

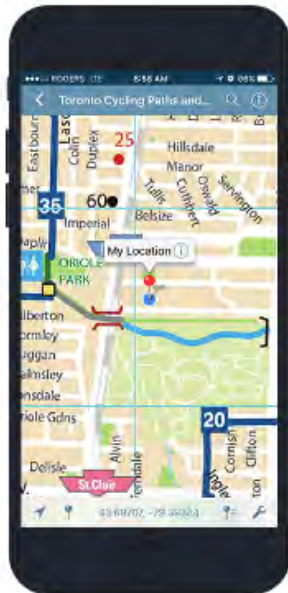
Central Appalachians Fire Learning Network Workshop 2016



Avenza Maps

[MAPS](#) ▾[PUBLISHERS](#) ▾[COMMERCIAL USAGE](#) ▾[AFFILIATES](#) ▾[HELP](#) ▾[STORE](#)[🛒\(1\)](#)[MY ACCOUNT](#)

Get Avenza Maps



DOWNLOAD THE APP

THE PDF MAPS APP FOR IOS AND ANDROID WILL BE REBRANDED AS AVENZA MAPS AND WILL BE AVAILABLE SOON. AVENZA MAPS FOR WINDOWS IS AVAILABLE NOW.

Download the free Avenza Maps app from the App Store, Google Play, or Windows Store.



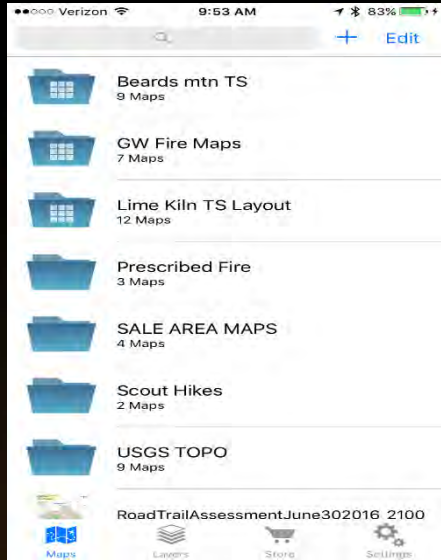
COMPATIBILITY

iOS: Requires iOS 7.1 or later. Compatible with iPhone, iPad, and iPod touch.

Android: For best results, use Android 4.4 or higher. PDF Maps 1.7 requires Android 4.4 or higher.

Windows: Requires Windows Phone 8.1 or higher.

Read geospatial PDF, GeoTIFF, and GeoPDF® Maps

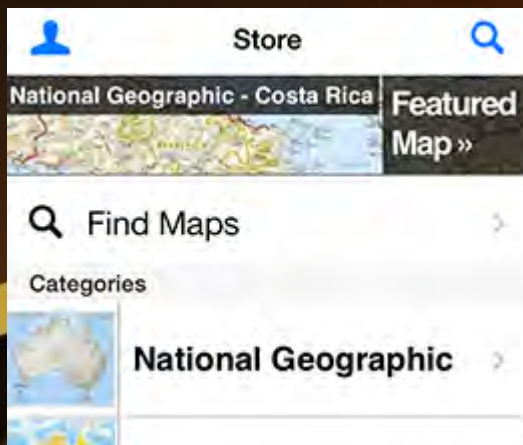


Download maps over a Wi-Fi or cellular network to read on your Apple or Android device.

The beauty is that you can access these maps even when you're offline because they are saved to the device's memory.

Server-side processing means downloaded maps open quicker and require less device resources.

Access thousands of maps in the Avenza Map Store



THE AVENZA MAP STORE

Browse, preview, purchase and download professionally created, high quality maps from the Avenza Map Store, including 1:24,000 scale USGS topographic maps for the entire United States.

Familiar gestures for navigation



You don't need to learn how to navigate these maps because you already know how.

Standard Apple and Android mobile device gestures apply here:
flick to pan, pinch/expand to zoom, double tap to zoom and center.

Add placemarks



What's a map without interaction?

Drop placemark pins anywhere on the map with the tap of a finger. Need to move it? No problem. Just tap and hold a pin to pick it up, move it to the spot you want, then release it to drop it.

Import and Export data

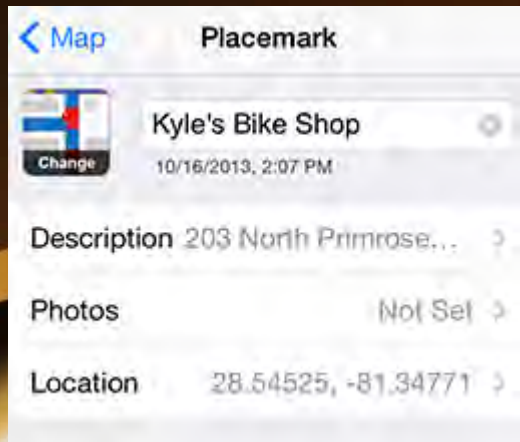


Took all that time to carefully plot placemarks during your project or incident?

Save them as KML, CSV or GPX format and export to iTunes, send as an e-mail or sync with Dropbox.

Alternatively, import a KML files to place placemarks on your map.

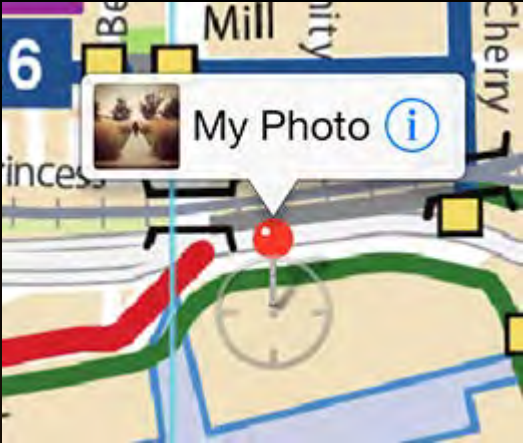
Edit placemark attributes



Easily record attributes at any placemark.

Add custom fields, insert field values, modify location, change pin color and add notes.

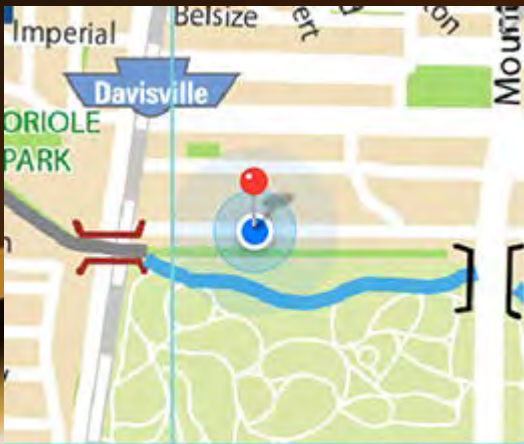
Plot photos



Captured a photo of something interesting and wanted to plot it on your map?

Simply add the geotagged photo and a placemark will drop in the correct location on your map. It couldn't be any easier.

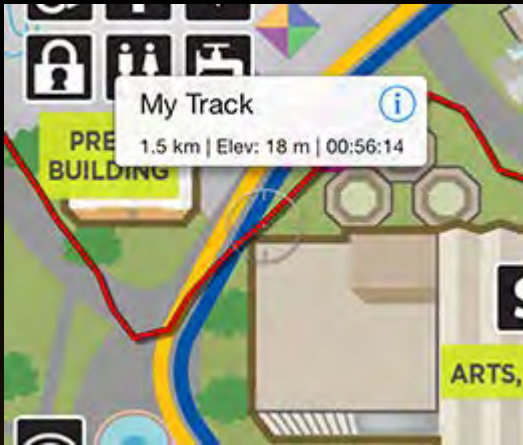
View your location using GPS



Use the built-in GPS in your Apple or Android device to locate yourself on any map (of course you have to be in the map's extents). Want to record where you're going? Simply drop placemarks at your location while you're on the move or record tracks.

Navigating? Use the compass to orient yourself.

Record your GPS tracks



Want to see how far you have walked, hiked, driven or biked?

Record your GPS tracks and see exactly where you've been.

View stats like elevation change and distance traveled on a graph including total time.

Like Placemarks, you can add photos and attributes to tracks and export them to KML or GPX.

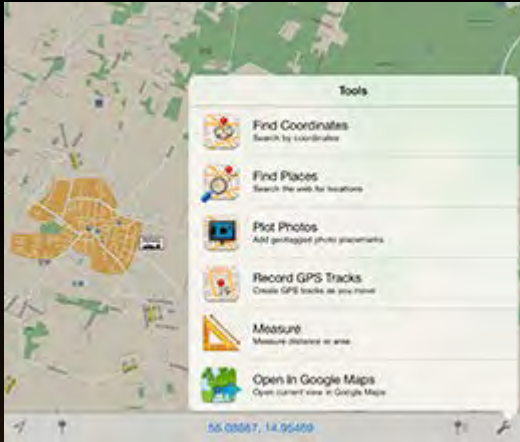
Find Coordinates



Easily find coordinates on a map in popular formats including Latitude/Longitude (Map default or WGS84), Northing/Easting, and Military Grid Reference System/United States National Grid.

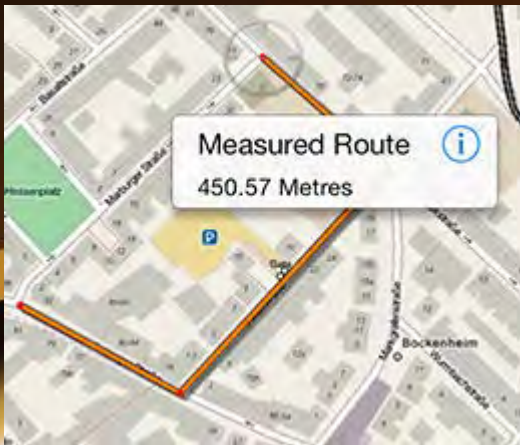
This tool also has the ability to search for a specified coordinate.

Quickly access Map Tools



Tap the Map Tools button to quickly access useful tools including Find Coordinates, Find Places, Plot Photos, Record GPS Tracks, Measure (area or distance), Open in (Google) Maps, and Compass.

Measure Distance



How far is it to that next intersection?

Use the Measure Distance tool to measure how far you need to travel.
Use the option to quickly change the measurement units.

Measure Area



Not sure how many acres your property is?

Measure it easily with the Measure Area tool.

Open in Maps



Use the Open in Maps tool to view the current map extents in the Maps app (a setting allows for maps to open in Google Maps). Also, perform more detailed searching by opening placemark locations in the Maps app based on its coordinates.

Find Places



Conveniently search for points of interest on any map.
Places are based on search engine results.
Save places as placemarks that can be visible or hidden as required.
Easily share these placemarks of places using Dropbox or email.

PDF compatibility



Geospatial PDF .pdf

A PDF embedded with geographic information.

GeoTIFF .tif, .tiff

A GeoTIFF is a TIFF file embedded with geographic information.

JPG.zip

A JPG must be packaged with either TFW & PRJ or JGW & WKT in a ZIP file.

Device compatibility



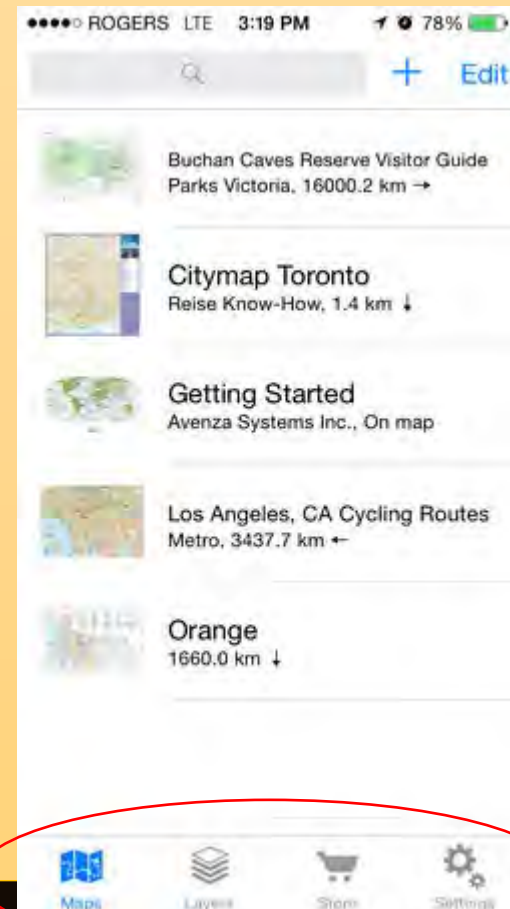
iOS: Requires iOS 7.1 or later. Compatible with iPhone, iPad*, and iPod touch*.

Android: For best results, use Android 4.4 or higher. PDF Maps 1.7 requires Android 4.4 or higher.

Windows: Requires Windows Phone 8.1 or higher.

Getting Started, Main User Interface

- The PDF Maps app has four main tabs
 - Maps
 - Layers
 - Store
 - Settings



Main User Interface - Maps

- Map View
- The map view consists of several components
 - 1. Back
 - 2. Search
 - 3. Map Information
 - 4. Toolbar



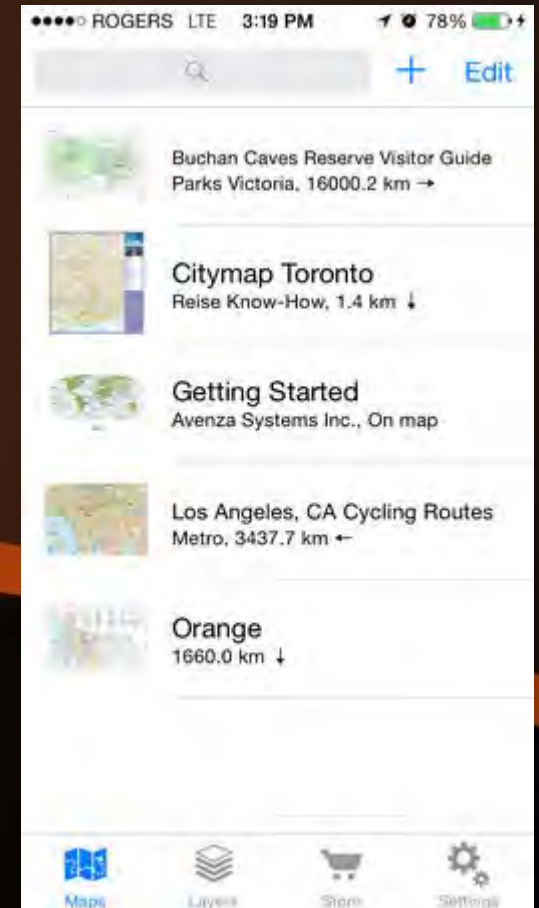
Map View - Toolbar

- The toolbar consists of several tools
 - 1. GPS and Compass
 - 2. Add Placemark
 - 3. Layers
 - 4. Map Tools



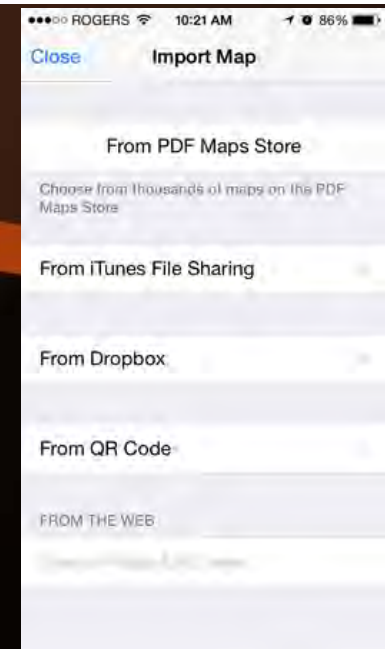
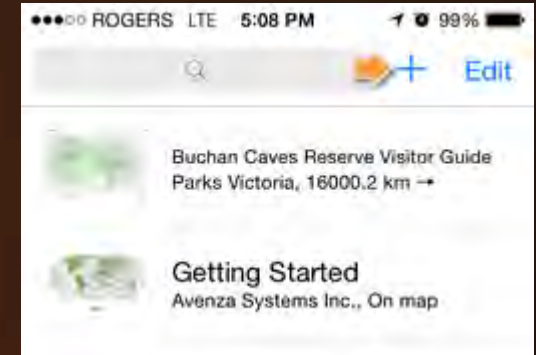
Maps

- The Map List is an easy way to access and view maps. The map list displays
- The map's title
- The map publisher
- The distance and direction from your location
- You can add and manage maps from



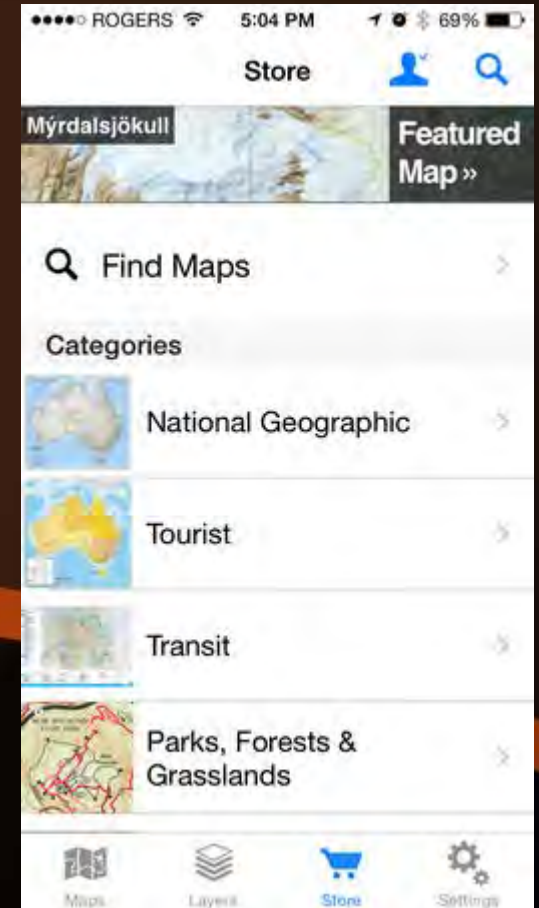
Importing Maps

- On the Map List screen, tap the Add icon to import a map.
- You can import a map from any of the following sources:
 - Avenza Maps Store
 - iTunes file sharing
 - Dropbox
 - QR Code – Single Map not Directory
 - Web – Single Map not Directory



Importing Maps – PDF Maps Store






- The PDF Maps Store contains spatially referenced maps created by professional mapping companies, agencies, and cartographers from around the world including the USGS, National Geographic, HEMA Maps, MapMobility and many more.



Importing Maps – PDF Maps Store

- My Account, A PDF Maps Store account is free. It has several benefits including the ability to:
 - browse previous purchases from the PDF Maps Store account
 - easily retrieve previously purchased maps
 - transfer purchased maps to other devices
 - purchase maps more quickly
 - allow our support team to assist you faster
- You will be prompted to create an account when you attempt to purchase a map. **An account is not required to download free maps.** However, it's recommended that you create an account due to the benefits listed above.

Why create a free PDF Maps Store account?

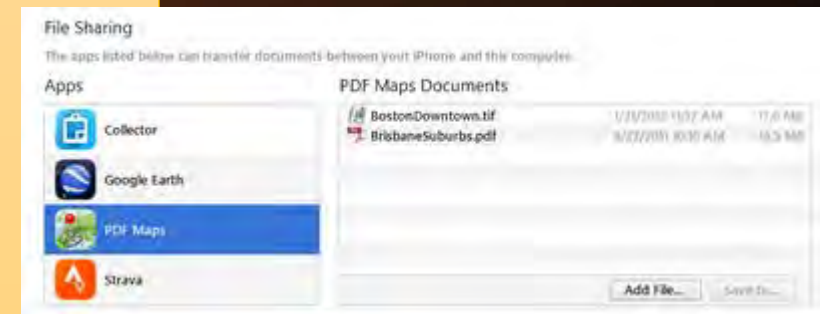
-  Browse previous purchases from the PDF Maps Store account
-  Easily retrieve previously purchased maps
-  Transfer purchased maps to other devices
-  Express map purchasing
-  Helps our support team assist you faster and more efficiently

Create account

No thanks

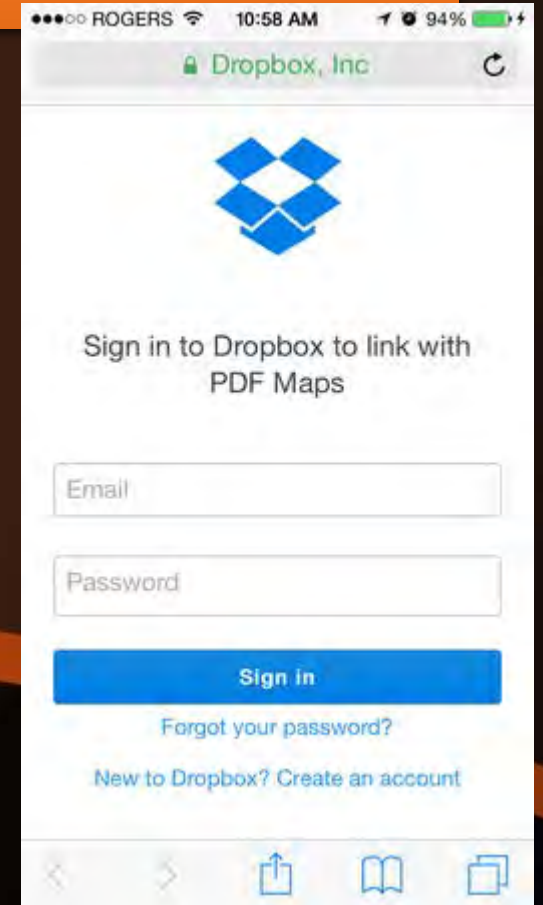
Importing Maps – iTunes

- You can load maps through iTunes File Sharing.
- 1. Connect your device to your computer and open iTunes.
- 2. Click Apps and scroll down to see the File Sharing section.
- 3. Select PDF Maps in the Apps list.
- 4. In the PDF Maps Documents box, click Add File and browse for a georeferenced map (acceptable formats include GeoTIFF, geospatial PDF, and GeoPDF®).
- 5. On your iOS device, tap From iTunes File Sharing.
- 6. Tap to select which maps you want to import, then tap Import.



Importing Maps – Dropbox

- Dropbox is a cloud storage solution for all your photos, docs, videos, and files. Maps stored on your Dropbox can be imported to PDF Maps.
 - 1. Tap From Dropbox.
 - 2. Confirm that you want to connect to Dropbox.
 - 3. Enter your login credentials or tap Allow (if you're already logged into Dropbox).
 - 4. Tap to select which maps you want to import, then tap Import.



Importing Maps – QR Code

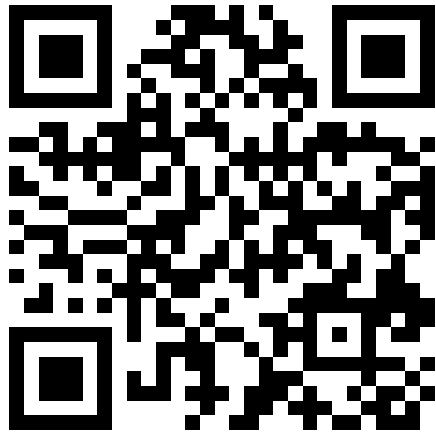
- A built-in QR code reader that allows you to import maps by scanning QR codes displayed on signs, posters, maps or the web.
- 1. Tap From QR Code.
- 2. Scan the QR code.



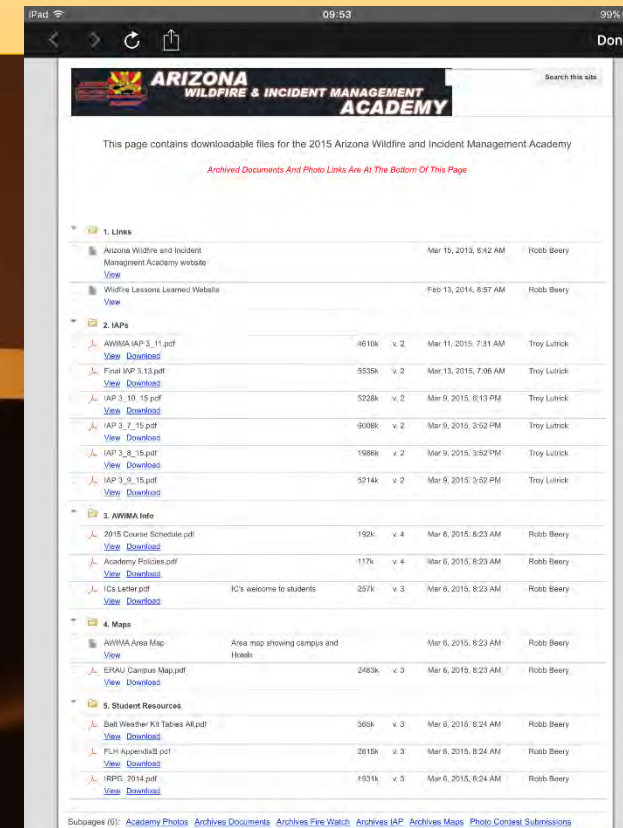
Importing Maps – QR Code

External QR Code Reader

- Download and Install a QR Code reader such as “QR Code Scanner” (Free App), many are available.
- Open app and scan QR code



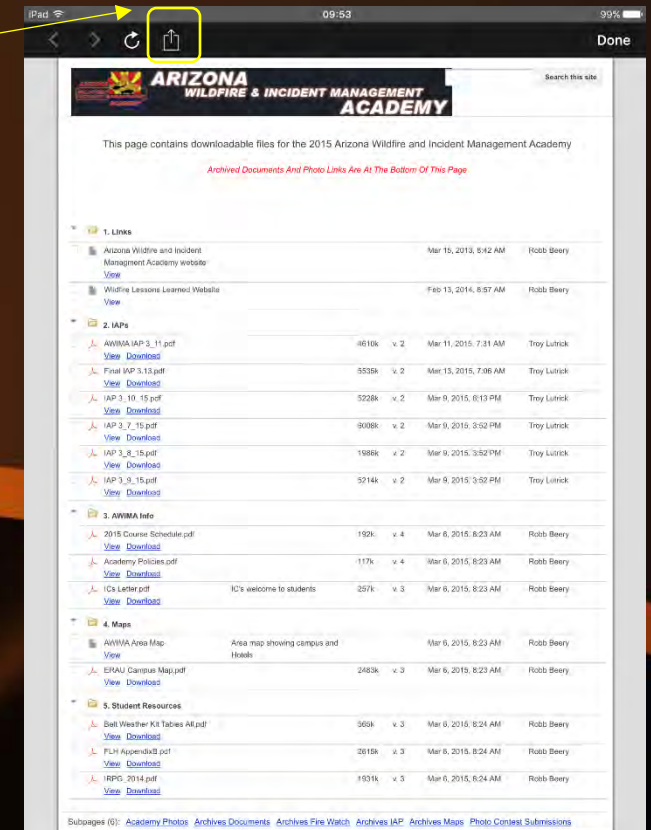
- ▶ This will open a web page with files available to download



Importing Maps – QR Code

TIP - External QR Code Reader

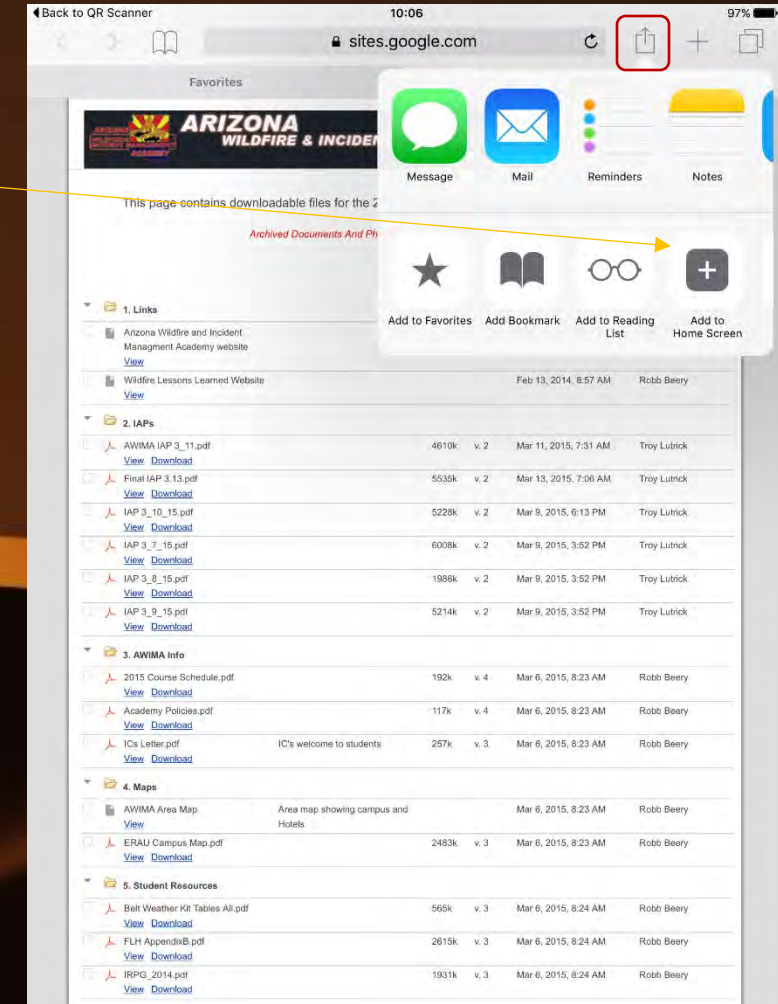
- TIP
- The first time you open this site press the “Open in other program button”
- Choose “Open in Safari”



Importing Maps – QR Code

TIP - External QR Code Reader

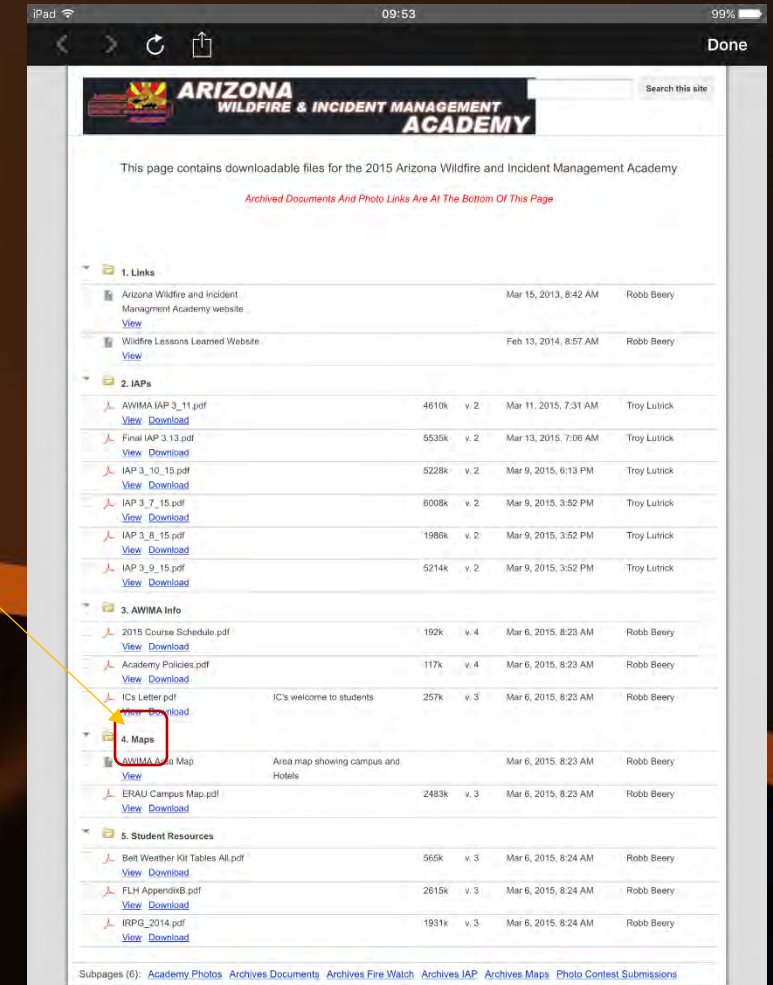
- This will open the website in Safari
- Press the up button and choose “Add to Home Screen”
- This will add a shortcut to this web site on your iPads home screen
- Next time you want to get a map from this site just press the icon that you just created on your home screen
- You will go directly to this site for download



Importing Maps – QR Code

External QR Code Reader

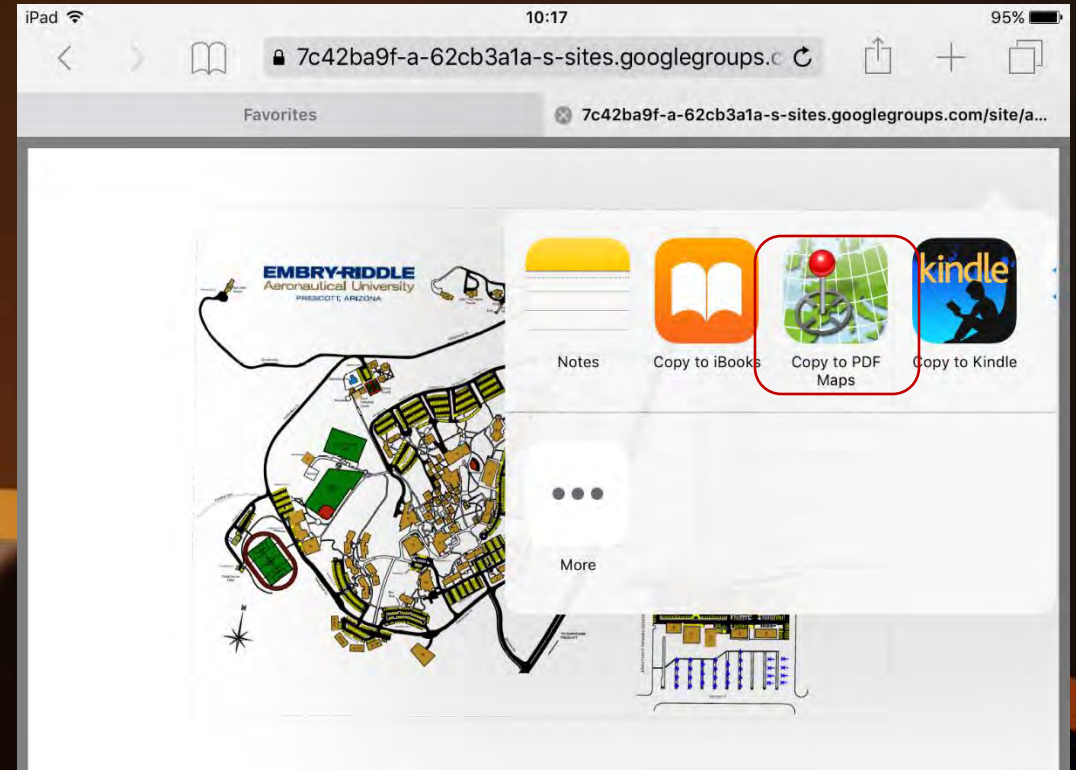
- Select a file on the web site
- *Should be labeled some sort of map
- Select Download or click on the map file
 - This depends on what website format is used
 - If there are multiple maps look at the date and name to get the most recent
- This will start the map downloading into Safari



Importing Maps – QR Code

External QR Code Reader

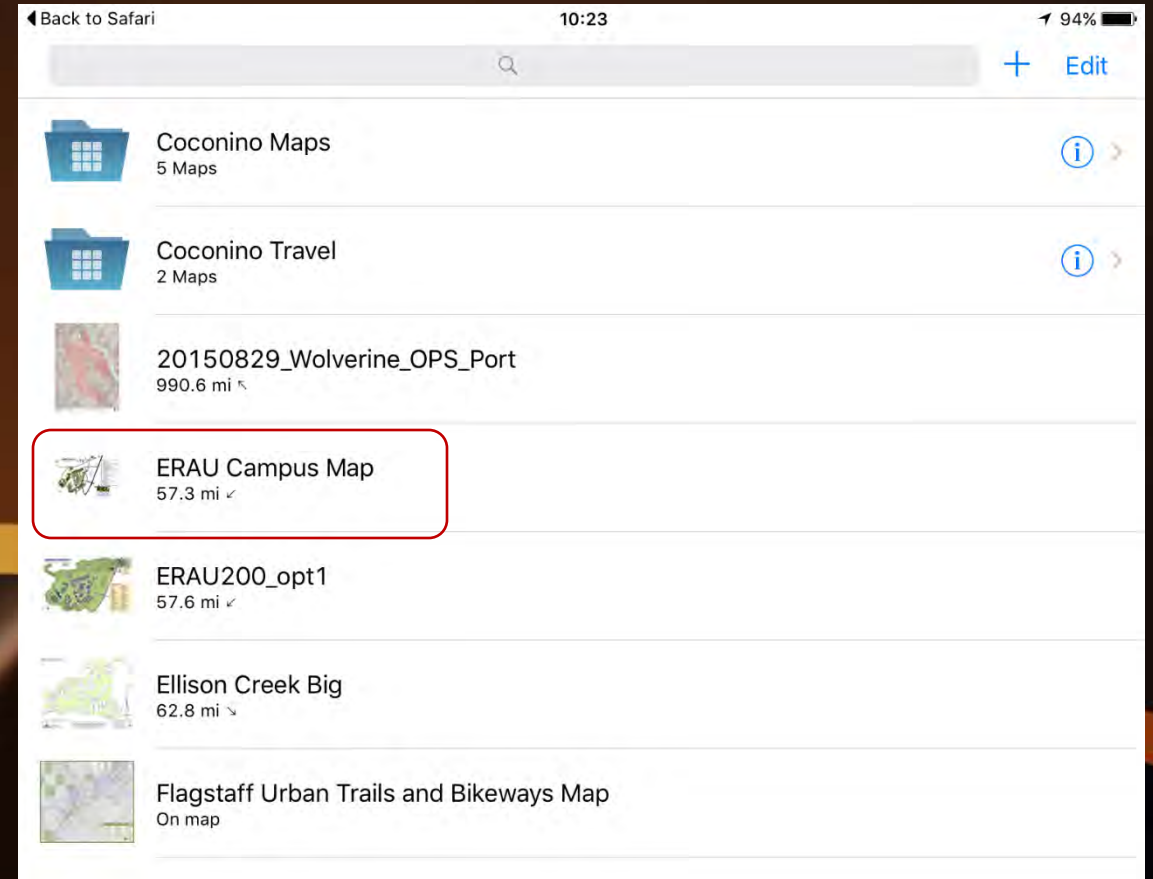
- The map will open in Safari
- Tap in the middle of the map
- An “Open In” bar will appear at the top of the screen
- Tap on “Open in”
- Tap on “Copy to PDF Maps”
- This will open PDF Maps and the map you selected will download and process



Importing Maps – QR Code

External QR Code Reader

- In PDF Maps
- Click on the map that you just imported
- It will show on the screen
- This map will be available in PDF maps until you delete it
- It will show if you are on the map, or how far away it is



Importing Maps – nifc.ftp site

http://ftp.nifc.gov/incident_specific_data/

- If an IMT is not in place, or is not using the QR Code
- Go to the NIFC ftp site to download maps and / or any infrared data available

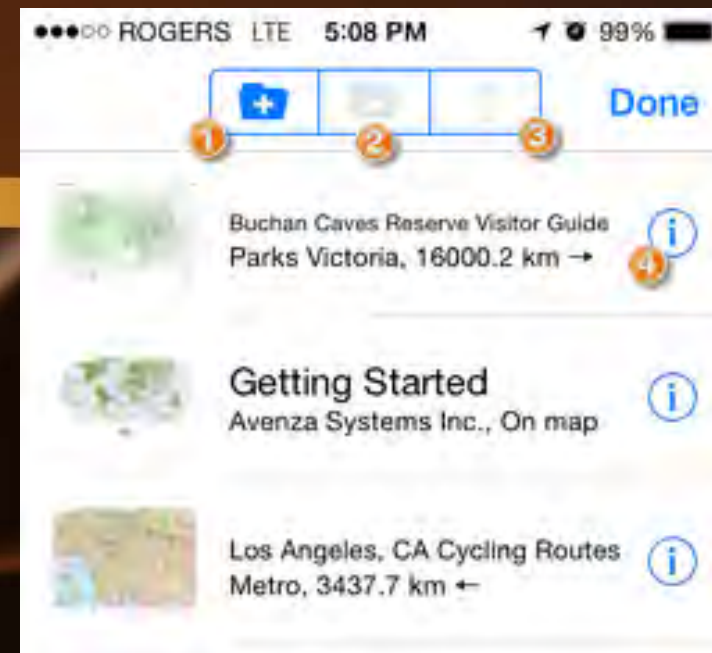
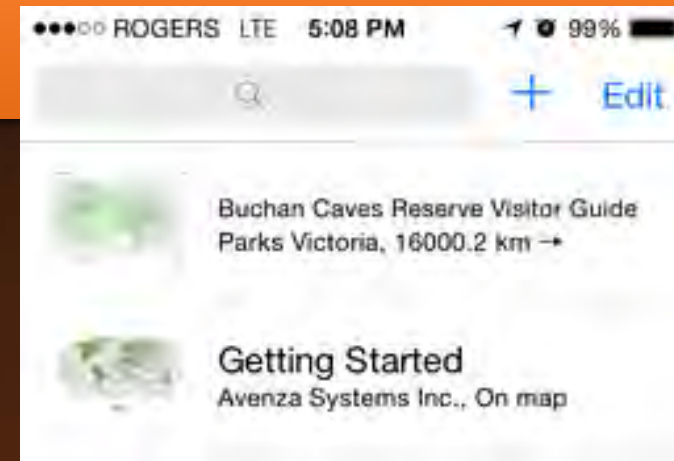
The screenshot shows a web browser window with the address bar displaying http://ftp.nifc.gov/incident_specific_data/southern/Virginia/2016/FLN_Workshop/. The browser's toolbar includes various icons for apps, bookmarks, and search engines. The main content area displays the title "Index of /incident_specific_data/southern/Virginia/2016/FLN_Workshop" and a table listing files in the directory. The table has columns for Name, Last modified, Size, and Description. The files listed are "Parent Directory", "Brief_ansiE_land_0318_2016_CellarMtn_.pdf", "MillsCreek_10182016.pdf", and "WSM_RestorationProject.pdf". At the bottom of the page, it says "Apache/2.2.15 (Red Hat) Server at ftp.nifc.gov Port 80".

Name	Last modified	Size	Description
Parent Directory	-	-	-
Brief_ansiE_land_0318_2016_CellarMtn_.pdf	27-Oct-2016 09:32	13M	
MillsCreek_10182016.pdf	27-Oct-2016 09:32	3.7M	
WSM_RestorationProject.pdf	27-Oct-2016 09:32	12M	

Apache/2.2.15 (Red Hat) Server at ftp.nifc.gov Port 80

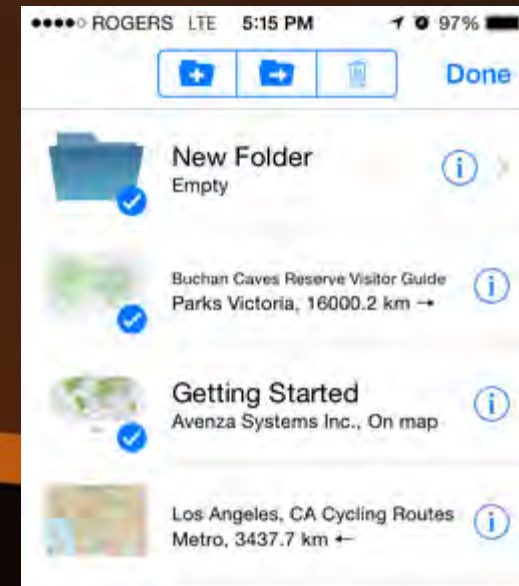
Managing Maps and Folders

- On the Map List screen, tap Edit
- Several contextual options appear to manage maps and folders.
 - 1. Add folder
 - 2. Move
 - 3. Delete
 - 4. Map information
- Tap maps or folders to move them



Managing Maps and Folders

- Moving maps or folders
 - Tap Move to move the maps to another folder.
- Deleting maps or folders
 - Tap Delete to delete the selected maps or folders. Tap Done to exit the editing mode.
 - Quick delete maps or folders
 - To quick delete, swipe left on a map or folder and then tap Delete.



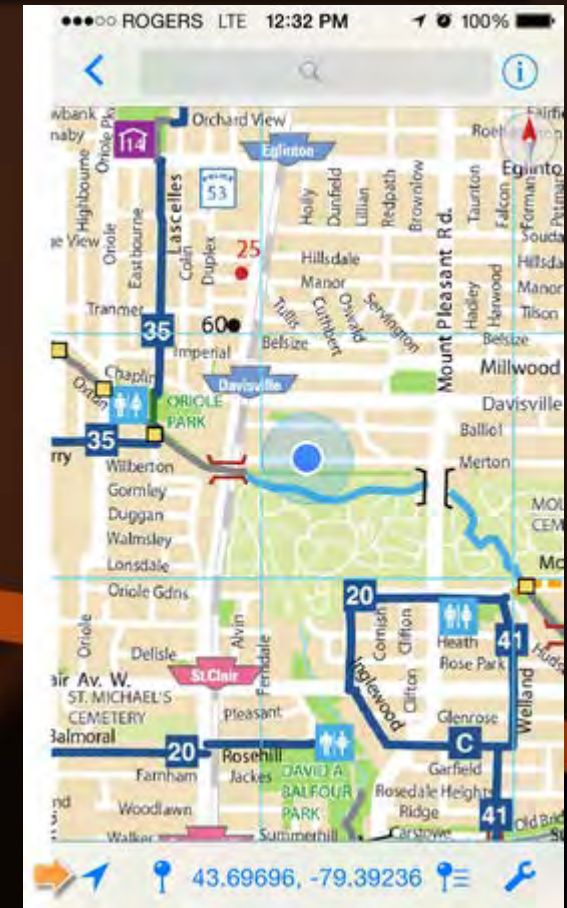
Viewing a Map

- When a map opens, you'll see the map view which consists of several components:
- 1. Back
- 2. Search
- 3. Map information
- 4. Toolbar
- The following is a list of supported gestures and what they perform:
 - • Single tap and drag: pan the map
 - • Single tap and flick: pan the map quickly
 - • Single tap: hide all placemark labels
 - • Single tap and hold: pick up a placemark, drag to reposition
 - • Double tap: zoom-in and centers
 - • Two-finger tap: zoom-out and centers
 - • Two-finger rotate: rotates the map
 - • Expand: Zoom-in
 - • Pinch: Zoom-out



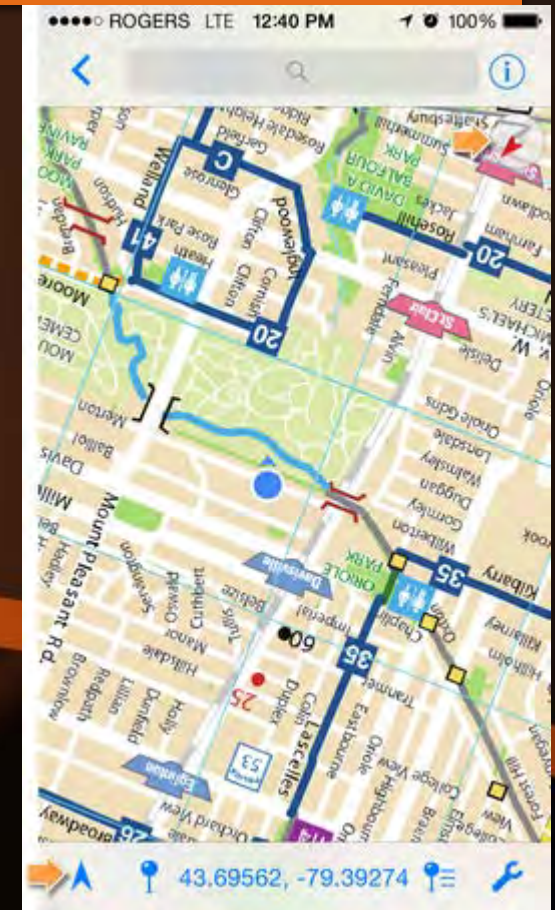
Locating with GPS

- Tap the GPS button to find your location on the map. Your location is displayed as a blue dot. The blue transparent circle is An indication of the accuracy of the GPS fix. If you're not physically within the extents of the map, "Not on map" will be displayed where the map coordinates are.
- On devices with built-in GPS, your location will be triangulated within a few seconds. Depending on your device and available services, your location is determined using a combination of cellular, Wi-Fi, Bluetooth, and GPS



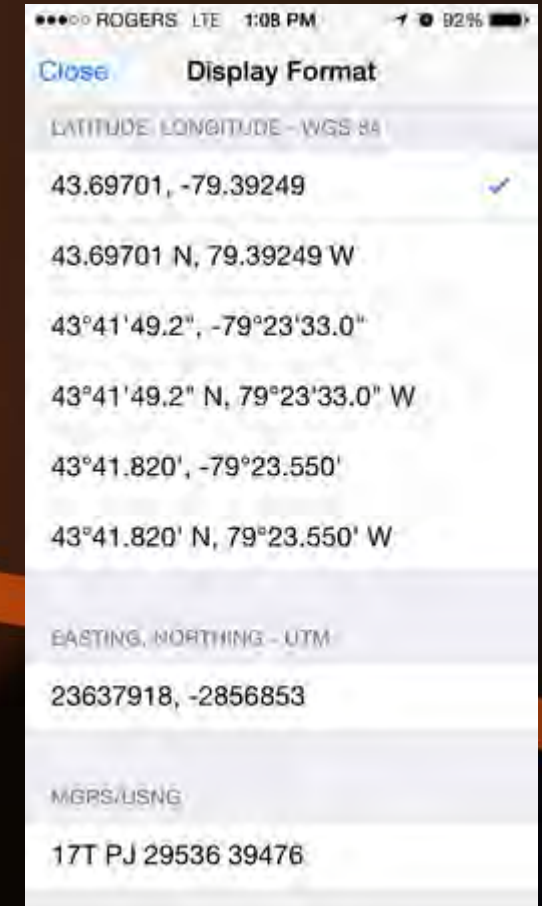
Locating with Compass

- Tap the GPS button again to enable the Compass. A compass appears in the top-right of the map view. The map rotates to align with the direction you are facing, which is indicated by the arrow on the blue location dot
- You can also rotate the map manually using a two-finger rotate gesture.
- To set the map north-up or to exit GPS mode, tap the compass in the top-right of the map view.
- To exit GPS mode but remain with an oriented map rotation, tap the GPS button.



Change Coordinate Format

- Map coordinates are displayed in the toolbar at the bottom of the screen.
- To change the coordinate display format, tap the coordinates. Choose from a variety of display formats including map default, WGS 84, UTM, and MGRS/USNG.



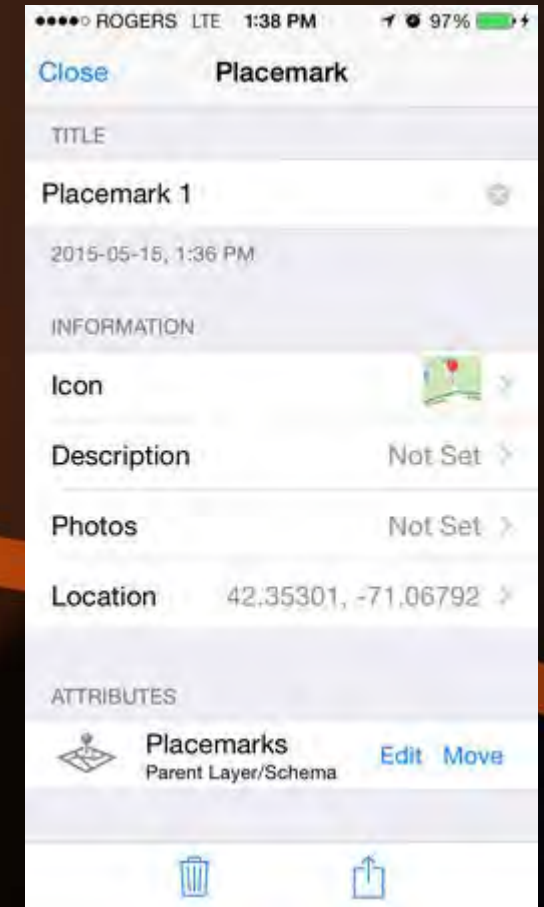
Adding a Placemark

- A placemark marks a position on the map. At it's most basic, a placemark is indicated by a default icon and stores geographic location.
 - To add a placemark, pan to a position on the map centered by the crosshair and tap the Add Placemark icon. A placemark is added with a default icon colour (red) and a default name.
- Moving a placemark on a map
 - To move a placemark on the map, tap and hold a placemark, move it to another position and release.



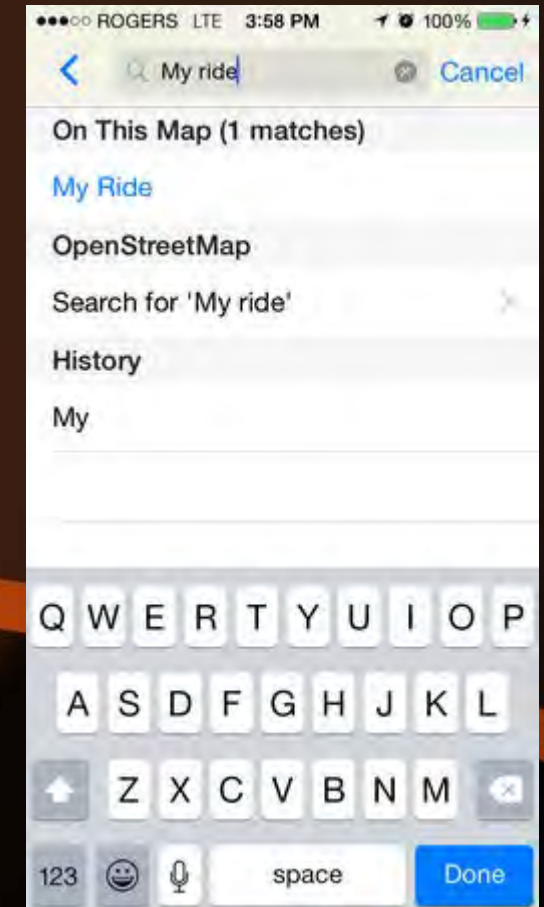
Placemark Details

- Tap the Information icon on a placemark label to see details about the placemark.
- On the placemark detail screen, you can change the placemark title, icon, enter a description, add photos, edit the location coordinate, and edit attribute schema.



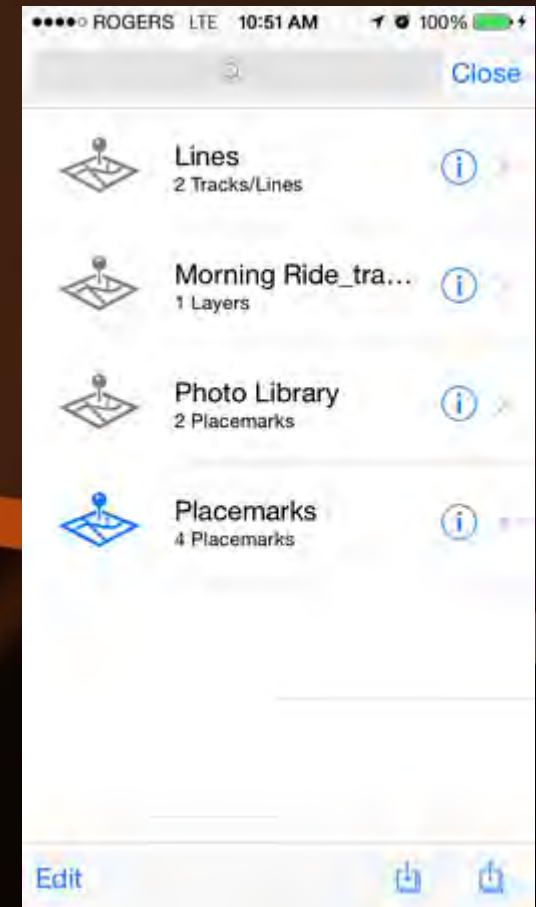
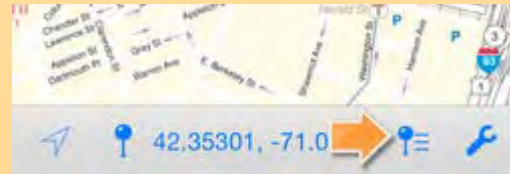
Searching a Map

- On any map, you can search for existing placemarks, lines or tracks. Enter a term into the search box and a list of results will appear below it.
- If you have internet access...
- If no matches are returned or if you're searching for other points of interest, you can search OpenStreetMap.



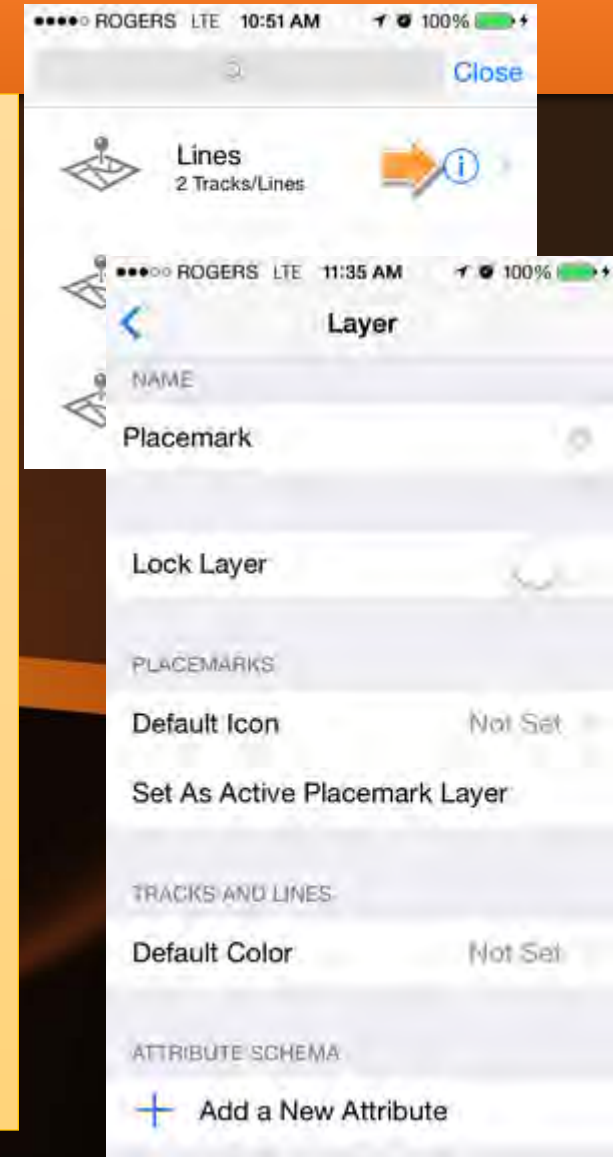
Using Layers in Maps

- Layers store map features such as:
 - Placemarks (added or imported)
 - Lines (from measuring or imported)
 - GPS Tracks
 - Photos
- Layers are linked to maps, meaning that layers can exist outside of a map. To see the layer list for a map, tap the Layers List icon.
- A list of layers linked to the map are shown. By default, layers are organized by type (lines, photos, placemarks, imported features), although map features can belong on any layer. The layer thumbnail in blue is considered the active layer.



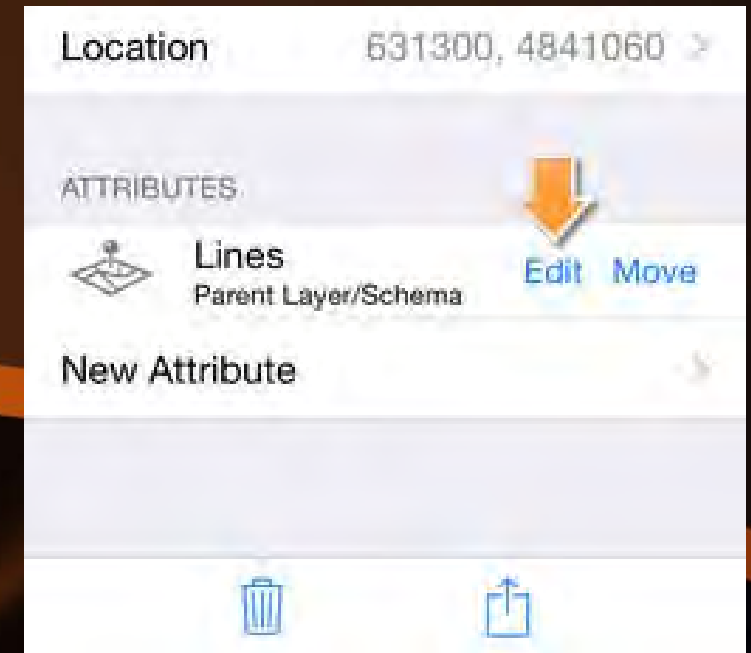
Using Layers in Maps

- Layer Information
 - To view a layer's information, tap the Information icon of a layer in the layer list.
- The Layer screen provides settings to change the layer properties.
 - **Name**, Specify a name for the layer.
 - **Lock Layer**, Lock the layer so it can't be deleted.
 - **Placemarks**, Set the default icon of the current layer's placemarks.
- Enabling the Set As Active Placemark Layer setting will ensure that placemarks are added to the current layer.
 - **Tracks and Lines**, Set the default color of tracks and lines.
 - **Attribute Schema**, Tap Add a New Attribute to create a new attribute and to specify attribute settings



Attribute Schema

- An attribute schema defines an attribute, its name, its type, and associated properties such as an optional pick list.
- To edit an attribute schema, tap the Information icon on a placemark label. On the placemark detail screen, scroll to the Attributes section and tap Edit.



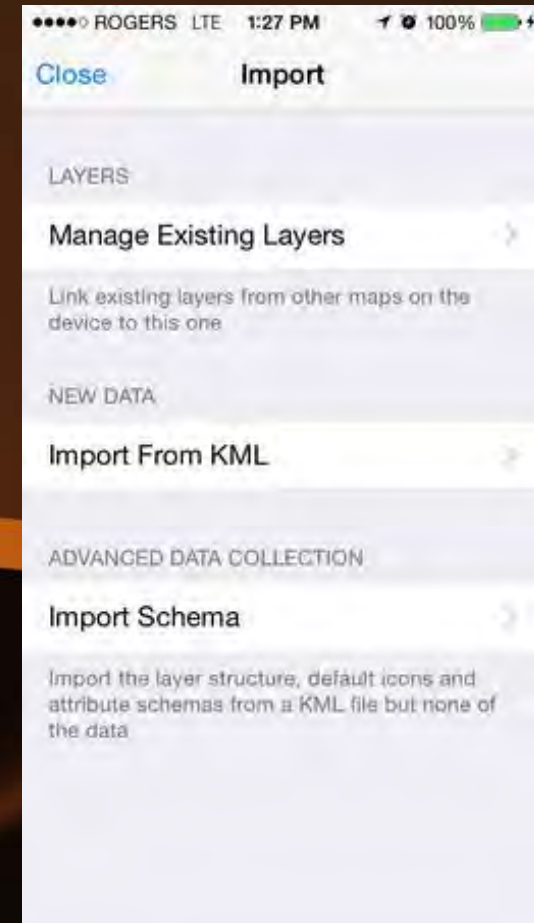
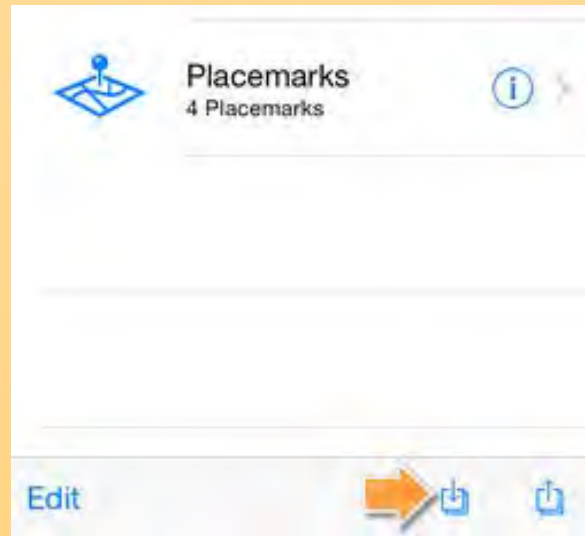
Attribute Schema

- On the Attribute screen, you can specify the attribute name, its type, and add values to create a pick list.
 - Name, Specify a name for the attribute.
 - Choose an attribute type:
 - String: alphanumeric characters
 - Boolean: yes or no values
 - Real: numbers with decimal values
 - Integer: whole numbers
- Pick List, Create a pick list to make data collection easier. They reduce the time and effort it takes to collect data by controlling the available choices, which will ultimately help improve the quality of your data.

The screenshot shows the 'Attribute' screen in a mobile application. At the top, there's a status bar with 'ROGERS LTE', '2:28 PM', and '100%' battery. Below the status bar, there's a navigation bar with a back arrow labeled 'Layer' and the title 'Attribute'. The main content area has three sections: 'NAME' with the value 'Soil Quality', 'TYPE' with the value 'String', and 'PICK LIST' with a list of values: 'Excellent', 'Good', and 'Poor'. At the bottom, there's a button labeled '+ Add a New Pick List Value'. A small note at the very bottom says 'Pick list has predefined attribute values to choose from. It is optional.'

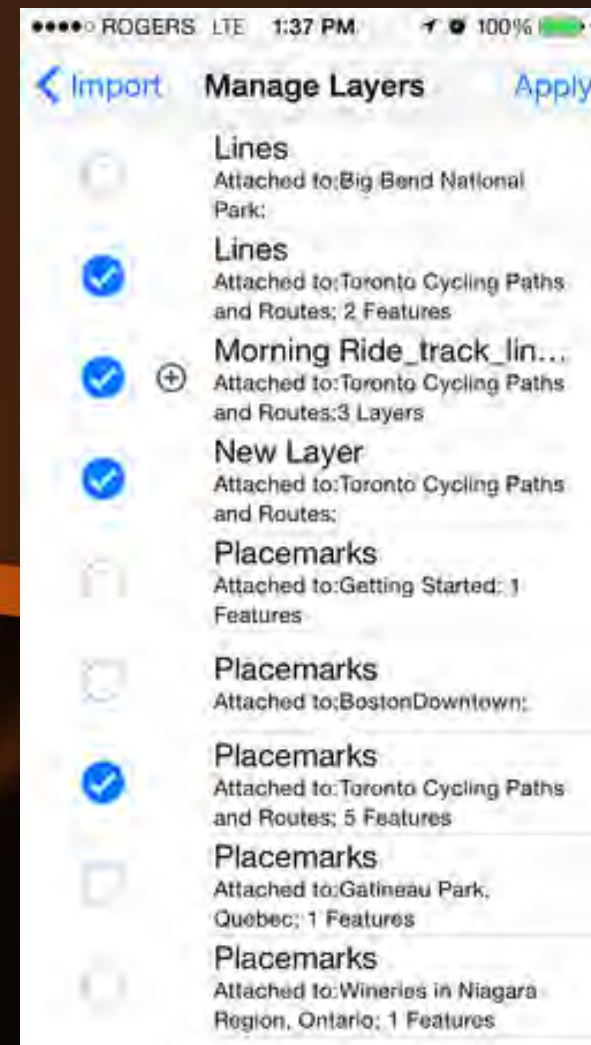
Importing Layers

- On the Layer List screen, tap the Import icon to import layers or attribute schema
- You can import from several sources including:
 - Existing Layers
 - From KML
 - Import Schema



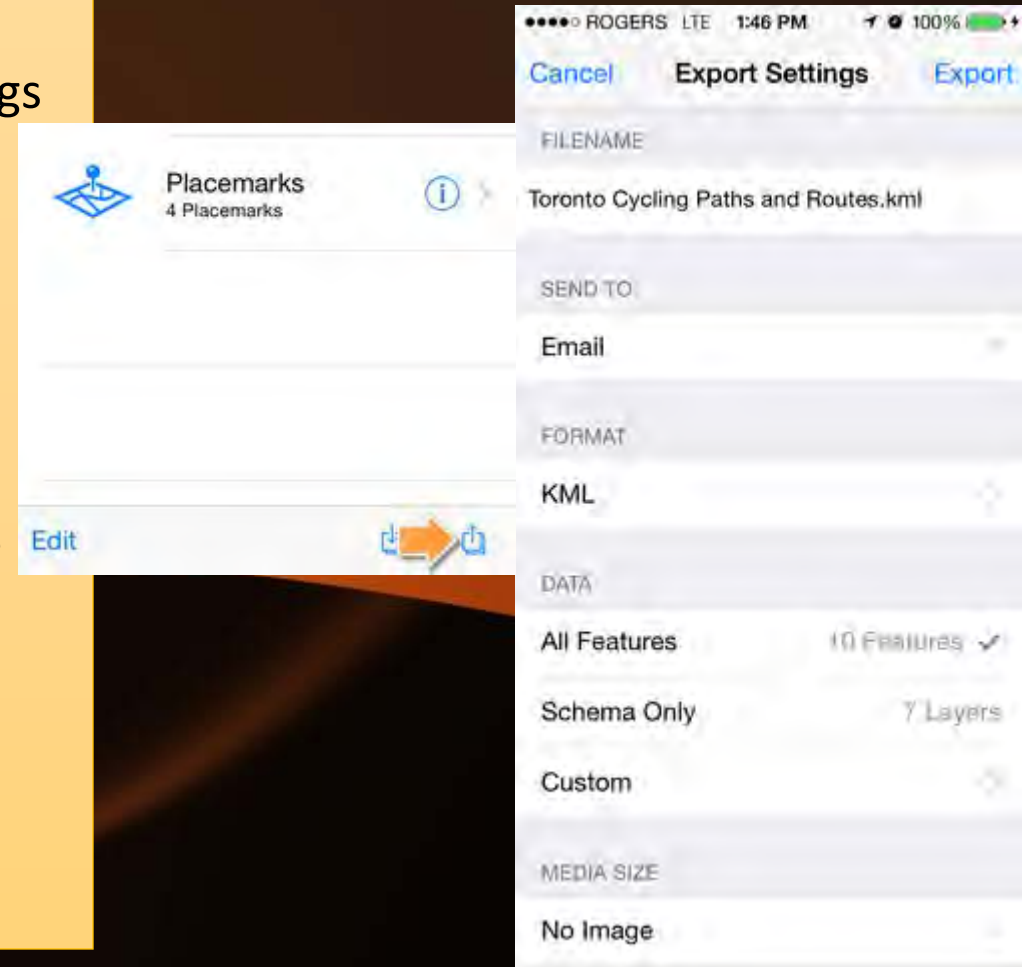
Importing Layers

- Manage Existing Layers
 - On a map, you can import existing layer from other maps. Tap layers to select them and tap Apply to import selected layers to the current map.
- Import From KML
 - Import KML from recently used files, from iTunes File Sharing, from Dropbox, from a QR Code, or from the web.
- Import Schema
 - Import the layer structure, default icons and attribute schema from a KML file without importing any of the data. Import attribute schema from recently used files, from iTunes File Sharing, from Dropbox, from a QR Code, or from the web.



Exporting Layers

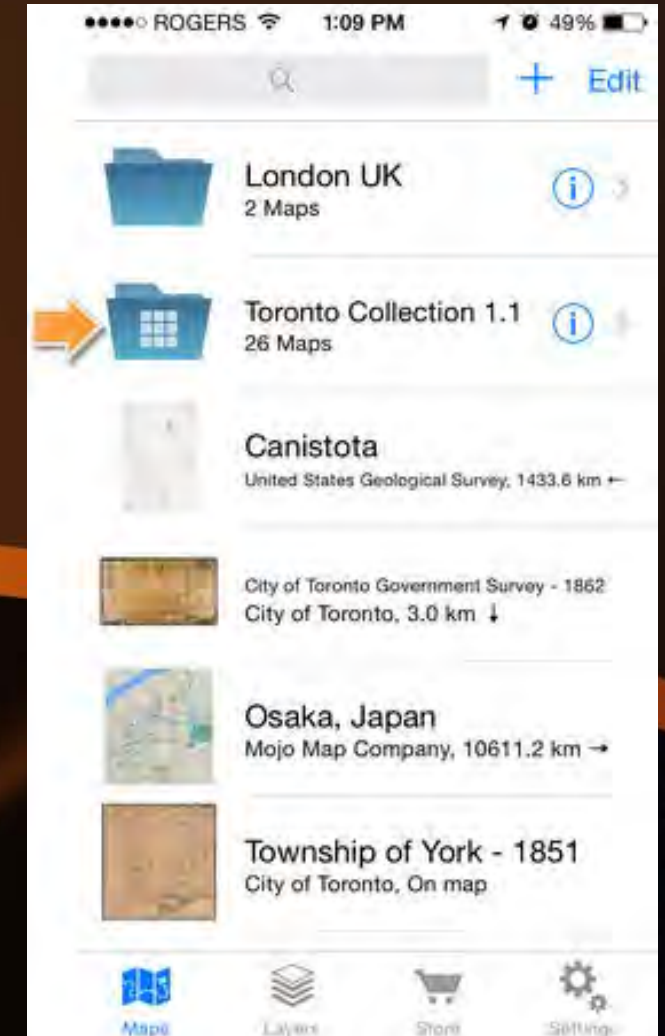
- On the Layer List screen, tap the Export icon to export layers or attribute schema:
- On the Export Setting screen, you can specify export settings to suit your requirements.
- **Filename**, Specify a filename.
- **Send to**, Send to email, Dropbox, iTunes File Sharing, or AirDrop.
- **Format**, Choose an export format: KML, CSV, or GPX.
- **Data**, Choose to export all features (including schema), the schema only, or a custom subset of features.
- **Media Size**, Choose to export images at small, medium or large (original size). An option to export no images is also available.



Map Collections

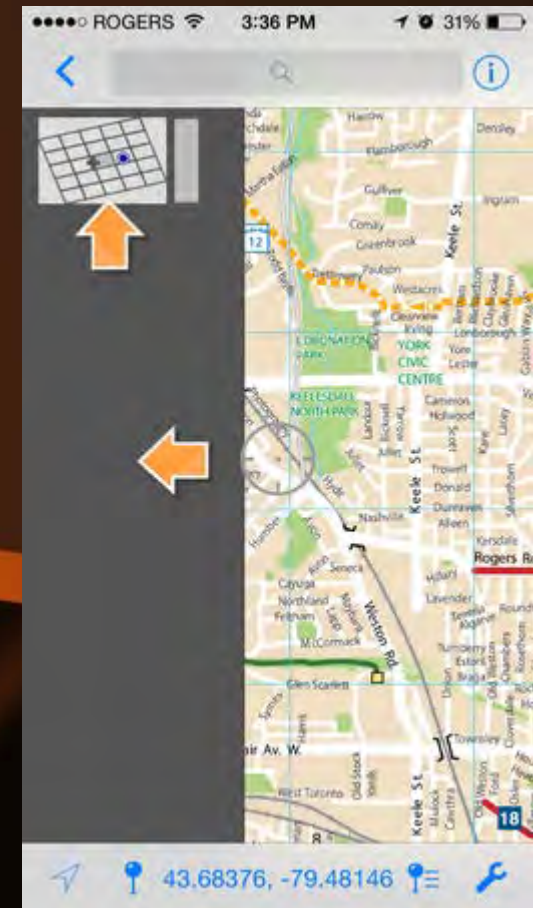
Apple Only – for now

- A Map Collection is a special folder that contains a set of maps and treats them as a larger collective. This allows you to pan to adjacent maps within the collection without having to reload another map. Map Collections work best when maps are geographically adjacent to each other, although maps can overlap and be of different extent and size.
- To enable a folder as a Collection:
 1. Tap the Maps tab.
 2. Tap the Information icon of a folder.
 3. Tap the Collection setting to enable it.



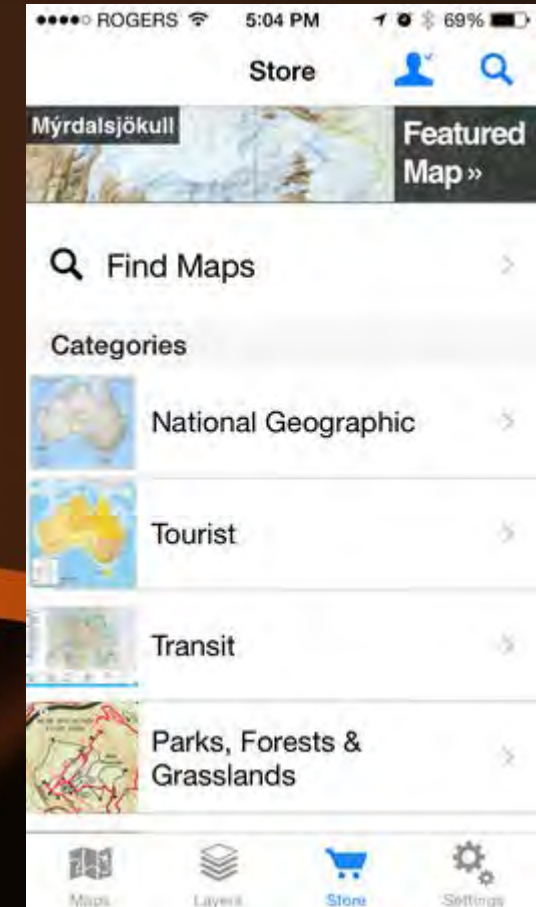
Map Collections - Viewing

- An inset map in the top-left corner shows the extent of all the maps in a Map Collection. On the inset map, a darker gray and a + represents the crosshair and the relative position on the current map. The blue dot represents your GPS location (if applicable). To go to an adjacent map, pan to the edge of the map and continue to pan in the direction of the adjacent map - the adjacent map will automatically load in the map view.
- To jump to any map in the collection, tap a map footprint on the inset map. The vertical column to the right of the inset indicates map scale relative to the other maps in the collection.
- To enlarge the inset map, swipe it to the right. To reduce the inset map, swipe it to the left. To hide the inset map, swipe it left until only a tab with an arrow shows. To show the inset map, tap the inset map tab or swipe right.
- When maps share the similar extent but are of two different map scales, you can pinch to zoom to the larger or smaller scale map by zooming in or out and holding when you reach the maximum or minimum zoom level.



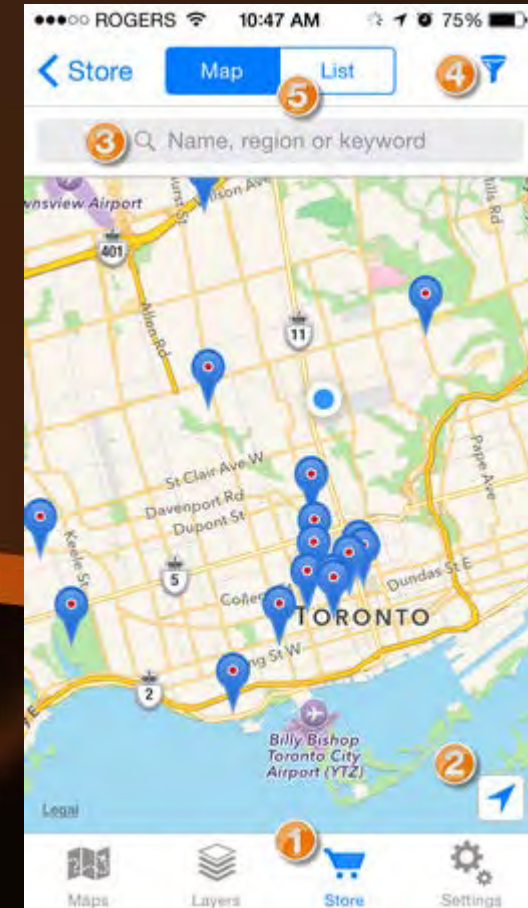
Map Store

- Categories
- The PDF Maps Store has many map categories including:
 - • National Geographic
 - • Tourist
 - • Transit
 - • Parks, Forests & Grasslands
 - • Recreation
 - • Topographic
 - • Special Interest
 - • Regional, Country & World
 - • Aeronautical
 - • Nautical
 - • Imagery
 - • Historical
- Tap any category to see subcategories by country, continent or region.



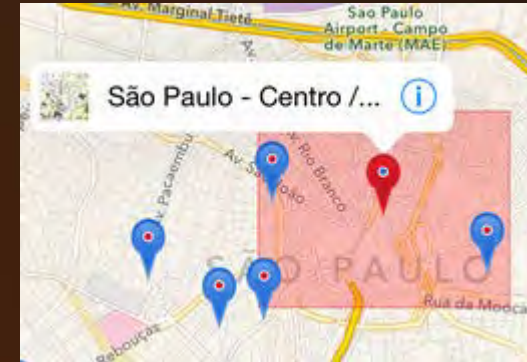
Map Store

- Searching for Maps
- To search for maps:
- 1. Tap the Store tab icon and tap Find Maps or tap the Search icon in the upper-right corner.
- 2. Navigate the search map to find a map near you (use the GPS) or pan to another area of interest.
- 3. Enter a search term to find maps.
- 4. Adjust Search Settings.
- 5. Tap List to see a list of search results.



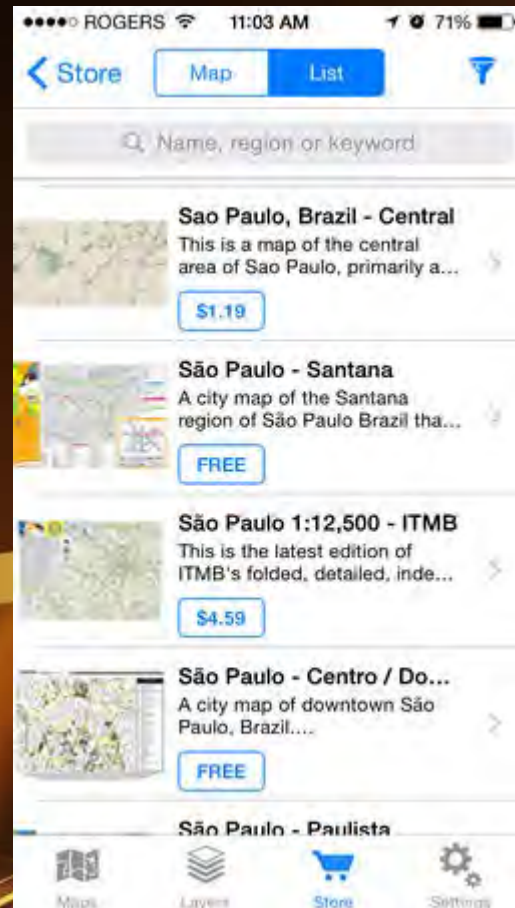
Map Store

- Searching for Maps
- Tap Map to view an interactive map that displays maps around your location or displays your search results.
- Maps are indicated by blue placemarks. Tap a placemark to see its label and map extent. A selected placemark is indicated in red. Tap the Information icon to see more details about the map including a description, publisher, size (MB), language, and publish date.
- Tap the GPS icon at the bottom-right corner to use your device's GPS to locate and center the map to your position.

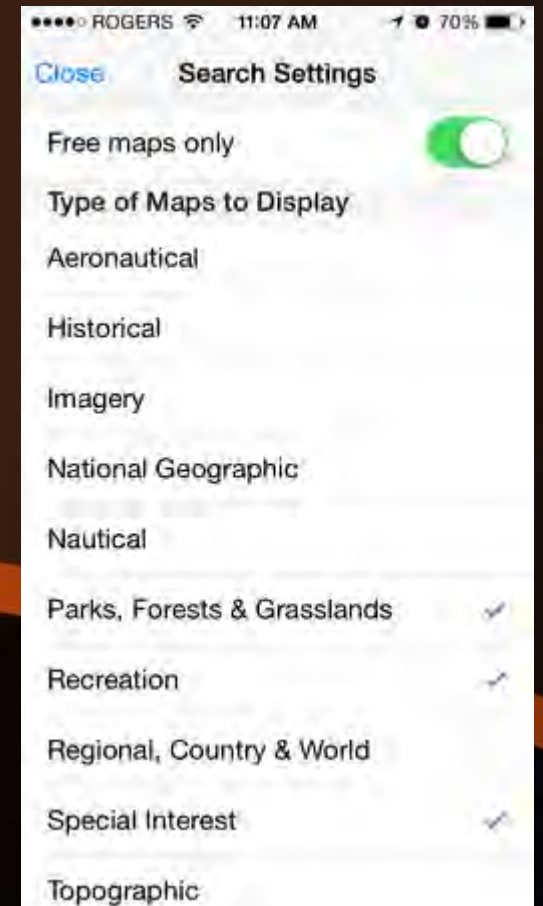


Map Store

- ▶ List
- ▶ Tap List to view a listing of all the maps that are either within the search map extent or match your search terms.

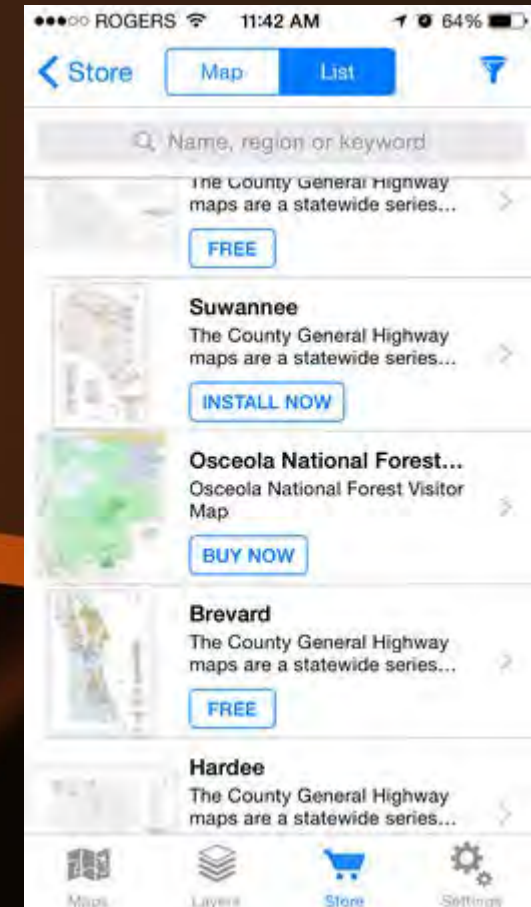


- Search Settings
- Tap the Search Settings icon to enable or disable search filters to change which types of maps to display.



Map Store

- Getting Maps
- You can purchase or download free maps and map bundles (a collection of maps available from a map publisher) easily from the PDF Maps Store with only a few taps.
- To download a free map or map bundle:
 - 1. Tap the FREE button beside any map listing or on the map details screen.
 - 2. Tap INSTALL NOW.
 - 3. Go to the Maps tab to open the map.
- To purchase a map or map bundle:
 - 1. Tap the price button beside any map listing or on the map details screen.
 - 2. Tap BUY NOW.
 - 3. Go to the Maps tab to open the map.



Bonus Material

Version Comparison

Trying to decide which version of Avenza Maps to go get? Or maybe you're considering upgrading to Pro that offers more features? Below is a list of features available in each version.

Feature	Avenza Maps	Avenza Maps Pro
Cost	Free	See pricing
Audience	Recreationalists & travelers	Industry, government & academic professionals
Access to Avenza Map Store	●	●
Offline map use	●	●
Record GPS tracks	●	●
Plot photos	●	●
Plot placemarks	●	●
Custom icons	●	●
Measure distance and area	●	●
Change measurement units	●	●
Locate with built-in GPS	●	●

Feature	Avenza Maps	Avenza Maps Pro
Commercial use		●
Coordinate display formats (MGRS/USNG)		●
Import your own maps	Up to 3 at a time*	●
Enterprise licensing		●
Locked layers		●
Save measure lines		●
Custom units		●
Shapefile import and export (points and lines only)		●
Request app features		●
Priority technical support		●

Unlock the ability to import an unlimited number of your own maps with an in-app subscription of \$29.99/year (USD).

TIPS

- PDF Maps will only display KML's with points and lines, won't show polygons
- Most forests have the forest visitor maps in the map store
- All topo maps are in the maps store
 - If you download multiple topo's put them in a folder and use the Collection feature (Apple Only)
- Works good on day to day projects: laying out burn blocks, photo points

Bonus Material



Enter Long URL Here

Shorten

Questions

