PITTSBURGH PURCHASING POWER PROFILES

SYSTEMS SYNTHESIS PROJECT 2004

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Executive Summary

Rationale for this Study

In a business environment where data inform virtually all decisions, reliable assessments of different communities' potential market strength is vital. However, increasing evidence suggests that conventional market assessment methods may not accurately represent the potential economic vitality of certain neighborhoods.

National research conducted by Harvard Business School's Michael Porter's Initiative for a Competitive Inner City, Social Compact, Brookings Institute, and the Employment and Training Institute at the University of Wisconsin-Milwaukee demonstrate that denser, lower-income urban neighborhoods are systemically undervalued by traditional market analysis indicators and data. The market standard metric, household income, fails to accurately reflect the comparative advantage of dense urban areas' aggregate purchasing power.

Census data, on which conventional market analyses are based, have limited ability to capture the significant 'unreported economy' that transpires in disproportionately high numbers in the inner city. Additionally, census demographic data is widely acknowledged to underreport lower-income and immigrant populations that are often distrustful of government.

In addition to using Census data as a source of information, many national marketing firms widely use a technique called "cluster marketing". This technique defines neighborhoods by segment categories that describe life-style choices and spending habits. The segment category descriptions are often over-simplified and racially and class-based. Additionally, these descriptors often provide particularly negative characterizations of lower-income segments and lack the same attention to detail as other more quantitative methods of analysis. We believe that the resulting underestimation of market strength by traditional market analyses helps fuel a cycle of disinvestment in many of our nation's urban cores.

In response to perceived deficiencies in conventional market analyses, several organizations, including those listed above have developed alternative approaches to market analyses in several US cities. These analyses use more localized information, such as state tax filings and school enrollment records and indicators more appropriate to

urban areas, such as expenditure per square mile. When compared to traditional marketing firms' analyses, their findings are intriguing and offer a more promising picture for potential investment in urban neighborhoods. For example, Social Compact found in the Columbia Heights/Petworth neighborhoods, in Washington DC, a much larger population (by 51%) and a 70% greater aggregate market income than documented in Census 2000. Research conducted by ETI in Milwaukee found an that an area designated by marketing firms as, distressed where "people who work only have part-time jobs" had roughly 4 times the income per square mile than their suburban counterparts.

Findings from these alternative market analyses in other US cities motivated a group of Carnegie Mellon University graduate students to determine whether these same dynamics held true in the Pittsburgh region. Their pilot study focused on comparing traditionally underserved neighborhoods – the Hill District and McKeesport – with neighborhoods more successful in attracting investment – South Side Flats and Monroeville.

Analysis results

The study's findings while only preliminary are intriguing. They echo discrepancies uncovered elsewhere in the country. Traditional analyses by national marketing firms do not present a strong case for development in the impacted communities of the Hill District or McKeesport. However, comparisons of traditional analyses with the alternative market analyses conducted of these four neighborhoods reveal that typically underserved areas are far more promising for investment and possess a more viable economic base than implied by conventional market analyses. For example, when using a less common, yet valuable metric, expenditure per square mile, we found that Hill District residents possess 4 times more purchasing power per square mile than their counterparts in Monroeville.

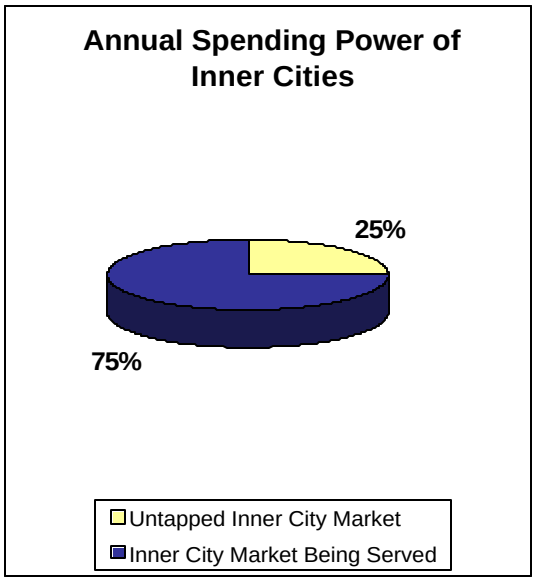
Policy recommendations

The findings of this study have implications for relevant stakeholders in the public, private, and nonprofit sectors. This study concludes that alternative market analysis methods ought to be incorporated into the business location decision process as a complement to conventional methods. Integrating these analyses into the business location decision making process holds the possibility for both social and economic gain. They can help businesses uncover previously hidden market opportunities and can facilitate revitalization of underserved communities.

I. Introduction

Business case for this project

Research suggests that America's inner-cities represent a large and untapped market. Estimates conclude that inner-city consumers represent an $85 billion in the retail market annually. However due to a relative lack of retail interest in the inner-city an estimated one-quarter, or $21 billion, of retail sales are not being provided by inner-city retailers.[1] These figures led Michael Porter, Harvard Business School Professor and CEO of the Initiative for a Competitive Inner City (ICIC) to conclude "the inner cities of the United States represents the world's largest and closest emerging market."[2] These findings have been echoed by business industry leaders. Carl Steidtmann, chief retail economist for Pricewaterhouse Coopers commented definitively "our findings point to the inner-city consumer as an untapped resource for retailers."[3] The Federal Reserve Bank of Richmond determined in a study of ten inner-city communities in the Federal Reserve's Fifth District that despite the low average incomes of urban residents their findings "support[ed] the view that a sustainable economic base exists or can be created in inner cities."[4]



Despite this research, the inner-city remains a risky-investment for the majority of retailers, and thus continues to be underserved by mainstream commercial enterprises.[5] Many factors contribute to this phenomenon, including negative perceptions, location-limiting factors such as smaller lot sizes, street widths, and limited parking, and the

[1] "The Business Case *The Business Case for Pursuing Retail Opportunities in the Inner City*, The Boston Consulting Group and ICIC (June 1998)
[2] Faye Brookman "Inner-City Lacks Marketing," *Discount Store News* Feb 22, 1999. Available at: http://articles.findarticles.com/p/articles/mi_m3092/is_4_38/ai_53997963
[3] Ibid.
[4] *Federal Reserve Board, Capital Connections Vol 3, No. 3 Fall 2001* http://www.federalreserve.gov/dcca/newsletter/2001/fall01/innercity.htm
[5] Robert Weissbourd and Christopher Berry, "The Market Potential of Inner-city Neighborhoods: Filling the Information Gap." Brookings Institution Center on Urban and Metropolitan Policy. March 1999. (9)

presumption of higher operating costs. In a business world where information shapes virtually all decisions, reliable market intelligence for inner-cities, areas with considerable obstacles to development, is vital.

However, evidence suggests that the current models and metrics employed to assess market viability do not adequately represent actual market opportunities available in inner-cities. This lack of dependable information is largely attributed to the fact that marketing firms' estimates are built almost entirely on data provided by the Federal government and used in ways inconsistent with its known strengths. Two such primary data sources are the U.S. Census and the Consumer Expenditure Survey (CEX) each of which has "serious limitations with respect to low-income households and taken together can provide an inaccurate picture of the market potential."[6]

U.S. Census reported income as a basis for expenditures is not accurate for low-income households that often expend more than their reported incomes due to the inclusion of government issued cash-equivalents. Census income estimates also fail to account for the 'unrecorded economy' – an economy estimated at $1 trillion annually which is comprised of predominately legal but unrecorded activities from nannies, tutors, and even small businesses that occur at disproportionate rates in the inner-cities.[7] The CEX is limited because it is based on a national sample and provides no local area data. Furthermore, a more detailed analysis of spending patterns reveals that one-size-fits all assumptions about spending patters based on the CEX are not accurate. Researchers have found that lower-income individuals spend a much higher percentage of their income than their wealthier counterparts.[8] Additionally, researchers have found that different demographic groups have different spending habits. For example, African American consumers make more weekly trips to the grocery store (2.2 trips per week compared to 1.8) and spend more per week ($94 compared to $85 per week) than the average shopper.[9]

By relying on marketing firms that use national-level government data to form racially and class-based segment descriptions, and models ill-suited to the urban marketplace, the assets of inner-city markets remain largely unknown to retailers. The business industry

[6] Ibid, 10.
[7] Ibid, 11.
[8] Ibid., 3.
[9] "The African American Grocery Shopper 2000" Food Marketing Institute. Research sponsored by Kraft Foods, and The Procter & Gamble Company

standard metric, average household income, does not adequately reflect spending patterns nor does it factor into account density, the key competitive advantage presented by the inner-city. The density metric is particularly important for dense inner-city communities because it can adequately predict the foot traffic that a commercial retailer can expect, as well as predict consumer expenditures on high-frequency repeat purchases.

Studies conducted by ICIC, University of Wisconsin-Milwaukee Employment and Training Institute (ETI), and Social Compact demonstrate the vastly different market analysis results that occur when using localized and density-sensitive metrics. For example, aggregate spending power in denser urban areas is better captured using income and expenditures per square mile, as opposed to household income. Their studies have revealed that overlooked inner-city markets in areas like Chicago and Milwaukee possess comparable aggregate spending power to many of their coveted suburban counterpart neighborhoods that are characterized by high income and low density. For example, CACI denigrated four Milwaukee zip code areas as "distressed neighborhoods" where people "who work have only part-time jobs." Yet, working age tax filers in these zip codes reported adjusted gross income totaling $804 million in 1999. Working age filers reported $59 million income per square mile in these four “distressed neighborhoods” while Oak Creek residents, whom CACI described on its website as "a prosperous population who have opted for semi-rural locales and lifestyles," had just $20 million adjusted gross income per square mile in 1999.[10]

We acknowledge that a business in a more advantaged neighborhood may have a larger market region than businesses of similar type that might locate in a “distressed neighborhood”, compensating for the relatively lower level of gross income inside the neighborhood proper. Nevertheless, the lack of rigorous examination of alternative measures of market opportunity, characterized as an ‘information gap’[11] between available market data and actual market opportunities, systematically undervalues inner-city markets thereby fueling a cycle of underinvestment in urban areas.

Project Scope and Justification

[10] John Pawasarat and Lois M. Quinn, “Exposing Urban Legends: The Real Purchasing Power of Central City Neighborhoods” Washington, DC: The Brookings Institute (2001). 4?
[11] Weissbourd, 12.

Inspired by the compelling research conducted in cities around the nation, a group of six Carnegie Mellon University graduate students undertook a pilot research study to assess whether the findings concerning the deficiencies in national marketing firm market analysis of inner-cities from other U.S. cities hold true in the Pittsburgh region. The ensuing study, "Pittsburgh Purchasing Power Profiles" was conducted between May and August of 2004 on behalf of the Allegheny County Department of Economic Development and the Urban Redevelopment Authority of Pittsburgh. This document describes the scope of the research consulted as well as the project's key deliverables.

We sought to answer the following questions:

- What information is used in commercial retail business location? How and by whom is this information used?
- What would result from applying alternative purchasing power profile methodology to both underserved and median comparison neighborhoods in the city of Pittsburgh and Allegheny County?
- How can alternate methodologies help to better capture hidden market opportunities?
- How can these profiles be utilized in the business location process?

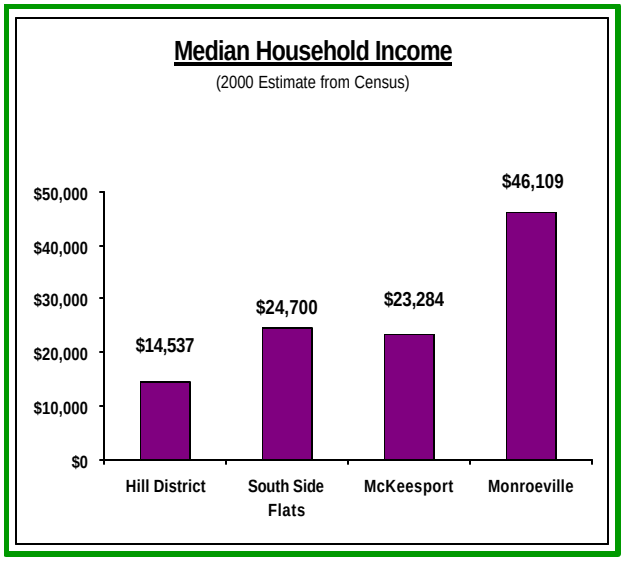
We used a multi-attribute selection process to select study neighborhoods. Ultimately, the research team focused on four neighborhoods in the region belonging to one of two categories – "impacted" neighborhoods, underserved by commercial retail enterprises, and "comparison" neighborhoods that are similar in location characteristics to impacted neighborhoods, yet more advantaged according to commercial retail investment and more representative demographically of the county overall. Impacted neighborhoods in this pilot study are the Hill District and McKeesport, two city and suburban communities, respectively; comparison neighborhoods to each of the impacted neighborhoods are South Side Flats and Monroeville.

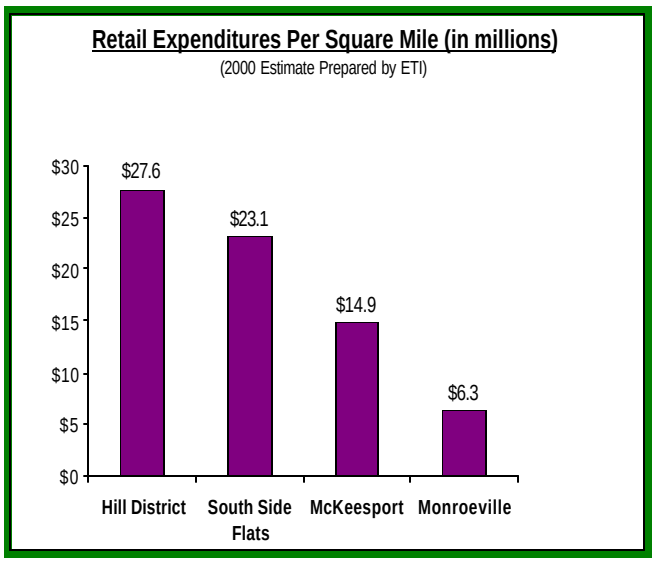
Summary of Results and Recommendations

These pilot study neighborhoods serve as a case study to compare ways in which traditional market analysis methodologies and alternate market analysis methodologies describe retail business opportunities in the Pittsburgh region. In spite of time and resource constraints that limited the number of neighborhoods that could be studied, intriguing preliminary findings suggest that lower-income, higher density neighborhoods

in the Pittsburgh region are more competitive with successful or comparison neighborhoods than traditional market analysis suggests.

The two figures below illustrate the differing images of neighborhoods presented by comparing the traditional market analysis metric, household income, with a less common, but valuable metric, retail expenditure per square mile.





Comparing these two approaches, we see that although Monroeville possesses a median household income over three times greater than the Hill District, the Hill District actually possesses over four times the purchasing power per square mile.

This analysis of metrics and data used to assess market viability has far-reaching implications that stretch across the public, private and nonprofit sectors. Our research supports using alternative market analysis methodologies to complement traditional market analysis approaches. By employing density-sensitive metrics and utilizing more reliable localized data, these alternative methodologies have the potential to better represent typically underserved areas. By more accurately capturing these neighborhoods' true spending potential, these methodologies can better advocate for the viable economic bases that often exist.

This research also concludes that several steps must be taken to ensure that these alternative methodologies impact development. First, these methodologies ought to be

introduced to relevant stakeholders. Community leaders across private, non profit and government sectors must learn about alternative methodologies and have access to these alternative market analyses. Second, the value and use alternative market analyses must be understood by a wide variety of stakeholders involved in the business location process. Real estate brokers and developers, community development corporations, and government agencies should understand the advantages of alternative methodologies and incorporate them into their market analyses. Third, the applicability of purchasing power methodologies must be recognized. For example, expenditures per square mile, while not the best metric for all business models, is especially salient for those businesses that rely on foot traffic or high frequency-repeat purchases. Fourth, more research must still be done to better understand exactly which businesses would most benefit from a density-based expenditure metric. Finally, communities must recognize that data alone are likely insufficient to influence development decisions. Negative perceptions of neighborhoods and the risk-averse nature of both businesses and lenders require a more comprehensive approach. This more comprehensive strategy may involve improving the appearance of a neighborhood and successfully courting a "pioneer business" to change conventional wisdom.

Overview of Sections

This report includes the following sections. The second section, "Project Methodology", summarizes the approach taken by the researchers as well as the main resources consulted during the course of their study. The next section, "Market Analysis", starts with a high-level overview of the business location process with specific attention to the role market analysis plays and then analyzes both traditional and alternative approaches to market assessment. "Overview of Neighborhoods" then provides a profile of the neighborhoods informed by localized qualitative research and an analysis of the 2000Census. This section concludes with a case study of one national marketing firm, Claritas, and its profiles of the four study neighborhoods. The fifth section, "Conducting a Neighborhood Analysis in the Pittsburgh Region", details the purchasing power profiles (PPP) developed in conjunction with nationally recognized PPP practitioner, the Employment and Training Institute (ETI) at the University of Wisconsin-Milwaukee. We then contrast the findings from the PPP with more traditional market analysis methodologies. The final two sections of this report summarize key findings, discuss avenues of further research and outline ways in which this pilot project can result in substantive regional impacts.

II. Project Methodology

After defining the scope of this project and roles and responsibilities of team members, the team set about conducting its research by using a phased approach. During Phase I, the team divided into two sub-teams and concurrently conducted background research. One sub-team conducted research on business location theory, process and relevant data, while the other sub-team focused on understanding conventional and alternative market analysis methodology and tools, and the information that is provided by those tools. We also determined the neighborhoods that would be selected for a subsequent neighborhood spending analysis. At the request of our project sponsors, we agreed to evaluate two neighborhoods within the city limits of Pittsburgh, and two neighborhoods in suburban Allegheny County.

During Phase II, the sub-teams uncovered information about those neighborhoods by using local, regional and national data sources and by conducting expert interviews and site visits. The team also partnered with Employment and Training Institute at the University of Wisconsin-Milwaukee to obtain spending pattern analyses for our chosen neighborhoods.

Data Sources Consulted

In assessing the information deemed most valuable by businesses making location decisions, we reviewed academic and practitioner literature and conducted interviews with local experts. We also reviewed marketing firm data to understand the information that is currently widely accessible and used by businesses. Finally, we analyzed the various stages of business location decision models and determined which actors, groups and institutions play significant roles in those decisions and the stages at which those decisions were made.

We utilized several different sources and methods of research to analyze our chosen neighborhoods. Sources of data included the 2000 U.S. Census, public state and local data, and privately funded Pittsburgh and Allegheny County neighborhood research done by the University Center for Social and Urban Research at the University at Pittsburgh. We also consulted spending power research tools, including several different quantitative methods of calculating potential expenditures. Throughout our research we also

conducted interviews with and in some cases obtained data from community experts and advisory board members. Finally, we partnered with the University of Wisconsin-Milwaukee Employment and Training Institute (ETI) to develop expenditure reports for our four neighborhoods. Our data sources are summarized as follows:

Source	Type of Information
US Census	General Population Statistics General Household Statistics Education and Labor Force Statistics
Public State and Local Data	Pennsylvania Department of Revenue ▪ Income Statistics Information Allegheny County Department of Economic Development ▪ Tax Revenue and Collection Statistics
Privately Funded Pittsburgh and Allegheny County Research	University Center for Social and Urban Research • General Population Statistics
Spending Power Research	Social Compact Initiative for Competitive Inner Cities
Marketing Firm Data	ESRI Claritas
Milwaukee Employment and Training Institute	Expenditure Reports • Developed using Census data and localized Regression model
Expert Interviews	Qualitative subject matter insight into study neighborhoods and business location process.

Criteria for selecting neighborhoods

In order to analyze the value of localized purchasing power studies and to compare the results of our neighborhood purchasing power analyses within and across neighborhoods, the selected neighborhoods fall into two broad categories – 'impacted' and 'comparison.' Impacted neighborhoods are those deemed to be underserved in terms of commercial investment and that meet certain criteria outlined below. The comparison neighborhoods are deemed to be neither underserved, nor grossly over-served, but rather neighborhoods

receiving a median amount of commercial investment with respect to county-wide averages.

The first selection criterion addressed location. It was determined that one of the impacted neighborhoods would be located within the limits of the city of Pittsburgh. The other impacted neighborhood would be located within Allegheny County, but outside of the Pittsburgh city limits. Similarly, one comparison neighborhood would be located within the city limits of Pittsburgh and the other comparison neighborhood would be located within Allegheny County, but outside of the Pittsburgh city limits. This criterion was chosen to ensure that our neighborhoods represented various regional geographic locations.

The second criterion we addressed was population density. It was decided that no specific population density threshold would be utilized in assessing neighborhood eligibility. Rather neighborhood eligibility based on population density would be established by a comparison of the two Pittsburgh city neighborhoods and two Allegheny County neighborhoods. Impacted and comparison neighborhoods would be eligible only if the impacted neighborhood had a higher density than its comparison counterpart. It was decided that the impacted neighborhood must possess a density that was higher than that of the comparison neighborhood. Neighborhood density was calculated using U.S. Census 2000 population estimates and square mileage of census tracts that were included in each neighborhood.[12] This criterion was decided upon to ensure that we were able draw clear preliminary conclusions about the effect of density on traditional and alternative market analysis methods.

The third criterion we addressed was median income. It was determined that the impacted neighborhoods were to have lower median incomes than their comparison neighborhood counterparts. We determined that the median income of the comparison neighborhood was to be at least 50% higher than that of the impacted neighborhood. Additionally, we looked at the distribution of households in different income brackets to better assess the range of incomes within the selected neighborhoods. Census 2000 median household income information was the resource consulted. This criterion was

[12] See appendix for explanation of census tracts included in each neighborhood and the zip codes approximating each neighborhood.

decided upon to ensure that the chosen 'impacted' and 'comparison' neighborhoods would reflect different amounts of money flowing into the community, and thus reflect different amounts of potential spending power under traditional market analysis.

The fourth criterion was that both impacted and comparison neighborhoods must have a business corridor. Business corridor was defined as an area or tract of land in which businesses can legally and in compliance with zoning regulations locate. This criterion was decided upon to ensure that every community chosen had the potential to accept commercial investment.

The fifth criterion regarded commercial investment. We determined that in impacted neighborhoods there should be relatively little commercial investment as determined qualitatively by the number of businesses open in the neighborhood as well as through interviews with community stakeholders. In contrast, we determined the comparison neighborhoods ought to experience relatively more commercial investment, which was also determined through assessing the number of businesses. This criterion was decided upon to ensure that the amount of commercial investment in our chosen communities was different.

After reviewing several candidate neighborhoods, we selected the following neighborhoods for this study:

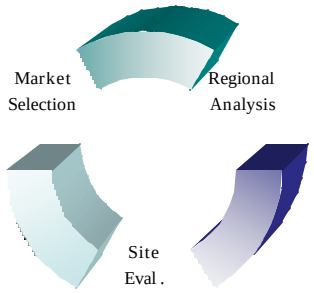
	City of Pittsburgh	Allegheny County
'Impacted' Neighborhood	Hill District	McKeesport
'Comparison' Neighborhood	South Side Flats	Monroeville

III. Market Analysis: Process and Data Sources

Business Location Process

General Business Location Model

In the book, 'Location Strategies for Retail and Service Firms,' business location methodology is defined as involving several key phases, including (1) Market Selection, (2) Regional Analysis and (3) Site Evaluation[13] (see model below).



Market Selection

In the first phase, market selection, regions or metropolitan areas are selected for business location based on demographic information such as population size, growth characteristics, income potential, level of competition, and regional economic base. At this phase, businesses also consult the following indexes when measuring the potential of markets[14].

- B.P.I. (Buying Power Index)
- PPP index (a graduated BPI which describes the purchasing power within households along all income levels)

Regional Analysis

After conducting research with a broad geographic scope, the next phase of the model is regional analysis which evaluates the spatial structure of different location sub areas in

[13] Avijit Ghosh and Sara L. McLafferty, "Location Strategies for Retail and Service Firms," Lexington Books, 1987. 10-15.
[14] Ibid, 18.

terms of their market potential and level of competition. At this phase, businesses consider detailed regional information including such measures as: [15]

- Total population
- Number of households
- Population by race
- Gender
- Marital status
- Income level
- Educational obtainment level
- Commute time to work

Site Evaluation

During the site evaluation phase, specific characteristics of selected individual sites are compared. During the site evaluation phase, businesses measure the demographic characteristics of target sites by looking at characteristics such as real estate, cost of development, traffic flow patterns, and ingress and egress qualities[16]. A more detailed description of these demographic characteristics follows:

- Local Demographics (includes: population base of the local area; and income potential within the local area).
- Traffic Flow and Accessibility (includes: number of vehicles; type of vehicles; number of pedestrians; type of pedestrians; availability of mass transit; access to major highway; level of street congestion; and quality of access streets).
- Retail Structure (includes: number of competitors in the area; number and types of stores in the area; and proximity to commercial areas).
- Site Characteristics (includes: number of parking spots available; distance of parking lots/spaces; visibility of site from street; size and shape of the lot; condition of existing building (if any); and ingress and egress quality).
- Legal and Cost Factors (includes: type of zoning; length of lease; local taxes; operations and maintenance costs; and restrictive clauses in lease).

[15] Ghosh, 35.
[16] Ibid, 37.

Exceptions to these strategies

The business location model described above is a generalized description of the typical process that many businesses follow when making site location decisions. It is important to note, however, that it is difficult to describe a 'one-size fits all' business location model, as the vast majority of companies adopt their own set of unique and proprietary location strategies when making decisions. Often, companies employ these proprietary, weighted multi-attribute facility location models to assist in locating new facilities.

Some alternative approaches are discussed in the text 'Service Management: Operations, Strategy and Information Technology.' Below are some of the location decision strategies which do not follow the conventional model that was discussed in the previous section[17].

- Competitive Clustering – this strategy involves locating a business, such as a hotel, in a location where there is lots of competition but where many customers would cluster (ex. locating a hotel off an interstate highway).
- Saturation Marketing – similar to the competitive clustering, this location strategy is to locate businesses in very close proximity in urban and other high-traffic areas).
- Marketing Intermediaries – this is a new strategy in business location where a business is not looking for where to open their business but how to get people to purchase their product. An example would be a visa card, where people do not go to a business to sign up for a card but they use the card at businesses all over the world.
- Substitution of Communication for Transportation – this model deals with businesses abandoning the model of locating a business within a city, that has the benefit of having a high population density, and instead locating in the suburbs where people may have more access to transportation (example: more clients in the suburbs may purchase insurance than in the urban core which is more important than the high levels of communication that could occur in the city).

Literature review of the location decision process

In performing this market analysis, a literature review of several academic articles and papers on the business location process was also conducted. One of the academic papers

[17] James A. Fitzsimmons and Mona J. Fitzsimmons, "Service Management: Operations, Strategy, and Information Technology, 3rd Edition, Irwin/McGraw-Hill, 2001."

was 'Business Location Decision-Making and the Cities: Bringing Companies Back,' a working paper from the Brookings Institute. The paper discusses the importance of understanding the distinction between location and site in the business location decision making process. Listed below are factors that businesses consider when making a location decision[18]:

- Skill level and suitability of the labor market
- Availability and cost of housing
- Adequacy of transportation systems
- Access to suppliers and contractors
- Proximity to natural resources
- Presence of competitors
- Positioning within the market for the company's product
- General taxation levels and tax policies of the state
- Workers compensation costs

Once a location is selected the next step is to find a site, which could mean a specific building within the location or a parcel of land that 'fits the company's strategy and cost structure.' Below is a list of the many of the typical site characteristics assessed[19]:

- Road/train/truck access
- The presence or absence of tax liens
- Title complexities on the property
- Cost and availability of water, sewer, solid waste disposal
- Telecommunications capacity
- Possible environmental remediation

Businesses usually have several locations and sites to choose from. While some businesses employ outside location strategists, most often companies will make decisions on their own by doing a 'drive-by, which will create enough of an impression to lead to a location decision.'[20] Those who do use outside location strategists may employ site selection

[18] Natalie Cohen, "Business Location Decision-Making and the Cities: Bringing Companies Back," *The Brookings Institution Center on Urban and Metropolitan Policy*, April 2000 (2).
[19] Ibid, 3.
[20] Ibid, 3.

consultants such as the firm, Bartram and Cochran, who provide the service of researching the salary levels of 'over 2,500 job titles in 298 metropolitan areas.' Corporate real estate analysts may also be hired and may consider 'between 30 and 50 possible locations before deciding on a shorter list.'[21]

Our research confirmed that businesses have different strategies and processes when making location decisions and the specifics of these strategies are often tightly held company secrets. It is rare that firms reveal their location decision processes to the public. Even within the same firm, only a small number of people understand the business location procedure completely. As mentioned earlier, firms may have an in-house team that makes location decisions and other companies may choose to hire local developers or brokers. Additionally, developers and brokers may pitch sites to businesses within a particular region.

In addition to the business location model, it was also important for our research to understand how national marketing firm data plays an important role in location decision. We found that location decisions, whether they are made by in-house site selection staff or from suggestions of developers and brokers, are largely based on marketing firm data which usually enters the location decision at an early stage. [22]

Business location process example

In an interview conducted in June 2004 with Rob Stephany, Real Estate Director for East Liberty Development Incorporated in Pittsburgh, Mr. Stephany described a different business location model that one pioneering company used when making what many considered a risky business location decision in the city's East Liberty neighborhood.

Mr. Stephany was involved with a community development project in East Liberty to try and bring a franchise of Whole Foods, the world's largest natural and organic foods supermarket, to the transitional Pittsburgh neighborhood. Mr. Stephany commented on his perception of how Whole Foods made the business decision to locate in East Liberty. He acknowledged that like other businesses, Whole Food employed a proprietary location model with key indicators such as population, educational attainment, income, and

[21] Cohen, "Business Location Decision-Making and the Cities: Bringing Companies Back." (page number?)
[22] For a diagram outlining the early business location process, see appendix.

discretionary spending habits of a given community. However, Whole Foods' differed in their approach to site location:

> "Whole Foods is known when making site location decisions to find their target location and the bulls-eye within that the location (otherwise described as the intersection of wealth) but are savvy enough to consider locating on the edge of the bull's-eye."[23]

Mr. Stephany credited this strategy as the critical factor in how East Liberty was able to gain a Whole Foods over more affluent city communities in Pittsburgh. Whole Foods' pioneering bulls-eye approach proved to be a success: the East Liberty Whole Foods store has been one of the chain's best-performing stores since its October 2002 opening.[24]

Data metrics

While some businesses may consult local government agencies and community development corporations to provide local data for a region or neighborhood, the most widely used data source that businesses use for market analysis is the U.S. Census. Below is an example of the Census metrics one firm uses in a 1, 2 and 3 mile radius of a target location to inform business location decisions[25].

- Median household income
- Population demographics by race, age and gender
- Population density
- Median age
- Educational attainment
- Home value
- Vehicle ownership
- Occupation breakdown of a region

Again, the data metrics selected, if in fact a business chooses to do their own data analysis, are unique from firm to firm and are regarded as proprietary information. However, our research found that many businesses initially do not conduct their own data analysis but

[23] Interview conducted with Rob Stephany, June 2004.
[24] "Major East End projects spur developer activity," Suzanne Elliot, *Pittsburgh Business Times* April 2004 (1).
[25] Ghosh, 36.

instead rely on national marketing firms to produce demographic/expenditure/income profiles on the targeted census tracts that businesses are considering.

Conventional Market Analysis Methods

National Marketing Firms' Approach

Marketing firms play a critical role in informing how and where businesses decide to locate. These firms often provide the first impression of neighborhoods and produce the data that are utilized in business location decision models; therefore, understanding how these marketing firms arrive at their analyses is extremely important.

Large national marketing firms offer a range of reports, services, and products that present data about markets largely by *clustering* - classifying neighborhoods according to a template of neighborhood types developed by each firm. These classifications are based on demographics, lifestyles, and spending habits of both neighborhoods and households. They are vitally important because they are often used to determine and rank the commercial viability of neighborhoods. This classification approach, which is based on numerous variables but depends highly on household income essentially, divides neighborhoods[26] into "winners" and "losers".

Cluster marketing, now widespread, has its genesis in President Lyndon Johnson's War on Poverty when the US Office on Economic Opportunity (OEO) funded research to rank neighborhoods. Contracted by OEO in 1966, Jonathan Robbin used Census files and federal statistical data to developed indices to compare neighborhoods including a "Poverty Index" and an "Index of Susceptibility to Civil Disorder."[27] Subsequently, Robbin founded a marketing firm, Claritas, which offered these services for purchase to business and government clients. Claritas originally created 40 PRIZM clusters (Potential Ratings in ZIP Markets) using 1970 Census data, and placed each zip code, census tract, and census block group into one of these categories: this methodology has formed the basis for many national marketing firms.

[26] Pawasarat, 8.
[27] Ibid.

NMF sources and methodology

According to consumer trade magazine, *American Demographics*, when it comes to the cost of purchasing this information, 'for a price ranging from $500 to $100,000, these [market analyses] technologies promise to advance the techniques of geodemographic cluster classification from the realm of art to the domain of science.'[28]

In addition to the PRIZM[NE] cluster system from Claritas Inc., referenced above, other major marketing information firms that offer cluster services include: *Community* from ESRI; MOSAIC from Applied Geographic Systems/Experian; *Personicx* from Acxiom; and PSYTE U.S. from MapInfo. These five organizations compete in what is estimated to be a $100 million subset of the marketing information landscape.[29]

Most marketing methods use U.S. Census data as their source for quantitative data. A breakdown of three of the major marketing firms and systems that use cluster marketing, as well as the data they use and sample categories are summarized in the table below.

Overview of Sample Firms Using Cluster Marketing:

Firm	Cluster Index	Data Sources Consulted	Sample Categories
Claritas	PRIZM NE	-Based primarily on Census data and projections models	-14 neighborhoods divided into 66 segments -Example segments include 'upper crust (01), 'young digerati' (04), 'suburban sprawl' (30), 'shotguns and pickups' (51), 'low rise living' (66) -Example of neighborhood classification is 'urban core' which is described as poor renters whose lifestyle preferences are to (1) buy gospel music and (2) shop at footlocker
ESRI	Community Tapestry	-Based upon over 60 attributes of socioeconomic and demographic info -Sources cited are Census 2000, proprietary ESRI BIS	-65 market segments with 12 Lifemode summary groups based on consumption patterns and 11 urbanization summary groups with similar density.

[28] McManus, 2.
29 John McManus, "Street Wiser - advertising in the 'Fort Worth Star-Telegram,'" July 1, 2003. *American Demographics* (1).

Firm	Cluster Index	Data Sources Consulted	Sample Categories
ESRI (continued)	Community Tapestry (continued)	2003 demographic updates, the Acxiom InfoBase consumer database, the Mediamark Research Inc. national consumer survey	-Example segments include 'top rungs' (01), 'international marketplace' (35), and 'city commons' (64)[30]
Experian	MOSAIC	-INSOURCE Database includes data such as telephone directory white pages, property/realty records, mail-order transactions, aggregated credit information and Census data[31]	-Clusters much of the world using Global MOSAIC which divides world population into 14 lifestyle types 'that can be found in every modernized country[32]

Alternative Approaches to Market Analysis

Due to the growing concerns in recent years about national marketing firms generalized classifications of neighborhoods in America, a number of new and innovative approaches to market analyses have emerged. These alternative approaches to market analyses have differed from traditional market analysis models in a number of ways. First, they rely more heavily on state and local data to inform their models rather than Census and national data. Additionally, many use a 'per square mile' rather than the 'per capita' metric in order to better account for the density in urban communities and areas.

Alternative Market Analysis Approach #1 – 'Purchasing Power Profiles'

Research Group: Milwaukee Employment and Training Institute at the University of Wisconsin Milwaukee[33]

[30] ESRI website http://www.esribis.com/pdfs/ctsegments.pdf
[31] Experian website http://www.experian.com/whitepapers/experian%5fdata%5fwhite%5fpaper%5f2002.pdf
[32] Ibid.
[33] http://www.uwm.edu/Dept/ETI/purchasing/milw12.htm

The Purchasing Power Profile performed in Milwaukee County, by the Employment and Training Institute (ETI), calculated purchasing power for several different zip codes. The Institute relied primarily on local data to inform their findings.

ETI utilized the following data metrics:

- Wisconsin Departments of Revenue and Transportation annual income tax data
- U.S. Census Bureau data
- U.S. Postal Service data
- Home Mortgage Disclosure Act data
- Federal Health Care Financing Administration current estimates of the elderly population
- Detailed studies of consumer spending patterns based on the Bureau of Labor Statistics Consumer Expenditure (CEX) Surveys of residents in large Midwestern cities. (This methodology was developed by Frank Stetzer and John Pawasarat of the University of Wisconsin-Milwaukee after consultation with Bureau of Labor Statistics staff regarding strengths and limitations of the CEX data and reviewing the methods used by national marketing firms to estimate spending.)

The research in Milwaukee utilized current income tax filing data by zip code and block for all of Milwaukee County. The data considered total adjusted gross income by zip code and block, as well as income ranges by types of households at the zip code level. Spending patterns were calculated for elderly persons and for four types of working age income tax filers: married filers with dependents; single filers with dependents; single filers without dependents; and married filers without dependents. To insure confidentiality of all tax data, detailed statistics were analyzed at the zip code level, while summary statistics (total Aggregated Gross Income, number of married and single filers, Earned Income Tax Credit claims) were reviewed at the block level.

This analysis of city purchasing power uses income tax data as the primary source of current information about the annual income of city and suburban residents. These tax data have important advantages over Census data. Tax data is available annually and therefore provides a more comprehensive listing of income than may be typically volunteered during the U.S. Census or on survey research projects. Also, tax data can be used to compare city and suburban neighborhoods using a common measurement system. Nevertheless, tax data also has important shortcomings. It can understate total income

for upper and middle-income residents, due to tax law provisions regarding reporting of rental property, self-employment business expenses, and tax-deferred annuities. The tax data can also understate income in lower-income neighborhoods where some workers may not file tax returns. Across all income groups tax data also does not completely capture unreported earnings from the "cash economy."

However, current income tax data does appear to be the preferable choice when conducting an analysis of a region as opposed to the ten-year U.S. Census reports that are used as the primary basis for making spending estimates by most commercial marketing firms.

Another reason for using current income tax data is that ETI found substantial undercounts in both population and income sources between the 1990 and 2000 Census in Milwaukee. Given the sense of resistance of many people to complete Census surveys, the data obtained is likely unrepresentative of the true neighborhood trends.

Alternative Market Analysis Approach #2 – 'Drill Down' Studies

Research Group: Social Compact

Social Compact's approach to market profiling begins with Census demographics as a baseline data source. Social Compact methodology then compares Census figures against local sources of data, including commercial, proprietary, and public data.

Local entities, such as local government departments, social services, or non-profit organizations often have far greater access to pockets of detailed information than the national Census takers. Public birth and death records, local voting districts, driver registration, credit check agencies, for example, can all provide data on their local areas of expertise which is typically more accurate than what can be pulled from national level estimates such as the Census or national marketing firms. Social Compact works to identify and connect with local institutions that are trusted and respected within the community in order to obtain information that is as accurate as possible.

The Drill Down methodology typically reveals substantial differences between Census demographics and the numbers found through aggregating local sources. The recent 2003 profiling of Jacksonville, Florida, for example, found that while the Census reported a

1.4% decrease in population, aggregation of detailed local data sources found instead a 13.3% increase. Census data also reported a 0.7% decline in the number of households from 1990 to 2000 while the drilldown found a 13.9% increase.[34] These types of gaps in estimates extend not just to population counts but more compellingly, to estimates of income and spending power.

This different picture of a neighborhood or region painted by Social Compact's Drill Down methodology can prove quite compelling in some instances. In Houston, Texas, a Social Compact analysis found not only a larger population, but also found a residential income of $3.4 billion and $443 million in a local cash economy. These estimates were significantly higher than traditional market analysis based on Census data implied. Houston developer Ed Wulfe promptly began using the new Social Compact estimates to attract large companies such as Lowe's, Marshall's, Old Navy and Ross Dress for Less to a redevelopment effort of the 40 year old Gulfgate Mall. As a result, the occupancy rate for the mall shot up to 90 percent from its 1999 rate of 40 percent.[35]

The differences in results obtained through Drill Down methodology and Census research can be attributed to a number of factors. For example, inner cities tend to consist of compacted and often heterogeneous population mixes. Additionally, population clusters separated by only a few miles or blocks can look very different from one another. This may result in inaccurate data collecting which Census and national marketing firms use to make population projections. Again, it is important to note that Census and national marketing firm sampling techniques are typically more successful in low density, more often homogenous suburbs where the population may look very similar from one mile to the next.

Census sampling can often be further skewed by disinterest of citizens or mistrust of federal data gatherers for example, which results in low response rates. This has been especially problematic with first generation immigrants as their mistrust of authority often extends even to local entities. To help lessen such impacts, Social Compact attempts to identify partner organizations that are respected and trusted within the community. Community development corporations and other nonprofits, for example, often collect

[34] Social Compact website. http://www.socialcompact.org/researchkeith.htm
[35] Federal Reserve E-Perspectives, "Houston Strikes It Big with Drilldown, Volume 3, issue 4, 2003, reprinted at http://www.dallasfed.org/ca/epersp/2003/4_2.html.

data about the groups that they serve. Local entities that have the trust of the citizens they serve are often able to access much more reliable personal data from the citizens.

Alternative Market Analysis Approach #3

Research Group: Initiative for a Competitive Inner City

The Initiative for a Competitive Inner City (ICIC) is an example of an approach that attempts to take the drill down profile a step further by uncovering patterns of where and how an area's residents use their spending power. The Initiative's approach has grown out of its founder Dr. Michael Porter's initial strategy, which was to challenge a number of typical market perceptions concerning inner city residents and their potential of becoming profitable markets.

Similar to Social Compact, ICIC begins by using Census data as a baseline and then supplements the data with local information. ICIC's unique strength lies in challenging the assumptions made about an area based on its demographics while simultaneously striving to highlight the inner city's strengths. While the inner city's strategic location and easy integration into regional markets, availability of workforce, and other comparative advantages are highlighted, the research puts forth the case that these areas in themselves contain a profitable market. For example, ICIC estimates that inner-cities represent a market size of about $85 billion that is being consistently under serviced by a lack of suppliers within the neighborhoods.[36]

The standard assumption is that an area with a low median income will not be a profitable market for businesses. This assumption ignores the number of dollars available per square mile. Urban areas often have denser populations than suburban areas, which means that collectively the denser population has as much or more spending power than many higher income suburban areas.

To better describe a neighborhood's market potential, ICIC relies on household surveys and interviews to uncover how an area's residents distribute their disposable income.

[36] Pricewaterhouse Cooper and Initiative For A Competitive Inner City, "The Inner City Shopper, A Strategic Perspective" Jan., 1999. Available at http://www.icic.org/Documents/pdf_1_The_Inner_City_Shopper.pdf.

ICIC's research goes a step further to attempt to describe exactly what types of markets were missing out on these tremendous revenue sources. The ICIC surveys revealed not only how much inner city residents spent on clothing and apparel, electronics, food items, etc, but also a number of useful trends in what types of clothing, electronics, and food items inner city residents seemed most predisposed to purchase. This type of specific breakdown in spending data, uncovered by ICIC surveys, can provide compelling evidence to potential business investors when analyzed on a local level.

There are, however, several limitations of this methodology. The reliance on survey data opens the door to potential flaws and biases and often the information is difficult to fully confirm for accuracy. Even more problematic are many of the same challenges the Census faces: the survey methodology is biased towards English speakers and response rates from non-native English speakers are likely to be much lower.

The survey aspect of ICIC methodology is not likely to be completed within a tight time constraint; however larger trends in urban spending patterns described in the 1998 report, *The Inner-City Shopper: A Strategic Perspective*, and followed up in the 2000 report, *Inner City Shoppers Make Cents (and Dollars)*, can still be used to suggest what kinds of patterns one might expect to find in many of the U.S.'s inner city neighborhoods.[37]

While these three alternative approaches are not without their flaws, their use of localized data sources and different metrics to supplement Census data and marketing firm analysis methods are helping many businesses to understand a more accurate picture of urban spending patterns, comparative advantages, and potential economic competitiveness.

Limitations of Conventional Neighborhood Profile Tools

The marketing data available on inner-cities in America has come under scrutiny for the imperfections surrounding the data used to assess the economic strength of inner cities. As discussed, a large portion of the data that businesses use for market analysis comes from the income data reported by the U.S. Census. While this reported income data is generally reliable for the middle income and upper income neighborhoods, it often does not paint an accurate picture of lower income neighborhoods.

[37] Ibid, *2nd Annual Inner City Shopper Survey: Inner City Shopper Make Cents (and Dollars)*, May 2001, Available at http://www.icic.org/research/pubs_and_studies.asp#a6.

Issues of undercounting and underreporting also occur when the Census gathers information on inner city areas. Again, these underreporting issues do not capture the hidden economy in inner city neighborhoods and therefore do not report accurately the disposable income of the inner city. In inner city neighborhoods, 'household expenditures have been reported to be as much as 30 percent larger than household incomes.'[38]

The use of Census income data by marketing firms is widespread according to the Brookings Institution paper, 'The Marketing Potential of Inner-City Neighborhoods: Filling the Information Gap," which states that the leading marketing companies in America base their assessments on market potential for an area on two primary data sources: the U.S. Census and the Consumer Expenditure Survey.[39] The paper describes one of the issues with the U.S. Census is that there is a "growing discrepancy between income-based and expenditure estimates of the standard of living"[40] and that the income reported in the Census is not an accurate data source for this type of purchasing power indicator.

The other data source that the paper takes issue with is the Consumer Expenditure Survey (CEX). This is because CEX is a national sample, and thus does not provide data at the local, neighborhood level. '[As] a national sample, (CEX) is insufficient for capturing the local specificity of each market—specificity that is crucial in business analysis.'[41]

However, while this market analysis has discussed at length the deficiencies in Census and national data, one of the most serious issues surrounding marketing firm data and their methodology is the assertion that marketing firms use strong qualitative descriptors and generalizations in their summaries.

A study by the FannieMae Foundation examined why African American neighborhoods had fewer local retail stores and services than similar white neighborhoods. They found that it had nothing to do with the neighborhoods purchasing power or income, but that it was a result of 'inaccurate stereotyped marketing information about black neighborhood

[38] Daniel Slesnick, "Consumption, Needs and Inequality," *International Economic Review,* August 1994, (1)
[39] Weissbourd, 2.
[40] Slesnick, "The Standard of Living in the United States,' Review *of Income and Wealth,* December 1991.
[41] Weissbourd, 2.

attributes and personal consumption preferences, or of racially biased business decisions.'[42]

A report published by an international marketing firm, CACI states that African Americans in Milwaukee, 'splurge on fast food and spend leisure time going to bars and dancing.'[43] ETI further reported that cluster marketing firm, Claritas, described African American families residing on the north-side of Milwaukee as 'very low income families who buy video games, dine at fast food chicken restaurants, and use non-prescription cough syrup.'[44]

We believe that the qualitative descriptors that national marketing firms use to describe neighborhoods hinder urban dense neighborhoods' ability to attract commercial investment. Businesses that use marketing firm data as their sole resource for evaluating individual neighborhoods are not getting a complete picture of all neighborhoods. Furthermore, by looking primarily at Census income in urban areas businesses may not be receiving the full picture of these neighborhoods. This point is emphasized by findings from researchers at ETI who remarked that "typical market research firm uses a deficit-based model of city neighborhoods overlooking the income density attributes that could make them attractive to retailers."[45]

Our analysis of national market firm market assessment led us to conduct our own assessments of four neighborhoods in Allegheny County to find out which neighborhoods are currently well positioned to receive commercial investment according to conventional and alternative market analysis methods.

[42] Amy Helling and David Sawicki, 'Race and Residential Accessibility to Shopping and Services,' *FannieMae Foundation*, Volume 14 Issues 1 & 2.
[43] Lois M. Quinn and John Pawasarat, "Confronting Anti-Urban Marketing Stereotypes: A Milwaukee Economic Development Challenge," *June 2001*. http://www.uwm.edu/Dept/ETI/purchasing/markets.htm
[44] Ibid.
[45] Ibid.

IV. Overview of Study Neighborhoods

To supplement both the national marketing firm and alternative PPP analyses of our neighborhoods, we conducted both qualitative and quantitative research to obtain a more complete picture of our four study neighborhoods. Our analysis included consulting federal, state, and local data sources in conjunction with conducting site visits and interviews with leaders in each of these four communities. We summarized our research through profiling these neighborhoods across five dimensions relevant to business development and investment. They are physical characteristics, population characteristics, infrastructure development, reputation, and assets and challenges. Our neighborhood overviews are organized by location. We compared the Hill District to South Side Flats in the city of Pittsburgh and McKeesport to Monroeville in Allegheny County suburbs.

City Neighborhoods: Hill District and South Side Flats

The two city neighborhoods that were studied in our purchasing power assessment were the Hill District and the South Side Flats.

Physical Characteristics

South Side Flats is located south of downtown and Oakland. South Side Flats covers 0.96 square miles and census tracts of 1609 and 1702. It is bounded by the Liberty Bridge to

the West and Becks Run Road to the East. The Southern boundary is primarily East Mount Washington Road with the Monongahela River serving as the northern boundary.

The Hill District is located directly east of downtown. It covers 1.38 square miles and encompasses five census tracts. They are 506, 501, 305, 509, 510 and 511. The Hill District is bounded by Bigelow Boulevard and Ridgway Street to the North, Bigelow Boulevard to the East, Centre Avenue, Sutherland Avenue, Bentley Avenue, and Fifth Avenue to the South, and Crawford Street to the West.

Population Characteristics

South Side Flats' population is approximately 5,726 according to the 2000 Census. The population density is 5,965 people per square mile. The South Side Flats is 95% white and the median annual household income is approximately $24, 700. A little more than one-third of the households earn over $35,000 and roughly one-third of the households earn less than $15,000 annually. The median income for a household in the city of Pittsburgh is $28,588. Thus, the South Side Flats' median income of $24,700 is slightly below the city's median. However, more than one-third of South Side Flats' households earn at or above the city's income median.

By comparison, the population of the Hill District is approximately 11,825 according to the 2000 Census. The population density is approximately 8,596 people per square mile. The Hill District is 92% black. The median annual income is approximately $14,536. Close to 18% of the population earn over $35,000 annually, while 61% earn less than $15,000. As stated earlier, the median income for a household in the city of Pittsburgh is $28,588. Thus, the Hill District's median income of $14,453 is significantly below the city's median. Additionally, at least two-thirds of the Hill District households earn less than the city's income median.

Infrastructure Development

The primary business corridor in South Side Flats is East Carson Street. The Liberty Bridge, South 10th Street Bridge and Birmingham Bridge, located at each end of the East Carson Street corridor, serve as major connections to Downtown and Oakland. East Carson Street is home to many businesses, including some large retail chains and smaller retail businesses.

Many residents continue to walk or use public transportation for commercial retail access. Local drivers are forced to compete with non-residents for on-street parking. Public transportation is provided by the Port Authority Transit of Allegheny County (PAT). Currently, 17 bus routes pass through South Side Flats and provide South Side residents with service to both Downtown and Oakland. The Monongahela and Duquesne Inclines also serve the South Side with service to Mt. Washington.

The Hill District's primary business corridor is Centre Avenue. The Hill District is accessible via Bigelow Boulevard, a heavily traveled road connecting the Hill District to Downtown. The Birmingham Bridge connects the lower portion of the Hill District called Uptown to the South Side Flats. Fifth Avenue and Center Avenue both run through the Hill District, Oakland and Shady Side.

Centre Avenue, while once a bustling corridor is now home to only a few businesses. There is very little retail or other types of business activity on Centre Avenue. Much of the corridor is now littered with abandoned retail store fronts. Currently 5 buses service the Hill District.

Reputation

South Side Flats is transitioning from an older working class Eastern European neighborhood, to a young and trendy area that attracts college and professional students. It is also known for its strong Eastern European legacy and its vibrant business district.

The Hill District is generally seen as a poor African-American community. It is most often associated with drug activity and sporadic violence. The Hill District is frequently referred to as an unsafe neighborhood.

Assets & Challenges

South Side Assets

- Numerous facilities in East Carson commercial district
- Easy access to public transit
- Stable residential organization and community
- High standard Victorian architecture

- Short distance to Downtown and Oakland
- Access to riverfront and rail

Hill District Assets

- Strategically located between Downtown and Oakland
- Historical Significance- Former jazz showcase
- Picturesque views of the rivers
- Revitalization Projects are underway

South Side Challenges

- Shortage of parking
- Heavy traffic on East Carson Street
- Limited availability of retail properties
- Inflated retail property values

Hill District Challenges

- Limited Commercial Investment
- Overcoming Negative Image
- Crime

County Neighborhoods: McKeesport and Monroeville

The two county neighborhoods that were studied in our purchasing power assessment were McKeesport and Monroeville.

Physical Characteristics

The City of Monroeville is located about 10 miles east of Pittsburgh and is approximately 19.5 square miles. The City is very accessible with Routes 48 and 22, the Parkway East and the Pennsylvania Turnpike both feeding in nearby. Wes Blaha, executive director of the Monroeville Area Chamber of Commerce, said Penn DOT studies have shown the junction of Routes 48 and 22, is the second-busiest intersection in the state.[46]

[46] Tom Schooley, "Monroeville Landmark May Become Retail Site," *Pittsburgh Business Times*, July 26, 2002. Available at http://pittsburgh.bizjournals.com/pittsburgh/stories/2002/07/29/story5.html

The City of McKeesport is located roughly 13 miles from downtown Pittsburgh and is just over 5 square miles in size. McKeesport is relatively difficult to access given the severe topography and the lack of a major highway in the community. Most significantly, McKeesport is not easily accessible from Pittsburgh's airport. Located at the confluence of the Youghigheny and the Monogahela Rivers, McKeesport is bordered by several communities; Dravosburg, Glassport, Port Vue, West Mifflin, Duquesne, White Oak, Versailles, and Liberty.

Population Characteristics

The population of Monroeville is approximately 29,349 according to the 2000 Census. The population density is approximately 1,483 people per square mile. Monroeville is 86% white and 8% African-American. The median annual income is approximately $46,108. Close to 62% of households earn over $35,000 annually, while 13% earn less than $15,000. The median income of households in Allegheny County is $40,360. Thus, Monroeville's median income of $46,108 is slightly above the county's median.

McKeesport's population is approximately 24,045 according to the 2000 Census. The population density is 4,805 people per square mile. The city of McKeesport is 73% white and 25% African-American. The median annual income is approximately $23,283. A little more than one-third of the households earn over $35,000 and roughly one-third of the households earn less than $15,000 annually. As stated earlier, the median income of households in Allegheny County is $40,360. Thus, McKeesport's median income of $23,283 is significantly below the county's median.

Infrastructure Development

In Monroeville, major retail businesses include the Monroeville Mall, Miracle Mile Shopping Center, Jonnet Plaza, the Plaza on Mall Boulevard and Mosside Plaza. The Monroeville Expo Mart is another major business and is located in front of the Monroeville Mall. The Expo Mart hosts conventions and shows. There are 16 buses that service the city of Monroeville. It is easily accessible from Interstate 76 and Highway 376. Monroeville is also accessible from Routes 48 and 22.

McKeesport's central business corridor, referred to as the Walnut-Market Corridor is presently in need of redevelopment. A study commissioned by the City of McKeesport

concluded "although presently in need of assistance, the Walnut-Market Corridor has strong loyalty from the long-term businesses and organizations in the area, and great potential for revitalization."[47] This business corridor is marked by a large number of deteriorated buildings, underutilized space, and vacancies. Business composition is mixed – including franchises, independently owned "mom and pop" stores, and commercial businesses. There are 18 buses that service the city of McKeesport. In spite of this, McKeesport is not easily accessible from any major highways or the airport.

Reputation

Monroeville is popularly regarded as one of the nicer suburbs of the Pittsburgh region. It is know for its shopping malls and commercial retail development. It is also known as a stable middle class neighborhood.

In comparison, McKeesport is a former steel town that declined significantly after the collapse of the steel industry. The majority of McKeesport residents are usually thought of as being McKeesport natives that never left the community.

Assets & Challenges

Monroeville Assets

- Streetscape Initiative – A Beautification Project for Route 22
- Location at intersection of Pennsylvania Turnpike, Route 22 and the 376 Parkway
- Has not raised taxes or imposed user fees on its citizens in the last thirteen years.[48]

McKeesport Assets

- Space available for large development
- State and federal incentive programs for business development
- Parks and recreational facilities
- Higher-end housing stock from $100,000 - $200,000
- Central location of public facilities – City Hall, Post Office, County agency offices, YMCA

Monroeville Challenges

[47] "Walnut-Market Corridor Study" commissioned by the City of McKeesport's Redevelopment Authority and performed by Mullin & Lonergan Associates, Inc. July 2002, 1.
[48] Monroeville Municipality website http://www.monroeville.pa.us/Elected/munaddress2004.html.

- Route 22 is not aesthetically pleasing to many
- Severe traffic congestion
- Competition from Cranberry, Ross Park, Robinson Towne Center and the Waterfront

McKeesport Challenges

- Large number of deteriorated buildings, both residential and commercial.
- Vacancies in central business district along
- Many of the lots available for development are non-contiguous[49]
- Poor condition of much of the housing stock
- Two large public housing communities, Harrison Village and Isbir Manor are located in the central business district

Case Study – Claritas

As stated earlier, the pioneer in lifestyle segmentation or cluster marketing has been the marketing firm Claritas. Claritas's PRIZM^{NE} system, divides the U.S. consumer into 14 groups and 66 different segments. Claritas identifies for businesses 'how [their] targets spend their time and money, and where they live.'[50]

During our study we were able to obtain a PRIZM^{NE} Segments Area Distribution Report prepared on July 21, 2004. The distribution classified our neighborhoods into tract into categories that included: Life stage Group; Social Group; Segment Number; Category Name; Household Count; and the percent that compose each segment. For each of our four neighborhoods, we calculated the three largest segments represented by aggregating the Claritas segmentation information for the relevant census tracts.

Below is a sample page from the PRIZM^{NE} reports for one of the census tracts in the Hill District neighborhood:

[49] Ibid, 10.
[50] http://www.clusterbigip1.claritas.com/claritas/Default.jsp

Figure 1. Sample for Hill District

PRIZM NE - Segments Area Distribution Report

Area(s): 42003-050900

Lifestage Group	Social Group	Segment	Name	42003-050900 HH Count	42003-050900 % Comp	United States HH Count	United States % Comp	% Pen	Index
11	03	59	Urban Elders	474	49.79%	1,493,872	1.37%	0.03%	3648
07	03	66	Low-Rise Living	478	50.21%	1,423,476	1.30%	0.03%	3860
			Totals	**952**	**100.00%**	**2,917,348**	**2.67%**	**0.03%**	**3751**

If we examine the census tract segment classifications in our city of Pittsburgh neighborhoods, the top segments (by population) classification for the two neighborhoods are: Low Rise Living for the Hill District (50.21% of the census tract); and Urban Achievers for the South Side Flats (41.18% of the census tract).

After referencing the Claritas website to obtain the descriptions for these segments, we summarized the following paragraph descriptions and accompanying photographs describing the Low Rise Living and Urban Achiever neighborhood descriptors.

Hill District –

66. Low-Rise Living - The most economically challenged urban segment, Low-Rise Living is known as a transient world for young, ethnically diverse singles and single parents. Home values are low–about half the national average–and even then less than a quarter of residents can afford to own real estate. Typically, the commercial base of Mom-and-Pop stores is struggling and in need of a renaissance.[1]

South Side Flats –

31. Urban Achievers - Concentrated in the nation's port cities, Urban Achievers is often the first stop for up-and-coming immigrants from Asia, South America and Europe. These young singles and couples are typically college-educated and ethnically diverse: about a third are foreign-born, and even more speak a language other than English.[1]

From these short descriptions and accompanying pictures, it is easy to see that the South Side Flats has a better chance of receiving more commercial investment then the Hill District.

We find similar results when we examine our selected neighborhoods in Allegheny County. The largest segment classification for McKeesport is Hometown Retired (44.48% of the census tract) while the top classification for the Monroeville is Pools and Patios (23.87%).

The Claritas website defines McKeesport and Monroeville as follows:

McKeesport-

62. Hometown Retired - With three-quarters of all residents over 65 years old, Hometown Retired is one of the oldest segments. These racially mixed seniors tend to live in aging homes–half were built before 1958–and typically get by on social security and modest pensions. Because most never made it beyond high school and spent their working lives at blue-collar jobs, their retirements are extremely modest.[1]

Monroeville-

15. Pools & Patios - Formed during the postwar Baby Boom, Pools & Patios has evolved from a segment of young suburban families to one for mature, empty-nesting couples. In these stable neighborhoods graced with backyard pools and patios–the highest proportion of homes were built in the 1960s–residents work as white-collar managers and professionals, and are now at the top of their careers.[1]

Again, it is clear from these descriptions that Monroeville would be a far preferable market in which to locate a business.

The Claritas firm claims that the 66 segments are not explicitly ranked; however, the number one segment is titled 'Upper Crust' and described as the 'nation's most exclusive address,' and the number 66th segment is labeled 'Low-Rise Living', and is described as 'the most economically challenged urban segment.'[51] These descriptors could arguably be interpreted as two ends of a spectrum of segments.

While Claritas does use quantitative data such as U.S. Census data in producing and mapping this 66 segment classification system, businesses that use the Claritas service do not see the hard data numbers, and often rely on simplified market segment descriptions such as those referenced above. These segment descriptions are often times what businesses rely on when making the determination to vet potential markets in which to locate a business.

With these types of descriptions guiding businesses in their decision-making process it is difficult to see communities without bias, as these descriptions are highly qualitative. While, the intention here may be to shield clients from excessive and perhaps confusing details, in so doing these descriptions assume homogeneity and fail to convey the complexity and diversity of the populations and economies of many neighborhoods.

Businesses that wish to understand their investment options more thoroughly will need to different market analysis strategies. By utilizing one alternative market analysis method, our study uncovered many interesting facts about the four neighborhoods, which were not reflected in the Claritas neighborhood descriptions.

[51] Claritas website http://www.clusterbigip1.claritas.com/claritas/

V. Conducting a Neighborhood Spending Analysis in the Pittsburgh Region

Given the intriguing findings alternative methodologies uncovered in other US cities, we assert that the same discrepancies between traditional approaches to market analysis and more localized purchasing power profiles might occur in Pittsburgh. After performing an environmental scan of organizations conducting alternative market analyses and profiles, the team selected the Employment and Training Institute (ETI) at the University of Wisconsin-Milwaukee as our practitioner partner. The national recognition generated by the neighborhood profiles ETI developed in Milwaukee was one of the primary inspirations for this study. As such, we welcomed a formal partnership with a recognized leader in this field.

Background on Partnership with Employment and Training Institute (ETI) at the University of Wisconsin-Milwaukee

The Employment and Training Institute (ETI) is a unit in the University of Wisconsin-Milwaukee School of Continuing Education. The purpose of the Institute is to address workforce development and education issues within low-income communities through applied research, policy development, and technical assistance.[52] Researchers at ETI are also readily available for consultation to cities outside of Wisconsin regarding purchasing power studies of central city neighborhoods."[53]

In conducting our neighborhood market analyses, we partnered with researcher John Pawasarat, Director of ETI. Pawasarat applied the same methodology used to develop the profiles for the city of Milwaukee to our study neighborhoods. Using a localized regression expenditure model developed from several collections of expenditure data by the Consumer Expenditure Survey (CEX), ETI is able to more accurately reflect true spending patterns by tailoring spending patterns to five specific household income categories.[54] Using Census 2000 household income data as well as this proprietary, localized regression model of expenditures by household income level, Pawasarat developed Purchasing Power

[52] ETI Website http://www.uwm.edu/Dept/ETI/ Last accessed on August 2, 2004.
[53] Ibid.
[54] For a more in-depth explanation of ETI's methodology refer to the appendix.

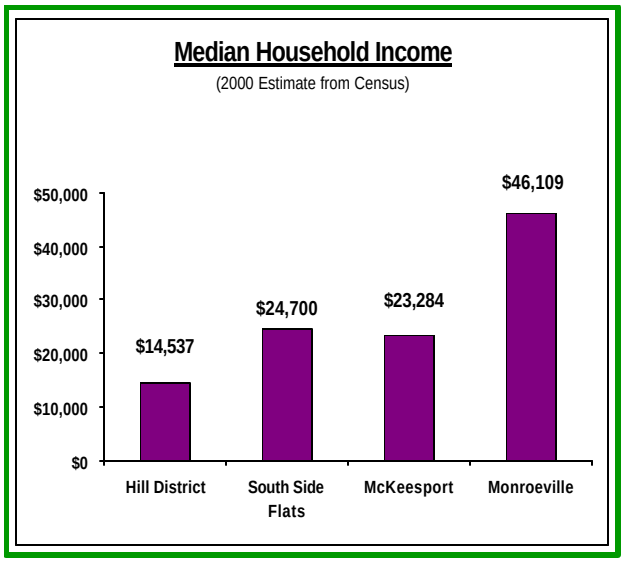
Profiles (PPPs) for our four neighborhoods. The resulting PPPs detail 16 categories of expenditures both as a total dollar amount and as expenditure per square mile.[55] These profiles are based on Census data, which has its limitations as this report has previously noted. Therefore, these purchasing power profiles do not take into account in their expenditure estimates cash equivalents such as food stamps. For this reason, expenditures for certain categories like food at home may underestimate actual values for neighborhoods with many low-income families participating in these government programs. Additionally, the population estimates may be underestimates due to Census undercounts, recognized as occurring with greater severity in lower-income areas.

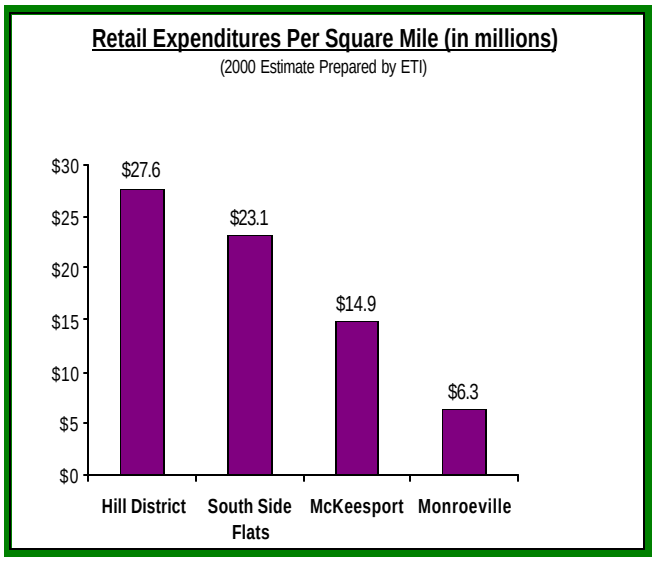
PPP Findings

The Purchasing Power Profiles (PPP) developed in partnership with ETI uncovered findings consistent with those conducted in other U.S. cities. When taking into account expenditures instead of income and density, as well as using density as a key component of analysis rather than per-family income measure, we find that urban areas become significantly more competitive. The following charts demonstrate the contrasting pictures presented using the industry-standard metric median household income and annual retail expenditures per square mile. Using only the household income metric, Monroeville appears to present the best retail market opportunity. However, according to estimates of total retail expenditures we see that the ranking is inverted: the Hill District assumes the top ranking spot and Monroeville the bottom. As presented neither of the two metrics capture overall market size, which does play a critical role in business location decisions. Nonetheless, contrasting the two highlights the different comparative advantages of different types of neighborhoods.

[55] For a complete listing of the PPP results please consult the appendix.

Figure 2 – Median Household Income & Retail Expenditures per Square Mile



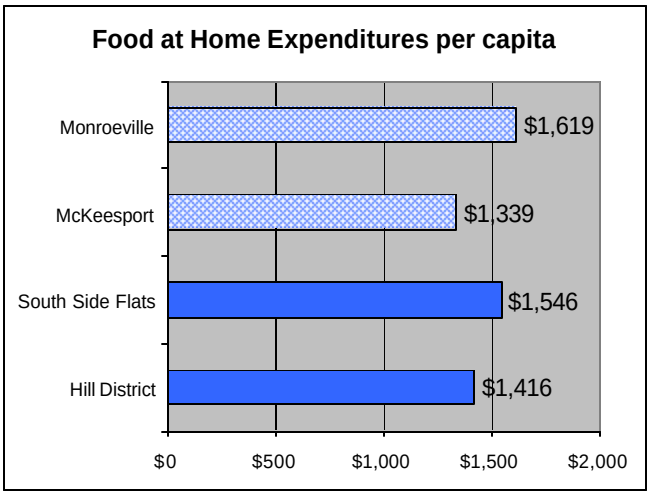


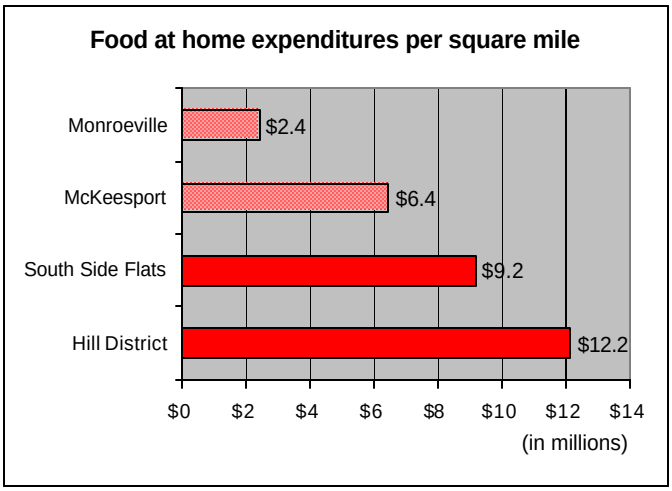
The localized expenditure profiles ETI developed for our four neighborhoods provide 16 categories of expenditures.[56] Our study will focus on two sub-categories of retail expenditures - food at home and personal products. We chose to highlight these two spending categories for several reasons. First, it is likely that many customers patronize grocery stores and pharmacies largely as a factor of proximity. Additionally, we selected food at home as a focus because of the challenges many urban neighborhoods, both in the region and nationally, face in securing grocery stores.

The reversal of the traditional market analysis rankings shown in the figures above holds true for more specific categorical analysis of spending patterns. Looking at the food at home[57] expenditure category we find that per capita spending patterns show limited variance. On the other hand if we analyze food at home expenditures per square mile a large difference emerges. Food at home expenditures per square mile in the Hill District is 5 times that of Monroeville. Additionally, the total expenditures for food at home in the Hill District is roughly twice as much as is spent by residents in the South Side Flats: $16.7 million in the Hill District as compared to $8.9 million in the South Side Flats.

[56] For a complete listing of these profiles findings please see the report appendix.
[57] According to ETI, 'Food at Home' includes expenditures for food purchased at grocery stores and convenience store, and food prepared at home for out-of-town trips.

Figure 3. Graphs of Spending on Food at Home[58]

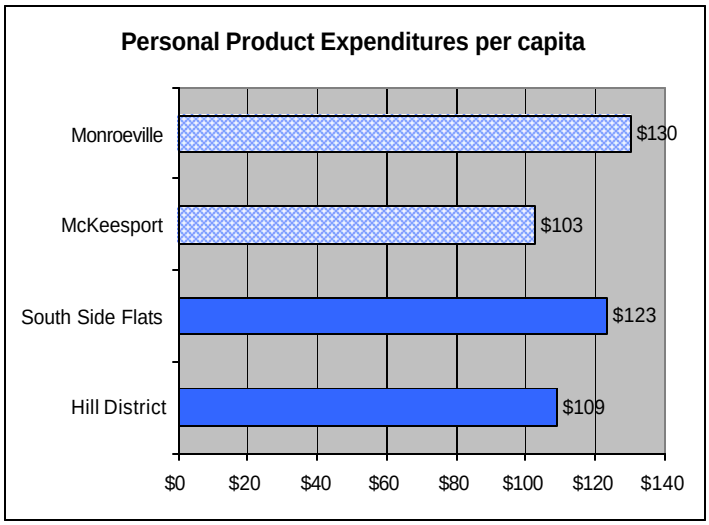


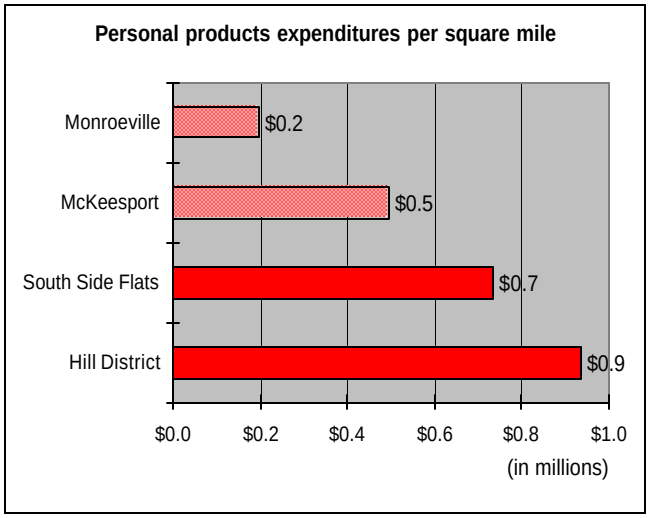


Additionally, reviewing personal products[59] expenditures a similar pattern emerges. The per capita spending rates are roughly comparable. However, the expenditure per square mile clearly highlights the aggregate purchasing strength of the denser neighborhoods. For example, the Hill District's personal product expenditures per square mile are approximately 5 times that of Monroeville.

[58] Graphs prepared by research team using spending estimates provided by Purchasing Power Profiles, prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 2004.
[59] 'Personal Products' is defined both by CEX and ETI as expenditures for hair care products, nonelectric articles for the hair, wigs and hairpieces, oral hygiene products and articles, shaving needs, cosmetics, perfume, bath preparation products, deodorants, feminine hygiene articles, and miscellaneous personal care items.

Figure 4. Graphs of Spending on Personal Products[60]





The contrasting pictures presented using the Purchasing Power Profiles are intriguing. These figures would become even more revealing if compared with the current level of service for each of these expenditure categories. Additional research ought to be done comparing spending levels with number of local businesses catering to that specific expenditure category. An analysis of this type would be able to uncover how many dollars, known as a "float," are being spent outside their community.[61] Identifying this expenditure leakage could uncover a market opportunity for a retailer to provide competitively-priced and competitive-quality goods or services to inner-city consumers.

Comparing PPP and Conventional Market Analyses

In order to better understand the impact of utilizing both traditional and newer market analysis methodologies, we have synthesized a sampling of the market assessment resources discussed in this study. The figure below summarizes these different methodologies. The following three sources constitute our sampling of traditional market analysis methodologies and metrics. The PRIZM segment classification used by Claritas which ranks classifies U.S. population into 66 different segments. ESRI's Spending Potential Index (SPI) rankings are a metric to represent different communities' expenditure capacity. The SPI is calibrated on a national scale with 100 being the average

[60] Graphs prepared by research team using spending estimates provided by Purchasing Power Profiles, prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 2004
[61] Weissbourd, 5.

and defined as the ratio of the local average to the US average expenditure.[62] The third traditional metric summarized is median household income according to the US Census 2000. The last two columns in the table represent expenditure estimates per square mile from the Purchasing Power Profiles prepared by ETI.

Figure 5. Methodology Comparison Table

		Marketing Firms		Census	PPP	
	Density (Population Per Sq. Mi.)	Claritas PRIZM labels (Rank)	ESRI Spending Potential Index - Personal Products	Median HH Income	Est. Retail Spending Per Sq. Mi.	Est. Personal Products Spending Per Sq. Mi.
Hill District	8,596	City Roots (61)	**46.5**	**$ 14,536**	**$2.4M**	**$.93M**
South Side Flats	5,965	Multi-Culti Mosiac (54)	68	$ 24,700	$2.3M	$.73M
McKeesport	4,805	**Hometown Retired (62)**	57.25	$ 23,715	$1.4M	$.49M
Monroeville	1,483	**Gray Power (21)**	**100.25**	**$ 46,108**	**$.7M**	**$.19M**

Key

= Best ranking

= Lowest ranking

This table shows that marketing firm rankings and census metrics depict Monroeville in the most favorable light and thus as the most attractive potential retail market. Monroeville's largest Claritas PRIZM market segment is 'Gray Power,' a segment in the upper third of the 66 total segments. Its SPI for personal products is equal to the national average, and the median household income is significantly higher than the other neighborhoods. However, the localized PPP inverts this conclusion. The Hill District possesses the greatest purchasing power in terms of total retail expenditures per square mile. Although McKeesport does not rise to the top, PPP methodology does present McKeesport as more competitive than Monroeville in terms of purchasing power per square mile.

Another way to represent the net effect of these different market analysis methods is through a ranking table. The figure below translates the numbers summarized above into rankings which perhaps more clearly identifies the contrasting outcomes of the differing market profile methodologies.

[62] "The Sourcebook of Zip Code Demographics" ESRI Business Solutions. 17th Edition, 2003 (xvii, 251-D, 252-D).

Figure 6. Ranking Comparison Table

		Marketing Firms		Census	PPP	
Rank	Density (Population Per Sq. Mi.)	Claritas PRIZM labels	ESRI Spending Potential Index - Personal Products	Median HH Income	Est. Annual Retail Spending Per Sq. Mi.	Est. Personal Products Spending Per Sq.
1	Hill District	**Monroeville**	**Monroeville**	**Monroeville**	**Hill District**	**Hill District**
2	South Side Flats	South Side Flats	South Side Flats	South Side Flats	South Side Flats	South Side Flats
3	McKeesport	McKeesport	McKeesport	McKeesport	McKeesport	McKeesport
4	Monroeville	**Hill District**	**Hill District**	**Hill District**	**Monroeville**	**Monroeville**

Key

= Best ranking

= Lowest ranking

This transformation suggests that the traditional approaches used by marketing firms and census rank the suburban neighborhood with lower density and higher income the highest. On the other hand, our findings point to the conclusion that alternate methodologies using different indicators and ideally more localized data would represent traditionally underserved neighborhoods like the Hill District and McKeesport as more promising for investment than more traditional methods.

VI. Key Report Findings

Our final research indicated several key findings about commercial investment decisions in different types of neighborhoods. We have described each of our seven key findings below.

Limitations with Conventional Metrics

Key Finding #1 **– Marketing firms provide businesses and communities with inaccurate and over simplified market analyses and neighborhood assessments.**

Marketing firms like Claritas and ESRI provide commercial retail businesses and communities with market analyses and neighborhood profile assessments. Currently, the market analyses provided by national marketing firms are used as the industry standards for neighborhood assessments. These assessments, however, are often inaccurate and over simplified. Additionally they are often highly qualitative in nature. Claritas, for example provides graphical illustrations and a few sentences to describe each neighborhood. Often pejorative terms and over-simplifications are used to describe individuals in communities. National marketing firms also rely very heavily on Census data. Because of problems with Census data, including undercounts and survey selection bias, relying on Census data makes marketing firms' information inadequate.

Key Finding #2 **– Metrics used by national marketing firms are based on inadequate information and are unable to accurately predict community spending potential.**

Many of the metrics used by national marketing firms to assess and classify neighborhoods are based on inadequate data. For example, the income metric utilized by many national marketing firms is based on income as it is reported to the Census. However, based on the shortcomings of Census data including undercounts, and survey completion self selection bias, as well as the fact that income information regarding social security income, retirement income, public welfare assistance are under-reflected, Census income data may not be not fully accurate. Additionally, subsidies for food and housing

are not currently included as a part of income. Combined these Census shortcomings underestimate the amounts of money families and individuals have to spend on retail purchases. The Census income metric also does not account for income earned in the informal economy. Because the income metric is so inadequately calculated currently, the expenditure metric, which is based on it, must inherently be flawed in predicting community expenditures.

New Metrics provide better information

Key Finding #3 **– There is a need for a new 'per square mile' metric that can more accurately capture and reflect the expenditure dollars in dense communities.**

New metrics are needed to adequately assess the spending potential and expenditures of dense neighborhoods. The metrics and models currently used by marketing firms do not represent dense neighborhoods adequately because they do not account for the impact of density on spending patterns. Currently the expenditure metric is measured in 'per capita' units, which makes dense urban areas appear to have relatively low expenditures. However the 'per square mile' metric takes into account the high population density that characterizes dense communities. When taken into account, this metric more adequately reflects the spending potential of dense areas and enhances their attractiveness to commercial investment.

Key Finding #4 **– The business location process model could be enhanced if it utilized alternative market analysis approaches that are based on more localized data as supplements to national marketing firm data.**

The business location process[63] currently relies on national marketing firm data to profile neighborhoods and assess a community population's characteristics. However, the flaws in national marketing firm data often paint an incomplete picture of a neighborhood. Because commercial retailers base business location decisions on this data, they are often making decisions with incomplete information. Alternative neighborhood profile methodologies use more localized data and metrics to profile neighborhoods. Often, this

[63] See Appendix for graphic representation of business location process.

more localized data coupled with more relevant metrics paints a more complete picture of neighborhoods.

Maximizing the Impact of New Metric and Alternative Market Analysis Approaches is a Critical Component to the Success of New Methods

Key Finding #5 **– There needs to be better distribution of better market analysis information**

Currently, neighborhoods, retailers, developers and local government agencies that utilize national marketing firm data must pay high prices to obtain this data. Additionally, we found in our research and interviews[64] with community and business stakeholders there is relatively little awareness of alternative neighborhood profile methodologies. Thus, it is critical that a marketing campaign for alternative market analysis approaches be implemented to ensure that relevant stakeholders are aware of alternative approaches that use new market analysis metrics.

Key finding #6 **– Alternative methodologies can make the most impact if they are used to supplement national marketing firm data**

Alternative methodologies can add value to the discussion on neighborhood profiles and commercial investment. The alternative methodologies outlined in this report utilize the 'per square mile' metric to assess the spending power of dense neighborhoods and communities. This metric captures community spending potential in dense areas in more useful ways than the traditional expenditures per capita metrics. While the alternative methodologies are value adding to the dialogue about neighborhood profiles, it is important that they be used as supplements to traditional national marketing firm data. By using the alternative methodologies as supplements, the portrait of neighborhoods will become more well-rounded and more reflective of the neighborhoods.

[64] Interview with Ebony Development and South Side Local Development Corporation; Information about interview is available upon request

Key Finding #7 **– Quantitative Data alone does not drive commercial investment decisions**

Quantitative data is not enough to effectively influence commercial investments decisions. There are several other factors that must be considered. For many communities perception is reality. This was uncovered during our research and confirmed by several different interviewees. A neighborhood is only as strong and ready for commercial investment as the perception that developers and others have of it. For many neighborhoods enhancing the perception means improving the physical structures in a neighborhood in order to make it more physically attractive. For other neighborhoods, enhancing the perception means transforming a negative reputation. Thus, quantitative data, as well as an awareness of the different aspects of the business location process is important to understanding how commercial investment decisions are made.

VII. Next Steps

Further Research

The Pittsburgh Purchasing Power Profile study was not comprehensive and only analyzed a small sub-section of market analyses methods and a small part of the business location process. There remain many areas for potential study and research. Below is a list of research areas that we believe still need to be explored to fully understand how market analyses, the business location process and other factors influence commercial investment decisions.

- Studies exploring how operations research facility location models can be utilized to rank potential business location sites to maximize utility for businesses and communities
- Research exploring how effectively current levels of retail service in different communities address known community expenditure patterns
- Research assessing the economic and geographic suitability of different types of neighborhoods for certain types of commercial retail investment
- Research comparing the accuracy of different consumer expenditure behavior models
- Studies comparing the impact of total market area on commercial development with the impact of density on commercial development
- Research assessing which types of retail businesses would benefit most from utilizing a density metric as part of their business location model
- Research focused on developing a more thorough understanding of the weight of quantitative and qualitative information in the business location process

Marketing Recommendations for the PPP reports

The Purchasing Power Profile information adds a new perspective to traditional market analysis. Interested stakeholders can use this added information to supplement the existing picture of neighborhoods and enhance their decision-making ability. However, in order to gain the most from this new information, businesses must be convinced to incorporate this input during the front end of the process by which they make location decisions.

One way in which this new information can be marketed and emphasized is by creating a public discourse around this issue. To increase awareness about PPP, the County and URA should champion disseminating PPP information throughout the Pittsburgh region.

To do this they should:

- Engage the establishment through: articles in *The Pittsburgh Business Times* or *Pittsburgh Post Gazette*, testimonials from success stories in other cities, or success stories here in the Pittsburgh region.
- Articulate how utilizing PPP information advances social entrepreneurism, in which Pittsburgh is leading the nation. This collaboration will help to move the Pittsburgh region forward to be competitive on a national and global scale.
- Encourage organizations like community development corporations to utilize this information in their own marketing plans when highlighting their neighborhoods to potential investors and businesses.
- Highlight specific recommendations for retail businesses that are especially impacted by factors of density (small footprint, high foot traffic volume)
- Persuade pioneering entrepreneurs looking for small-scale investment opportunities that this information might uncover niche markets for them.

How to disseminate information to key stakeholders

This alternative model for market analysis highlights the need for partnerships between invested organizations. A key vehicle for disseminating this information to interested parties is through closer working relationships between complementary organizations.

To do this:

- Community development corporations should forge relationships with city, county and state governments to disseminate information about their neighborhoods and their potential investment opportunities and to understand how these opportunities fit into the current system of incentives.
- In addition to specific organizations, this issue should be raised within the business community in an effort to foster better public-private relationships. The key take-away that this information provides is the opportunity for success on a

double bottom line – businesses can be more profitable and communities can be better served.

- Local funders interested in the field of economic development might support a consortium of a local public organizations and universities/research institutions to continue to keep this issue on the public agenda and to move it forward.

How Communities Can Undertake their Own Assessment

Several organizations are conducting alternative market analyses in the U.S.; most notably those covered in this study. These organizations should be considered subject matter experts in these analyses. For listing of these organizations contact information consult the appendix. Additionally, John Pawasarat, Director of ETI is working on a project to make localized PPP expenditure data available on a much wider scale. For further details contact ETI.

Additionally, a report commissioned by the Brookings Institute, "Exposing Urban Legends: The Real Purchasing Power of Central City Neighborhoods" reviews the steps communities can take and the resources they ought to utilize to develop their own localized profiles.

Cities have numerous organizations, both local and state government agencies collecting localized data. These organizations often have substantial data collections of their own which can help fill in gaps left by national level data sets such as census and as supplements to national marketing firms' assessments.

Businesses located in the area also collect information concerning where their customers reside and what types of purchases they make. This data is often difficult or costly to obtain, however, if available can often provide very accurate understanding of purchasing power.

Website

The findings of this study and the Purchasing Power Profiles developed for the four study neighborhoods will be accessible on and able to be downloaded from the Allegheny County Department of Economic Development and the Urban Redevelopment Authority of Pittsburgh's websites. At the time of this report's completion, the websites are not yet active. Please contact these organizations for further details.

Urban Marketing Challenge Systems Group

The Heinz School Fall 2004 Systems Synthesis Group "Urban Marketing Challenge" will utilize these findings as input for their project. Their client, the Pittsburgh Urban Redevelopment Authority, has asked the team to work on attracting a grocery store to the Hill District, which has been a challenge for 20 years. The Hill District, a neighborhood spanning 1.4 square mile and containing 12,000 people spends $38 million on retail products annually, yet still faces many hurdles in attracting retailers.

In a recent International Council of Shopping Centers (ICSC) survey of retailers, the following factors were cited as influencing their decision to establish stores in underserved markets: crime/perception of crime, site availability, and an insufficient market or the perception of an insufficient market.

The Urban Marketing Challenge group will take the purchasing power profile created by the summer group and work with the Pittsburgh banking, development and retail communities to increase their awareness and acceptance of purchasing power as a standard metric in site selection. For the Hill District, the 'Urban Marketing Challenge' group will include the purchasing power profile (which shows there is significant buying power in the Hill District) with further analysis of the neighborhood's crime statistics, available geographic sites for commercial development, and competition as well as an analysis of retailers' site selection models to pitch the Hill District to grocery store operators.

Acknowledgements

We would like to thank the following people for their time, assistance, advice and providing resources with the development of this project and report. We would like to give special thanks to a few individuals without whose support this project would not have been possible: our clients, Ron Gaydos of the Allegheny County Department of Economic Development and Julie DeSeyn of the Urban Redevelopment Authority of Pittsburgh, our advisor, Michael Johnson, and Erin Dalton whose systems project in 2003 spurred the idea for this project.

Our sincerest gratitude goes to the following people for helping us complete this project:

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Bethany D. Bauer	Department of Community Development, City of McKeesport
Connie Yarris	Regional Business Alliance (serving the Mon Valley region)
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Deborah Gilkey	Pittsburgh Bureau of Police
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Irvin E. Williams	Ebony Development LLC
Jack Norris	CB Richard Ellis

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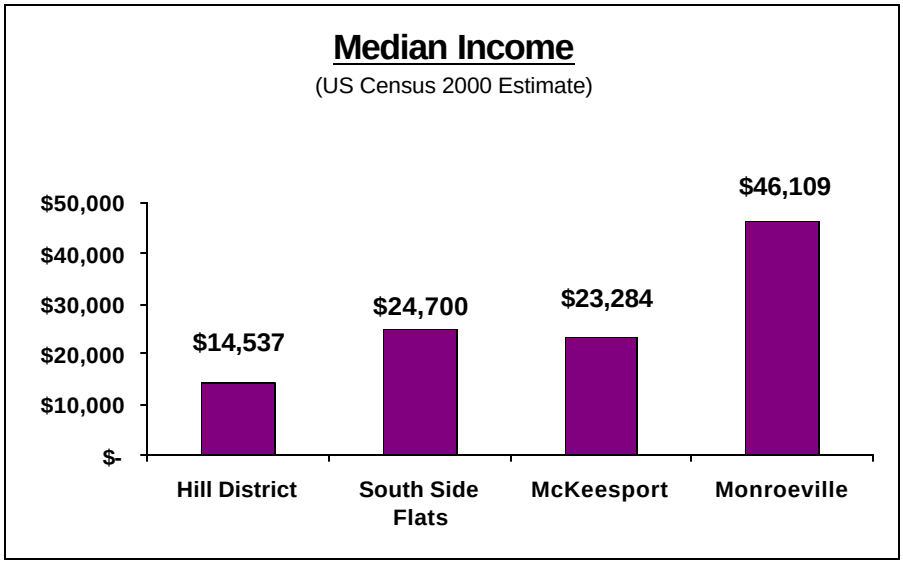
Kurt Foreman	Pittsburgh Regional Alliance
Laura Zinski	Mon Valley Initiative
Rob Stephany	East Liberty Development, Inc
Russell Jenkins	Urban Redevelopment Authority of Pittsburgh
Shelly Kaltenbaugh	Community Development (Municipality of Monroeville)

Appendix

Appendix 1 - Median Household Income



Appendix 2: Summary Tables from Purchasing Power Profiles prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 2004.

Graphs summarize estimated expenditure in several categories by both per capita and per mile metrics – (1) total retail expenditures, (2) total food at home expenditures, (3) total food away from home expenditures, (4) personal products expenditures, (5) apparel and related services, (6) entertainment expenditures, and (7) household furnishings and equipment expenditures.

Figure 1. Retail Expenditures per capita

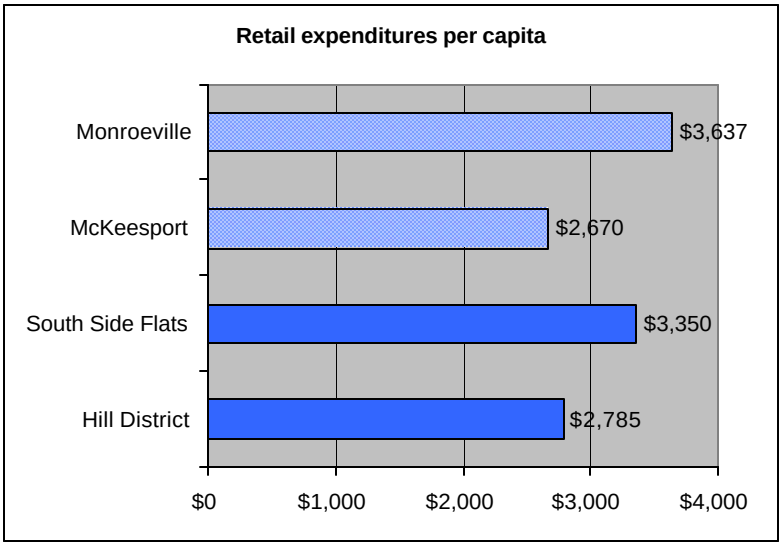


Figure 2. Retail expenditures per square mile

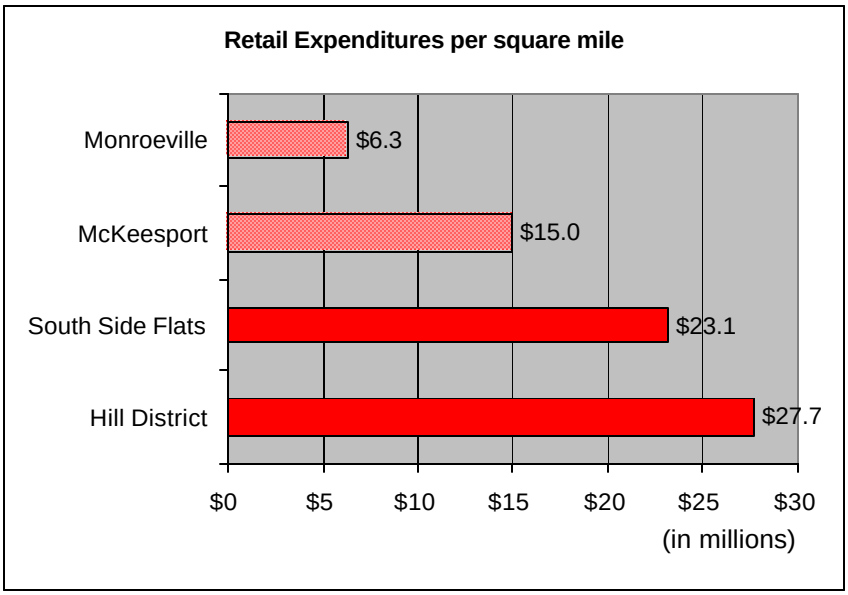


Figure 3. Food at home expenditures per capita

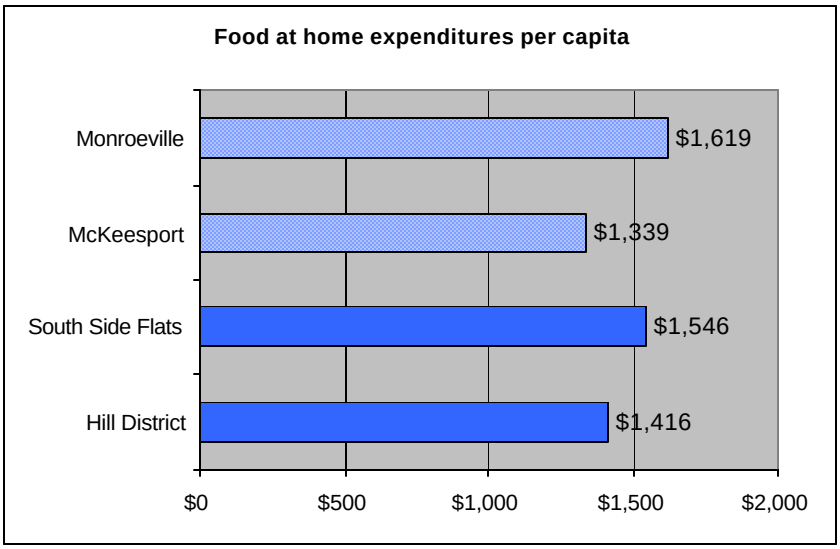


Figure 4. Food at home expenditures per square mile

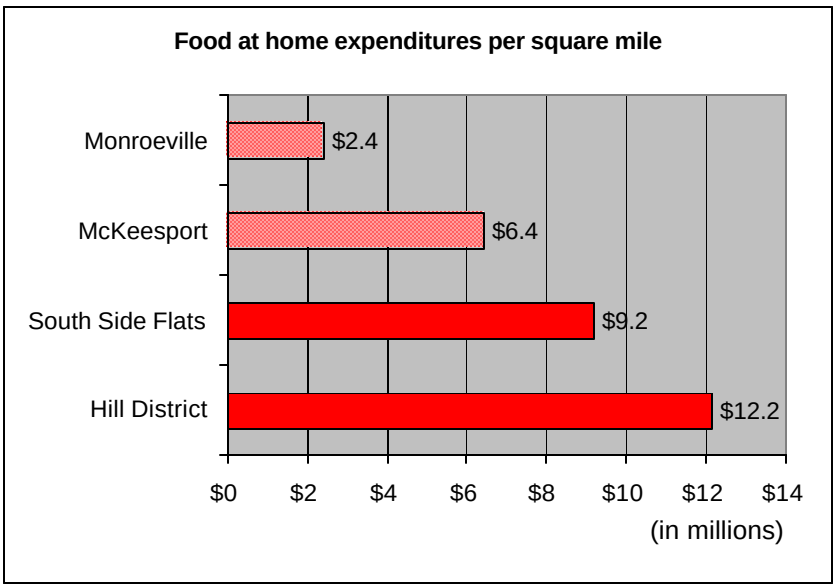


Figure 5. Food Away from Home per capita

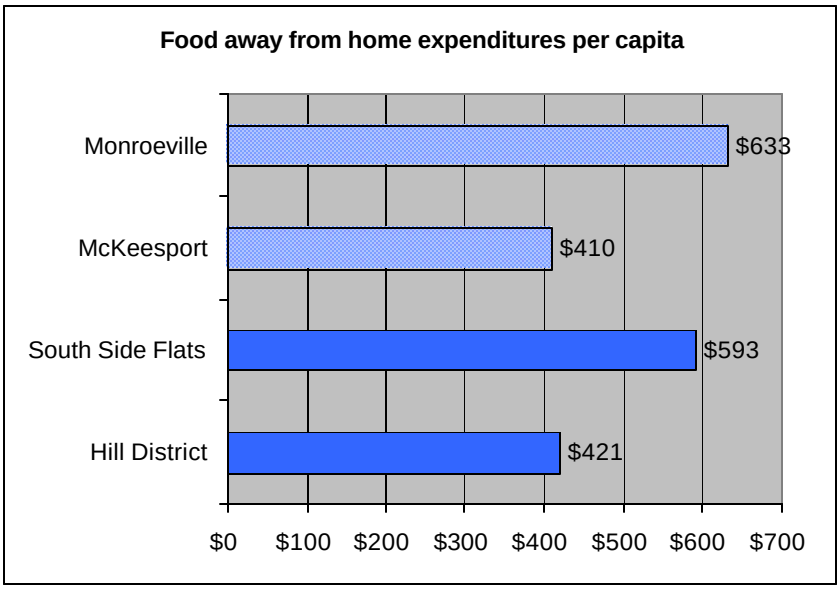


Figure 6. Food Away from Home per square mile

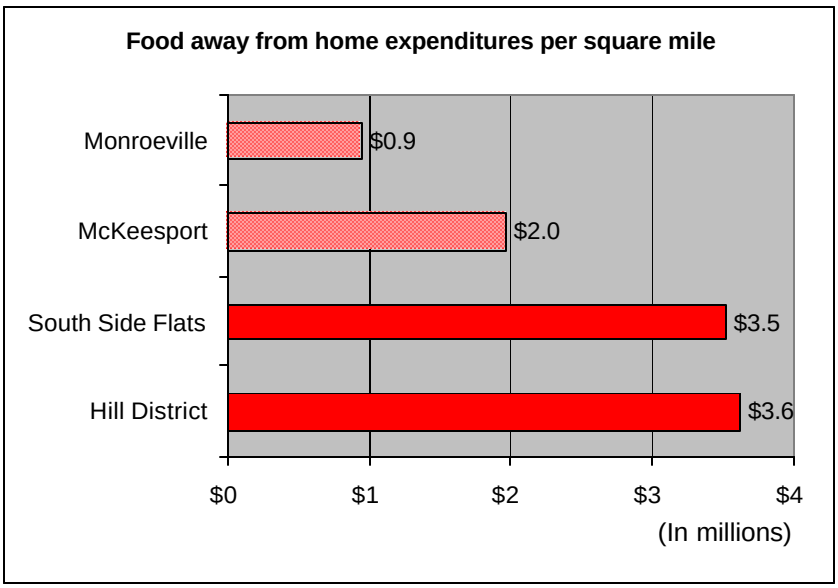


Figure 7. Personal products expenditures per capita

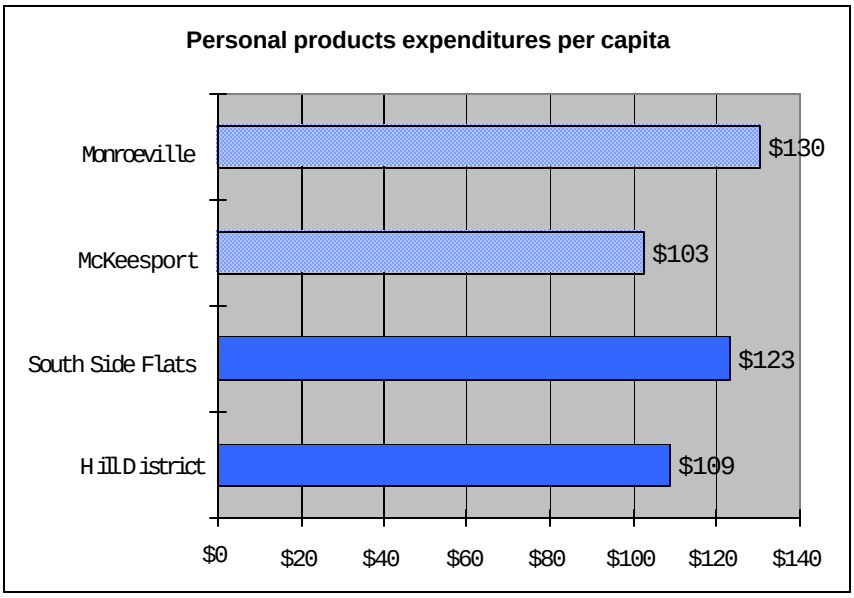


Figure 8. Personal products expenditures per square mile

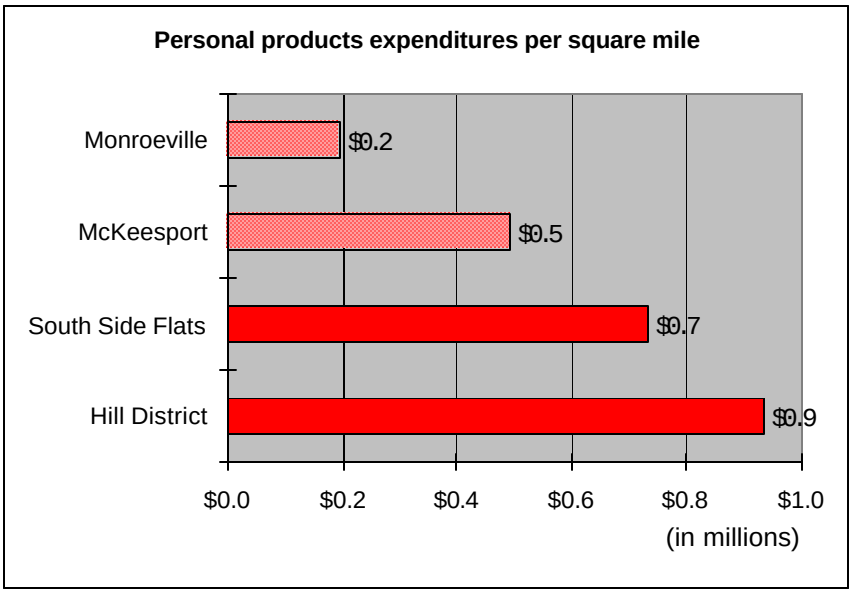


Figure 9. Apparel and related services expenditures per capita

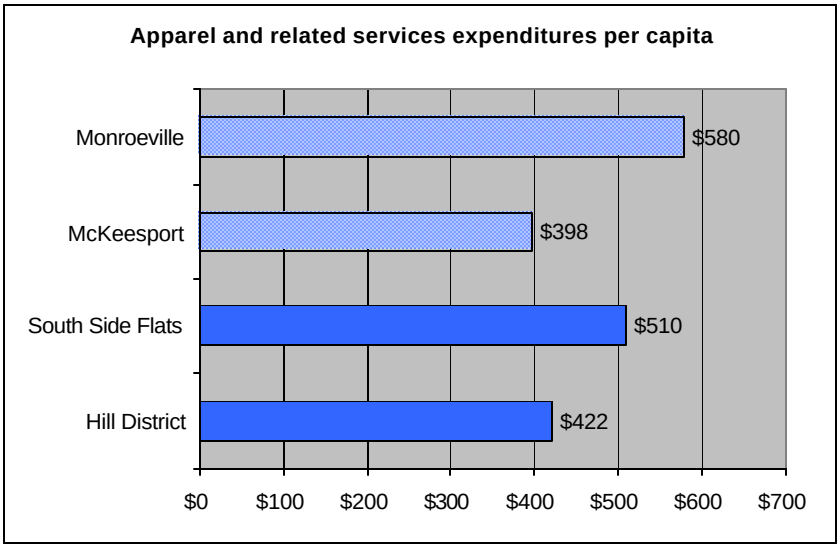


Figure 10. Apparel and related services expenditures per square mile

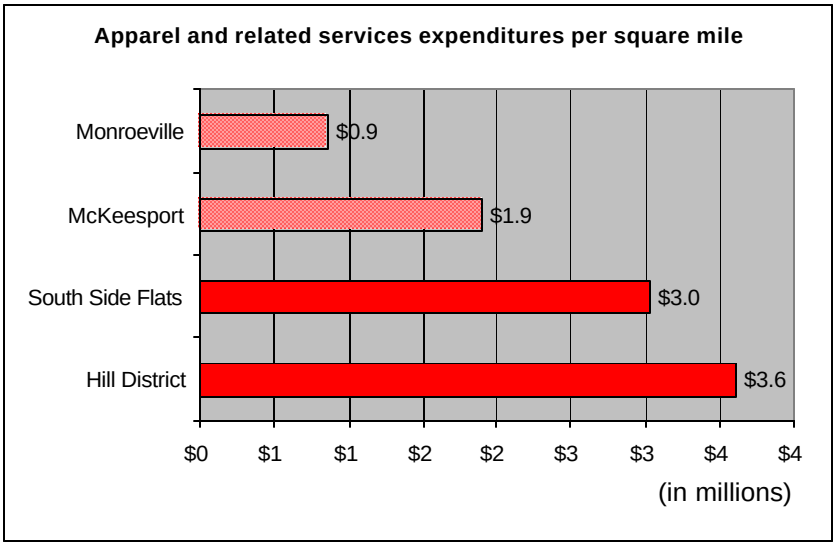


Figure 11. Entertainment expenditures per capita

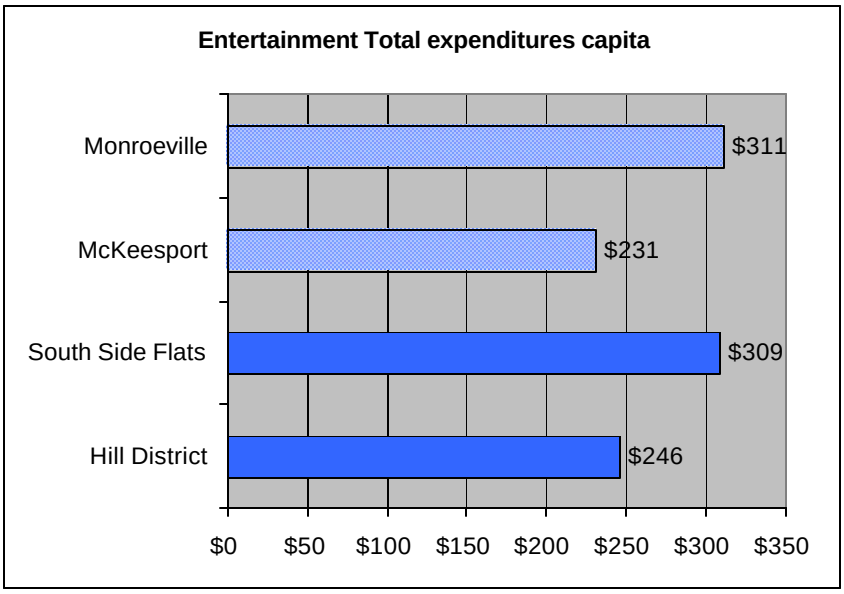


Figure 12. Entertainment expenditures per square mile

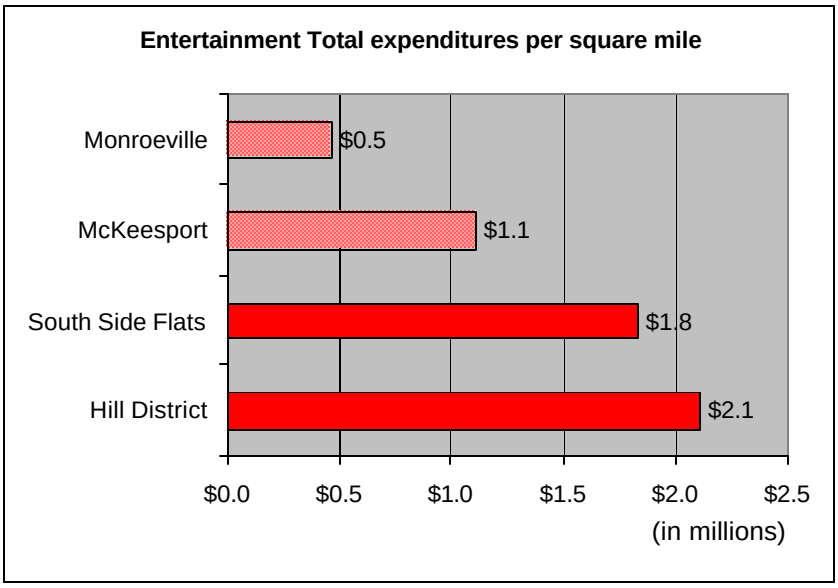


Figure 13. Household furnishings and equipment expenditures per capita

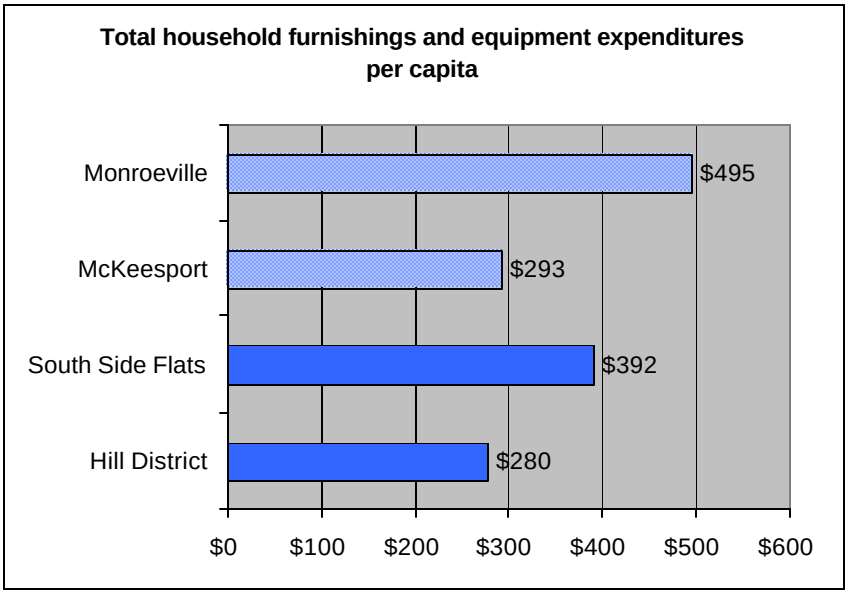
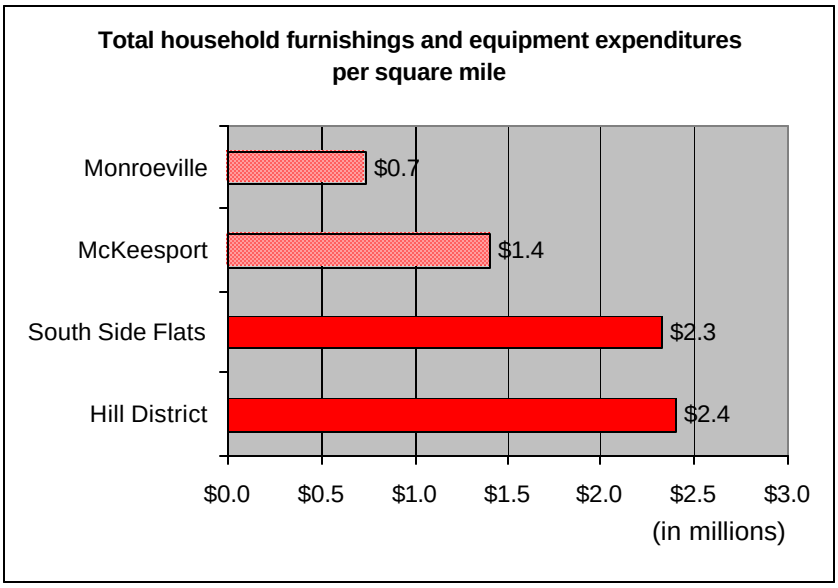


Figure 14. Household furnishings and equipment expenditures per square mile



Appendix 3. Summary Tables from Purchasing Power Profiles prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 2004 in table form.

Hill District Summary

Residents in the Hill District (census tracts 305, 501, 506, 509, 510, and 511) spend an estimated $38 million annually on the 16 retail expenditure categories detailed below.

This translates to $27.66 million in spending per square mile for these categories.

Est. Consumer Expenditures by Hill District Residents	Total Expenditures	Expenditures Per Square Mile
Food at home	$16,749,270	$12,150,359
Food away from home	$4,983,218	$3,614,957
Apparel and related services	$4,984,907	$3,616,182
Television equipment, tapes, discs	$2,347,541	$1,702,968
Audio equipment, CDs, tapes	$562,512	$408,061
Household textiles	$286,291	$207,683
Furniture	$1,200,140	$870,613
Floor coverings	$109,801	$79,653
Major appliances	$640,213	$464,427
Small appliances and housewares	$197,986	$143,624
Computer hardware and software	$578,267	$419,490
Miscellaneous household equipment	$873,944	$633,982
Non-prescription drugs and supplies	$1,144,325	$830,123
Housekeeping supplies	$1,905,308	$1,382,160
Personal products	$1,289,624	$935,527
Home repair commodities	$276,421	$200,523
TOTAL for 16 categories	$38,129,768	$27,660,332

Source: Purchasing Power Profiles, prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 2004.

Monroeville Summary

Residents in Monroeville (census tracts 5211, 5212, 5213.01, 5213.02, 5214.01, 5214.02, 5215) spend an estimated $124.7 million annually on the 16 retail expenditure categories detailed below.

This translates to $6.3 million in spending per square mile for the 16 categories.

Est. Consumer Expenditures by Monroeville Residents	Total Expenditures	Expenditures Per Square Mile
Food at home	$47,514,446	$2,400,944
Food away from home	$18,567,376	$938,225
Apparel and related services	$17,011,254	$859,593
Television equipment, tapes, discs	$7,245,355	$366,114
Audio equipment, CDs, tapes	$1,878,749	$94,935
Household textiles	$1,191,039	$60,184
Furniture	$5,578,159	$281,869
Floor coverings	$580,663	$29,341
Major appliances	$2,470,910	$124,857
Small appliances and housewares	$796,737	$40,260
Computer hardware and software	$2,199,262	$111,131
Miscellaneous household equipment	$3,919,711	$198,066
Non-prescription drugs and supplies	$3,725,785	$188,267
Housekeeping supplies	$6,837,821	$345,521
Personal products	$3,824,834	$193,272
Home repair commodities	$1,396,920	$70,588
TOTAL for 16 categories	$124,739,021	$6,303,166

Source: Purchasing Power Profiles, prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 2004.

McKeesport Summary

Residents in McKeesport (census tracts 5509, 5512, 5513, 5519, 5520, 5521, 5522, 5523, and 5524) spend an estimated $75 million annually on the 16 retail expenditure categories detailed below.

This translates to $15 million in spending per square mile for the 16 categories.

Est. Consumer Expenditures by McKeesport Residents	Total Expenditures	Expenditures Per Square Mile
Food at home	$32,185,007	$6,431,085
Food away from home	$9,847,514	$1,967,693
Apparel and related services	$9,567,768	$1,911,795
Television equipment, tapes, discs	$4,481,863	$895,549
Audio equipment, CDs, tapes	$1,073,011	$214,405
Household textiles	$595,857	$119,062
Furniture	$2,530,765	$505,688
Floor coverings	$254,462	$50,846
Major appliances	$1,349,078	$269,568
Small appliances and housewares	$415,241	$82,972
Computer hardware and software	$1,170,842	$233,953
Miscellaneous household equipment	$1,905,314	$380,713
Non-prescription drugs and supplies	$2,431,556	$485,864
Housekeeping supplies	$4,088,290	$816,906
Personal products	$2,472,492	$494,044
Home repair commodities	$689,408	$137,755
TOTAL for 16 categories	$75,058,468	$14,997,896

Source: Purchasing Power Profiles, prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 2004.

South Side Flats Summary

Residents in South Side Flats (census tracts 1609 and 1702) spend an estimated $22.3 million annually on the 16 retail expenditure categories detailed below.

This translates to $23.1 million in spending per square mile for the 16 categories.

Est. Consumer Expenditures by South Side Flats Residents	Total Expenditures	Expenditures Per Square Mile
Food at home	$8,854,483	$9,180,387
Food away from home	$3,392,768	$3,517,644
Apparel and related services	$2,922,184	$3,029,740
Television equipment, tapes, discs	$1,423,363	$1,475,752
Audio equipment, CDs, tapes	$343,787	$356,441
Household textiles	$191,676	$198,731
Furniture	$797,230	$826,573
Floor coverings	$78,554	$81,445
Major appliances	$415,583	$430,879
Small appliances and housewares	$136,151	$141,162
Computer hardware and software	$390,441	$404,812
Miscellaneous household equipment	$626,425	$649,482
Non-prescription drugs and supplies	$700,419	$726,199
Housekeeping supplies	$1,128,106	$1,169,628
Personal products	$706,315	$732,312
Home repair commodities	$206,267	$213,859
TOTAL for 16 categories	$22,313,752	$23,135,046

Source: Purchasing Power Profiles, prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 2004.

Methodology

The Purchasing Power Profiles are prepared by the University of Wisconsin-Milwaukee Employment and Training Institute to identify estimated expenditure patterns for residential neighborhoods. The Purchasing Power Profiles are based on spending patterns taken from the 2002 U.S. Census Bureau Consumer Expenditure Surveys (CEX) for common retail items, utilizing survey responses from more than 30,000 interviews of households with complete income and expenditure responses. Two years of additional expenditure data are drawn from the CEX diary file, which includes patterns of spending by more than 22,000 respondents. The CEX provides data on spending by income levels and family types, which makes it possible to estimate expenditures within communities. For the Public Power Profiles, five types of households by five levels of income ranges (i.e., 25 cells of data) are derived from the 2000 U.S. Census and used to estimate expenditures, based on CEX data, for each of the 16 retail categories listed below:

"FOOD AT HOME" includes expenditures for food purchased at grocery stores and convenience stores, and food prepared at home for out-of-town trips.

"FOOD AWAY FROM HOME" includes expenditures for meals at restaurants, carry-out orders, food purchased on out-of-town trips, school lunches, and meals as pay.

"APPAREL AND RELATED SERVICES" includes expenditures clothing (suits, coats, sweaters, shirts, skirts, nightware, undergarments, hosiery, uniforms, costumes, etc.), accessories, footwear, material for making clothes, watches, jewelry, shoe repair, laundry and dry cleaning costs, and clothing storage.

"TELEVISION EQUIPMENT, TAPES AND DISCS" includes expenditures for TVs, VCRs and video disc players; video cassettes, tapes and discs; video game hardware and software; cable and satellite service; repairs of TVs, radio and sound equipment; and rental of televisions.

"AUDIO EQUIPMENT, CDs, AND TAPES" includes expenditures for radios; tape recorders and players; sound components and component systems; records, CDs, audio tapes, an d needles; record, tape, CD and video mail order clubs; musical instruments; accessories and other sound equipment; satellite dishes; and rental of above equipment.

"HOUSEHOLD TEXTILES" includes expenditures for bathroom, bedroom, kitchen and dining room linens; curtains and draperies; slipcovers and decorative pillows; sewing materials for the home.

"FURNITURE" includes expenditures for mattresses and springs; sofas; living room tables and chairs; kitchen and dining room furniture; infants' furniture; outdoor furniture; wall units, cabinets and other occasional furniture.

"FLOOR COVERINGS" includes expenditures for wall-to-wall carpeting (for renters and homeowners) and non-permanent floor coverings.

"MAJOR APPLIANCES" includes expenditures for dishwashers, garbage disposals, refrigerators, freezers, washing machines, clothes dryers, cooking stoves, microwave ovens, air conditioners; floor cleaning equipment, and sewing machines.

"SMALL APPLIANCES AND HOUSEWARES" includes expenditures for china, dinnerware, flatware, glassware, serving pieces, small electric kitchen appliances, and portable heating and cooling equipment.

"COMPUTER HARDWARE AND SOFTWARE" includes expenditures for computers, computer hardware, computer software and accessories, for nonbusiness use.

"MISCELLANEOUS HOUSEHOLD EQUIPMENT" includes expenditures for window coverings, infants' equipment, outdoor equipment, clocks, lamps and lighting fixtures; other household decorative items; telephones and accessories; lawn and garden equipment; power tools; hand tools; plants and fresh flowers; closet and storage items; rental of furniture; and luggage.

"NON-PRESCRIPTION DRUGS AND SUPPLIES" includes expenditures for non-prescription drugs, non-prescription vitamins, eyeglasses and contact lenses, topicals and dressings, medical equipment for general use, supportive and convalescent medical equipment, and rental and repair of medical equipment.

"HOUSEKEEPING SUPPLIES" includes expenditures for laundry and cleaning supplies, cleansing and toilet tissue, paper towels and napkins, miscellaneous household products, and lawn and garden supplies.

"PERSONAL PRODUCTS" includes expenditures for hair care products, nonelectric articles for the hair, wigs and hairpieces, oral hygiene products and articles, shaving needs, cosmetics, perfume, bath preparation products, deodorants, feminine hygiene articles, and miscellaneous personal care items.

"HOME REPAIR COMMODITIES" includes expenditures for paints; wallpapers; electrical supplies for heating and cooling equipment; materials for hard surface flooring, repair and replacement; materials and equipment for roof and gutters; materials for plastering, paneling, siding, windows, doors, screens, awnings; materials for patios, walks, fences, driveways, brick, masonry and stucco work; materials for landscaping maintenance; materials to finish basements, remodel rooms, or build patios, walks, etc.

Purchasing power estimates per square mile are calculated using the land area of the geographical unit. Emphasis on average household income by major marketing firms, rather than spending per square mile, misses significant retail spending by large urban populations, and particularly the aggregate spending that occurs in dense urban neighborhoods. The CEX shows that families with lower incomes spend much higher percentages of their income on common retail purchases. Additionally, these families are often clustered in very dense neighborhoods while many upper income families reside in sparsely populated suburban or exurban areas.

Credit for the Purchasing Power Profile estimates and tables should be given as:

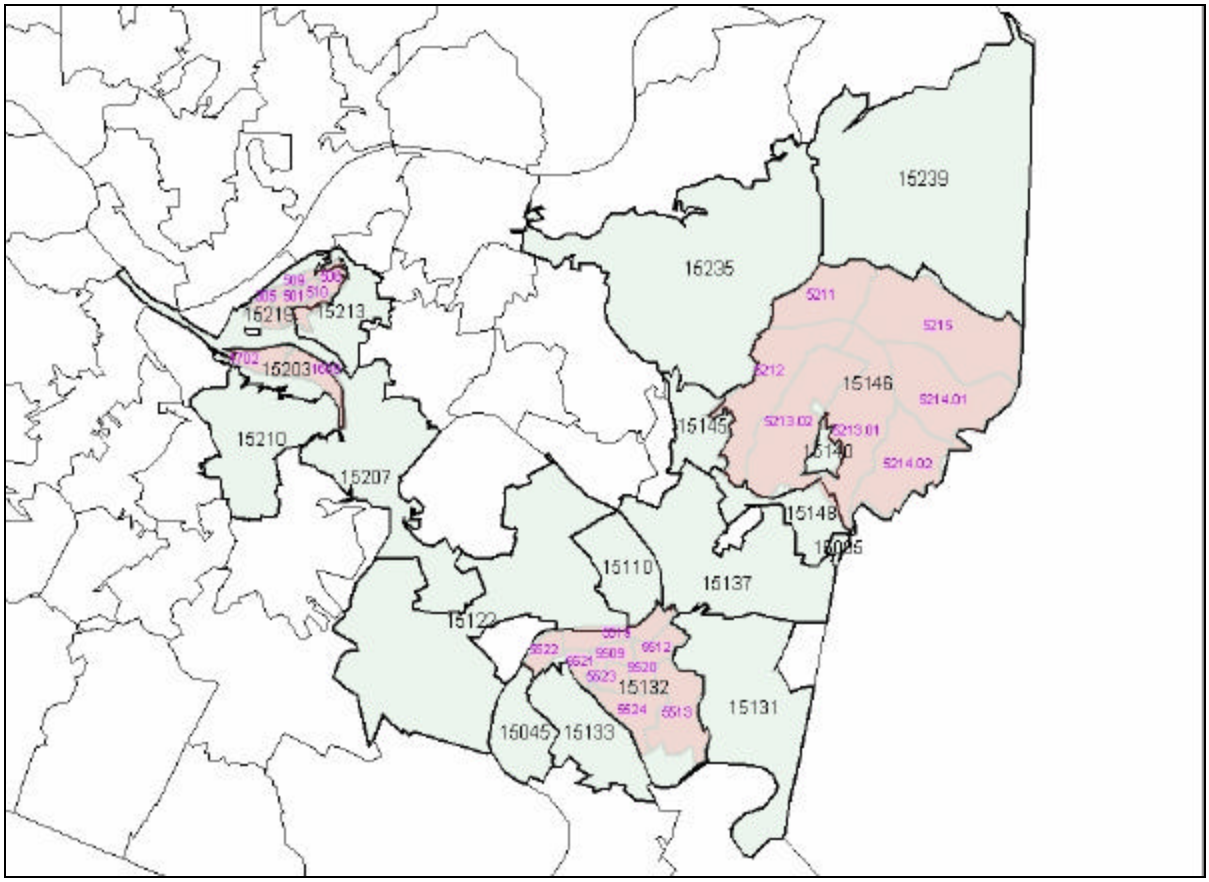
> Purchasing Power Profiles, prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 2004.

Additional tables may be purchased from the Employment and Training Institute, University of Wisconsin-Milwaukee, 161 W. Wisconsin Avenue, Suite 6000, Milwaukee, WI 53203. Phone 414-227-3380. Email: eti@uwm.edu. Website: www.eti.uwm.edu.

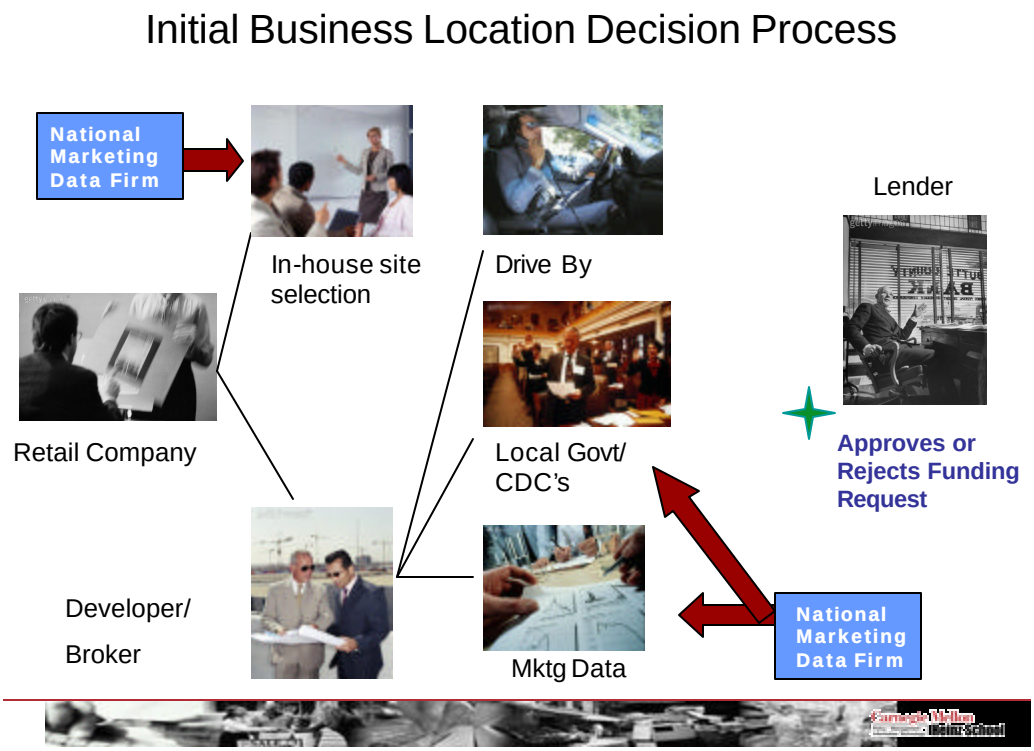
Appendix 4: Definition & Map of Study Neighborhoods by Zip Code and Census Tracts. Census Tracts were how this study chose to define neighborhoods.

Neighborhood	Census Tracts	Total	Zip Code	Region
Hill District	305, 501, 506, 509, 510, 511	6	15219 (includes more than sum of tracts)	Pittsburgh
South Side Flats	1609, 1702	3	15203 (includes more than sum of census tracts)	Pittsburgh
McKeesport	5509, 5512, 5513, 5519, 5520, 5521, 5522, 5523,5524	9	15132	Allegheny County
Monroeville	5211, 5212, 5213.01, 5213.02, 5214.01, 5214.02, 5215	7	15146	Allegheny County
	Total Census Tracts	25		

*In census 2000, census tract 1704 in the South Side was collapsed into the two other areas.



Appendix 5: Diagram of Initial Business Location Decision Process



Appendix 6: Alternative Market Analysis Firms

Alternative Market Analysis Firms

1. Employment and Training Institute
   University of Wisconsin-Milwaukee
   161 W. Wisconsin Avenue, Suite 6000
   Milwaukee, WI 53203
   Phone (414) 227-3388
   FAX (414) 227-3233
   Website: http://www.uwm.edu/Dept/ETI/

2. Social Compact
   7201 Wisconsin Ave., Suite 650
   Bethesda, MD 20814
   Phone (301) 961-4982
   Fax (301) 961-4990
   Website: http://www.socialcompact.org/

3. Initiative for a Competititive Inner City
   727 Atlantic Avenue, Suite 600
   Boston, MA 02111
   Phone (617) 292-2363
   Fax (617) 292-2380
   Website: http://www.icic.org/default.asp

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