



Mapping Address Data using Batchgeocode.com

A standard practice among economic geographers is address matching or geocoding. This process utilizes a software that identifies the latitude and longitude coordinates associated with an address. The software does this according to an algorithm in which the numeric part of the address is converted into a fraction of the distance along a line segment that represents a street. That fraction is used by the software to place a point somewhere on the line segment. Odd and even addresses are placed on the north/south or east/west side of the street according to convention. This process used to be far more time consuming than it is today. It can still be laborious if the number of addresses you are geocoding is very large (15,000 or more for example). For very large geocoding jobs, you should consider learning the geocoding function in one of the geographic information systems softwares available to you.

Luckily there are some online services that have significantly reduced the effort associated with geocoding smaller batches of addresses. On line geocoding sites use Google Maps or Yahoo Maps to process the information you ask it to map. This process is more accurate because much of the data is 'ground truthed', some of it by CSUN Geography grads, and it is far easier. Perhaps the best online geocoder is www.batchgeocode.com

Here's how to make a point map with batchgeocode and ArcMap.

1. Begin by opening a web browser (Firefox is best), ArcMap and Microsoft Excel.
2. Use control + tab to move between the windows.
3. Open ArcMap. Make a new blank map.
4. Add some data in ArcMap, so you have a layer or two that will provide you some background for Los Angeles County.
 - a. ESRI/USA/Census/Zip_Poly
 - b. ESRI/USA/Trans/Freeway system.
 - c. Others?
 - d. Zoom in on LA
5. Open your browser.
6. Do a web search for: LA county health department restaurant ratings.
7. The following site is the one: <http://www.lapublichealth.org/rating/>
8. This site will provide our address data.
9. Pick a ZIP code, city or other search criteria. For a good starter type “burrito” into the “Name” response box and click “Submit”.
10. A .html style table will appear in your browser window.
11. Copy and paste that table into your Excel Window
 - a. Be sure to get the column headings and the very last cell in the table.

12. In excel, press control + N to get a new blank spreadsheet. (or just use another sheet)
13. Highlight all your addresses and open the new blank window
14. You will next “Paste Special” into the new window, but only paste VALUES...that will take out all the extra .html stuff that you don’t want.
15. Now switch your browser to www.batchgeocode.com
16. Click in the “Step 2” window and press Control + A to select all.
17. Press delete to empty that window.
18. Back in your Excel window highlight you address data and copy it (Control + C).
19. Paste it into the “Step 2” window over in batchgeocode.com
20. Click Validate Source.
21. Click “Run Geocoder”. It should begin processing immediately.
22. When it has finished, your addresses will appear again in the “Step 6” window and a map will appear below....
23. You can copy and paste this map into a website, place it in Google Earth or maybe email it.
24. To get this map into ArcMap, you need to copy your address data from the “Step 6” window, back into Excel.
 - a. You can paste it into a new window, over to the side or right over top of the original data.
25. Rename the column heading “bg_lat” to “latitude” and “bg_long” to “longitude”.
26. Delete any extraneous data (look at the bottom of your file).
27. Save your data somewhere you can easily find it in ArcMap
 - a. . If you can, save it as a .dbf file.
 - b. If you can’t you may want to rename your “sheet”.
28. Close Microsoft Excel.
29. In ArcMap, add your address data.
30. In ArcMap, right click on the file in the table of content window, select from the options "Map X, Y Coordinates"
31. You will then be prompted to find the coordinate system. Batchgeocode uses a very standard, non-projected, global system called WGS1984. Select that from your options.
 - a. Click Edit/Select/Geographic Coordinate Systems/World/WGS1984
 - b. Apply/ Apply/OK
32. Once you have mapped your points, they will be only "events".
33. You must select them all and then export them as a .shp file.
 - a. Right click/Data/Export Data/
 - b. Pick your save location and a good name.

Finish!