

Google Maps as a GIS

GIS stands for Geographic Information System. A GIS can be used to "capture, store, manipulate, analyse, manage and present all types of geographical data" almost always on a base layer of a map of some kind.

In simple terms, it's using computing technology to present some form of data on some kind of map. Google has a variety of tools which can be used as a GIS.

Google Maps

This is the standard Google Maps web service.

1. Log in to your Google account
2. Go to **maps.google.co.uk**

July 2013: if you're using the New Google Maps at this point things get different. You'll know if you are because there's no search pane on the left of the browser window – just a search box in the top left with the map underneath it. If you're in new maps you need to click the **cog** at the top right hand corner of your map and then click **My Places**

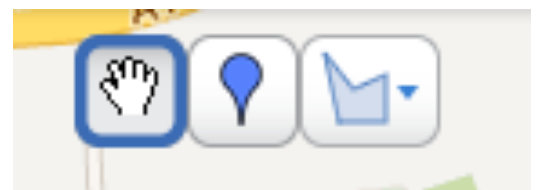
In "Classic" Google Maps:

3. Click the **My Places** button in the search pane on the left (where directions etc... usually come up)
4. Click the Create Map button
5. Give your map a name and description
6. Navigate to where you want to place your data and zoom to an appropriate scale

Now add some stuff to your map.

At the top of the map is a set of icons.

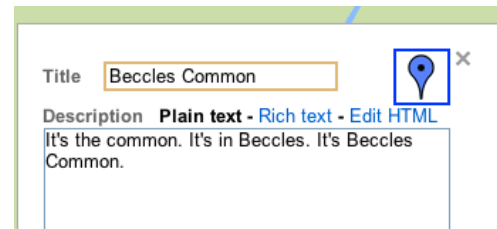
- the hand simply lets you move around the map. That gets selected by default.
- the map pin icon lets you add a map pin to your map – simply click to drop it and then give your pin a title and write something about it.



- the line icon lets you draw a polygon (a straight sided shape) or a line on the map. You can use this to mark an area – for example, an area which has been gentrified, an area of protected land or an area likely to be lost to coastal erosion.

Formatting

Once you have information on your map you can format it. Click the shape, line or pin to pop the information box up. Then click the icon or square in the top right of the information popup. This will allow you to format aspects like colour.



Saving

Once your map is done (or enough of it is done to test) you need to click the **Done** button in the side pane. If you don't do this then you won't see the map as it looks to end users! Guess which mistake I kept making...

Using the map

You can get a link to your map by clicking the button in the side pane which looks like the links of a chain. This will give you a URL (a web address) to send to people and some embed code to, in theory, embed the map in a web page.

July 2013: It looks like embedding your own maps in webpages won't work for now. They might sort this feature out though.

Adding images to Google Maps

It is possible to add an image to a information box on your Google Map. To do this you need:

- the image uploaded to the internet somewhere (I tend to use Flickr)
- a map with some information boxes on it

The process is a little tricky, but this should do the job (as of July 2013...)

1. Open your Google Map – find it in My Places after you've logged in
2. Click the **Edit** button
3. Copy the image address of your image from wherever you have it stored

The best way to do this is to right click on the image and Copy Image Address

If your image is in Flickr you'll need to go to one of the sizes of the image first

4. Click the pin, shape or line that you want to add the image to
5. Click **Edit HTML**

Some "tags" will appear. These are formatting the display of the information – just like web pages do using HTML (the code that makes webpages display)

6. Add – probably after your writing and the last tag - the following:

```

```

The < at the front, the quotes and the > at the end are all important!

7. **Save** and then press **Done**
8. Test whether it works



Troubleshooting:

The biggest problem you're likely to have is the size of the image. Ideally you want to choose whatever image size will work best in the information box – a huge image is likely to be pretty poor. That's where Flickr comes in handy.

You can adjust the size by adding height and width parameters as part of the HTML – but you need to keep the parameters in proportion or else you'll distort the image. You'd do this by going:

```

```

To stop the image distorting you're almost certainly going to need to know it's width and height first – you then divide by 2 (or 3 or 4 or whatever) to get the proportions right.

Getting a graph in Google Maps

As of July 2013 I can't find a way of linking a Google Chart directly to a standard Google Map. There might be one...

So, the workaround is to create the chart and save it as an image anywhere on the web – and then use the same technique as above.

To do this:

1. Create your chart in whatever piece of software or web application you choose
2. Format it all pretty – bearing in mind you might end up with the chart being quite small in the information box
3. Take a screenshot of the chart (Windows: PrintScr button; Mac: Cmd+Shift+3)
4. Open your standard graphics editor (Paint if you use Windows is fine)
5. Paste the screenshot in (Mac: open it from the Desktop)
6. Crop the image and save it – you now have a picture of your chart that you can upload to somewhere on the internet