

Table of Contents

About the Geocoding tutorial					3
Exercise 1: Creating an address locator					4
Exercise 2: Creating a composite address locator					7
Exercise 3: Finding addresses				. '	10
Exercise 4: Geocoding addresses in a table and rematching unmatched addresses				. '	13
Exercise 5: Using alternate street name and place-name aliases				. '	18

About the Geocoding tutorial

The ArcGIS Geocoding tutorial provides sample data and step-by-step instructions on how to use geocoding functionality for matching addresses. This tutorial introduces you to geocoding with ArcGIS Desktop. You will learn the basic techniques for creating address locators and geocoding with ArcGIS.

Some procedures in this tutorial require that you be familiar with using ArcCatalog and ArcMap. For example, you should know how to copy data to a new location and add data to a map. You should also have a basic understanding of what a geodatabase is and the objects it can contain. If you're new to GIS or feel you need to refresh your knowledge, take some time to read What is ArcMap? and What is ArcCatalog?, or other related topics in ArcGIS Help to help you understand many of these basic concepts.

Tutorial data

Ask your system administrator for the correct path to the tutorial data if you do not find it at the default installation path, C:\ArcGIS\ArcTutor\Geocoding, as specified in the tutorial. Before you begin the exercises, it is recommended that you make a copy of the data used in this tutorial so the original tutorial data will remain unmodified. Copy the Atlanta.gdb folder in the ArcTutor\Geocoding folder to a new location on your computer such as the C drive. The Atlanta.gdb folder contains a file geodatabase named Atlanta. Make sure the geodatabase is not read-only.

In this tutorial

- Exercise 1: Creating an address locator
- Exercise 2: Creating a composite address locator
- Exercise 3: Finding addresses
- Exercise 4: Geocoding addresses in a table and rematching unmatched addresses
- Exercise 5: Using alternate street name and place-name aliases

Exercise 1: Creating an address locator

In this tutorial you'll learn how to create a new address locator.

An address locator lets you convert textual descriptions of locations into geographic features. Address locators are stored and managed in a workspace you choose. The workspace can be a file folder, file geodatabase, personal geodatabase, or ArcSDE geodatabase. The first thing you'll do is create an address locator based on your copy of the Atlanta file geodatabase.

Complexity: Beginner Data Requirement: ArcGIS Tutorial Data Setup Data Path: c:\ArcGIS\ArcTutor\Geocoding Goal: To create an address locator

Steps:

- 1. Start ArcCatalog by clicking **Start > All Programs > ArcGIS > ArcCatalog 10.**
- 2. Navigate to the Atlanta file geodatabase.
- 3. Right-click within the empty space of the **Contents** tab and click **New > Address Locator**.

116	Туре		
altname customers place_alases streets	File Geodata File Geodata File Geodata Elle Geodata Copy Chri+4 Peste Chri+4 Delete	ibase Tabi ibase Tabi ibase Tabi	e e ture Class
2	Rename Fi Refresh	2	
3 41 2	New Import Export Compress File Geodatabase Uncompress File Geodatabase Compact Database Publish to ArcGIS Server Distributed Geodatabase Properties		Feature Dataset Feature Class Table Relationship Class Raster Catalog Raster Dataset Mosaic Dataset Srimmar, Catalog Srimmar, Catalog

The Create Address Locator dialog box appears.

4. Click the **Browse** button that is next to the **Address Locator Style** text box to open the **Select Address Locator Style** dialog box.

-
1



Choose the US Address—Dual Ranges address style and click OK.

5. Click the Browse button that is next to the Reference Data text box.

US Address - Dual Ranges	
Reference Data	
	2

The Reference Data dialog box appears.

- Navigate to the Atlanta file geodatabase, choose the streets feature class, then click Add. You can also drag and drop the streets feature class from the workspace to the Reference Data text box in the dialog box.
- 7. In the *Create Address Locator* dialog box, click the arrow under the **Role** column heading and click **Primary Table**.

Reference Data	Role	+
C:\ArcTutor\Geocoding\Atlanta.gdb\streets	Primary Table 🛛 😧 Primary Table	×
	Alternate Name Table Alias Table	Ť

 The Field Map section should be completed automatically. If not, choose the appropriate field in the reference data for each address locator field.
 Fields with an asterisk (*) next to their names are required by the address locator style. These

Fields with an asterisk (*) next to their names are required by the address locator style. These fields must be mapped with valid fields in the reference data. Nonrequired fields can be left as <None> if the fields do not apply.

Next, you will set the output path for the locator.

- Click the Browse button that is next to the Output Address Locator text box. The Output Address Locator dialog box appears.
- 10. Navigate to the Atlanta geodatabase folder, type Atlanta in the Name text box, then click Save.

The output path is displayed in the Create Address Locator dialog box.



11. Click **OK** to start the process of creating the address locator.

 Contents
 Preview
 Description

 Name
 Type

 Adanta
 Locator

 Bathname
 File Geodatabase Table

 Customers
 File Geodatabase Table

 Splace_alases
 File Geodatabase Table

 Hysterets
 File Geodatabase Feature Class

When the process finishes, the new address locator appears in the Atlanta file geodatabase.

Exercise 2: Creating a composite address locator

In this tutorial, you'll learn how to create a new composite address locator.

A composite address locator consists of two or more individual address locators that allow addresses to be matched against the multiple address locators and find best matches. For example, a composite address locator may contain a street address locator and a ZIP Code locator. If an address fails to match against the street address locator, the address can fall back to match against the ZIP Code locator.



Like address locators, composite address locators are stored and managed in a workspace you choose. The workspace can be a file folder, file geodatabase, personal geodatabase, or SDE geodatabase. Before you create a composite address locator, you need to find or create the address locators you want to include in the composite address locator.

This tutorial will use the Atlanta address locator you created in exercise 1 and the Postal_US address locator available in the StreetMap data in the Data & Maps DVD. The StreetMap data and address locators should be found in \dm_stmap_dvd\streetmap_na\data.

Steps:

- 1. Start ArcCatalog by clicking Start > All Programs > ArcGIS > ArcCatalog 10.
- 2. Navigate to the Atlanta file geodatabase.
- Right-click within the empty space of the Contents tab, then click New > Composite Address Locator.

	Туре			
name ktomers ce_alases eets	File Ge File Ge File Ge File Ge Ella Ca Delote Rename Rename Refresh	odatabase odatabase odatabase Otri+C Otri+C	Table Table Feat	a uro Class
3	New Import Export Compress File Geodatabase Uncompress File Geodatabase Compact Database Publish to ArcGI5 Server Distributed Geodatabase Properties	• • •		Feature Dataset Feature Class Table Relationship Class Raster Catalog Raster Dataset Mosaic Dataset Schemote Dataset Toolbox Address Locator

The Create Composite Address Locator dialog box appears.

4. Click the Browse button next to the Address Locators text box.



The Address Locators dialog box appears.

- 5. Navigate to the Atlanta file geodatabase, select the Atlanta address locator, then click Add.
 - Tip: Instead of using the Address Locators dialog box, you can dragand-drop locators from the Catalog Tree directly into the Participating Address Locator section of the Create Composite Address Locator dialog box.
- Repeat step 4, navigate to the StreetMap data folder, select the Postal_US address locator, then click Add.

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ok in:	🚞 data		1	- 12		8		3
Composi Composi Composi Postal_C	te_CAN te_NA te_US CAN							
Street_4	Addresse Addresse	s_CAN s_US						
Street_A	Addresse Addresse Po	s_CAN s_US stal_US				(Ad	đ

The two address locators now appear in the **Participating Address Locators** section. Under the **Name** column, each locator is automatically given a name that the composite address locator refers to. Field mapping for all the participating address locators is also automatically created. The fields become the input fields for the composite address locator.

ldress Locators		1
Participating Address Locators	Name	+
C:\ArcTutor\Geocodpo\Atlanta.odb\Atlanta	Atlanta	-
K:\dm_stmap_dvd\streetmap_na\data\Postal_US	Postal_US	×
		1
		+
		-
		2
ad Map		10.00
Allacta Street		
P Chy		~
Atlanta.City		_
E State		9
Atlanta.State		
⊟ ZIP		3
Atlanta.ZIP		
Portal LIS 7TP		

Changing the Selection Criteria section is optional.

- 7. Make sure the output composite locator will be stored in the Atlanta geodatabase by following the substeps below.
 - a. Click the **Browse** button next to the **Output Composite Address Locator** text box. The **Output Composite Address Locator** dialog box appears.
 - b. Navigate to the folder of the Atlanta geodatabase and click the geodatabase to select it.
 - c. Type Atlanta Composite in the Name text box.
 - d. Click Save to accept the changes and close the dialog box.

The output path appears in the Output Composite Address Locator text box.

			and the second se
C;\ArcTutor\Geocodin	g\Atlanta.gdb\A	Atlanta_Composite	
			and a second
OK	Cancel	Environments	Show Help >>

8. Click **OK** to start creating the composite address locator.

When the process finishes, the new composite address locator appears in the Atlanta file geodatabase.



Exercise 3: Finding addresses

In this tutorial, you'll learn how to find an address on the *Geocoding* toolbar and the *Find* dialog box in ArcMap.

Find an address on the Geocoding toolbar

Steps:

- Start ArcMap by clicking Start > All Programs > ArcGIS > ArcMap 10.
- 2. If the Geocoding toolbar is not visible, click Customize > Toolbars > Geocoding to add it.



A list of default locators, including geocoding services from ArcGIS Online and a Military Grid Reference System (MGRS) locator, have been added to ArcMap. You can use these locators to find addresses or locations.

- 3. Click the **Catalog window** button **(i)** on the Standard toolbar to open the Catalog window.
- 4. Navigate to the geocoding tutorial data folder and drag and drop the streets feature class to the map display.

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	😑 📑 Atlanta.gdb	~
	Atlanta_Compos	ite
	dianta 🚳	
	💷 altname	
	customers	
	🚍 streets	~
		2

5. Click the **Manage Address Locators** drop-down arrow on the left side of the **Geocoding** toolbar and click **<Manage Address Locators>**.

Geocoding		×
~	<type address="" an=""></type>	🗸 🆓 🚱 😒
North America Geocode Service Europe Geocode Service (Arcl World Places (ArcGIS Online) MGRS (Mittaty Grid Reference	re (ArcGIS Online) 515 Online) • System)	
<manage address="" locators=""></manage>		

The Address Locator Manager dialog box appears.

- 6. In the *Address Locator Manager* dialog box, click the **Add** button to open the *Add Address Locator* dialog box.
- Browse to the Atlanta file geodatabase and double-click the Atlanta address locator. The *Address Locator Manager* dialog box closes, and the Atlanta locator is added to the list in the *Address Locator Manager* dialog box.

Complexity: Beginner Data Requirement: ArcGIS Tutorial Data Setup Data Path: c:\ArcGIS\ArcTutor\Geocoding Goal: To find addresses using the Geocoding toolbar and Find tool

- **Tip:** Instead of using the *Address Locator Manager* to add a locator to ArcMap, you can click and drag a locator from the **Catalog** window and drop it in the map area or **Table of Contents**.
- 8. Click the <Type an address...> text box, type 150 Linden Ave NE, then press ENTER.



A ToolTip appears showing the full address returned by the locator, and the point location on the map flashes.



9. Right-click the address on the *Geocoding* toolbar and click **Add Labeled Point** to add the graphic point and its label to the map.



10. Type 100 feet NW from 150 Linden Ave NE in the Address Input text box and press ENTER. Then, right-click the address and add it to the map as a labeled point.



Address locators created in the current version of ArcGIS support finding an address based on a spatial offset. The spatial offset can be presented as 100 feet NW from [an address] or in any other distance, linear unit, and direction from the address. Instead of specifying a direction, you can enter a bearing degree, for example, 200 yards bearing 70 from [an address].

Take a moment to select one of the default locators from the *Geocoding* toolbar and search for addresses that you know.

Find an address in the Find dialog box

Steps:

- 1. Click the **Find** button on the **Tools** toolbar.
- 2. In the *Find* dialog box that appears, click the Locations tab.
- 3. Click the **Choose a locator** drop-down list and click Atlanta.
- 4. Type 300 Peachtree St NE 30303 in the Full Address text box and press ENTER, or click Find to search for candidates. Found candidates ranked by score are shown at the bottom of the dialog box. You can see more candidates by checking the Show all candidates check box.
- 5. Right-click the first candidate in the list and click **Add Point** in the context menu.

Match_addr	Pct_along	Side	From	To	PreDir	PreTyp
300 Peachtree St NW, Atlanta, GA 30303 230 Peachtree St NW, Atlanta, GA 30303 (1) objects found	0.8 	то Го	284	304		2
	Creab Creab Add B	e Bookr	vark		-	A P

A graphic point representing the location of the address appears on the map.

Optionally, select one of the default locators from the **Choose a locator** drop-down list and search for any addresses you know.

6. Click **Cancel** to close the *Find* dialog box.

Exercise 4: Geocoding addresses in a table and rematching unmatched addresses

Geocoding addresses in a table

If you have a table that contains address information, you can geocode all the addresses at once. In this exercise, you will begin with a table containing the addresses of customers and geocode the entire table, showing where the customers are located.

Steps:

- 1. Open a new map document in ArcMap. You do not need to save the map you created in the previous task.
- 2. Add the Streets feature class and the customers table from your copy of the Atlanta geodatabase to your map.
- 3. Right-click the customers table on the List by Source view of the Table of Contents and click Geocode Addresses in the context menu.
- 4. Click Add in the *Choose an address locator to use* dialog box. The *Add Address Locator* dialog box opens.
- 5. Navigate to the Atlanta geodatabase, click the Atlanta address locator, then click **Add**. Click **OK**.
- 6. Click OK.

The Geocode Addresses: Atlanta dialog box appears.

7. In the Output section, click the Browse button to define the output feature class.

oustomers		
Address Input Fields		
Street or Intersection	n: ADDRESS	~
City or Placename:	CITY	*
State:	STATE	*
Zipcode:	ZIP	~
Output O Create static sna O Create dynamic f	pshot of table inside new feature feature class related to table	Jass
Output Oreate static sna Oreate dynamic f Output shapefile or C:VarcTuror/Geoco	pshot of table inside new feature i eature class related to table feature class: dirug/Wilanta.gdb/Geocoding_Res	dass
Output Ocreate static sna Create dynamic f Output shapefile or C:VircT utor\Geoco Config Keyword:	pshot of table inside new feature feature class related to table feature class: ding/wilanta.gdb\Geocoding_Rest DEFAULTS	dass A
Output Create static sna Create dynamic I Output shapefile or C:VarcTuror\Geocc Config Keyword: Advanced Geo	pshot of table inside new feature : feature class related to table feature class: drigtAilanta.gdb\Geocoding_Ress DEFAULTS metry Options	dass A 💽

The Saving Data dialog box appears.



- 8. Click the **Save as type** drop-down arrow, then click **File and Personal Geodatabase feature classes**.
- 9. Navigate to your copy of the Atlanta geodatabase, then double-click the geodatabase. In the Name text box, type Atlanta_Results.
- 10. Click Save.

A new point feature class named Atlanta_Results will be created in the Atlanta geodatabase. The point features generated by the geocoding process will be saved in the feature class.

11. Click **OK** to start geocoding.

The *Geocoding Addresses* dialog box is displayed showing the matching statistics and the progress bar for the matching process.

When the geocoding process is finished, the *Geocoding Addresses* dialog box shows the final statistics of the addresses that were matched or not matched. In this tutorial, three addresses fail to match and one address is tied. You'll rematch the unmatched addresses later in the tutorial.

Click Close to close the Geocoding Addresses dialog box.
 A Geocoding Result layer is added to the map. It shows the points that were added to the Atlanta_Results feature class.

Rematching addresses

Steps:

 Select the Geocoding Result: Atlanta_Results layer in the Table of Contents and click the Review/Rematch Addresses button a on the Geocoding toolbar. The Interactive Rematch dialog box opens.

how results: All A	vddresses	✓ Man	age result	t sets R	efresh Remato	ch Automa	tically		Matched	46 (92%)	
ObjectID *	Shape ' Sta	itus	Sce	же	Match_type		~	16	Tied	1 (2%)	
1 P	ont M			100	A 1	171 Piedr	nont ~		Unmatched	1: 3(6%)	
Address:		152 Cano	lidates					, ř	Cand	idate details:	
Address:		152 Cano	lidates					×	Cand	idate details:	
treet or Intersection	1171 PIEDMONT	Score	⊤ Side	Match_addr		From	To	-	From	1159	
ty or Placename	ATLANTA	100	R	1171 Piedmoni	Ave NE, Atlanta,	. 1159	1185		То	1185	
ate	GA	85.71	R	599 Piedmont	Ave NE, Atlanta,	591	599		PreDir		
DCode .	30309	85.71	R	589 Piedmont	Ave NE, Atlanta,	565	589		PreType		
rcode		85.71	R	563 Piedmont	Ave NE, Adanta,	517	563		StreetName	Piedmont	_
include		85.71	R	515 Piedmont	Ave NE, Atlanta,	499	515		SufType	Ave	
rcue									Contraction of the second s		

2. The *Interactive Rematch* dialog box may display all the records in the geocoded feature class at the top of the dialog box. In this exercise, there are three addresses that were not matched. To rematch the unmatched address records, click the **Show results** drop-down arrow and click **Unmatched Addresses**. The result will show three records, and the first one is automatically selected. Sometimes, an address is not matched because a perfect match cannot be found, but

there are close match candidates. The candidates are listed in the **Candidates** section of the dialog box.

- 3. Arrange the *ArcMap* window and the *Interactive Rematch* dialog box so you can see the map. Near the center of the map, you will notice a few points that are highlighted: one in yellow and the others in cyan. These are the locations of the candidates listed in the bottom window of the *Interactive Rematch* dialog box. The selected candidate is highlighted in yellow on the map.
- 4. Click the **Zoom In** button on the **Tools** toolbar and drag over the area of the candidates to zoom in on them.
- 5. Click the fourth candidate in the candidate list. The location of the yellow highlighted candidate changes on the map.
- Click the Match button in the bottom of the dialog box. The selected address is now associated with the fourth candidate in the list at the bottom and the Status field is changed from U to M. The list of unmatched addresses is updated.

Rematching addresses by picking a point location on the map

Steps:

- 1. The result set shows two addresses that were not matched.
- 2. Arrange the *ArcMap* window and the *Interactive Rematch* dialog box so you can see the map.
- 3. Click the **Zoom In** tool and drag over an area of the map.

Next, you will use **Pick Address from Map** to match an unmatched address. You can use this tool to match or rematch an address when you know where it should be located on the map.

4. Click the **Pick Address from Map** button (Pick Address from Map in the *Interactive Rematch* dialog box.

Now when you point the mouse cursor on the map, it shows a cross with a blue dot in the center.

- 5. Click and hold the mouse button along a street segment to display the nearest qualifying address in a ToolTip box.
- 6. Place the mouse pointer on the location you want the address to be matched to.
- 7. Right-click the location and click **Pick Address** from the context menu.

٩	Pick Address
~	Search Street Addresses
	Search Intersections
~	Match To Click Point
	Match To Address Location
-	Long Tooltip Display
	Short Tooltip Display
	Set Search Distance
0	Identify,
	Address Locator Manager

The unmatched address is now matched to the point location you just picked.

8. Click **Close** to close the *Interactive Rematch* dialog box.

Geocoding addresses using a composite address locator

In this exercise, the customers address table is geocoded against the composite address locator you created in exercise 2. It shows how addresses are matched against multiple address locators to find best matches.

Steps:

- 1. Right-click the customers table on the **List by Source** view of the table of contents and click **Geocode Addresses**.
- Click Add in the Choose an address locator to use dialog box. The Add Address Locator dialog box opens.
- In the Add Address Locator dialog box, navigate to the Atlanta geodatabase, click the Atlanta_Composite composite address locator, then click Add to close the Add Address Locator dialog box.
- Click OK to close the Choose an address locator to use dialog box. The Geocode Addresses: Atlanta_Composite dialog box opens.
- 5. In the **Output** section, edit the path to the Atlanta geodatabase and change the result feature class name to Composite_Results.
- 6. Click **OK** to start geocoding.

The *Geocoding Addresses* dialog box is displayed showing the matching statistics and the progress bar for the matching process.

Matched:	48 (96%)	
Tied:	1 (2%)	
Unmatched:	1 (2%)	
100%	X.	
Complet	ed	
Average mend: 160.0	200 recordelbour	

You can see that only one address is not matched.

7. Click Close.

The *Geocoding Addresses* dialog box closes, and a *Geocoding Result* layer is added to the map. The layer shows the points that were added to the Composite_Results feature class.

8. Right-click the **Composite_Results** layer and click **Open Attribute Table**.

You can see that the name of the participating address locator used to match the address is shown in the **Loc_name** field of the attribute table. Some addresses that failed to match against the Atlanta address locator were instead matched by ZIP Code against the Postal_US locator.

	coding Resul	E.					
	ObjectID *	Loc_name	Shape *	Status	Score	Match_type	Match_addr
ľ	1	Atlanta	Point	м	100	A	1171 Piedmont Ave NE, Atlanta, GA 30309
	2	Atlanta	Point	м	100	A	1670 VV Peachtree St NE, Atlanta, GA 30309
Ì	3	Postal_US	Point	м	100	A.	30309
ſ	4	Atlanta	Point	м	100	A	241 16th St N/V, Atlente, GA 30318
1	5	Atlanta	Point	M	100	A	1233 Peachfree St NE, Atlanta, GA 30309
1	6	Atlanta	Point	м	100	Δ	360 Fortune St NF: Atlanta: G& 30312

9. Close ArcMap. You do not need to save the map document.

Exercise 5: Using alternate street name and placename aliases

When you create an address locator, you have the option to use alternate names and place-name aliases. Place-name aliases let you associate names of well-known places with street addresses—for example, the names of museums, hospitals, or landmarks. When geocoding an address, the place-name alias table is consulted first. If a place-name is found, the street address from the place-name alias table is geocoded. Similarly, alternate names can be defined for features, such as streets, in the reference data. When geocoding an address, the alternate name table is also searched to find potential candidates where streets have more than one name.

Complexity: Beginner
Data Requirement: ArcGIS Tutorial Data Setup
Data Path: C:\ArcGIS\ArcTutor\Geocoding
Goal: Create an address locator using alternate name and place-name aliases and find locations using those aliases.

Creating an address locator that uses alternate names and place-name aliases

In this task, you'll create a new address locator that uses alternate street names and place-name aliases, then use it in ArcMap to find addresses.

Steps:

- 1. In ArcCatalog, navigate to the Atlanta geodatabase.
- Right-click within the empty space of the Contents tab and click New > Address Locator. The Create Address Locator dialog box appears.
- In the Create Address Locator dialog box, click the Browse button that is next to the Address Locator Style text box.

Create Address Locator	
Address Locator Style	· • • • •
Reference Data	
and the second	man Sha

The Select Address Locator Style dialog box appears.

4. Choose the US Address—Dual Ranges address style.

elect the address locator style to use:	
General - City State Country	
General - Gazetteer	
General - Single Field	
US Address - Dual Ranges	
US Address - One Range	
US Address - Single House	
US Address - ZIP 5-Digit	
US Address - ZIP+4	
US Address - ZIP+4 Range	

- 5. Click OK.
- Click the Browse button that is next to the Reference Data text box to open the Reference Data dialog box.

- 7. Browse to the Atlanta file geodatabase, choose the streets feature class, then click Add.
- 8. In the *Create Address Locator* dialog box, click the arrow under the **Role** column heading and choose **Primary Table**.



- 9. Repeat steps 6 and 7, but this time browse to and add the altname table in the Atlanta geodatabase.
- 10. Click the arrow under the **Role** column heading for the altname table and choose **Alternate Name Table**.
- 11. The **Field Map** section should be completed automatically. If not, select the appropriate field in the reference data for each field. It is essential that the JoinID fields for the Primary Table and Alternate Name Table are mapped properly; if they aren't, follow these substeps:
 - a. Click the arrow under the Alias Name column heading for the Primary Table:Altname JoinID field and choose streets:JOINID.
 - b. Click the arrow for the Alternate Name Table: JoinID field and choose altname: JOINID.

Reference Data	Role	+
C:\ArcTutor\Atlanta.gdb\stree	ets Primary Table	
C:\ArcTutor\Atlanta.gdb\altna	me Alternate Name Table	×
		1
		+
	10	8
eld Map		
Field Name	Alias Name	
Primary Table:Left ZIP Code	streets:ZIPL	
Primary Table: Right ZIP Code	streets:ZIPR	
Primary Table:Left State	streets:STATE_A88R	
Primary Table:Right State	streets:STATE_ABBR	
Primary Table:Left Additional Field	d <none></none>	
Primary Table: Right Additional Fie	eld <none></none>	
Primary Table: Altname JoinID	streets:JoinID	
*Alternate Name Table: JoinID	altname: 301NID	
Alternate Name Table:Prefix Dire	ction althame:PRE_DIR	
Alternate Name Table:Prefix Type	e altname:PRE_TYPE	
Alternate Name Table: Street Nan	ne altname:ST_NAME	
Alternate Name Table:Suffix Type	e altname:ST_TYPE	
	the second second second second second	

The JOINID field in the altname table and the JOINID field in the streets feature class are used to relate the records in the altname table to the records in the streets feature class.

- 12. Repeat steps 6 and 7, but this time browse to and add the place_aliases table in the Atlanta geodatabase.
- 13. Click the arrow under the **Role** column heading for the place_aliases table and choose **Alias Table**.

14. The field mapping for the place_aliases table should be completed automatically. If not, select the appropriate field in the reference data for each address locator field. For the field named Alias Table:Alias, click the arrow under the Alias Name column heading and choose place_aliases:NAME. This is the field that contains the names of the places that you can use to geocode.

Field Name	Allas Name	1
Primary Table: Right Additional Field	<none></none>	
Primary Table: Altname JoinID	streets:JoinID	
*Alternate Name Table: JoinID	altname: JOINID	
Alternate Name Table:Prefix Direction	altname:PRE_DIR	
Alternate Name Table:Prefix Type	altname:PRE_TYPE	
Alternate Name Table:Street Name	akname:ST_NAME	
Alternate Name Table:Suffix Type	akname:ST_TYPE	
Alternate Name Table:Suffix Direction	altname:SUF_DIR	
*Alias Table:Alias	place aliases:NAME	
Alias Table: Street	place_aliases:Address	
Alias Table: City	place_aliases:City	
Alias Table: State	place_aliases:State	
Alias Table:ZIP	place_aliases:ZIP	-

Next, you'll set the path for the output address locator.

- 15. Click the **Browse** button that is next to the **Output Address Locator** text box. The **Output Address Locator** dialog box appears.
- 16. Navigate to the folder of the Atlanta geodatabase, type Atlanta_AltName as the address locator name, then click **Save** to accept the change and close the dialog box.
- Click **OK** to start the process of creating the address locator. When the process finishes, the new Atlanta_AltName address locator appears in the Atlanta file geodatabase.
- 18. Close ArcCatalog.

You can now use this address locator to find where an address is located on a map.

Finding locations using alternate street names and place-name aliases

In this task, you'll use the Atlanta_AltName locator you just created to find addresses.

Steps:

- 1. Open a new map document in ArcMap.
- 2. Add the streets feature class from the Atlanta geodatabase to your map.
- 3. Click the Find button on the Tools toolbar.
- 4. In the *Find* dialog box, click the Locations tab.
- Click the Browse button that is next to the Choose an address locator drop-down box. The Add Locator dialog box opens.
- 6. Browse to the Atlanta file geodatabase, choose the Atlanta_AltName locator, then click Add.

A street may have more than one name. For example, Atlanta Blvd is an alternate name for Old 10th St NE in the Atlanta database. With the Atlanta_AltName address locator, 30 Old 10th St NE and 30 Atlanta Blvd will both find the same location.

7. Type 30 Old 10th St NE in the Full Address text box and click Find to search for candidates.

Features	Locations	Linear Referencing	Find
Choose a	locator:		Sine
Atlanka_A	ARName	× E	2
Full Addre	es: 30 Old 1	Oth St NE	New Search
Options		Show all candidates	Cancel
Options Sight-click	a row to sho	Show all candidates	Cancel
Options Sight-click Score	a row to sho	Show all candidates	Cancel

- 8. Right-click the candidate in the candidate list and click **Add Point**. A graphic point representing the address' location appears on the map.
- 9. Type 30 Atlanta Blvd in the Full Address text box and click Find to search for candidates.
- Right-click the found candidate and click **Flash**.
 You can see that both addresses are matched to the same location on the map.

In addition to geocoding addresses, you can also geocode place-names that have been defined in the place_aliases table.

- 11. Type Atlanta Market in the Full Address text box and click Find to search for candidates.
- 12. Right-click the first found candidate and click **Add Point**. The location of the hospital appears on the map as if you had typed its complete address.
- 13. Click **Cancel** to close the *Find* dialog box.

Creating locators that use alternate names and place-name aliases is beneficial for people who know a landmark's name but not its address. It also helps in situations where a street or feature has more than one name.