



## 12<sup>TH</sup> ANNUAL TRAIL FORUM AGENDA

Charles Mack Citizen Center  
 Mooresville, NC  
 Thursday, December 5, 2019

- 8:30-9:00 Registration
- 9:00-9:30 Welcome and Introduction (Lowrance Room)
- 9:40-10:40 **Concurrent Session #1**
- ***Trail Construction and Archaeological Surveys: Assessment Methodologies and Discovery Protocols (Merchant Room)***  
Brittany Prinz, Long Range Planner II, York County Planning and Zoning Department  
L.M. Drucker, Ph.D., RPA, Adjunct Faculty, University of South Carolina & Columbia College, AF Consultants
  - ***Water Resource Planning and Design for Resilient Trail and Recreational Facilities (Cedars Room)***  
Jacob McLean, PE, CFM, Wildlands Engineering  
Aaron Earley, PE, CFM, Wildlands Engineering
  - ***Emerging Technology - Emerging Trail Users: How EBikes and Electric and Autonomous Vehicles are Affecting Trail Development (Peddler Room)***  
John Cock, AICP, Vice President Planning/Southeast Region, Alta Planning + Design  
Joe Michel, Chief eBike Officer, eBike Central  
Ross Atherton, VP/GM, Ingersoll Rand/Club Car  
Will Washam, Bicycle Program Coordinator, Charlotte Department of Transportation
- 10:40-11:00 Break
- 11:00-12:00 **Concurrent Session #2**
- ***Taking the Path Towards Mobile Mapping for Trail Data (Merchant Room)***  
Sean Bloom, Biologist and GIS Director, Catawba Lands Conservancy and Carolina Thread Trail
  - ***Sustainable Natural Surface Trail Maintenance (Cedars Room)***  
Scott Brown, Managing Partner, Blue Ridge Trail Works Inc.  
Bob Karriker, Lead Trail Supervisor, Blue Ridge Trail Works Inc.
  - ***Sticker Shock! How Investing in Feasibility Studies Reduce Risk, Cost, Schedules and Stress (Peddler Room)***  
Iona Thomas, AICP, McAdams, Director, Public  
Jason Pauling, AICP, Senior Planner, City of Concord Parks and Recreation Department
- 12:00-1:30 Lunch - Gary Vernon, Program Officer, Head of Trail Development, Walton Family Foundation (Lowrance Room)
- 1:30-2:30 **Concurrent Session #3**
- ***Creating Historically Themed Trails Through Unique Collaboration (Merchant Room)***  
Jeff Ashbaugh, PLA, Senior Project Manager, Alfred Benesch & Company  
Jon Wood, PLA, Senior Park Planner, Alfred Benesch & Company  
Ben Richardson, Chief of Planning and Partnerships for the Southern Campaign of the American Revolution Parks Group, National Park Service  
Paul LaFrancios, Ph.D., Professor of Economic and Chair of Professional Studies, Limestone College
  - ***Harnessing the Power of Volunteers (Cedars Room)***  
Vanessa Covington, Engagement and Volunteer Manager, Catawba Lands Conservancy and Carolina Thread Trail  
Karen Howard, LRT/CTRS, Volunteer Services/Commemorative Events, Mecklenburg County Park & Recreation Department
  - ***2020: A New Frontier for Greenway Costs (Peddler Room)***  
Gabe Dobbs, PE, Senior Active Transportation Planner, LandDesign  
Brian Bennett, PLA, ASLA, Project Manager, Mecklenburg County Asset & Facility Management  
Katie Lloyd, PLA, ASLA, Planner, Mecklenburg County Park and Recreation Department  
Curtis Bridges, AICP, Principal Planner, Charlotte Regional Transportation Planning Organization
- 2:30-2:50 Break
- 2:50-3:50 **Closing Session**
- ***Noah Wilson, Program Director, Growing Outdoors Partnership, Board Secretary, NC Outdoor Recreation Coalition & Advisory Council (Lowrance Room)***
- 3:50-4:30 Wrap up - Trail Forum survey and raffle

**Trail Construction and Archaeological Surveys: Assessment Methodologies and Artifact Discovery Protocols** Archaeological assessments are common requirements for state or federal construction grant monies, even local governments can require a survey in a culturally significant area. The Founders Trail, in Fort Mill, South Carolina, was required to conduct an archaeological survey not only for the South Carolina Parks, Recreation, and Tourism Grant requirements, but also because of the trail's proximity to a prehistoric, Catawba Indian, fish weir. This presentation will explain the methodologies used in archaeological assessments, especially those used in trail construction, and the protocol to follow if cultural artifacts are discovered.

**Water Resource Planning and Design for Resilient Trail and Recreational Facilities** Natural waterway corridors are a common setting for trail and recreational facility development. In urban areas, these corridors are already stressed to provide the "green" or "ecosystem" services that we rely on. In less densely developed areas, there are likewise both challenges and opportunities associated with trails alongside or across waterway corridors. This presentation will focus on what has been learned from working on projects in these settings. The session will explore greenway planning and design, along with complimentary stream and stormwater projects in Asheville, Charlotte, Greenville, SC, and other locales.

**Emerging Technology - Emerging Trail Users: How EBikes and Electric and Autonomous Vehicles are Effecting Trail Development** Emerging technologies such as e-bikes, e-scooters, neighborhood electric vehicles, and autonomous vehicles represent a new group of trail users that we must consider for trail design and management. These new modes of trail use introduce challenges such as increasing the speed differential between users on the trail, creating potential trail user group conflicts, and requiring different trail design and amenities. Some trail managers are working to develop trails that incorporate these new modes to provide a trail system for all users, embracing these emerging technologies. This presentation will discuss the unique aspects and challenges to designing for these emerging technologies.

**Taking the Path Towards Mobile Mapping for Trail Data** Moving from trail data collection with GPS units, paper and pen to online mobile mapping tools can be daunting, but Catawba Lands Conservancy (CLC) recently made the change. This session will explore the mobile mapping tools CLC created with ESRI's ArcGIS Online and ArcGIS Pro platforms. Specifically, the presenter will discuss how CLC is utilizing Collector, Survey 123, Dashboard, and StoryMaps to create more efficient workflows, reduce the risk of data loss, and collect trail data from the public. The presenter will also discuss how the tools were developed and how other non-profits and municipalities can begin developing their own tools.

**Sustainable Natural Surface Trail Maintenance** This session will discuss the different components needed in the maintenance of natural surface trails. The presentation will examine the two types of trail maintenance, basic/light maintenance and advanced/heavy maintenance. While both types of trail maintenance require differing levels of thought, effort, and time, they are both necessary for the continued sustainability of natural surface trails. This discussion will also consider the impacts of flooding on trails and trail bridges, as well as determine ways to assess rising water levels and potential effects of flowing water.

**Sticker Shock! How Investing in Feasibility Studies Reduce Risk, Cost, Schedules and Stress** Communities struggle to accurately scope the design and construction phases of bicycle and pedestrian projects during the prioritization and budgeting process. This discussion will provide recommendations for the right questions to ask during scoping to develop more accurate project budgets and avoid underfunding. This session will address feasibility methodology and cost estimating as well as provide the municipal perspective on investing in feasibility analysis, the action items associated with executing the plan, and working with City Councils and community action groups.

**Transformation Through Trails** Many know Bentonville, Arkansas as the home of Wal-Mart. However, did you know that through the transformational vision of Wal-Mart's philanthropic organization, the Walton Family Foundation, NW Arkansas is being internationally recognized as a trail destination? Hear the story of how a passion for mountain biking inspired the Foundation to lead, assist, and collaborate to create a world-class network of mountain bike trails and greenways. In sharing this story, the presenter will discuss the celebration of success and the overcoming of challenges in this project, all aimed at keeping us motivated to continue pursuing our trail initiatives

**Historical Trails: Bridging the Past, Present, and Future** This session will present an overview of unique historical trails with a highly collaborative planning element. The presentation will include the Yadkin River Trail in Davidson County, NC, and the Overmountain Victory National Historic Trail in Cherokee County, SC. These historical trails were developed for tourists and the public to experience the historical importance of an area, to provide educational destinations for teachers and students, to re-connect people to riverfronts, and to attract economic activity in small town communities.

**Harnessing the Power of Volunteers** Volunteers make community happen! Learn how two different outdoor entities utilize volunteers to support our local outdoors. Carolina Thread Trail has utilized volunteers since 2007 to serve on advisory committees, increase community awareness, implement trail construction and maintenance, and support special events and programming. Mecklenburg County Parks and Recreation has a robust year-round volunteer program that includes opportunities to support its staff in park projects and maintenance. Get an insight into how this municipality harnesses the power of its residents to aid in their natural spaces.

**2020: A New Frontier for Greenway Costs** This session will focus on presenting information about greenway costs, showing a variety of tools developed by professionals in the public and private industry. Presenters will share a bid item cost analysis tool developed in the private industry and rolled out at LandDesign. Using cost of construction information across multiple County greenway projects, they will assess trends in material costs and generalized percent of overall construction costs across disciplines. Presenters will discuss greenway construction cost implications in long-range County capital planning and present a demonstration of a new cost estimator tool being used at the regional level.

**Outdoor Recreation Driving Economic & Community Development** This presentation will bring both a statewide perspective on how NC is investing in its recreation economy (and the benefits that recreation brings to the state), as well as a national perspective from the presenters experience working with other recreation coalitions and organizations across the US as a consultant and collaborator. The discussion will highlight thriving local economies that are growing thanks to outdoor recreation, strong regional coalitions that cross all sectors both public & private, and what makes our shared investments in recreation infrastructure so critical to our state's 21st century economy & communities.