Smartphone & Tablet Navigation App Comparison

App	Compatibility	Cost	Monitoring forms	Takes photos	Photo report	Waypoints	Track	Import/Export maps	Import/Export data	Notes
Collector	iOS, Android, Windows	Free with ArcGIS license/ArcGIS online account	Not directly	✔	X	✔	✔	✔	KML, SHP	Not ideal for volunteers or people unfamiliar w/ GIS
Gaia GPS	iOS, Android	3 membership levels with different benefits: ranging from free to $29.99 /annually	X	✔	X	✔	✔	✔	GPX, KML	responsive help desk, online manuals and training videos
Survey 123	iOS, Android, Windows	Free with ArcGIS license/ArcGIS online account	✔	✔	✔	✔	X	X	Yes-can export through ArcGIS online	Easy basic webform set-up, but not easy to set up sophisticated form. Works well in conjunction with Collector app
Avenza	iOS, Android	free with in-app map purchases, Pro is 129.99/year	X	✔	X	✔	✔	unlimited maps to download from the store- may cost money. import 3 personal maps or unlimited in pro	free version does not allow import/export. pro version will allow import/export of shapefiles, KML, GPX	Some experience using quadrangle maps helpful.
Motion X	iOS	$1.99 one time fee	X	✔	X	✔	✔	✔	GPX, KML	Cheap and easy to teach volunteers
Backcountry Navigator	Android	$11.99, some in-app map purchases	X	✔	X	✔	✔	✔	GPX, KML	Familiar to Android users
Fulcrum	iOS, Android	22.50$/user/month (non-profit price)	✔	✔	✔	✔	X	✔	✔	Great for completeing montoring reports in the field! Not a lot of control over look of report
GPS Kit	iOS	$9.99-$14.99 one time fee, some in-app map purchases	X	✔	X	✔	✔	✔	GPX, KMZ	preloaded maps, basic GPS functions simple main screen.
GeoJot	iOS, Android	$300/user/year	X	✔	✔	✔	X	✔	✔	Best for Baselines/ Current Conditions Reports

Collector App Tutorials

Preparing the data in ArcMap and creating the geodatabase:
https://doc.arcgis.com/en/collector/android/create-maps/prepare-data-desktop.htm

Creating the map in ArcGIS Online:
https://doc.arcgis.com/en/collector/android/create-maps/create-and-share-a-collector-map.htm

How to configure maps to use disconnected from internet or cell service:
https://doc.arcgis.com/en/collector/android/create-maps/offline-map-prep.htm

Quick Reference for Collector interface:
https://doc.arcgis.com/en/collector/android/collect-data/quick-reference.htm

Gaia App Tutorials

Membership Levels:
https://help.gaiagps.com/hc/en-us/articles/115003524547-Free-vs-Membership-vs-Premium-Membership

Help/info (choose your device; iOS or Android for tutorials)
https://help.gaiagps.com/hc/en-us

Android Main Screen:
https://help.gaiagps.com/hc/en-us/articles/115003524767-Main-Map-Functions

iOS Main Screen:
https://help.gaiagps.com/hc/en-us/articles/115003639528-Main-Map-Functions

Other App Links

Free software for file conversion (kml, shp, gpx)
https://www.dnr.state.mn.us/mis/gis/DNRGPS/DNRGPS.html

Google Earth Pro (free- desktop)
https://www.google.com/earth/desktop/

Recommended Accessories

Portable Back-up Batteries

- Anker Power Core (mAh 20,000) -$39
- Jackery Bolt (mAh 6,000)- $30
- PNY 2200 (mAh) 220)-$7.65
- Polanfo (mAh 20,000)-$10.00

Cases

- Lifeproof (iOS only)- $50-100
- Otterbox-$20-50
- Waterproof sleeve-$10

Bluetooth GPS

- Bad Elf-$200-600