

Mapping Your World with Community Analyst: An Easy to Use Tool to Map the Characteristics of U.S. Communities¹

Robert Swett and Lisa Krinsky²

Introduction

In recent years, the number of mapping and geospatial tools that are both feature-rich and easy to use has increased. This is good news because it allows many more of us to capitalize on the power and unique insights that such tools can provide without having to spend inordinate amounts of time learning how to use them. This article presents Community Analyst, a web application that provides access to thousands of business, demographic, economic, education, and health data variables for the United States. The application's extensive suite of data metrics, in conjunction with on-demand reports and interactive color-coded maps, allows one to quickly explore the characteristics of one or more geographic areas.

Community Analyst is produced and marketed by Esri (<http://www.esri.com>). The University of Florida (UF) has a site license with Esri that enables faculty, staff, and students to use a suite of the company's geospatial tools, including Community Analyst.¹ The primary purpose of this article is to introduce Community Analyst (Standard Plus²) to the university's extension and education communities and provide them with an example of its use. That said, Esri products are widely used by government agencies, and many other entities in Florida and elsewhere will find this article beneficial.

Community Analyst (Standard Plus) currently allows users to explore 12,764 metrics (variables) within a spatial (geographic) context.³ The variables can be mapped and/or downloaded in PDF reports or MS Excel spreadsheets for specific geographic areas. To provide a sense of the types of metrics available, Table 1 shows them lumped into 20 broad categories. Note that some variables serve multiple purposes and, therefore, appear in more than one category.

1. This document is FOR315, one of a series of the School of Forest Resources and Conservation Department, UF/IFAS Extension. Original publication date October 2013. Visit the EDIS website at <http://edis.ifas.ufl.edu>.
2. Robert Swett, associate professor, School of Forest Resources and Conservation; and Lisa Krinsky, Florida Sea Grant Extension agent, Miami-Dade County; UF/IFAS Extension, Gainesville, FL 32611.

Table 1.

Data Categories	Number of Variables
2012/2017 Demographics	1,586
ACS (2005-2009)	896
Banking/Finance	1,468
Behaviors & Preferences	4,402
Budget & Tax	459
Business	213
Census (2010/2000/1990)	2,929
Education	1,872
Employment/Jobs/Labor	2,645
Energy	1,666
Environment/Natural Resources	565
Families	657
Health	3,169
Housing	2,165
Income/Wealth/Poverty	1,208
Insurance	999
Neighborhood Type	253
Spending Patterns	2,301
Supply & Demand	184
Transportation	958

*ACS – American Community Survey

For those readers who are more interested in exploring a realistic example of how Community Analyst (Standard Plus) can be used in their own work, we suggest that you jump ahead to the section titled: *An Example of How to Use Community Analyst in Extension*. The three sections that precede the example, starting with *What Data Are Available?*, describe the features and functionality of Community Analyst. An overview of the available datasets is given and the geographic levels (scales) at which data can be summarized are detailed. The article closes with instructions on how UF personnel (faculty, staff, and students) can gain access to Community Analyst, and where anyone can find additional information and help on its use.

What Data Are Available?

Data available in Community Analyst for US geographies come from datasets produced (or enhanced) by Esri, as well as from federal agencies and data sources including the US Census Bureau (1990, 2000, 2010), the American Community Survey (ACS), the Centers for Disease Control (CDC), the Department of Health and Human Services (DHHS), the Environmental Protection Agency (EPA), the Social Security Administration (SSA), and the US Department of Agriculture (USDA). Specialty dataset providers include Gfk-MRI, InfoGroup, and Dun & Bradstreet. Depending

on the source, datasets (metrics) are updated quarterly, semiannually, annually, and decennially. Esri also provides current-year and five-year projections of demographic data, however, not all data variables are available at every geography level (Table 2 on page 3).

Summarizing Metrics by Geographic Area in Community Analyst Using Standard Geographies

Community Analyst aggregates, or provides areal summaries of, data variables for eleven standard US geographies (places, census block groups⁵, census tracts⁶, county subdivisions, ZIP codes, counties, core-based statistical areas, congressional districts, designated market areas, states, and the entire United States.) (Figure 1). Before using these standard geographies, it is important to understand some of their properties. For example, some geographies are nested and, by definition, their boundaries will never transect (cross) each other. Nesting, or spatial hierarchy, is represented in Figure 1 by arrows that lead from one geography to another. For example, the main stem shows five geographies that are nested: the entire United States comprises states, which comprise counties, which comprise census tracts, which then comprise census block groups. Figure 1 also shows that congressional districts and places (cities and towns) nest within states, but do not necessarily nest within each other. Finally, it is a given that the United

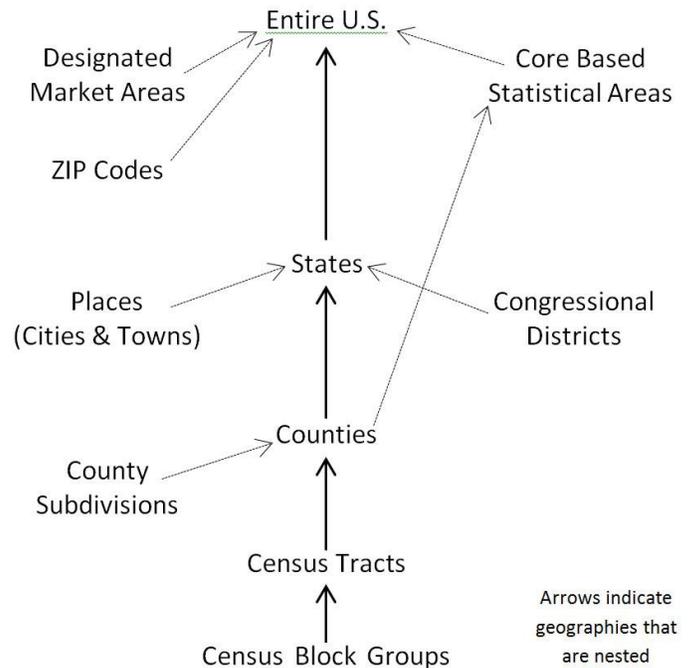


Figure 1. Standard geographies available in Community Analyst for summarizing data (adapted from US Census Bureau: <http://www.census.gov/geo/reference/pdfs/geodiagram.pdf>).

Table 2. Data available in Community Analyst by geography level (in descending order of average size).

US Data Available in Community Analyst (*as of 7/1/2013)	US	State	Designated Market Area	Congressional District	Core Based Statistical Area	County	ZIP Code	County Subdivision	Census Tract	Block Group	Place (cities & towns)	Data Source
ESRI projections	X	X	X	X	X	X	X	X	X	X	X	Esri
Access to Care		X				X						DHHS
Adult Preventive Services Use		X				X						DHHS
American Community Survey	X	X	X	X	X	X	X	X	X	X	X	Census Bureau
Birth Measures						X						DHHS
Building Permits		X				X						Census Bureau
Business Summary	X	X	X	X	X	X	X	X	X	X	X	Esri, InfoGroup
Census 1990 Demographics	X	X	X	X	X	X	X	X	X	X	X	DHHS
Census 2000 Demographics	X	X	X	X	X	X	X	X	X	X	X	Esri, Census Bureau
Census 2010 Demographics	X	X	X	X	X	X	X	X	X	X	X	Esri, Census Bureau
Consumer Spending	X	X	X	X	X	X	X	X	X	X	X	Esri, Bureau of Labor Statistics
Crime Indices	X	X	X	X	X	X	X	X	X	X	X	Applied Geographic Solutions, Inc.
Death Measures		X				X						DHHS
EPA Enforcement		X				X						USEPA
Food Access		X				X						USDA
Food Consumption		X				X						USDA
Food Stamps		X				X						2006-2008 ACS 3-Year Estimates
Health Insurance		X				X						Census Bureau
Health Status		X				X						USDA
Housing Affordability		X				X	X					Esri
HUD Income Limits		X										DHHS
HUD Subsidized Households		X				X			X			HUD
Infant Mortality						X						DHHS
Infectious Disease Cases		X				X						DHHS
Market Potential	X	X	X	X	X	X	X	X	X	X	X	Esri, GfK MRI
Poverty		X				X						USDA
Retail Market Place	X	X	X	X	X	X	X	X	X	X	X	ESRI
Risk Factors for Premature Death						X						DHHS
Supplemental Security Income		X				X						SSA
Tapestry Segmentation	X	X	X	X	X	X	X	X	X	X	X	Esri
Traffic Counts	X											Market Planning Solutions, Inc.

States comprises all other US geographies (i.e., they are nested within boundaries of the United States.).

Another important property of geographic units is the frequency with which their boundaries are subject to change over time. This property becomes particularly important when trying to compare the characteristics of an area for different points in time. Though the boundaries of states and counties rarely change, those of census tracts and block groups are subject to change every ten years in conjunction with the decennial census. The number of congressional districts in each state may change after each decennial census, but their boundaries can also change between subsequent decennial censuses. ZIP code boundaries are maintained by the US Postal Service, and they are updated periodically to maximize delivery efficiency.

Making Your Own Geography

The ability of users to define their own geography significantly enhances the power of Community Analyst. Doing so entails defining the extent of the area over which variables of interest will be summarized. A user-defined geography is created by first identifying a specific location on the map or by drawing a polygon that encapsulates an area of interest. A location, or point of interest, can be mapped by typing an address, an intersection, or a place name, or by placing a push-pin directly onto the map. Once the location is mapped, the user then defines the area surrounding the location that will be used as the basis to summarize data. The areal extent can be based on drive times (in minutes) or rings/donuts (in miles). Multiple locations can be identified in this manner. Users can also upload (import) a Microsoft Excel file with address information, or latitudes and longitudes, for up to 100 locations (points).

The second way to define a summary area is to draw a polygon directly on the map, or by importing a zipped Esri shapefile with up to 100 features. An example of how the polygon method might be used is to search ArcGIS online for an aerial image showing the swath of destruction for a recent hurricane and then draw a polygon that encapsulates that swath. Information on any number of metrics can then be summarized for the resulting site (polygon), such as characteristics that define populations that likely need greater assistance.

How Data Is Summarized

Summarizing data for nested geographies is straightforward when the nested hierarchy includes census block groups (Figure 1). However, this is not the case for other geographies, including those that are user-defined, when they

transect (cross) census boundaries. Community Analyst uses a hybrid of two apportionment methods to summarize variables in these instances. The first method, census block apportionment, is more accurate, and the second, cascading centroid apportionment, is faster. The apportionment method that is used depends on the size of the area for which data variables are being summarized. In general, census block apportionment will be used for areas whose largest dimension is 20 miles or less and cascading centroid for all others. Both methods are explained below.

Census Block Apportionment: Census blocks are the smallest unit of US census geography and they are used to create (build) all other levels of census geography. The only census variables that are published for census blocks are counts of population, households, and housing units; all other census variables are published at the census block group level.

As seen in Figure 2, the distribution of block centroids within a block group does not necessarily follow a regular pattern. The distribution of centroids reflects the underlying population distribution, which may be highly irregular. This fact is used in Community Analyst to more accurately summarize / aggregate data for non-standard geographies. For example, the yellow circle with a radius of one mile in Figure 2 represents a user-defined geography that happens to intersect six block groups. The black dots are block centroids that fall outside of the yellow circle, and the cyan dots are block centroids that fall within the circle. The population sum (8,130 people), as well as the sum of the household and housing unit counts that correspond to the highlighted centroids, are assigned to the user-defined area. The proportions of each block group's population, number of households, and number of housing units that fall within the user-defined area determine how the remaining data variables are allocated to the user-defined area. For example, when determining median age (or any other

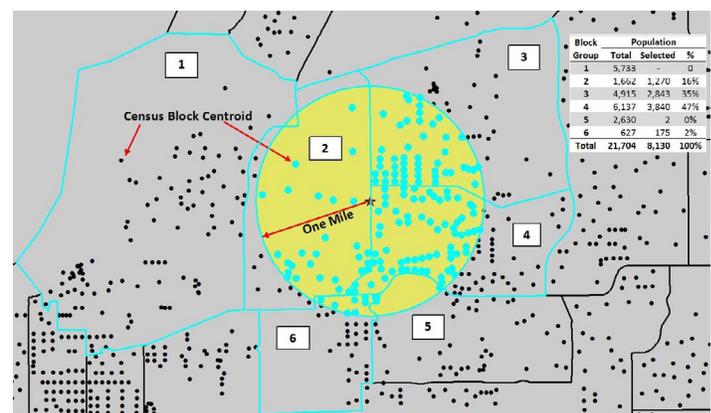


Figure 2. Census block centroids and block group boundaries in relation to a user-defined area of interest.

variable), block group 4 would have the greatest weight of the six block groups because it accounts for 47% of the user-defined area's population. Also note that the weight of block group 1 is zero because none of its block centroids are within the user-defined circle.

Cascading centroid (or Centroids in Polygon) apportionment: This method assigns values to the user-defined area based on which centroids of particular census geographies fall within the user-defined area. Basically, if the centroid of a census unit falls within the user-defined area, then the user area will be apportioned the entirety of the census units' values (e.g., population, housing units, households, income, etc.). Thus, the assignment, or apportionment, is "all or nothing."

The particular census geography that is used for cascading centroid apportionment depends on the size of the largest dimension of the user-defined area. If the largest dimension is between 20 and 100 miles, block groups are used. Census tracts are used for dimensions between 100 and 200 miles, ZIP codes for dimensions between 200 and 400 miles, and counties for anything larger. Regardless of which census geography is used, the sum of the values (e.g., population, housing units, households, income, etc.) for census units whose centroids fall within the user-defined area are assigned to that area.

Community Analyst Functionality

The primary view (window) the application user interacts with is a map, which defaults to the United States when the application is opened. The types of analyses that can be performed with Community Analyst include exploring the characteristics of a location (e.g., community) of interest, comparing the characteristics of several locations, or identifying locations that match characteristics of interest to the user.

Users can explore communities and other areas of interest by creating a color-coded map or by implementing a *Smart Map Search*. Both techniques are menu-driven and lead the user through the process. Creating a color-coded map is the simpler of the two, and it involves selecting a variable to map and, optionally, the geography level at which the variable is mapped. The user either selects the variable to be mapped by searching for it or from a hierarchical, drop-down list that can be filtered by category and by year(s). Smart Map Search can be used to filter a map using up to five criteria. Only those geographic units that meet the criteria will be displayed on the map.

Figure 3 shows a color-coded map of the percentage of people in each of the lower 48 states who recycled products in the last 12 months. The map legend in the lower right corner shows the variable categorized into quintiles. When the cursor hovers over a state on the map, a popup window

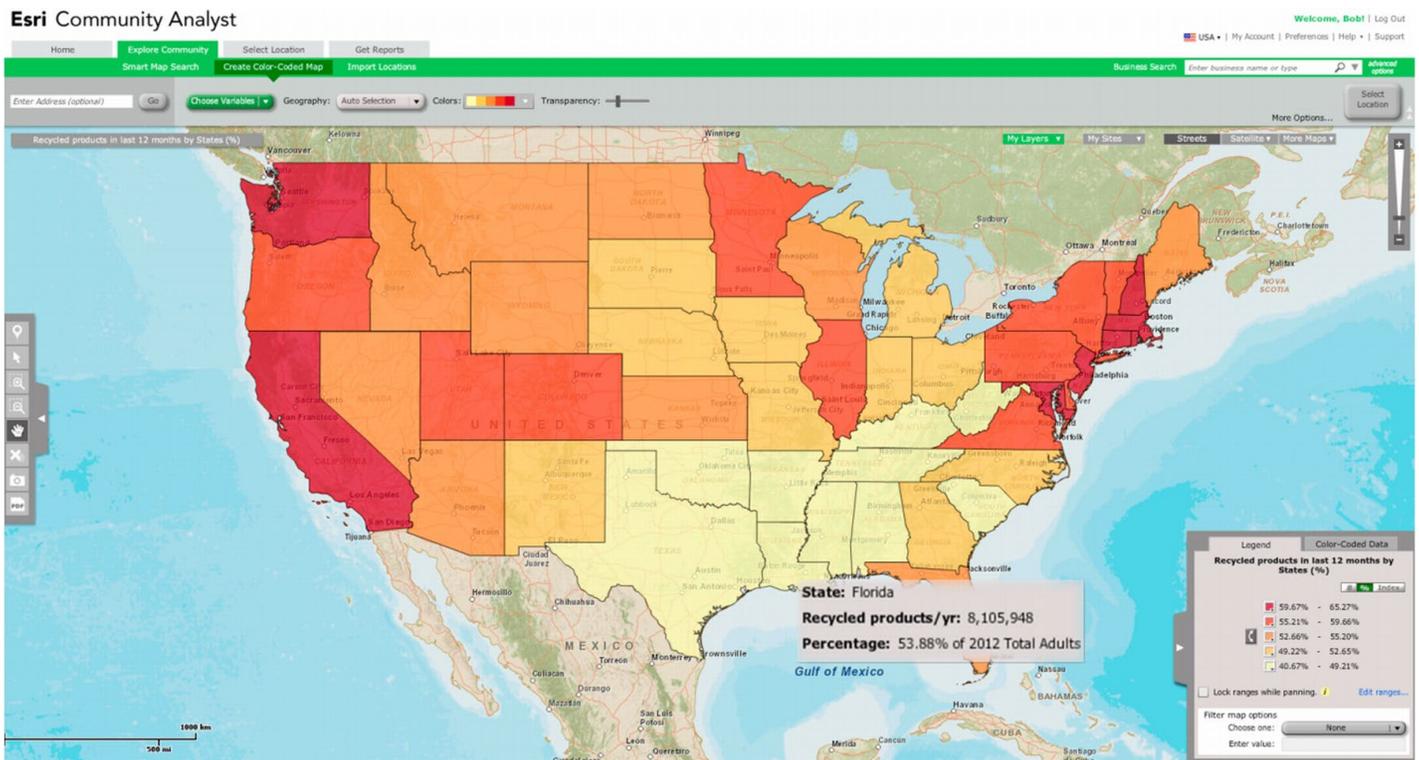


Figure 3. Percent of people in each state who recycled products in the last 12 months.

appears displaying the state's name and the value of the mapped variable. The map can be toggled to portray the estimated number of people in each state who recycled, or to compare recycling in each state with the national average (which is represented as an index value of 100). The data also can be filtered to only show states that meet specified criteria (for example, greater than or less than a particular value), and they can be exported to an MS Excel spreadsheet. To show the data value for smaller geographies, such as counties or ZIP codes, the user must simply zoom in on the map.

An Example of How to Use Community Analyst in Extension

This section provides an example of using Community Analyst and Smart Map Search to design a hypothetical extension program to increase seafood consumption among low-income populations in the city of Miami, Florida.⁷ The questions to answer include where the target audiences are located and how they might be reached programmatically. For this example, Census block groups in the city of Miami were identified that have relatively high concentrations of low-income family households and female householders, and that also consume relatively low quantities of seafood.

Mapping the Population to be Served

First, a Smart Map Search using five criteria (metrics) available in Community Analyst was used to screen each of the 307 block groups in Miami: (1) the total number of households in each block group in 2012, (2) the percentage of households in 2012 that were family households⁸, (3) the percentage of family households in 2010 with a female householder, (4) the median household income in 2012, and (5) seafood purchases as compared to the national average (Figure 4a).

Each criterion was refined by adjusting its minimum and/or maximum values: either by using the corresponding handles above each histogram in the Smart Map Search dialog (Figure 4b), or by typing in a value. Block groups selected for further consideration were those:

- with a 2012 median household income of \$40,000 or less;
- with 200 or more households in 2012, 50% or more of which were family households;
- with 15% or more the householders in 2010 being female;
- that had a seafood consumption index of 75 or less (the national average is 100).

These values were arrived at iteratively, by adjusting the minimum and maximum values until a reasonable (but arbitrary) number of block groups remained on the map (22 in the city of Miami). [Note that, in actuality, the selection criteria and their values would likely be based on expert knowledge and/or published values.]

The Smart Map Search results are shown in a table in the lower right of Figure 4a (an expanded view of the table is shown in Figure 4c). The table rows can be sorted in ascending or descending order by clicking on a field header and the results can be exported to an MS Excel spreadsheet.

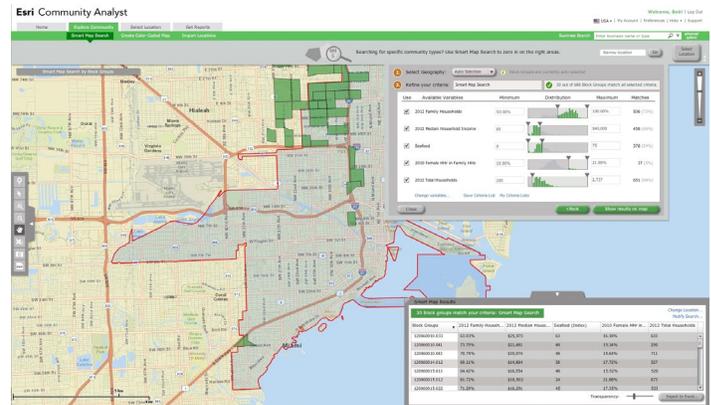


Figure 4a. Smart Map Search in Community Analyst to select block groups for a hypothetical seafood extension program.



Figure 4b. Smart Map Search criteria used for a hypothetical seafood extension program.



Figure 4c. Smart Map Search results for a hypothetical seafood extension program.

Characterizing Selected Neighborhoods and Their Inhabitants

For this example, our selected target audience was families who live within eleven, more or less contiguous block groups in the vicinity of the Liberty City neighborhood of Miami; hereafter referred to as “Seafood Program Area” (Figure 5). The next step was to find more information about this area and the people who live there in order to design the extension program. To do so, *Get Reports* was used to request one or more of the 49 detailed, on-demand reports (and maps) that are available for download as a PDF or an Excel spreadsheet. The reports are grouped thematically—business, demographics, consumer spending, maps, tapestry segmentation, traffic, and market potential—and a description and sample of each are provided.

Community Analyst requires that users create a *site* to generate reports for an area or a location. The *Select Geographies* tool was used to create the “Seafood Program Area” site (shown in blue in Figure 5) For this example, one site was created that comprised the chosen eleven block groups, although separate sites could have been created for each block group, thus allowing them to be characterized individually. Furthermore, the Smart Map Results table (Figure 4c) also contains the records for all Miami block groups that met the five selection criteria; therefore, the extension program can later be expanded within the context of Miami as a whole.

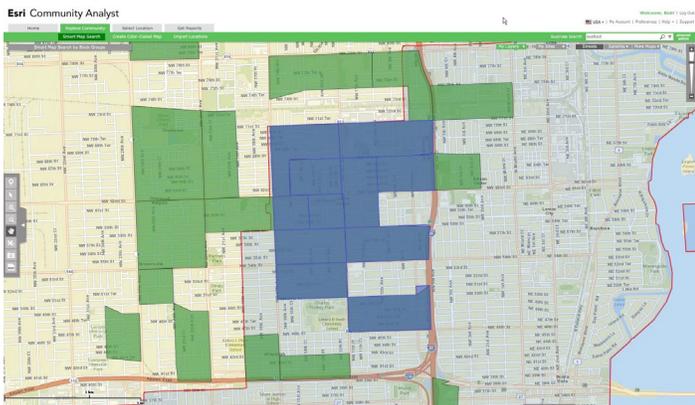


Figure 5. Area selected for the hypothetical seafood extension program.

Once the site was created, *Get Reports* was used to generate several reports to characterize different facets of the seafood program area. A *Demographic and Income Profile* report was generated both for the city of Miami and for the seafood extension program area. Table 3 contains a few of the resulting statistics.

Table 3. Demographic and income statistics for the seafood extension program area and the city of Miami.

Demographic and Income Statistics	Seafood Program Area	City of Miami
Population	14,138	408,943
Households	4,806	162,594
% Family Households	68%	56%
Median Household Income	\$17,597	\$26,496
Median Age	29.6	38.9

In addition to *Get Reports*, Community Analyst includes a number of on-demand reports that can provide cultural and social characteristics about the people living within a geographic site, which in turn can help in the design of an extension program. Most of these reports show the number and percentage of adults residing in the site who are expected to engage in particular activities or behaviors, as well as an *Index* that measures the behavior relative to its national average (an index value of 100). For example, the *Sports and Leisure Market Potential* report for the seafood program area indicates that 49.7% of adults attended movies in the last 6 months. The Index for this behavior (84) was 16% below the national average (100). Nonetheless, an expected 4,888 adults attended movies in the last 6 months, suggesting an opportunity for a marketing campaign related to movie attendance. Another example is that 14.4% of adults (1,421) in the seafood program area said they cooked for fun in the last 12 months; this might suggest seafood cooking classes as an educational method. One last, but important example from the *Electronics and Internet Market Potential* report is that only 34.5% reported Internet access at home (compared to 56.2% for the city of Miami as a whole). This should influence how the extension program is marketed and delivered. There are 46 other questions in this same report that relate to Internet use (e.g., where, how often, and for what). The above are just a few examples of the types of available information and they are meant to demonstrate the potential utility of Community Analyst in helping to design and implement an extension program.

Esri also creates profiles that classify US neighborhoods into 65 market segments based on socioeconomic and demographic factors. The *Tapestry Segmentation Reference Guide*⁹ provides a one-page description that includes the demographic, socioeconomic, residential, and preference characteristics that make each segment unique. Though the main purpose of this information is for marketing, it can also prove useful for extension programming. For example, the results of the *Tapestry Segmentation* report for the seafood program area indicate that 52.6% of its neighborhoods are “City Commons” and 38.1% are “Modest Income Homes.” “City Commons” is a residential segment

consisting primarily of young, single-parent families or singles who often rent apartments in multiunit buildings. Food is one of their most frequent purchases and they eat at fast-food restaurants several times a month.

Identifying and Mapping Community Partners

As “City Commons” residential segments focus largely around children, the seafood extension program likely will be more successful if it includes collaborative efforts with local public schools and seafood establishments. The *Business Search* tool was used to find locations of elementary schools, seafood establishments, and grocery stores in the immediate vicinity of the Seafood Program Area (i.e., within the current map extent) (Figure 6). The schools provide a point of contact with families and the seafood businesses can help with marketing and promotional campaigns.

Using the aforementioned characterization reports, an extension program could be developed that fit the needs of the targeted community. A hypothetical program could provide family seafood cooking classes housed at local public schools. Seafood businesses could assist with advertising and be program sponsors. If necessary, additional advertisement for the seafood programming could be done during the previews at local cinemas. By taking into account the demographic and income characteristics of the community, as well as the activities and behaviors of its residents, Community Analyst helped provide a strong foundation for extension programming that met the needs of the community and the goals of the extension agent.

Business Name	Address	City	State	ZIP	NAICS	SIC	Number of Employees
Atlantic Restaurant & Fish Market	374 W 32th Ave	Hialeah	FL	33012	722111	5822700	0
LAH Seafood Distribution Corp.	248 S 27th St	Hialeah	FL	33010	424800	5140000	3
La Hialeah Fish & Chip Corp	2835 W 2nd Ave	Hialeah	FL	33010	722111	5822700	15
Blue Fin Tuna Company	2285 W 9th Ave	Hialeah	FL	33010	424800	5140000	2
Samara Seafood, Inc.	2275 W 9th Ave	Hialeah	FL	33010	424800	5140000	15
Samara's Seafood, Inc.	2285 W 9th Ave SW 1	Hialeah	FL	33010	424800	5140000	3
Power Seafood Corp.	330 W 37th St	Hialeah	FL	33010	424800	5140000	3
Palmetto & Bono Seafoods, Inc.	710 W 20th St	Hialeah	FL	33010	424800	5140000	12
Campana Seafood, Inc.	710 W 20th St	Hialeah	FL	33010	424800	5140000	3
Marissa Seafood	1366 E 4th Ave	Hialeah	FL	33010	424800	5140000	3
Fish Market and Lungs	4454 Hialeah St	Hialeah	FL	33010	442220	5421000	6
Golden Choice Seafood	3112 NW 20th St	Miami	FL	33130	722111	5822700	0
Carlini Seafood, Inc.	4041 NW 20th St	Miami	FL	33142	424800	5140000	20
Castellanos Queen Seafood Inc	4620 NW 20th St	Miami	FL	33142	20241	2000200	2
George Stone Corp	2700 NW 20th St	Miami	FL	33142	722111	5822700	0
Stone's Seafood Inc	2610 NW 20th Ave	Miami	FL	33142	424800	5140000	2
Florida Fresh Seafood	3076 NW South River Dr	Miami	FL	33142	424800	5140000	2
Seafood Inc	3621 NW 20th St	Miami	FL	33142	424800	5140000	3
Clumpy Seafood	3621 NW 20th St	Miami	FL	33142	424800	5140000	2
Thompson Seafood Distributors Inc	944 Hialeah St	Hialeah	FL	33010	722111	5822700	0
U of S Seafood	1908 NW 20th Ave	Miami	FL	33142	442220	5421000	3
Bilinski's Seafood	4272 NW 20th Ct	Miami	FL	33142	424800	5140000	1
Crandon Intl	7737 NW 20th Ave	Miami	FL	33147	424800	5140000	3
Neuro Seafood, Inc.	7620 NW 20th Ave	Miami	FL	33147	424800	5140000	25
La Pasadilla Fish Mkt	1005 C 9th Ave	Hialeah	FL	33010	442220	5421000	3
Florida Fresh Seafood Corp	7327 NW 20th Ave Unit 2	Miami	FL	33147	312120	2002000	3
Archer Seafood, Inc.	7327 NW 20th Ave	Miami	FL	33147	424800	5140000	6
Heald's Fish Seafood Inc	7327 NW 20th Ave Unit 4	Miami	FL	33147	424800	5140000	7
Aurora Fish Market	5704 NW 20th Ave	Miami	FL	33142	442220	5421000	3
Kingfisher Fish Corp	2288 NW 20th Ave	Miami	FL	33142	722111	5822700	0
Penalty's Restaurant, Inc.	2275 NW 20th St	Miami	FL	33142	722111	5822700	3
Flava Seafood Market, Inc.	3114 NW 20th Ave	Miami	FL	33142	442220	5421000	7
Chief Pen's Seafood & Seafood Retail	4034 NW 20th Ave	Miami	FL	33142	722111	5822700	3
Distributiva Colaboracion Empresarial	2111 NW 20th Ave	Miami	FL	33137	424800	5140000	4
Immortal USA, LLC	2800 Biscayne Blvd # 500	Miami	FL	33137	424800	5140000	2
Thelco Supply	242 NW 27th St	Miami	FL	33137	722111	5822700	0
Public Corp Seafood Co, Inc.	2242 NW 2nd Ave	Miami	FL	33137	424800	5140000	20

Figure 6. The results of a search for seafood establishments in the program area.

Figure 7 shows the locations of grocery stores, seafood establishments, and elementary schools that are within the seafood program area and nearby. Each icon can be selected to show more details.



Figure 7. Locations of elementary schools, grocery stores, and seafood establishments near the program area.

Where to Get More Help on Community Analyst

University of Florida faculty, staff and students with a GatorLink email address should contact the UF GeoPlan Center (<http://www.geoplan.ufl.edu/>), which maintains the Esri site license, to obtain instructions to access Esri applications, including Community Analyst.

The Community Analyst web application includes links in the upper right corner to *Help Documentation*, *Data Documentation*, and FAQs. Within the help documentation, under Getting Started, there are links to a Quick Start Video; the Community Analyst blog, where you can stay in touch with the application's team; and the Resource Center for Community Analyst, where you get the latest news on updates.

1. UF faculty, staff, and students with a GatorLink email address; Instructions to access Esri applications available to UF personnel can be obtained by contacting the University of Florida's GeoPlan Center (www.geoplan.ufl.edu), which maintains the Esri site license.

2. Three types of subscriptions to Community Analyst are available. They vary in the amount of accessible data: Standard Plus (12,764 variables), Standard (8,362 variables), and Basic (4,110 variables). Thirty-day guest subscriptions also are available, as are education and non-profit subscriptions.

3. Community Analyst is an evolving product and the available data changes over time, as does the application's functionality (usually for the better).
4. Esri methodology statements can be found at http://www.esri.com/data/esri_data/methodology-statements.
5. Statistical subdivisions of census tracts, generally containing between 600 to 3,000 people (<http://www.census.gov>).
6. Small statistical subdivisions of a county, generally containing between 1,200 to 8,000 people (<http://www.census.gov>).
7. Though this example is hypothetical, similar programs do exist in IFAS.
8. A family consists of two or more people (one of whom is the householder) related by birth, marriage, or adoption residing in the same housing unit.
9. <http://www.esri.com/library/brochures/pdfs/tapestry-segmentation.pdf>