

CHAPTER 2: BROWSE/SELECT GEOGRAPHY VARIABLES

This chapter describes the geography selection function in DataFerrett. This function can be used to organize data in a dataset by type of geography and/or to restrict the data to certain geographic areas.

DataFerrett treats geography as another variable to add to your DataBasket. However, due to the nature of geographic definitions, the approach taken to adding geographic variables to the DataBasket is quite different than the approach taken for other types of variables.

Many datasets available in DataFerrett can be restricted to a variety of sub-national geographic areas. For example, you can restrict both the Census 2000 Summary File 3 and the American Community Survey (ACS) 5-Year Summary File datasets to geographic areas as small as census tracts or block groups. Other datasets, such as the County Business Patterns (CBP), Small Area Income and Poverty Estimates (SAIPE), and the Small Area Health Insurance Estimates (SAHIE), can be restricted to the county level. For most datasets with two or more sub-national geographic areas, you are required to specify the geographic areas to complete the variable selection process. The geographic selection will then be added to the DataBasket. In this case, a window like the one shown in Figure 2-1 will appear. (The approach taken when adding geography is optional is illustrated later in this chapter in Example 2-2.) Once you click on the row containing the phrase “Needs to be selected,” the geographic selection user interface (aka the “Ferrett Geography Codebook”) appears. The section below discusses the new user interface, after which a series of examples demonstrating its use for different scenarios is provided.

Highlight the variables you are interested in

Currently viewing: B01001A. SEX BY AGE (WHITE ALONE) 31 Variables returned from search. 2 variables selected in DataBasket.

Browse/Select Highlighted

Selected	Topic	Name	Availability	Variable Label
✓ Default value selected for you	Selectable Geographies	COMPONENT	2005-2009 - current	Geographic Component
✗ Needs to be selected	Selectable Geographies	Geography	2005-2009 - current	Geographic Items

Double-click to open “Ferrett Geography Codebook.”

Figure 2-1: Required Variables List

Introduction to Enhanced Ferrett Geography Codebook Interface

DataFerrett has improved the “Ferrett Geography Codebook” to simplify the process of selecting geographic areas to add to the DataBasket. The new “Ferrett Geography Codebook” layout is divided into three separate panels, which remain constant throughout most of the selection process. A listing of the available geographies appears in the left-hand panel. After highlighting the geography you want to work

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with, the center panel displays the available codes under the heading “Hierarchies.” The right-hand panel is where selected geographies are placed.

With the different levels of geographic areas, or hierarchies, contained within a three-panel screen, the enhanced interface allows you to find the geographic areas you need. “Hierarchy” refers to the types of geography that must be specified to uniquely identify a specific geographic area for a specific dataset. For example, counties are contained within the State-County hierarchy. Geography selection begins by clicking on a type of geography in the left panel and choosing one of the hierarchies containing that geography type from the list that appears in the center panel. Official Census Bureau hierarchies are also known as “geographic summary levels.” The new layout gives you a ‘preview’ as to what geographic data is available in each area by highlighting it. Figure 2-2 below depicts the geographic data available within the American Community Survey 5-Year Summary File.

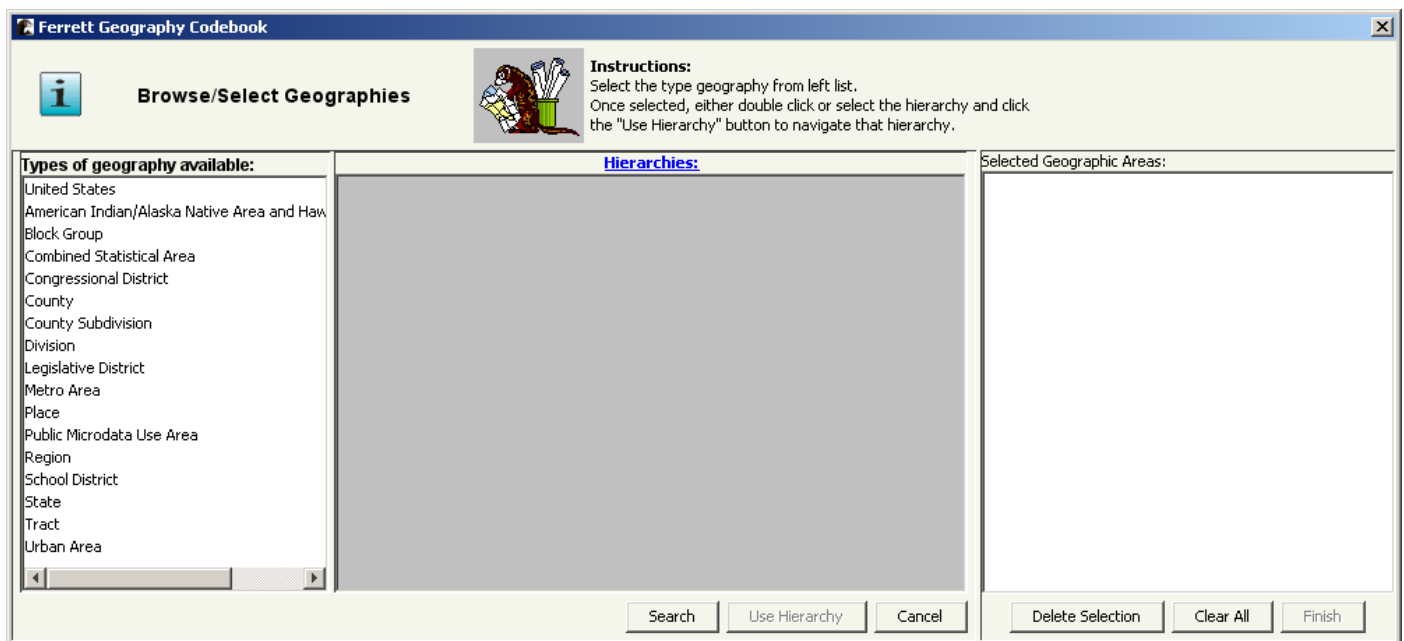


Figure 2-2: List of Available Geographies in Left Panel “Ferrett Geography Codebook”

After highlighting a geography from the list in the left panel, the hierarchies associated with it are automatically shown in the second panel making it easier to choose the correct geographic area (see Figure 2-3). For this example, we will be working with the County Subdivision codes contained within the State geography. After selecting “State” from the “Types of Geography Available” list, you have two options. You can click the search button to bring up a search box to find a specific State or states or click the “Use Hierarchy” button to see a complete list of all 50 states and the District of Columbia.

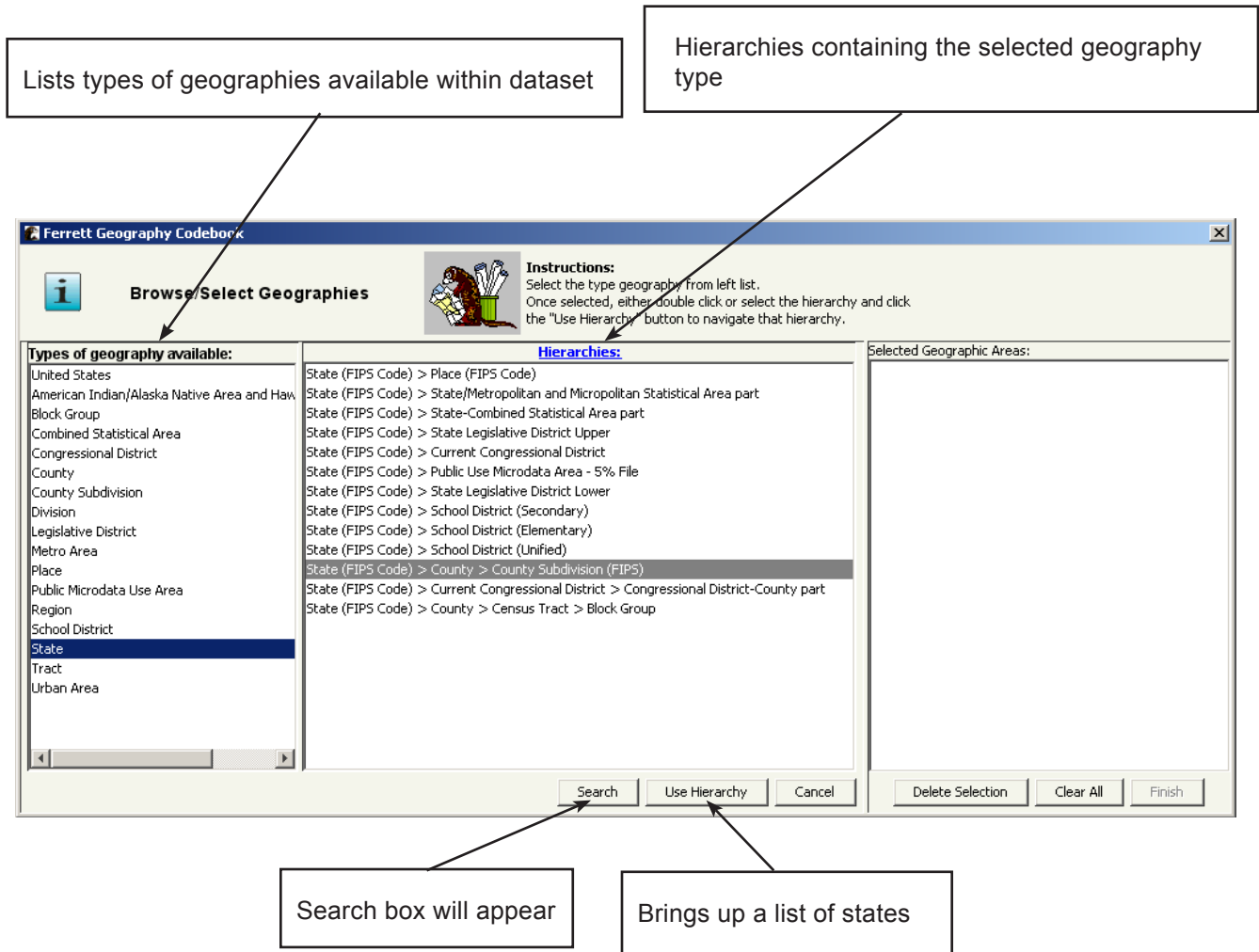


Figure 2-3: List of Hierarchies in State Geography

After selecting “State (FIPS Code) > County > County Subdivision (FIPS),” Figure 2-4 shows what you will see after clicking “Use Hierarchy” and choosing “Select All” at the top of the list displayed in the left panel. You can view the areas you want by either dragging “Select All” into the center panel or double-clicking it to place it there. Individual states or groups of states can also be highlighted and dragged into the center panel. If you want to go back, you have the option of clicking “Previous Level” or using the bread crumbs trail highlighted in Figure 2-5.

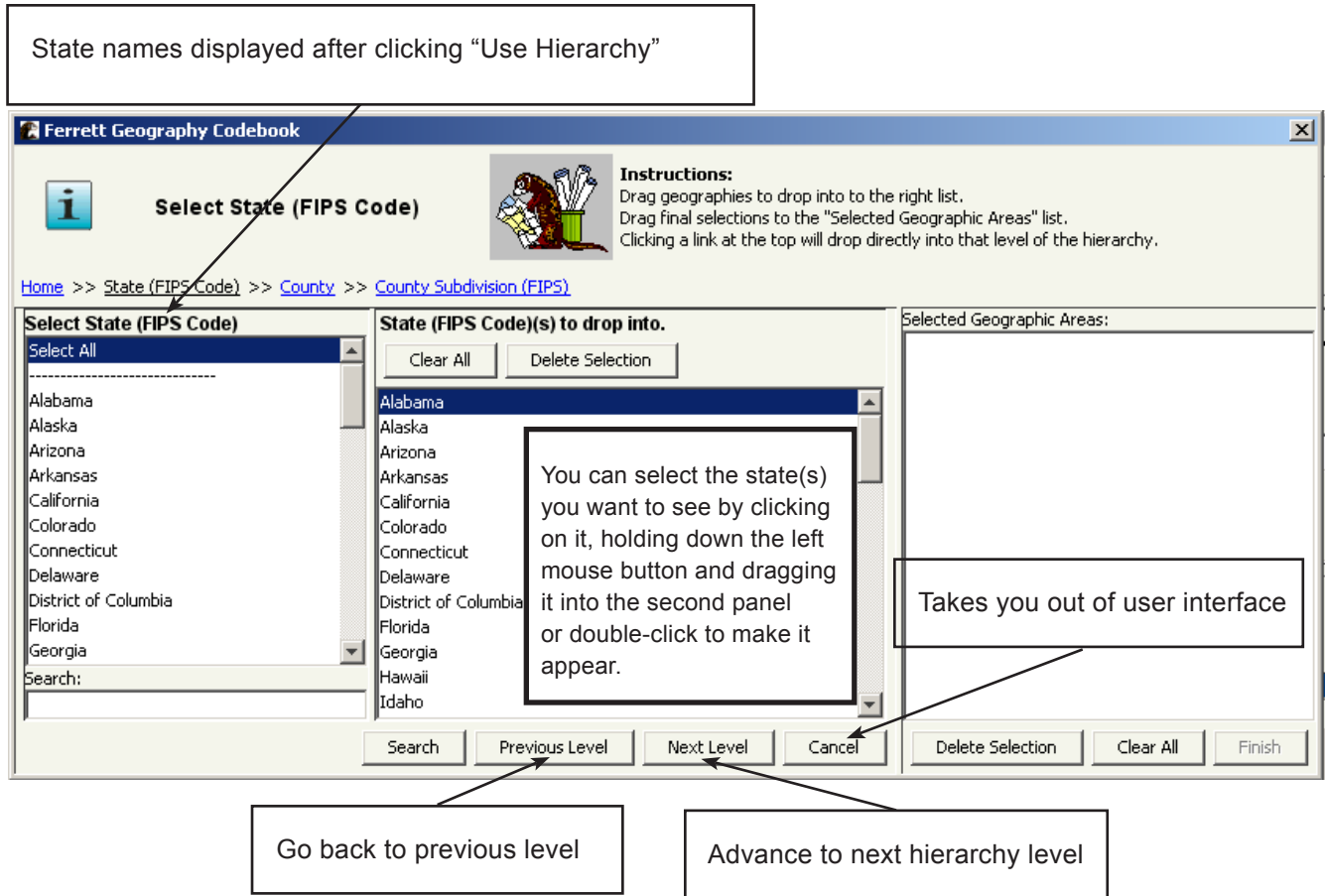


Figure 2-4: Ferrett Geography Codebook after selecting State/County/County Subdivision Hierarchy

After the desired states are listed in the center panel, highlight the one(s) you want to see and click “Next Level” which will bring you to the display shown in Figure 2-5. In this example, all counties in Alabama are shown.

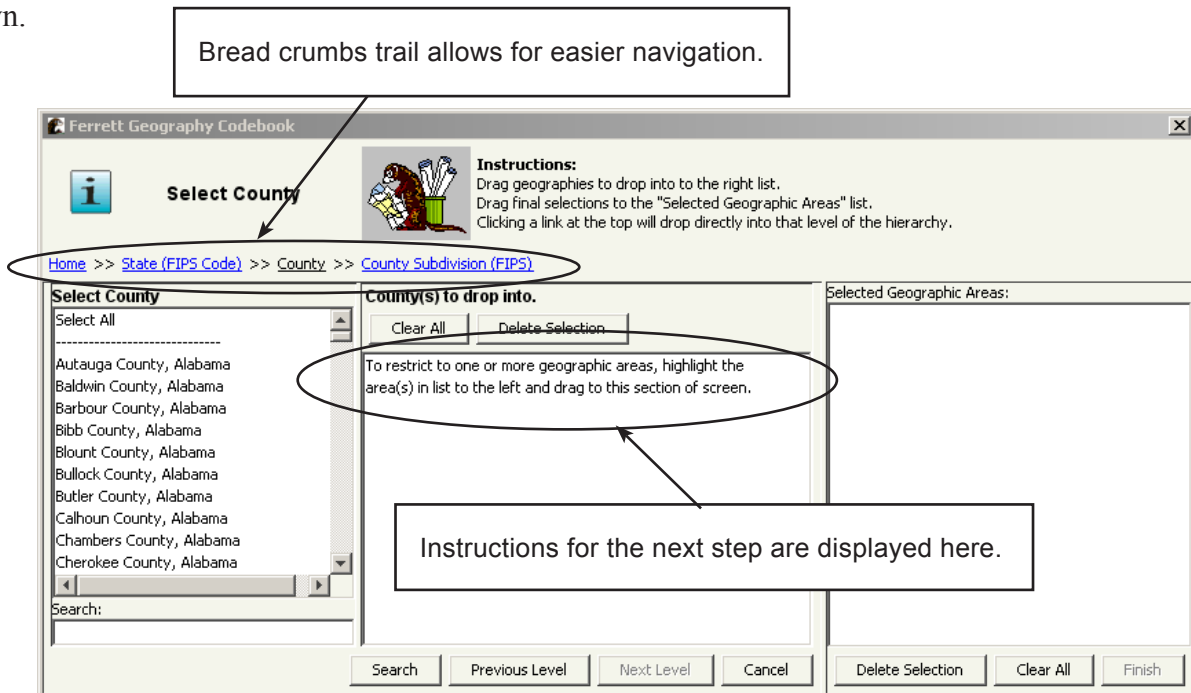


Figure 2-5: Ferrett Geography Codebook after selecting Alabama then “Next Level”

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To see the county subdivisions codes in this example, you can either drag “Select All” into the center panel or double-click to place it there. You can also select individual counties by dragging them to the center panel or double-clicking on the county names. Figure 2-6 shows the Codebook after choosing “Select All.”



Figure 2-6: Highlight “Select All” then Click “Next Level”

The next step in this example is to click “Next Level” which will display the County Subdivision Codes within the Alabama Counties, as shown in Figure 2-7.

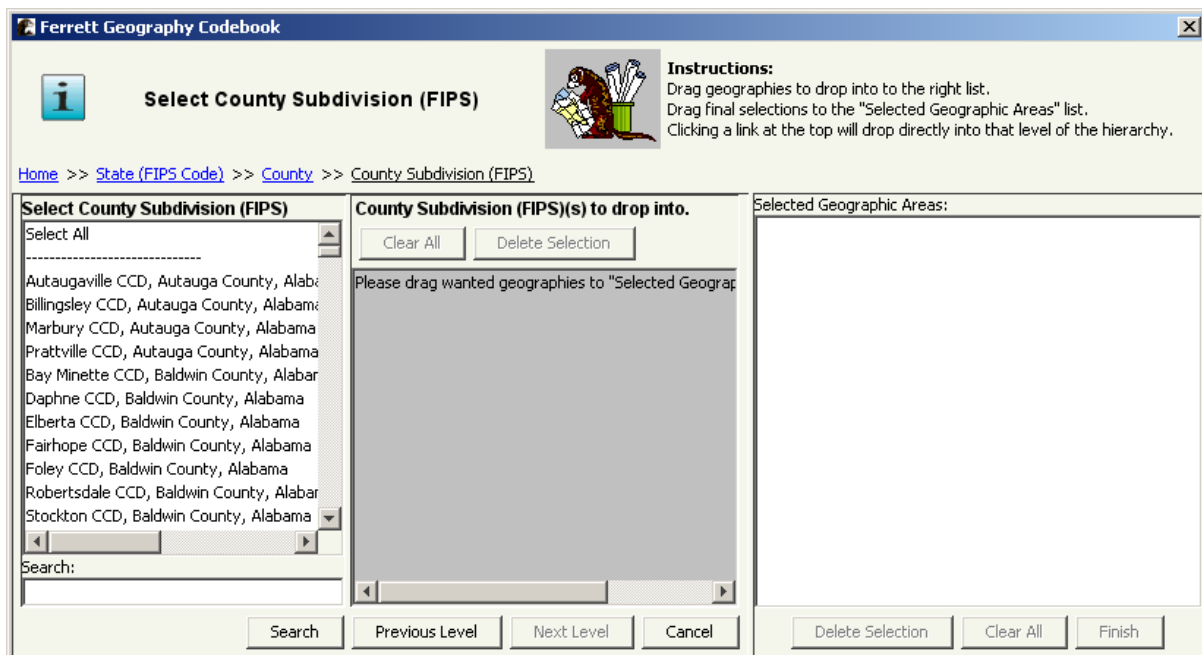


Figure 2-7: After Choosing “Select All”

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Holding down the CTRL key, highlight all counties in Alabama under “Select County,” then drag over to the center panel, as shown in Figure 2-8.

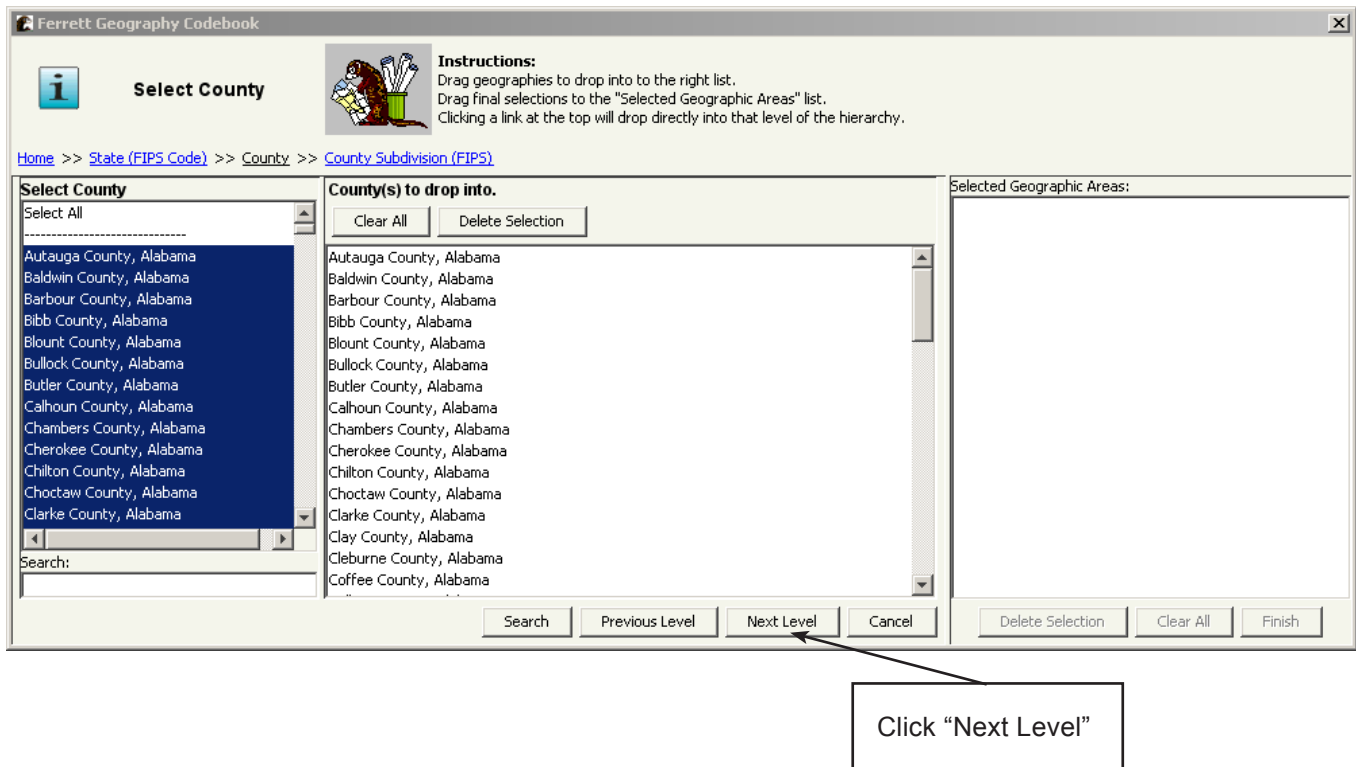


Figure 2-8: Select all Alabama Counties, move to second panel then click “Next Level”

Selected geographical areas (“Select All”) can be dragged directly into the far right panel once they have been identified in the left panel. Figure 2-9 displays the list and count (in bold type) in the far right panel of all selected geographic areas. The list of selected geographic areas can be modified by highlighting specific items and clicking “Delete Selection.” To start over and clear all selections, click on “Clear All.” Once you have made your final geographic selections, click “Finish” to add them to your DataBasket.

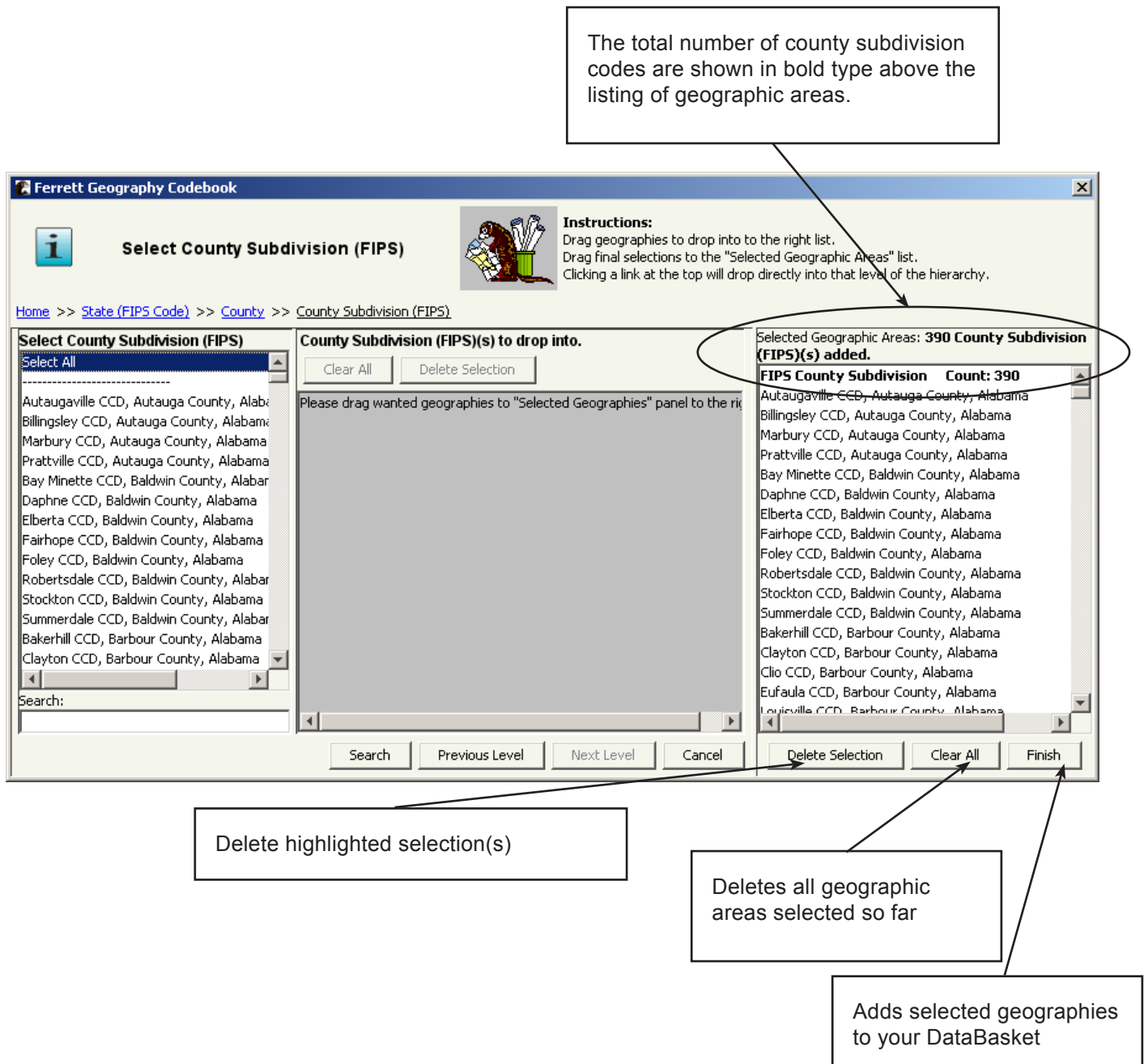


Figure 2-9: Ferrett Geography Codebook Prior to Making Final Selection

Examples

The remainder of this chapter consists of three examples that illustrate the various options you have for adding geographic areas to the DataBasket:

- Example 2-1 uses the County Business Patterns dataset and shows a simple use of the dialog window.
- Example 2-2 uses the American Community Survey (ACS) PUMS (Public Use Microdata Sample) data to allow you to add Public Use Microdata Areas (PUMAs) to the DataBasket.
- Example 2-3 utilizes the 2006-2010 ACS Summary File to demonstrate how to make a complex selection of geographic areas for organizing and restricting the data.

Example 2-1: Selecting Counties for the County Business Patterns Dataset

The following example demonstrates how to use the County Level dataset for County Business Patterns in New Jersey for the NAICS variable. You will be using the County Level dataset for 2007.

Example 2-1: Selecting Counties for the County Business Patterns Dataset		
Steps	What to do	Why do it?
1	Select the 2007 instance of the County Business Patterns county-level dataset. View the “2007 CBP County Variables,” select “NAICS code” and add it to the DataBasket. (For detailed instructions on these actions, see <i>Introduction, Task 1: Choose the Dataset and the Variables You Want to View.</i>)	Although you could have started by selecting the geographic areas, this is probably a more typical sequence for a data user.
2	Next, you will arrive at the “Required Variables” window where you will be required to choose selectable geographies. Double-click on the row with the red “X”.	Double-clicking the red “X” will bring you to the “Ferrett Geography Codebook.”
3.1 3.2 3.3	In the left-hand panel, there is a choice between “County” and “State.” Highlight “County” (3.1) and then highlight “FIPS State Code > FIPS County Code” under “Hierarchies” (3.2). Click “Use Hierarchy” (3.3).	This action is necessary to get the list of states containing the county codes.
4.1 4.2 4.3	Select “New Jersey” from the list of states (4.1), hold down the mouse (or double-click) to drag it into the center panel (4.2), highlight it and then click “Next Level” (4.3, see Figure 2-11). Figure 2-12 shows you what you will see after clicking “Next Level.”	This action brings up all counties in New Jersey.
5.1 5.2 5.3	In the left panel, highlight “Select All” (5.1) and, with mouse button held down, drag it over to the right panel (5.2). When you see the complete list of counties (Figure 2-14), click on “Finish” (5.3).	This action places all geographies into your DataBasket.

Step 2

21 Variables returned from search. 2 variables selected in DataBasket.

REQUIRED VARIABLES				
Selected	Topic	Name	Availability	Variable Label
<input checked="" type="checkbox"/>	Selectable Geographies	Geography	1998 - current	Geographic Items
<input checked="" type="checkbox"/>	CBP County Level Variables	naics	1998 - 2007	NAICS Code

Figure 2-10: Prompt to Select Geographic Variables

Step 3

Instructions:
Select the type geography from left list.
Once selected, either double click or select the hierarchy and click the "Use Hierarchy" button to navigate that hierarchy.

Types of geography available:
County
State

Hierarchies:
FIPS State Code > FIPS County Code

Selected Geographic Areas:

Buttons: Search, Use Hierarchy, Cancel, Delete Selection, Clear All, Finish

Figure 2-11: Select FIPS County Code

Step 4

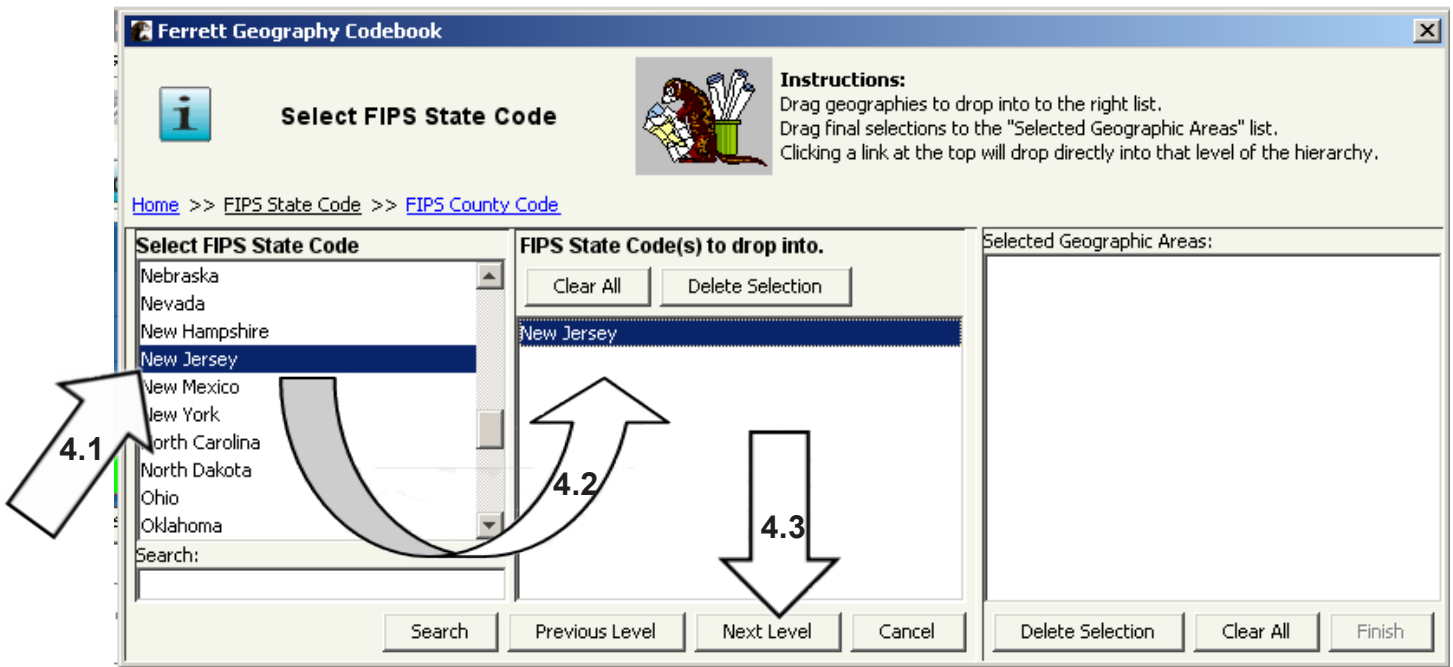


Figure 2-12: Select and Drag New Jersey from FIPS State Code List

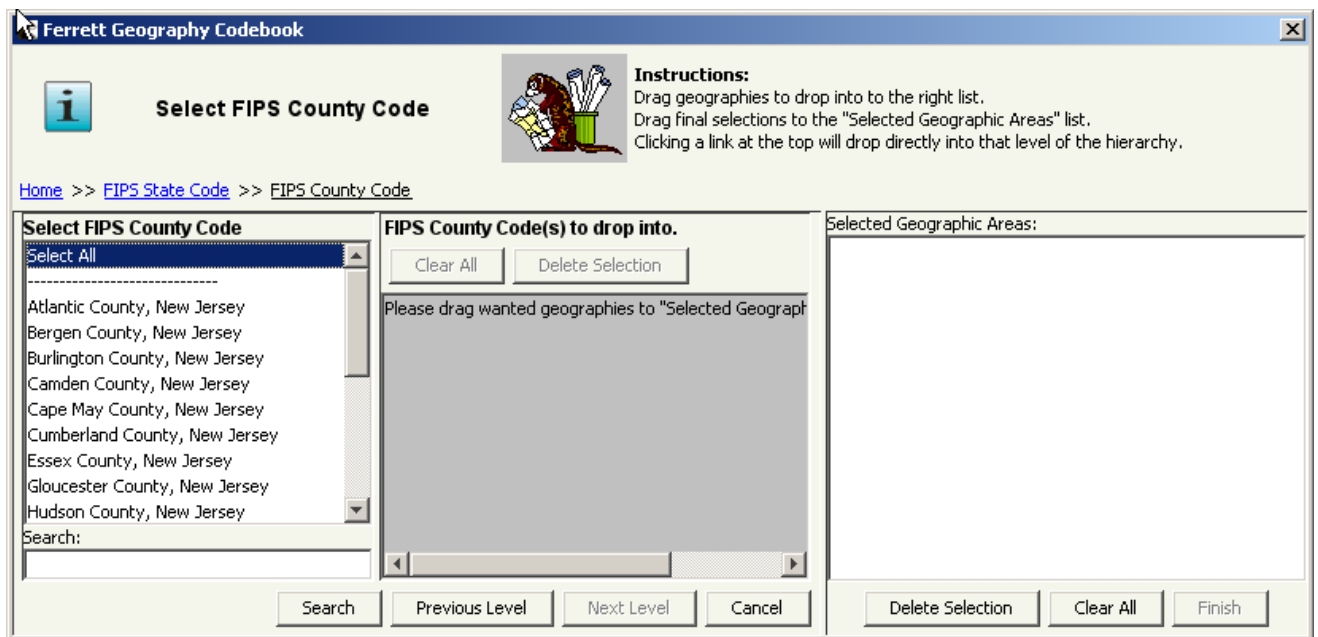


Figure 2-13: After Clicking “Next Level”

Step 5

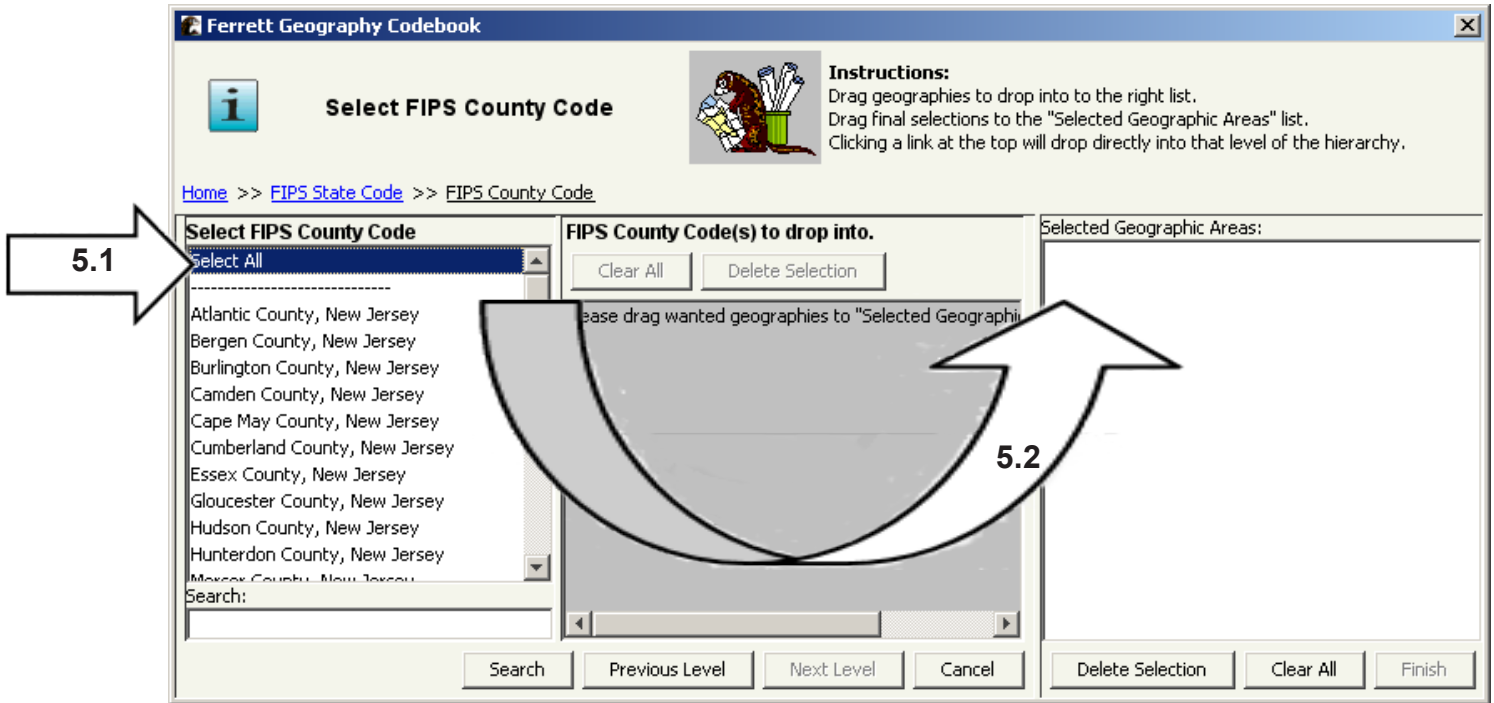


Figure 2-14: Drag “Select All” into Right Panel

Step 5 (con't.)

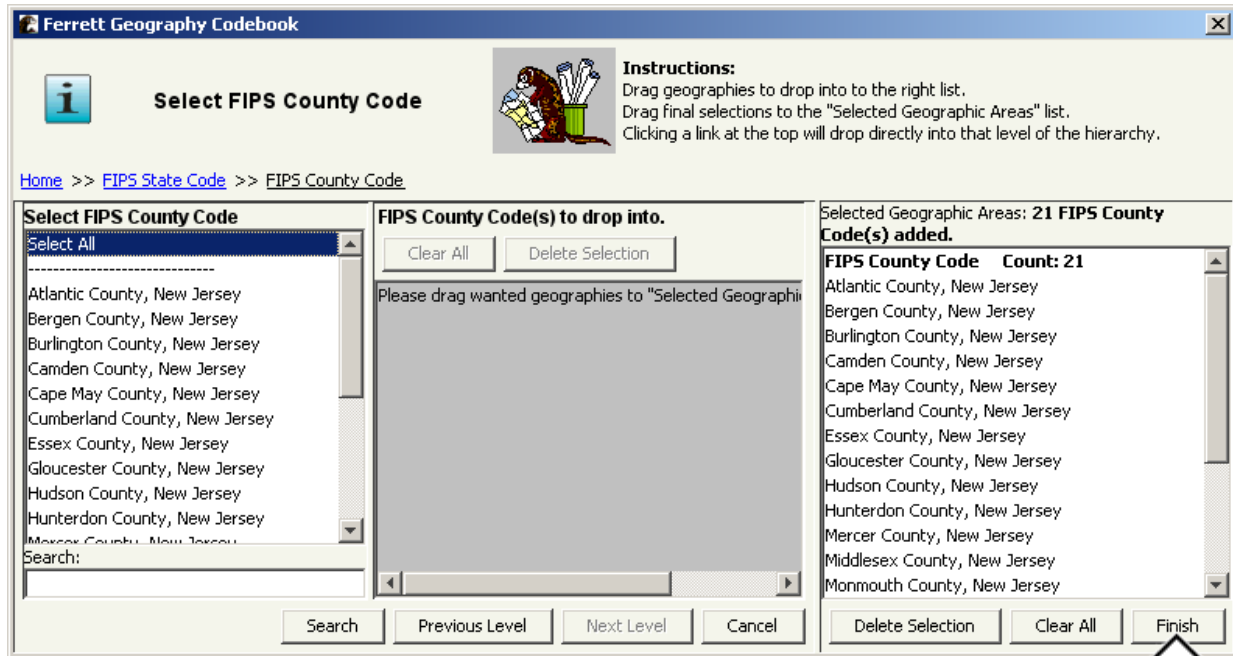


Figure 2-15: Click on “Finish”

Example 2-2: Adding Public Use Microdata Area (PUMA) Codes to DataBasket

Here we will demonstrate how to select more than one type of geographic area in a single session of the Ferrett Geography Codebook. For this example, we will be using the 2009 Public Use Microdata Sample (PUMS) found within the American Community Survey (ACS) and add data for Public Use Microdata Areas (PUMAs). The Public Use Microdata Sample (PUMS) consists of geographic areas with extracts of raw data from a small sample of census records that are screened to protect confidentiality.

Example 2-2: Selecting State Codes & PUMA Codes to add to DataBasket		
Steps	What to do	Why do it?
1.1 1.2 1.3	Under “Select Datasets to Search,” open the American Community Survey (1.1), followed by Public Use Microdata Sample (1.2), select 2009 and click “View Variables” (1.3).	Your goal is to view the variables in the 2009 instance of the ACS PUMS dataset.
2.1 2.2	Under “Select ALL Topics,” choose “Selectable Geographies” (2.1) and then click “Search Variables” (2.2).	Since you are focusing on state and PUMA codes, this is the only variable you need. You are not required to select a geography when using this dataset.
3	Double-click “Selectable Geographies” in the list of variables.	This action opens the “Ferrett Geography Codebook.”
4.1 4.2 4.3	In the “Ferrett Geography Codebook,” highlight “Public Use Microdata Area” (4.1), then “State of Current Residence > PUMA Code” (4.2) and then click “Use Hierarchy” (4.3).	This action will bring you to the list of states.
5.1 5.2 5.3	Highlight “Select All” (5.1) and drag it into the center panel (5.2, Figure 2-19) then click “Next Level” (5.3, Figure 2-20).	You must choose the states you want to view prior to accessing PUMA codes.
6.1 6.2 6.3	Highlight “Select All” in the listing of PUMA Codes (6.1), hold down the mouse key and drag into the right panel (6.2) then click “Finish” (6.3).	This will place all PUMA codes into your DataBasket.

Step 1

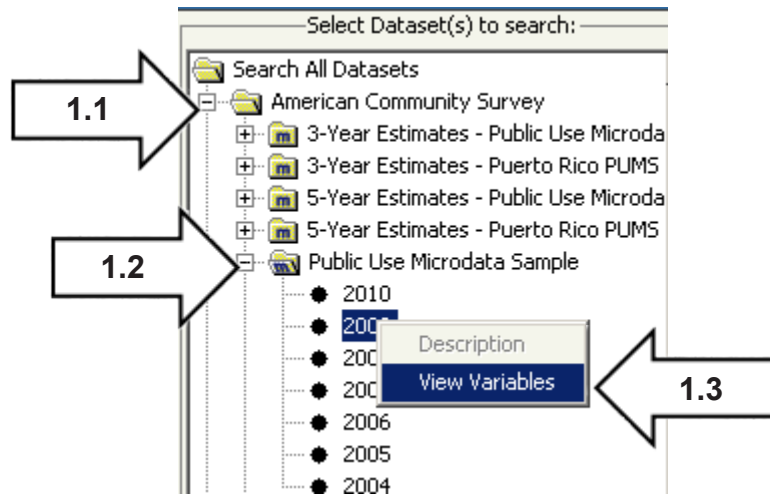


Figure 2-16: Select PUMS Data from American Community Survey

Step 2

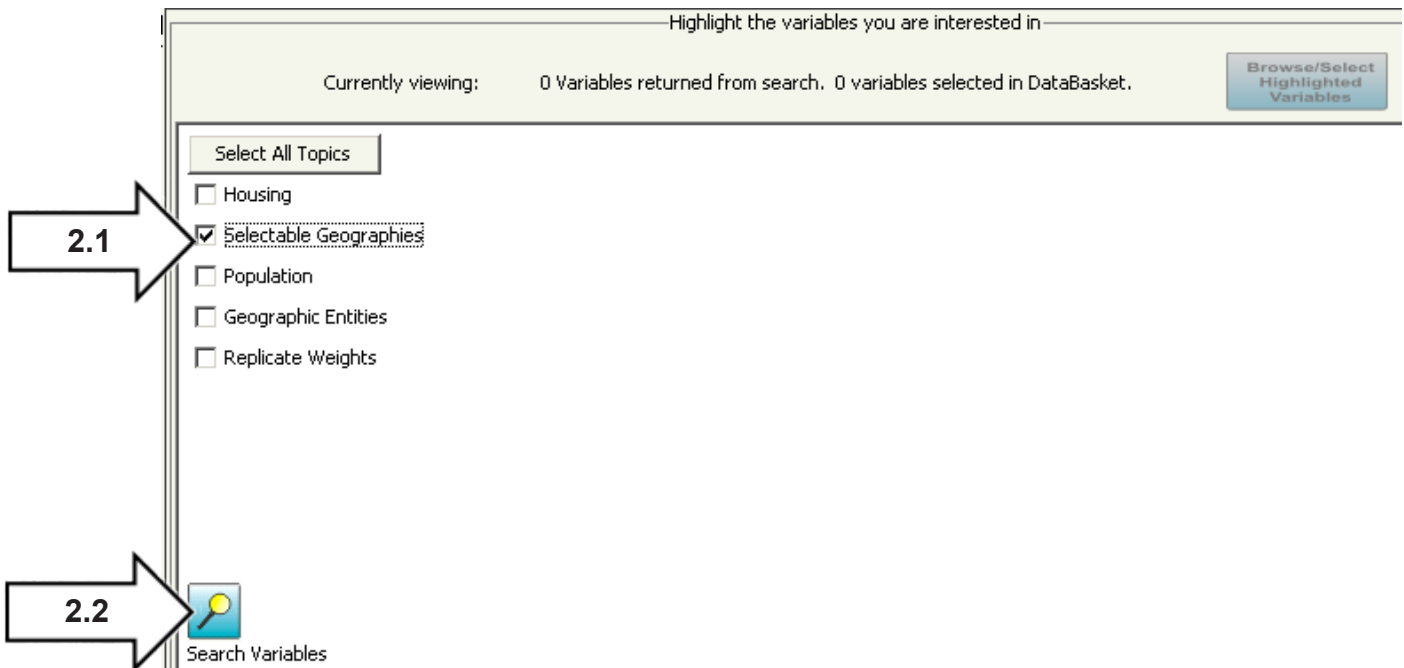


Figure 2-17: Search Selected Geographies

Step 3

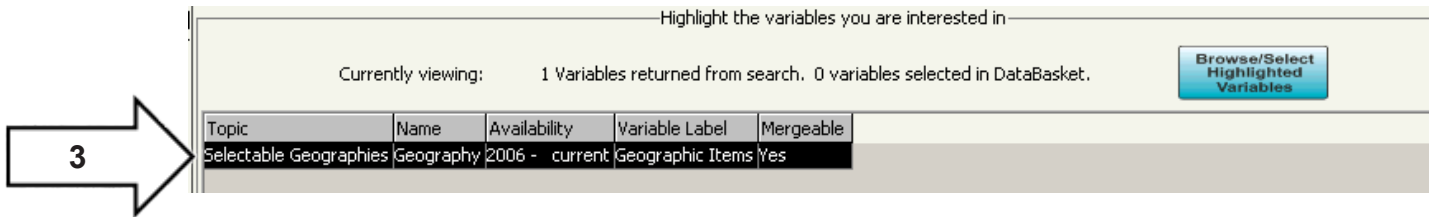


Figure 2-18: Double-click “Selectable Geographies”

Step 4

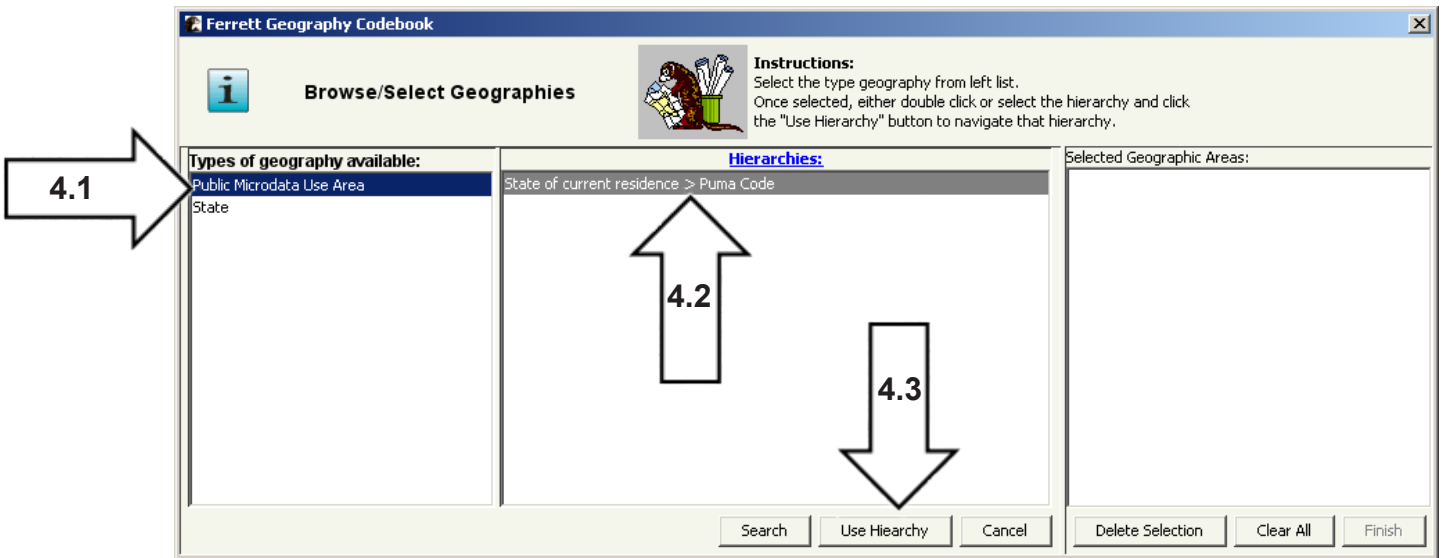


Figure 2-19: Select Public Microdata Use Area, Puma Code and then “Use Hierarchy”

Step 5

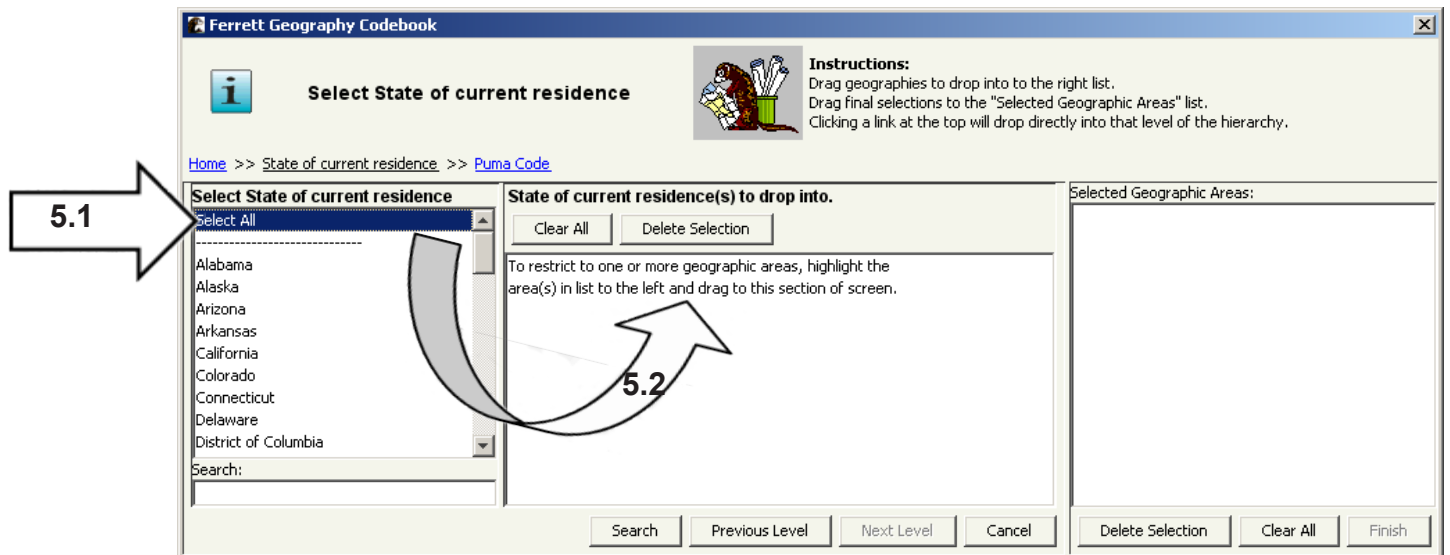


Figure 2-20: Select All States and Drag to Center Panel

Step 5 (cont'd.)

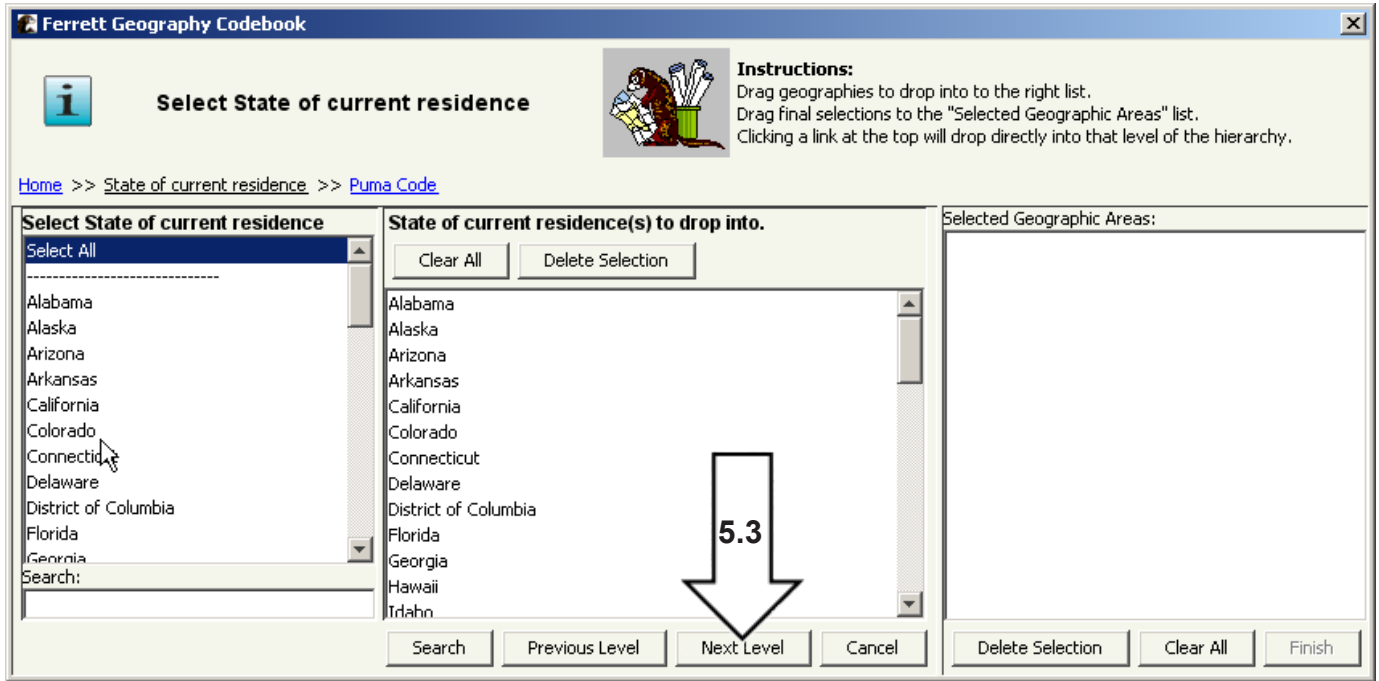


Figure 2-21: After Selecting all States

Step 6

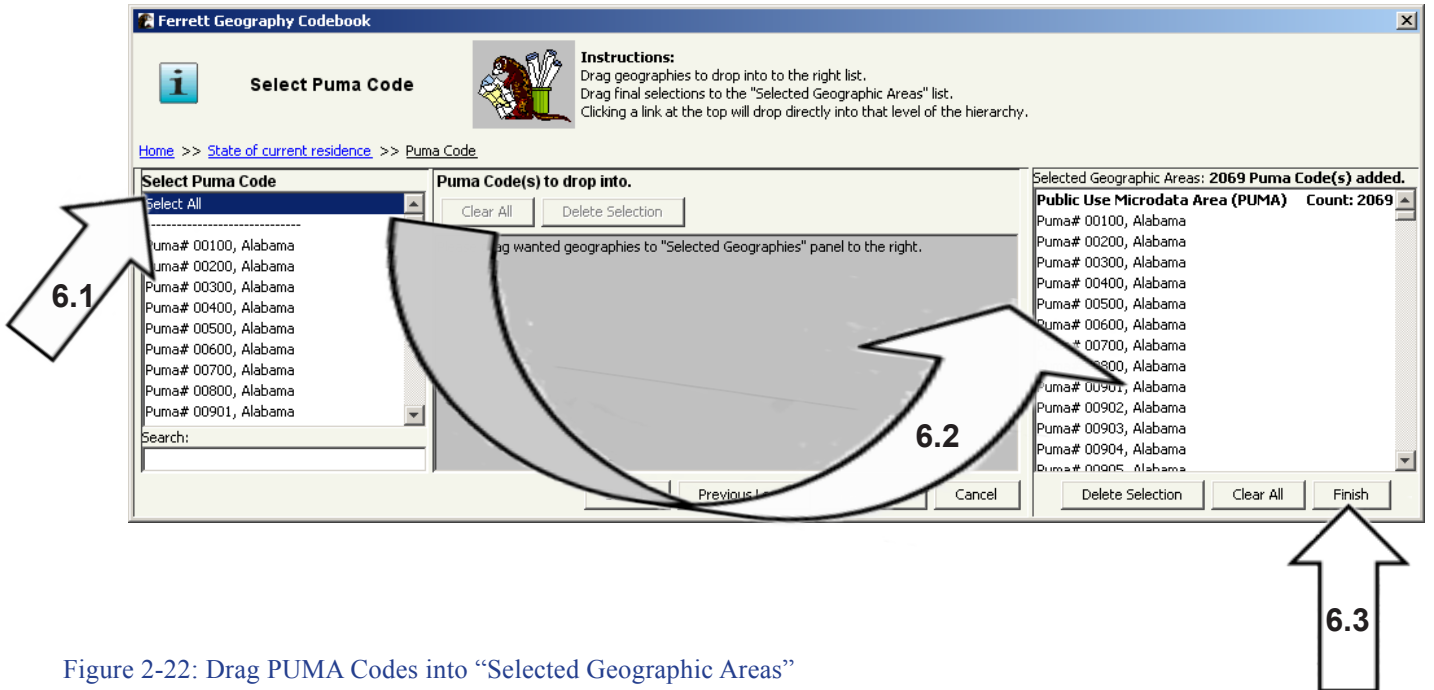


Figure 2-22: Drag PUMA Codes into “Selected Geographic Areas”

Example 2-3: Selecting Various Geographic Areas from the 2006-2010 ACS Summary File Dataset

We will demonstrate how you can select a particular geographic area in a single session with the Ferrett Geography Codebook dialog screen. It also illustrates how to find a geographic area by searching for its name. The ACS 2006-2010 Summary File dataset is used because it contains many different types of geographic areas.

In this example, the city of Glen Burnie, Maryland and all of the counties in the state of Maryland will be selected, which then could be used for a particular measure or measures. In order to begin, you will need to choose the variables containing the characteristics you want to compare from the 2006-2010 ACS Summary File, which is a typical starting point for selecting geography.

Example 2-3: Selecting Various Geographic Areas from 2006-2010 ACS Summary File		
Steps	What to do	Why do it?
1	After selecting the variables, a warning message appears, followed by the "Required Variables" list. Double-click on the row "Needs to be selected" marked with a red "X."	This action opens up the "Ferrett Geography Codebook."
2.1 2.2 2.3	Highlight "County" (2.1) under "Types of geography available." The "State (FIPS Code)>County" will appear in the center panel (2.2), Highlight it and click on "Use Hierarchy" (2.3) to continue.	This will bring you to the list of state FIPS codes.
3.1 3.2 3.3	Select "Maryland" from the list of states and with mouse button held down, drag it into the second panel (3.2) and then click "Next Level" (3.3).	This action will bring you to the list of places within the state of Maryland.
4.1 4.2 4.3	After selecting "Maryland," there will be a listing of all counties in Maryland. Highlight "Select All" (4.1) and drag it to "Selected Geographic Areas" (4.2) to the right. Once all the counties are shown in "Selected Geographic Areas," click on "Home" in the bread crumb trail toward the upper left of the window.	You must place all the desired geographic areas into the "Selected Geographic Areas" panel in order to search within those areas. Clicking "Home" allows you to begin a new search while keeping all the geographic areas you selected.
5.1 5.2	Click on the "Search" button to bring up the search bar/window, type "Burnie" in the "Search" window (5.1) and then click "Search" (5.2).	This action searches for all areas within the Maryland counties with the word "Burnie" in it.
6.1 6.2 6.3	Select "Glen Burnie CDP, Maryland" in the "Results" window (6.1) and drag it into the "Selected Geographic Areas" window. Then, scroll to the bottom of the list in "Selected Geographic Areas" to display "Glen Burnie CDP, Maryland" (6.2) then click "Finish" (6.3, see Figures 2-27 and 2-28).	You now have Glen Burnie, Maryland added to your DataBasket.

Step 1

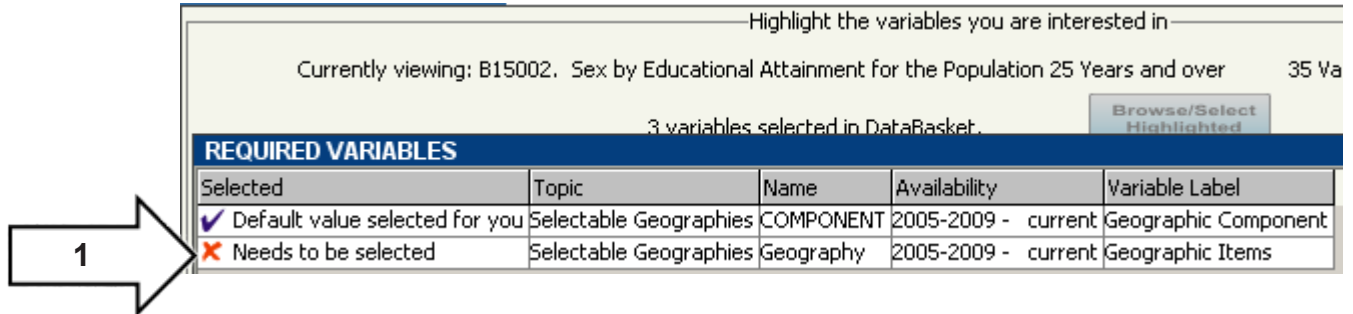


Figure 2-23: Double-click “Needs to be selected”

Step 2

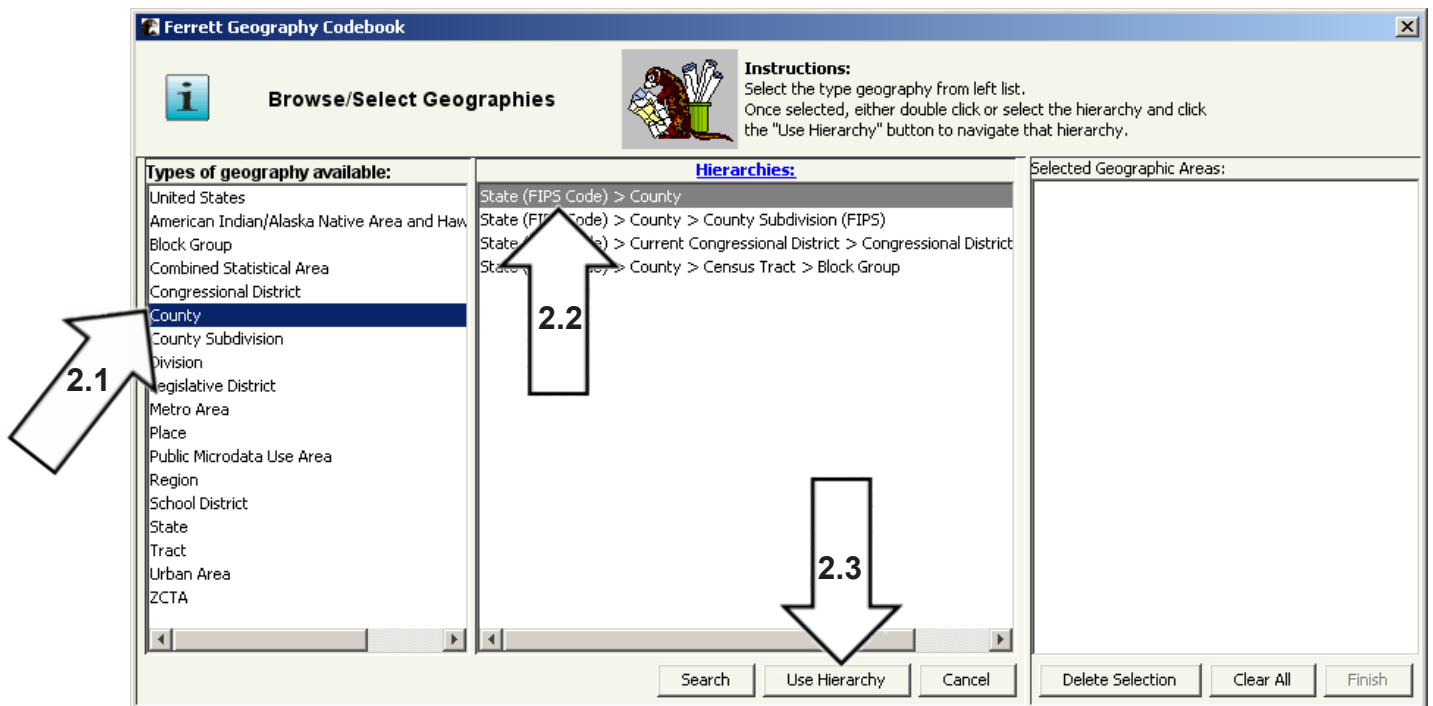


Figure 2-24: Highlight “County” in “Types of geography available”

Step 3

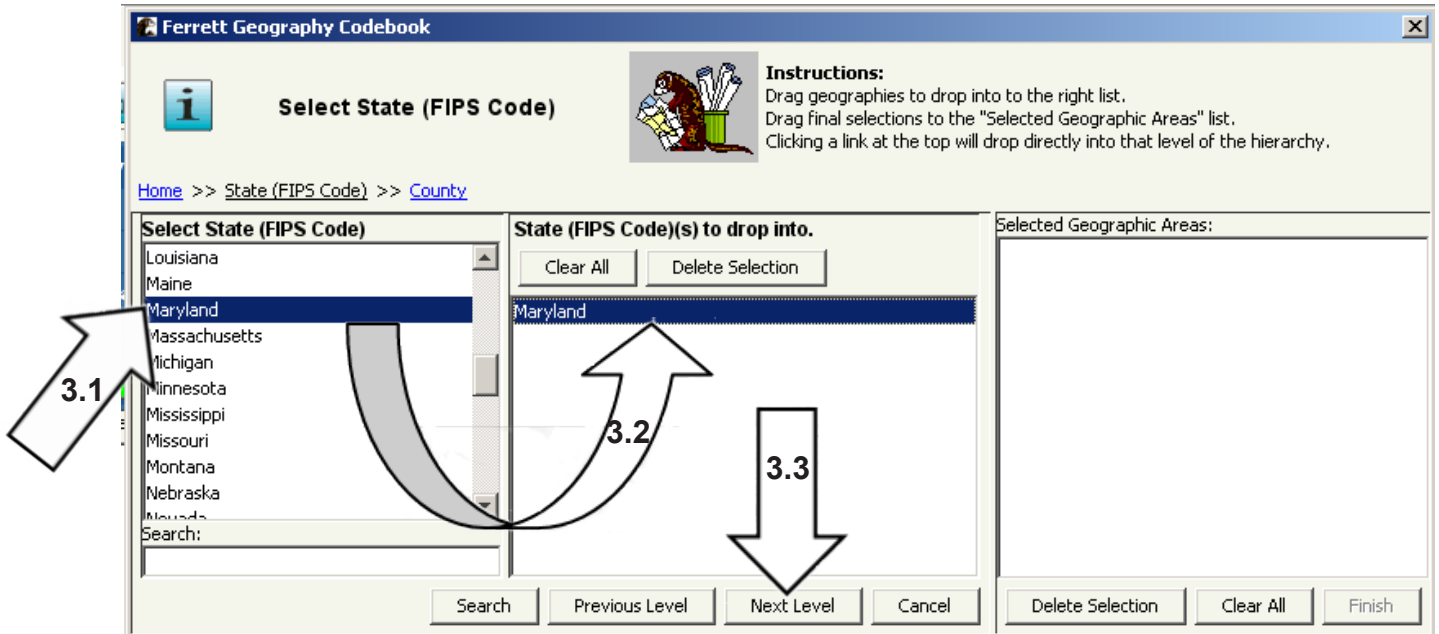


Figure 2-25: Select and Drag Maryland into Center Panel

Step 4

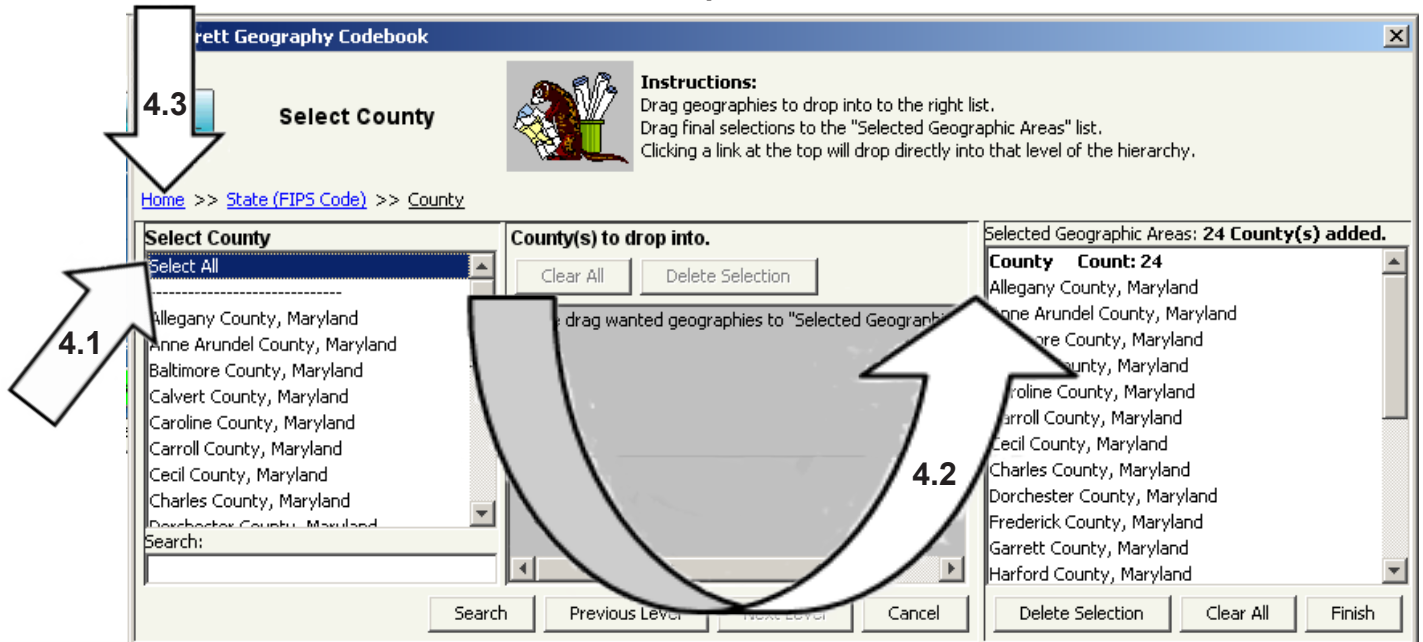


Figure 2-26: Add All Counties in Maryland to Selected Geographic Areas and then click “Home”

Step 5

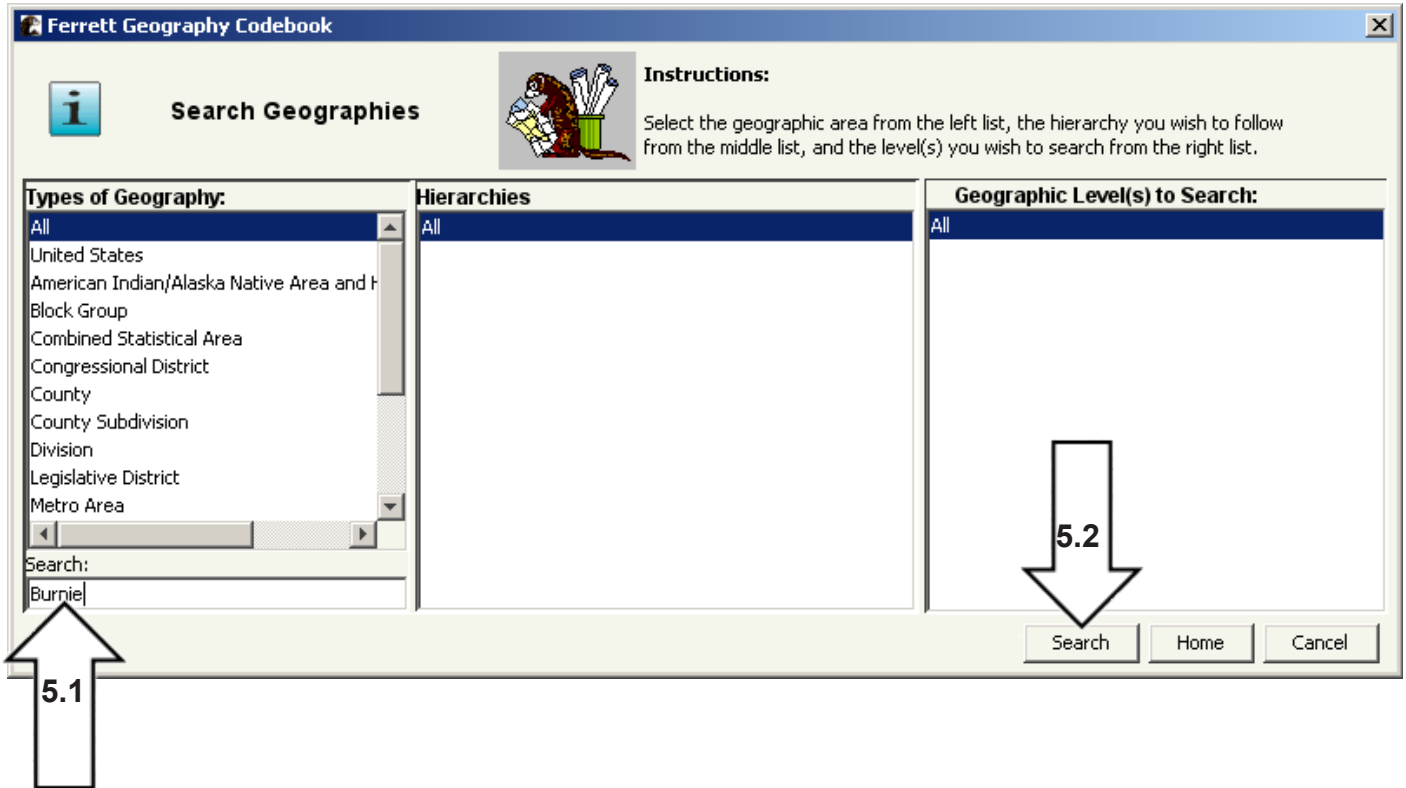


Figure 2-27: Type “Burnie” into the Search box

Step 6

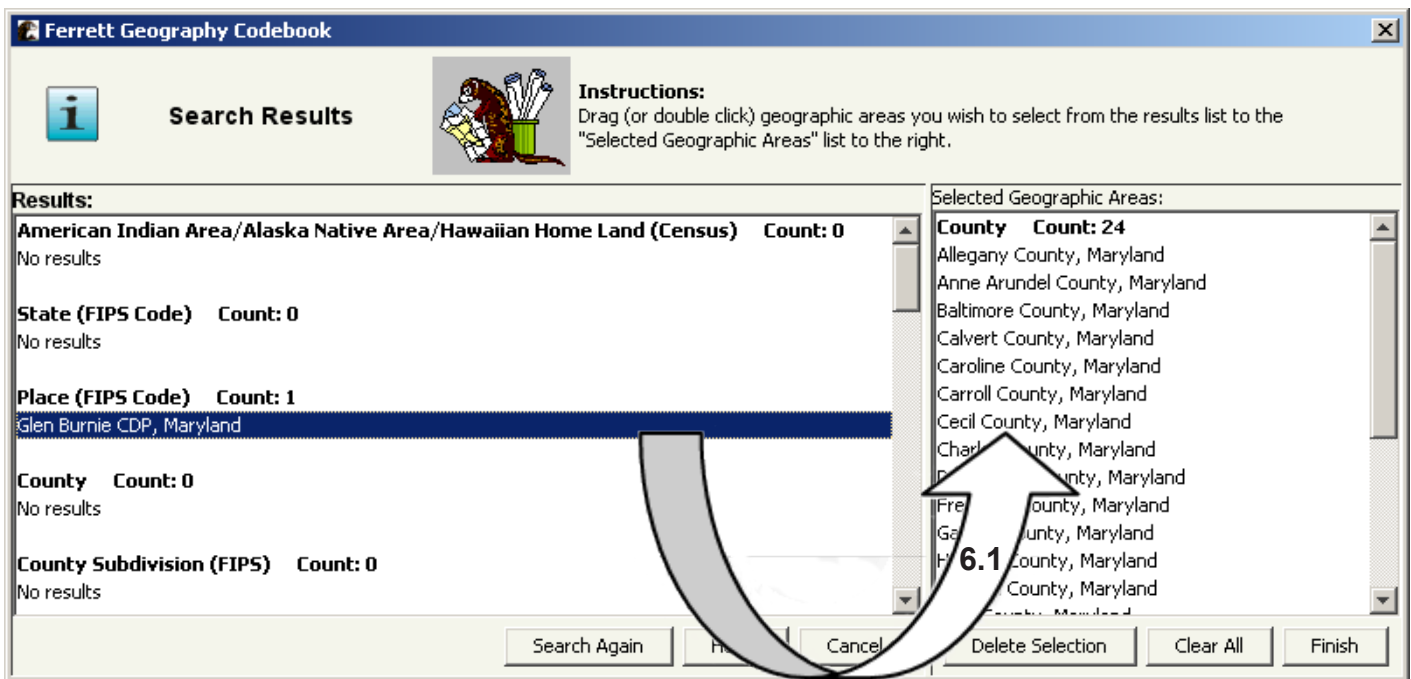


Figure 2-28: Highlight “Glen Burnie” and Drag Into “Selected Geographies” panel

Step 6 (con't.)

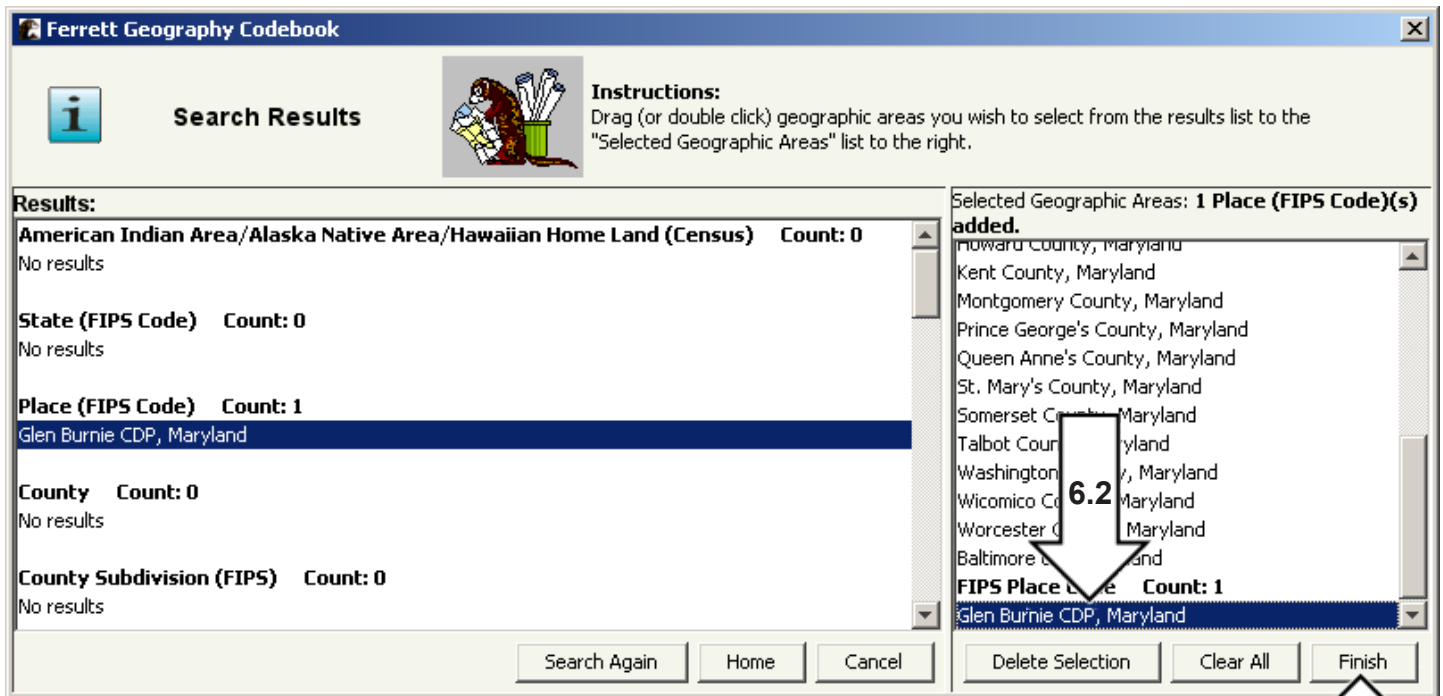


Figure 2-29: Highlight “Glen Burnie” from “Selected Geographies” Panel, then Click “Finish”