People collecting data in the field can use simple programs like Evenza, Cal Topo, Gaia,

But then for creating a MET map you need a mapping program which gets more complex.

We have two classes of users –

people who want to get out into the field and map, and

people who want to get into the complexity of mapping programs on the computer.

What does OCTA want?

* A line on a map representing the trails?
* Or collected data, categorized, and turned into maps that conforms to the MET Manual?

How do we quality control check the data?

 Centralized or decentralized data?

Need to invest a fair amount of time in becoming familiar and adept with any of these software packages

Terrain Navigator Pro

Pros

* By the use of markers it records the collection of data
* Symbology allows us to identify various types of data
* Easy to put a track on a map
* Can be done manually or be downloaded
* Emulates the original MET manual suggestion – can’t put a circle around your class
* 3D view and rotation capable
* You can import geo-referenced overlays from various sources
* You can geo-reference quite accurately
* You can look at basemaps, satellite images, at several different scales
* You can examine the route profiles
* You can export a georeferenced TIF from TNP to put into Evenza as a basemap
* It’s easy to learn
* Extremely responsive customer service, has initiated changes to TNP based on our questions
* Export .shp file

Cons

* Expensive
	+ Subscriptions based on states
* Layers are aggregated into one category and you can’t separate those
* Difficulty exporting and importing into other programs
* Change in symbology of markers, you have to do it one at a time. Can’t do it as a group.
* Have to do length conversions outside the program
* TNP satellite views are not great
* Layout of UTM coordinates is not great
* Can lose information from labels in TNP when data is exported
* Issues with quality control – one person can’t see all the data coming in
* Preliminary, clumsy mobile app, not user friendly

ArcGIS

Pros

* Allows for different file types to be imported in, GPX, KML
* Standard GIS software that is used
* Can have separate data files for different sets of data with different symbology
	+ Ways to save those data sets to maintain that symbology so if someone else opens it they’ll see the same icons
* Standardized fields so the same data is collected and there is not loss of data
* Centralized data set that can be edited by everyone that has access and can add their data to that instead of having individualized pieces
* Ability for quality control – a single person can review all of the data being created by many individuals
* You can streamline from field use, to desktop, to online
* This is what federal agency and other land managers use
* Survey 123 integrates with ArcGIS and allows for ease of editing
* Can set up a series of attributes so you can have items stored on your phone that you want to reference in the field
* Survey 123 is simple for having field users collect data and then having someone else take that data and create a Met map.
	+ Not all of us need to learn ArcGIS for people to contribute
	+ Can use ArcGIS online to review their data
	+ MET map makers can use ArcGIS desktop or pro
* Ability to export a .shp file
* $100/year/person

Cons

* Learning curve
* System is designed for data analyses and display
	+ Possible to develop an ArcGIS for dummies manual that just takes on the things we want to do.
	+ Can create template projects so the look would be the same for everyone within OCTA and to make it easier to navigate.
	+ Could have a centralized data set that you would always have in a user’s map, and user’s can edit specific data sets
* Need to be aware of coordinate systems and data projections
	+ Viewing data in the wrong coordinate system will skew the data and plot it incorrectly

Google Earth

Pros

* High resolution imagery
* Easy to use, simplicity
* Can export data
* Free
* Historical satellite imagery
* Can overlay images for research purposes, not necessarily for mapping purposes
* Great reference/visualization software for knowing where things are
	+ Ability to bring in KMLs and view those
* Ability to look at the Earth from different orientations

Cons

* Not a great mapping program
* Georeferencing is not consistent and accurate, depends on the scale, resolution, and accuracy of the imagery you’re looking at
* Limited capabilities

CalTopo

Pros

* All the basic mapping tools are there
* $100/year
* Great integration between the desktop and field app
* Ease of use
* Many different basemaps you can pull up, including slope maps
* You can put layers on the maps
* You can look at land ownership and public utilities/infrastructure

Cons

* Import and export of .shp files
* Less accurate georeferencing

Gaia

Pros

* Alternative for recording in the field
* You see your work on the computer – automatically there
* Has a ton of integrated maps if you buy the correct package
* It has realtime maps as long as you have cellular connection
* Very easy to download the maps before you go into the field

Cons

* Aerials don’t have enough resolution
* Not a good alternative for creating a MET map
* Doesn’t allow the export of .shp files

Avenza

Pros

* Easy to use in the field
* You can use georeferenced maps
* $30/year model is sufficient for the work we do
	+ Export in a .kml or .gpx
	+ Can have any number of maps active on your phone at a time
	+ Can import other symbols
	+ You can bring in geo .pdfs
* Pro version you can export .shp files

Cons

* Have to get maps from the Evenza store
* Can only have 3-5 active maps on your phone at one time for the free version
* Only on the phone, not a mapping tool

PROMPT: How can we get more people involved in mapping and marking the trails?

Ideas:

Success giving people specific assignments: marking coordinates of objects

People love getting outside, and getting together and having a good time.

Some people love metal detecting, and that will draw them to events

What skill sets do you want to attract?

Soliciting wilderness volunteers, search and rescue, there are people you can approach that already have an interest in this and use GPS devices

Think of specific roles in the field and train and mentor for that.

 -understand roles we need

 -use mentors to teach volunteers in those roles

 -offering focused trainings: how to use your GPS, how to use metal detectors

Share results to show people progress was made

New opportunities with zoom: zoom mapping conferences in the Northwest chapter every two months.

Partnering people with specific skills with specific roles/needs.

Make sure we have a plan when we get people out in the field

If they go home and open their computer and have a failure they’re not going to want to do it. Mentor needs to guide the successful progress of the new volunteers

OCTA members love history. Take them out. Give them history. And build toward cultivating an interest in mapping

Think from the new person’s perspective

More activities would be great

Help people overcome obstacles to mapping on public lands

Find people with skillsets more inclined to be out in the field

Show people the product from the previous outing

Younger audiences are more inclined to go out into the field

Process of training the trainer

Archaeology is difficult to train for

Have SOPs developed, walk throughs developed on how to do tasks step by step

Have a spectrum of how people can contribute to the effort – varying levels of investment

Need trust with members that are doing this, and that they have permissions to do what they’re doing out in the field and they know what they are doing.

Do we have a “field trip” manual for taking people out?

Lessons learned from past attempts:

Got too technical to quickly and scared a lot of people away