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Real Estate Process

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Location Analysis[1]

Objective: The purpose of this case is to familiarize students with how feasibility analysts use demographic data from the Bureau of the Census, the internet, and other sources to help them determine potential market areas. The case is also designed to introduce students to some of the benefits of geographic information systems (GIS). For a good overview of trade area analysis, visit the website http://www.directionsmag.com/features.php?feature_id=5

Company: Krispy Kreme (Ticker: KKD) http://www.krispykreme.com/. Krispy Kreme, which began in 1937, is a leading retailer and wholesaler of doughnuts. Krispy Kreme serves over 20 varieties of doughnuts, including their Hot Original Glazed™, as well as hot coffee and other beverages. As of January 28, 2007, there were 395 Krispy Kreme stores operated systemwide in 40 U.S. states, Australia, Canada, Hong Kong, Indonesia, Japan, Kuwait, Mexico, the Philippines, South Korea and the United Kingdom, of which 113 are company owned and 282 are owned by franchisees. Of the 395 total stores, there are 296 factory stores and 99 satellites. Factory stores, which have the capacity to produce from 4,000 dozen to over 10,000 dozen doughnuts daily, typically support multiple sales channels to more fully utilize production capacity and reach additional consumer segments. These sales channels are comprised of on-premises sales (sales to customers visiting factory and satellite stores) and off-premises sales (sales to convenience stores, grocery stores/mass merchants and other food service and institutional accounts). Satellite stores consist primarily of the fresh shop, kiosk and hot shop store formats. Hot shop stores contain doughnut heating technology that allows customers to have a hot doughnut experience throughout the day. Fresh shops and free-standing kiosk locations do not contain doughnut heating technology. Of the 296 Krispy Kreme factory stores in operation at January 28, 2007, 239 are located in the United States.

Factory stores feature a doughnut-making production line known as the doughnut-making theater, which is designed to produce a multi-sensory customer experience and establish a brand identity. The goal is to provide customers with an entertainment experience and to reinforce Krispy Kreme's commitment to quality and freshness. Another integral contributor to branding is The Hot Doughnuts Now sign, an impulse purchase generator. When illuminated, the sign is a signal that their Hot Original Glazed™ are being made. Their Hot Original Glazed™ are made for several hours every morning and evening, and at other times during the day.

History: In 1933, Vernon Carver Rudolph, the founder of Krispy Kreme, bought a doughnut shop in Paducah, Kentucky including the rights to a secret yeast-raised doughnut recipe from a French chef from New Orleans. Rudolph and his partner moved their operations to Nashville, Tennessee in the mid 1930s and during the early summer of 1937, they moved their operations yet again to Winston-Salem with $25 in cash, a few pieces of doughnut-making equipment, the secret recipe, and the name Krispy Kreme Doughnuts. On July 13, 1937, the first Krispy Kreme doughnuts were made at the new Winston-Salem shop. Rudolph's first customers were local grocery stores, but soon afterward, people began stopping by to ask if they could buy hot doughnuts right there on the spot. The demand was so great that according to legend, Rudolph

opened the shop for retail business by cutting a hole in the wall and selling doughnuts directly to customers, marking the beginning of Krispy Kreme's retail services. The company went public in April of 2000 at a split-adjusted $5.25 a share. Shares peaked at nearly $49 a share (a 240% increase) in August 2003 but eventually its shares began to fall in 2004 when the company issued its first-ever profit warning. Although its executives blamed the low-carb craze, but disappointing financial results and probes into its accounting practices also played a large role as well in the company losing favor on Wall Street. In 2005, six company executives were replaced in an attempt to turn things around after the company lost $198 million in fiscal 2005. Livengood (the former CEO) was tossed out in favor of corporate turnaround artist Stephen Cooper in 2005. CEO and President Daryl Brewster, the former head of Kraft Foods Inc.'s Northern America Snacks & Cereal sector was recently hired to replace Cooper.

The Arizona Experience: Krispy Kreme debuted in Arizona in June 1999 at Arizona Mills mall in Tempe with about 100 people lined up outside the small shop as early as 4 a.m. on opening day. On August 11, 2006, all eight Krispy Kreme Doughnuts stores in Arizona closed unexpectedly when Rigel Corporation, the company that franchises the Krispy Kreme in Arizona and New Mexico filed for Chapter 11 bankruptcy protection. Currently, closest Krispy Kreme to the Valley is in Las Vegas, about 250 miles away. On April 20, 2007, The Arizona Republic reported that Krispy Kreme's parent company received a city license to reopen a store at 6626 E. Superstition Springs Boulevard in Mesa. This new store will be operated by the company, according to its license application. Brian Little, director of communications for Krispy Kreme Doughnut Inc., said, "Krispy Kreme is interested in having a presence in the Greater Phoenix area, and Mesa is one of the cities we are considering. However, it is too early in the process to share information regarding a potential opening."[2] If Krispy Kreme reopened, it would have to find different sites because two fast-food companies, Chick-fil-A and El Pollo Loco bought 10 of the 11 former Krispy Kreme shops in Arizona and New Mexico.

Site Selection and Trade Area**:** The franchise agreement[3] for Krispy Kreme states that "In approving or disapproving a proposed site, we will consider such matters as we deem material from time to time, including, without limitation, demographic characteristics (such as population in the area - both residential population and daytime population), traffic patterns (e.g., whether it is on the side of the road that goes with the traffic patterns), allowed design and building, parking, visibility, allowed signage (since they need to be able to have their neon signs that say "Hot Doughnuts Now"), the predominant character of the neighborhood, competition from other businesses selling similar products and services within the area (including other KRISPY KREME STORES), the proximity to other businesses, the nature of other businesses in proximity to the site, zoning restrictions, soil and environmental issues, other commercial characteristics (including the purchase price or rental obligations and other lease terms for the proposed site), the size, appearance, and other physical characteristics of the

[2]http://www.azcentral.com/community/mesa/articles/0420biz-mr-krispy0420.html
[3]http://contracts.onecle.com/krispy-kreme/dev.shtml

proposed site and the exclusivity granted to other franchisees or developers of KRISPY KREME STORES."

The objective of this site selection process[4] is to create highly visible destination locations. Consequently, the comprehensive site selection process focuses on 1) High volume traffic, 2) High household density, 3) Proximity to both daytime employment and residential centers (since company research found that 50% of doughnut purchases were taken home and 13% were taken to work), and 4) Proximity to other retail traffic generators. The company's highest priority is on expanding into markets with over 100,000 households[5] with stores built in high density, prime-retailing locations off major thoroughfares to maximize customer traffic and on-premises sales volumes. In Colorado Springs, for example, Krispy Kreme located at Citadel because it is located in the exact center of Colorado Springs, within a five-mile radius of the most densely-populated part of the city. That outweighed all other factors. Krispy Kreme's management further believes that the food-service and institutional channel of sales offers significant opportunity to extend the brand into colleges and universities, business and industry facilities, and sports and entertainment complexes.

In deciding which town to locate a store, they tend to favor hub locations. For example, Reno got a Krispy Kreme Doughnuts store before other western metropolitan areas that are the same size or larger, among them Boise, Idaho, Eugene, Ore., and Visalia, Calif because it's first and foremost a hub. Not only does Reno have its own population but it also has ties with people living in Carson City, Lake Tahoe and eastern California. On a more micro-location basis, Krispy Kreme tends to locate stores that tap into the existing population and the expected population from new homes in the surrounding areas.

For factory stores featuring "doughnut-making theatres", Krispy Kreme requires 4,000 square feet of space and up to 1.5 acres of land. Investment for a new store, excluding land and pre-opening costs, is estimated to cost $550,000 for the building (of approximately 4,000 square feet) and $500,000 for equipment, furniture and fixtures. Typically, Krispy Kreme's experience has been that people will drive 14 miles to reach these factory stores. Analysts anticipate that Krispy Kreme will focus its retail efforts on a hub and spoke strategy that would utilize a handful of factory stores in a given market to supply several smaller "tunnel oven" stores containing 1,000-1,500 square feet that do not produce doughnuts in house[6]. The smaller stores use heating systems that allow customers to buy hot doughnuts, instead of simply selling them unheated in boxes as grocery and convenience stores do. The "tunnel oven" stores are significantly less costly to operate than the traditional stores with doughnut-making equipment. Unit sales potential for these smaller units could range from $750,000 to $1.5 million based on analysts' estimates from CIBC. This will allow Krispy Kreme to enter urban centers, malls and a variety of other locations that could not be reached through the factory store model[7]. These small units also facilitate the sale of

[4]2001 10K, Krispy Kreme

[5]Krispy Kreme established initial market penetration parameters of one Krispy Kreme unit per 100,000 households to prevent product overexposure. At the end of FY04, there was one factory store for every 760,000 persons domestically. This roughly equals the penetration rate of such regional players as El Pollo Loco, Fazolis, Pizza Inn or White Castle.

[6]The company's primary real estate strategy of using a much smaller, approximately 1,000-square-foot prototype store has been tested with success in dense Asian markets.

[7]According to a CoStar report, For the retail leasing broker, smaller format stores increase the retailer's ability to locate in lifestyle centers and urban or downtown locales, which typically carry higher rental rates. The creation of flexible real estate models demonstrates the importance of prime locations to a retailer and most are willing to pay for that advantage. For landlords and developers, smaller format

coffee, which has a much tighter draw radius than a traditional doughnut shop. From a real estate persepctive, smaller-store prototypes offer reduced construction, real estate acquisition, inventory stocking and employee costs, as well as a reduced timeline from ground-breaking to opening.

According to the Simmons survey[8], just under two-thirds (65%) of households consume doughnuts with larger households and households having children significantly more likely than the average to eat doughnuts. Prime demographics for doughnuts also included householders aged 35-44 and minorities, especially African Americans. A more detailed profile of doughnut demographics is reported in the "Donut Demographics" worksheet. This profile sharply contrasts that of Krispy Kreme's research which showed that all demographics, including age and income liked their doughnuts and as such stores were opened in high traffic areas, without much other research done to determine the best locations. Critics have pointed out that this is a significant weakness of Krispy Kreme's real estate strategy… that they did not know specifically who its customers are and what they want.

Research shows that each time Krispy Kreme enters a new market, the company increases sales for other doughnut shops. Krispy Kreme new stores rarely hurt competitors. Krispy Kreme spokeswoman said, "Typically, our competitors large and small tend to see a positive impact when we arrive in a new market"[9].

stores can translate into the ability to include more high-profile retailers in a development, thereby boosting a center's image and foot traffic.

[8]The U.S. Market for Sweet Baked Goods, November 2005. Published by Packaged Facts, a division of marketresearch.com

[9]Krispy Kreme to Open Western Canadian Store, 2003

Assignment: Download the location analysis spreadsheet from my website and use the downloaded spreadsheet to answer the following questions. This is an ***individual*** project. Your project should resemble an investment banking report:

1. DNA (demographic neighborhood attributes) Profile of Zip Code Neighborhood:

   a. Inferring the Target Customer Base for Krispy Kreme (10 points): Claritas (www.claritas.com) is a leading provider of geographic information systems (GIS) data. They process their data into lifestyle segments based on differing criteria[10]. Their newest market segmentation approach is entitled **PRIZM NE**. To access this segmentation approach, click on **Free stuff** at the top of the page then scroll down to link labeled "You Are Where You Live" on their website.

      - You Are Where You Live
        Enter a ZIP Code and learn more about the **lifestyle of the people that live in that neighborhood!** This exciting feature allows you to access Claritas' powerful PRIZM NE segmentation system. You'll discover how people are classified by demographic and behavioral characteristics into segments.

   For each of the neighborhoods in the Phoenix-Mesa CMSA[11] where Krispy Kreme used to have a store, fill in the **PRIZM NE** characteristics associated with that neighborhood using the template "1a. AZ Customer Profile (KKD)". Make sure to calculate the relative frequency for the **PRIZM NE** categories. Please report any category that has at least a 30% probability (1/3 likelihood) of occurring. This provides us with a stereotype of the type of households that live in the neighborhood thus the slogan "You are where you live". Please see the excel spreadsheet associated with the Trader Joe case from the prior year (2007) in the worksheet labeled "Example -AJ CustProfile". Looking at the relative frequency for AJ's, we see that Movers & Shakers reside in 60% of the neighborhoods (zip codes) which have an AJ's Fine Food store. Following is the Claritas profile for Movers & Shakers:

   > "Movers & Shakers is home to America's up-and-coming business class: a wealthy suburban world of dual-income couples who are highly educated, typically between the ages of 35 and 54 and often with children. Given its high percentage of executives and white-collar professionals, there's a decided business bent to this segment: Movers & Shakers rank number-one for owning a small business and having a home office."

   Other demographic neighborhood attributes (DNA) that define a neighborhood where AJ's locates its stores are that the residents tend to be Upper Crust and Young Influentials (40% each) with about 1/3 of the residents also belonging to American Dreams, Executive Suites, and/or Home Sweet Home lifestyle segments.

[10]Claritas uses multivariate techniques such as cluster, factor, and discriminant analysis to group neighborhoods into clusters. This helps firms to better identify areas where they should locate once they have a good idea of who their customers are.

[11]CMSA stands for consolidated metropolitan statistical area which is a large geographic entity consisting of communities around a city or large population center The Phoenix-Mesa consolidated metropolitan statistical area is comprised of Maricopa and Pinal Counties

b. Inferring the Target Customer Base for Dunkin Donuts (10 points): For each of the neighborhoods in the Phoenix-Mesa CMSA[12] where Dunkin Donut has a store, fill in the **PRIZM NE** characteristics associated with that neighborhood using the template "1b. AZ Cust Profile (Dunkin)". Make sure to calculate the relative frequency for the **PRIZM NE** categories. Please report any category that has at least a 30% probability (1/3 likelihood) of occurring. Since Krispy Kreme new stores rarely hurt competitors and assuming that Dunkin Donuts does do their market research as to the best location for a donut shop, these zip codes represent potential neighborhoods for Krispy Kreme.

c. Krispy Kreme's Customer Base: Claritas Lifestyle Stereotypes (10 points): Fill in the template "1c. Krispy Kreme Prizm Profile". Please see the spreadsheet for the Trader Joe's case from 2007 as an example of what I want you to do. If there is no information on a category, leave it blank. Discuss what type of customer and neighborhood Krispy Kreme appears to be trying to capture.

d. Dunkin Donut's Customer Base: Claritas Lifestyle Stereotypes (10 points): Fill in the template "1d. Dunkin Donut Prizm Profile". If there is no information on a category, leave it blank. Discuss what type of customer and neighborhood Dunkin Donut appears to be trying to capture.

2. Fit of Customer Profile versus PRIZM NE Profile of Zip Code Neighborhoods: Which competitor's PRIZM NE's segments, Krispy Kreme or Dunkin Donut, has a closer fit to the doughnut consumption results from Simmons Survey System in the worksheet labeled "Donut Demographics" and the general customer profile for doughnuts from the Simmons Survey as discussed on page 4 of this case? Please elaborate.

3. In Search of "Target Market(s)" using 2000 Census Data. The objective in this portion of the case is to use Census data in the "ZipCode Stats" and "5-Mi Radius Stats" worksheets to search for Target Markets. For this exercise, we will focus on zip codes that have an existing Dunkin Donut store as well as zip codes that had a Krispy Kreme store. However, if Krispy Kreme reopened, it would have to find different sites because two fast-food companies, Chick-fil-A and El Pollo Loco bought 10 of the 11 former Krispy Kreme shops in Arizona and New Mexico.

a. Calculating Statistics on Demographic Data (5 points): Given the "ZipCode Stats" and "5-Mi Radius Stats" worksheets which contains zip code demographics for each potential Krispy Kreme location in the Phoenix CMSA, fill in the areas highlighted in yellow in the "3a. Calc DNA Stats" worksheet. In this portion of the case study, you are transforming the data to facilitate comparisons between locations such as finding out what percentage of the population in a given zip code is a minority since we know that minorities have a greater propensity to consume doughnuts. Another example is calculating the number of households having 3 or more persons since the Simmons Survey found that larger households tend to consume more doughnuts. To calculate some statistics, you will need to link the worksheets together. Appendix A provides an illustration of how to link worksheets.

b. Summary DNA Profile of Dunkin Donuts and "old" Krispy Kreme Neighborhoods (12 points): Fill in the highlighted portion of the "3b. Median Stats" worksheet using your completed "3a.

[12]CMSA stands for consolidated metropolitan statistical area which is a large geographic entity consisting of communities around a city or large population center The Phoenix-Mesa consolidated metropolitan statistical area is comprised of Maricopa and Pinal Counties

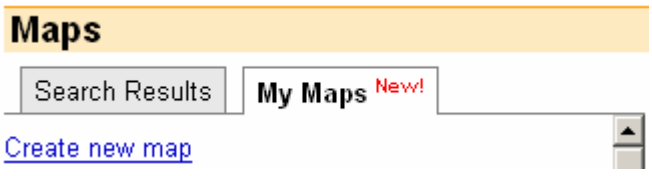
Calc DNA Stats". This essentially entails using the MEDIAN command in excel to calculate the median demographics for neighborhoods that used to have a Krispy Kreme vs. neighborhoods that have a Dunkin Donut store. Please note that some zip codes had both a Krispy Kreme and Dunkin Donut store. In this case, you will have to count that neighborhood twice e.g., once in calculating the Krispy Kreme average and once again in calculating the Dunkin Donut average. Based on the median statistics associated with the 5 mile trading area for Dunkin Donuts and Krispy Kreme, please discuss whether the profiles are similar. Given the Simmons Survey, which company appears to have done a better job in terms of their location analysis? Please elaborate.

c. Ranking Zip Codes on Each Demographic Characteristic: Using the "3c. Ranked Locations" worksheet, input the zipcodes from highest to lowest on each demographic attribute. It is not necessarily the case that the zipcode which has the largest 5-mile radius population will have the largest household size. Given your rankings of zipcodes on various DNA attributes, what five zipcodes should we do further analysis on for a possible Krispy Kreme location? Which is the most likely zipcode for our first re-introduction of Krispy Kreme donuts? What is the second most likely zipcode to locate a Krispy Kreme location?

d. Claritas Profiles for Top 5 "Target Market" Zip Codes: Fill in the **PRIZM NE** characteristics associated with each of the top 5 target market zip codes using the template "3d. Claritas Profiles (Top 5)". Also complete the PRIZM NE characteristics for the proposed Krispy Kreme store at 6626 East Superstition Springs. This is similar to what you did in question 1a of this case. Make sure to calculate the relative frequency for the **PRIZM NE** categories. Please report any category that has at least a 60% probability of occurring. Are there common themes with respect to the PRIZM NE classification for your top 5 zip code locations? What are the predominant PRIZM groups? What does this portend? Please discuss. Is the site that Krispy Kreme has chosen to re-open their first store at 6626 East Superstition Springs consistent with this profile? Is this the BEST site to open a Krispy Kreme? Please explain.

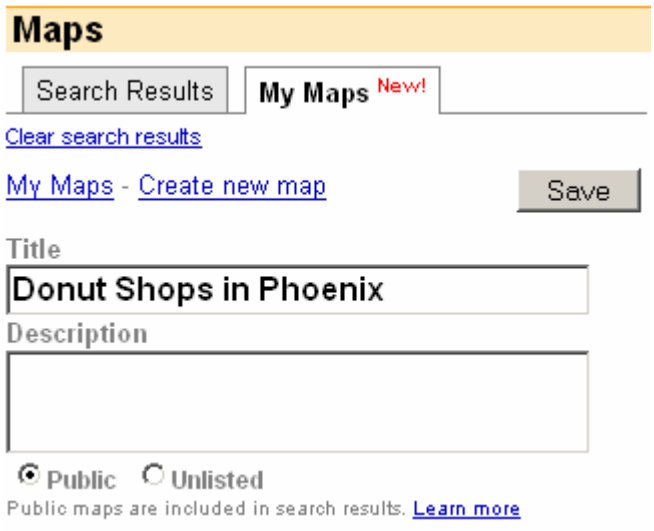
4. Map the Competition: Using http://maps.google.com/, prepare a map showing the locations of all donut shops in the Phoenix-Mesa-Scottsdale MSA[13]. To generate this map, type donuts phoenix, az as shown below:

then click **Search Maps**. Next, click on the tab in grey labeled **My Maps** and then click on **Create new map**.

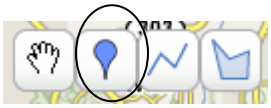


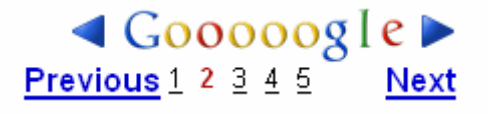
[13]The Phoenix-Mesa-Scottsdale MSA (Metropolitan Statistical Area) includes Tempe.

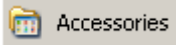
Label this map, Donut Shops in Phoenix and then click on the **Save** button.

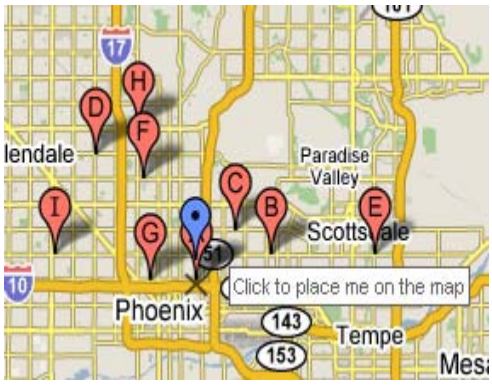


Next, click on the **Search Results** tab and scroll to the bottom of the page. You will note that there is now a palette. The second icon in the palette is the **add placemark** tool which we will use in generating a competition spotting map.





You will notice that not all of the donut shops in the Phoenix-Mesa-Scottsdale MSA are located on the map. Only 10 donut shops, A – J, are plotted on the map. If you click on 2 at the bottom of the page, notice that another 10 donut shops are plotted on the map. These shops differ from the prior 10 donut shops. This will be the same when you click on 3, etc. To show all of the donut shops, first click on 1 at the bottom of the page to get back to the first 10 donut shop locations. Click on the **add placemark** tool. Move the placemark tool to the first donut shop (the **red** marker labeled A), position the X so that it is at the bottom tip, and then click to place the **blue** placemark on the map. Continue this process until all of the donut shops are plotted. To copy this map to place it in a Word document, hit the **Print Screen** button on your keyboard. Next, click on the **Start** button  on the lower left hand corner of your computer → **Programs**  → **Accessories**  → **Paint**  → **Edit** **(**top menu**)** → **Paste** → select the rectangle  which is the cutting tool → highlight the area you wish to copy/cut → **Edit** (top menu) → select either **Copy or Cut** → open your word document and paste it. Please discuss where these donut shops tend to be located. What is the intuition behind the location of donut shops?



5. Transportation as a Selection Criteria (12 points): Recall from the case study that Krispy Kreme desires prime-retailing locations off major thoroughfares to maximize customer traffic and on-premises sales volumes. To generate a map of the contiguous zip codes with placemarkers showing these target zipcodes, go to http://zip.langenberg.com and use the Huge.Info option. Type in each of the target market zipcodes, enter the first zip code to generate the zip code map. Next, type in another zip code and click **Find Zipcode**. Notice that there are now two placemarkers each of which demarcates a target zipcode. Continue this process until the zip codes of all 5 potential target markets are shown on the map. Do all of the potential sites have access to a major transportation corridor e.g., Interstate or Freeway? Please discuss what major transportation corridor(s) runs along each potential zip code.

6. Location of Krispy Kreme in and Ring Study of the Target ZipCode (10 points): Where should Krispy Kreme locate their first store. How important is it to be close to ASU? If crime was a concern, where should you locate the first Krispy Kreme? Crime statistics for a zip code can be obtained from http://realestate.yahoo.com/ (click on the **Neighborhoods** tab and type in an zipcode). To determine how many donut shops exist in your proposed target zip code(s), use http://www.mapquest.com/. More specifically, go to mapquest → Maps → enter **doughnuts** under Place Name and input the zip code. After you click Search and the next page loads, under the caption **Please Select One:** click on **Refine Your Search**. Set the radius to 5 miles, select the appropriate city, and choose Doughnuts as the Category. In addition to the location of doughnut shops in your proposed target zip code, perform a ring study using http://demo.analygis.com/google/default.htm. You do not need to put in an actual address just the zip code will suffice. Leave the default at Census 2000 Report. Various demographic information is provided for the 1 mile, 3 mile, and 5 mile radius. There are a couple of features of this map. First you can resize the map. More importantly, if you click on another area of the map where you would like the "bullseye" to be, not only can you redefine the target area but also the accompanying ring demographics will change to correspond with your new trade area. Please copy this map and the accompanying demographics. Following is an example of the 85283 zip code trade area in Tempe (this is not a location for Krispy Kreme, just an example of how to use the mapping function). Two trade areas are provided to demonstrate the capabilities of this website.

Variable	1 Miles	3 Miles	5 Miles
Total Population	6,969	104,864	259,493
Total Households	2,839	40,811	100,289
Median Income	$42,257	$36,952	$39,377
Average Income	$46,746	$44,810	$49,537
Median Age	27.90	26.80	28.60
Male Population	3,736	55,038	133,439
Female Population	3,233	49,826	126,054
White Population	5,143	70,504	176,366
Black Population	317	6,390	18,467
Am. Indian Population	250	4,729	8,591
Pac. Islander Population	38	425	637
Asian Population	254	4,755	8,916
Other Population	725	13,969	37,087
2+ Race Population	241	4,092	9,430
Hispanic Population	1,521	27,347	71,254

Variable	1 Miles	3 Miles	5 Miles
Total Population	10,098	123,700	319,160
Total Households	3,511	46,654	123,172
Median Income	$82,097	$60,094	$52,875
Average Income	$98,716	$72,255	$63,423
Median Age	37.30	32.40	31.40
Male Population	5,021	61,778	160,474
Female Population	5,076	61,922	158,685
White Population	8,849	98,498	250,753
Black Population	211	4,694	12,822
Am. Indian Population	58	3,372	7,326
Pac. Islander Population	13	206	642
Asian Population	497	6,190	13,390
Other Population	243	7,098	24,231
2+ Race Population	227	3,641	9,994
Hispanic Population	860	17,623	53,220

Appendix A: Calculations involving Two or More Worksheets

Sometimes it is easier to use the information where it resides in several worksheets rather than to tediously copy and paste the information repeatedly. For our purposes, we will show you how to calculate population density using the "DNA Stats" worksheet along with the "2c. Calc DNA Stats" worksheet. Following is a portion of the latter worksheet:

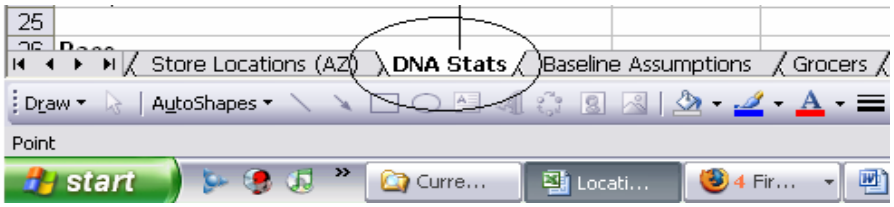
	A	B	C	D	E
1					
2	USPS Place:	PHOENIX	PHOENIX	PHOENIX	PHOENIX
3	Zip Code	85012	85016	85048	85051
4	Existing Trader Joe's Store	None	Trader Joes	Trader Joes	Trader Joes
5	Natural Food/High End Stores (Other than Trader Joe's)	AJ's	Sprouts		
6	Population	6,337	36,327	33,636	41,075
7	Number of Households	2,758	16,714	11,700	15,439
8	Median Age	42.7	37.1	30.7	34
9					
10	Population per Square Mile (Density)				
11	Average Household Size				

We will be calculating the Population Density for zip code 85012 and putting the result in cell B10 (column B, row 10). First, type the = sign in cell B10, click on cell B6, then type / as follows:

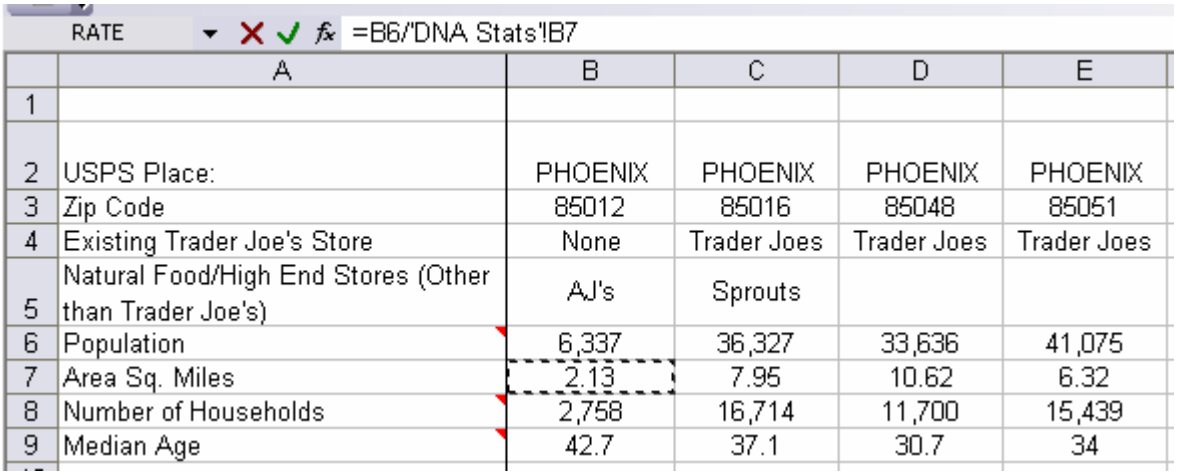
RATE =B6/

	A	B	C	D	E
1					
2	USPS Place:	PHOENIX	PHOENIX	PHOENIX	PHOENIX
3	Zip Code	85012	85016	85048	85051
4	Existing Trader Joe's Store	None	Trader Joes	Trader Joes	Trader Joes
5	Natural Food/High End Stores (Other than Trader Joe's)	AJ's	Sprouts		
6	Population	6,337	36,327	33,636	41,075
7	Number of Households	2,758	16,714	11,700	15,439
8	Median Age	42.7	37.1	30.7	34
9					
10	Population per Square Mile (Density)	=B6/			
11	Average Household Size				

Next, scroll to the DNA Stats worksheet

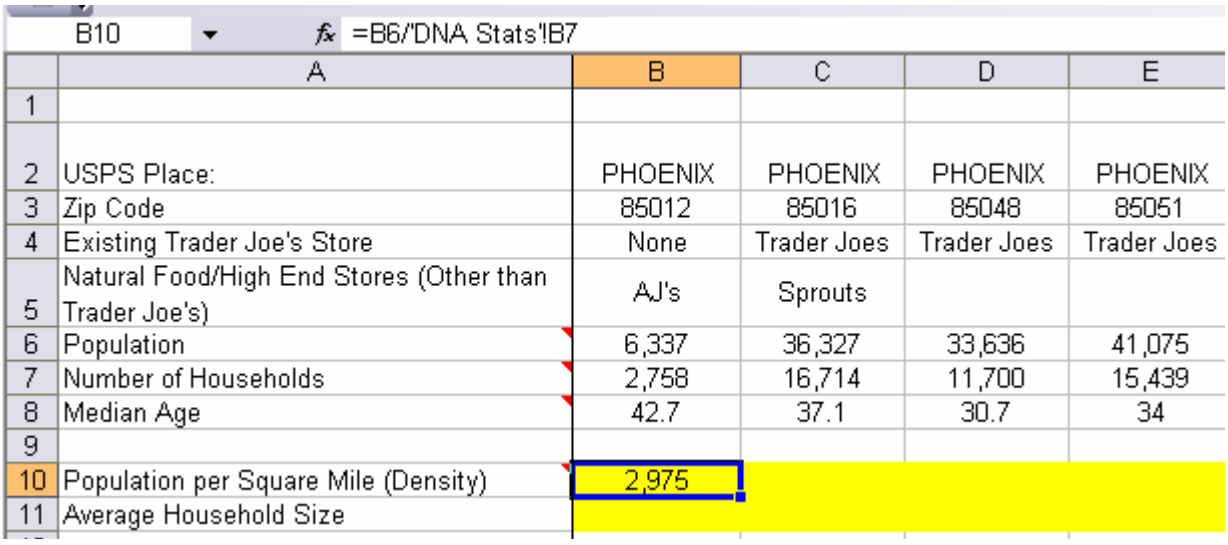


Once you scroll to the DNA Stats worksheet, click on cell B7. Observe that in the function (fx) box at the top of the spreadsheet, it now says **=B6/'DNA Stats'!B7.**


RATE =B6/'DNA Stats'!B7

	A	B	C	D	E
1					
2	USPS Place:	PHOENIX	PHOENIX	PHOENIX	PHOENIX
3	Zip Code	85012	85016	85048	85051
4	Existing Trader Joe's Store	None	Trader Joes	Trader Joes	Trader Joes
5	Natural Food/High End Stores (Other than Trader Joe's)	AJ's	Sprouts		
6	Population	6,337	36,327	33,636	41,075
7	Area Sq. Miles	2.13	7.95	10.62	6.32
8	Number of Households	2,758	16,714	11,700	15,439
9	Median Age	42.7	37.1	30.7	34

Press the **ENTER** key. The answer of 2,975 appears in cell B10 of the "2c. Calc DNA Stats" worksheet.


B10 =B6/'DNA Stats'!B7

	A	B	C	D	E
1					
2	USPS Place:	PHOENIX	PHOENIX	PHOENIX	PHOENIX
3	Zip Code	85012	85016	85048	85051
4	Existing Trader Joe's Store	None	Trader Joes	Trader Joes	Trader Joes
5	Natural Food/High End Stores (Other than Trader Joe's)	AJ's	Sprouts		
6	Population	6,337	36,327	33,636	41,075
7	Number of Households	2,758	16,714	11,700	15,439
8	Median Age	42.7	37.1	30.7	34
9					
10	Population per Square Mile (Density)	2,975			
11	Average Household Size				

For zip code 85012, there are 2,975 people per square mile. As of 2005, the population density for the city of Phoenix as a whole was 3,078 per square mile. Thus, zip code 85012 has approximately the same density as the city as a whole.