

LOCATION ANALYSIS OF LIFESTYLE CENTERS: UNCOVERING PATTERNS
AND POTENTIAL DRIVING FACTORS BEHIND SITE SELECTION

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The shopping center has held an important place in the American economy for decades. However, the concept has seen multiple revolution in terms of format. The most recent shopping center concept to gain rapid popularity is the lifestyle center – an outdoor shopping mall made to resemble a pleasant main street setting, with a tenant mix emphasizing dining and entertainment. In other words, the lifestyle center concept is geared toward selling consumers things to do, versus things to buy. This thesis studies the geography of lifestyle centers in the United States in both the large-scale and small-scale view. Results show that lifestyle centers are concentrated into larger urban areas, often with a population of over 1 million. An analysis of spatial agglomeration revealed that lifestyle centers are often several miles away from the nearest traditional mall, indicating that developers do not feel the need to build near established shopping districts where traditional malls lie. Finally, results concerning trade area characteristics show the characteristics of consumers in areas where lifestyle centers have been built. Findings in this study indicate that developers are utilizing a unique approach when selecting sites for lifestyle centers compared to traditional indoor malls.

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By

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CHAPTER 1

INTRODUCTION

Retail is a staple of the American economy. The industry creates an enormous number of jobs and provides an opportunity for Americans to spend their earnings. According to the National Retail Federation, the retail sector directly or indirectly supports about 42 million jobs in the United States, while paying approximately \$1.6 trillion in annual income (NRF, 2018). The economic mainstay that is retail has experienced many revolutions in its history. One recent example is the wave of online retail that has seemingly exploded over the past decade. Another notable revolution is massive number of bankruptcies and store closures that American retailers have experienced in the past few decades. In 2017 and 2018 alone, Sears, Toys R Us, Mattress Firm, Bon-Ton, Payless, and many others were forced to enter bankruptcy (Thomas, 2017 & 2018). Brick-and-mortar retail has seen several new shopping venues emerge over the past century, from downtown shopping, to indoor shopping malls, to the emergence of outlet malls, and after that, the introduction of big box retailers and the power centers they reside in. However, more research is needed on the emergence of new shopping center formats.

More recently, lifestyle centers have entered the scene as a popular shopping center format. As of 2018, there are over 500 of these shopping centers in the United States, providing a shopping opportunity for millions of consumers and jobs for countless jobseekers. The International Council of Shopping Centers (ICSC) defines lifestyle centers as shopping centers containing “upscale national-chain specialty stores with dining and entertainment in an outdoor setting” (ICSC, 2018). Lifestyle centers are

a type of outdoor shopping mall whose tenant mix is comprised of mostly restaurants and specialty retailers. They may also contain movie theaters as an entertainment option. Lifestyle centers are said to be typically located in high-income areas, which provide a market of people who may shop at upscale stores.

While lifestyle centers have recently experienced rapid deployment (Figure 1), the concept has existed for decades, predating even the traditional indoor shopping mall which entered the scene in the 1950s. The first lifestyle center was completed in 1931. This shopping center, which is still thriving today, is located in Highland Park, Texas. It was designed to serve as town square and as an upscale shopping district modelled after Mediterranean Spanish architecture (Highland Park Village, 2018).

While lifestyle centers contain groupings of retailers, much like a traditional mall, lifestyle centers and traditional malls are quite distinct. Traditional malls have many more locations in the United States than lifestyle centers (about 1000 compared to about 500) and are likely what the average consumer would think of when hearing the word “mall.” The ICSC describes this type of retail complex as being enclosed, with stores lined along corridors inside that space. Tenant mix is typically geared towards general merchandise and various fashion options. Traditional malls gained popularity starting in the 1950s and is the type of shopping venue usually described when people talk about the supposed death of the shopping mall (Sanburn 2017; Chalk, 2017). Lifestyle shopping centers, in contrast, grew in numbers much more recently, becoming an especially popular choice of developers since the late 1990s. Figure 1 visualizes this trend; from the 1970s through the 1990s, growth was quite slow, but in the mid-1990s, growth began to accelerate. Instead of containing all stores under one roof, lifestyle

centers are developments which often feature the appearance of a main street/downtown setting, sometimes comprised multiple buildings containing retail and walkable paths connecting these structures. These malls are open-air and designed to provide an inviting and relaxing atmosphere, with the aim of creating a unique shopping experience.

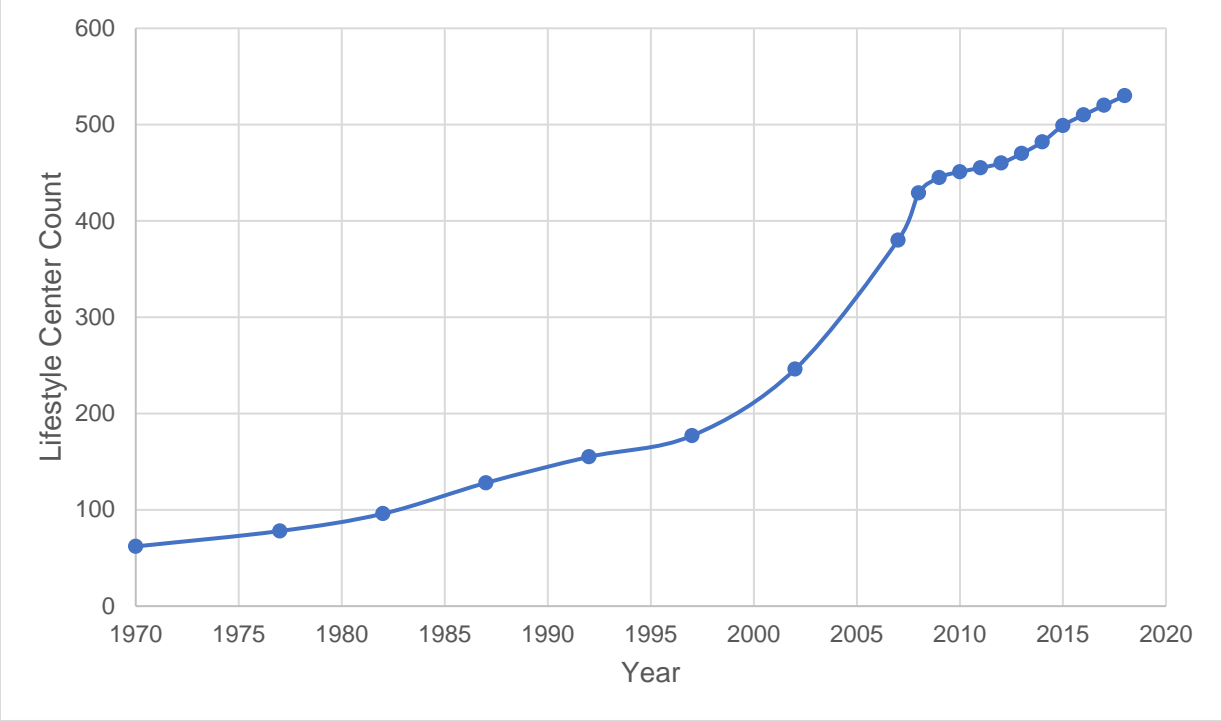


Figure 1: Total number of lifestyle centers from 1970 to 2018 (Data source: ICSC, 2018)

The recent explosive growth in lifestyle center construction began around the year 2000. In about 15 years, the number of lifestyle centers in the United States has risen from about 170 to 530 (ICSC, 2018). After a slowdown in construction following the Great Recession, the number of lifestyle centers has grown by at least 10 each year since 2013. Figure 2 shows the net change in the lifestyle center count over time. It shows that from 1977 (the earliest the data were available) until 1997, the lifestyle center count grew by fewer than 8 per year. But into the 2000s, the annual growth increases dramatically.

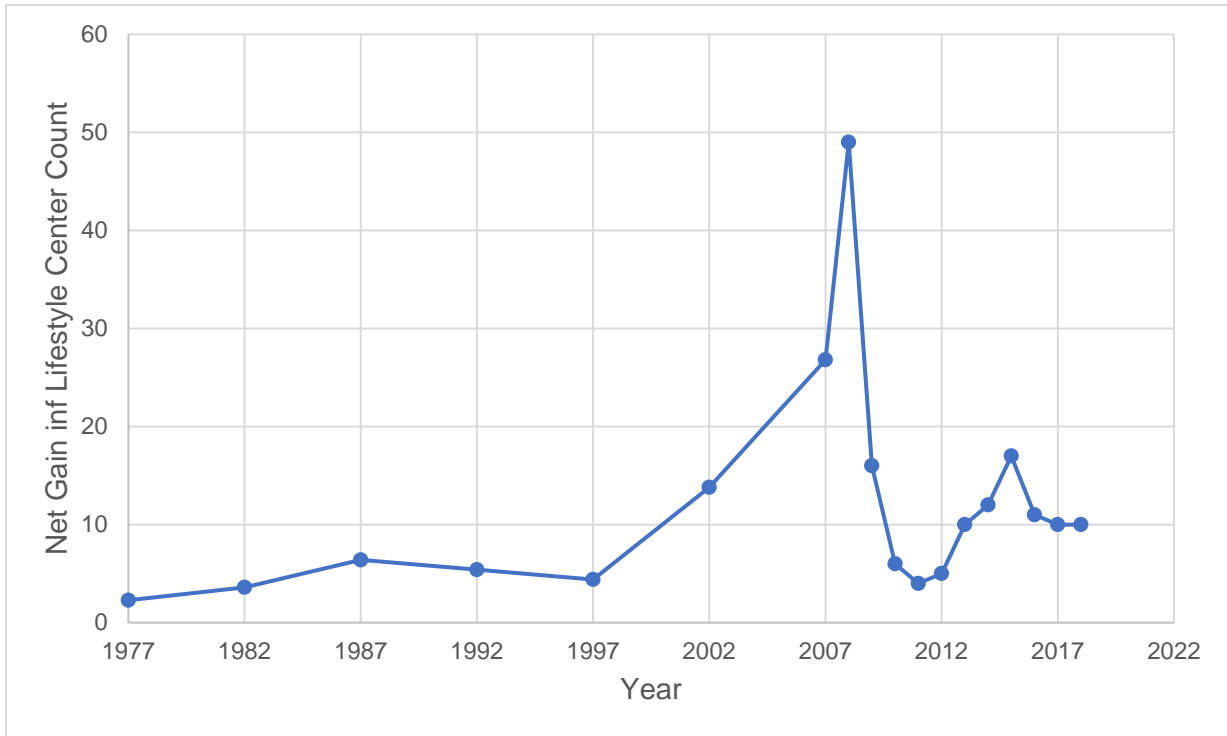


Figure 2: Net change of lifestyle centers per year from 1977 to 2018 (Data source: ICSC, 2018)

To help set the stage for the research, it is important to note the significance of lifestyle centers. These shopping venues are important because they provide consumers with a setting where they can go shopping, enjoy a meal or dessert, or simply visit and walk around. As a center or retail, lifestyle centers also contribute to their local economies, hosting a variety of stores which provide jobs to the local population. Knowledge on the topic of lifestyle centers and their geography has the potential to create and maintain jobs, wealth, and economic growth. This relates to the central idea of retail geography: that the better a location is, the more successful that store will be. And the more profitable a shopping center is, the more jobs its stores can provide, and greater the economic impact it can make.

Research regarding the geography of lifestyle centers is important because it fills a critical gap in knowledge on the subject. Although researchers have published

research concerning lifestyle centers, such as the consumer reception to the emerging retail concept, none of the research has addressed the location of lifestyle centers (Sullivan & Trotter 2003, Kim et al. 2003, Guidry & Montero 2005). The obvious follow-up question is, *why does this knowledge gap need to be filled?* It is important to fill this knowledge gap because multiple different stakeholders would benefit from this knowledge. These include primarily city government officials or economic development corporations. These parties may not have the resources to conduct research regarding shopping center locational qualities, so results presented in this paper will provide a great service to them.

The purpose of this research is to study geographic patterns of lifestyle centers from a few different angles, with the goal of identifying patterns of location both nationally (by finding regions where these shopping centers are more common) and within specific markets (by detailing characteristics of their markets). The first research question addresses the general, national distribution of lifestyle center location. The goal is to identify any regions where lifestyle centers are found in particularly high concentrations. The second research question tackles the topic of agglomeration, seeking to discover whether or not lifestyle centers are typically found in close proximity to traditional shopping centers. Finally, the third research question seeks to discover common qualities of people or households residing near lifestyle centers. Demographic information at the 5-, 10-, and 15-mile driving distance intervals around these shopping centers will be examined in order to determine what typical trade area households look like. This question also sought to uncover statistical evidence comparing lifestyle center trade areas to that of traditional shopping malls.

Multiple stakeholders have the potential to benefit from the findings of this research. First and foremost, city governments or economic development groups stand to gain from the results. Knowledge concerning geographic qualities of lifestyle centers has the power to guide officials' decisions when considering the entry of a new lifestyle center into a city or region. While results uncovered in this research can't provide a perfect prediction to a future center's success, they can at least give an indication of what a typical location looks like. This may either help reinforce or dissuade officials' decisions if a potential location appears very typical or very atypical, respectively. Aside from governments or economic development corporations, shopping center developers may also have some information to gain from the results of this research. Developers likely have their own idea of what they look for in a location, but they may not know how their centers fit in to the national network of lifestyle centers from a variety of developers. Seeing a snapshot of all lifestyle center markets in the country may reveal something unexpected to developers.

Before outlining the completed research process and the results, it is important to review previous research on the topic which has guided this research project. The following section provides a historical view of the research leading up to this research paper.

CHAPTER 2

LITERATURE REVIEW

This overview of the literature provides background from several disciplines that present a variety of perspectives linked to the location of retail activity in general and lifestyle centers in particular. Specific focal areas of discussion include foundational background in economic geography, business and retail geography, shopping center geography, shopping center patronage, and lifestyle center research.

2.1 Foundations in Economic Geography

There is a lengthy history in the literature which has led up to what is now business geography. Foundations of this current body of knowledge can be traced to early work in economic geography and urban geography. Early economic geography work was pioneered by Johann von Thünen (1826). Von Thünen's work centered on the study of the value of land. He theorized that land values were a function of their location, and that when land is farther from a central "market," increased transportation costs resulted in lower land costs. He also argued that a "market bidding process" influenced land prices, and that through this process, the most productive, or most profitable, land uses would occupy land (Thrall, 2002). What is most important is that he described how land values are a function of location: something that is foundational to modern business.

Alfred Weber continued the tradition which has led to modern business geography by investigating factors contributing to industrial location. Weber (1929) focused specifically on location factors at play concerning the location of industrial facilities. Christaller's (1966) central place theory provided some additional foundation

for business location. His work described how larger, more centrally located cities will contain higher-order goods. Goods sold at such businesses are more expensive and are bought less frequently.

William Applebaum continued this tradition with his work in the 1930s onward, which involved trade area analysis and consumer shopping behavior (Applebaum 1951, 1966). Throughout his career, Applebaum contributed greatly to what is now the field of business geography, and specifically retail geography, by studying many aspects relating to retail location, including accessibility of a site, store size, and competition, (Cohen and Applebaum 1960). Most notable may be his 1966 work, "Methods for Determining Store Trade Areas, Market Penetration, and Potential Store Sales." This article presented a detailed approach for the delineation of store trade areas based on sales and population data. The approach was based on the acquisition of a statistically significant sample of customer location data, where each customer would represent a certain number of sales. Customer locations could then be mapped across the city in order to determine the extent of the store's trade area. Potential sales values could be determined by comparing the customer spotting distribution to a demographic map from the U.S. Census Bureau in order to calculate the number of potential customers, and therefore potential sales, in the trade area.

More recently, the quantitative revolution played a major role in laying the foundation of modern business and retail geography. This era of research marked a paradigm shift away from the qualitative nature of regional science, the dominant paradigm within geography in the 1950s and before, to a much more empirical, or quantitative, approach to solving problems and conducting research in the field. This

revolution reached many subfields within geography, including economic geography (Burton, 1960). The emphasis on statistics and mathematics resulting from the quantitative revolution is highly important to business geography because many techniques used today by business geographers continue in this quantitative tradition. Fred Schaefer (1953) argued that the geography did not need to be merely a descriptive field, but that laws governing geographic phenomena could be sought after. Another key contribution came from McCarty et al. (1956), who, as described by Rice & Hernandez (2016), made strides in utilizing regression analysis in geography.

The field of economic geography has evolved greatly over the years. From Von Thünen's land use theory, to Applebaum's trade area research, to the quantitative revolution, there have been many important contributions to the field. Business geography stands as an important applied branch of economic geography. The following section discusses important contributions of business geography.

2.2 Business and Retail Geography

The context for this study most broadly falls within the field of business geography. The field of business geography is best defined by Grant Thrall in his seminal work, *Business Geography and New Real Estate Market Analysis* (2002). In this work, he describes that "business geography integrates geographic analysis, reasoning, and technology for the improvement of the business judgmental decision" (Thrall 2002, p. 1). Working from this definition, business geography relies on a variety of data and forms of analysis to provide insight regarding problems not only affecting businesses, but other institutions as well, including governmental entities and nonprofit institutions.

The literature concerning retail geography is large and broad. Researchers who have played a key role in the development of retail geography include Reilly and Huff. William Reilly is famous for his law of retail gravitation (1931), which posits that consumers are more likely to visit a shopping center or other agglomeration of retail if that retail center larger than an alternative, or if it is closer than an alternative. This law of retail reflects the attraction between particles in physics, with such an attraction being driven by gravity. Also very influential in early retail geography was David Huff, who is known for his famous approach of calculating probabilities that consumers in certain areas will visit a shopping center, and how these probabilities vary across space (Huff 1963). The article also described how adopting the Law of Retail Gravitation to shopping centers in order to estimate trade areas is not a strong enough approach, and that the shopping center's utility to the consumers must be strongly considered. Huff explained that shopping center's utility to a consumer is a function of two factors: the specific product selection that the shopping center provides, and the travel time necessary to reach any shopping center.

Much applied retail geography research has taken place since then. This includes research on topics such as Walmart, Kmart, or Target locational patterns (Graff 1994, 1998, 2006) or restaurant location (Dock et al. 2015). The research by Dock et al. represented an analysis of restaurant site selection in Jefferson County, Kentucky. Their research used gravity modeling to assess site locations, finding that "site characteristics may play a substantial role in attracting customers" (Dock et al. 2015, p. 207). They also noted that the selection of variables for a gravity model is very important in evaluating a restaurant's location. Such research shows that many

decades after Reilly's early work involving retail geography, the field of retail geography is still very relevant. Graff's work in applied retail geography studied topics including the spatial diffusion of Walmart stores (1996) and a comparison of expansion strategies of some of the largest US retailers (1998). In his 2006 article, Graff evaluated the supercenter store format by exploring comparisons between Walmart, Kmart, and Target. He found that Walmart, which targets lower-income clientele, has emerged as the leader of supercenters, in part by managing its own distribution system and by clustering its supercenters very near distribution centers. Graff also observed that Kmart has failed to compete with Walmart's prices and that Kmart's strategy of scattering supercenters throughout metropolitan areas nationally, it couldn't dominate any particular market. Target, however, has been able to stay competitive by identifying a niche of higher-income consumers even though its locations are far less-concentrated than Walmart's locations. Graff has made major contributions to the field of retail geography through his applied research of retailers, including observations of the clustering of Walmart stores in relatively small cities near distribution centers and his observations of Walmart's supercenter growth strategy, which includes contagious diffusion through smaller cities.

2.3 Shopping Center Geography

A more specialized body of literature contains many similarities to the retail geography literature (which is concerns the geography of shopping centers). Reilly's (1931) law of retail gravitation was described with regards to shopping centers. Huff's (1963) research also involved shopping centers.

Within the shopping center geography literature is a body of research concerning the use of geographic information systems (GIS) in site selection. Mejjia and Benjamin (2002) conducted research on the many determinants of traditional shopping center sales, which included income, rent type, competition, and agglomeration. Cheng et al. (2005) present an application of the analytic network process in shopping center location, and in another article (2007) discuss, in a more general sense, how GIS can be applied to research involving shopping center location selection, along with a case study which concerns some of the key features and potential problems analysts may come across when using GIS to select a site for a shopping center. Önüt et al. (2010) described the application of the fuzzy analytical hierarchy process to selecting a shopping center site. Finally, El Samen and Hiyasat (2017) used GIS to study the distribution of shopping centers in Amman, Jordan, finding that shopping centers are highly clustered to an unnecessary degree. They concluded that developers had placed shopping centers in a small section of the city, with the cause being the “absence of established planning criteria and a lack of careful location selection of malls” (p. 35). They stated that the excess of retail space, especially in one small area of the city, could negatively impact investors and developers in the future. While research regarding shopping center location in the Middle East does not directly apply to research in the United States, as the retail landscape undoubtedly has many differences, the work by Önüt et al. and Samen and Hiyasat give some insight into the kinds of research being conducted regarding shopping center location.

Hahn (2000) specifically researched the rapid emergence of power center retail in the United States. She provided an overview of power center retail while describing

locational patterns, which is similar to the goal of the thesis to be completed. Hahn described reasons for the rapid emergence of power centers and compared power center retail to other dominant forms of retail. Most applicable from Hahn's work is a section describing locational patterns behind power centers in Chicago. Hahn found that power centers are usually found near regional shopping malls and in suburban areas. She took a big-picture approach to describing location, by describing general trends in major urban areas. Other power center research has been conducted within a Canadian context. Simmons and Hernandez (2008) provide an excellent contribution by reviewing many aspects of power retailing in Canada. They surveyed the rapid emergence of power centers in Canada starting in the mid-1990s, finding that power centers are not usually found in smaller cities or rural areas, but are often found in suburban areas of Toronto.

2.4 Shopping Center Patronage

A large body of shopping center research has been conducted from a non-geographic perspective. This includes research examining shopping center patronage. This research branches into the topic of consumer behavior and has looked at the various reasons why consumers decide to visit one shopping center over another. Though not geographic, this body of literature is worth mentioning because consumer motives behind shopping center patronage may not solely include geographic proximity to a particular shopping center. Shopping motives are also important to consider when examining the popularity of a new retail concept such as the lifestyle center. Such research in the field includes Reynolds et al. (2002), who compared some reasons why consumers visit a traditional mall versus a factory outlet mall. Shim & Eastlick (1998)

investigated how the attitudes of consumers are an accurate predictor of shopping center patronage, and that the “personal values” of consumers play an important role in deciding where to shop. They found that these personal values, which are a function of a consumer’s culture and ethnicity, will affect how favorable a consumer feels toward a shopping center’s atmosphere, tenant mix, and product selection, and that developers consider these consumer attitudes when “defining the character” of a shopping center, in order to make it as successful as possible. What this indicates is that Bellenger et al. (1977) found that the quality of the facility is the most significant determinant of shopping center patronage, and that this correlation is most prominent among wealthy women. Results from these studies demonstrate that consumer attitudes or behavior play an important role in the decision of where to shop, and that location isn’t the only factor.

2.5 Lifestyle Center Research

While there is a lengthy literature concerning shopping centers as a whole, and even literature on specific formats (Hahn, 2000; Hernandez & Simmons, 2006; Reynolds et al., 2000), the literature on lifestyle centers is scant. Often, mentions of lifestyle centers describe that these facilities are open-air, contain retailers that lean toward upscale, and are geared toward providing shoppers with a unique experience. Much of this echoes the ICSC definition of the lifestyle center.

However, the practical definition of a lifestyle center is not cut-and-dried, which has the potential to complicate any type of analysis on the topic. A commonly used definition from the ICSC, which appears repeatedly in the literature (Rosenbaum et al. 2018; Yan & Eckman 2008; Hernandez 2007) states that a lifestyle center is “an open-

air project located near affluent residential neighborhoods that includes at least 50,000 square feet of retail space occupied by upscale national chain specialty stores.” While this ICSC definition is very commonly used, other definitions exist (Hernandez 2007; DeLisle, 2007). What one researcher or real estate developer may consider a ‘lifestyle center’ may not fit any definition perfectly, leading to complications. DeLisle (2007) discussed the challenges and issues which have emerged from the classification of lifestyle centers within the history of shopping center classification in general. He calls on the ICSC to create an improved system of shopping center classification that would serve as the industry standard, because currently there are several different classification systems being utilized across different organizations. According to DeLisle, this especially creates problems for real estate investors when exploring investment opportunities. In his paper, he recommends that a new approach be implemented, offering up cluster analysis and discriminate analysis as possible tools to set a classification that is “unambiguous, meaningful, and measurable” (p. 3-4).

Though not much knowledge is available regarding lifestyle center location, lifestyle centers have been researched from a few different angles. This includes work from Guidry and Montero (2005), who identified some reasons consumers would visit a lifestyle center versus other existing shopping concepts. Among the reasons was that consumers enjoy the relaxing, interesting atmosphere when shopping. Kim et al. (2003) studied the background and reasons for the emergence of lifestyle center retail in the early 2000s and identified some consumer groups that are likely to visit a lifestyle center. Other researchers have studied related issues such as consumer openness to the open-air shopping concept (Heitmeyer & Kind 2007) or how increases in consumers’

incomes has led to a greater demand for facilities like lifestyle centers (Kim et al. 2003). But once again, geography has not been the forefront of any of this research. But this doesn't mean that there has been absolutely no mention of lifestyle center and their trade areas. Gose (2004) interviewed Michael Baker of the consulting firm Independent Retail Research, mentioning that developers tend to place lifestyle centers in areas where there are at least 30,000 households that make over \$75,000 annually.

2.6 Gap in Literature

While much research regarding retail geography, shopping centers, and lifestyle centers has been conducted, there are critical gaps waiting to be filled. Researchers have looked at the national distributions of retailers like Target, Kmart, and Walmart. Studies have also examined at the emergence of power centers, and their metropolitan locations. Hahn (2000) found that power centers exhibit a form of agglomeration with traditional malls, as the two concepts are usually found within a half mile of each other. Existing research concerning lifestyle centers has addressed shoppers' patronage motivations and the recent growth of the shopping concept. What is missing is lifestyle research from the geographic perspective. Spatial research addressing primary drivers and factors behind lifestyle center site selection would aid developers in selecting the best sites possible in the future.

While existing research has not directly addressed the spatial component of lifestyle retail, applied research on related topics has been conducted. Joseph (2010) explored national distributions of major American discount retailers. Hahn (2000) and Simmons & Hernandez (2008) studied the development of power center retail in the United States and Canada, respectively. Both Hahn and Simmons & Hernandez considered geographic distributions of power centers, with Hahn describing

agglomeration between power centers and traditional malls. There is a need for research to adapt such research with the lifestyle center concept.

In order to address this gap, research will need to pursue the lack of geospatial knowledge in lifestyle center research. There is a need to analyze this shopping center concept's geography from a few different angles, including national distributions across the United States, agglomeration with existing traditional shopping centers, and the type of market (in terms of income, population, and consumer segmentations) in which lifestyle centers are often found. The following chapter develops details of an investigation to do just that.

CHAPTER 3

RESEARCH DESIGN

This section provides an overview of the research questions being addressed in this study. Each research question will be defined, explained, connected to existing literature, and discussed regarding expected results. A discussion addressing the methods and necessary data for each research question is also included.

3.1 Research Questions

3.1.1 Research Question 1

The first research question asks *How are lifestyle centers distributed across the United States? Are there any regions where lifestyle centers are especially prevalent?*

This question provides general insight into lifestyle center location. No public knowledge is available for even a simple lifestyle center distribution, so answers gained will provide basic, yet meaningful insight for parties interested in lifestyle center location, which may include developers, city officials, or economic development corporations.

This question will also identify regions of high density. The existence of these regions may reveal places where desirable market characteristics exist at high levels. The search for clusters of stores has been pursued in previous business geography literature. Rice et al. (2016) identified regional clusters, or “hotspots,” of Walmart locations. However, existing literature does not give an indication of where regions with high concentrations of lifestyle centers would be located. One reasonable expectation is that, because lifestyle centers are open-air, clusters of high concentrations will be found in the southern United States. If the results support this hypothesis, they would

confirm the influence of climate, while alternate results would suggest the action of other powerful influences.

3.1.2 Research Question 2

The second research question asks *Are developers targeting potential agglomeration economies between lifestyle centers and traditional malls?* This question seeks to find the typical distance between lifestyle centers and traditional malls. The purpose is to determine the spatial relationship between lifestyle centers and traditional shopping centers. This insight will guide decision-makers by defining the key information regarding their location. Research by Hahn (2000) provides some partial expectation for the results of this investigation. She concluded that power centers are usually found within two or three miles from a traditional shopping center, and many times are immediately next to a traditional shopping center. Hahn stated that the reason for this proximity is because “shopping patterns are already established” in such areas. It is reasonable to expect similar patterns relative to lifestyle centers and their proximity to traditional shopping centers.

3.1.3 Research Question 3

The third and final research question asks *What income levels, population totals, and consumer segmentation groups appear most frequently in lifestyle center trade areas?* This question addresses the composition of lifestyle center markets themselves. It studies median household income, median population, and the consumer segmentation breakdown of lifestyle center markets. The purpose is to gain insight into what the typical market looks like, which could help provide guidance to developers or city officials when considering the location of a potential lifestyle center.

Lifestyle centers have been shown to exist in high-income areas (Gose 2004; Hernandez 2007; Yan & Eckman 2008; Rosenbaum et al. 2018). The expectation is that the median household income in lifestyle center trade areas will exceed the median household income citywide. Regarding population counts, there is no specific expected result. The purpose of researching population counts is to uncover some specific statistics regarding typical trade area characteristics. Finally, regarding consumer segmentation groups, a reasonable expectation is that, if there is any pattern to the consumer segmentation breakdown, the group associated with the most well-off consumers will be most common in lifestyle center trade areas.

3.2 Data Requirements

3.2.1 Research Question 1 Data

To answer the first research question, the thesis needs a few different types of data. The first piece of necessary data is a shopping center dataset which includes shopping center locations. Data vendor Competitive Analytics Professionals (CAP) provided the shopping center location dataset. CAP maintains comprehensive datasets of both shopping centers and individual retailers. What makes this dataset unique and optimal for the study is that it contains all shopping centers in the United States while including a differentiation of shopping center type.

Because there is no hard-set definition of what constitutes a lifestyle center, it is important to note the process by which CAP categorized lifestyle centers. An expert at CAP, Dr. James Root, individually categorized the lifestyle centers in the analysis. Dr. Root holds a PhD in Economic Geography and has spent decades working in the real estate industry. According to Dr. Root, they were identified by their layout, parking

space location (with lifestyle centers often including street parking near retailers as opposed to large lots on the periphery), type or number of anchors, and tenant mix. The subjectivity of the classification is a limitation for the analysis. However, because lifestyle center definitions vary and there is no established set of qualities to define a lifestyle center, using locations identified by an expert with decades of experience in the industry may be the best option.

A shapefile of urban areas in the United States and populations in those urban areas is also needed. The US Census Bureau was the source of that data. According to the US Census Bureau, an urban area “represents densely developed territory and encompasses residential, commercial, and other non-residential urban land uses.” Because the urban area shapefiles that the Census Bureau provides do not contain population estimates, population data was downloaded in tabular format from the Census Bureau. The data analysis software program Alteryx joined the two files.

This research question also required the populations of each county in the United States. The software Maptitude provided the national shapefile, with population information, for all counties in the United States.

3.2.2 Research Question 2 Data

The second research question also made use of the lifestyle center location dataset. In order to answer this research question, the study needed proximity data, in the form of the distance (along a road network) from each lifestyle center to the nearest traditional mall. The program Esri Business Analyst used the CAP shopping center dataset to calculate these distances.

3.2.3 Research Question 3 Data

The data studied in the third research question was entirely trade area consumer data. The first step was the creation of drive distance polygons. Business Analyst created polygons of 5, 10, and 15 miles surrounding each shopping center. Since it is not feasible to create custom trade area polygons for each lifestyle center in the United States, a standard drive distance needed to be selected. It is hard to know exactly what distance to use because the ICSC (2018) gives only a general range for what defines a lifestyle center trade area, which is 8-12 miles. At the suggestion of a member of this thesis' committee, the thesis used three trade area definitions: 5 miles, 10 miles, and 15 miles. The software includes a variety of data that can be extracted and appended to any polygon. The specific data appended to the drive distance polygons were: median household income, total population, the number of households making at least \$75,000 annually, and a breakdown of the consumer segmentation groups in each trade area. The income and population data were sourced from the American Community Survey's 2016 5-year estimates. Unfortunately, there are some potential issues with using data provided through a vendor such as Esri. Dr. Bill Graves' presentation at the 2017 Applied Geography Conference discussed how demographic data that is available through software providers is quite inconsistent and is potentially a cause for concern. But since such data is commonly used and was available through UNT, it is used in this thesis.

The consumer segmentation data comes from Esri's consumer segmentation system, which it calls Tapestry. It is a system of classifying consumers into one of sixty-eight unique consumer groups, based on their incomes, buying habits, education,

interests, net worth, and other variables (Esri, 2018). Esri's approach consisted of combining cluster analysis with data mining techniques to best identify consumer groups. Esri gathered data for their analysis from the U.S. Census, the American Community Survey, Experian, and the Survey of the American Consumer.

3.3 Methods

3.3.1 Research Question 1 Methods

In order to examine the general distribution of lifestyle centers in the United States, the thesis mapped lifestyle center locations in the United States. The distribution was studied to determine just how "urban" lifestyle centers are. The spatial join feature in Business Analyst assigned the urban area population to each shopping center in the analysis. The purpose was to see how many lifestyle centers reside within sizeable urban areas.

To study regionalism among lifestyle centers, a Local Moran's I autocorrelation test was implemented. Business Analyst conducted a spatial join to assign a count of the number of lifestyle centers to each county. Per-county counts of lifestyle centers were calculated using ArcMap, and the count of lifestyle centers per million residents was calculated using county-level population data. The test works by comparing values of features to neighboring values to find hotspots or coldspots. If the test reveals a hotspot over a certain area, it means that the area contains many high values which border other high values, meaning that the area has a widespread presence of lifestyle centers per capita.

3.3.2 Research Question 2 Methods

The goal of this research question is to determine whether lifestyle centers are typically found: in close proximity to traditional shopping centers; relatively far from traditional shopping malls; or whether there is no clear pattern. To conduct this proximity analysis, Business Analyst calculated the distance from each lifestyle center to the nearest traditional mall. These distances were calculated along a road network as opposed to a straight-line distance, because road network distances are much more beneficial when calculating distances between different retail establishments. For both research questions 2 and 3, six cities receive extra analysis. New York, Los Angeles, and Chicago are used because they are the three largest cities in the United States, and Dallas-Fort Worth, Miami, and Washington are included because they have the largest number of lifestyle centers (other than New York, Los Angeles, and Chicago).

3.3.3 Research Question 3 Methods

Results gained in from research into this question provide insight into the specific market characteristics of lifestyle centers. The income, population, and consumer segmentation data at the different trade area thresholds was visualized in Tableau and Excel. Tableau is a software specializing in data visualization and it allows the data to be easily sorted by city or state. This feature provides a straightforward way of seeing how results vary by city or state. The approach in this research is similar to the approach used by Joseph (2015). In that article, Joseph examined multiple demographic characteristics in order to study the characteristics of Walmart Neighborhood Center trade areas.

CHAPTER 4

RESULTS

4.1 Research Question 1 Results

The purpose of this research question is to study the general distribution of lifestyle center locations in the United States. The thesis does this through map creation, an examination of lifestyle center prevalence in urban areas, and a Moran's I test for spatial autocorrelation.

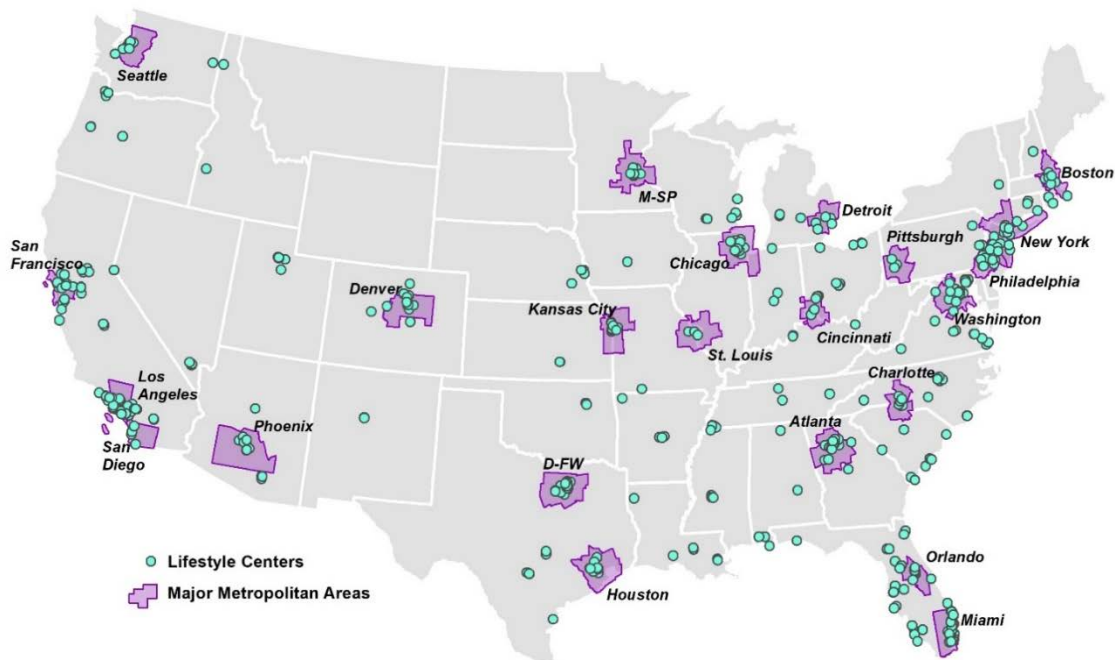


Figure 3: Lifestyle Centers in the United States, 2017

Figure 3 shows the distribution of lifestyle centers in the continental United States. The map is simple yet significant. Because no publicly available knowledge of the national distribution of lifestyle centers exists, the map gives some new insight into the distribution. This map of lifestyle center locations in the United States shows that lifestyle centers appear to be highly clustered toward urban areas. While it appears that certain regions (or specific urban areas) contain particularly high concentrations,

lifestyle centers are found across the country. Population centers on the west coast (Seattle, San Francisco, and Los Angeles) contain many locations. Lifestyle centers are especially prevalent in the eastern half of the United States. Florida and the Northeast appear to contain a very high number of these shopping centers. The large metropolitan areas of the eastern half of the country all contain many locations, while many other small- to mid-sized cities also appear to have some lifestyle centers.

While lifestyle centers are plentiful in many regions of the country, they are not found everywhere. One notable exception is the Great Plains/Rocky Mountains region, where, with the exception of Denver and Salt Lake City, no lifestyle centers are found. There are many small to medium-sized cities in this region, but major population centers are few and far between, and consequently, lifestyle centers are scarce.

The analysis which examined the presence of lifestyle centers in urban areas found that they are concentrated in large urban areas. About seventy percent of lifestyle centers in the continental United States reside in urban areas with a population of at least 1 million (Figure 4). Furthermore, ninety percent of lifestyle centers exist in urban areas of 250 thousand or more, and ninety-five percent are in urban areas with at least 100 thousand residents. That leaves just 31 lifestyle centers, or about five percent, in urban areas of less than 100 thousand. The concentration of lifestyle centers into relatively large cities is especially interesting when comparing the data to that of traditional malls. Traditional malls are much more likely than lifestyle centers to be found in smaller cities (Figure 5). While only five percent of lifestyle centers are in cities of 100 thousand or less, twenty-four percent of traditional malls are in these small population centers. This trend continues when looking at urban areas of less than 1

million residents, where fifty-nine percent of traditional malls and thirty percent of lifestyle centers are found.

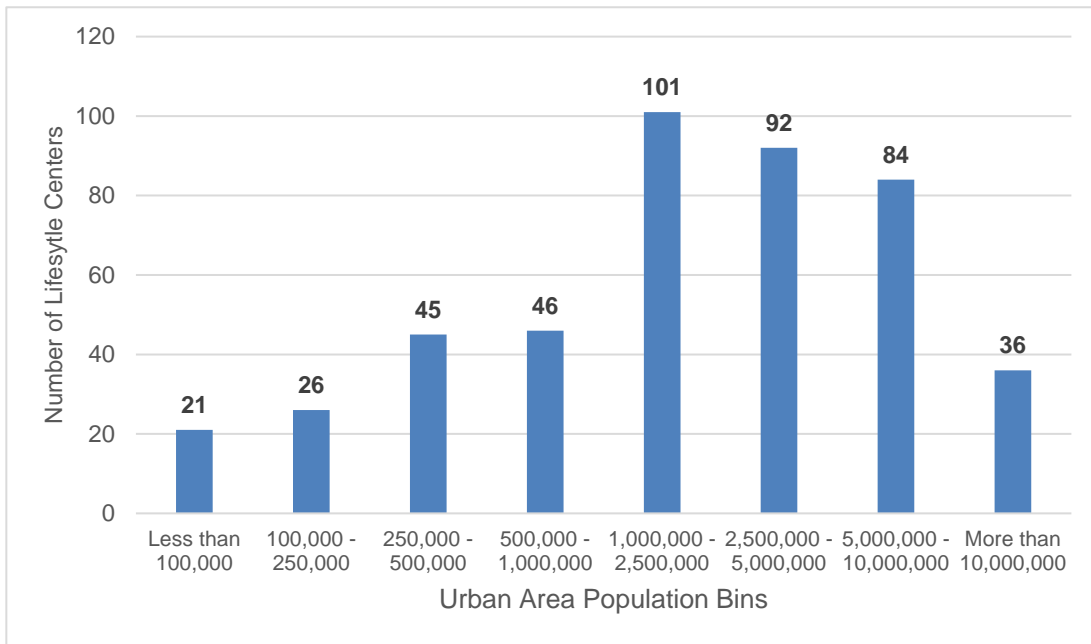


Figure 4: Histogram showing the population of the urban area where each lifestyle center is located, 2017

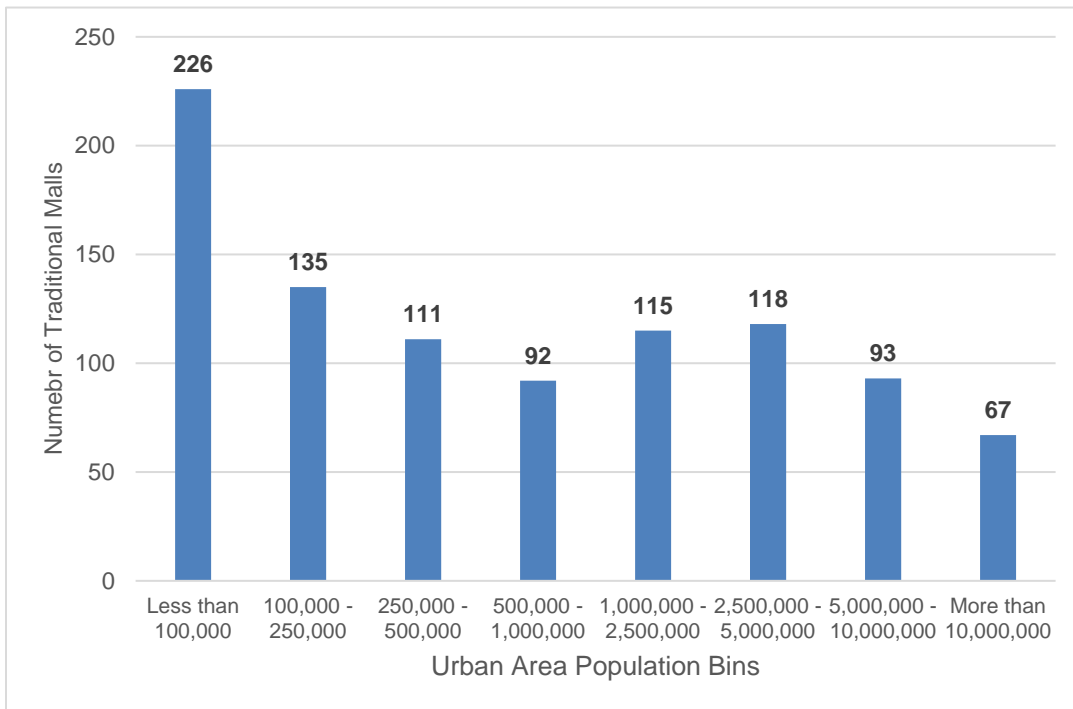


Figure 5: Local Moran's I result of lifestyle centers per capita at the county-level, with hotspots circled

Research Question 1 also sought to uncover regions with statistically significant clustering of counties with a large presence of lifestyle centers per capita. The Local Moran's I test for spatial autocorrelation, the test used in the analysis, identified three hotspots (Figure 6). These hotspots are denoted as high-high clusters in the output. One of these hotspots, located in the Denver area, is fairly small. The two remaining hotspots cover much larger territories. One of these clusters stretches roughly from the Philadelphia area to Washington, D.C. while also covering a large portion of New Jersey. The third cluster occupies much of Florida, stretching from Miami on the Atlantic Coast, through Orlando in Central Florida, and into the Tampa, Sarasota, and Cape Coral areas of the Gulf Coast.

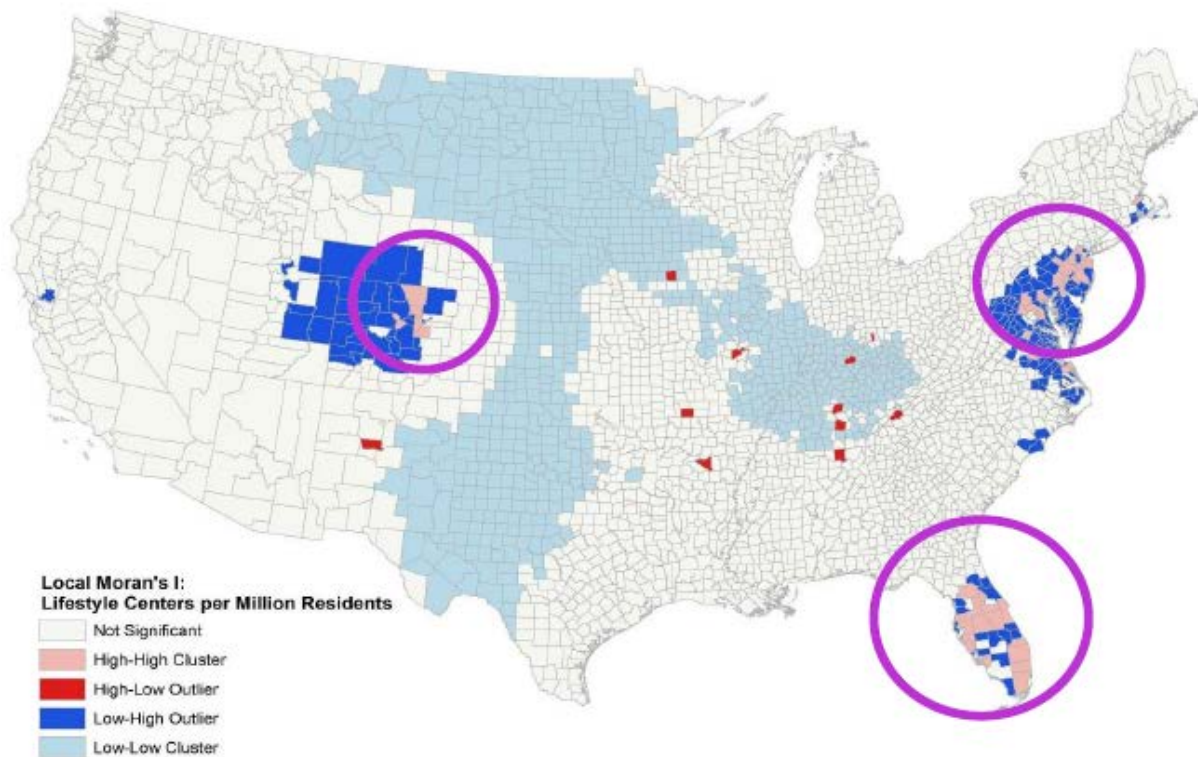


Figure 6: Histogram showing the population of the urban area where each traditional mall is located, 2017

Without controlling for population, clusters are still found in Florida and in the Northeast, but new clusters appear in Southern California and Northern California (Figure 7). The high-high clusters in Florida and the Northeast occupy nearly the same territory. The large low-low cluster is very similar in the two outputs. Areas of low-low values indicate counties with low values surrounded by other counties with low values. The presence of this large low-low cluster is not surprising, as there are large swaths of the country where lifestyle centers are not found.

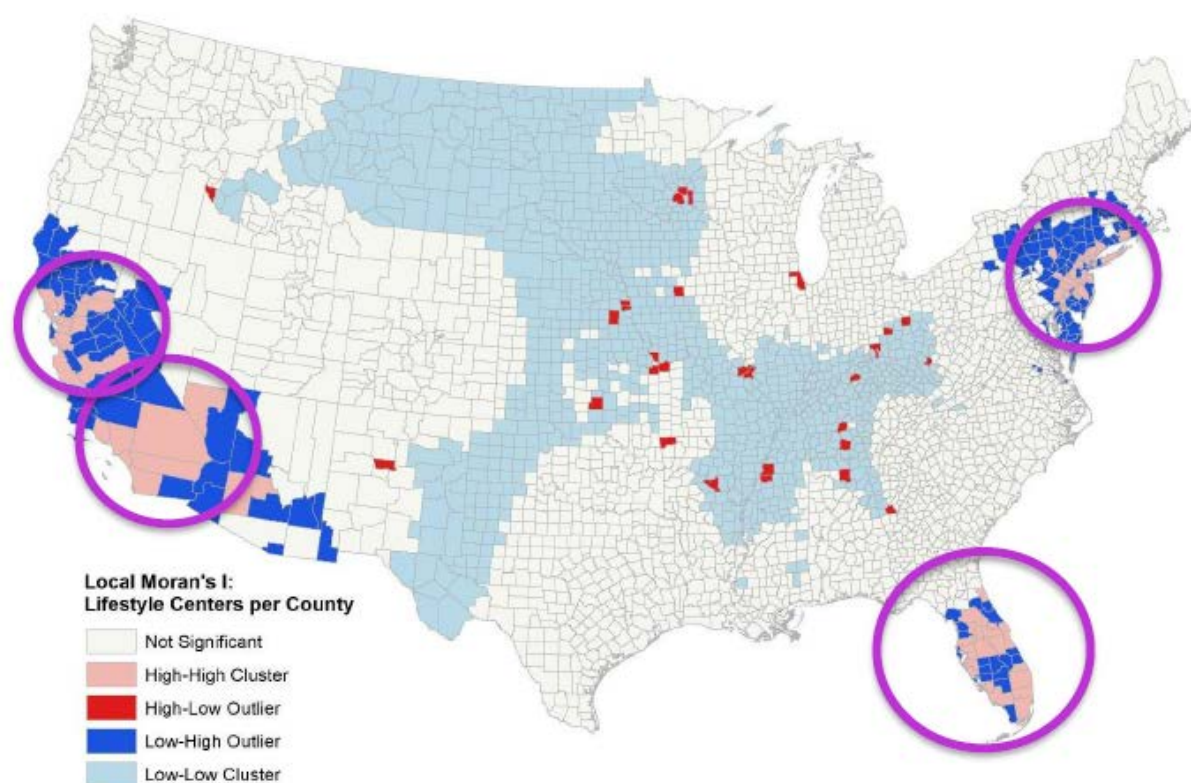


Figure 7: Local Moran's I result of lifestyle centers counts at the county-level, with hotspots circled

4.2 Research Question 2 Results

The purpose of the second research question is to explore the typical distances between lifestyle centers and the nearest traditional malls. Figure 8 is a histogram which displays the distance breakdown. First and foremost, it shows that the

overwhelming majority (all but 33 of over 400) of lifestyle centers are at least one mile from any traditional mall, and only 66 nationally are within 2 miles of a traditional mall.

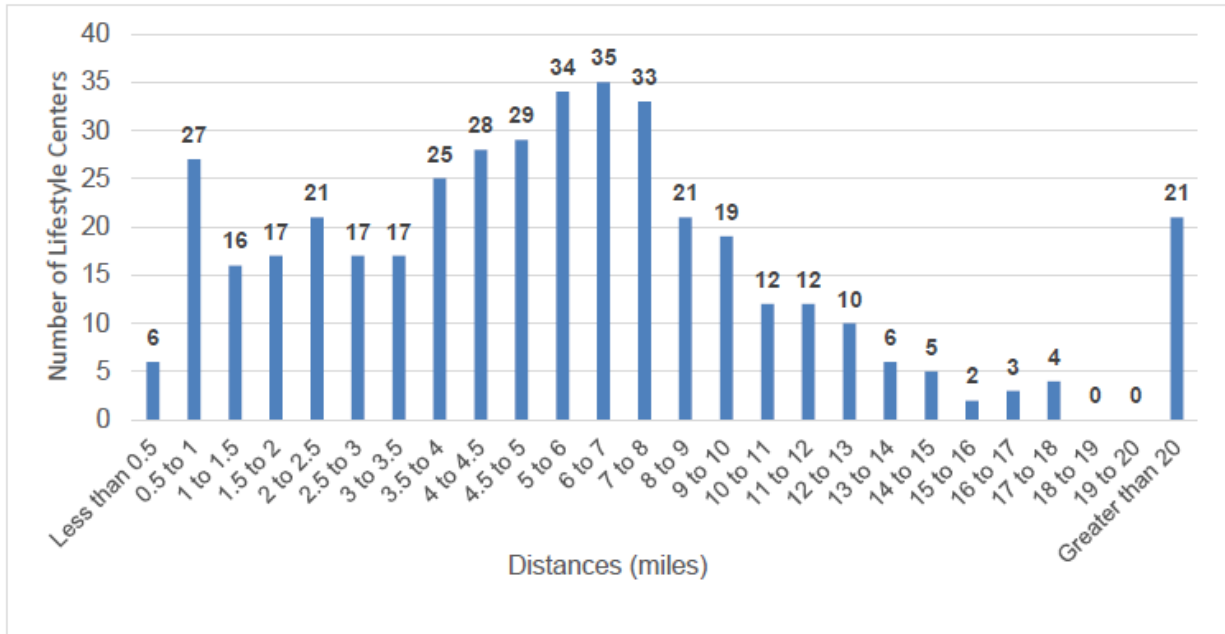


Figure 8: Histogram showing the distances (in miles) from each lifestyle center to the nearest traditional mall

Figure 9 breaks down the median distance, 25th percentile, and 75th percentile of the entire study area and the six cities receiving particular attention. The figure reveals that the median distance between a lifestyle center and the nearest traditional mall is 5.21 miles. The median distance is fairly similar between the six cities, with five of the six median distances ranging from 3.6 to 5.1. The one outlier is New York, where the median distance is 7.4. The 25th percentile of distances shows a degree of variation. Among the six cities, four of the six 25th percentiles are between 3.0 and 4.4 miles. Two outliers are Miami and Dallas-Fort Worth, which show 1.5 and 2.3 miles, respectively.

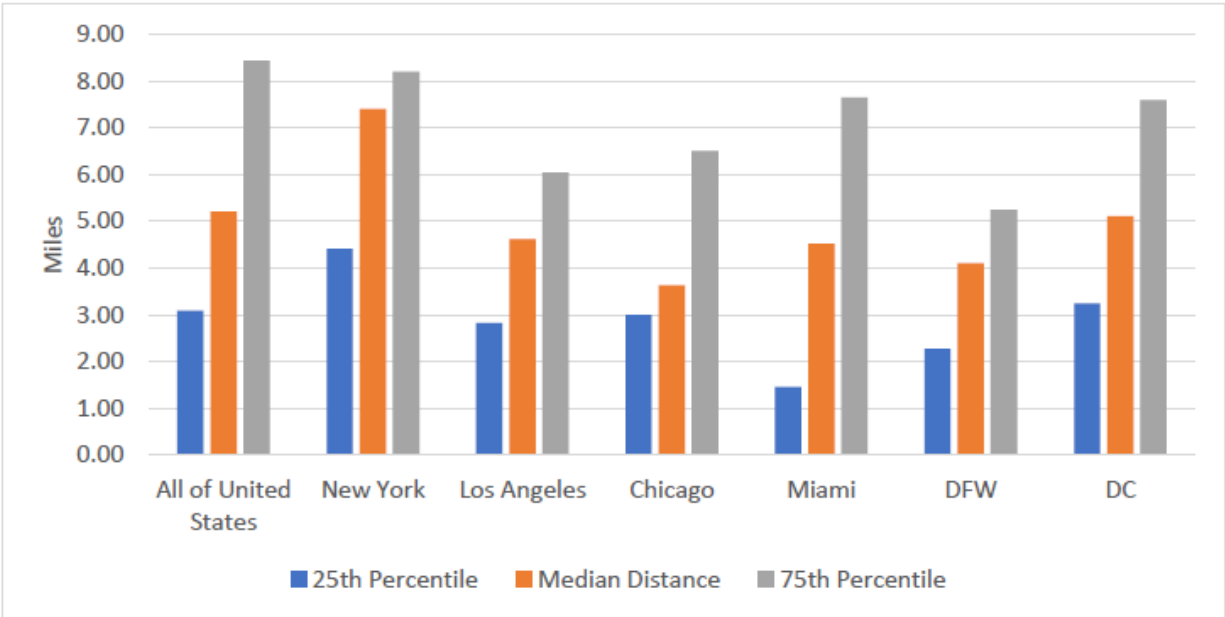


Figure 9: Graph showing the median, 25th percentile, and 75th percentile distances from lifestyle centers to traditional malls in select cities

4.3 Research Question 3 Results

The purpose of third research question is to examine the market characteristics at greater detail while using 5-, 10-, and 15- mile drive distance polygons. These characteristics include median population, median household income, and consumer segmentation characteristics. A series of tables and charts best display this data.

Figure 10 shows the median population within the different trade area sizes for both the United States for the six cities being studied. Nationally, the median population within 5 miles of a lifestyle center is about 112,000. New York City was very close to this figure (111,000), while four of the other markets had a median population between 135,000 and 208,000. Washington, D.C. was a large outlier, where the median population within 5 miles was about 313,000. The pattern continues when looking at the 10- and 15-mile trade areas, where median values for New York nearly mirrors that of United States lifestyle centers as a whole, while Los Angeles, Chicago, Miami, and

DFW with much higher populations, with Washington experiencing particularly high populations.

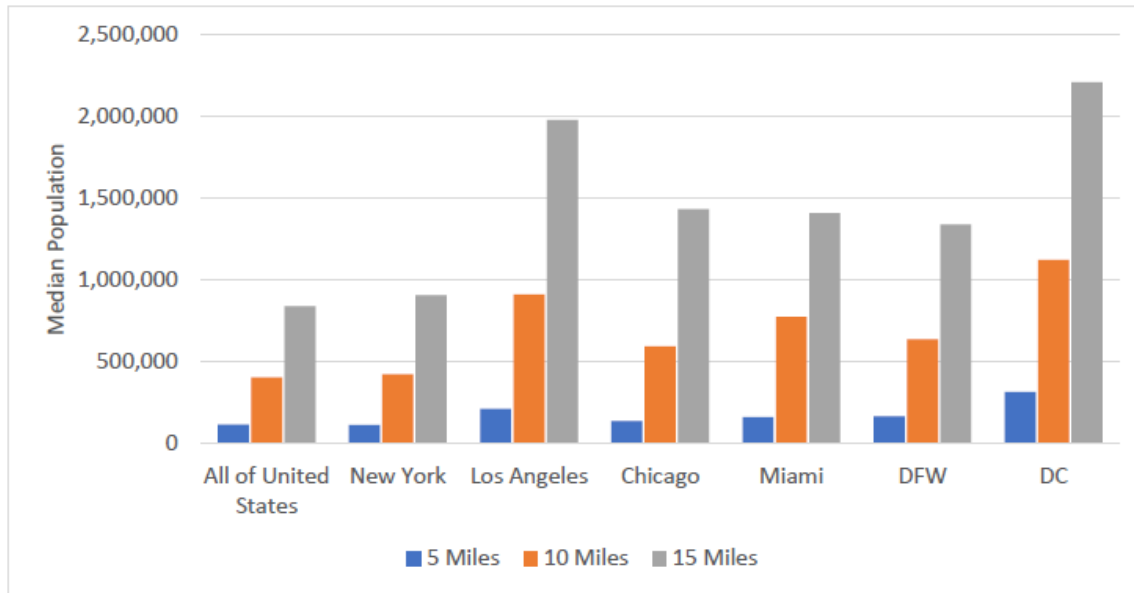


Figure 10: Graph showing the median 5-, 10-, and 15-mile lifestyle center trade area populations in select cities

Figure 11 also incorporates the 25th and 75th percentiles of trade area populations while studying the different trade areas. Markets where there is little difference between the 25th percentile, 75th percentile, and median populations indicate a homogenous trade area population. For the 5-mile trade area, Chicago and Dallas show low variation, while New York and DC show particularly high variation. At the 10-mile trade area, Miami and Los Angeles show less variation, while Chicago and Dallas still show a large degree of similarity. New York and DC show even more variation, with the 75th percentile of population in New York rising far above its median and 25th percentile values. Trends regarding the 15-mile trade areas are very similar to that of the 10-mile trade areas, but, as expected, with much higher population values.

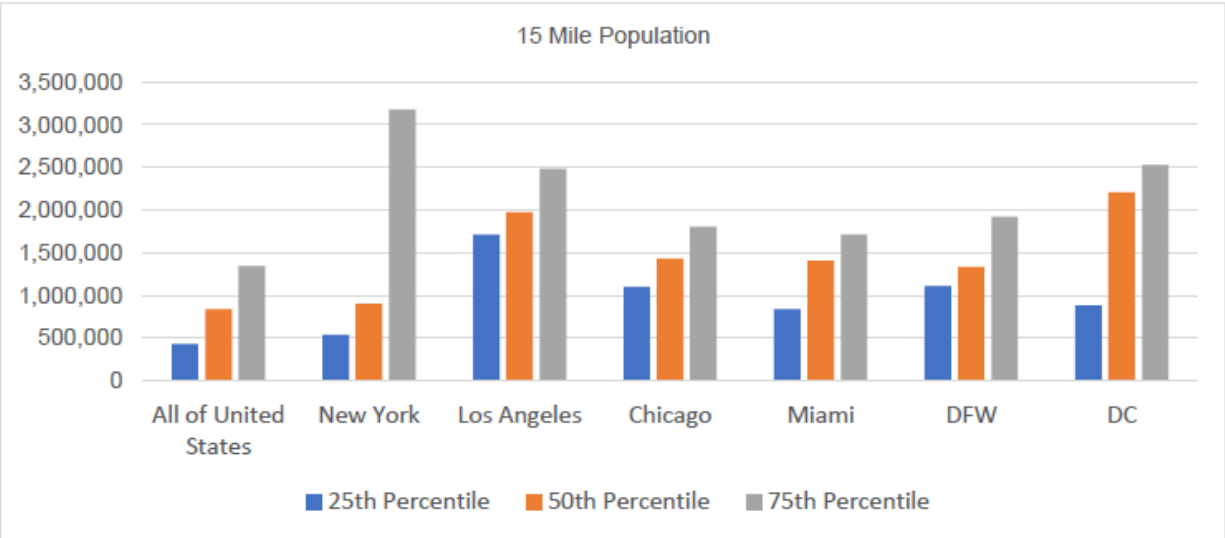
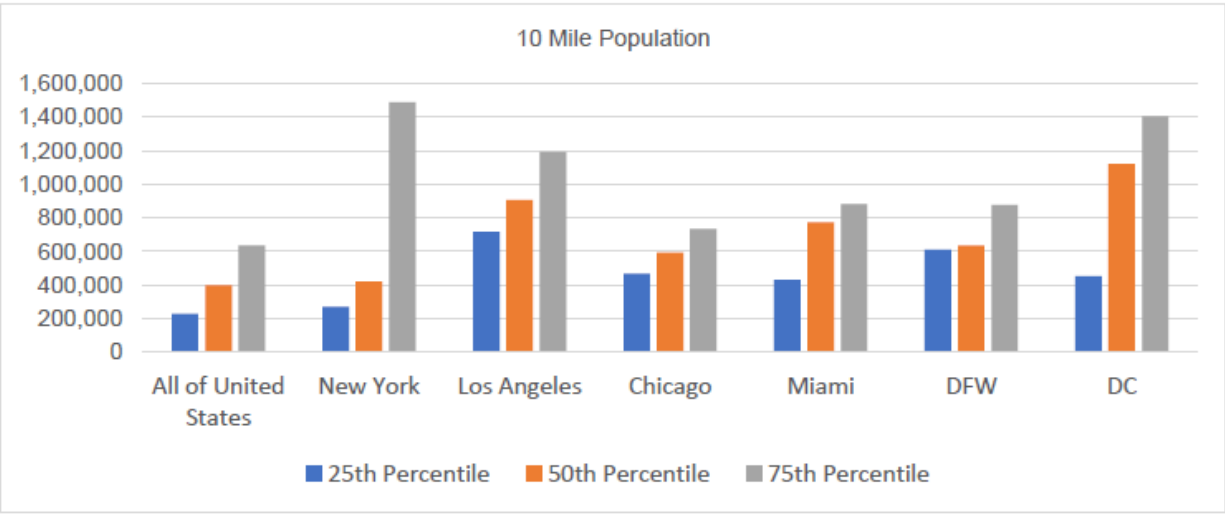
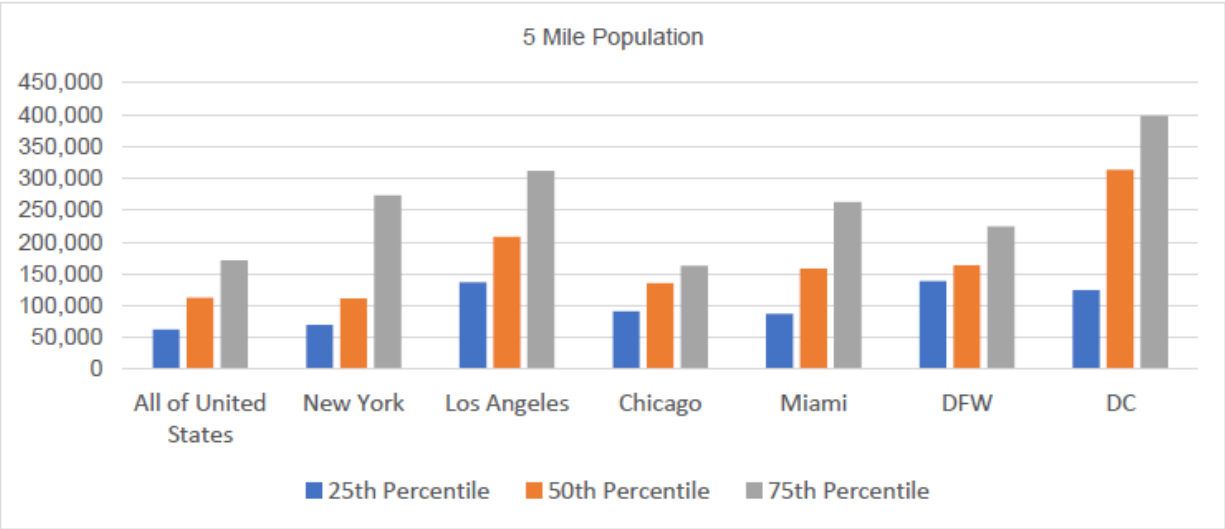


Figure 11: Graph showing the 5-, 10-, and 15-mile median household income in lifestyle center trade areas.

Figure 12 shows a breakdown median household income at three different trade area definitions. Nationally, the median household income within the 5-mile trade area is \$66,000, within the 10-mile trade area is \$61,000, and within the 15-mile trade area is \$59,000. This trend of median household income decreasing while the trade area size increases is also present in each of the six markets being surveyed. Figure 12 is also useful because it plainly portrays the cities which have the highest-earning lifestyle center trade areas. Washington stands out, particularly when looking at the 5-mile trade area, where the median household income is \$102,000. New York, Los Angeles, and Chicago are not far behind: the 5-mile median household incomes all range between \$85,000 and \$88,000. Dallas and Miami have much lower incomes: Dallas with \$69,000, and Miami with \$53,000.

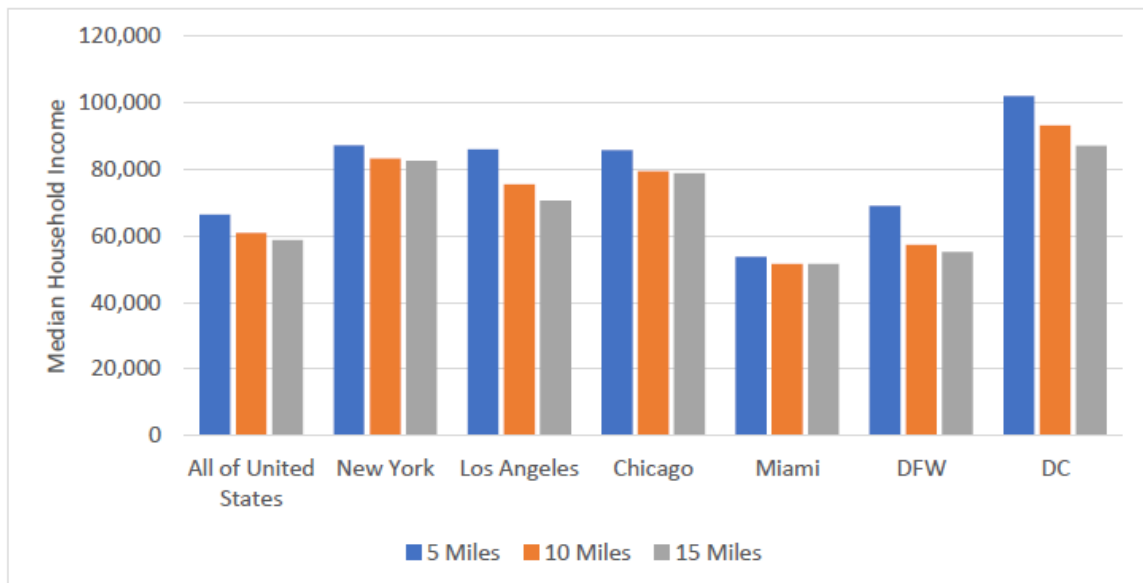


Figure 12: Graph showing the 5-, 10-, and 15-mile median household income in lifestyle center trade areas

When comparing trade area median household income to each specific market's median household income, it shows that lifestyle center trade areas typically have much higher incomes than the rest of the urban area. In New York, Los Angeles, and

Chicago, the median income for each of the three trade area distances is much higher than the urban area median. The pattern is not quite as pronounced in Miami, Dallas-Fort Worth, and Washington, where the urban area median exceeds the 10- and 15-mile trade area medians. However, in each of the six cities, the 5-mile trade area median household income exceeds the median household income of the entire urban area.

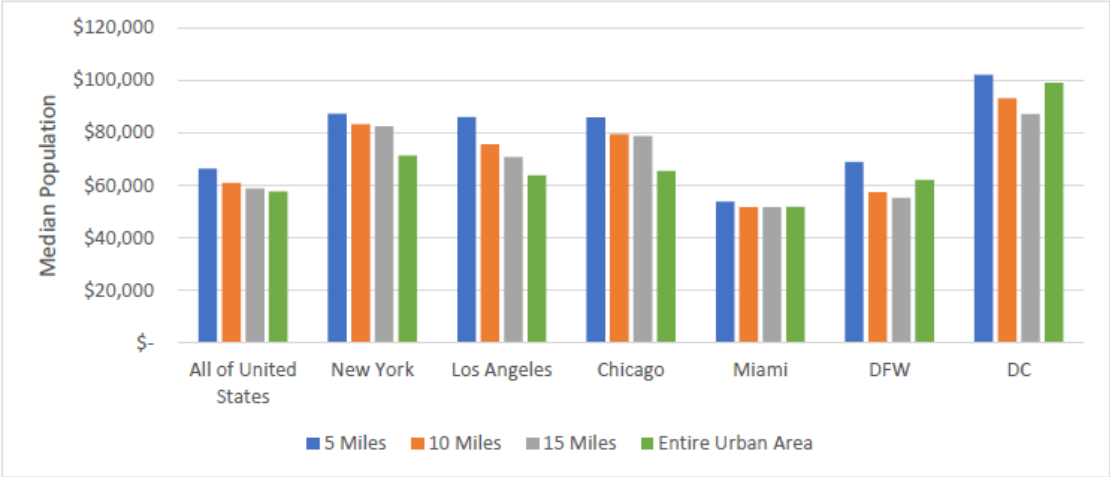


Figure 13: Graph showing the 5-, 10-, and 15-mile median household income in lifestyle center trade areas, along with a comparison to the entire trade area

To investigate whether there is a difference in the trade areas of lifestyle centers and traditional malls, the thesis used a two-sample t-test. Resulting t-stats are shown in Table 1. What these results show is that, nationally, lifestyle center trade areas have both greater populations and greater incomes than traditional mall trade areas. Although, this could be explained by the fact that lifestyle centers are much more likely to be in large cities than traditional malls. t-Tests for six individual cities show that this difference is not necessarily the case when looking at individual markets. New York City, Dallas-Fort Worth, Miami, and Washington do not have any significant differences in their trade areas in terms of population and income. However, Los Angeles and

Chicago do have differences. Interestingly, lifestyle centers in Los Angeles have less-populated trade areas than traditional malls in the city. But when it comes to income, lifestyle center 5- and 10-mile trade areas contain residents that earn significantly more than that of traditional mall trade areas. Chicago is the only other city with any significant difference apparent. At the 5-, 10-, and 15-mile trade area definitions, lifestyle center trade areas have higher earners than traditional mall trade areas.

Table 1: t-Stats of a two-sample t-test between lifestyle centers and traditional malls at the 95% confidence interval. Significant values are highlighted in green.

	Critical Value	Population			Income		
		5 Miles	10 Miles	15 Miles	5 Miles	10 Miles	15 Miles
United States	~1.96	2.76	4.08	4.7	11.51	8.47	7.24
New York	~2.13	0.06	0.16	-0.06	0.14	0.45	0.64
Los Angeles	~2.03	-3.75	-2.99	-2.8	3.58	2.58	1.95
Chicago	~2.03	-0.88	-0.89	-0.49	2.1	2.63	2.34
Dallas	~2.03	1.49	1.57	1.64	1.48	0.19	-0.45
Miami	~2.03	0.37	-0.43	-0.68	-0.52	0.075	0.37
Washington	~2.03	1.76	1.14	0.45	-0.21	-0.98	-0.39

This thesis also presents a consumer segmentation breakdown for each city in the analysis. The thesis accomplished this by finding the percentage of households that fall within each consumer group for each trade area, and then taking the median percentage for each segmentation across all trade areas. Table 2 shows a breakdown of the top 3 consumer segmentation groups for six markets. A few of these markets don't show a clear pattern: there is not a single group (or couple of groups) which dominate lifestyle center trade areas. Miami and Dallas-Fort Worth, along with the United States as a whole, fit this case. However, the remaining cities' lifestyle center

trade areas are dominated by some specific consumers. In New York, the *Affluent Estates* and *Upscale Avenues* segmentation groups represent over sixty percent of households within 10 miles of lifestyle centers. Chicago's trade area composition is similar to that of New York, where those same two groups represent nearly half of trade area households. The next largest group for Chicago, *Senior Styles*, takes up just eight percent of households. In Los Angeles, the *Upscale Avenues* group has strong representation in lifestyle center trade areas, at nearly a quarter of households. Washington, D.C.'s trade area composition shows that households near lifestyle centers are overwhelmingly concentrated into the *Uptown Individuals* group, while the *Upscale Avenues* and *Affluent Estates* groups, which have often appeared in other cities, round out the top three groups in the city.

Table 2: Break down of three largest consumer segmentation groups in 10-mile lifestyle center trade areas. The names of the three groups and the percentage of consumers for each group is included for each city.

	Largest Group		Second Largest Group		Third Largest Group	
	Name	Percentage	Name	Percentage	Name	Percentage
All United States	Group 8 – <i>Middle Ground</i>	13.1	Group 1 – <i>Affluent Estates</i>	11.7	Group 11 – <i>Midtown Singles</i>	9.1
New York	Group 1 - <i>Affluent Estates</i>	36.1	Group 2 – <i>Upscale Avenues</i>	24.9	Group 8 – <i>Middle Ground</i>	10.4
Los Angeles	Group 2 – <i>Upscale Avenues</i>	24.8	Group 13 – <i>Next Wave</i>	17.1	Group 1 – <i>Affluent Estates</i>	13.6
Chicago	Group 1 - <i>Affluent Estates</i>	28.5	Group 2 – <i>Upscale Avenues</i>	15.5	Group 9 – <i>Senior Styles</i>	8.5
Miami	Group 9 – <i>Senior Styles</i>	17.6	Group 7 – <i>Ethnic Enclaves</i>	15.4	Group 8 - <i>Middle Ground</i>	11.3
Dallas-Fort Worth	Group 11 – <i>Midtown Singles</i>	13.2	Group 1 – <i>Affluent Estates</i>	11.5	Group 7 – <i>Ethnic Enclaves</i>	9.7
Washington	Group 3 – <i>Uptown Individuals</i>	38.8	Group 2 – <i>Upscale Avenues</i>	14.9	Group 1 – <i>Affluent Estates</i>	14.5

A series of four sample maps of Washington, D.C. provide a small case study into previously explained results regarding population, income, and consumer segmentations. The reason Washington serves as the case study is because the provider of the data, CAP, makes available a shopping center sample dataset of Washington on their website. Figure 15 displays the proximity of lifestyle centers to traditional malls. It shows that lifestyle centers are more likely to be found near the center of the urban area, while traditional malls are typically far from the city center. This provides support to previous results that showed that lifestyle centers in Washington are usually at least 3 to 5 miles from any traditional mall.

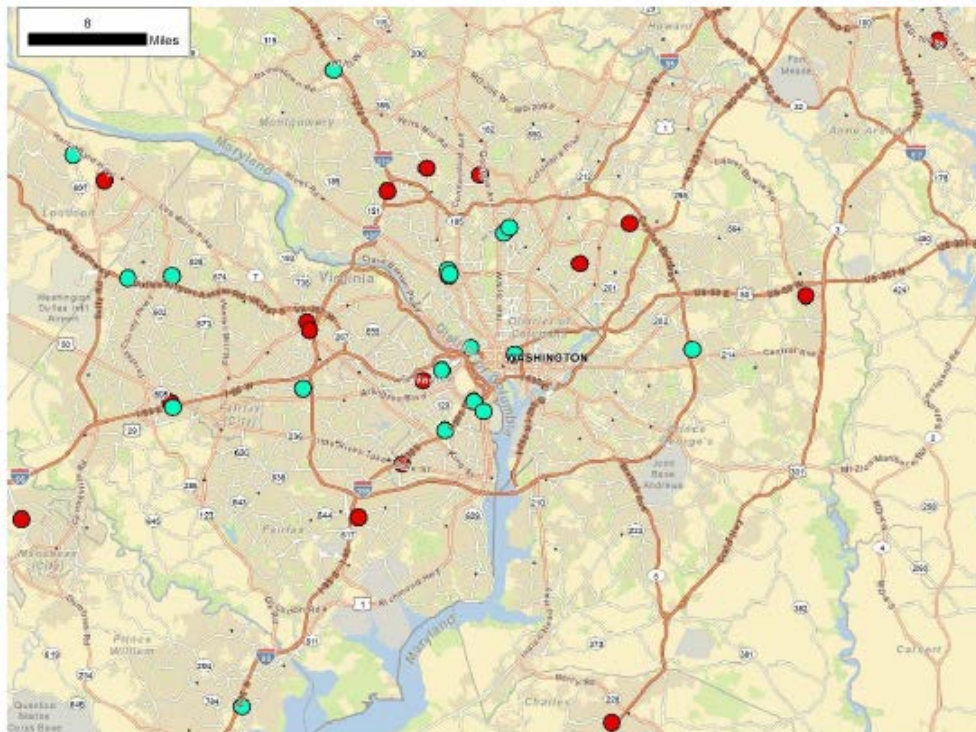


Figure 15: Map showing the locations of lifestyle centers (blue) and traditional malls (red) in Washington, D.C.

Figure 16 maps the median household income across the D.C. area, and reveals that lifestyle centers are not located in lower-income areas of the city but are situated in medium-to-high earning areas. When it comes to population density in Figure 17,

lifestyle centers appear to be positioned into areas with relatively high population density.

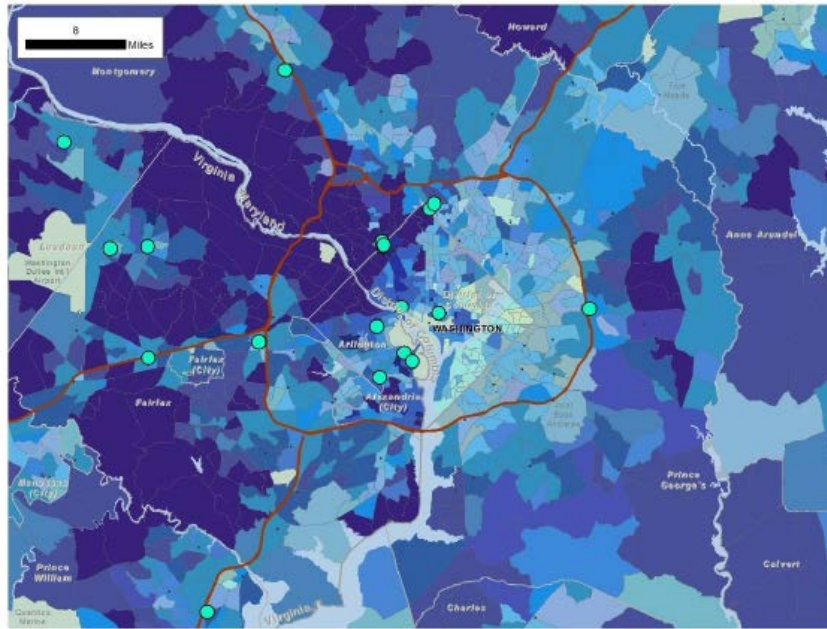


Figure 16: Map showing the median household income by census tract in Washington, with areas with the smallest incomes the lightest blue, and the highest incomes the darkest blue

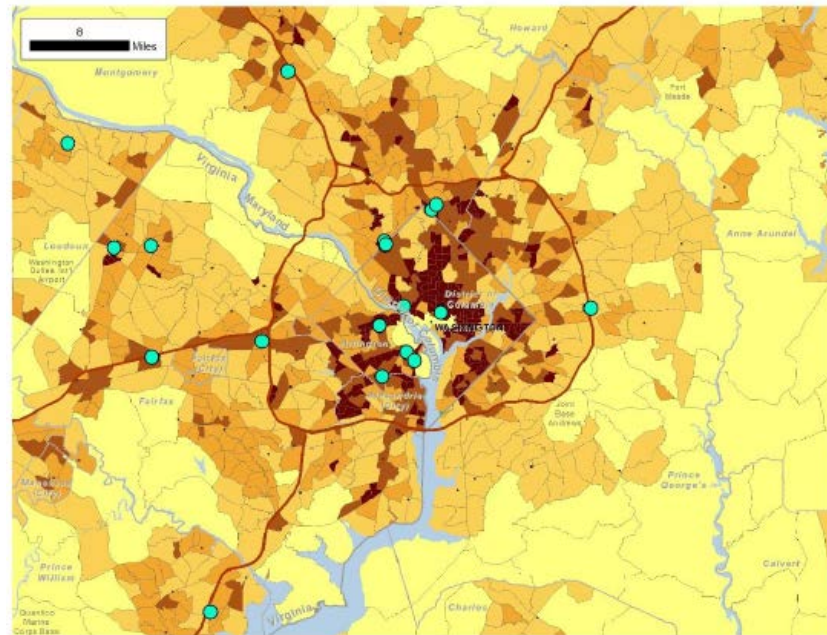


Figure 17: Map showing the population density by census tract in Washington, with areas with the smallest population density in light yellow, and the highest population density in dark red

Figure 18, which maps the most dominant consumer segmentation group per census tract. It provides support to results displayed in Figure 13, which stated that the most dominant consumer segmentations in lifestyle center trade areas are *Uptown Individuals* (shown in light blue), *Upscale Avenues* (green), and *Affluent Estates* (orange). Only a small number of Washington lifestyle centers are in an area that isn't dominated by one of those three groups.

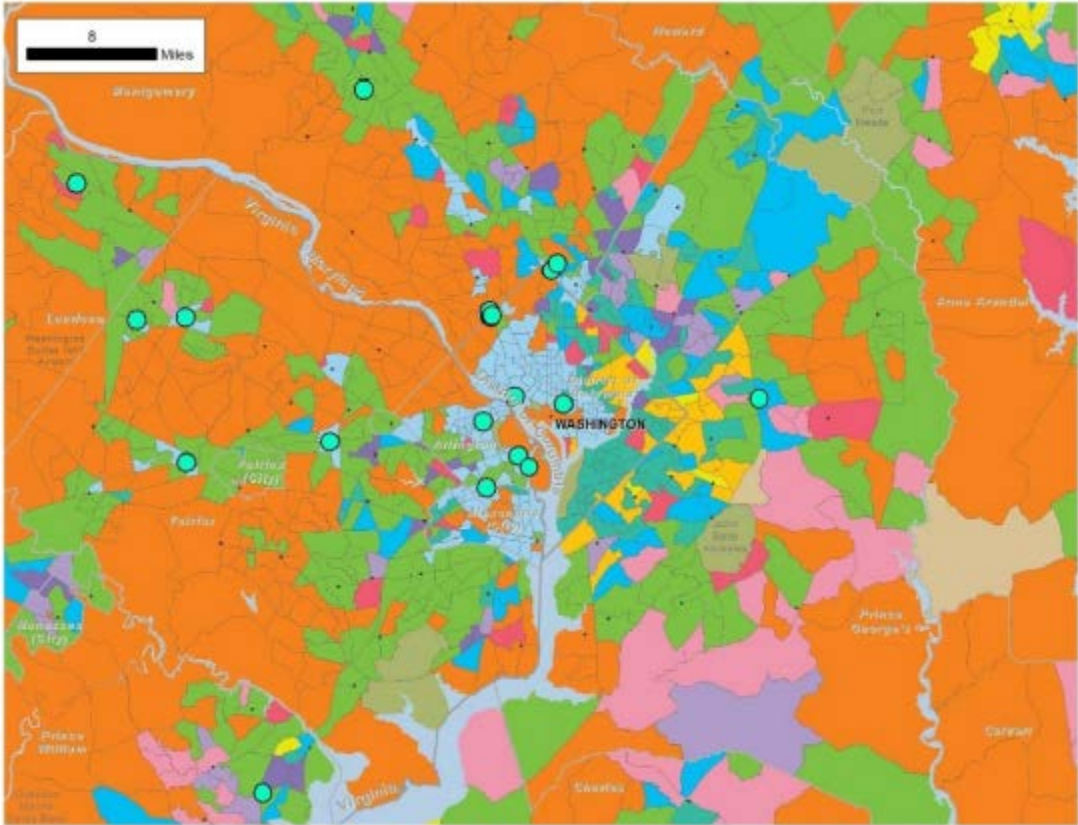


Figure 18: Map showing the dominant consumer segmentation group by census tract in Washington, with each color representing a different group

Finally, the research sought to uncover the number of households making at least \$75,000 annually within lifestyle center trade areas. This was done in response to real estate expert Michael Baker's assertion in an article by National Real Estate Investor that lifestyle centers are typically located in neighborhoods containing at least

30,000 households making over \$75,000 per year (Gose 2004). It’s hard to know what was specifically meant by “neighborhood,” but because the data are available for drive distance polygons, the study used household counts per trade area. Nationally, at the 5-mile level, only a small portion (26 percent) of lifestyle center trade areas contain at least 30,000 households earning at least \$75,000 annually. Figure 20 shows the exact breakdown. Percentages vary significantly; however, at the 5-mile level, many lifestyle centers across the six metropolitan areas do not have at least 30,000 households meeting the income threshold in the trade area. When using 10-mile trade areas, the household count is much higher. In Chicago, Miami, Dallas-Fort Worth, and Washington, all lifestyle centers have at least 30,000 households making at least \$75,000 per year within 10 miles. For New York and Los Angeles, 83 and 96 percent of lifestyle center trade areas, respectively, meet the household count threshold.

Table 3: Break down of percentage of lifestyle centers with at least 30,000 households with an annual income over \$75,000 in the trade area

	All US	NY	LA	CHI	MIA	DFW	DC
5 Mile Trade Area Percentage	25.8%	33.3%	72.7%	50.0%	28.6%	55.0%	72.7%
10 Mile Trade Area Percentage	81.1%	83.3%	95.5%	100.0%	100.0%	100.0%	100.0%

CHAPTER 5

DISCUSSION AND CONCLUSION

5.1 Summary

Lifestyle center retail has experienced tremendous growth over the past couple of decades. Because no existing literature addresses the geography of these shopping centers, this paper takes an important step in filling that literature gap. The thesis used three research questions to study lifestyle centers in this lens.

The purpose of the first research question was to survey the national layout of lifestyle centers in the continental United States. A simple map of lifestyle center locations revealed that these shopping centers appear to be clustered into large urban areas. Further investigation revealed that about 70 percent of lifestyle centers are found in urban areas with a population of at least 1 million and about 90 percent are in urban areas with at least 250 thousand people. This research question also included a spatial autocorrelation test, with the goal of finding regions with higher concentrations of lifestyle centers. The spatial autocorrelation test of lifestyle centers per capita at the county level uncovered one small cluster (surrounding Denver) and two larger clusters: one in the northeast, ranging from Philadelphia to Washington, DC, and another cluster which occupies much of southern Florida. Without controlling for population, sizeable clusters are found around New York City/New Jersey, throughout much of Florida, Los Angeles, and the Bay Area.

The second research question investigated the spatial relationship between lifestyle centers and traditional indoor malls. Business Analyst calculated the distance from each lifestyle center to the nearest indoor mall. Results showed that most lifestyle

centers are at least 2 miles away from any traditional mall, with the median distance being about 5 miles. A breakdown of six specific markets revealed a relatively-high degree of variation by city, but the median distance in each market was at least 3.5 miles.

The final research question provided a glimpse into the types of consumers living in lifestyle center trade areas. Results provide market-specific results of the median population, median income, and consumer groups that make up lifestyle center trade areas. The median household income within 5 miles of lifestyle centers in each of the six markets exceeds the median household income across that entire urban area. For New York, Los Angeles, and Chicago, the median household income for the 10- and 15-mile trade areas also exceed that of the entire urban area. The investigation into consumer segmentation groups showed that, in most markets, 1-2 consumer groups dominate lifestyle center trade areas, although the specific groups vary by market. One exception was Dallas-Fort Worth, where the consumer breakdown was diverse; no groups stood out as being particularly prevalent. Interestingly, the consumer breakdown city-wide did not mirror the breakdown within lifestyle center trade areas in any of the six cities studied. This research question also studied the number of households within lifestyle center “neighborhoods” making at least \$75,000 per year. In a 2004 real estate publication, a real estate expert stated that lifestyle center trade areas typically contain at least 30,000 households making at least \$75,000 per year. At the 10-mile drive distance area, nearly all lifestyle centers meet that threshold, with four of the six metropolitan areas studied having all lifestyle centers meeting the 30,000 number.

5.2 Discussion

This thesis concludes by addressing the key takeaways from the research. The hot-spot analysis in the first research question found that lifestyle centers, even when controlled for population, are significantly clustered into a few regions of the country. The areas were in the Northeast, Florida, and the Denver area. This indicates that there is something about these regions that is particularly attractive to shopping center developers. The first research question also found that lifestyle centers are rarely found in cities with a population under about 250,000. This is likely because developers view lifestyle centers as needing a certain city-wide population threshold to be met, or that the types of consumers that developers are targeting are found in larger urban areas.

Results in this thesis also indicated that developers are not seeking potential benefits of agglomeration when selecting sites for lifestyle centers, as lifestyle centers are rarely found in close proximity to traditional malls. This was unexpected, as the business geography literature has extensively explored the concept of agglomeration in the world of retail. Some reasons that retailers would prefer locations near other retail sites were outlined by Oppewal and Holyoake (2004), who mentioned a very clear, obvious reason: consumers want to minimize travel distance or time when possible, which means that that they will want to shop in areas where they can get the most shopping done in the least amount of time. Hahn (2002) described this trend specially with shopping centers, noting how power centers are often in very close proximity to traditional malls. A plausible explanation for results found in thesis could be that developers are seeking to place their lifestyle centers in geographic areas that target a

unique group of consumers. This indicates that a new, emerging retail strategy is being applied to lifestyle center site selection.

The investigation into the consumers residing within lifestyle center trade areas provided crucial insight into what a typical lifestyle center trade area looks like in six different major American cities. Most important in these findings were the results regarding the consumer segmentation breakdown within these trade areas, which showed that certain types of consumers dominate the trade areas of lifestyle centers in most of the cities studied. These findings indicate that lifestyle centers may have been intentionally placed in areas where specific types of consumers are present. This reinforces findings regarding agglomeration in the previous paragraph— that developers have a new, unique strategy with regards of lifestyle center location. The types of consumers dominating the trade areas is consistent with the prevailing thought that lifestyle centers are located in high-income areas, as these specific consumer groups happen to be the wealthiest of Esri's fifteen segmentations.

5.3 Future Research

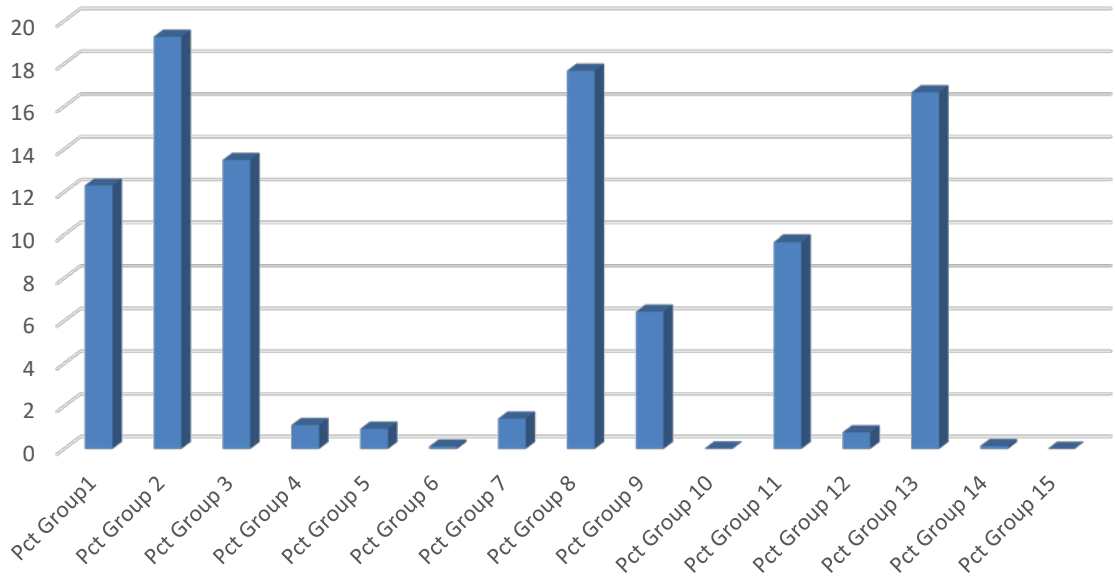
This thesis represents a first step into researching lifestyle center location. The results offer market-specific information regarding what a typical lifestyle center location is like in specific markets, in terms of both the types of consumers in the trade area as well as the proximity to any traditional malls. City officials can use these market-specific results when considering whether to offer incentives or allow a lifestyle center to enter a specific site.

While this research has presented an important step into researching lifestyle center geography, there is certainly more research that can be done. Future research

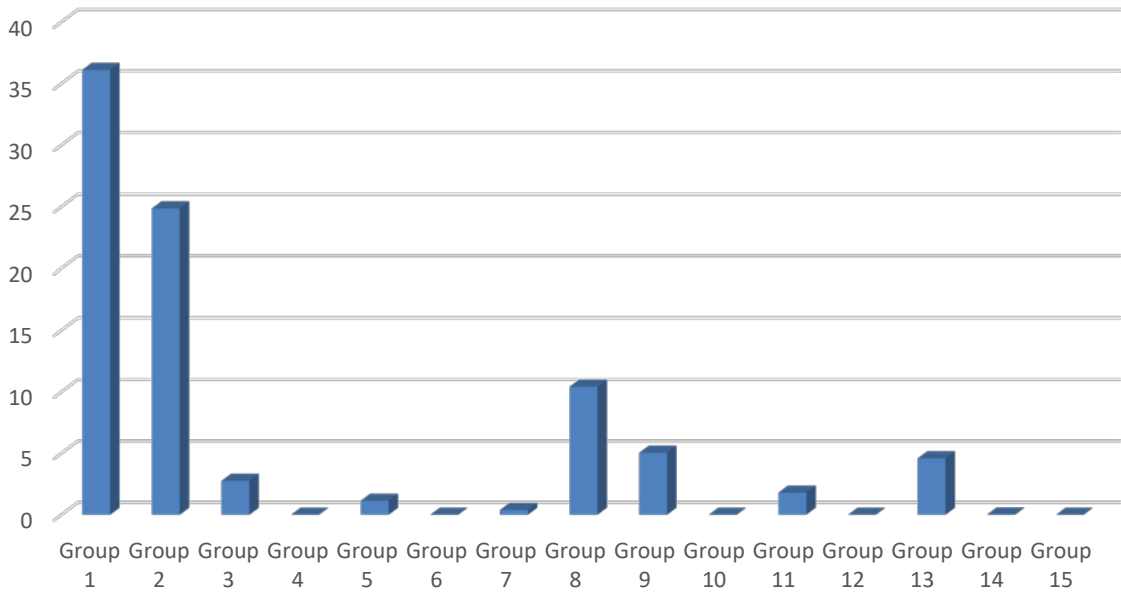
needs to address the spread of lifestyle center construction over time in the United States. This would identify areas which were prioritized by developers and could show what was so attractive about those locations. Graff (1996, 1998) conducted this type of research concerning retailers like Walmart, Kmart, and Target. His research resulted in uncovering clear patterns behind the spatial growth of these retailers over time, and such research could also show what lifestyle center developers have prioritized as good markets over time. Other necessary research would study factors leading to lifestyle center profitability. Shopping center size, age, store mix, proximity to other shopping centers, or trade area characteristics all potentially relate to sales. Mejia and Benjamin (2002) discussed how it is not only spatial factors that are important in shopping center success, but also non-spatial attributes like retail mix and the quality of the facility are that are important determinants. Further research would build off this to find what is most important to lifestyle centers specifically. Finally, the role of tourism in lifestyle center site selection may shine some light on developers' location decisions. The smallest cities which are occupied by a lifestyle center all have tourist-driven economies (Sedona, Breckenridge, Branson, Gulf Shores, and South Lake Tahoe, among others), so the presence of tourism very likely plays a role in developer's decisions. Existing literature supports the association between tourism and shopping (Kinley 2003), but research regarding the connection to lifestyle centers specifically has not been pursued. Future findings regarding lifestyle center location and profitability would provide a great benefit to both city officials and to shopping center developers.

APPENDIX
CONSUMER SEGMENTATION GRAPHS

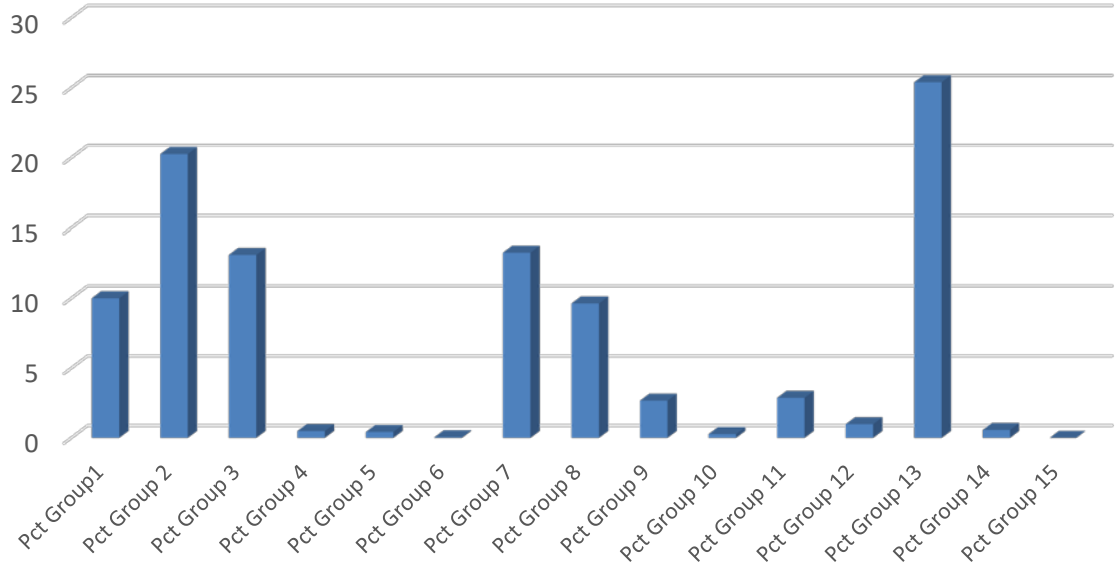
New York City-Wide Breakdown



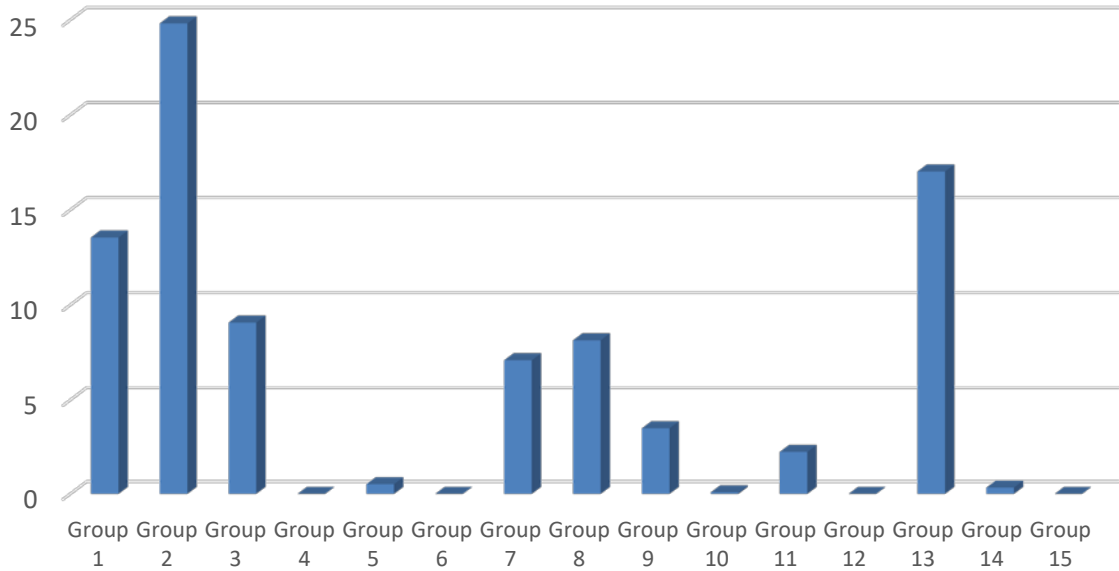
New York Lifestyle Center 10 Mile Trade Area Breakdown



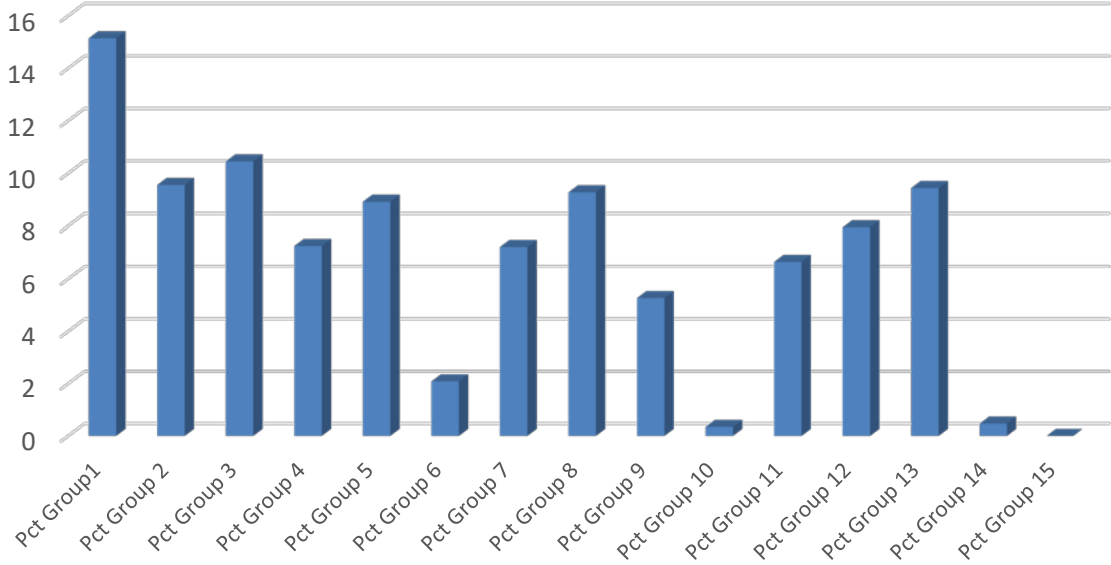
Los Angeles City-Wide Breakdown



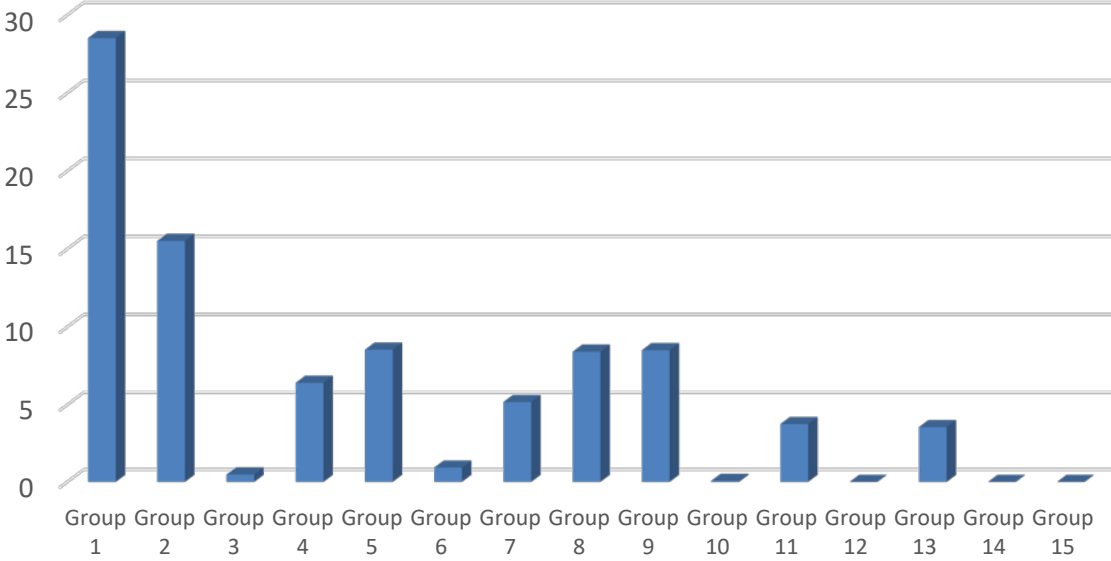
Los Angeles Lifestyle Center 10 Mile Trade Area Breakdown

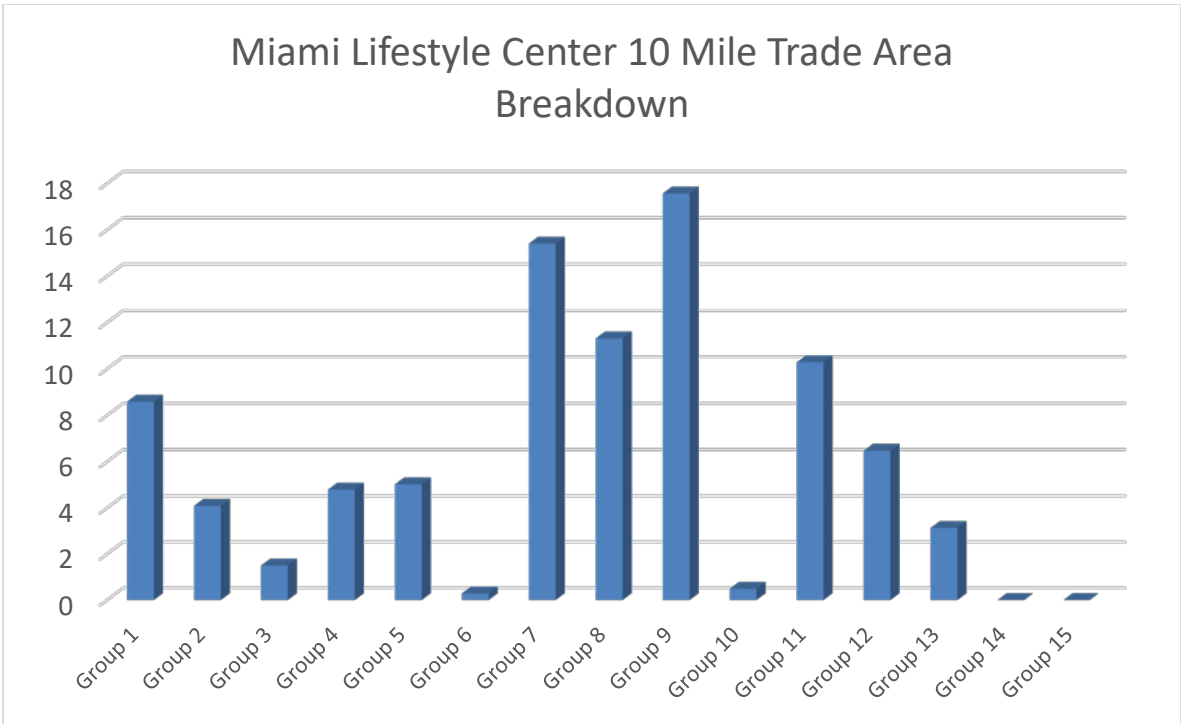
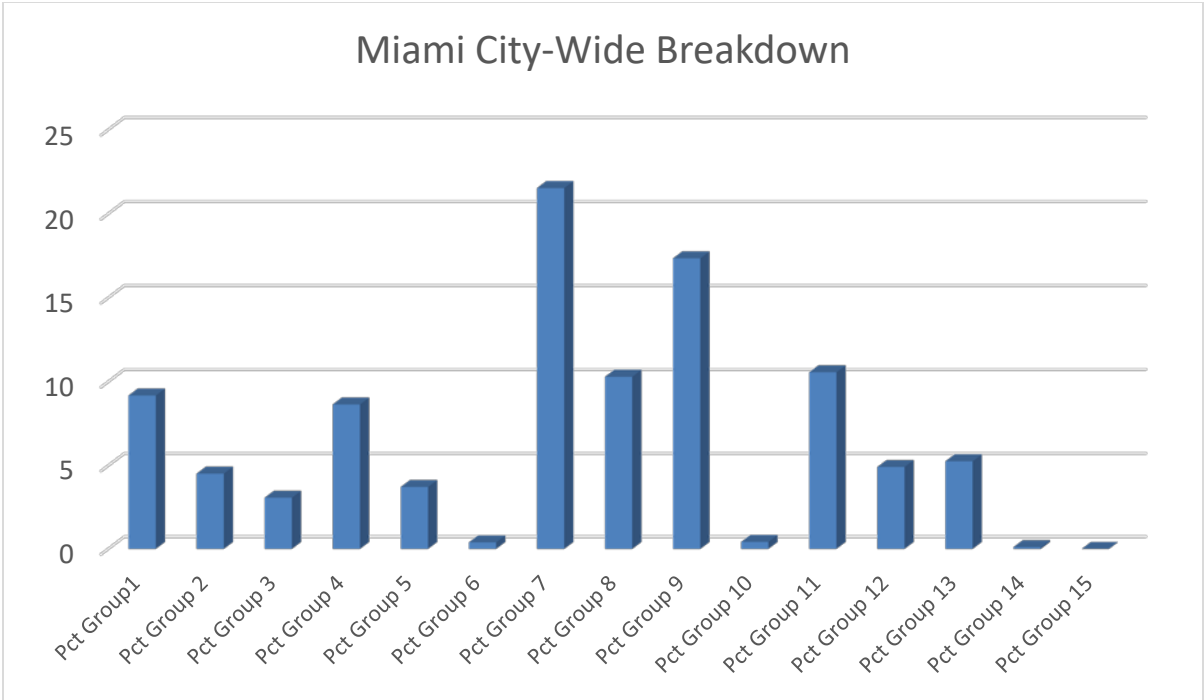


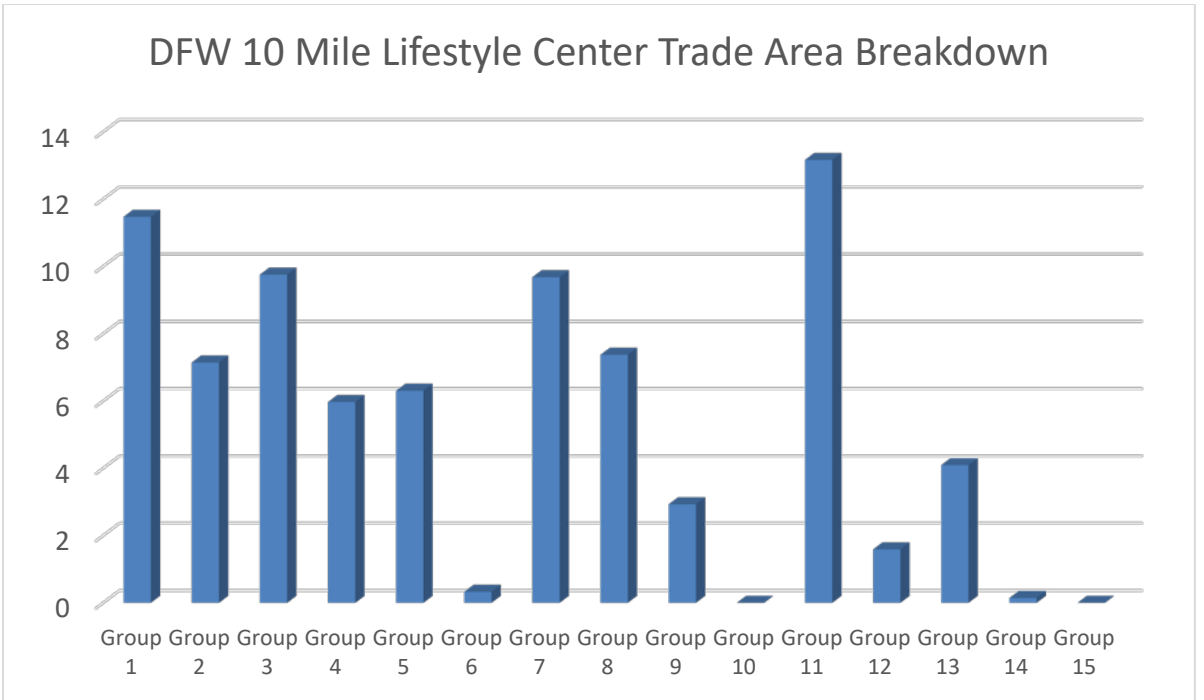
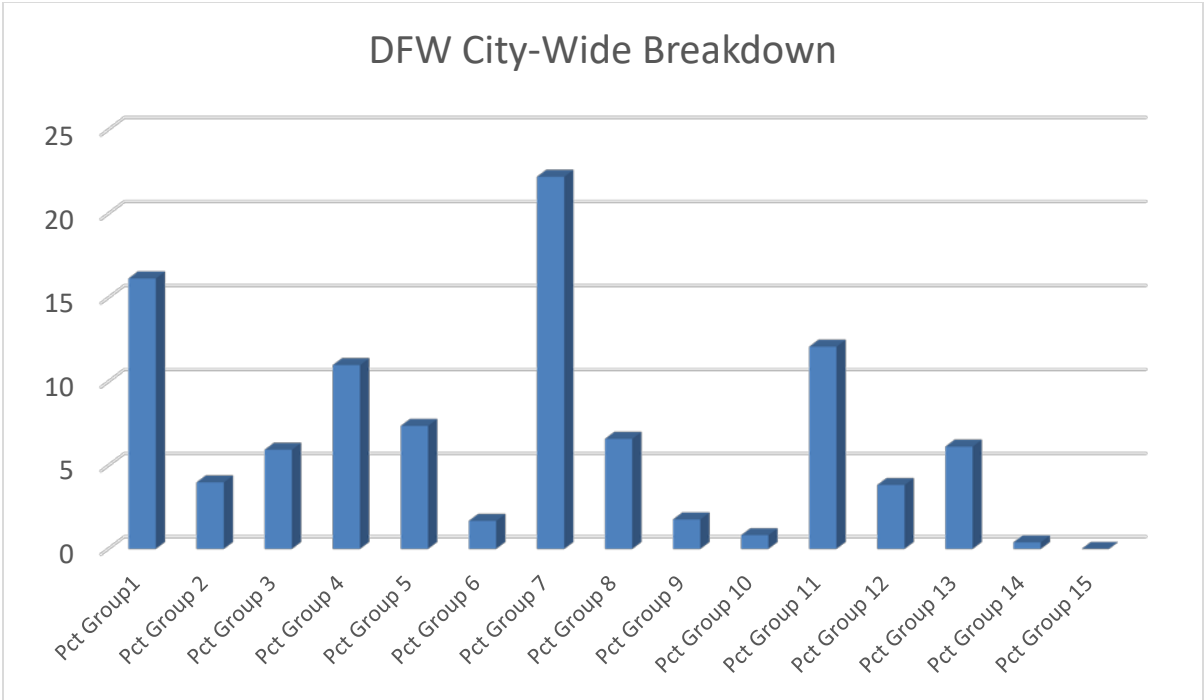
Chicago City-Wide Breakdown

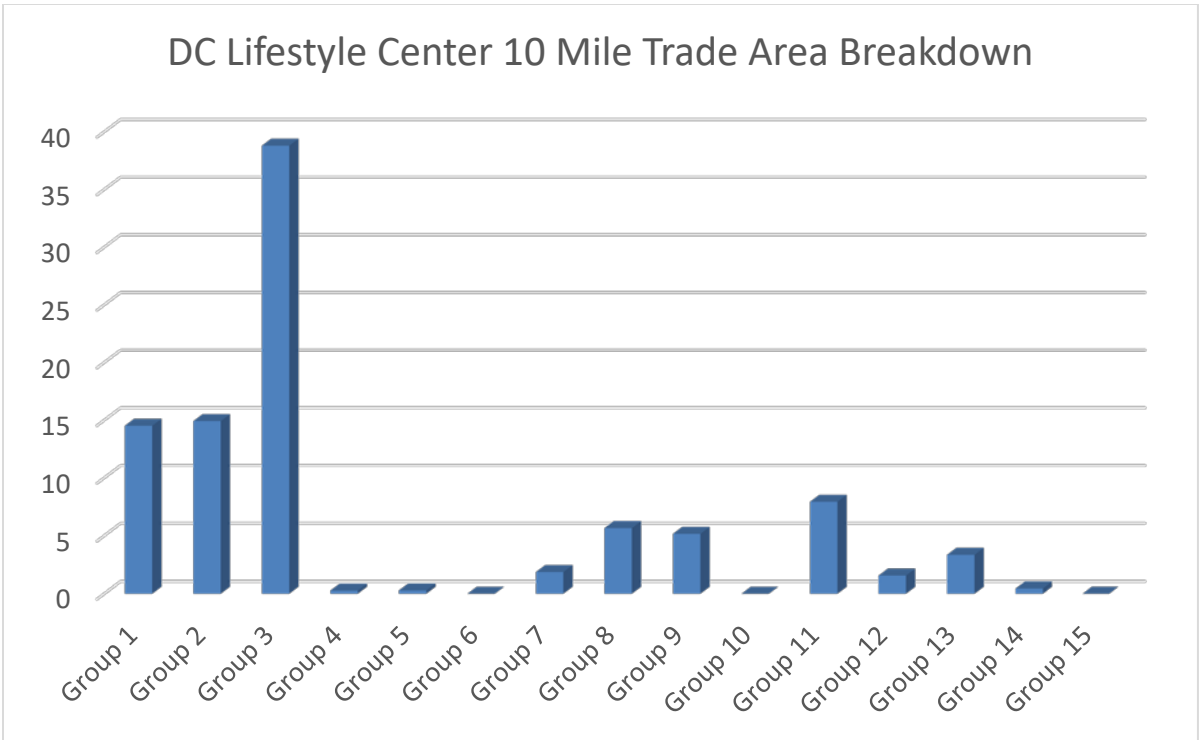
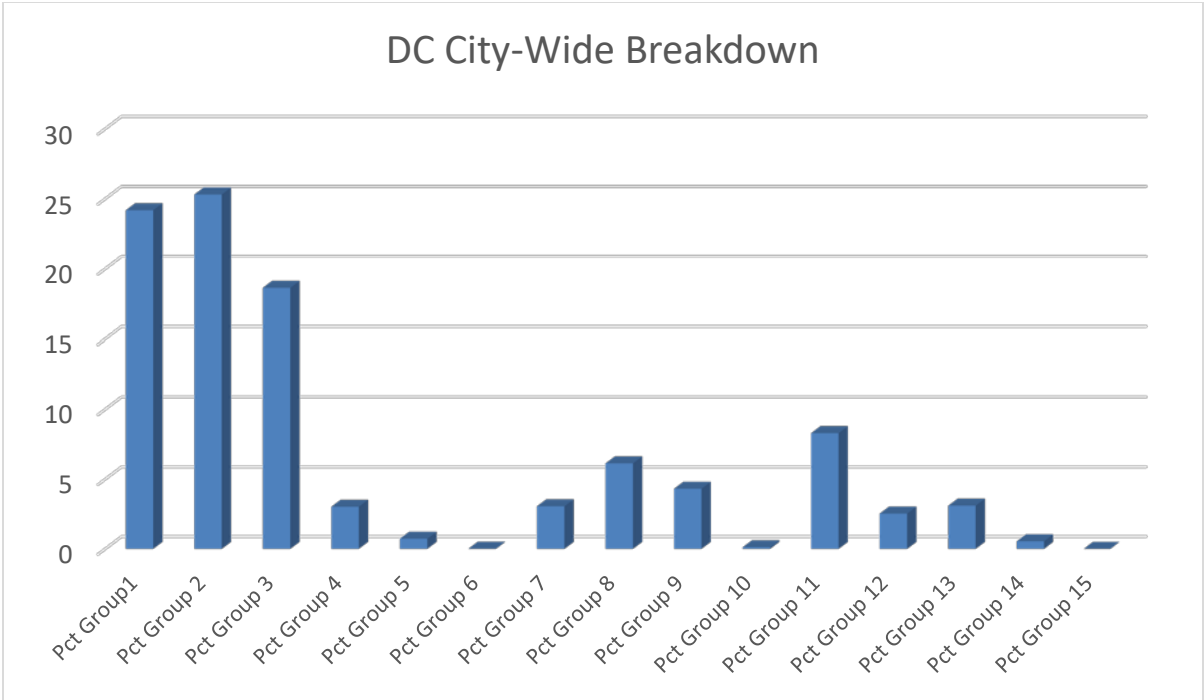


Chicago Lifestyle Center 10 Mile Trade Area Breakdown









REFERENCES

- Applebaum, W. (1951). Studying customer behavior in retail stores. *Journal of Marketing*, 16(2), 172-178.
- Applebaum, W. (1966). Methods for determining store trade areas, market penetration, and potential sales. *Journal of Marketing Research*, 127-141.
- Bellenger, D. N., Robertson, D. H., & Greenberg, B. A. (1977). Shopping center patronage motives. *Journal of Retailing*, 53(2), 29-38.
- Brunner, J. A., & Mason, J. L. (1968). The influence of driving time upon shopping center preference. *The Journal of Marketing*, 57-61.
- Burton, I. (1963). The quantitative revolution and theoretical geography. *The Canadian Geographer*, 7(4), 151-162.
- Chalk, C. (2017). *Why I Mourn the Death of the American Mall*. Retrieved from <http://www.theamericanconservative.com/urbs/why-i-mourn-the-death-of-the-american-mall/>
- Cheng, E. W., Li, H., & Yu, L. (2005). The analytic network process (ANP) approach to location selection: a shopping mall illustration. *Construction Innovation*, 5(2), 83-97.
- Cheng, E. W., Li, H., & Yu, L. (2007). A GIS approach to shopping mall location selection. *Building and Environment*, 42(2), 884-892.
- Christaller, W. (1966). *Central places in southern Germany*. Prentice-Hall.
- Christiansen, T., & Snepenger, D. J. (2002). Is it the mood or the mall that encourages tourists to shop? *Journal of Shopping Center Research*, 9(1), 7-26.
- Cohen, S. B., & Applebaum, W. (1960). Evaluating store sites and determining store rents. *Economic Geography*, 36(1), 1-35.
- DeLisle, J. R. (2005). US Shopping center classifications: Challenges and opportunities. *Research Review*, 12(2), 96-101.
- Dock, J. P., Song, W., & Lu, J. (2015). Evaluation of dine-in restaurant location and competitiveness: Applications of gravity modeling in Jefferson County, Kentucky. *Applied Geography*, (60) 204-209.
- El Samen, A. A. A., & Hiyasat, R. I. (2017). Beyond the random location of shopping malls: A GIS perspective in Amman, Jordan. *Journal of Retailing and Consumer Services*, 34, 30-37.
- Esri. (2018). *Tapestry Segmentation*. Retrieved from <http://www.esri.com/data/tapestry>

- Gose, J. (2004). *A Golden Age for Lifestyle Centers*. Retrieved from <https://www.nreionline.com/mag/golden-age-lifestyle-centers>
- Graff, T. O., & Ashton, D. (1994). Spatial diffusion of Wal-Mart: Contagious and reverse hierarchical elements. *The Professional Geographer*, 46(1), 19-29.
- Graff, T. O. (1998). The locations of Wal-Mart and Kmart supercenters: Contrasting corporate strategies. *The Professional Geographer*, 50(1), 46-57.
- Graff, T. O. (2006). Unequal Competition Among Chains of Supercenters: Kmart, Target, and Wal-Mart. *The Professional Geographer*, 58(1), 54-64.
- Graves, B. (2017). Demographic Data Vendor Bias and Retail Location Inefficiencies. Applied Geography Conference, Kent, OH.
- Guidry, K., & Montero, T. (2005). Lifestyle centers: The de-malling of consumerism. *Real Estate Review*, 34(1), 5-16.
- Hahn, B. (2000). Power centres: a new retail format in the United States of America. *Journal of Retailing and Consumer Services*, 7(4), 223-231.
- Heitmeyer, J., & Kind, K. (2007). Consumer Acceptance of Urban Open-Air Mixed-Use Centers: A Cross-Generational Comparison. *Journal of Shopping Center Research*, 14(1), 57-78.
- Hernandez, T., & Simmons, J. I. M. (2006). Evolving retail landscapes: power retail in Canada. *The Canadian Geographer*, 50(4), 465-486.
- Highland Park Village (2018). The HP Village Legacy. Retrieved from <http://hpvillage.com/legacy/>
- Huff, D. L. (1963). A probabilistic analysis of shopping center trade areas. *Land economics*, 39(1), 81-90.
- International Council of Shopping Centers. (2018). *QuickStats*. Retrieved from <http://quickstats.icsc.org/HomePage.aspx>
- Joseph, L. (2010). National Level Analysis of Major U.S. Domestic Retailers. In M. D. Rice & T. Hernandez (Eds.), *Locational Intelligence: Research and Applications* (55-69). Applied Geography Conferences Inc.
- Kim, Y. K., Sullivan, P., Trotter, C., & Forney, J. (2003). Lifestyle shopping center: A retail evolution of the 21st century. *Journal of Shopping Center Research*, 10(2), 61-94.
- Kinley, T. R., Josiam, B. M., & Kim, Y. (2003). Why and where tourists shop: Motivations of tourist-shoppers and their preferred shopping center attributes. *Journal of Shopping Center Research*, 10(1), 7-28.

- McCarty, H. H., Hook, J. C., & Knos, D. S. (1956). *The measurement of association in industrial geography*. Iowa City: University of Iowa
- Mejia, L., & Benjamin, J. (2002). What do we know about the determinants of shopping center sales? Spatial vs. non-spatial factors. *Journal of Real Estate Literature*, 10(1), 1-26.
- Mitchell, A. (2009). *The ESRI Guide to GIS Analysis Volume 2: Spatial Measurements & Statistics*. ESRI, Inc.
- National Retail Federation (2018). *About Retail Jobs*. Retrieved from <https://nrf.com/resources/about-retail-jobs>.
- Önüt, S., Efendigil, T., & Kara, S. (2010). A combined fuzzy MCDM approach for selecting shopping center site: An example from Istanbul, Turkey. *Expert Systems with Applications*, 37(3), 1973-1980.
- Oppewal, H., & Holyoake, B. (2004). Bundling and retail agglomeration effects on shopping behavior. *Journal of Retailing and Consumer Services*, 11(2), 61-74.
- Picone, G. A., Ridley, D. B., & Zandbergen, P. A. (2009). Distance decreases with differentiation: Strategic agglomeration by retailers. *International Journal of Industrial Organization*, 27(3), 463-473.
- Reilly, W. J. (1931). *The law of retail gravitation*. WJ Reilly
- Reynolds, K. E., Ganesh, J., & Lockett, M. (2002). Traditional malls vs. factory outlets: comparing shopper typologies and implications for retail strategy. *Journal of Business Research*, 55(9), 687-696.
- Rice, M. D., & Hernandez, T. (2016). Perspectives on an Evolving Research Field: Location Intelligence and Its Representation at the Applied Geography Conferences, 1978 to 2012. *Papers in Applied Geography*, 2(3), 271-283.
- Rosenbaum, M. S., Ramirez, G. C., & Camino, J. R. (2018). A dose of nature and shopping: The restorative potential of biophilic lifestyle center designs. *Journal of Retailing and Consumer Services*, 40, 66-73.
- Sanburn, J. (2017). *Why the Death of Malls is About More Than Shopping?* Retrieved from <http://time.com/4865957/death-and-life-shopping-mall/>.
- Schaefer, F. K. (1953). Exceptionalism in geography: A methodological examination. *Annals of the Association of American Geographers*, 43(3), 226-249.
- Schuetz, J. (2015). Why are Walmart and Target next-door neighbors? *Regional Science and Urban Economics*, 54, 38-48.

- Shim, S. & Eastlick, M. A. (1998). The hierarchical influence of personal values on mall shopping attitude and behavior. *Journal of Retailing*, 74(1), 139-160.
- Simmons, J. & Hernandez, T. (2008). Defining Power Retailing. *Centre for the Study of Commercial Activity*.
- The World Bank. (2018). *GDP: Current \$USD*. Retrieved from https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?year_high_desc=true.
- Thrall, G. I. (2002). *Business geography and new real estate market analysis*. Oxford University Press on Demand.
- Thomas, L. (2017). *Store closures rocked retail in 2017. Now 2018 is set to bring another round of them*. Retrieved from <https://www.cnbc.com/2017/12/26/store-closures-rocked-retail-in-2017-and-more-should-come-next-year.html>
- Thomas, L. (2018). *Mattress Firm is the latest retailer to go bankrupt. Here are others that went bust this year*. Retrieved from <https://www.cnbc.com/2018/10/05/here-are-the-retailers-that-have-filed-for-bankruptcy-so-far-this-year.html>
- Von Thunen, J. H. (1826). *Isolated State* (English edition, ed. P. Hall).
- Weber, A. (1929). *Theory of the Location of Industries*. University of Chicago Press.
- Yan, R. N., & Eckman, M. (2009). Are lifestyle centres unique? Consumers' perceptions across locations. *International Journal of Retail & Distribution Management*, 37(1), 24-42.