

## Understanding coordinates in Google Maps

There are many ways to show a place on a map. For example, the latitude and longitude of the Nascar Hall of fame in Charlotte can be expressed as:

- Degrees, minutes and seconds 35° 13' 17.1186" -80° 50' 36.2436"
- Degrees and decimal minutes 35 13.285319 -80 50.60406
- **Decimal degrees** 35.221422,-80.843401

**Google Maps coordinates are expressed in *decimal degrees*** to comply with the most common Geographic Information Systems.

When using Google Maps you can search for coordinates expressed in the different formats indicated above. Alternatively, you can find out the coordinates of a point by placing your cursor over a map and right clicking on your mouse. Then select *What's here?* and the latitudinal and longitudinal coordinates will be provided.

You can then send that location directly to your phone or other device.

- Convert the coordinates to your specific device input format for manual enter. The rounding applied during the conversion can affect the accuracy of the location displayed on the map.
- An easy to use **conversion site** provided by the FCC appears on <http://transition.fcc.gov/mb/audio/bickel/DDDMSS-decimal.html>  
Simply input decimal degrees to generate degree, minutes and seconds

**Google Maps Labs** allows you to try out experimental new features in Maps to assist you with geocaching. To turn on a Labs feature in Google Maps, click the green conical flask icon at the top right of the screen. This will bring up a list of Labs features that you can choose from. If you're signed in with your Google account, it will remember which Labs you have enabled the next time you sign in to Google Maps.

<http://support.google.com/maps/bin/answer.py?hl=en&answer=2533464> Retrieved 12-16-13

## Applications for Androids

Free application for converting coordinates (Decimal Degrees and Degree/Minutes). Converts as you type. View coordinate on map. Locate your current location . Export coordinate to Email or Text message Copy desire coordinate format and paste in any other app. Go to googleplay store or itunes for **Coordinates Converter Free 2.0.1**

**Free apps for Androids c:geo** is an open source, full-featured, always ready-to-go client for geocaching.com (unofficial) and offers basic support for other geocaching platforms (like Opencaching). It does not require a web browser or exports - just download and start right away. A compass is an additional feature on this app.

**GeoBeagle** is free and doesn't violate geocaching's TOS. Store and wirelessly update thousands of geocaches, track them with the gps/map, and log with fieldnotes. Download caches directly using [bcaching.com](http://bcaching.com) or import gpx files. Integrates with another free app called **Radar**. It is available on the googleplay store.

## Using Smart Devices with Map Apps

All smart devices come with a Map App, whether it is an Apple product or an Android. It is always recommend that you keep all of your apps up to date.

For this sample an Android was used with Google Maps


1. Open your Maps App
2. Find your search bar (the search icon is traditional this icon  )
3. Within your search box enter your coordinates, once you are done click the next or search icon, Figure 1, should appear.
  - a. If your coordinates are listed in the Degrees, Minutes, Seconds like such: 35° 13' 17.1186" -80° 50' 36.243" enter them without any symbols, but you must keep the negatives otherwise you will end up on the other side of the world, 35 13 17.1186, -80 50 36.2436. You can see in all the figures that an the Coordinates were converted to an actual address.
4. If you click on the directional arrow, and your GPS is on (see your devices Settings for the GPS function), you will be promoted to enter a Start Point or My Location, Figure 2. The icons displayed show the different modes of transportation. Once you have indicated how you would like to get to your destination click Get Directions.



Figure 1

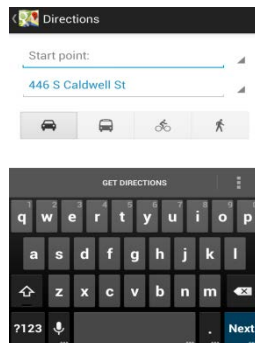


Figure 2

5. If you would have chosen the > icon from Figure 1, a similar page would have showed, see Figure 3. You would have clicked on Directions and followed the prompts.

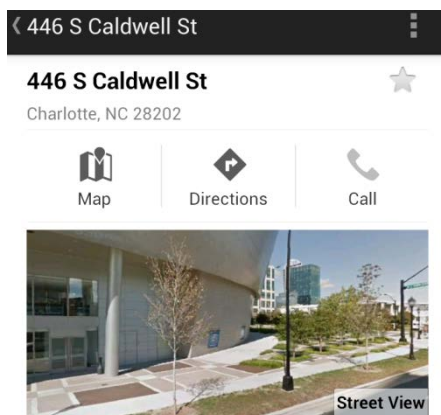


Figure 3

For this same an iPhone was used with the Maps App that came with the phone.

Please not that Apple users can download Google Maps and the sample above would be the same. If you are using the Map Apps that came on your Apple device continue reading.


1. Open your Maps App
2. Find your search bar (the search icon is traditional this icon )
3. Within your search box enter your coordinates, once you are done click the next or search icon, Figure 4, should appear.
  - a. If your coordinates are listed in the Degrees, Minutes, Seconds like the first sample list on page one it will not work. If you convert the coordinates into a Decimal Degree it will work. 35.221422, -80.843401.
4. If you click on the directional arrow, and your GPS is on (see your devices Settings for the GPS function), you will be promoted to enter a Start, Figure 5. The icons displayed show the different modes of transportation. Once you have indicated how you would like to get to your destination click the Route, then Start.
5. If you click on the blue > symbol indicated on Figure 4, Figure 6 will show up and again follow the prompted which will which will take you back to Figure 5.



Figure 4

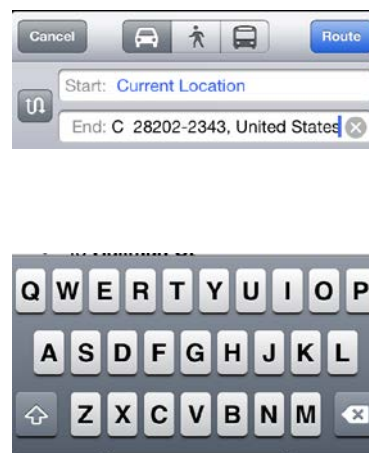


Figure 5

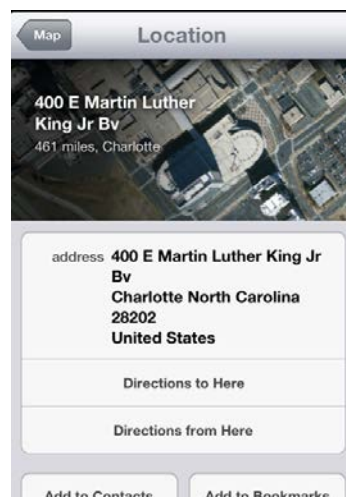


Figure 6