

# *GIS Tutorial for Marketing*

## **Chapter 6**

### **Prospect Profiling**

Place Location

#### **Market scenario**

##### **World Treasures, Inc:**

- A successful New York-based electronic retailer of traditional art objects from around the world
- Wishes to establish database marketing program to reach new customers via direct mail
- Initial focus on electronic newsletter subscribers
  - Subscribers are Web site users who have not yet made a purchase
  - After first purchase, a subscriber's name is transferred to the customer database
  - Why no purchases? Perhaps subscribers are reluctant to purchase online

## Learning objectives

To conduct a prospect profiling market research project in an eCommerce context, you will learn how to use ArcGIS to:

- Display population demographic information on a map
- Assign market segment values to ZIP Codes based on the number of subscribers they contain
- Create demographic profiles of ZIP Code segments and use them to identify attractive prospects
- Target ZIP Codes that match the profile of attractive prospects
- Design maps to communicate your customer profiling recommendations

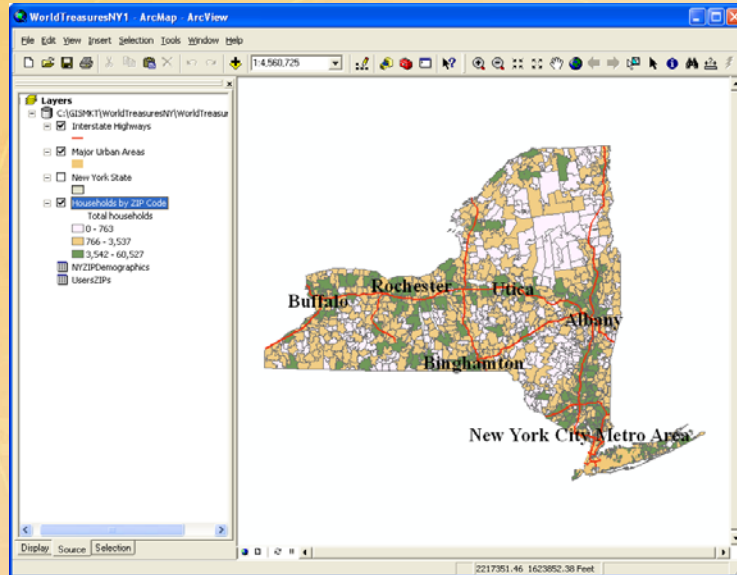
## Exercise 6.1: Explore and prepare data

In this exercise you will:

- Explore a basemap of New York and its ZIP Codes
- Add demographic and customer data tables to the project
- Create a summary table of users by ZIP Code to use in your customer profiling analysis

Share Location

## New York households by ZIP Code



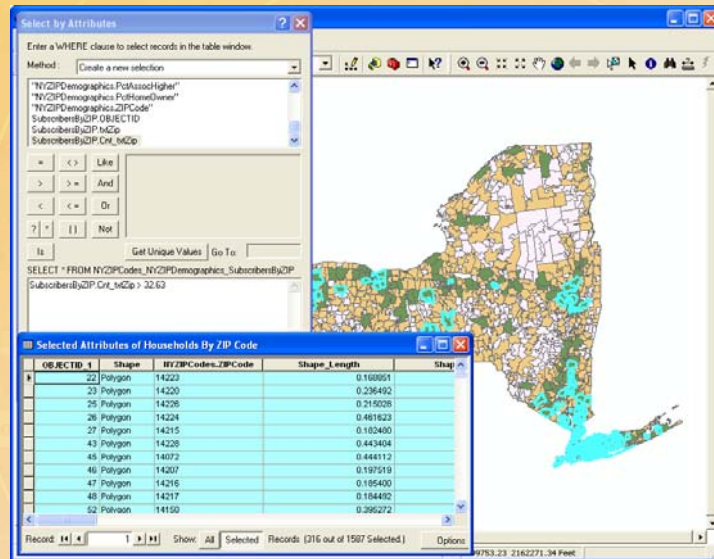
## Exercise 6.2: Define market segments and assign them to ZIP Codes

In this exercise you will:

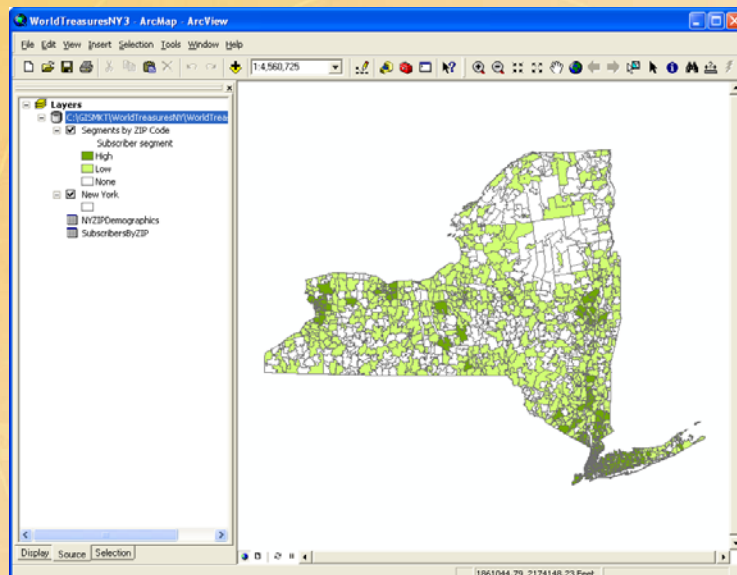
- Define segments based on the number of subscribers
- Assign segment values to New York's ZIP Codes
- Design a map displaying the geographic distribution of these market segments

More Location

## Assigning ZIP Codes to the High subscriber segment



## ZIP Codes by segment



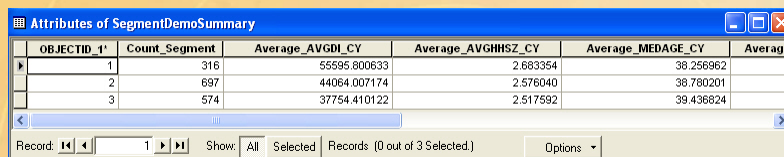
## Exercise 6.3: Profile subscriber segments

In this exercise you will:

- Create a summary table of the demographic characteristics of each subscriber segment
- Identify the demographic characteristics that distinguish the High subscriber segment from the other two
- Format a table capturing these values for inclusion in a map layout

## Segment demographics tables

As generated by ArcMap



OBJECTID_1	Count_Segment	Average_AVGDI_CY	Average_AVGHSZ_CY	Average_MEDAGE_CY	Average
1	316	55595.800633	2.683354	38.256962	
2	697	44064.007174	2.576040	38.780201	
3	574	37754.410122	2.517592	39.436624	

Formatted for Layout View



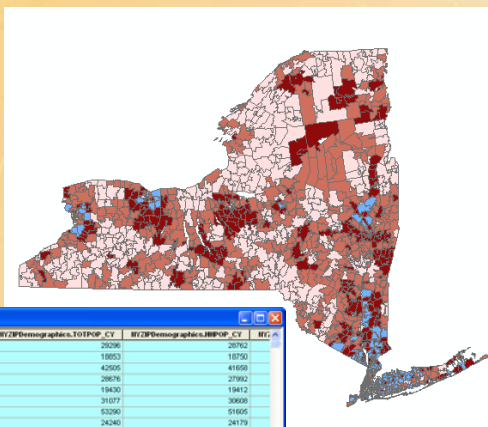
Segment	# of ZIPs	Avg HH Disposable Income	Pet Assoc or Higher
High	316	\$55,595.80	40.5%
Low	697	\$44,064.01	32.1%
None	574	\$37,754.41	26.7%

## Exercise 6.4: Use subscribers' profiles to select target ZIP Codes

In this exercise you will:

- Identify ZIP Codes with above-average values for the distinguishing variables
- Calculate the number of households in these ZIP Codes
- Adjust the selection to less than 2,000,000 households, the level dictated by the campaign budget
- Design a map that displays the selected ZIP Codes

## ZIP Codes selected by demographics and segment



10 Selected Attributes of Pct Pop w/ Assoc Degree or Higher				
Shape_Area	BYZIPCodes.Segment	OBJECTID	BYZIPDemographics.TOTPOP_CY	BYZIPDemographics.HHPOP_CY
0.000091 High	25	26036	26036	26036
0.000127 High	45	18953	18953	18953
0.011100 High	70	42005	42005	41650
0.011400 High	189	38676	38676	27942
0.004820 High	218	19430	19430	19412
0.010174 High	221	31077	31077	30600
0.000515 High	224	53290	53290	51405
0.000204 High	247	24340	24340	24179
0.008214 High	252	38762	38762	38264
0.012754 High	253	45965	45965	45431
0.004647 High	275	20330	20330	19940
0.000779 High	336	74479	74479	40601

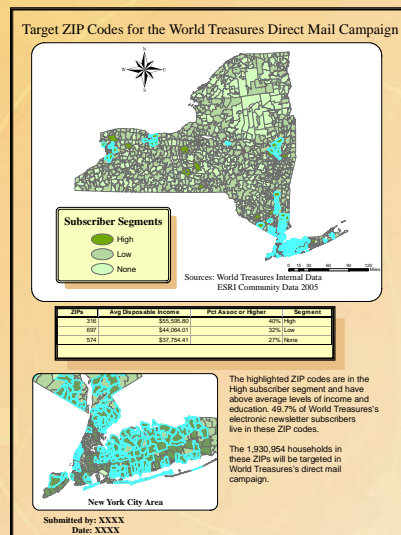
## Exercise 6.5: Report the analysis results

In this exercise you will:

- Explain the attractiveness of the selected ZIP Codes for the campaign
- Explain how this profiling and selection process will improve the effectiveness of the campaign
- Design a map to communicate and support your recommendations

Show Location

## Targeted ZIP Codes





## Additional applications

How ArcGIS capabilities can be extended:

- More extensive demographic and Community Tapestry data from ESRI Community Data and other sources
- Integration with internal customer data in enterprise databases via ArcSDE
- Integration with server log and clickstream data from eCommerce Web sites
- Integration with RFM analysis in database marketing systems
- Advanced targeting capabilities of newspaper and direct-mail advertising firms