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Extension and Outreach



Geocoding with Batchgeo.com

Welcome to the Essential ArcGIS Task Sheet Series. This series supplements the Iowa State University Geospatial Technology Training Program short course series. The task sheets are designed to provide quick, easy instructions for performing mapping tasks.

Geocoding is the process of converting street addresses (like "702 Clark Ave., Ames, IA, 50010") into geographic coordinates (like "42.028032, -93.616755") that can be mapped. There are many services that offer geocoding, some are free of charge, some are not. This task sheet will focus on a website called BatchGeo, which allows users to make basic maps with only a spreadsheet of addresses. The resulting maps can be embedded on a web page or exported as a .kml file for use in programs like Google Earth or ArcMap.

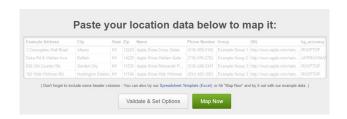
1. Download the Data

- a. To download the formatted data used in this task sheet, navigate to <u>www.extension.iastate.edu/communities/gis/quicktasksheets/data</u> in a web browser and click on the publication number PM2082-16h.
- b. The data for this task sheet includes a log of calls for service for the Ames Police Department for a 4-day period in June 2016. This data comes from http://www.cityofames.org/government/departments-divisions-i-z/police/news-and-updates.

2. Geocode the Addresses

- a. In your browser, navigate to <u>batchgeo.com</u>. You can either copy & paste the data from the spreadsheet you downloaded in **step 1a**, or drag and drop the file in the box. You should see your data appear in the table.
- b. Next, click **Validate & Set Options**. Make sure BatchGeo has correctly matched the columns in your spreadsheet to the fields of the geocoder.
- c. The dataset we're using does not have zip / postcode information. That's okay! Select **none** in the drop-down menu.
- d. For **Group By / Thematic Value**, select **Type of Call**. This is how our data will be grouped in the map.
- e. Click on **Show Advanced Options** to further customize your map. You can manage marker color and shape, map style, enable marker clustering, add a title to your map, and more. For now, let's go with the default settings.
- f. Click **Map Now** to start the geocoding process. This may take several minutes, as we are geocoding 232 records. After all the addresses are processed, click **Make Map** to view the results on a map.





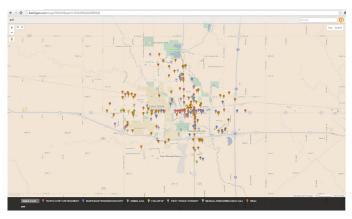


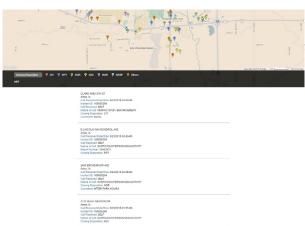


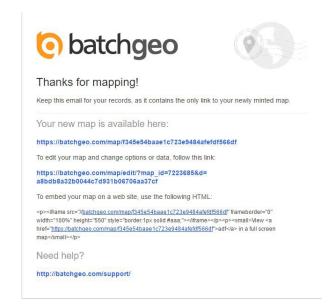


3. Editing, Saving, Exporting the Map

- a. Now you should see a map of Ames with Police service calls mapped by the type of the call.
- b. At this stage, you can edit the location points by clicking and dragging them. This is useful as the geocoder sometimes will place a marker in the wrong location.
- c. Click **Save & Continue**, and then add a title like Ames Police Department and description like Calls for Service, 6/19/2016 - 6/23/2016, enter your email address, and click **Save**. A link to the map will automatically be emailed to you.
- d. The map should now appear full-screen in your browser. In the bottom-left, you can change the column by which the points are sorted. You can also select one or more categories to filter the data.
- If you scroll down, you can see the information included in each record on the map. If you click directly on an address, a new Google Maps page will open in new tab, but if you click anywhere else on the record, a pop-up for that record will be activated within the current map.
- At the very bottom of the page, there is a link to download your map as a Google Earth document (KML). This file can be opened in Google Earth or converted to other file types.
- Open the email you received from BatchGeo to find a link to view your map, a link to edit your map, as well as HTML code you can use to embed your map on a website.







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