TRAIL COMPETENCY FRAMEWORK PROJECT

Project Origin

Over the past year, a group of nationwide trail professionals representing federal agencies, trail nonprofits, and the private sector, coordinated by American Trails, initiated this project to develop a common trail competency framework.

Purpose

Seeking to promote professionalism as well as a higher level of skill for those working in trails through shared language around trail skills and expertise, the purpose of the resulting project was to codify a competency framework that would create opportunities to align, integrate, and coordinate trail trainings nationwide; communicate needs for technical trail expertise; and increase the overall skill level of the trail workforce.

Study Design

Employing a Modified Delphi study design to develop and validate this set of core competencies, the study adopted a two-phase approach.

- Phase 1 sought to draft competency statements from existing literature in the field and the input of the project team members.
- Phase 2 employed an online survey. This survey sought feedback on several measures per competency: (a) the degree of consensus (b) the level of agreement for each persona, or skill, level (e.g., percentage selecting entry, full professional, or expert). More than 500 participants were recruited through expert referral & snowball sampling.

Expert Input

Ultimately, 220 individuals participated. Respondents represented a variety of government institutions at state and federal levels. Additionally, nearly half represented a nonprofit or private organizations. The respondent group indicated substantial experience within the trails industry; the typical respondent had nearly 19 years of trail experience.

Institutional Representation of Respondents

Institution or Organization	Count	%
Federal	87	40%
Bureau of Land Management		
National Park Service		
United States Forest Service		
State System	23	10%
Private	70	32%
Nonprofit	29	13%
Other	11	5%
Grand Total	220	100%

Location of Respondents



Distribution of Years of Trail Experience among Respondents



American Trails | Bureau of Land Management | Federal Highways Administration | National Park Service | Professional TrailBuilders Association | Trailhead Consultants | U.S. Forest Service



COMPETENCY FRAMEWORK OVERVIEW

Competencies by Competency Group		
Trail Construction		
Construction Specifications Corridor Clearing Hand-Built Trail Construction Mechanized Trail Construction Trail Finishwork Water Management/Drainage Features	Water Crossing Structures Retaining Walls Tread Hardening Trailside Structures / Dispersed Recreation Decommissioning Trails	
Trail Maintenance		
Maintenance Specifications Inventory & Assessment Corridor Clearing: Power tools Corridor clearing: Hand tools	Tread Maintenance - Hand tools Tread Maintenance - Mechanized Equipment Drainage Features/Water Management	
Project Preparation		
Land Use Plan Alignment Define Purpose and Need of Project Corridor Planning	Stakeholder Engagement Justice, Equity, Diversity, and Inclusion (JEDI) Principles	
Project Planning and Design		
Project Cost Estimation Implementation Plan Trail Specifications Design	Trail Plans Interpretation Permitting Universal Design/ADA Accessibility	
Project and Crew Management		
Crew Recruitment Crew Management Jobsite Safety	Jobsite Risk Management Performance Management Field-based Resource Protection	
Program Administration and Leadership		
Program Budgeting Communications Contract Administration Education and Public Outreach Funding/Grants	Inspections/Monitoring Partnership and Collaboration Policy/Directives/Law Visitor Use Management and Monitoring Agreement Development	

Respondents also indicated the persona (i.e., skill) level that was most appliable to a given competency across three "persona", or skill, levels: Entry, Full Performance, and Expert. This level of detail will be published in the full report.

Next Steps

This project opens a door for several next steps. For example, future project work might consider developing a definition differentiated by persona level and/or specialty competencies.

Use Cases

Possible uses within an organization include:

- 1. Identifying skill or knowledge gaps among trail professionals
- 2. Guiding the development and delivery of training opportunities
- 3. Communicating the needs for a position or evaluating prospective hires

Across organizations, a competency framework can:

- 1. Help promote professionalism and a higher level of skill through shared language around trail skills and expertise
- 2. Provide the structure for a coordinated approach to trail training nationwide

Reflections & Thanks

Trails are important corridors that connect users to spaces of natural, cultural, and historical significance. This project sought to serve as an initial, but crucial, component in a longstanding process to increase the overall skill level of the trail workforce so as to build, maintain, plan, and manage the nation's trails well into the future.

The joint project team sincerely thanks the trail experts who shared their time and expertise through participating in this project. Their input was crucial in the development of this competency framework!



