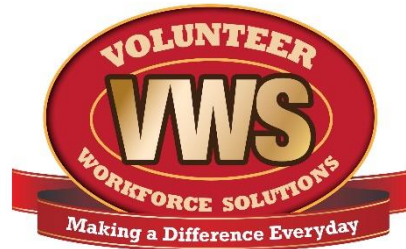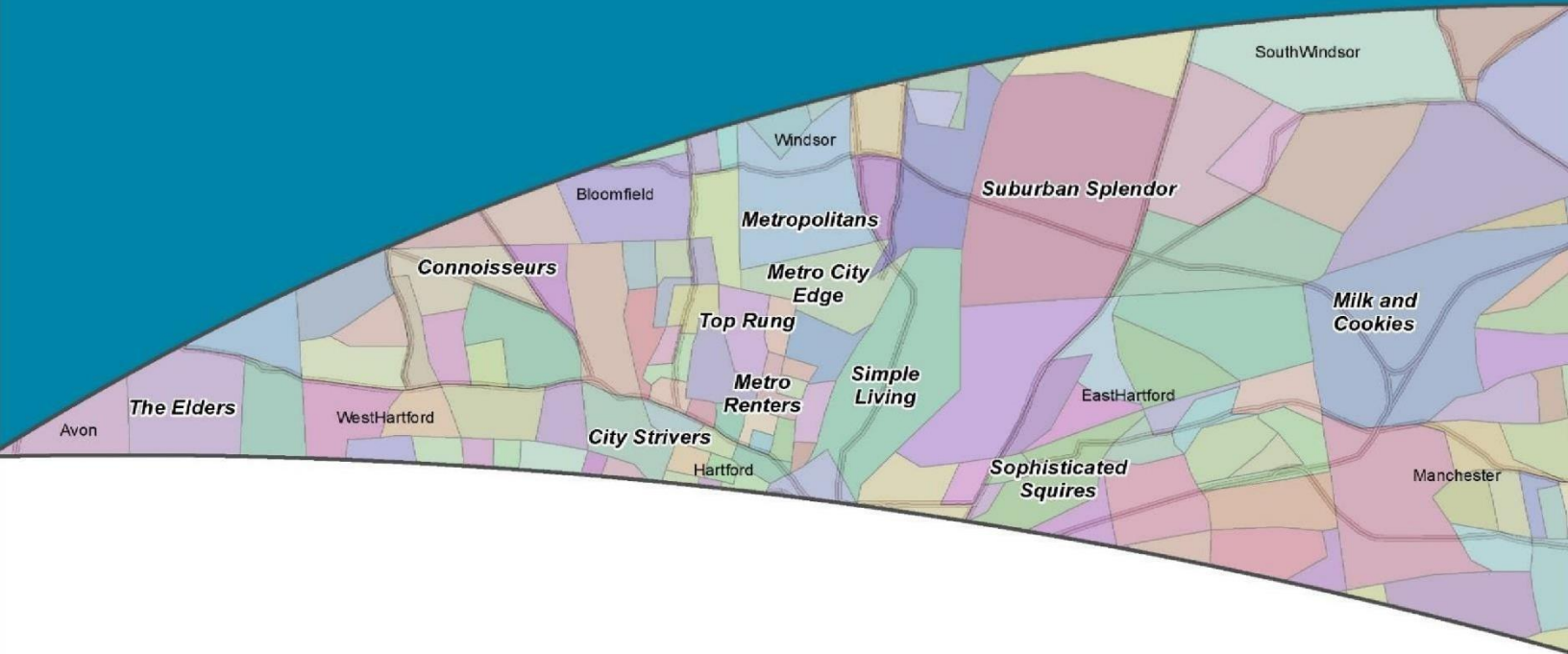# National Volunteer Workforce Solutions

Volunteer Firefighter
Recruitment and Retention Study

Prepared for:

Santa Fe County Fire Department

Santa Fe, New Mexico

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Introduction

Your community is part of the Volunteer Workforce Solutions (VWS) study. The study is based on the premise that a citizen profile analysis will provide information that will improve the ability to identify the types of people who would be the best candidates for volunteer fire service, where they can be found, and how best to communicate with them. Esri's Tapestry™ Segmentation system was used for this analysis.

Tapestry Segmentation classifies US residential neighborhoods into 67 distinct market segments. Tapestry Segmentation combines the "who" of lifestyle demography with the "where" of local neighborhood geography to create a model of various lifestyle classifications, or segments, of actual neighborhoods with addresses – distinct behavioral market segments.

For the analysis, a group of communities across the United States representing a variety of community sizes, volunteer firefighter workforce sizes, numbers of fire stations, resident ages, incomes and lifestyles was selected as the study group. The home addresses of current paid and volunteer firefighters in the study group communities were used to identify specific Tapestry segments that describe residents of the communities in which these firefighters live. Identifying these Tapestry segments will allow marketing campaigns to include methods specifically designed to target and reach potential volunteer firefighters.

The study is expected to show that success in growing a volunteer firefighter workforce starts with a thorough knowledge of a community's firefighter base. This means knowing all about the types of people who are currently enlisted as firefighters. Accurate and precise understanding of the communities your firefighters come from is expected to increase the effectiveness of your volunteer workforce recruitment and retention efforts. Some examples include:

• Holding recruitment functions in locations where likely candidates congregate
• Highlighting the aspects of service that appeal directly to potential firefighters in a specific area
• Directing advertising with the right message to the right audience
• Targeting direct mail or door-to-door canvassing in the areas where the most responsive recipients live

Your community's time and money could be used more effectively when accurate knowledge of firefighters is considered before recruitment and marketing plans are launched. We all know that firefighters are expensive to recruit and retain. It is expected that the results of the Tapestry analysis which are included in this report will provide valuable input into your volunteer recruitment planning process, including:

• Understanding the characteristics of your target (ideal) firefighters
• Analyzing the lifestyle characteristics of firefighters
• Determining where these firefighters live
• Discovering the untapped potential of un-recruited individuals in a specific area
• Developing strategies to encourage candidates to join the fire service

Firefighter data collection and analysis is a first step to acquiring this valuable knowledge. The process can be equated to painting a picture: the more detail that is added to the picture, the more defined the picture becomes. Tapestry Segmentation "paints" its firefighter profiles by using data from several sources to fill in the firefighter "picture". When the firefighter data analysis is complete, a detailed picture of your firefighters emerges. In the following sections, we describe the process of compiling a detailed firefighter profile and analysis and the benefits derived from the analysis. The expectation is that the more information you know about your existing firefighters, the better you can recruit and retain more people like them. This Volunteer Workforce Solutions report for your community provides that information. This report will help you answer basic questions about your firefighters and provide specific information that you should include in your recruitment and retention plans. Some of these fundamental questions are: Who are my target firefighters? Where do they live? What products and services do they buy? How do I reach them? What are the most

effective strategies to build my firefighter workforce? Once you have collected this information, you can develop a variety of marketing and outreach tactics to increase your workforce. Appendix A provides some suggestions for how you can apply the information found in this report.

Community Tapestry Explained

To help you better understand your firefighters, VWS chose to use Esri's Tapestry Segmentation, a proprietary market segmentation system. Tapestry demonstrates the principle that people with similar interests and lifestyles prefer to live in similar neighborhoods. Tapestry can tell you who they are, where they live, what they buy, and how you can reach them. Tapestry is powerful because it exceeds the one-dimensional nature of traditional demographic analysis and incorporates lifestyle characteristics into a detailed firefighter analysis customized for your community. The advantage of Tapestry is its ability to identify specific patterns in the data. Although variables such as age and income are important to profiling individuals, analyzing these factors separately fails to uncover underlying characteristics.

What defines the similarities among people? If two households have the same income and age, would they engage in the same lifestyle activities? Not necessarily. For instance, imagine that one household includes a married couple with children and the other household includes a single person. The family household may own a minivan, a single-family home, and shop for children's apparel. The single householder may own a sports car, a townhouse, and travel frequently. One demographic variable can offer only a single dimension of an individual, and fails to paint the whole picture. Bottom line: Tapestry provides a vivid, multidimensional profile of your firefighters.

The Tapestry Segmentation system classifies US neighborhoods into 67 unique market segments using a proven methodology introduced more than 30 years ago. Neighborhoods with the most similar characteristics are grouped together, and neighborhoods showing divergent characteristics are separated. Communities throughout the country are different and diverse. Capturing the essence of each community to characterize those differences requires sorting the most accurate and powerful data available using a wide array of attributes. Each neighborhood is analyzed and sorted by more than 60 demographic and socioeconomic attributes including income, source of income, employment, home value, housing type, occupation, education household com position, age, and other key determinants of citizen behavior. To capture the subtlety and vibrancy of each community, Tapestry incorporates data sources including Census 2000 and 2010, Esri's proprietary Updated Demographics data, national consumer survey information from GfK MRI, Mediamark Research Inc., and other sources. Tapestry combines traditional statistical segment analysis methodology with the latest GIS data mining techniques. These techniques complement and strengthen the traditional methodology used in working with large amounts of geodemographic data to produce a vigorous and compelling segmentation of U.S. neighborhoods.

For easy identification, names such as Up and Coming Families, Trendsetters, and Retirement Communities designate each of Tapestry's 67 segments. Detailed descriptions of the demographic, socioeconomic, and residential characteristics of the segments as well as their preferences for leisure activities, financial services, and media consumption have been developed. The descriptions of the segments relevant to your community can be found in Appendix C. All 67 segment descriptions can be found in this reference guide: http://doc.arcgis.com/en/esri-demographics/data/tapestry-segmentation.htm

Who are your current firefighters?

Once you know where your firefighters are located, you can learn more about their demographic make-up. Esri appends demographic characteristics to each firefighter record based on where firefighter addresses are located. The summarized results of this analysis are found in the Demographic Profile. The Demographic Profile provides a snapshot of the demographics surrounding firefighter locations. Based on the information in this report, you get a sense of the demographic makeup of your firefighter base.

Firefighter Tapestry Profile

The Firefighter Tapestry Profile report shows the Tapestry segments and summary groups that most accurately reflect your firefighter records and compares your firefighter profile to the base profile of your study area using Tapestry segmentation. The Firefighter Tapestry Profile by *Summary Group* and Firefighter Tapestry Profile *by Segment,* display the count, percent, and index of each summary group/segment for your firefighter file and for the study area. The *Tapestry Description* provides the name of the Tapestry segment or Summary group. The *Firefighter* column notes the actual *count* of firefighters in each segment or summary group and the *percentage* of firefighters in the segment or summary group to the total number of firefighter records. The *Penetration per 100* illustrates the penetration percentage per 100 firefighters in the segment or summary group. The last three columns - *Number, Percent,* and *Index* - show the population or households, percent of total population or households, and index of each summary group/segment in the study area. Whether the report shows population or household count depends on which base type is chosen when creating the base profile: Total Adult Population or Total Households. The index average is 100. A segment with an index of 216 means that these people or households are 2.16 times more likely to be a firefighter than the average person or household. The report is based on the number of firefighter records analyzed.

The Firefighter Tapestry Profile by Segment report is sorted by firefighter percentage from highest to lowest. By sorting on firefighter percentage, we can now see which segments make up your current firefighters. This report will help us identify your target firefighters.

Who are your target firefighters?

By using the Tapestry Profile from the previous section, we are able to identify your Target firefighters using a combination of two factors: Index and Percent of Firefighters. These two factors, in different combinations can define your Core and Development target groups.

Core Segments

Segments with a high percentage of your firefighter base are indicators of your *Core Segments*. Core Segments are the segments that not only make up a large percentage of your firefighter base, but also have an above average index to be a firefighter. Firefighters in this segment make up a larger percentage of your firefighter base than the percentage that they make up of the market area. These segments represent loyalty and good opportunity. In Figure 1 below we have identified the Core Segments in your study area. These segments contain at least 4.00 percent of the firefighter base and also have an index greater than 110.

Figure 1: Tapestry Profile - Core Firefighter Segments

Tapestry Description	Firefighter Count	Firefighter Percent	Market Area Count	Market Area Percent	Index
7C: American Dreamers	16	4.98	15,196	3.75	133
10D: Down the Road	37	11.53	17,822	4.39	262
1E: Exurbanites	46	14.33	28,436	7.01	204
6A: Green Acres	17	5.30	6,345	1.56	339
1D: Savvy Suburbanites	16	4.98	9,742	2.40	208
6C: The Great Outdoors	92	28.66	16,099	3.97	722

Development Segments

Development segments are the segments that make up a significant percent of firefighters and of the market area but do not have an above average index. Development segments are important because they represent a significant portion of firefighters but also represent areas with households that have not yet been reached. They represent potential for loyal firefighters. These segments contain at least 4.00 percent of the firefighter base and also have an index less than 110.

Figure 2: Tapestry Profile - Development Firefighter Segments

Tapestry Description	Firefighter Count	Firefighter Percent	Market Area Count	Market Area Percent	Index
5B: In Style	17	5.30	23,538	5.80	91

Top Leisure Activities/Lifestyle Characteristics:

Description	Core Index	Developmental Index	Overall Index
HH owns ATV/UTV	165	78	146
Did birdwatching in last 12 months	146	121	135
Member of AARP	142	125	132
Member of veterans club	142	99	132
Bought mystery book in last 12 months	139	106	127
Rented movie/oth video/30 days: western	136	82	129
Did woodworking in last 12 months	129	101	120
Participate in indoor gardening/plant care	129	125	125
Rented DVDs in last 30 days: 2	125	84	115
Bought 7+ books in last 12 months	124	129	118
Member of charitable organization	122	151	123
Rented/purch DVD/Blu-ray/30 days: from amazon.com	122	146	120
Rented movie/oth video/30 days: classics	122	133	117
Went to beach in last 12 months	122	116	114
Went on overnight camping trip in last 12 months	121	130	115
Bought book last 12 mo: amazon.com	120	132	114
Read book in last 12 months	118	130	113
Bought book online in last 12 months	117	127	112
Did photography in last 12 months	117	118	113
Went to art gallery in last 12 months	116	153	116

Summary	Census 2010		2015		2020	
Population	981,439		1,004,194		1,029,172	
Households	393,703		405,637		416,799	
Families	246,869		250,711		255,385	
Average Household Size	2.45		2.44		2.43	
Owner Occupied Housing Units	263,415		270,222		278,116	
Renter Occupied Housing Units	130,288		135,415		138,684	
Median Age	37.5		38.3		38.7	

Trends: 2015 - 2020 Annual Rate	Area	State	National
Population	0.49%	0.53%	0.75%
Households	0.54%	0.59%	0.77%
Families	0.37%	0.47%	0.69%
Owner HHs	0.58%	0.62%	0.70%
Median Household Income	1.67%	2.85%	2.66%

			2015		2020	
Households by Income			Number	Percent	Number	Percent
<$15,000			57,814	14.3%	54,552	13.1%
$15,000 - $24,999			49,041	12.1%	36,702	8.8%
$25,000 - $34,999			41,157	10.1%	39,946	9.6%
$35,000 - $49,999			52,450	12.9%	57,021	13.7%
$50,000 - $74,999			71,485	17.6%	75,351	18.1%
$75,000 - $99,999			48,217	11.9%	53,645	12.9%
$100,000 - $149,999			48,700	12.0%	55,798	13.4%
$150,000 - $199,999			20,601	5.1%	24,979	6.0%
$200,000+			16,170	4.0%	18,803	4.5%
Average Household Income			$69,760		$77,575	
Per Capita Income			$28,292		$31,530	

	Census 2010		2015		2020	
Population by Age	Number	Percent	Number	Percent	Number	Percent
0 - 4	64,987	6.6%	63,432	6.3%	64,888	6.3%
5 - 9	65,567	6.7%	63,911	6.4%	63,539	6.2%
10 - 14	64,631	6.6%	64,533	6.4%	65,301	6.3%
15 - 19	65,957	6.7%	62,143	6.2%	63,086	6.1%
20 - 24	66,029	6.7%	66,980	6.7%	61,622	6.0%
25 - 34	132,497	13.5%	139,142	13.9%	144,866	14.1%
35 - 44	125,366	12.8%	124,657	12.4%	132,188	12.8%
45 - 54	144,134	14.7%	132,741	13.2%	121,385	11.8%
55 - 64	127,337	13.0%	137,727	13.7%	138,507	13.5%
65 - 74	70,363	7.2%	90,688	9.0%	107,062	10.4%
75 - 84	38,769	4.0%	41,046	4.1%	48,622	4.7%
85+	15,804	1.6%	17,194	1.7%	18,108	1.8%

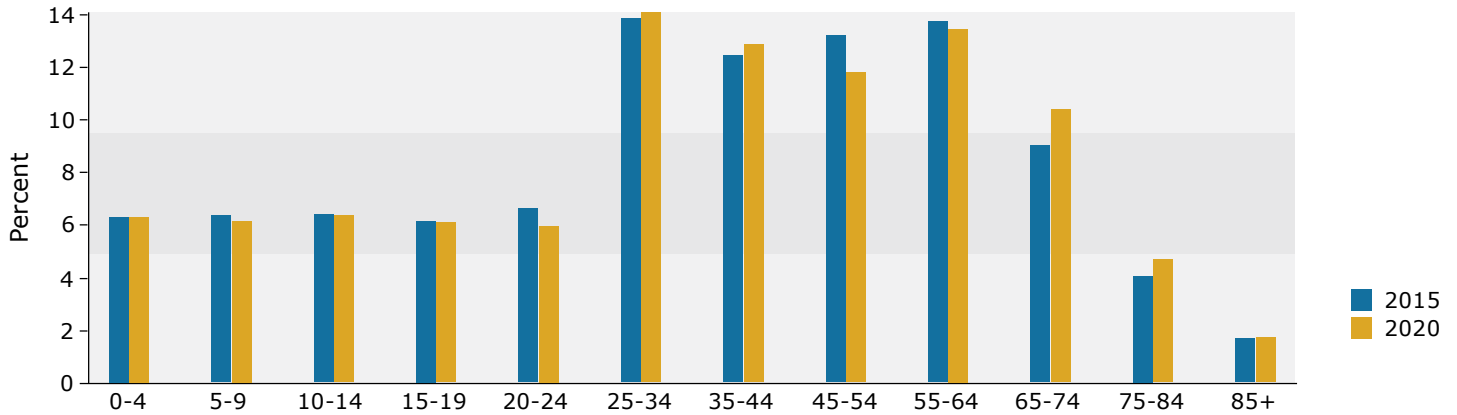|	Census 2010		2015		2020	
Race and Ethnicity	Number	Percent	Number	Percent	Number	Percent
White Alone	694,001	70.7%	696,567	69.4%	703,456	68.4%
Black Alone	23,998	2.4%	25,107	2.5%	26,400	2.6%
American Indian Alone	50,876	5.2%	54,299	5.4%	57,525	5.6%
Asian Alone	20,339	2.1%	22,501	2.2%	24,872	2.4%
Pacific Islander Alone	993	0.1%	1,075	0.1%	1,162	0.1%
Some Other Race Alone	150,055	15.3%	159,755	15.9%	167,490	16.3%
Two or More Races	41,176	4.2%	44,889	4.5%	48,266	4.7%
Hispanic Origin (Any Race)	458,417	46.7%	486,201	48.4%	516,608	50.2%

Data Note: Income is expressed in current dollars.

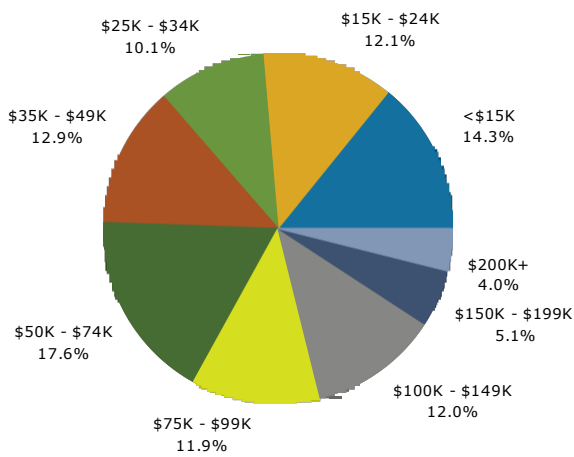**Source:** U.S. Census Bureau, Census 2010 Summary File 1. Esri forecasts for 2015 and 2020.
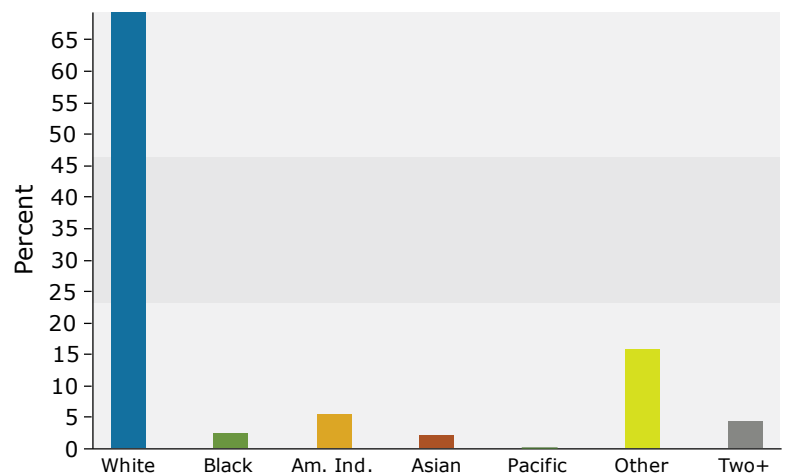
Trends 2015-2020
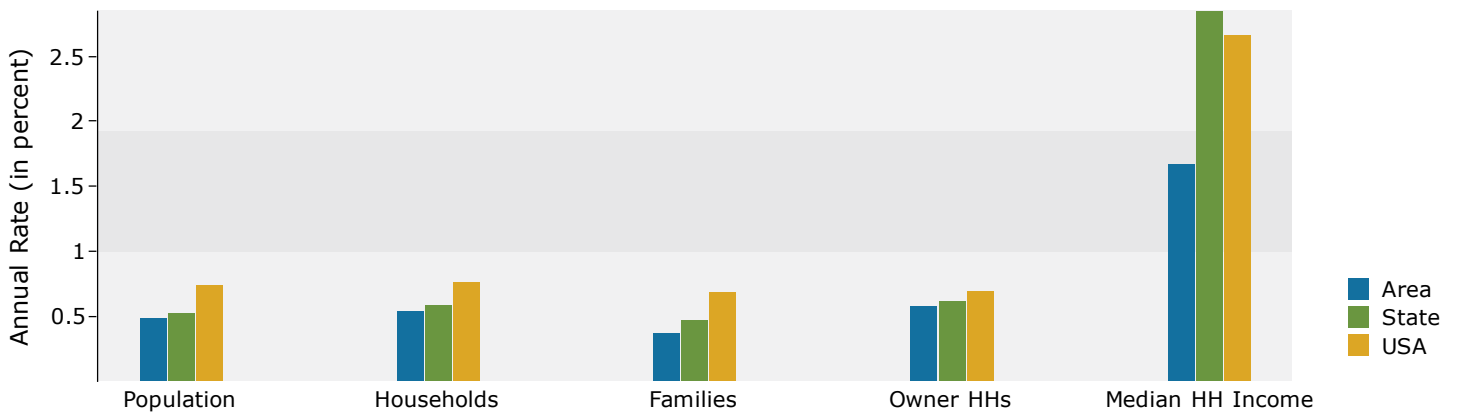
Population by Age

2015 Household Income

2015 Population by Race

2015 Percent Hispanic Origin: 48.4%

American Dreamers

7C

Households: 1,747,000

Average Household Size: 3.16

Median Age: 31.8

Median Household Income: $48,000

WHO ARE WE?

Located throughout the South and West, most *American Dreamers* residents own their own homes, primarily single-family housing—farther out of the city, where housing is more affordable. Median household income is slightly below average (Index 94). The majority of households include younger married-couple families with children and, frequently, grandparents. Diversity is high; many residents are foreign born, of Hispanic origin. Hard work and sacrifice have improved their economic circumstance as they pursue a better life for themselves and their family. Spending is focused more on the members of the household than the home. Entertainment includes multiple televisions, movie rentals, and video games at home or visits to theme parks and zoos. This market is connected and adept at accessing what they want from the Internet.

OUR NEIGHBORHOOD

- *American Dreamers* residents are family-centric and diverse. Most are married couples with children of all ages or single parents; multigenerational homes are common (Index 201).

- Average household size is higher at 3.16 (Index 122).

- Residents tend to live further out from urban centers—more affordable single-family homes and more elbow room.

- Tenure is slightly above average with 65% owner occupancy; primarily single-family homes with more mortgages (Index 122) and slightly higher monthly costs (Index 122).

- Three quarters of all housing were built since 1970.

- Many neighborhoods are located in the urban periphery of the largest metropolitan areas across the South and West.

- Most households have one or two vehicles available and a longer commute to work.

SOCIOECONOMIC TRAITS

- While nearly 16% have earned a college degree, the majority, or 63%, hold a high school diploma only or spent some time at a college or university.

- Unemployment is higher at 10.7% (Index 124); labor force participation is also higher at 67%.

- Most *American Dreamers* residents derive income from wages or salaries, but the rate of poverty is a bit higher in this market (Index 126).

- They tend to spend money carefully and focus more on necessities.

- They are captivated by new technology, particularly feature-rich smartphones.

- Connected: They use the Internet primarily for socializing but also for convenience, like paying bills online.

Note: The Index represents the ratio of the segment rate to the US rate multiplied by 100. Consumer preferences are estimated from data by GfK MRI.

TAPESTRY SEGMENTATION
esri.com/tapestry