Use WV GIS Technical Center geocode services to reverse geocode locations in WV

The WV GIS Technical Center hosts a geocode service that returns map coordinates for WV addresses. This service can also be used to determine street addresses from coordinates. This document shows how to use the ArcMap 'Reverse Geocoding' tool and WV GIS geocode services to return address locations for points in a feature class.

- 1. First, create a point feature class with digitized locations that have unknown street addresses.
- 2. If your ArcMap session is not connected to the WV GIS Tech Center services, follow these instructions to create a connection.
 - a. Add a new ArcGIS Server connection in the ArcMap Catalog view.

_	-1	GIS	Serv	ers			
			Add	ArcGIS	Serve		

b. Select 'Use GIS Services' from the menu, then click Next.

/hat would you like to do?					
Use GIS services					
Publish GIS services					
O Administer GIS server					

- c. Type the WV GIS Tech Center services URL into the 'Server URL' field:
 - i. http://services.wvgis.wvu.edu/arcgis/services

General	×							
Server URL:	http://services.wvgis.wvu.edu/arcgis/services							
	ArcGIS Server: http://myserver:6080/arcgis/services Spatial Data Server: http://myserver:8080/arcgis/rest/services							
Authentication (Opt	Authentication (Optional)							
User Name:								
Password:								
	Save Username/Password							
About ArcGIS Server connections About Spatial Data Server connections								
	Back Finish Cancel							

- ii. The 'User Name' and 'Password' fields are not required, click Finish.
- iii. The WV GIS Tech Center services will load in the Catalog view. Expand the services directory to view service folders.

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- 3. Geocode services are located in the Geocode service folder. Multiple geocode services reside in this folder:
 - a. **WV_Composite** a combination of WV_Site and WV_Street geocoders
 - WV_Street a geocoder that searches for addresses/coordinates using street features.
 - c. WV_Site a geocoder that searches for addresses/coordinates using WV parcel data.

_		arc	gis on services.wvgis.wvu
	+	6	Application
	-	6	Geocode
			WV_Composite
			WV_Composite_wgs84
			WV_Site
			WV_Street
	+	6	Geoprocessing
	+	6	Image
	+	6	Map
	_	6	Test
			📮 easter_panhandle_only
			morgantown
			PresentationData
			Test_wv_flood_hazard_exper
			wv_flood_hazard_expert
			WV_Legislature

- 4. Open the 'Reverse Geocoding' tool in ArcMap, which is listed in the 'Geocoding Tools' toolbox. Enter the following parameters and click 'OK'.
 - a. Select a point feature class for the 'Input Features' parameter
 - b. For the 'Input Address Locator' parameter, drag a geocoder from the WV GIS Tech center services folder (in the Catalog view) into this field.
 - c. Select an output feature class.
 - d. Enter a search distance for the final parameter. If the final geocoded addresses are incorrect, try adjusting this parameter.

Input Features							
E:\Geocoding\	reverse_geocod	e.gdb\tes	st				2
Input Address L	ocator						_
C:\Users\rsta	nley\AppData\l	Roaming	J\ESRI\De	esktop1).1\ArcCat	alog\ar 🔻	2
Output Feature	Class						
E:\Geocoding\	reverse_geocod	e.gdb\ge	ocode_ou	tput			2
Address Type (optional)						
ADDRESS							•
Within				_			
				10	Feet		•

 The output feature class will add four new fields in addition to the feature class' original fields. The following fields will be added as a result of running the 'Reverse Geocode' tool: Street or Intersection, City or Placename, State, and Zip Code.

Street or Intersection	City or Placename	State	ZIP Code
150 PLEASANT ST	MORGANTOWN		26505
1205 PHILIP ST	MORGANTOWN	WV	26501
3493 UNIVERSITY AVE	STAR CITY	WV	26505
1226 BEATRICE ST	CHARLESTON	WV	25302
1386 SOMERSET ST	STAR CITY	WV	26505

 If the reverse geocode results are not as you expected, try adjusting the search distance. Here is a reference to ESRI's documentation about the 'Reverse Geocode' tool. <u>http://resources.arcgis.com/en/help/main/10.1/index.html#//00260000009000000</u>