the specific plan name and decision date (e.g. in Remarks/Comments). NST/NHT - Comprehensive Management Plan is applicable to all NSTs and NHTs (BLM, NPS, USFS)
							FWS - COMPREHENSIVE CONSERVATION PLAN		
							NPS - GENERAL MANAGEMENT PLAN		
							USFS - FOREST PLAN		
							NST/NHT - COMPREHENSIVE MANAGEMENT PLAN		
							OTHER		
MANAGED USE	A mode of travel that is actively managed and appropriate on a trail, based on its design and management.	X	X			X	ATV - ALL TERRAIN VEHICLE		One or more Managed Uses may be identified per trail or trail segment. The Managed Use attribute is applicable to all trails, except for those NHT segments that are not managed for recreation trail traffic. USFS will not use NSPC as the identification of Managed Use is required for each USFS trail. NPS will not use 4WD as this is not a NPS Managed Trail Use. BLM will currently default populate Managed Use with NSPC - Not Specified
							BIKE - BICYCLE		
							DOG - DOG SLED		
							4WD - FOUR WHEEL DRIVE > 50" IN WIDTH		
							HIKE - HIKER/ PEDESTRIAN		
							MTRCYCL - MOTORCYCLE		
							NSPC - NOT SPECIFIED		
							PACK - PACK AND SADDLE		
							SNOMO - SNOWMOBILE		
							SNOWSHOE - SNOWSHOE		
							WCRAFT(MTR) - MOTORIZED WATERCRAFT		
							WCRAFT(NMTR) - NON-MOTORIZED WATERCRAFT		
							XSKI - CROSS COUNTRY SKI		
MANAGING ORG	The unit that has the long-term responsibility for the management of the trail or trail segment.	X	X	X	X	X	(insert unit codes for USFS, NPS, BLM & FWS)	USFS Numeric Codes = rrffdd (region, forest, district)	For NPS and FWS "management" indicates physical location.
								NPS Alpha Codes = 4 character park/unit code	
								BLM Alpha Codes = state, dist, field office	
								FWS Numeric Code = 5 number organization code	
							NA - NOT APPLICABLE	Nonfederal agency or entity	

Attribute Name	Attribute Definition	Attribute Applies To[A]					List of Values (LOV) Attribute Code	LOV Definition	Notes Business Rules & Clarifiers
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)			
MOTORIZED PROHIBITED	Motorized use is prohibited year-round along the trail.	X	X			X	YES	There is a year-round prohibition on motorized use on this trail or trail segment.	Note: Do not record conflicting data between Managed Use and Motorized Prohibited.
							NO	There is not a year-round prohibition on motorized use on this trail or trail segment, although some seasonal restrictions may exist.	
MUNICIPALITY	City, town or community that is adjacent to or nearby the trail or trail segment.	X	X			X	(hand enter or pull from GIS spatial data)		Populate only if applicable. Recorded as point of reference and/or source of local services.
NHT NST TRAIL ADMINISTRATOR	The agency specifically charged with trailwide coordination of National Trails System Act provisions for a designated National Scenic Trail (NST) or National Historic Trail (NHT) by the Secretary of Interior or Agriculture.		X	X		X	BLM - BUREAU OF LAND MANAGEMENT	Officially administered by the BLM, through direction of the Secretary of the Interior.	Populate only if applicable. Per the National Trails System Act, Trail Administrators are officially assigned for each NST or NHT by the Secretary of Interior or Agriculture.
							BLM/NPS - BUREAU OF LAND MANAGEMENT AND NATIONAL PARK SERVICE	Officially co-administered by the BLM and NPS, through direction of the Secretary of the Interior.	
							FS - FOREST SERVICE	Officially administered by the USFS, through direction of the Secretary of Agriculture.	
							NPS - NATIONAL PARK SERVICE	Officially administered by the NPS, through direction of the Secretary of the Interior.	
NHT NST VISITOR CENTER NAME	The name of the visitor center that exists specifically to provide NHT or NST-related information and interpretation.		X	X		X	(hand enter)	A Visitor Center is a staffed museum, information, or interpretive facility which typically includes exhibits, interpretive/educational programs, restrooms, etc. NHT or NST-associated Visitor Centers are defined as those staffed visitor information facilities that have dedicated all or a portion of their exhibits and/or programming to providing information and/or interpretation on the NHT or NST.	Populate only if applicable. Agency visitor centers will be reported by the Managing Org. Non-agency visitor centers will be reported by the NHT or NST Administrator.
NHT AUTO-TOUR SURFACE	The predominant surface type the user would expect to encounter on the road or road segment of the NHT Auto-Tour Route.			X		X	AC - ASPHALT		Populate only if applicable. Applicable only for NHT Auto-Tour Routes.
							AGG - CRUSHED AGGREGATE OR GRAVEL		
							BST - BITUMINOUS SURFACE TREATMENT		
							CSOIL- COMPACTED SOIL		
							FSOIL - FROZEN SOIL		
							IMP - IMPORTED NATIVE MATERIAL		
							NAT -NATIVE MATERIAL		
							OTHER - OTHER		
							P - PAVED		
							PCC - PORTLAND CEMENT CONCRETE		
							TPIKE - TURNPIKE		

Attribute Name	Attribute Definition	Attribute Applies To[A]					List of Values (LOV) Attribute Code	LOV Definition	Notes Business Rules & Clarifiers
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)			
NHT CERTIFICATION STATUS	Status of NHT certification agreement for the trail segment on nonfederal land.			X			CERTIFIED	Certification agreement has been formally established between managing agency and nonfederal land owner.	
							NOT CERTIFIED	Certification agreement has not been formally established between managing agency and nonfederal land owner.	
NHT CONDITION CATEGORY	Interagency classification category designed to assess the comparative character of visible trail remnants of the NHT at the time of mapping.				X		NHT I	Location Verified, Evident and Unaltered	Populate only if applicable. For expanded definition of NHT Condition Category, refer to NHT Condition Categories document.
							NHT II	Location Verified and Evident with Minor Alteration	
							NHT III	Location Verified with Little Remaining Evidence	
							NHT IV	Location Verified and Permanently Altered	
							NHT V	Location Approximate or Not Verified	
							NHT VI	Location Verified with Historic Reconstruction	
NHT HIGH POTENTIAL SEGMENT	NHT trail segment that has been identified as a NHT High Potential Segment as defined in the NHT Comprehensive Management Plan.			X			NHT HIGH POTENTIAL SEGMENT		Populate only if applicable. For expanded definition of NHT High Potential Segment, refer to NHT Comprehensive Management Plan and the National Trails System Act.
NHT HIGH POTENTIAL SITE	NHT-associated heritage resource site that has been identified as a NHT High Potential Site as defined in the NHT Comprehensive Management Plan.			X			NHT HIGH POTENTIAL SITE		Populate only if applicable. For expanded definition of NHT High Potential Site, refer to NHT Comprehensive Management Plan and the National Trails System Act.
NHT PUBLIC USE SEGMENT	NHT trail segment that is currently managed for public use, appreciation and/or viewing.			X	X	X	NHT PUBLIC USE SEGMENT		Populate only if applicable. Applicable only to NHT trail segments that have been preserved and/or developed, and are currently managed for public use, appreciation and/or viewing.
NHT PUBLIC USE SITE	NHT-associated heritage resource site that is currently managed for public use, appreciation and/or viewing.			X	X	X	NHT PUBLIC USE SITE		Populate only if applicable. Applicable only to NHT-associated heritage resource sites that have been preserved and/or developed, and are currently managed for public use, appreciation and/or viewing.
NHT SITE NAME	Name of the heritage site associated with a National Historic Trail.				X	X	(hand enter)		Populate only if applicable and/or available. Applicable only to heritage sites associated with a National Historic Trail.

Attribute Name	Attribute Definition	Attribute Applies To[A]					List of Values (LOV) Attribute Code	LOV Definition	Notes Business Rules & Clarifiers
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)			
NHT SITE NUMBER	Agency identifier for a heritage resource that is thematically associated with a National Historic Trail.				X	X	(refer to agency lists)		Populate only if applicable. Applicable only to heritage sites thematically associated with a National Historic Trail.
NRHP CRITERIA	Guideline(s) used to determine historic resource qualifications for listing in the National Register of Historic Places (NRHP).				X	X	A - EVENT	Criteria as identified in the National Register Bulletin: "How to Apply the National Register Criteria for Evaluation".	Populate only if applicable. One or more NRHP Criteria values may be identified per trail or trail segment.
							B - PERSON		
							C - CRAFTSMAN		
							D - INFORMATION POTENTIAL		
							UNK - UNKNOWN		
NRHP PROPERTY CATEGORY	Categories of historic properties as identified in the National Register of Historic Places (NRHP).				X	X	BUILDING	Criteria as identified in the National Register Bulletin: "How to Apply the National Register Criteria for Evaluation".	This attribute applies only to historic resources that are Eligible or Listed on the NRHP.
							DISTRICT		
							HISTORIC LANDSCAPE		
							OBJECT		
							SITE		
							STRUCTURE		
							TRADITIONAL CULTURAL PROPERTY		
NATIONAL TRAIL DESIGNATION	The national designation assigned to the trail or trail segment. This includes designations by federal statute for National Historic Trails (NHT), National Scenic Trails (NST), Connecting or Side Trails (C-S), and National Recreation Trails (NRT); and also includes National Millennium Trails (NMT) and Millennium Legacy Trails (MLT).	X	X	X	X	X	NHT - ALA KAHAKAI	Ala Kahakai National Historic Trail	Populate only if applicable. One or more National Trail Designation values may be identified per trail or trail segment. When applicable select the LOV for the specific NHT, NST, Connecting or Side Trail, Millennium Trail, or Millennium Legacy Trail. When recording a National Recreation Trail, select the LOV "NRT - National Recreation Trail" and also document the specific name of the trail (e.g. in Remarks/Comments). For a Connecting or Side Trail officially identified as a component of a National Scenic or Historic Trail, select the LOV "CST - [NST or NHT Trail Name] C-S" and also document the specific name of the Connecting or Side trail (e.g. in Remarks/Comments). When recording any other type of National Trail Designation, select the LOV "Other - Other National Designation" and also document the specific type of designation (e.g. in Remarks/Comments).
							NHT - CALIFORNIA	California National Historic Trail	
							NHT - CAPTAIN JOHN SMITH CHESAPEAKE	Captain John Smith Chesapeake National Historic Trail	
							NHT - EL CAMINO REAL DE LOS TEJAS	El Camino Real de Los Tejas National Historic Trail	
							NHT - EL CAMINO REAL DE TIERRA ADENTRO	El Camino Real de Tierra Adentro National Historic Trail	
							NHT - IDITAROD	Iditarod National Historic Trail	
							NHT - JUAN BAUTISTA DE ANZA	Juan Bautista de Anza National Historic Trail	
							NHT - LEWIS AND CLARK	Lewis and Clark National Historic Trail	
							NHT - MORMON PIONEER	Mormon Pioneer National Historic Trail	
							NHT - NEZ PERCE	Nez Perce (Nee-Me-Poo) National Historic Trail	
							NHT - OLD SPANISH	Old Spanish National Historic Trail	
							NHT - OREGON	Oregon National Historic Trail	
							NHT - OVERMOUNTAIN VICTORY	Overmountain Victory National Historic Trail	
							NHT - PONY EXPRESS	Pony Express National Historic Trail	
							NHT - SANTA FE	Santa Fe National Historic Trail	
							NHT - SELMA TO MONTGOMERY	Selma to Montgomery National Historic Trail	
							NHT - STAR-SPANGLED BANNER	Star-Spangled Banner National Historic Trail	
							NHT - TRAIL OF TEARS	Trail of Tears National Historic Trail	

NHT - WASHINGTON-ROCHAMBEAU REV ROUTE	Washington-Rochambeau Revolutionary Route National Historic Trail
NRT - NATIONAL RECREATION TRAIL	National Recreation Trail
NST - APPALACHIAN	Appalachian National Scenic Trail
NST - ARIZONA	Arizona National Scenic Trail
NST - CONTINENTAL DIVIDE	Continental Divide National Scenic Trail
NST - FLORIDA	Florida National Scenic Trail
NST - ICE AGE	Ice Age National Scenic Trail
NST - NATCHEZ TRACE	Natchez Trace National Scenic Trail
NST - NEW ENGLAND	New England National Scenic Trail
NST - NORTH COUNTRY	North Country National Scenic Trail
NST - PACIFIC CREST	Pacific Crest National Scenic Trail
NST - PACIFIC NORTHWEST	Pacific Northwest National Scenic Trail
NST - POTOMAC HERITAGE	Potomac Heritage National Scenic Trail
CST - ICE AGE C-S	Ice Age NST Connecting or Side Trail
CST - IDITAROD C-S	Iditarod NHT Connecting or Side Trail
NMT - AMERICAN DISCOVERY	National Millennium Trail: American Discovery Trail
NMT - APPALACHIAN NST	National Millennium Trail: Appalachian National Scenic Trail
NMT - CASCADIA MARINE	National Millennium Trail: Cascadia Marine Trail
NMT - CIVIL WAR DISCOVERY	National Millennium Trail: Civil War Discovery Trail
NMT - EAST COAST GREENWAY	National Millennium Trail: East Coast Greenway
NMT - FREEDOM	National Millennium Trail: Freedom Trail
NMT - GREAT WESTERN	National Millennium Trail: Great Western Trail
NMT - HATFIELD-MCCOY RECREATION AREA	National Millennium Trail: Hatfield-McCoy Recreation Area Trail
NMT - IDITAROD NHT	National Millennium Trail: Iditarod National Historic Trail
NMT - INTERNATIONAL EXPRESS	National Millennium Trail: International Express
NMT - JUAN BAUTISTA DE ANZA NHT	National Millennium Trail: Juan Bautista de Anza National Historic Trail
NMT - LEWIS AND CLARK NHT	National Millennium Trail: Lewis and Clark National Historic Trail
NMT - MISSISSIPPI RIVER	National Millennium Trail: Mississippi River Trail
NMT - NORTH COUNTRY NST	National Millennium Trail: North Country National Scenic Trail
NMT - UNDERGROUND RAILROAD	National Millennium Trail: Underground Railroad

NMT - UNICOI TURNPIKE	National Millennium Trail: Unicoi Turnpike
MLT AL – PINHOTI NRT	Millennium Legacy Trail (Alabama): Pinhoti National Recreation Trail
MLT AK – CHILKOOT	Millennium Legacy Trail (Alaska): Chilkoot Trail
MLT AZ – ARIZONA	Millennium Legacy Trail (Arizona): Arizona Trail
MLT AR – TRAIL OF TEARS ROUTES	Millennium Legacy Trail (Arkansas): Trail of Tears Routes
MLT CA – CALIFORNIA COASTAL	Millennium Legacy Trail (California): California Coastal Trail
MLT CO – AMERICA THE BEAUTIFUL	Millennium Legacy Trail (Colorado): America the Beautiful Trail
MLT CT – CT IMPRESSIONIST ART	Millennium Legacy Trail (Connecticut): Connecticut Impressionist Art Trail
MLT DE – COASTAL HERITAGE GREENWAY	Millennium Legacy Trail (Delaware): The Coastal Heritage Greenway
MLT DC – METROPOLITAN BRANCH	Millennium Legacy Trail (District Of Columbia): Metropolitan Branch Trail
MLT FL – FLORIDA NST	Millennium Legacy Trail (Florida): Florida National Scenic Trail
MLT GA – COASTAL GEORGIA GREENWAY	Millennium Legacy Trail (Georgia): Coastal Georgia Greenway
MLT HI – THE HANA HIGHWAY	Millennium Legacy Trail (Hawaii): The Hana Highway
MLT ID – NORTH IDAHO CENTENNIAL	Millennium Legacy Trail (Idaho): North Idaho Centennial Trail
MLT IL – I&M CANAL	Millennium Legacy Trail (Illinois): I&M Canal Trail
MLT IN – MONON RAIL-TRAIL CORRIDOR	Millennium Legacy Trail (Indiana): Monon Rail-Trail Corridor
MLT IA – AMERICAN DISCOVERY: IOWA ROUTE	Millennium Legacy Trail (Iowa): American Discovery Trail: Iowa Route
MLT KS – KANOPOLIS STATE PARK MULTI-USE	Millennium Legacy Trail (Kansas): Kanopolis State Park Multi-Use Trails
MLT KY – PINE MOUNTAIN	Millennium Legacy Trail (Kentucky): Pine Mountain Trail
MLT LA – THE TAMMANY TRACE	Millennium Legacy Trail (Louisiana): The Tammany Trace
MLT ME – ACADIA NATIONAL PARK TRAIL	Millennium Legacy Trail (Maine): Acadia National Park Trail
MLT MD – BWI - BALT & ANNAP - COL ANNAP	Millennium Legacy Trail (Maryland): BWI Trail/Baltimore & Annapolis Trail/Colonial Annapolis Maritime Trail
MLT MA – NORWOTTUCK NETWORK	Millennium Legacy Trail (Massachusetts): Norwottuck Network
MLT MI – SOUTHEAST MICHIGAN GREENWAYS	Millennium Legacy Trail (Michigan): Southeast Michigan Greenways Trail

MLT MN – WILLARD MUNGER STATE	Millennium Legacy Trail (Minnesota): Willard Munger State Trail
MLT MS – MISSISSIPPI DELTA BLUES	Millennium Legacy Trail (Mississippi): Mississippi Delta Blues Trail
MLT MO – THE KATY	Millennium Legacy Trail (Missouri): The Katy Trail
MLT MT – ROUTE OF THE HIAWATHA RAIL-TR	Millennium Legacy Trail (Montana): Route of The Hiawatha Rail-Trail
MLT NE – THE COWBOY REC AND NATURE	Millennium Legacy Trail (Nebraska): The Cowboy Recreation and Nature Trail
MLT NV – TAHOE RIM	Millennium Legacy Trail (Nevada): Tahoe Rim Trail
MLT NH – FRANCONIA NOTCH STATE PARK REC	Millennium Legacy Trail (New Hampshire): Franconia Notch State Park Recreation Trail
MLT NJ – HIGHLANDS	Millennium Legacy Trail (New Jersey): Highlands Trail
MLT NM – EL CAMINO REAL DE TIERRA ADENTR	Millennium Legacy Trail (New Mexico): El Camino Real de Tierra Adentro (The Royal Road of the Interior)
MLT NC – BLUE RIDGE HERITAGE	Millennium Legacy Trail (North Carolina): Blue Ridge Heritage Trail
MLT ND – BISMARCK - MANDAN MO VALLEY	Millennium Legacy Trail (North Dakota): Bismarck/Mandan Missouri Valley Trail
MLT OH – THE BUCKEYE	Millennium Legacy Trail (Ohio): The Buckeye Trail
MLT OK – STANDING BEAR NATIVE AMER MEM	Millennium Legacy Trail (Oklahoma): Standing Bear Native American Memorial Park & Trail
MLT OR – HISTORIC COLUMBIA RIVER HWY	Millennium Legacy Trail (Oregon): Historic Columbia River Highway State Trail
MLT PA – PITTSBURGH–HARRISBURG GREENWAY	Millennium Legacy Trail (Pennsylvania): Pittsburgh to Harrisburg Greenway
MLT RI – RI STATEWIDE GREENWAY	Millennium Legacy Trail (Rhode Island): Rhode Island Statewide Greenway System
MLT SC – THE PALMETTO	Millennium Legacy Trail (South Carolina): The Palmetto Trail
MLT SD – GEORGE S MICKELSON	Millennium Legacy Trail (South Dakota): George S. Mickelson Trail
MLT TN – CUMBERLAND TRAIL STATE PARK	Millennium Legacy Trail (Tennessee): Cumberland Trail State Park
MLT UT – BONNEVILLE SHORELINE	Millennium Legacy Trail (Utah): Bonneville Shoreline Trail
MLT VT – LAKE CHAMPLAIN BIKEWAYS	Millennium Legacy Trail (Vermont): Lake Champlain Bikeways
MLT VA – NEW RIVER TRAIL STATE PARK	Millennium Legacy Trail (Virginia): New River Trail State Park

							MLT WA – JOHN WAYNE PIONEER	Millennium Legacy Trail (Washington): John Wayne Pioneer Trail	
							MLT WV – GREENBRIER RIVER	Millennium Legacy Trail (West Virginia): Greenbrier River Trail	
							MLT WI – HANK AARON STATE	Millennium Legacy Trail (Wisconsin): Hank Aaron State Trail	
							MLT WY – WY CONTINENTAL DIV SNOWMOBILE	Millennium Legacy Trail (Wyoming): Wyoming Continental Divide Snowmobile Trail	
							MLT PR – THE RIO CAMUY CAVE PARK	Millennium Legacy Trail (Puerto Rico): The Rio Camuy Cave Park	
							MLT VI – ST CROIX HERITAGE	Millennium Legacy Trail (Virgin Islands): St. Croix Heritage Trail	
							OTHER - OTHER NATIONAL DESIGNATION	Other National Designation	
PRIMARY TRAIL MAINTAINER	The agency or group having primary maintenance responsibility for the trail or trail segment.	X	X			X	BIA - BUREAU OF INDIAN AFFAIRS		Populate only if applicable. The Primary Trail Maintainer is usually the same as the Managing Org, but can include trail user groups, volunteers, communities, etc. When applicable, the specific name of the Primary Trail Maintainer may also be recorded in Remarks/Comments (e.g. if the Primary Trail Maintainer equals "V - Volunteer", the group name "BSA Troop 230" could be recorded in Remarks/Comments).
							BLM - BUREAU OF LAND MANAGEMENT		
							BOR - BUREAU OF RECLAMATION		
							C - COUNTY, PARISH, BOROUGH		
							CU - COMMERCIAL USER		
							DOD - DEPARTMENT OF DEFENSE		
							DOE - DEPARTMENT OF ENERGY		
							FAA - FEDERAL AVIATION ADMINISTRATION		
							FS - FOREST SERVICE		
							FWS - FISH AND WILDLIFE SERVICE		
							L - LOCAL GOVERNMENT	Town, Township, Municipal Agency (City or other local civic government)	Township here refers to district or territory of a town; not the Public Land Survey System of Township, Range, Section
							NPS - NATIONAL PARK SERVICE		
							NGO - NONGOVERNMENTAL ORGANIZATION	Nonprofit organization	
							OF - OTHER FEDERAL AGENCY	Federal agency other than those specifically listed	
							P - PRIVATE	Nongovernmental agency, entity, or individual	
							S - STATE		
							T - TRIBAL		
							USACE - US ARMY CORPS OF ENGINEERS		
							UNK - UNKNOWN		
							V - VOLUNTEER		

Attribute Name	Attribute Definition	Attribute Applies To[A]					List of Values (LOV) Attribute Code	LOV Definition	Notes Business Rules & Clarifiers
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)			
PROHIBITED USE	Mode of travel prohibited by official legal order. Applicable Code of Federal Regulations (CFR) is cited and implemented through appropriate enforcement, restriction devices, and signing.	X	X			X	0 ALL TRAFFIC	All types of motorized and non-motorized traffic.	Populate only if applicable. One or more Prohibited Uses may be identified per trail or trail segment. Trail or trail segment is closed year-round or seasonally to the identified Prohibited Use. The modes of travel are listed and numbered in hierarchical order. Selection of a "top" mode of travel (or one listed higher up in a numeric series), indicates the inclusion of all of the subordinate modes of travel listed within that numeric series. Select the mode of travel code at the highest applicable level within any series.
							1 MOTOR VEHICLE	Any vehicle which is self-propelled, other than a wheelchair or mobility device as defined in 36 CFR 261.2 (or applicable non-federal regulation), including highway legal and non-highway legal terra vehicles. Excludes aircraft, watercraft, and over snow vehicles according to 36 CFR 212.51 (or applicable non-federal regulation).	
							1.1 HIGHWAY VEHICLE	Any motor vehicle that is licensed or certified under State law for general operation on all public roads within the State.	
							1.1.1 PASSENGER VEHICLE	All passenger vehicles such as sedans, and other typical low clearance vehicles less than 10,000 GVW licensed to operate on public roads.	
							1.1.2 HIGH CLEARANCE VEHICLE	All sport utility vehicles (SUVs), light trucks, motorcycles, and other highway-legal vehicles designed for operation on rough terrain. These vehicles are also OHVs under 1.2.	
							1.1.3 MTR VEHICLE > 10,000 GVW	All motor vehicles greater than 10,000 pounds GVW licensed to operate on public roads.	
							1.1.3.1 TRUCK	All motor vehicles greater than 10,000 pounds GVW designed, used, or maintained primarily for the transportation of property or equipment, such as lowboys, log trucks, chip trucks, end dumps and fire trucks licensed to operate on public roads.	
							1.1.3.2 BUS	All motor vehicles designed for carrying more than 10 passengers and greater than 10,000 pounds GVW licensed to operate on public roads.	
							1.1.3.3 MOTOR HOME	All motor vehicles that are self-contained living quarters on wheels licensed to operate on public roads.	
							1.2 STANDARD/TERRA OHV	Any motor vehicle designed for or capable of cross-country travel on or immediately over land.	
							1.2.1 OHV > 50"	Motor vehicles greater than 50” in width, such as sport utility vehicles (SUVs), rock crawlers, side-by-sides, and sand rails.	
							1.2.1.1 WHEELED OHV > 50"	OHVs greater than 50” in width operating on wheels.	
							1.2.1.2 TRACKED OHV >50"	OHVs greater than 50” in width operating on tracks, including SUVs or utility vehicles with track conversion kits.	

1.2.1.3 OTHER OHV > 50"	Other OHVs greater than 50” in width that are not wheeled or tracked.
1.2.2 OHV <= 50"	Motor vehicles less than or equal to 50” in width.
1.2.2.1 WHEELED OHV <= 50"	OHVs less than or equal to 50” in width operating on wheels such as ATVs, motorcycles, and balancing scooters.
1.2.2.1.1 ATV	OHVs less than or equal to 50” with three or more low-pressure tires, handle-bar steering and a seat designed to be straddled by the operator.
1.2.2.1.2 MOTORCYCLE	Two-wheeled vehicles on which the two wheels are inline, not side-by-side.
1.2.2.1.3 OTHER WHEELED OHV <= 50"	Other wheeled OHVs less than or equal to 50” in width. Includes balancing scooters.
1.2.2.2 TRACKED OHV <= 50"	An OHV less than or equal to 50” in width operating on tracks. Includes ATVs with track conversion kits and snowmobiles when not operating over snow.
1.2.2.3 OTHER OHV <= 50"	Other OHVs less than or equal to 50” in width that are not considered to be ATVs or motorcycles and are not wheeled or tracked.
2 NON-MOTORIZED	All use by other than motor vehicles, including wheelchairs or mobility devices under CFR 212.1 (or applicable non-federal regulation), including battery-powered.
2.1 HIKER/PEDESTRIAN	Foot travel, including wheelchairs or mobility devices.
2.2 PACK AND SADDLE	Riding or packing stock
2.2.1 HORSE/MULE	Horses or mules
2.2.2 LLAMA	Llamas
2.2.3 OTHER PACK STOCK	Other packing animals, including goats.
2.3 MECHANIZED	All use by mechanized transport other than motor vehicles.
2.3.1 BICYCLE	Bicycles
2.3.2 GAME CARTS	Game carts
2.3.3 ANIMAL PULLLED VEHICLE (3 “L’s”)	Mechanized vehicles pulled by animals, including horse/mule drawn carts, wagons, and carriages.
2.3.4 SKATE/SKATEBOARD	Roller skates, inline skates, skateboards, and similar devices.
2.3.5 OTHER MECHANIZED	Other non-motorized mechanized vehicles.
2.4 ANIMALS	All use by domestic animals and livestock not included in Section 2.2 above.
2.4.1 LIVESTOCK	All use by domestic livestock, including cattle, sheep and goats.
2.4.1.1 CATTLE	Use by cattle.
2.4.1.2 SHEEP/GOAT	Use by sheep and goats.
2.4.1.3 OTHER ANIMALS	Use by other livestock.
2.4.2 PETS	Use by domestic pets including dogs.

3 OVER SNOW TRAVEL	All types of over-snow travel.
3.1 MTR OVER-SNOW VEHICLE	Motor vehicles designed for over-snow that run on a track or tracks and/or a ski(s), while in use over snow. The same vehicle would be a Standard/Terra OHV (1.2) when not in use over snow. 36 CFR 212.1 (or applicable non-federal regulation).
3.1.1 OVER-SNOW VEHICLE > 50"	Over-snow vehicles greater than 50” in width, including snow coaches, snow cats, and sport utility vehicles (SUVs) with track conversion kits.
3.1.2 OVER-SNOW VEHICLE <= 50"	Motorized over-snow vehicles less than or equal to 50” in width.
3.1.2.1 SNOWMOBILE	Motorized over-snow vehicles that operate on a track, use one or more skis for steering, have handle-bar steering, and a seat designed to be straddled by the operator.
3.1.2.2 OTHER OSV <= 50"	Other over-snow vehicles less than or equal to 50” in width, including ATVs with track conversion kits.
3.2 NON-MTR SNOW TRAFFIC	All non-motorized uses specifically designed for travel over snow and ice.
3.2.1 CROSS COUNTRY SKI	Cross-country skis. Includes ski mountaineering and hike-in downhill skiing/snowboarding when not supported by mechanized vehicles.
3.2.2 SNOW SHOE	Snow shoes
3.2.3 DOG SLED	Snow sleds pulled by dogs.
3.2.4 OTHER NON-MTR SNOW TRAFFIC	Other non-mechanized vehicles, including vehicles pulled by animals other than dogs, as well as vehicles propelled by wind or gravity, such as ice-boats or bobsleds.
4 WATERCRAFT	All types of watercraft when floating. Excludes amphibious vehicles if any wheel or track is in contact with the ground/substrate.
4.1 MOTOR WATERCRAFT	All types of self-propelled motorized watercraft.
4.1.1 ELECTRIC WATERCRAFT	Motorized watercraft propelled by electric outboard motors.
4.1.2 GAS WATERCRAFT	Motorized watercraft propelled by inboard or outboard gas engines.
4.1.2.1 MOTOR BOAT	Hulled boats propelled by inboard or outboard engines.
4.1.2.2 PERSONAL WATERCRAFT	One or two-person watercraft designed to be straddled by the operator or ridden standing, such as jet skis, wet bikes, and amphibious ATVs.
4.1.2.3 OTHER GAS WATERCRAFT	Other use by gas powered watercraft.
4.2 NON-MTR WATERCRAFT	All types of non-motorized watercraft.
4.2.1 CANOE	Canoes
4.2.2 KAYAK	Kayaks

							4.2.3 RAFT	Inflated open-top rafts.	
							4.2.4 OTHER NON-MTR WATERCRAFT	Use by other non-motorized watercraft including rowboats.	
							5 AIRCRAFT	All types of aircraft.	
							5.1 MTR AIRCRAFT	All types of motorized powered aircraft.	
							5.1.1 AIRPLANE	All types of motorized winged aircraft generally requiring a runway for takeoff and landing. Includes ultralites.	
							5.1.2 HELICOPTER	All types of motorized helicopters.	
							5.1.3 OTHER MOTORIZED AIRCRAFT	Other motorized aircraft, including blimps.	
							5.2 NON-MTR AIRCRAFT	All types of non-motorized flying vehicles.	
							5.2.1 GLIDER	Hang gliders and other winged, non- motorized aircraft.	
							5.2.2 OTHER NON MTR AIRCRAFT	Other un-powered aircraft, such as balloons.	
RIGHTS-OF-WAY	Right-of-way, permits, or easements that exist or are needed along the trail or trail segment.	X	X	X	X	X	AN - AUTHORIZATION NEEDED	No legal access right exists and authorization is needed.	Populate only if applicable.
							E - EXISTING EASEMENT	An interest in land owned by another party that entitles the holder to a specific limited use or enjoyment.	
							L - EXISTING LEASE	A right of ingress or egress granted by a government authority under the terms of the lease.	
							P - EXISTING PERMIT	A written license has been issued by one party to a second party granting permission but not vesting a right.	
							TE - EXISTING TEMPORARY EASEMENT	A temporary interest in land owned by another party that entitles the holder to a specific limited use or enjoyment for a specific period of time.	
ROAD SYSTEM	The road network to which the trail or trail segment belongs, in the case of trails occurring on system roads.	X	X	X	X[B]	X[B]	BLMR- BUREAU OF LAND MANAGEMENT SYSTEM ROAD		Populate only if applicable. This attribute is used to document when a trail occurs concurrently on a road (in which case the Shared System attribute should also be populated).
							C - COUNTY, PARISH, BOROUGH		
							I - INTERSTATE HIGHWAY		
							L - LOCAL GOVERNMENT		
							NFSR - NATIONAL FOREST SYSTEM ROAD		
							NPSR - NATIONAL PARK SERVICE SYSTEM ROAD		
							NWRR - NATIONAL WILDLIFE REFUGE SYSTEM ROAD		
							OF - OTHER FEDERAL		
							OS - OTHER STATE		
							OTH - OTHER		
							P - PRIVATE		
							SH - STATE HIGHWAY		
							T - TRIBAL		
							US - US HIGHWAY OR ROUTE		

Attribute Name	Attribute Definition	Attribute Applies To[A]					List of Values (LOV) Attribute Code	LOV Definition	Notes Business Rules & Clarifiers
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)			
SHARED SYSTEM	Additional network(s) of travelways serving a common need or purpose; managed by an organization with the authority to finance, build, operate and maintain the routes.	X	X	X	X[B]	X[B]	H2O - WATER TRAIL		Populate only if applicable. One or more Shared Systems may be identified per trail or trail segment. The intent of this attribute is to identify when a trail or trail segment physically overlaps another trail type or road (e.g. when a Standard/Terra Trail overlaps a Snow Trail, or when a trail overlaps a road). For BLM, do not confuse "Shared System" with BLM "Shared Use" attribute.
							RD - ROAD		
							SNO - SNOW TRAIL		
							STD - STANDARD/TERRA TRAIL		
SPECIAL MGMT AREA	Land area, that may be of special management concern or interest, through which the trail or trail segment crosses.	X	X	X	X	X	ACEC - AREA OF CRITICAL ENVIRONMENTAL CONCERN - INVENTORIED ROADLESS AREA	BLM agency-identified area	Populate only if applicable. One or more Special Mgmt Area values may be identified per trail or trail segment. When recording this attribute, also document the official name of the Special Management Area (e.g. in Remarks/Comments). For specifics refer to official definitions for the Congressionally, Presidentially and/or Agency-designated areas listed.
							IRA - INVENTORIED ROADLESS AREA		
							NCA - NATIONAL CONSERVATION AREA	Congressionally designated area	
							NBCB - NATIONAL BACKCOUNTRY BYWAY	Administrative designation	
							NHL - NATIONAL HISTORIC LANDMARK	Identified by Secretary of the Interior	
							NHS - NATIONAL HISTORIC SITE		
							NM - NATIONAL MONUMENT	Congressionally designated area or proclaimed by the President	
							NNL - NATIONAL NATURAL LANDMARK	Identified by either the Secretary of Agriculture or the Secretary of the Interior	
							NONA - NATIONAL OUTSTANDING NATURAL AREA	Congressionally designated area	
							NP - NATIONAL PARK	Congressionally designated area	
							NR - NATIONAL RESERVE	Congressionally designated area	
							NRA - NATIONAL RECREATION AREA		
							NSA - NATIONAL SCENIC AREA	Congressionally designated area	
							NSB - NATIONAL SCENIC BYWAY	Administrative designation	
							ONA - OUTSTANDING NATURAL AREA	Agency administrative designation	
							OTH - OTHER	Other federal, state or local designation	
							PUNA - PUBLIC USE NATURAL AREA		
							RNA - RESEARCH NATURAL AREA	Agency administrative designation	
							SRMA - SPECIAL RECREATION MANAGEMENT AREA	Agency administrative designation	
							UNBR - UNITED NATIONS BIOSPHERE RESERVE	Designated by UNESCO	
							URA - UNROADED AREA		

							WHSRN - WESTERN HEMISPHERE SHOREBIRD RESERVE NETWORK		
							WILD - DESIGNATED WILDERNESS AREA	Congressionally designated area	
							WSA - WILDERNESS STUDY AREA	Congressionally authorized for study	
							WSR - RECREATION	Congressionally designated area	
							WSR - SCENIC	Congressionally designated area	
							WSR - WILD	Congressionally designated area	
							WSS - WILD AND SCENIC STUDY RIVER	Congressionally authorized for study	
							WHS - WORLD HERITAGE SITE	Administrative designation	
STATE	State (or Territory) where the trail or trail segment exists.	X	X	X	X	X	(use applicable two-letter US postal code)		
TRAIL CLASS	The prescribed scale of development for a trail, representing its intended design and management standards.	X	X			X	TC1 - MINIMALLY DEVELOPED	Primitive trail, minimum to nonexistent constructed features	Populate only if applicable / known. For expanded definitions refer to the Trail Class Matrix.
							TC2 - MODERATELY DEVELOPED	Simple trail, minor development, constructed features for trail resource protection	
							TC3 - DEVELOPED	Trail appears constructed, structures common, designed for user convenience	
							TC4 - HIGHLY DEVELOPED	High standard trail, significant structures, may be fully accessible	
							TC5 - FULLY DEVELOPED	Highest standard trail, significant structures, tread hardening common, typically fully accessible	
TRAIL CONDITION	The physical status of the existing trail or trail segment.	X	X			X	CONDITION A - FULLY FUNCTIONAL	Trail is functional; requires only annual or routine maintenance to meet agency standard	Populate only if applicable.
							CONDITION B - MINOR REPAIR/MAINTENANCE NEEDED	Trail is functional; needs minor repair or cyclic maintenance to meet agency standard	
							CONDITION C-MARGINALLY FUNCTIONAL	Trail is marginally functional; requires major repair or rehabilitation to meet agency standard	
							CONDITION D - NOT FUNCTIONAL	Trail is not functional or serving the purpose for which it was intended; requires replacement or decommission to meet agency standard	
							CONDITION E - ALTERATION, EXPANSION, NEW CONSTRUCTION NEEDED	Trail requires alteration, expansion, new construction to meet agency standard	
TRAIL LENGTH	The length of the trail or trail segment in miles.	X	X	X	X[B]	X[B]	(record length in miles)		BMP: Beginning measure point EMP: Ending measure point Reg Tr: Trail length in miles NST: Trail length in miles NHT[1]: Route length in miles NHT[2]: Length of associated heritage properties determined for extant routes NHT[3]: Trail length in miles

Attribute Name	Attribute Definition	Attribute Applies To[A]					List of Values (LOV) Attribute Code	LOV Definition	Notes Business Rules & Clarifiers
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)			
TRAIL NAME	The name that the trail or trail segment is officially or legally known by.	X	X	X	X	X	(hand enter)		Only one Trail Name is identified per trail record (e.g. Duck Pond Nature Trail). In the case of long-distance trails and based on naming conventions established for the trail, only one Trail Name is recorded per trail segment (e.g. John Muir Trail), or one Trail Name is recorded for the entire long-distance trail (e.g. Pacific Crest National Scenic Trail).
TRAIL NUMBER	The official numeric or alphanumeric identifier for the trail.	X	X	X		X	(hand enter)		
TRAIL STATUS	Current physical state of being of the trail or trail segment.	X	X			X	DE - DECOMMISSIONED	A trail that was no longer needed and has been removed from service	USFS does not use the LOV "UNK - UNKNOWN".
							EX - EXISTING	A trail that physically exists	
							PL - PLANNED	Planned trail identified by an appropriate management decision (e.g. NEPA, Land Management Plan, NHT/NST Comprehensive Management Plan)	
							UNK - UNKNOWN		
TRAIL SURFACE	The predominant surface type the user would expect to encounter on the trail or trail segment.	X	X			X	ASPHALT	Asphalt	
							CHUNK WOOD	Shredded wood or bark	
							CONCRETE	Concrete	
							IMPORTED COMPACTED MATERIAL	Imported compacted aggregate or clay	
							IMPORTED LOOSE MATERIAL	Imported uncompacted gravel, pea gravel, sand	
							NATIVE MATERIAL	Native surface material	
							OTHER	Other trail surface type (including paver block, geogrid, etc)	
							SNOW	Snow	
							WATER	Water	
TRAIL SYSTEM	The travel network to which the trail or trail segment belongs.	X	X	X	X[B]	X[B]	BLMT - BUREAU OF LAND MANAGEMENT SYSTEM TRAIL		Populate only if applicable / known.
							C - COUNTY, PARISH, BOROUGH TRAIL		
							L - LOCAL GOVERNMENT TRAIL		
							NFST - NATIONAL FOREST SYSTEM TRAIL		
							NPST - NATIONAL PARK SERVICE SYSTEM TRAIL		
							NWRT - NATIONAL WILDLIFE REFUGE SYSTEM TRAIL		
							OF- OTHER FEDERAL TRAIL		
							OTH - OTHER		
							P - PRIVATE TRAIL		
							S - STATE GOVERNMENT TRAIL		
							T - TRIBAL TRAIL		

Attribute Name	Attribute Definition	Attribute Applies To[A]					List of Values (LOV) Attribute Code	LOV Definition	Notes Business Rules & Clarifiers
		Reg. Trail	NST	NHT[1] (Desig)	NHT[2] (HR)	NHT[3] (Rec)			
TRAIL TYPE	A category that reflects the predominant trail surface and general mode of travel accommodated by a trail.	X	X	X	X[B]	X[B]	STANDARD TERRA TRAIL	A trail that has a surface consisting predominantly of the ground and that is designed and managed to accommodate use on that surface.	If the trail occurs concurrently with or overlaps another route (trail or road), document the type, name and number of the other route (e.g. in Remarks/Comments).
							SNOW TRAIL	A trail that has a surface consisting predominantly of snow or ice and that is designed and managed to accommodate use on that surface.	
							WATER TRAIL	A trail that has a surface consisting predominantly of water (but may include land-based portages) and that is designed and managed to accommodate use on that surface.	
TYPE OF ROUTE	The type of transportation route.			X	X[B]	X[B]	ROAD	(see agency definition)	Populate only if applicable. One or more Type of Route value may be identified if applicable (e.g. Route may function as Road in summer and Snow Trail in winter). This attribute is only applicable to NHTs, and is used to reflect the Route Type (road or trail) for NHT[1], NHT[2], and/or NHT[3]. (Comparable information for other trails can be determined through other existing attributes.)
							TRAIL	(see interagency definition)	
TYPE OF SITE	The type of site.			X	X	X	ADMIN SITE OFFICE		Populate only if applicable. This attribute is only applicable to NHTs, and is used to reflect the heritage resource site type for NHT[1], NHT[2], and/or NHT[3]. LOV Abbreviations: ADMIN = Administrative DEV = Developed INTERP = Interpretive REC = Recreation
							ADMIN SITE OTHER		
							ADMIN SITE RESIDENCE		
							ARCHEOLOGICAL AREA		
							BOTANIC AREA		
							DEV REC BOATING SITE		
							DEV REC DOCUMENTARY SITE		
							DEV REC FAMILY CAMPGROUND		
							DEV REC FAMILY PICNIC		
							DEV REC OVERNIGHT LOOKOUT/CABIN		
							DEV SITE GROUP CAMPSITE		
							DEV SITE GROUP PICNIC		
							DEV REC HORSE CAMP		
							DEV REC RESORT/HOTEL/LODGE (AGENCY OWNED)		
							DEV REC RESORT/HOTEL/LODGE (PRIVATELY OWNED)		
							DEV REC INFORMATION SITE		
							DEV REC INTERP SITE ADMIN		
							DEV REC INTERP SITE MAJOR		

							DEV REC INTERP SITE MINOR		
							DEV REC OBSERVATION SITE		
							DEV REC ORGANIZATION SITE (AGENCY OWNED)		
							DEV REC ORGANIZATION SITE (PRIVATELY OWNED)		
							DEV REC OTHER		
							DEV REC TRAILHEAD		
							GEOLOGIC AREA		
							HISTORIC AREA		
							PALEONTOLOGICAL		
VISITOR FACILITY TYPE	Category of facility that accommodates visitor activities or provides visitor amenities.		X	X		X	ADMIN SITE OFFICE		Populate only if applicable. One or more Visitor Facility Type values may be identified per trail or trail segment. LOV Abbreviations: ADMIN = Administrative DEV = Developed INTERP = Interpretive REC = Recreation
							ADMIN SITE OTHER		
							ADMIN SITE RESIDENCE		
							ARCHEOLOGICAL AREA		
							BOTANIC AREA		
							DEV REC BOATING SITE		
							DEV REC DOCUMENTARY SITE		
							DEV REC FAMILY CAMPGROUND		
							DEV REC FAMILY PICNIC		
							DEV REC OVERNIGHT LOOKOUT/CABIN		
							DEV SITE GROUP CAMPSITE		
							DEV SITE GROUP PICNIC		
							DEV REC HORSE CAMP		
							DEV REC RESORT/HOTEL/LODGE (AGENCY OWNED)		
							DEV REC RESORT/HOTEL/LODGE (PRIVATELY OWNED)		
							DEV REC INFORMATION SITE		
							DEV REC INTERP SITE ADMIN		
							DEV REC INTERP SITE MAJOR		
							DEV REC INTERP SITE MINOR		
							DEV REC OBSERVATION SITE		
							DEV REC ORGANIZATION SITE (AGENCY OWNED)		
							DEV REC ORGANIZATION SITE (PRIVATELY OWNED)		
							DEV REC OTHER		
							DEV REC TRAILHEAD		
							GEOLOGIC AREA		
							HISTORIC AREA		
							PALEONTOLOGICAL		

A - **The type of trail (or aspect of an NHT) that the attribute applies to:**

Regular Trail:	Any agency-managed trail that is not a designated NST or NHT
NST:	National Scenic Trail (Congressionally Designated)
NHT[1] (Desig):	Route/s Congressionally designated as the National Historic Trail
NHT[2] (HR):	NHT-associated heritage resources (routes and/or sites)
NHT[3] (Rec):	NHT-associated recreation or interpretive route and/or site

B - **Attribute applicable to associated NHT heritage resource route or NHT recreation/interpretive route (trail or road).** Not applicable to associated NHT sites.

Attribute Color Coding:

Attribute applicable only to National Historic Trails (NHT)

APPENDICES

Appendix A (Normative)

FTDS Trail Fundamentals

Trail Type ▪ Trail Class ▪ Managed Use ▪ Designed Use

Updated: 10/16/2008

Note: The management concepts incorporated in the FTDS Trail Fundamentals are currently undergoing public notice and comment via the Federal Register under the leadership of the US Forest Service. Once this is complete and the final version published in the Federal Register, the FTDS Fundamentals will be revised as needed to reflect the final published version of these management concepts (June, 2010)

The Federal Trail Fundamentals include four concepts that are the cornerstones of effective trail planning and management:

- Trail Type
- Trail Class
- Managed Use
- Designed Use

Identify the four Trail Fundamentals for each trail or trail segment based on applicable land management plan direction, travel management decisions, trail-specific decisions, and other related direction.

Trail Fundamentals provide an integrated means to consistently record and communicate the intended design and management guidelines for trail design, construction, maintenance and use.

Trail Type

A category that reflects the predominant trail surface and general mode of travel accommodated by a trail

There are three Trails Types:

> **Standard/Terra Trail:** *A trail that has a surface consisting predominantly of the ground and that is designed and managed to accommodate use on that surface.*
>
> **Snow Trail:** *A trail that has a surface consisting predominantly of snow or ice and that is designed and managed to accommodate use on that surface.*
>
> **Water Trail***: A trail that has a surface consisting predominantly of water (but may include land-based portages) and that is designed and managed to accommodate use on that surface.*

This management concept allows managers to identify trail-specific Design Parameters or technical specifications, management needs, and the cost of managing the trail for particular uses and/or seasons by trail or trail segment.

1. Inventory trails and identify the appropriate Design Parameters or technical specifications, management needs, and management costs for trail using the Trail Types.

2. Identify only one Trail Type per trail.

3. Identify the Trail Type for each trail based on applicable land management plan direction, travel management decisions, trail-specific decisions, and other related direction.

4. Inventory both trails and Trail Types when two trails overlap, for example, when a Snow Trail overlaps a Standard Terra Trail.

Trail Class

The prescribed scale of trail development for a trail, representing its intended design and management standards.

Trail Classes are general categories reflecting trail development scale, arranged along a continuum.

There are five Trail Classes, ranging from the least developed (Trail Class 1) to the most developed (Trail Class 5):

Trail Class 1: Minimally Developed

Trail Class 2: Moderately Developed

Trail Class 3: Developed

Trail Class 4: Highly Developed

Trail Class 5: Fully Developed

Use Trail Classes to inventory trails and to identify the applicable Design Parameters or technical specifications and the costs for meeting trail management standards.

1. Identify only one Trail Class per trail or trail segment.

2. Trail Class descriptors reflect typical attributes of trails in each class. Local deviations from any Trail Class descriptor may be established based on trail-specific conditions, topography, or other factors, provided that the deviations are consistent with the general intent of the applicable Trail Class.

3. There is a direct relationship between Trail Class and Managed Uses: generally, one cannot be determined without consideration of the other.

4. Identify the appropriate Trail Class for each trail or trail segment based on the management intent in the applicable land management plan, travel management decisions, trail-specific decisions, and other related direction. Apply the Trail Class that most closely reflects the management intent for the trail or trail segment, which may or may not reflect the current condition of the trail.

For specifics on each Trail Class, refer to the National Trail Management Class matrix.

Managed Use
A mode of travel that is actively managed and appropriate on a trail, based on its design and management.

1. Managed Use indicates management intent to accommodate a specific use.

2. There can be more than one Managed Use per trail or trail segment.

3. The Managed Uses for a trail are usually a small subset of all the allowed uses on the trail, that is, uses that are allowed unless specifically prohibited. For example, on a trail that is closed to all motorized use but open to all non-motorized use, the Managed Uses could be Hiker/Pedestrian and Pack and Saddle. The allowed uses, however, would also include bicycles and all other non-motorized uses.

4. Identify the Managed Uses for each trail or trail segment based on applicable land management plan direction, travel management decisions, trail-specific decisions, and other related direction.

5. There is a direct relationship between Managed Use and Trail Class: generally, one cannot be determined without consideration of the other. Not all Trail Classes are appropriate for all Managed Uses. For guidance on the potential appropriateness of each Trail Class to each Managed Use, refer to agency-specific guidelines and reference material.

Designed Use

The Managed Use of a trail that requires the most demanding design, construction, and maintenance parameters and that, in conjunction with the applicable Trail Class, determines which Design Parameters or technical specifications will apply to a trail.

1. There is only one Designed Use per trail or trail segment. Although a trail or trail segment may have more than one Managed Use and numerous uses may be allowed, only one Managed Use is identified as the design driver or Designed Use.

2. Determine the Designed Use for a trail or trail segment from the Managed Uses identified for that trail. When making this determination, consider all Managed Uses that occur during all seasons of use of the trail or trail segment. Assess any essential or limiting geometry for the Managed Uses of the trail or trail segment to determine whether any trail-specific adjustments are necessary to the applicable Design Parameters or technical specifications.

    a. In some situations, when there is more than one Managed Use identified for a trail, the Designed Use may be readily apparent. For example, on a trail with Managed Uses of all-terrain vehicle and Motorcycle, all-terrain vehicle use would be the Designed Use because this use requires wider tread widths and has lower tolerances for surface obstacles and maximum trail grades.

    b. In other situations involving more than one Managed Use, the Designed Use may not be readily apparent, as is often the case when there are fewer differences between the applicable sets of Design Parameters than in the example above. For example, on a trail that is actively managed for hiker and pedestrian, pack and saddle, and bicycle use, pack and saddle use would likely be the Designed Use because of the three Managed Uses, pack and saddle use generally has the most limiting design requirements. While the Bicycle Design Parameters are very similar to the Pack and Saddle Design Parameters, the Design Parameters or technical specifications for this trail may need to be adjusted to accommodate bicycles.

Designed Use / Managed Use Types*

Hiker / Pedestrian
Pack and Saddle
Bicycle
Motorcycle
All Terrain Vehicle
Four-Wheel Drive Vehicle > 50” in Width

Cross-Country Ski
Dog Sled
Snowshoe
Snowmobile

Motorized Watercraft
Non-Motorized Watercraft

* Refer to agency-specific guidance regarding which of the Designed Uses and Managed Uses listed above are being used by a particular agency.

FTDS National Trail Management Classes

10/16/2008

Note: The National Trail Management Classes are currently undergoing public notice and comment via the Federal Register under the leadership of the US Forest Service. Once this is complete and the final version published in the Federal Register, the Trail Classes incorporated in the Federal Trail Data Standards will be revised as needed to reflect the final published version of these management concepts. (June, 2010)

Trail Classes are general categories reflecting trail development scale, arranged along a continuum. The Trail Class identified for a trail prescribes its development scale, representing its intended design and management standards.[1] Local deviations from any Trail Class descriptor may be established based on trail-specific conditions, topography, or other factors, provided that the deviations do not undermine the general intent of the applicable Trail Class.

Identify the appropriate Trail Class for each trail or trail segment based on the management intent in the applicable land management plan, travel management direction, trail-specific decisions, and other related direction. Apply the Trail Class that most closely matches the management intent for the trail or trail segment, which may or may not reflect the current condition of the trail.

Trail Attributes	**Trail Class 1** **Minimally Developed**	**Trail Class 2** **Moderately Developed**	**Trail Class 3** **Developed**	**Trail Class 4** **Highly Developed**	**Trail Class 5** **Fully Developed**
Tread & Traffic Flow	• Tread intermittent and often indistinct. • May require route finding. • Single lane, with no allowances constructed for passing. • Predominantly native materials.	• Tread continuous and discernible, but narrow and rough. • Single lane, with minor allowances constructed for passing. • Typically native materials.	• Tread continuous and obvious. • Single lane, with allowances constructed for passing where required by traffic volume in places where there is no reasonable opportunity to pass. • Native or imported materials.	• Tread wide and relatively smooth, with few irregularities. • Single lane, with allowances constructed for passing where required by traffic volume in places where there is no reasonable opportunity to pass. • Double lane where traffic volume is high and passing is frequent. • Native or imported materials. • May be hardened.	• Tread wide, firm, stable, and generally uniform. • Single lane, with frequent turnouts where traffic volume is low to moderate. • Double lane where traffic volume is moderate to high. • Commonly hardened with asphalt or other imported material.

Trail Attributes	Trail Class 1 Minimally Developed	Trail Class 2 Moderately Developed	Trail Class 3 Developed	Trail Class 4 Highly Developed	Trail Class 5 Fully Developed
Obstacles	• Obstacles common, naturally occurring, often substantial, and intended to provide increased challenge. • Narrow passages; brush, steep grades, rocks and logs present.	• Obstacles may be common, substantial, and intended to provide increased challenge. • Blockages cleared to define route and protect resources. • Vegetation may encroach into trailway.	• Obstacles may be common, but not substantial or intended to provide challenge. • Vegetation cleared outside of trailway.	• Obstacles infrequent and insubstantial. • Vegetation cleared outside of trailway.	• Obstacles not present. • Grades typically < 8%.
Constructed Features & Trail Elements	• Structures minimal to nonexistent. • Drainage typically provided without structures. • Natural fords. • Typically no bridges.	• Structures of limited size, scale, and quantity; typically constructed of native materials. • Structures adequate to protect trail infrastructure and resources. • Natural fords. • Bridges as needed for resource protection and appropriate access.	• Structures may be common and substantial; constructed of imported or native materials. • Natural or constructed fords. • Bridges as needed for resource protection and appropriate access.	• Structures frequent and substantial; typically constructed of imported materials. • Constructed or natural fords. • Bridges as needed for resource protection and user convenience. • Trailside amenities may be present.	• Structures frequent or continuous; typically constructed of imported materials. • May include bridges, boardwalks, curbs, handrails, trailside amenities, and similar features.
Signs[2]	• Route identification signing limited to junctions. • Route markers present when trail location is not evident. • Regulatory and resource protection signing infrequent. • Destination signing, unless required, generally not present. • Information and interpretive signing generally not present.	• Route identification signing limited to junctions. • Route markers present when trail location is not evident. • Regulatory and resource protection signing infrequent. • Destination signing typically infrequent outside wilderness areas; generally not present in wilderness areas. • Information and interpretive signing uncommon.	• Route identification signing at junctions and as needed for user reassurance. • Route markers as needed for user reassurance. • Regulatory and resource protection signing may be common. • Destination signing likely outside of wilderness; generally not present in wilderness areas. • Information and interpretive signs may be present outside of wilderness.	• Route identification signing at junctions and as needed for user reassurance. • Route markers as needed for user reassurance. • Regulatory and resource protection signing common. • Destination signing common outside of wilderness; generally not present in wilderness areas. • Information and interpretive signs may be common outside wilderness areas. • Accessibility information likely displayed at trailhead.	• Route identification signing at junctions and for user reassurance. • Route markers as needed for user reassurance. • Regulatory and resource protection signing common. • Destination signing common. • Information and interpretive signs common. • Accessibility information likely displayed at trailhead.

Trail Attributes	Trail Class 1 Minimally Developed	Trail Class 2 Moderately Developed	Trail Class 3 Developed	Trail Class 4 Highly Developed	Trail Class 5 Fully Developed
Typical Recreation Environs & Experience[3]	• Natural and unmodified. • ROS: Typically Primitive to Roaded Natural. • WROS: Typically Primitive to Semi-Primitive.	• Natural and essentially unmodified. • ROS: Typically Primitive to Roaded Natural. • WROS: Typically Primitive to Semi-Primitive.	• Natural and primarily unmodified. • ROS: Typically Primitive to Roaded Natural. • WROS: Typically Semi-Primitive to Transition.	• May be modified. • ROS: Typically Semi-Primitive to Rural • WROS: Typically Portal or Transition.	• May be highly modified. • Commonly associated with visitor centers or high-use recreation sites. • ROS: Typically Roaded Natural to Urban. • Generally not present in wilderness areas.

1 - For management standards, potential appropriateness of Trail Classes for Managed Uses, technical specifications by Trail Class and Designed Use, and other related guidance, refer to agency-specific guidelines and reference material.

2 - For standards and guidelines for the use of signs and posters along trails, refer to agency-specific guidelines.

3 - The National Trail Management Class matrix shows the combinations of Trail Class and Recreation Opportunity Spectrum (ROS) or Wilderness Recreation Opportunity Spectrum (WROS) settings that commonly occur, although trails in all Trail Classes may and do occur in all settings. For guidance on the application of the ROS and WROS, refer to agency-specific guidelines.

Appendix B (Normative)

National Historic Trail (NHT) Corridor Concept
Federal Trail Data Standards

National Historic Trails (NHTs) differ from "regular" trails, which can generally be described, inventoried, and managed as one linear route. This is not usually the case with NHTs. To better understand the inventory and management of NHTs, it is helpful to consider each NHT as an unofficial, informal "corridor", rather than a single line on a map. Each “NHT corridor” is comprised of two and often three aspects:

> **NHT^1 Designated Route**: What and where is the congressionally designated NHT route and associated NHT heritage sites? [NHT^1 is identified for all NHTs.]
>
> **NHT^2 Heritage Resources:** What and where is the route and sites where history actually occurred? [NHT^2 occurs on all NHTs, although physical evidence and/or remnants may no longer be present. Location may be other than the congressionally designated route.]
>
> **NHT^3 Recreation and/or Interpretive Trail/Road/Sites:** Where/what is the route and associated sites that people can use (i.e. trail/road/site used for recreation or interpretation)? [May or may not be present. NHT^3 location may vary from the congressionally designated route and/or original, historically used route.]

To be effective, NHT administrators and managers rely on data representing two to three of these various components that can occur within an NHT corridor. It is important to note that “corridor” is used here as an unofficial descriptive concept and not intended to imply the existence of actual area boundaries.

The Federal NHT Data Standards Team recommends this concept be adopted and used internally to better communicate and explain the management and data needs related to NHTs.

National Historic Trail Condition Categories

The National Historic Trail (NHT) Condition Categories are Federal standard classifications designed to assess the comparative character of visible trail remnants observed at the time of mapping for all NHTs. National Historic Trail Condition Categories are applicable to the heritage resource component of the NHT and not to the recreation or interpretive components. NHT Condition Categories do not reflect the character or integrity of the NHT setting or surrounding landscape.

The six NHT Condition Categories include:

NHT Condition Category	Title/Descriptor
NHT I	Location Verified, Evident, and Unaltered
NHT II	Location Verified and Evident with Minor Alteration
NHT III	Location Verified with Little Remaining Evidence
NHT IV	Location Verified and Permanently Altered
NHT V	Location Approximate or Not Verified
NHT VI	Location Verified with Historic Reconstruction

Because NHTs are designated for historic events spanning more than two centuries, NHT segments are classified based on their condition at the time of documentation, compared to their condition at the time of historic significance – be that undeveloped route, trail, primitive road, or surfaced transportation route.

The NHT Condition Categories reflect broad standardized categories that can generally be applied to all NHTs, and will be used to communicate condition status among all NHTs. Since the character of each NHT differs, however, the NHT Condition Categories may be further refined to reflect specific NHTs if needed and appropriate. Any such trail-specific refinements or sub-categories must still fall within the general logic and generally equate to the national NHT Condition Categories, and should be clearly documented with examples.

NHT Condition Categories Encompass:

1. Documentation of the historic location; and
2. Presence (or lack) of visible trail remnants and/or artifacts that provide evidence of the historic route.

Reference Terminology:

Archaeological Evidence: Physical manifestations (e.g. artifacts and features) of historical use or events related to the significant period of trail use.

Condition: A descriptor of the current trail appearance, including the look and feel of the trail, in comparison to the probable appearance of the trail during its period of significant historic use. In other words, to what degree does the trail still look like it did during its period of maximum historic importance?

Location Verification: The combination of written records (e.g. journals or letters), cartographic information, terrain limitations, visible trail remnants, and artifacts used to precisely locate a land or water based historic route. Location verification is an important part of the definition of condition categories.

Historic Reconstruction: The deliberate re-creation or simulation of an NHT segment based on the accurate duplication of historic location, features, and materials. Historic reconstruction re-creates the original appearance of the NHT segment.

Routes, Braids and Swales:

Route(s): Well-defined major variants of a historic trail. Most historic trails have various routes. They may be caused by divergent starting and destination points; changes in water, feed, and weather conditions; or the simple human desire to find a better, faster, and easier route. Routes are generally well defined, will be mapped at all scales, and should be reported to the Federal level for all historic trails. An example of routes for the California National Historic Trail are the Independence Road and St. Joe Road routes, which begin in different cities on the Missouri River and come together in Marysville, Kansas.

Braid: Routes frequently divide into braids. Trail braiding occurred when travelers found different routes around obstacles. One braid may go north of a butte and another south. At creek and river crossings braids spread out to find the best ford. If one braid was wet and marshy, a new braid was formed on higher, drier ground. Braids generally run more-or-less parallel to one another and are usually within a couple of miles of one another. Most braids are well known and are mapped at most scales. Whenever possible braids should be reported at the Federal level.

Swale: If trail data is recorded at the on-the-ground/GPS level, a third type of trail becomes visible. Physical evidence of the passage of historic travelers on the ground is often still visible. There may be many parallel swales running very close to one another. There are locations where 10-15 separate swales run parallel up a single ridge. Multiple swales occurred because travelers didn’t like to eat

one another's dust and would spread out whenever possible and also because old swales were often deeply rutted and muddy, making travel easier a few feet away. Although agencies may be documenting these swales at the GPS level of accuracy and detail, this information should not be reported at the Federal level.

Trace: A term normally associated with wagon and horse trails, that reflects visible, on-the-ground evidence of the travel along the route.

Visible Trail Remnant: The readily visible, remaining physical evidence of a trail or route that was established or made significant by historic use. For example trail trace, ruts, swales, rust marks, bridges, blazes, retaining wall, sidewalk, etc. Visible trail remnants do not include associated archaeological sites or features that are not directly part of the trail.

NHT Condition Category Definitions

Each NHT Condition Category is defined below, along with brief examples intended to illustrate the underlying logic of each category and to assist with the application of the categories to individual National Historic Trails.

NHT I: Location Verified, Evident and Unaltered

Description: The trail route is accurately located and verified from written and cartographic records, terrain limitations, and/or archaeological evidence.

The visible trail remnant retains the essence of its original character that relates to the historic period for which the trail was designated and shows no evidence of having been either impacted by subsequent uses or altered by other improvements.

For example, in the case of wagon trails, there is visible evidence of the original trail in the form of depressions, ruts, swales, tracks, or other scars, including vegetative differences and hand-placed rock alignments along the trailside. In the case of more contemporary historic trails, evidence may include constructed road features, sidewalks, railroad grades, etc. if significant to the historic events for which the trail was designated.

NHT II: Documented and Evident with Minor Alteration

Description: The trail route is accurately located and verified from written and cartographic records, terrain limitations, and/or archaeological evidence.

The visible trail remnant retains the essence of its character that relates to the historic period for which the trail was designated, but shows minor evidence of alteration by subsequent use, development, or natural events.

For example, in the case of wagon roads, there is little or no evidence of having been altered permanently by more modern road improvements, such as widening, blading, grading, crowning, or graveling. In forested areas, the trail may have been used for logging but still retains elements of its original character during the significant historic period.

NHT III: Documented with Little Remaining Evidence

Description: The trail route is accurately located and verified from written and cartographic records, terrain limitations, and/or some archaeological evidence.

Due to weathering, erosion, vegetative succession, development, etc., trail traces are insignificant, although some evidence remains (e.g. wagon wheel impact evidence such as rust, grooved, or polished rocks).

For example, this category includes trail segments that once passed through forests and meadows, across excessively hard surfaces or bedrock (such as on ridges), over alkali flats and sandy soils, through ravines or washes, or other environments not conducive to trace preservation.

NHT IV: Documented and Permanently Altered

Description: The trail route's location is verified from written and cartographic records, or by terrain limitations, although little or no archaeological evidence remains.

The trail has been permanently altered or obliterated by human-caused or natural events, leaving no evidence of its original appearance.

For example, the original trail may have been permanently altered by road construction through widening, blading, grading, etc. Other above or below-ground developments include pipeline installation, utility corridor development, building construction, etc.

NHT V: Approximate Trail

Description: The trail route's location cannot be accurately verified from written or cartographic records, or archaeological evidence.

The trail is either so obliterated or unverifiable that its location is only approximately known.

In many cases, the trail has been destroyed entirely by development, such as highways, structures, agriculture, or utility corridors. In others, it has been inundated beneath reservoirs. In some, there is not enough historical or topographic evidence by which to locate the trail accurately.

NHT VI Historic Reconstruction

Description: The trail route is accurately located and verified from written and cartographic records, terrain limitations, and/or archaeological evidence.

The trail segment has been deliberately reconstructed, at its original location, to appear as it did during the period of maximum historic importance.

For example, the reconstruction of a tow path or lock along an historic canal to simulate trail's original character and use.

Note: Reconstructed trail segments or associated features, not in the original location do not meet the definition of NHT VI Historic Reconstruction, and are considered as recreation, interpretive or other developments.

NHT Condition Categories: Comparison Summary and Classification Tree

The tables below provide summarized comparisons of the NHT Condition Categories and are intended for general comparative purposes only. Refer to the specific NHT Condition Category definitions and, if applicable, the supplemental discussion when attempting to assign the Condition Categories to a particular NHT.

NHT Condition Category Comparison Summary

NHT Characteristics	NHT Condition Categories					
	NHT I	NHT II	NHT III	NHT IV	NHT V	NHT VI
Location Verified	Yes	Yes	Yes	Yes	No	Yes
Historic Reconstruction	No	No	No	No	No	Yes
Trail Remnant Visible and Unaltered	Yes	No	No	No	No	No
Trail Remnant Visible and Altered	No	Yes	No	No	No	No
Trail Remnant Not Visible, but Archaeological Evidence Visible	No	No	Yes	No	No	No

NHT Condition Category Classification Tree

NHT Condition Categories: Classification Tree To classify an NHT trail segment, ask the following questions in order shown:					
1.	Is location verified?	if	**No**	then segment is:	**NHT V**
2.	Is location verified and historic reconstruction present?	if	**Yes**	then segment is:	**NHT VI**
3.	Is location verified, but the trail tread is permanently altered?	if	**Yes**	then segment is:	**NHT IV**
4.	Is location verified and original physical trail remnant visible and unaltered?	if	**Yes**	then segment is:	**NHT I**
5	Is location verified and original physical trail remnant visible, but altered?	if	**Yes**	then segment is:	**NHT II**
6	All remaining segments are:				**NHT III**

Application of NHT Condition Categories: Supplemental Discussion

This section provides additional examples and discussion to assist with the application of NHT Condition Categories to some common and/or potentially problematic situations. The examples provided below are not comprehensive and should be further refined as needed to reflect specific National Historic Trails, while remaining within the general context of the standardized NHT Condition Categories.

No trail categorization scheme can cover all situations with equal uniformity. In most situations, applicability of one of the six NHT Condition Categories is fairly straight-forward. Inevitably, however, there will be situations where more than one category might apply. In such cases, where there is no clear determination, the trail classifier will have to make a subjective decision based on a thorough observation and assessment to determine which NHT Condition Category best fits the NHT trail or NHT trail segment.

Origin of the Categories

The NHT Condition Categories were inspired by the Oregon-California Trails Association (OCTA) "Mapping Emigrant Trails" (OCTA 2002:13-15). The OCTA categories were devised for the emigrant trails across the western United States to describe, in particular, wagon and livestock trails. When developing NHT Condition Categories for Federal use, the OCTA categories were used as a starting point and were revised to be more broadly applicable to all NHTs, using the logic of trail location and trail appearance today relative to appearance during the period of the trail's use.

Relationship to National Register of Historic Places

The NHT Condition Categories do not incorporate the National Register of Historic Places concepts of integrity, or even significance. These National Register concepts are derived through analysis and consideration of the context of an historic resource. The NHT Condition Categories, by contrast, are *descriptive*. Specifically, "setting", as defined in the National Register of Historic Places, is not a consideration in assessing NHT condition: NHT Condition Categories describe the comparative condition of the route actually traveled and not the condition of the overall landscape in which the route currently exists.

The National Register concept of associative qualities is not incorporated into the condition categories. The associative qualities of an NHT are already incorporated into its designation and management.

Eligibility to the National Register of Historic Places is not part of NHT condition categories because the condition categories are independent of the National Register criteria. For instance, a trail segment may not be significant but still be in NHT I

Condition Category; another trail segment may be significant due to its association with some important event but be in NHT IV.

Effects of Modern Intrusions and Changes Around the NHT

Modern intrusions, such as freeways, power lines, or buildings situated near trails normally do not affect trail categorization, because the NHT Condition Categories describe the route's surface, not the landscape in which the NHT segment lies presently. Only the presence (or absence) of visible trail remnants, archaeological evidence, and/or knowledge of the trail's location affect categorization.

Logging, forest fires, or vegetation changes since the period of the NHT's maximum importance may have altered the trail corridor temporarily. However, over time, new growth has, or will have, restored the natural condition of the trail corridor. As long as the trail route is accurately known and the trail itself has not been physically altered, there will be no effect upon the Condition Category.

Often, the physical remains of a long NHT trail segment will be intermittently indistinct during certain conditions (e.g., in different seasons). In these cases, determining an appropriate NHT Condition Category requires multiple observations of the trail segment.

Application of NHT Condition Categories: Examples

Wagon and Livestock Trails

NHT I: Most emigrant trails still retaining evidence of original wagon use – in the form of ruts, swales, scaring, or tracks – probably have undergone later 19th century wagon use due to freighting, mining, stage, or ranching activity. Therefore, rarely will visible trail remains be the result solely of emigrant wagon use. Also because these wagon trails have had little or no use in the 20th century, either erosion or restoration have often changed their appearance where they no longer look like they did during use by the emigrants. Nonetheless, these trail segments still retain their emigrant wagon-use character and qualify as NHT I.

NHT II: Many times, historic wagon roads have continued to be used as *unimproved* roads since their period of historic importance. In these cases, even though the historic road is overlain by an unimproved two-track road, it still retains the essence of its historic appearance and is an NHT II Condition Category trail.

Occasionally, a superimposed, two-track road will have been abandoned and the NHT will have reverted in appearance to an "unaltered trail." However, if through research of historic documents, oral histories, or soil conditions, it can be demonstrated that the trail was once used as a road for motor vehicles, then it is classified as a NHT II Condition Category. Agency documentation for the trail segment should note that the segment is an abandoned road that spuriously seems "unaltered trail."

NHT III: Trails passing over soils and surfaces that did not easily take the imprint of a wagon wheel, or where erosion and other subsequent changes have obliterated the original trail tread, may still retain some evidence of the passage of emigrant wagons. Rust marks, grooves, and polish on rocks; rope burns on trees; and hub scrapes on rocks or trees allow verification of emigrant wagon travel even in areas where the trail tread itself may no longer be evident. The trail may also be verified in these areas by terrain limitations or archaeological evidence. Sections of trail that can be verified from these limited remains, but where no visible trail remnant remains should be classified as NHT III.

NHT IV: The trail condition has been permanently altered by subsequent development. Where *improved* roads, such as crowned and ditched roads, have been built over historic trails, the historic appearance is no longer retained and the trail Condition Category is NHT IV.

NHT V: In most cases, NHT V trails have been so obliterated by development that exact trail locations are impossible to determine. However, there will be situations where additional research and field verification may reveal the exact location of a trail segment which presently is known only approximately. Thus where trail location has not been determined due to insufficient research and field verification, a trail corridor should be protected from disturbance until it has been confirmed that physical or other evidence of a trail segment no longer exists.

NHT VI: NHT VI seldom exists for wagon and livestock trails. In rare cases trail tread may be reestablished in an area where the original trail has been completely obliterated. This reconstruction is usually done for interpretive purposes. For example: the pavement was removed from a section of the abandoned county road at Whitman Mission NHS and the trail returned to a more 19th century appearance.

"Urban" Trails

Examples of NHT Condition Categories applied to trails that originally occurred along roadways, sidewalks, railroads, or other developed travel ways:

NHT I: The NHT will have a Condition Category of NHT I if, for example, the original sidewalks that were used historically are unaltered in design, materials, construction method, and appearance along the original, verified, historical route. So, the concrete sidewalks of a block along a historic trail would be NHT I if they had been replaced with similar concrete slabs of the same dimensions and appearance.

NHT II: The NHT will have a Condition Category of NHT II if, for example, the original sidewalks that were used historically have been altered in design, materials, construction, method, but still retain much of their historical appearance along the original, verified, historical route. So, the concrete sidewalks of a block along a

historic trail would be NHT II if they had been replaced with asphalt sidewalks of similar dimensions, replaced with somewhat larger poured slabs, or modified in places by cut-ins for driveway ramps or wheeled vehicles. Another example of an NHT II condition class is a block with much of its original sidewalk still similar in appearance to its period of historic significance but with minor areas of very different sidewalk.

NHT III: The NHT will have a Condition Category of NHT III if, for example, the original sidewalks that were used historically are substantially altered in appearance as well as design, materials, and construction but one can still tell that it was the originally used location and one could still traverse the trail in a similar way. So, the concrete sidewalks of a block along a historic trail would be NHT III if the sidewalks were rebuilt completely with different materials, or very different dimensions, or of very different materials (e.g., paving stones instead of cement slabs). Another NHT III condition is a stretch of former sidewalk that has now decayed to rubble, or on which the paving slabs have been wholly removed.

NHT IV: The NHT will have a Condition Category of NHT IV if, for example, the original sidewalks that were used have been paved over by conversion of a street to a highway and removal of all sidewalk. So, the concrete sidewalks of a block along a historic trail would be NHT IV if they were covered over by buildings, parking areas, roadways, or in some other way obliterated, yet the original location of the trail is known.

NHT V: The NHT will have a Condition Category of NHT V if, for example, the original location of the trail cannot be verified. For example, the trail is known to have occurred from Point A to Point B, but no exact location for the route traversed is known.

NHT VI: The NHT will have a Condition Category of NHT VI if, for example, the trail has been completely replicated by reconstruction intended to restore the trail to a facsimile of its original appearance. Or, for instance, a bridge that was once present, but has then been removed and replaced with a new bridge designed to appear the same as the historic bridge.

Snow Trails

Examples of NHT Condition Categories applied to trails that originally occurred across snow, ice, or water:

[Note: Field assessment of snow and water routes often necessitates observation during periods when snow and ice are not covering the ground.]

NHT I: Trail is in a verified location. Evidence of previous use including primitive bridges, culverts, corduroy road surfaces, and blazes may be evident in the same manner and degree as existed during the trail's period of primary use.

NHT II: Trail is in a verified location. Some evidence of original use patterns including ruts, blazes, and dirtwork (ditches) are evident. Subsequent modern use by vehicles following the period of historic significance is evident.

NHT III: Trail is in a verified location. Original evidence of historic travel modes (sled trails, horse-drawn wagons, or sledges) is absent. Modern use (snowmobiles, ATVs) patterns are apparent. Old blazes on trees are found occasionally.

NHT IV: Trail is in a verified location. No evidence of historic use can be found. The trail surface has been modified or obliterated by subsequent use or construction.

NHT V: The trail location cannot be verified.

NHT VI: Trail is in a verified location. The trail has been rebuilt on its original location with a replica representation of the trail's historic appearance during its period of significant historic use.

Appendix C (Informative)

Frequently Asked FTDS Questions

Several frequently asked questions and answers about the Federal Trail Data Standards (FTDS) are listed below.

1. Why are you creating a new database?

This effort does not create any new databases. For the first time, four federal land management agencies have collaborated to standardize their definitions of commonly used trail terminology.

2. What are your ultimate goals?

Develop universal standards for core trail terminology and data attributes: Federal Trail Data Standards (FTDS). These standards will enable national, regional, state, and trail-level managers AND the public to use mutually understood terminology for recording, retrieving and applying spatial and tabular information.

3. Why are you creating more work for the field?

The Federal Trail Data Standards Team (Team) is developing commonality amongst the four agencies. The Team is NOT creating a new database, but is merely defining and standardizing terms that we have all used for decades. Existing databases may adapt these standards throughout the four agencies. Data exchange amongst managing units will be more efficient. Most importantly, there will be less confusion on the public's part as they access information about the trails they use.

4. How will GIS layers fit into this data model?

The FTDS outline common definitions, terminology, and core set of data attributes to be used by the BLM, FWS, NPS, and USFS for communicating and sharing trails information. There is no attempt here to develop data models or Geographic Information Systems (GIS). Rather, the standards will define the data that is displayed in your particular GIS.

5. How and who will maintain this system? How will we maintain and mesh this effort with existing databases?

Maintenance of your particular GIS and/or database will continue as before in your unit. This is not a GIS or a data model. The standards will not lead to the creation of new databases, but allow existing data to be described in a manner that is clearly understood and utilized by the four agencies.

6. How could such an effort foresee unique local situations?

No attempt was made to do so. The attributes that have been defined here are those that should be common to most databases nationwide. This does not prevent any unit from identifying its own data attributes and values to reflect the trail or agency-specific situation or information need.

7. Are there any standards or descriptors that could be used to ground-truth road, two-track, and/or trails?

These standards are for trails (see Federal Definition of a Trail[1]). While these trail data standards may have some applicability in the future development or refinement of road data standards, these standards focus on trails.

8. Has the FTDS Team reviewed the current Federal Geographic Data Committee (FGDC) Framework Standards as a basis for establishing these standards? Does this effort need approval by the Federal Geographic Data Committee?

The FTDS Team worked with the FGDC to publish the FTDS as a federal trail standard.

9. Is this a data request?

No, data collection and implementation schedules will be determined by each agency. The FTDS simply provide common definitions and terminology for a core set of trail information.

10. Do these standards deal with trail difficulty?

No, this level of detail is beyond the scope of the FTDS (see FTDS Core Questions[1]), and is up to the agency and/or specific managing unit.

11. Do these standards deal with facilities along the trail?

In general, the FTDS do not include standardized data definitions for facilities or "things along the trail" (i.e. constructed features, etc.). This level of detail is beyond the scope of the FTDS and more appropriate for individual agencies or entities to define, depending on their specific data needs (see FTDS Selection Criteria[1]). In the case of National Scenic and Historic Trails, however, basic data on National Scenic and Historic Trail-related visitor centers and visitor facility type, and National Historic Trail-related historic sites are included in the standards.

12. Who is the audience for this information?

The audience that will benefit from the Federal Trail Data Standards includes:
- Federal counterparts
- Congress
- Partner organizations

- General public (Media, trail users, info seekers, educators, researchers)
- Travel and Recreation Industry (service providers)
- Advisory boards
- Intra-agency Specialists (GIS, budget, facilities, resource specialists, cultural and natural, related biologists, etc.).

13. What units of measure shall we use? What projection shall we use?

The FTDS will be provided in miles (and/or feet when applicable). Most FTDS will be recorded with a beginning and ending measure point, allowing total miles/feet to be available at the Federal level, per FTDS attribute and attribute list of values. Databases and GIS have the capability of quick conversion to metric, if desired. Feet and miles are still the US national standards for measurement. NAD83 is the national standard.

14. What is the format in which this information should be reported?

The FTDS Team did not address database and presentation formats. The Team only addressed data standards – attribute definitions. It is up to the individual agency and/or user to decide which format to display data.

15. Why should we use these standards since they are not found in MAXIMO (FMSS in Park Service, FAMS in BLM, SAMMS in FWS)?

- **BLM:** BLM is adapting these standards into FAMS.
- **FWS:** FWS has incorporated these standards into SAMMS and into the trail inventory of all National Wildlife Refuges and National Fish Hatcheries. The first inventory was conducted by the Federal Highway Administration in 2007. A second inventory was planned for 2011.
- **NPS:** NPS is adapting these standards into FMSS.
- **USFS:** USFS has incorporated the majority of these standards into Infra Trails. The remaining standards have been through internal review and are planned for incorporation into Infra Trails and/or Infra Heritage (for certain NHT data fields).

16. Why is financial data addressed in these standards? Isn't this an unnecessary duplication of databases?

The FTDS define four very general categories of Annual/Cyclic Operations and Maintenance, Deferred Maintenance, and Capital Improvement Costs to facilitate apples-to-apples summation of costs between agencies and for long-distance trails crossing multiple agency boundaries (see FTDS Core Questions 11 and 12[1]). The FTDS do not address financial details of trail assessment and condition surveys. It is up to the managing unit to compute and store its own detailed trail maintenance and construction costs.

17. Why is it necessary to collect and assess detailed trails data in a multi-agency setting?

Each agency determines the specifics and extent of its data needs. This effort is in keeping with a government-wide effort to store, classify, and efficiently share important data that is useful to the general public.

18. How do we implement these standards?

Implementation is up to the individual agencies. The FTDS should be incorporated as each agency data management system is developed or refined.

19. How do these standards deal with "segmentation" of trails (especially long-distance trails)?

a. Trail Segment: "Trail segment", as used in the FTDS attribute definitions, is used as an informal term to identify that portion of trail that corresponds to the attribute "answer" or value selected for that attribute. It is not used in the FTDS definitions to identify or indicate officially recognized portions of trail, but rather to define the portion or entire section of trail to which a particular attribute value corresponds. The "segment" identified depends on the question being asked, or the data attribute and attribute value being recorded.

For example, the data attribute State may be recorded for Trail ABC as "Montana" from mile 0.0 to mile 24.55, Idaho from mile 24.55 to mile 54.70, and Utah from mile 54.70 to mile 61.22. In this case, the attribute State is recorded by using three different attribute values that correspond to three different "segments" of trail. Another example for the attribute State could be recorded as "Florida" for Trail QRS which lies entirely within the state of Florida, from mile 0.0 to mile 9.75. Hence the reference to "trail or trail segment" in several FTDS attribute definitions.

For those same trails, the data attribute Trail Class may be recorded for Trail ABC as Trail Class 3 from mile 0.0 to mile 35.50, and as Trail Class 2 from mile 35.50 to mile 54.70. Trail Class may be recorded for Trail QRS as Trail Class 4 from mile 0.0 to mile 1.74, and as Trail Class 3 from mile 1.74 to mile 9.75. Again, in these examples the "segment" refers only to the portion of trail where the recorded attribute value is applicable.

In these examples, there is no correlation between the informally identified "segments" recorded for State and the "segments" recorded for Trail Class, as the attribute values usually change at locations independent of other data attributes.

b. GIS Segmentation: Resolution of detailed spatial segmentation at the agency or trail-specific level is currently possible within various agency databases, depending on database capabilities, protocols, and data structure.

In the case of the USFS' Infra Trails, for example, all FTDS attributes are recorded as linear events, each with its own beginning and ending measure point (i.e. length). Most of these can also be displayed spatially by trail or identified attribute segment. Depending on the question being asked, a lump sum total can be queried to answer the question (i.e. Miles of Trail Class 2), or a "slice" or snapshot taken at any given point on a trail to display the entire combination of attributes and values recorded for that location (i.e. Attributes values for Trail Class, Managed Use, and Designed Use at mile 6.5). While the intent of the FTDS is not to go to this level of trail-specific detail, this example is provided to illustrate the possibility of incorporating the FTDS and the utility of identifying data attributes by informal or dynamic "segments".

20. What does "No Overlap Allowed" and "Allow Multiple Entries" on the List of Values (LOV) table mean?

The "Overlap Allowed" is used to indicate whether, for any one data attribute along a particular portion of trail, more than one value or LOV code can be concurrently assigned that attribute.

- **No Overlap Allowed:** Only one attribute value or LOV code may be recorded at any given location along the trail or trail segment. Multiple segments may be identified, each with the appropriately corresponding LOV.

- **Overlap Allowed:** More than one attribute value or LOV code may be recorded, if applicable, at any given location along the trail or trail segment. Multiple segments may be identified, each with the appropriately corresponding LOV(s).

The following data attributes may be recorded with more than one attribute code identified for the same location: Land Use Plan, Managed Use, National Trail Designation, Prohibited Use, NHRP Criteria, Prohibited Use, Shared System, Special Mgmt Area, Type of Route, and Visitor Facility Type.

- **Example:** For any particular stretch of trail, that portion of trail is physically located in only one County at that location, while that same location on the trail may have one or more Prohibited Uses. Therefore, there is no overlap allowed for the data attribute for County – only one County may be recorded for that specific location (either the trail segment, or the entire trail if applicable). The data attribute for Prohibited Use, however, does allow the entry of multiple values, if more than one actively Prohibited Use is defined for any given stretch of trail. In this case, only one County (i.e. Mineral County) could be recorded in any single location, but all Prohibited Uses would be recorded for that same location (i.e. ATV, Motorcycle).

The Beginning Measure Point (BMP) and Ending Measure Point (EMP) would not necessarily be the same for these two data attributes. For example, the trail may be in Mineral County from BMP 0.00 to EMP 6.42 (recorded in miles), while the Prohibited Uses of Motorcycle and ATV may extend for the entire length of the trail from BMP 0.00 to EMP 16.75.

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[1] Refer to corresponding sections of the Federal Trail Data Standards and associated reference material.

Appendix D (Informative)

FDTS Core Questions and Attributes Considered, but Dropped or Deferred for Further Consideration

Core Questions Considered but Dropped (Concept was considered in detail, but dropped from further consideration as indicated by text marked with a red strikethrough)		
Core Question		**Rationale**
General Questions for All System Trails (including NSTs and NHTs)		
Basic Information	~~What is the trail width? (average, max, min)~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~What is the trail depth? (average, max, min)~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~What is the trail elevation? (average, max, min)~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~What are the basic characteristics of the trail?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~• What is the trail width?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~• What is the trail grade? (average, maximum)~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~• What is the trail cross slope?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~• What is the landform prevailing side slope?~~	Too detailed, specific and/or costly for tracking at interagency level*
Management & Use	~~Maintenance histories~~	Interagency relevance? Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*
	~~Maintenance requirements~~	Interagency relevance? Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*
	~~What hazards exist on the trail?~~	Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*
	~~What is the safety rating?~~	Difficult to consistently define and quantify at interagency level. Too detailed, specific and/or costly for tracking at interagency level*
	~~Capacity (trails, associated developed sites, weight limits)~~	Difficult to quantify at interagency level: No interagency standardized capacity classification system exists Too specific/detailed for tracking at interagency level*
	~~Available (open and available?)~~	Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*
	~~Season of use~~	Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*
	~~Volunteers~~	Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*

Core Questions Considered but Dropped
(Concept was considered in detail, but dropped from further consideration as indicated by text marked with a red strikethrough)

Core Question		Rationale
Integrity & Setting	~~What is the protection status of the trail? (protected, threatened, unprotected)~~	Difficult to consistently define and quantify at interagency level, considering individual agency missions (i.e.. multiple use)
	~~How protected is the trail?~~	Difficult to consistently define and quantify at interagency level, considering individual agency missions (i.e.. multiple use)
	~~What is the ROS class?~~	Classification system not used by all 3 agencies. Too detailed, specific and/or costly for tracking at interagency level*
	~~What is the VRM class? (view shed)~~	Difficult to quantify at interagency level: No interagency standardized visual classification system exists. Too specific/detailed for tracking at interagency level
	~~What is the visual integrity of the trail viewshed?~~	Difficult to quantify at interagency level: No interagency standardized visual classification system exists. Too specific/detailed for tracking at interagency level
	~~What is the Landscape setting? (meadow, forest, farm land) i.e. Baily/Keuchler classification system for wilderness~~	Difficult to quantify at interagency level: No interagency standardized setting classification system exists. Too detailed, specific and/or costly for tracking at interagency level*
Heritage Resources	~~Is cultural/paleo clearance needed for maintenance?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~Are cultural/paleo features present?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~Historic sites~~	Too detailed, specific and/or costly for tracking at interagency level, although may have some interagency applicability for NSTs and NHTs*
	~~What documentation/historical research is available? (NHT)~~	Information available at local level. Too detailed, specific and/or costly for tracking at interagency level*
Adjacent Natural Resources	~~What is the prevailing land use?~~	Interagency relevance? Too detailed, specific and/or costly for tracking at interagency level*
	~~What is the ecosystem? (Ecology)~~	Interagency relevance? Too detailed, specific and/or costly for tracking at interagency level*
	~~Are there Threatened and Endangered species?~~	Duplicative: Tracked in other resource databases. Too detailed, specific and/or costly for tracking at interagency level*
	~~Geological features/resources (oil, fossils, minerals)~~	Duplicative: Tracked in other resource databases. Too detailed, specific and/or costly for tracking at interagency level*
	~~Forest resources~~	Duplicative: Tracked in other resource databases. Too detailed, specific and/or costly for tracking at interagency level*
	~~Natural resources~~	Duplicative: Tracked in other resource databases. Too detailed, specific and/or costly for tracking at interagency level*

Core Questions Considered but Dropped
(Concept was considered in detail, but dropped from further consideration as indicated by text marked with a red strikethrough)

Core Question		Rationale
"Things" Along the Trail	~~Where are the "things" on the trail (i.e. waterbars, dips, bridges, viewpoints, etc.)?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~What structures are along the trail?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~What features are monitored along the trail?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~What facilities are available along the trail?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~What constructed features exist along the trail?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~Signage~~	Interagency relevance? Too detailed, specific and/or costly for tracking at interagency level*
	~~Markers and monuments (survey, historical)~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~What coincident features exist along the trail?~~	Interagency relevance? Too detailed, specific and/or costly for tracking at interagency level*
	~~What things does the trail cross (junctions, intersections) what things cross the trail?~~	Basic information available from existing sources (i.e. Road layers, city locations)
Permits	~~Fees~~	Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*
	~~Permits~~	Interagency relevance? Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*
	~~What agreements exist? (leases, easements, ROWs, certifications, MOUs)~~	Interagency relevance? Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*
Visitor Info.	~~Visitors~~	Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*
	~~Visitor facilities~~	Too detailed, specific and/or costly for tracking at interagency level, although may have some interagency applicability for NSTs and NHTs*
	~~Visitor use information (numbers, demographics)~~	Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level*
Planning	~~What planning documents/decisions exist and how can they be obtained?~~	Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level, although may have some interagency applicability for NSTs and NHTs (i.e. NST/NHT Comprehensive Plans)*
	~~What year was the planning decision document signed?~~	Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level, although may have some interagency applicability for NSTs and NHTs (i.e. NST/NHT Comprehensive Plans)*
	~~What agency(s) developed the plan?~~	Too site-specific and dynamic. Too detailed, specific and/or costly for tracking at interagency level, although may have some interagency applicability for NSTs and NHTs (i.e. NST/NHT Comprehensive Plans)*
Misc.	~~What are the seasonal weather conditions?~~	Interagency relevance? Too site-specific and dynamic.
	~~How difficult is the trail?~~	Too detailed, specific and/or costly for tracking at interagency level*
	~~What social trails exist and what is their impact?~~	ITDS only apply to system, developed and/or managed trails. Tracking social trails considered too detailed, specific and/or costly for tracking at interagency level*

Core Questions Considered but Dropped (Concept was considered in detail, but dropped from further consideration as indicated by text marked with a red strikethrough)		
Core Question		**Rationale**
NHT-Specific Questions		
NHT-Specific	~~What is the potential for the visitor to view or experience the NHT route as it originally existed?~~	Does not meet interagency relevance or feasibility selection criteria.
	~~What is the area of the NHT-associated site?~~	Does not meet interagency feasibility selection criteria
	~~What threats exist t0 the NHT?~~	Too broad and/or not consistently applicable under agency multiple-use objectives.
	~~What changes in land uses could impair or enhance the NHT?~~	Too broad, subjective, and difficult to define/quantify.
	~~What is the historic integrity of the NHT routes and sites?~~	Basic information available from existing sources (i.e. Road layers, city locations)
Core Questions Considered but Deferred (Deferred for potential future consideration)		
NST / NHT	**NST & NHT Question:** What visitor facilities exist along the NST or NHT?	Question pending validation/development of data standards by RecOneStop Team or subsequent ITDS effort.
NHT	**NHT[1] & NHT[2] Question:** How much does it cost to manage the NHT? (administration, planning, construction, maintenance) Question deferred for NHT[1] & NHT[2] for resolution at later date. (NHT[3] included in Core Question 12.)	Important question, but resolution postponed because lack of readily available data, difficulty in consistently quantifying/answering between agencies (i.e. management of heritage resource sites), and current higher data priorities.

* Question too specific, difficult and/or costly to track, summarize and update at the interagency level (although may be valuable at the internal agency or trail-specific level for planning and management).

Attributes and/or Attribute Codes Considered but Dropped
(Concept was considered in detail, but dropped from further consideration as indicated by text marked with red strikethrough)

Attribute Name	Attribute Definition	Code	Code Definition	Notes	Rationale
~~ADMINISTRATIVE AGENCY~~	Agency or entity responsible for the land where the trail or trail segment physically resides.				*Attribute determined to be unnecessarily redundant; the information can be derived from the ITDS attributes "Agency Data Source" and "Admin Org"*
~~ASSOCIATION WITH NHT~~	Type of affiliation between Visitor Center to the NHT.	THEMATIC GEOGRAPHIC ETC…			
~~DATE RECORD CREATED~~	The date that the basic trail record was created.	yyyy/mm/dd	(8-character numeric: year/month/day)	USFS = Created_Date *(Infra Trails: existing)* *NPS=Day/Month/Year*	*Covered by ITDS Metadata Protocols applicable to all data*
~~DATE RECORD UPDATED~~	The date that the basic trail record was last updated.	yyyy/mm/dd	(8-character numeric: year/month/day)	USFS = Modified_Date (*Infra Trails: existing)* *NPS=Day/Month/Year*	*Covered by ITDS Metadata Protocols applicable to all data*
DESIGNED USE	The intended use that controls the desired geometric design of the trail, and determines the subsequent maintenance parameters for the trail. (One Designed Use per trail or trail segment)	~~VIEWED - NHT VIEWED, NOT TRAVELED~~	~~Designed Use is viewing, observation or appreciation of historically used NHT remnant, rather than actual use as a current travelway.~~	~~Code applicable only to those portions of designated NHT's that were historically used segments, now preserved for viewing & education.~~	*Attribute will not be applied to NHT[2] (visible NHT remnants preserved for observation & appreciation, but not as a current travelway)*
HISTORIC SIGNIFICANCE	The officially recognized historic significance of the trail segment.	~~INELIGIBLE~~ NOT ELIGIBLE	Site has been evaluated and determined to <u>not meet</u> the criteria for listing on the National Register of Historic Places, with SHPO/ACHP concurrence.		*Replace "Ineligible" with "Not Eligible"*

Attributes and/or Attribute Codes Considered but Dropped
(Concept was considered in detail, but dropped from further consideration as indicated by text marked with red strikethrough)

Attribute Name	Attribute Definition	Code	Code Definition	Notes	Rationale
~~HR AGE/PERIOD~~	Age or period of the NHT-associated heritage resource.	-	-	-	*Not needed at interagency level. Intent of this attribute can be generally derived from the NHT that the historic resource is associated with.*
~~HR FUNCTION~~	Function of the NHT-associated heritage resource.	-	-	-	*Standardized lists do not exist*
MANAGED USE	The mode(s) of travel that are actively managed and appropriate, considering the design and management of the trail. (One or more Managed Uses may be identified per trail or trail segment.)	~~VIEWED - NHT VIEWED, NOT TRAVELED~~	~~Managed Use is viewing, observation or appreciation of historically used NHT remnant, rather than actual use as a current travelway.~~	~~Code applicable only to those portions of designated NHT's that were historically used segments, now preserved for viewing & education.~~	*Attribute will not be applied to NHT[2] (visible NHT remnants preserved for observation& appreciation, but not as a current travelway)*
~~MANAGING AGENCY~~	Agency or entity that has long-term responsibility for management of the trail or trail segment.			No overlap allowed. In this context, "management" includes the planning, management, funding and the on-the-ground construction and maintenance of the trail. Managing Org usually is the same as Admin Org, but not always (as in the case of trails meandering across agency or unit boundaries, where an agreement has been established for one entity to take lead management responsibility for the trail). For NSTs and NHTs, this attribute represents the "trail manager" for that trail segment, and may or may not be the same as the NHT/NST Trail Administrator.	*Attribute determined to be unnecessarily redundant; the information can be derived from the ITDS attributes "Agency Data Source" and "Managing Org"*

Attributes and/or Attribute Codes Considered but Dropped
(Concept was considered in detail, but dropped from further consideration as indicated by text marked with red strikethrough)

Attribute Name	Attribute Definition	Code	Code Definition	Notes	Rationale
~~MILEAGE SOURCE~~	The source of the measure points recorded for the route segment.	ARC - Spatial Data			*Covered by ITDS Metadata Protocols applicable to all data*
~~PROXIMITY TO NHT~~	Proximity of the NHT-associated Visitor Center to the NHT.	ON NEARBY ETC…		For NSTs and NHTs, this attribute represents the "trail manager" for that trail segment, and may or may not be the same as the NHT/NST Trail Administrator.	*Considered to help answer the Core Question: What Visitor Centers are specifically associated with the NHT or NST? Dropped because of specificity and interagency relevance questions.*
SPECIAL MGMT AREAS	Land area, that may be of special management concern or interest, through which the trail or trail segment crosses. (For specifics refer to official definitions for the Congressionally, Presidentially and/or Agency-designated areas listed.)	~~ERMA - EXTENSIVE RECREATION MANAGEMENT AREA~~ ~~NCMPA - NATIONAL COOPERATIVE MANAGEMENT AND PROTECTION AREA~~ ~~NPRA - NATIONAL PETROLEUM RESERVE AREA~~ ~~SCK - SIGNIFICANT CAVE OR KARST~~ ~~SMA - SPECIAL MANAGEMENT AREA~~ ~~WWL - WATCHABLE WILDLIFE VIEWING AREA~~			*These types of designated special management area are not widely applicable.* *Record under "Other" and enter specific management area name in "Remarks".*
TRAIL ~~IDENTIFIER~~ NUMBER	The official identifier for the trail.				*Changed to TRAIL NUMBER*

Attributes and/or Attribute Codes Deferred (for potential future consideration)					
TRAIL INTEGRITY or *Adjacent Activity / Development ?*	The status of the trail and immediate trail setting in terms of adjacent activities and /or development.	INTEGRITY INTACT	No adjacent activities or developments exist that conflict with the values for which the trail is being managed,		Difficult to consistently define and quantify at interagency level, considering individual agency missions (i.e. multiple use).
		GRAZING - EXISTING, COMPATIBLE	Activity is present and does not conflict with the values for which the trail is being managed.		
		GRAZING - EXISTING, INCOMPATIBLE	Activity is present and does conflict with the values for which the trail is being managed.		
		GRAZING - PLANNED, COMPATIBLE	Activity is planned and does not conflict with the values for which the trail is being managed.		
		GRAZING - PLANNED, INCOMPATIBLE	Activity is planned and does conflict with the values for which the trail is being managed.		
		GRAZING - POTENTIAL, COMPATIBLE	Activity is possible and does not conflict with the values for which the trail is being managed.		
		GRAZING - POTENTIAL, INCOMPATIBLE	Activity is possible and does conflict with the values for which the trail is being managed.		
		TIMBER HARVEST - EXISTING, COMPATIBLE	Activity is present and does not conflict with the values for which the trail is being managed.		
		TIMBER HARVEST - EXISTING, INCOMPATIBLE	Activity is present and does conflict with the values for which the trail is being managed.		
		TIMBER HARVEST - PLANNED, COMPATIBLE	Activity is planned and does not conflict with the values for which the trail is being managed.		

Attributes and/or Attribute Codes Deferred (for potential future consideration)					
		TIMBER HARVEST - PLANNED, INCOMPATIBLE	Activity is planned and does conflict with the values for which the trail is being managed.		
		TIMBER HARVEST - POTENTIAL, COMPATIBLE	Activity is possible and does not conflict with the values for which the trail is being managed.		
		TIMBER HARVEST - POTENTIAL, INCOMPATIBLE	Activity is possible and does conflict with the values for which the trail is being managed.		
		ROAD - *(existing, planned, potential)*			
		UTILITIES - *(existing, planned, potential)*			
		OTHER DEVELOPMENT - *(existing, planned, potential)*		(specify in Remarks)	
VISITOR FACILITY ACTIVITIES	*Pending*			*Applicable to NST and NHT[3]. Optional for all other trails (information can be determined through other existing attributes.)*	
VISITOR FACILITY CONTACT INFORMATION	*Pending*			Applicable to NST, NHT[1] and NHT[3].	*Pending consideration, definition, development by RecOneStop Team…..*
VISITOR FACILITY LOCATION	*Pending*			Applicable to NST, NHT[1] and NHT[3].	*Pending consideration, definition, development by RecOneStop Team…..*

Appendix E (Informative)

Chronology of the Project

1. **The Genesis of the Federal Trail Data Standards:** May 2001

   At a meeting of Federal National Trails System administrators in Denver, Colorado, participants affirm a collective need to inventory, assess, and map trail locations and trail resources across multiple jurisdictions throughout the United States. They also recognize that consistent standards would facilitate the exchange of trail data.

2. **GPS Data Dictionary Team:** May 2001 to December 2001

   A team of agency representatives discuss the challenge and decide to pursue the production of two GPS (Global Positioning System) data dictionaries. One would be for National Scenic Trails and the other for National Historic Trails. Drafts of both data dictionaries are created.

3. **Evolution of the GPS Data Dictionary Team into the Interagency Trail Data Standards Team:** December 2001

   The GPS Data Dictionary Team realizes that the scope of the work needs to expand in order to fully address the needs first identified by the Federal National Trails System administrators. The Federal Interagency Council on Trails concurs and calls for the formation of an interagency team of trail, data, and subject-matter specialists who would develop national-level interagency trail data standards. The authority to form the team is based on a provision in the January, 2001, *Memorandum of Understanding for the Administration and Management of National Historic and National Scenic Trails*.

4. **Interagency Core Trail Data Standards Charter and Action Plan:** February 2002

   Agency representatives meet in Phoenix, Arizona to draft a charter for the Interagency Trail Data Standards Team. The charter calls for the establishment of a Core Trail Data Set to be used by the Bureau of Land Management, National Park Service, and US Forest Service in the collection, recording, and retrieval of trails data for National Scenic Trails, National Historic Trails, and other agency trails. Two potential action plans are outlined.

5. **Interagency Core Trail Data Identification Meeting:** July 2002

   At a meeting in Phoenix, Arizona, Interagency Core Trail Data needs are identified, the objectives and expectations of the Interagency Draft Charter and Action Plan are

reviewed, Core Data Review Criteria are established, the Interagency Definition of a "Trail" is crafted, and Interagency Core Trail Questions (Desired Data Outputs) are identified.

The Interagency Trail Data Standards Team begins the identification of data attributes, definitions, and lists of values. Two interagency work groups are created to follow-up on identifying and defining the remaining attributes.

6. **Completion of Draft Interagency Trail Data Standards:** August 2002 to April 2003

   The two work groups meet several times via conference calls and/or meetings to complete discussion, review, and development of the Draft Interagency Trail Data Standards. The Interagency Trail Data Work Group focuses on the draft standards applicable to all system trails, while the Interagency National Historic Trails (NHT) Data Work Group focuses on an additional subset of unique draft standards applicable only to National Historic Trails.

7. **Internal Agency Review of Draft Interagency Trail Data Standard:** May 1 to May 30, 2003

   The draft standards are circulated within the Bureau of Land Management, the National Park Service, and the US Forest Service for review and comment.

8. **Refinement of Draft ITDS Based on Comments Received from the Internal Agency Review:** June 2003 to April 2004

   The Interagency Trail Data Standards Team meets in Phoenix, Arizona in July 2003 to review the comments received from the internal agency review. Over the next several months, the team meets via conference calls to complete the crafting of a disposition document and the editing of the data standards files.

9. **External Review of Draft Interagency Trail Data Standards (ITDS Version 1):** May 1 to June 30, 2004

   The Draft Interagency Trail Data Standards (ITDS Version 1) are posted on a web site (http://www.nps.gov/gis/trails/) for review by agency partners, state trail coordinators, and other interested trail groups and individuals.

10. **US Fish and Wildlife Service Joins the Team:** October, 2004

11. **Refinement of ITDS Version 1 Based on Comments Received from the External Review:** July, 2004 to September, 2006

    The Interagency Trail Data Standards Team meets in Denver, Colorado in July 2004 to review the comments received from the external review. Periodic conference calls continue the work.

    Members of the team advance the incorporation and implementation of the Interagency Trail Data Standards within the Department of the Interior (National Park Service, Bureau of Land Management, and US Fish and Wildlife Service). Implementation is almost completed within the USDA Forest Service.

    A task team works with GIS professionals to refine the geospatial component of the data standards. A second task team contracts with North Carolina State University to do a proof of concept pilot project in which the ITDS is applied to a selected area in the Greater Yellowstone ecosystem.

    Core members of the ITDS team meet in Anchorage, Alaska in September 2006 to thoroughly review the ITDS Spreadsheet (Attributes, Definitions, LOVs, etc.)

12. **Public Review of Federal Trail Data Standards (ITDS Version 2) for Publication as FGDC Trail Data Standard:** March 6 August 8, 2008

    In FY2007 the North Carolina State University team was contracted to transform the ITDS into a Federal Geographic Data Committee (FGDC) Trail Data Standard. The Standard was presented in two separate parts:

    - *Data Content* provides semantic definitions of a set of objects. This part specifies and defines the data elements associated with trails.

    - *Data Transfer* describes how to produce or consume packages of data, independent of technology and applications that will facilitate moving data between agencies and systems.

    ITDS Version 2 – entitled “Federal Trail Data Standards (Public Review Draft)” – was posted on the web by FGDC for public review.

13. **Refinement of FTDS (Public Review Draft) Based on Comments Received from the Public Review:** September, 2008 to June, 2010

    Comments received from the public review were adjudicated by a core work group of the Interagency Trail Data Standards Team in Denver, Colorado in January 2009. The Interagency Trail Data Standards Team is renamed Federal Trail Data Standards

Team. In June, 2010, identified edits from the review were incorporated into the data standards in preparation for final publication by the FGDC.

14. **Final Step – FTDS Published as FGDC Data Standard:** November 2011

The Federal Trail Data Standards are published by the FGDC as the Federal standard document number FGDC-STD-017-2011.

Appendix F (Informative)

Acronyms and Abbreviations

Acronym	Definition
4WD	Four Wheel Drive
ACHP	Advisory Council on Historic Preservation
ADMIN	Administrative
ATV	All-terrain vehicle
BIA	Bureau of Indian Affairs (in Department of the Interior)
BLM	Bureau of Land Management (in Department of the Interior)
BMP	Beginning measure point
BOR	Bureau of Reclamation (in Department of the Interior)
CFR	Code of Federal Regulations
Desig	Designated
DEV	Developed
DOD	Department of Defense
DOE	Department of Energy
E-gov, E-Government	The Presidential E-Government Initiatives; Electronic Government
EMP	Ending measure point
ESRI	Environmental Systems Research Institute
FAA	Federal Aviation Administration (in Department of Transportation)
FAMS	Facility Asset Management System (Bureau of Land Management)
FGDC	Federal Geographic Data Committee
FICT	Federal Interagency Council on Trails
FMSS	Facility Management Software System (National Park Service)
FS	USDA Forest Service (in Department of Agriculture) [same as USFS]
FTDS	Federal Trail Data Standards
FWS	United States Fish and Wildlife Service (in Department of the Interior)
FY	Fiscal year
GIS	Geographic Information System
GPRA	Government Performance and Results Act of 1993 (P. L. 103-62)
GPS	Global Positioning System

Acronym	Definition
GVW	Gross Vehicle Weight
HR	Heritage Resource(s)
Infra	USFS Infrastructure Database (corporate database)
INTERP	Interpretive
ITDS	Interagency Trail Data Standards
Lat/Long	Latitude/Longitude
LOV	List of Values (also known as: "Code List", "Coded Domain", or "Coded Value Domain")
MAXIMO ™	Off-the-shelf asset-based work identification, work management, and work analysis program
MGMT	Management
MP	Milepost
MTR	Motorized
MOU	Memorandum of Understanding
NA	Not applicable
NEPA	National Environmental Policy Act of 1969
NGO	Nongovernmental Organization
NHT	National Historic Trail
NMTR	Non-motorized
No.	Number
NPS	National Park Service (in the Department of the Interior)
NRHP	National Register of Historic Places
NSPC	Not specified
NSSDA	National Standards for Spatial Data Accuracy
NST	National Scenic Trail
NTS	National Trails System
OCTA	Oregon-California Trails Association
OHV	Off-highway vehicle
OMB	Office of Management and Budget
ORG	Organization
OSV	Over-snow vehicle
P. L.	Public Law
Paleo	Paleontological

Acronym	Definition
REC, Rec	Recreation
RecOneStop	Recreation One-Stop (http://www.recreation.gov/)
Reg	Regular
ROS	Recreation Opportunity Spectrum
ROW	Rights-of-Way
SAMMS	Service Asset Maintenance Management System (US Fish and Wildlife Service)
SDG	Standards Development Group (for FGDC trail standards, the SDG is primarily comprised of the ITDS Team)
SHPO	State Historic Preservation Office
SWG	FGDC Standards Working Group
U.S.	United States
USACE	United States Army Corps of Engineers (in Department of Defense)
USC	United States Code [of Federal Regulations]
USDA	United States Department of Agriculture
USFS	USDA Forest Service (in Department of Agriculture) [same as FS]
USGS	United States Geological Survey
WROS	Wilderness Recreation Opportunity Spectrum
WSR	Wild and Scenic River