

Market Analysis (Ted Spitzer, Market Ventures, Inc.)

Public Market Hall, Pittsburgh

The purpose of the market analysis is to quantify the potential demand for fresh and prepared foods at a public market in the proposed location, and to identify the targeted customers for the market. Demand analysis consists of defining the proposed market's trade areas, evaluating the demographics of the residents of the different trade areas, and analyzing buying behavior in order to estimate potential expenditures for the different products sold in the market. Both the experience of other public markets and the characteristics of Pittsburgh helped shape the trade area decision.

The market analysis utilizes both primary and secondary data sources. Primary data was collected through the Campos, Inc., Consumer Survey and secondary data was provided by Claritas, Inc.

A few general comments can be made about the differences between public markets and supermarkets:

- Public markets compete with the modern supermarket and other retail food outlets for consumers' patronage by providing a shopping environment unlike the typical American retail experience, with individually owned businesses linked to the region's food and agriculture and inviting public spaces.
- While supermarkets strive to obtain a large percentage of the expenditures for food within a small geographic area, downtown public markets realize a small percentage of these expenditures from a much larger area. The trade areas of downtown public markets are generally much larger than supermarkets'.
- It is typical for customers to drive 20 to 30 minutes to shop at a large, successful public market, even if most of their food shopping can be done more conveniently at supermarkets within several minutes of their homes.
- Tourists often seek out authentic public markets because they are such unique places, offering a window into the culture of the region where they are located because they cater first and foremost to area residents, not tourists.

Pittsburgh is a medium-sized metropolitan area, with a population of 1.6 million within a 20 mile radius around the city. Allegheny County is the second most populated in the Commonwealth of Pennsylvania. Pittsburgh is the largest city in western Pennsylvania and is the center of a region that includes eastern Ohio and northern West Virginia.

Trade areas

Three separate trade areas were defined for the public market:

1. Residents of a one mile ring around the site. This ring includes nearby neighbors of the site, for whom the market will be very convenient. Many would be expected to walk to the site, although the geography of the Strip prevents easy foot access from many directions. This area includes the entire Strip District as well as part of the downtown core.
2. The area between the one mile ring and a five mile ring. This band includes much of the City of Pittsburgh. Again, the public market will generally be convenient to residents and workers in this area although it will be beyond easy walking distance. There are also competitive stores within this area.
3. The area between the five mile ring and a 20 mile ring, which covers much of Allegheny County.

In addition to these trade areas, the demand analysis also includes estimates of potential patronage by tourists (defined as anyone from outside the 20 mile ring).

According to research Market Ventures, Inc. has conducted at other downtown public markets, public markets attract a wide range of shoppers in terms of age, ethnicity, and income level. In general, families buy more fresh food than individuals or people living in unrelated households, and people with higher income levels (\$50,000 and above) are more frequent shoppers and spend more than people with lower incomes. Research has also shown that individuals with higher educational attainment generally purchase high quality foods and are interested in both where their food comes from and how it was grown. The highest spending customer is typically an upper income, 40 to 55 year old woman. What is unique about public markets, however, is their ability to appeal to both the highest income shoppers and lower income shoppers. While higher income shoppers might be drawn by unique products and superior quality, lower income and elderly shoppers appreciate the ability to purchase smaller quantities, the ability to negotiate with empowered owners, ethnic specialties, and competitive prices.

Demographic data about the three trade areas were acquired from Claritas, a national market research data company. The acquired data include 2000 U.S. Census information, estimates developed by Claritas for 2005, and projections for 2010. Data from the three trade areas are summarized in the chart below:

Strip Market Hall Trade Area	1 m radius	1-5 m band	5-20 m band	Total	USA
Population 2000 census	17,451	397,343	1,172,051	1,586,845	281,421,906
Population 2005 estimate	16,562	382,190	1,164,212	1,562,964	295,140,073
Population 2010 projection	15,760	368,045	1,156,200	1,540,005	
Population change 2005-2010	-4.8%	-3.7%	-0.7%	-1.5%	4.90%
Households 2005	8,205	166,785	480,258	655,248	

Strip Market Hall Trade Area	1 m radius	1-5 m band	5-20 m band	Total	USA
Average household size	1.94	2.15	2.38		
Median age	38.5	37.8	42.3		36.2
Median hh income	\$19,210	\$34,416	\$48,220		
Average hh income	\$31,218	\$48,766	\$65,304		\$64,816
Per capita income	\$16,033	\$21,868	\$27,243		\$24,704
Household income >\$50,000/yr	18%	33%	48%		
Household income >\$100,000/yr	4%	10%	17%		
Bachelor's Degree or higher (age 25+)	14%	27%	28%		25%
Family households	3,630	87,507	323,894		
Age 35-64	37%	38%	43%		
Percent African-American	56%	20%	7%		12%
No Vehicles	55%	25%	10%		

Trade area 1: One mile ring

2005 population for the one mile radius is estimated at 16,562 people, which represents a decrease of 5.1% from the 2000 Census count of 17,451. The population is expected to decrease another 4.8% by 2010, to 15,760 people. By comparison, the population of the United States grew 4.9% between 2000 and 2005 and is expected to grow another 4.9% between 2005 and 2010. However, these projections might not take into account new condominiums being developed near the site, including the 297 apartments in the Armstrong Cork Factory, the Otto Milk Building (40 to 60 condos), the Blackbird Lofts (12 condos) and The Pink Building (14 condos), as well as condominiums being planned for the recently sold Ayoob-Acme Banana Co. property and the 12 acre Buncher property along the river. Owners of buildings on Penn Avenue, which have retail at street level, have begun expressing interest in developing residential units in the upper floors. While a decreasing population suggests lower demand for consumer goods, the residents in the new condominiums are expected to have higher than average incomes and will be within close walking distance to the site.

At present, this trade area has 8,205 households, with an average household size of only 1.94, which is well below the national average of 2.6. Only 44% of these households (3,630 of 8,205) are families. Typically, this would suggest lower than average purchases at a public market.

The median age of the population, at 38.5 is above the national median of 36.2. 37% of the population is in the targeted age range of 35 to 64, which is slightly below the other two trade areas.

Incomes in this area are low. Per capita income is only \$16,033, compared to a national average of \$24,704. Only 18% of the households have income of greater than \$50,000 per year, compared to 33% of the households in the 1-5 mile band and 48% in the 5-20 mile band. Only

4% of the households have income of \$100,000 or more. In general, people from higher income households spend more at a public market so these income levels suggest lower than average shopping at the proposed market.

Another indicator of interest in high quality food is educational attainment. Only 14% of residents in this trade area who are age 25 or older have achieved a Bachelor’s Degree or higher, compared to 27% in the 1-5 mile band and 28% in the 5-20 mile band, and 25% in the US.

More than half (55%) of the households have no vehicle. For these households, the convenience of a public market should be very welcome.

A large percentage of the population, 55%, is African-American, compared to 25% in the 1-5 mile band and only 10% in the 5-20 mile band.

Based on the demographic profile of area residents and typical expenditure patterns as determined by the Bureau of Labor Statistics’ Consumer Expenditure Survey, Claritas estimates the retail sales potential for consumer goods. Using their estimated per capita expenditures for various food items, Claritas creates a Food Purchasing Index that compares local expected purchases to national averages on the household level. In any category, a score of 1.00 means that households within the defined trade area are expected to buy exactly the same as the national household average. If households in the targeted trade area are expected to purchase less of a particular product, the index will be less than one. Conversely, if they are expected to buy more of a certain item, the index will be more than one. For example, if the average household in the trade area is expected to buy \$1,200 worth of baked goods per year and the national average is \$1,000 per household, then the index would be 1.2.

For the one mile radius, the food purchasing index for 2005 and 2010 is:

1 mile ring	Yr 2005 Estimate	Yr 2010 Projection
Food at Home - overall	75	74
Food away from Home - overall	62	62
<i>Market categories</i>		
Baked goods	75	74
Dairy	73	73
Meat	91	90
Prepared foods	62	62
Fruits and Vegetables	77	76
Seafood	67	66
Sweets	66	66
Beverages - nonalcoholic	64	63

These scores are all below one, reflecting expected household expenditures to be below national averages. Only meat indexes near one, with a score of 91 in 2005 and a score of 90 in 2010. These data suggest that residents who live within a one mile radius of the Public Market Hall will not make up a strong customer base. However, as noted above, residents in the new condominiums very close to the site will probably have different demographic profiles from existing residents and are likely to be market shoppers.

In addition to residents in this trade area, there are many downtown workers near the site. According to the City of Pittsburgh Downtown Plan, there are 130,000 daily workers in the downtown, plus 10,000 daily visitors and 20,000-30,000 daily students. This daytime population generates 25,000-30,000 daily shopping trips. The Strip District and neighboring Lawrenceville alone have nearly 16,000 daily workers at 367 businesses.

Trade area 2: Area between 1 mile ring and 5 mile ring

The area between the one mile radius and the five mile radius contained 382,190 people in 2005 and is expected to decrease to 368,045 by 2010, a drop of 3.7%. This area is divided into 166,785 households, with an average household size of 2.15, which is larger than the one mile trade area but still below the national average. On average, this is a slightly younger population, with a median age of 37.8, which is still above the national average. 52% of the households are families.

Average household income in this area is \$48,766, which exceeds the first trade area but lags both the 20 mile ring and the national average. 33% of the households have income of more than \$50,000 and 10% have household income above \$100,000. 27% of the residents age 25 or higher have at least a Bachelor’s Degree, which is significantly higher than the 1 mile radius and slightly higher than the national average of 25%. The African-American population of this area drops to 20%.

25% of the households do not have a vehicle, so most have the ability to drive to the site. For those without a vehicle, there are eleven Port Authority Bus Stops in the Strip District, four on Penn Avenue and seven on Liberty Avenue. All eleven bus stops are between 17th and 25th Streets. These eleven stops include 10 separate routes inbound and 12 separate routes outbound, serving the areas within the area between the one mile radius and the five mile radius. There are also plans to create three taxi stands in the Strip District within the next three months. Two of these stands would be on Smallman Street between 15th and 21st Streets and the third would be on Penn Avenue close to 17th Street. Additionally there are long range plans to incorporate water taxi service and to re-activate the Allegheny Valley Railroad (AVRR) as a commuter service between the Strip District and New Kensington.

The Food Purchasing Index for this trade area are closer to national averages, although still below. This is probably caused by lower household incomes. The 2010 projections are all slightly below the 2005 estimates, suggesting that the area will not keep up with national averages for food expenditures.

	Yr 2005 Estimate	Yr 2010 Projection
1-5 mile ring		
Food at Home - overall	90	89
Food away from Home - overall	88	87
<i>Market categories</i>		
Baked goods	94	93
Dairy	92	92
Meat	95	94
Prepared foods	83	82

Fruits and Vegetables	92	90
Seafood	78	77
Sweets	88	87
Beverages - nonalcoholic	82	81

Based on this demographic data, expended sales at the public market are expected to be somewhat below national averages.

Trade area 3: Area between 5 mile radius and 20 mile radius

The 5-20 mile band contains about 1.16 million people divided into 480,258 households. This population is expected to shrink by 0.7% between 2005 and 2010. 67% of the households are families and the average household size is 2.38. The median age is 42.3, which is older than the other two trade areas and significantly above the national average of 36.2. 43% of the residents are in the targeted age range of 35-64.

Average household income in this trade area is \$65,304, which is slightly above the national average of \$64,816 and significantly higher than the other two trade areas. Per capita income is also the highest of the three trade areas at \$27,243. 48% of the households have income about \$50,000 and 17% have income above \$100,000. 28% of the residents age 25 or higher have at least a Bachelor's Degree, which is about the same as the 1-5 mile band and slightly higher than the national average of 25%.

Only 10% of the households do not own a vehicle.

This trade area generally ranks above national averages for food purchasing. It is particularly strong on baked goods, dairy, meat, and fruits and vegetables. The area ranks lowest on seafood.

	Yr 2005 Estimate	Yr 2010 Projection
5-20 mile ring		
Food at Home - overall	103	102
Food away from Home - overall	103	102
<i>Market categories</i>		
Baked goods	110	109
Dairy	107	107
Meat	104	103
Prepared foods	98	97
Fruits and Vegetables	105	104
Seafood	91	91
Sweets	104	105
Beverages - nonalcoholic	93	92

The demographics of this trade area are strongest for the public market. However, it is also farthest from the site so access and parking will be particularly important.

Tourists

Depending on location and how they are marketed, public markets can attract a large number of tourists. Tourists are often attracted to markets because they are such unique places, offering a window into the culture of the region where they are located. As Americans have become more interested in food and cuisine, they are searching out public markets when they travel.

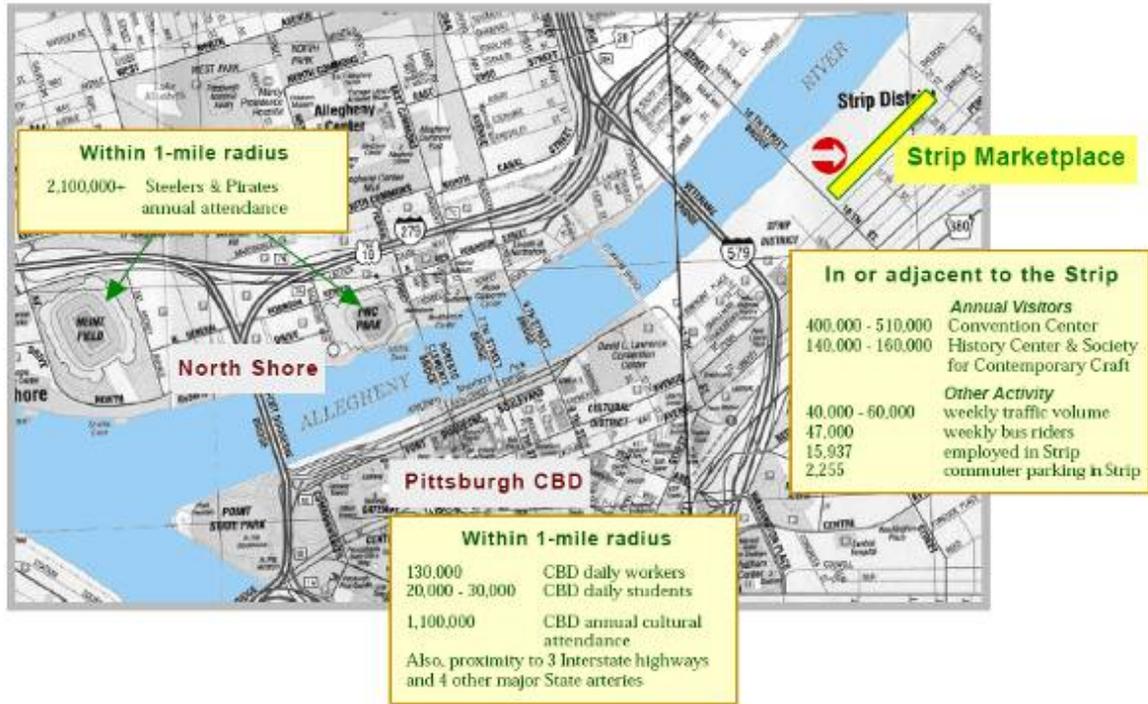
Some public markets experience significant challenges managing the tourist influx. The management at Pike Place Market, for example, reports that sales for fresh foods are suppressed in the summer – even though the largest quantity of locally grown items are available then – because local shoppers stay away from the market when the aisles are clogged with tourists. Farmers actually have higher sales in the winter than in summer. The short term economics of catering to tourists sometimes drives vendors to offer more items to this customer base, eroding their local clientele and eventually degrading the shopping experience for tourists, as well.

As part of the well known Strip District adjacent to Pittsburgh's Central Business District, *The Public Market Hall* is well located to attract tourists. The corridor draws visitors from the Convention Center, the Cultural District and the Heinz History Center, as well as the Society for Contemporary Crafts located within the Strip. Annual visitations to these venues include:

- 400,000 – 500,000 annual visitors to the new Convention Center
- 1,100,000 annual visitors to the Cultural District
- 110,000 – 130,000 annual visitors to the Heinz History Center
- 30,000+ annual visitors to Society for Contemporary Craft

NEARBY ATTRACTIONS & ACTIVITY

Consumer, commuter & tourist traffic near & through the Strip District is optimized by many assets and attractions.



The site is also near the city's two professional sports stadiums, where the Pittsburgh Pirates draw 1.6 million visitors to home games and the Steelers draw approximately 500,000 visitors.

Given the wide variation in tourist purchases, a capture rate methodology has not been developed for tourists. Rather, we utilize a mark-up factor over the sales to local residents. For this analysis, sales to tourists have been projected at 15% of the total.

Campos Consumer Survey

Neighbors in the Strip contracted with Campos, Inc. to obtain potential consumers' reaction to and attitudes about the proposed *Public Market Hall* using their Voice of the Region™ panel to participate in an online survey.

The overall objective of this research was to determine the products and services that shoppers, in particular regular shoppers to the Strip, want to see in *The Public Market Hall*. Secondary objectives were to understand customer behavior of current Strip District shoppers, and to estimate customer demand and high-traffic times for the proposed public market.

Data was collected between March 3, 2006 and March 8, 2006. There were 466 interviews completed, with the vast majority of respondents living in Allegheny County (seven respondents were residents of surrounding counties).

One of the key findings of this study suggested that the traffic of customers shopping the Strip District at least once a month would increase by an estimated 35.5% due to the addition of *The Public Market Hall*.¹ This survey also indicated that 36.3% of respondents currently shop the Strip District at least once a month, however 62.1% of respondents would shop *The Public Market Hall* at least monthly. When asked to choose up to three most important reasons why they shop the Strip District, 49.7% indicated selection of specialty/unique items, 49.2% indicated an enjoyable experience/fun way to spend time, and 41% mentioned unique stores. A complete copy of the Campos study survey and results is included as Appendix H.

Supply Analysis

The Strip is currently populated with a large number of food businesses, particularly those classified as specialty food stores (SIC 541-549). Within the one mile trade area, Claritas (using data from the Census of Retail Trade) reports that there are 47 groceries, meat and fish markets, fruit and vegetable markets, retail bakeries, and miscellaneous food stores, with aggregate sales of \$78 million. These are broken down in the chart, below. There are also 94 eating places, with sales of \$68 million.

In the 1-5 mile band, there are 293 such retail stores with sales of \$776 million and 941 eating places with sales of \$796 million.

In the 5-20 mile band, there are 735 retail food stores with sales of \$1.9 billion and 2,129 eating places with sales of \$2.0 billion.

SIC	Establishments	1 mile radius	1-5 mile band	5-20 m band
541	Grocery Stores	15	173	408
542	Meat and Fish Markets	6	9	24
543	Fruit and Vegetable Markets	5	3	30
544	Candy, Nut and Confection Store	2	26	51
545	Dairy Products Stores	1	7	10
546	Retail Bakeries	8	32	86
549	Miscellaneous Food Stores	10	43	126
Total		47	293	735
5812	Eating Places	94	941	2,129

Claritas also provides sales gap analysis. Within the one mile radius trade area, sales by specialty food stores greatly exceed the demand generated by residents within the same area, with a surplus of about \$10.4 million. This reflects the existing widespread customer base for food stores within the Strip and adjacent areas – these stores are not just serving neighborhood residents but a much wider range of customers. Conversely, the Pittsburgh area shows a huge gap for specialty food stores in the other two trade areas: nearly \$67 million in the 1-5 mile band and a huge \$232 million in the 5-20 mile band. Combining the three trade areas, there is a gap of nearly \$290 million, as the chart below demonstrates.

¹ Strip Marketplace Concept Study. March 24, 2006, Campos, Inc., p. 6

Specialty Food Stores	Demand (000)	Supply (000)	Gap/(Surplus)
1 mile radius	\$ 3,475	\$ 13,842	\$ (10,367)
1-5 mile band	\$ 82,888	\$ 16,285	\$ 66,603
5-20 mile band	\$ 272,494	\$ 40,219	\$ 232,275
Total	\$ 358,858	\$ 70,347	\$ 288,511

Supermarkets and convenience stores in the region more than absorb this gap. Demand for supermarkets and convenience stores is estimated at \$2.54 billion while the supply is \$2.92 billion, resulting in a surplus of \$382 million. These data suggest that the area is significantly underserved by specialty food stores and growth in specialty food stores will pull from supermarkets, not other specialty food stores.

For Foodservice and Drinking Places, both the 1 mile radius trade area and the 1-5 mile band have surpluses, while the 5-20 mile band has an even larger gap, leading to an overall gap between supply and demand of nearly \$50 million.

Foodservice and Drinking Places	Demand (000)	Supply (000)	Gap/(Surplus)
1 mile radius	\$ 19,720	\$ 75,809	\$ (56,089)
1-5 mile band	\$ 562,058	\$ 595,338	\$ (33,280)
5-20 mile band	\$ 1,854,600	\$ 1,715,775	\$ 138,825
Total	\$ 2,436,378	\$ 2,386,922	\$ 49,456

These data all point to the need for *The Public Market Hall* to attract customers from a wide geographic region because it is in these outlying areas where demand is outstripping supply and where the demographic profile of typical public market shoppers is most closely matched.

Sales potential

The chart below shows Claritas estimates for aggregate annual food and beverage expenditures divided between the types of products typically found in a public market, in each of the three trade areas. The table on top shows estimates for 2005 and the table below shows projections for 2010.

These categories represent many of the fresh food components of a public market, but the list is not exhaustive. For example, the data does not include specialty foods (jams, mustards, sauces) or wine, products which are typically found in a public market. It also does not include prepared foods to eat in the market, which often represents up to a third of public market sales.

Yr 2005 Estimate	1 mile ring	1-5 m radius	5-20 m radius
Market categories	(million)	(million)	(million)
Baked goods	\$3.51	88.954	\$298.93
Dairy	\$3.41	\$87.27	\$292.26
Meat	\$8.26	\$174.63	\$549.80
Prepared foods at home	\$5.31	\$143.60	\$488.45
Fruits and Vegetables	\$4.23	\$102.34	\$338.72
Seafood	\$0.67	\$15.70	\$52.97
Sweets	\$1.96	\$52.54	\$180.15
Beverages - nonalcoholic	\$2.85	\$74.33	\$243.64
Total	\$30.18	\$650.40	\$2,444.91

Yr 2010 Projection	1 mile ring	1-5 m radius	5-20 m radius
Market categories	(million)	(million)	(million)
Baked goods	\$3.48	\$89.09	\$309.70
Dairy	\$3.39	\$87.11	\$301.10
Meat	\$8.43	\$180.63	\$587.31
Prepared foods	\$5.90	\$161.42	\$566.85
Fruits and Vegetables	\$4.23	\$108.39	\$371.24
Seafood	\$0.72	\$17.25	\$60.36
Sweets	\$1.98	\$54.18	\$192.05
Beverages - nonalcoholic	\$2.59	\$68.09	\$230.23
Total	\$30.72	\$766.14	\$2,618.83
Change 2005-2010	1.8%	17.8%	7.1%

Adding the various categories within each trade area, total sales potential in 2005 for residents within the one mile ring for these categories is \$30.18 million. Based on anticipated population and income changes, as well as lifestyle trends, this figure is expected to increase slightly to \$30.72 million by 2010, a change of 1.8%. The other two trade areas are expected to see larger increased demand, particularly the 1-5 mile band, which is expected to see demand increase 17.8%.

These market categories do not include estimates for food purchased away from home, including breakfast, lunch, and dinner, snacks, catered affairs, and food on trips. For 2005, food purchased away from home equaled \$24 million in the first trade area, \$699 million in the second, and \$2.35 billion in the third. As the trend toward eating more meals away from home continues, these figures are projected to increase over the next five years to \$26 million, \$752 million, and \$2.62 billion, respectively. As Americans move toward spending half of their food dollar on meals away from home, there is strong potential for developing food to eat on premises within *The Public Market Hall*. Many public markets have successful restaurants, including several full service restaurants within the Ferry Plaza Market Hall and numerous restaurants within Seattle's Pike Place Market and in and around Granville Island Public Market.

To estimate potential sales for fresh food products within the market, the consumer expenditure data is utilized with projected capture rates. The chart labeled "Sales Analysis – 2005," repeats the product categories and sales estimates from the chart above in the first two columns. The third column, labeled "Potential," contains a realistic estimate for the percentage

of sales that the public market vendors should be able to obtain.²

The fourth column, labeled “Sales,” is the product of multiplying the potential by the capture percentage. For example, in the Baked Goods category, Claritas estimates \$3.51 million in consumer expenditures within the first trade area. Market Ventures, Inc. estimates that market vendors could reasonably capture 5.0% of those sales, based on our experience and research. This results in the potential for \$175,500 in baked goods sales at the market from nearby residents. Adding the sales for baked goods across both the three trade areas, we estimate that the market could reasonably achieve \$1.96 million in baked goods sales.

Summing the sales total column for the 1 mile ring, the market could reasonably capture \$1.34 million in sales, which represents 4.4% of all fresh food sales in the zone, \$6.67 million in sales from the 1 to 5 mile band, which is 0.90% of fresh food sales in that region, and \$7.01 million from the 5-20 mile band, which is 0.29% of fresh food sales in that region. Although comparable data is limited, successful downtown public markets in other cities have achieved up to 10% of the sales in the immediate neighborhood around the market and 2-3% of the fresh food sales within a 30-minute drive. Given the extensive range of similar businesses in the Strip and the area’s demographic characteristics, these capture rates can be viewed as realistic.

Since the available data does not include specialty foods and wine and the analysis does not include food to eat on premises, a factor of 30% has been added, increasing sales to residents \$17.02 million. Finally, a factor of 15% has been added for tourists, increasing total potential sales to \$19.58 million. Using an average sales figure of \$750 per square foot, which reflects a profitable public market vendor, the location can support a public market of 26,103 leasable square feet.

Since the region is changing in population, wealth, and lifestyle trends, it is reasonable to look at sales potential several years out. Using Claritas projections for sales potential in 2010 with the same capture rates, total sales can be expected to grow to \$21.31 million. *This should be more than adequate demand to develop a successful public market at the proposed site.*

As the chart labeled “Source of Sales” shows, the 5-20 mile ring represents the largest share of sales, at 39% of the total, closely followed by the 1-5 mile band at 37%. Tourists make up 13% of expected sales and nearby residents 7%. The fairly wide dispersion of market customers will mean that a broad-based marketing strategy must be utilized to reach potential customers.

2. These estimates have been developed and refined by the Market Ventures, Inc. through its work planning, developing, and operating public markets and its research of other public markets around the country, and have been customized for the unique characteristics of this location, taking into account the market research findings and other sources of supply. The ability to achieve these capture rates will depend on the market having the qualities of other successful public markets (adequate scale, convenient parking, the right tenant mix with high quality vendors, skilled management, effective marketing, etc.) The potential suggests what an accomplished vendor might realistically achieve for sales from a trade area. A particularly strong vendor might achieve higher sales from the trade area and might attract customers from outside the trade area if his/her business is unique and attractive to consumers.

Market vendors and farmers will benefit from several other sources of demand for their products in the public market. Chefs and restaurateurs are increasingly looking for locally grown, fresh, and interesting foods to add to their menus. Both market farmers and merchants will be positioned to establish accounts with restaurants and other wholesale buyers, and market management should help promote and facilitate this process. In other public markets, many merchants use their market stall as a base for catering and corporate sales, which can be highly profitable. The public market provides a high-profile location to create or promote a food business, which can lead to other store locations and sales opportunities. Web-based sales are also an emerging practice among public market vendors. A store in a public market with an e-commerce web site allows a vendor to have both a real and a virtual presence.

