



GEOCODING ADDRESSES USING GEOMEDIA eTRAINING

Introduction

Use GeoMedia Professional to geocode point features at the locations of a set of addresses.

Software

- GeoMedia Professional

Data

- Parcel Address data for King County, Washington

Transcript

0:09

Hello and thank you for watching this Hexagon Geospatial eTraining module: Geocoding Addresses Using GeoMedia. In this video we'll learn how to generate point features at the locations of a set of addresses, using the Geocode Addresses command in GeoMedia.

0:26

“Geocode” means to establish the geographic location of an input address. The Geocode Addresses command uses a geocoding directory, or GCD file, to geocode a list of addresses. The geocoding directory file references one or more geocoding datasets.

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Each geocoding dataset references a published Address Geocoding Index, or AGI file. An AGI file is a published binary file that contains a complete geocoding index for fast and accurate geocoding.

0:57

At the end of this video, we'll be able to geocode a given set of input addresses described in a tabular feature class. Let's open GeoMedia Professional to see how to geocode addresses in GeoMedia.

1:10

We'll start with GeoMedia Professional open with established warehouse connections.

1:15

Here is the Warehouse Connections dialog in GeoMedia. There are two warehouse connections. One is to the parcel_address ArcView data, which has a parcel_address area feature class. The other is to the GeocodeAddresses SQL Server data, which has a ParcelAddressData tabular feature class. The ParcelAddressData tabular feature class contains the input addresses that need to be geocoded.

1. We can close the Warehouse Connections dialog.
2. Add parcel_address area feature class to the map window.

1:48

This is the reference feature class with which AGI files are built.

1:52

Let's see the input addresses for which we want to generate geographical locations.

3. On the Home tab in the Window group, under the Add / Show Windows list, click New Data Window.
4. In the New Data Window dialog, in the Features to display feature panel, select the ParcelAddressData tabular feature class from the Geocode Addresses connection.
5. Click OK to open a data window with 29 input addresses.

2:17

Here in the data window, generic address elements such as House number, Street Name, Address, ZIP, CityName, and County are listed as columns. These are the addresses that will be geocoded.

6. To do this, we'll use the Geocode Addresses command in the Geocoding group on the Analysis tab.

2:37

The Geocode Addresses command operates on input addresses from a feature class, a query, a categorized feature class, or a reference feature class; and it produces an output query.

7. In the Geocode addresses in list, select the ParcelAddressData feature class that contains the input addresses to be geocoded.
8. Click Browse and select Parcel_Address_RooftopGeocodingDirectory.xml as the Geocoding directory file.

3:07

It has two geocoding datasets, namely Seattle and Kent. This geocoding directory file has the basic metadata information about AGI files that are built on the Parcel_address reference data covering the cities Seattle and Kent.

9. The Geocoding dataset lists Seattle, Kent, and By address element options. Select the By address element.
10. The Address element name list is available. Select City from the list.

3:37

This tells the command to pick the Geocoding dataset according to the City attribute value. This means that an input address having a City value of "Seattle" will be geocoded against the AGI file for the Seattle geocoding dataset as configured in the Geocoding directory file. Note that Street address: City: ZIP is selected for Input address format.

4:01

The Address Attributes grid below is populated based on the Input address format selected. The address elements displayed in bold red are mandatory.

11. Select appropriate attributes for Attribute names: Street address > Address, City > CityName, ZIP > ZIP.
12. Click the Advanced button to open the Advanced Properties dialog.
13. Set Minimum match score and Offset distance according to your requirement. Here we'll set a minimum match score of 50 and an offset distance of 2 meters.
14. Click OK to close the Advanced Properties dialog.
15. Click the Style button to open the Select Style dialog.

4:43

This defines the style of the geocode point to be displayed in the map window.

16. Select the style you want to represent the geocoded point.
17. Close the Select Style dialog.
18. Click OK to close the Geocode Addresses dialog.

4:59

Note that the Geocode Addresses query is displayed in both a data window and a map window.

19. Open the data window, scroll to the right, and note that Score, Status, StandardizedAddress, and MatchedAddress attributes are displayed along with the other attributes of the ParcelAddressData feature class.

4:59

Note that the Status column values show the match status.

20. Shift the focus to the map window.

5:27

Note that the Geocode Addresses query output is added to the legend, and 17 point features are displayed on the map window with the style we defined earlier.

5:36

Other addresses in the input tabular feature class did not match completely, may not have indexed in the AGI files selected, or may be invalid inputs.

5:46

Let's vertically tile the windows.

21. Select an address with Match Score of 100 in the data window.
22. Fit select set in the map window.
23. Zoom out a bit to view the parcel_address area feature overlaid on the selected point feature.

6:06

The geocoded point feature is placed at the center of the parcel_address area feature.

24. Select parcel_address feature and open the Select Set Properties.

6:17

Now we can see that the input address elements match the attributes of parcel_address area feature.

6:25

Thank you for watching this eTraining module from Hexagon Geospatial. For more eTraining please visit hexagongeospatial.com/eTraining.