

# NTS GIS Network- Meeting Minutes

Tuesday, August 20, 2019 1:00 pm Mountain Time (12pm PT, 2pm CT, 3pm ET)

## MEETING AGENDA

### 1. Welcome & Introductions (Peter Bosnall/Kerry Shakarjian)

Meeting Attendees:

1. Angie Southwold (Presenter) - NPS Alaska Region GIS
2. Peter Bosnall (moderator)
3. Kerry Shakarjian (moderator) - NPS Intermountain Region GIS
4. Anthony Tridente - USFS, Florida National Scenic Trail
5. Jereme Monteau - CTO & OuterSpatial
6. Matt Colwin, NPS MWR Geospatial Resources
7. Matthew Schulte, Santa Fe Trail Association
8. Gita
9. Nell Conti - NPS IMR GIS Coordinator
10. Ryan Branciforte - OuterSpatial
11. Philip Marley - USFS-Florida National Scenic Trail
12. Heidi Ogle - NPS IMR GIS
13. Greg Matthews - USGS, National Digital Trails Project
14. Tiffany Stram - GIS/IT Specialist, Ice Age Trail Alliance, Cross Plains, WI
15. Don Owen - Partnership for the National Trails System
16. Reese Hirth - NPS, Geographer
17. Elizabeth McCartney (USGS) National Digital Trails Project, USGS

### 2. Announcements & Information from Audience

- a. ArcGISPro Keyboard Shortcut Poster now available:  
<https://www.esri.com/content/dam/esrisites/en-us/media/pdf/g526942-arcgis-pro-kybrd-shrtct-Final.pdf>
- b. PAD-US 2.0 has been released. USGS Technical Announcement: <https://go.usa.gov/xy8ZP>
- c. Additional updates?

### 3. Discussion Topic

**Presenter – Angie Southwold, NPS Alaska Region, Lead GIS Data Manager**

#### ***Maintaining Trail Data in Alaska Region Parks***

After working with Trail Specialists and Facility Managers in Alaska parks, the Alaska Region GIS Team designed a regional Trail Spatial Data Standard in 2013 intended to streamline field data collection and work as seamlessly as possible with the NPS Facilities Management Software System (FMSS). In the six years since initial implementation, we've learned many lessons that have helped us make continual improvements to the design and workflows surrounding data collection and maintenance. Please join us to learn more about this journey.

#### **Notes:**

- Driving forces to create a Trail Standard - upcoming USGS topo maps, goal to improve relationship with FMSS facilities database and GIS by involving FMSS staff.
- Using National Data Standards as much as possible to be able to roll up Trails data nationally
- GIS data feature classes: Trail Centerline, Trailside Feature Point, Trail Point, Trail Deficiencies
- Trail Centerline - inventory of NPS trails, can add additional trails as seen fit
- Trail Attribute Point - Point for a segment change related to any management change such as trail width, trail surface, trail type etc.
  - Frees up to collect a clean trail line
  - Synced with line later in the office
  - Can review/sort data by surface type locations or trail width locations
- Trailside Feature Point - features along the trail such as bridges, benches, signs, trailhead which will be tied back into FMSS
  - Anything constructed and built to keep track of in the FMSS system
  - FMSS ID is the direct tie between GIS and FMSS allowing exports from FMSS to connect all the information to GIS from FMSS without having to house this information in GIS

- Data Dictionaries provided to parks have list of fields and domains from FMSS to collect a new feature
  - Additional attributes from FMSS and are not carried over to GIS since this data will be housed in FMSS.
  - Avoids duplicate data in GIS and FMSS. Can pull directly from FMSS
- Trail Deficiencies - allows user to drop a point in the field for something that needs to be fixed or replaced or any other point in the field such as a drain or culvert
  - Anybody can use this if they are going in the field and happen to be using a trail. If there is something they notice they are able to collect it.
- Divide different Trail feature classes between multiple GPS's so multiple people can be collecting data at the same time for different feature classes. Keeps data clean and streamlined.
- Can store a wheeled distance if needed, but also use GIS to calculate length as well. There is a difference between these lengths to be aware of (horizontal vs slope distance).
- Photo documentation is huge so a second trip into the field isn't needed. Photos can be used to answer questions if needed. Photos will be used to attach to points.
- Bridges are captured with start and end points where a line can be created between the points to have a bridge line segment as part of the trail line
- Trimble Data Dictionaries are created to streamline data collection with minimal fields during field collection to make it smooth.
  - Facility Managers are in mind when field collection was created
  - Dictionary can have presets built in before going into the field based on what is being collected and business rules within the data Ex: Social Trail vs NPS Trail or Winter Route vs defined Trail path on the ground
- Rule: Don't change the dictionary, don't delete anything or change the dropdown domain list
  - or else these changes make it not as seamless in the post processing side
- GeoJot - geotags photos, allows watermarking of photos including ID's such as FMSS IDs or lat/longs or dates
- In NPS Alaska Region 100% of Trail Centerlines are collected but still need to continue with Trailside points. Its a continuous effort working with Parks and other staff.
- Post editing workflow: QA/QC process has to occur to make sure Business Rules are not broken before data is merged with final dataset.
- Current project is producing a web map for FMSS facility personnel to see their FMSS data in a map. Currently using roads/trails for this process.

#### 4. Future Meeting Dates & Topics

- September 17, 2019** - Trail Finder: <https://www.trailfinder.info/>
- October 15, 2019** - Greg Matthews, COU Coordinator USGS, Digital Trail Project Platform Update
- November 19, 2019** - Brian Deaton and Sara Rivera, NPS National Trails Intermountain Region, NTIR's mapping of the annual commemorative re-ride by the National Pony Express Association of the Pony Express NHT.

**We always welcome suggestions for additional topics for discussion or presentations. Please contact Ryan Cooper, Peter Bonsall, and/or Derek Nelson with your suggestions!**

**NTS GIS Email Address:** [ntsgis@nps.gov](mailto:ntsgis@nps.gov)

**NTS GIS Network Email List:** [ntsgis@webmail.itc.nps.gov](mailto:ntsgis@webmail.itc.nps.gov)

**NTS GIS Network Website:** <https://pnts.org/new/national-trails-system-gis-network/>

#### **NTS GIS Network Mission:**

*We established the NTS GIS Network as a way to connect the diverse array of National Trails System staff and partners who use GIS systems and products in their work. One of our goals is to facilitate the sharing of information and tools that help us do our jobs more efficiently and innovatively. Because the national trails system is managed as a collaboration of agencies and partner organizations, the NTS GIS Network is open to anyone.*