ESTIMATING THE ECONOMIC IMPACT OF PUBLIC MARKETS

Report Submitted To:

Project for Public Spaces
700 Broadway, 4th Floor
New York, NY 10003

Submitted By:

Econsult Corporation
3600 Market St., 6th Floor
Philadelphia, PA 19104

Funding Provided By:

The Ford Foundation

February 2007

1.0 INTRODUCTION

Public markets are unique economic and social institutions which are increasingly being viewed as tools to achieve a wide variety of goals. These goals include improved access to quality food, better marketing opportunities for family farmers, improving social interaction in urban neighborhoods, increasing social cohesion, providing employment opportunities to local communities, creating entrepreneurial environment to increase small business formation, and enhancing community economic development. These are fairly high hopes for the relatively simple market institution, with small businesses that continuously compete for survival. Yet many, including the Project for Public Spaces (PPS) believe that the public markets fill a unique niche that delivers both economic and social benefits. At the request of PPS, Econsult Corporation (Econsult) participated in several meetings of the Public Markets working group to help them think about measuring the potential benefits of public markets.

For public markets to provide the benefits discussed above, they first must be economically sustainable, and this often requires some form of external financial support. A key issue in obtaining public and other funding for public markets is whether the markets can demonstrate that they deliver economic benefits to the community. The goal of this analysis is to examine only one of the potential benefits of public markets—their direct and indirect impacts on local economic activity.

Comprehensive economic impact analyses have been undertaken for large individual public markets such as the Pike Place Market in Seattle. These analyses provide detailed insight into the direct and indirect economic impacts of the market. This type of analysis is expensive and beyond the means of most public markets. At the other end of the spectrum is an economic impact analysis tool developed specifically for small public markets by the Economics Institute at Loyola University in New Orleans. This tool, called the Sticky Economics Evaluation Device (SEED) is a promising web-based approach that provides a straightforward mechanism for collecting data about small markets for self-evaluation.[1] These data are then used to estimate direct and indirect economic impacts using a standard multiplier.

This study fits in between these two approaches. Recognizing the diversity of public markets and the communities they serve, we created a stylized typology of public markets that can be used as a basis for estimating the potential indirect and induced expenditures of specific public markets. In conjunction with PPS, Econsult analyzed data on the expenditures of seven public markets and their vendors in communities across the country. These markets differed in terms of their scale, various mixes of vendors, and the local economies in which markets are situated. The goal of the analysis was to evaluate different aspects of the market and how they contributed to the overall economic impact of the market.

One of the key aspects of the analysis was to evaluate how economic "multipliers" are likely to differ across several types of markets and different local economies. Due to the very heterogeneous nature of public markets, it is unlikely that a single economic impact multiplier

[1] See http://crescentcityfarmersmarket.org/seed/index.html for a discussion of SEED.

would be appropriate across all types of markets. A goal of the analysis was to create a tool in which individual public markets could best determine their appropriate multiplier.

To build this tool, standard economic impact techniques were employed so as to evaluate hypothetical public markets in specific local economies. By taking this approach, it was possible to construct a matrix of multipliers based on market type, vendor mix, and market location. This would effectively allow various types of market operators to use an economic impact multiplier that corresponds to, and is most appropriate for, their specific market characteristics.

In addition to creating a matrix of multipliers that would be useful for individual markets to determine their appropriate multiplier (which could, for example, be used with the SEED analysis discussed above), the analysis revealed several insights into the nature of public market economic impacts. These insights are useful in understanding not only the nature of the economic impacts, but also for understanding the appropriate economic impact. The most striking example of this type of finding is the impact of producer spending in large city markets. For producers, virtually all of their expenditures in support of their business occur out of the local area—and therefore result in a net drain of economic activity outside of the city (a multiplier of less than 1). On the other hand, if the local area were defined in broader geographic terms, sales of producers would likely have a multiplier considerably greater than one.

One other point should be made with respect to the economic impacts of public markets. In the analysis that we have performed, we have *not* made adjustments for the reduction in sales that might have occurred in other retail venues as a result of sales at the public market. While this might appear to cause a serious upward bias in the estimated multipliers, this should be tempered by two additional considerations. First, the market may be selling products that do not directly compete with nearby retail venues, and second, shoppers in some communities might be inclined to travel outside the local community to purchase the same goods, and hence the introduction of the public market could potentially reduce the leakage from the local community.

Overall, the process of data collection to conduct the economic impact analysis proved to be difficult. In particular, vendors were often unwilling to provide accurate expenditure data for analysis. This suggests that developing credible multipliers specific to vendor, market, and community type might be even more useful since they could be used in conjunction with customer purchase survey data in order to estimate economic impacts, rather than having to obtain business expenditure data directly from the vendors.

2.0 METHODOLOGY

The basic approach to creating the matrix of economic activity multipliers was as follows:

1. Identify market types
2. Identify vendor types
3. Collect data on expenditures of markets and managements
4. Use the U. S. Department of Commerce (Bureau of Economic Analysis) Regional Input-Output Modeling System (RIMS) to evaluate the impact of specific market and vendor types in three separate local economies
5. Create a matrix of impact multipliers specific to each market, vendor, and local economy type.

We expect that large indoor markets are likely to have different spending patterns than small outdoor markets. For example, a large indoor market might have large expenditures for building maintenance and insurance that a small outdoor market will not. Similarly, different market vendors will have different local expenditure patterns. For example producers reported extremely small local expenditures associated with their business in large city markets, but these same types of vendors situated in small cities and towns reported considerable expenditures in the local economy. It is not surprising that large city producers apparently travel from outside the local county to the market, while that is not the case for those producers in smaller areas.

The expenditure data of each type of market and vendor was evaluated to determine local economic impacts[2]. This was done for specific local economies by assigning expenditures to industry categories and using the RIMS model to determine the extent to which these expenditures created additional local economic activity. Because vendors sometimes travel considerable distances to be part of a market, we also asked vendors what fraction of their business expenditures occurred within the county where the public market was located. This data was used to modify the input data to the RIMS model, and generally has the effect of reducing the multiplier.

3.0 STUDY SAMPLE

After in-depth discussions regarding which particular markets to focus on in the economic impact analysis, Econsult and PPS determined that it would be most effective to separate the study sample based on market type, vendor mix, and the local economy in which the market is located.

[2] Throughout the following sections of the report, the "regional" or "local" economic impacts of markets refer to the counties in which markets are physically located.

Market Types

These hypothetical markets reflect the following particular market types:

- Large regional public markets (indoor)
- Mid-size public markets (indoor/outdoor)
- Mid-size farmers markets (outdoor)

Each of the markets is assumed to be primarily food-oriented. For each of these market types, it was important to have an understanding of the expenditures made to manage, maintain and promote the market. Each of the three market types identified has different local economic impacts associated with the management of the market. For example, large regional markets may purchase sophisticated marketing, accounting, and legal services, which this is unlikely to be the case for small outdoor farmers markets. Economic impact multipliers for market management were calculated for each market type listed above.

Vendor Mix

Each market is composed of three basic types of vendors:

- Producers, including meat, poultry, fruit and vegetable farmers and fishermen
- Non-producers, including produce re-sellers, butchers, fishmongers and bakers
- Prepared food vendors, including restaurants
- Other (crafts, etc)

Different vendor types are likely to have different economic impacts on the local economy. A vendor that spends all of its revenue outside of the local economy will have virtually no economic impact on the economy.

Actual vendor data from several vendors was collected to evaluate the spending patterns for each vendor type. Detailed data collected from several types of vendors allowed us to calculate typical or average spending patterns across vendor types.

Vendor-type specific multipliers were calculated using the detailed data. Market managers can use these vendor-specific multipliers in determining the mix of vendors in their own market and can to more accurately assess economic impacts. There cannot be one universal vendor specific multiplier for each type however, because the multiplier will depend on the scale and structure of the local economy.

Local Economies for Evaluation

It was necessary to evaluate the market and vendor types in the context of a local setting, primarily since economic impact multipliers depend on the scale and structure of the local economy. Since it would be costly and ineffective to construct specific multipliers for a large number of economies, PPS and Econsult chose locations which would serve as representative economies. Market types and management were evaluated in the following local contexts: large city, small city, and small town. The specific representative economies are as follow:

- Large City Economy (population > 1,000,000) Philadelphia PA
- Small City Economy (population > 250,000) Pulaski, AR
- Small Town Economy (population > 70,000) Medford, OR

Note that overall we have listed various market, vendor, and economy types—which implies a number of multipliers, based on combinations of these variables. The following analysis provides a total of 15 different multipliers that will cover important market types, vendor types and different kinds of local economies. Market managers could pick the appropriate multipliers that reflect their situation and get a good, defensible estimate of their market impact with only the type of data that is generated with SEED.

4.0 DATA REQUIREMENTS

Econsult and PPS determined that a survey would be the main method of obtaining detailed data on vendors and market management. Separate surveys were formulated for distribution to both market operators and vendors[3].

Specific markets where surveys were to be distributed were chosen based on the local economies in which they were located. Because of their close relationships and prior dealing with most of the markets that were to be surveyed, PPS was responsible for contacting the markets and vendors and having them complete the surveys. The final list of markets in the study includes the following:

- Large City Markets[4]
  - Pike Place Market (Seattle, WA)
  - North Market (Columbus, OH)
  - City Market (Kansas City, MO)
  - Grand Central Market (New York, NY)

- Small City Markets
  - Findlay Market (Cincinnati, OH)
  - Roanoke Market (Roanoke, VA)
  - River Market (Little Rock, AR)

- Small Town Markets
  - Troy Waterfront Farmers Market (Troy, NY)
  - Silver City Farmers Market (Silver City, NM)
  - Corvallis Farmers Market (Corvallis, OR)

Detailed surveys were distributed to both vendors and market operators/managers. Detailed vendor surveys asked for specific information on employment, daily customers, sales, all market-related expenses, and the percentage of market-related expenses occurring in the same county as the market. Information on vendor expenses was requested, by category, based on corresponding industries appearing in the Bureau of Economic Analysis' RIMS Model (Regional Input-Output Multipliers). The RIMS model accounts for inter-industry relationships within regions, and is a useful tool for conducting regional economic impact analysis.

The detailed vendor survey appears on the following pages.

[3] See Appendix A for complete versions of the various surveys that were distributed.
[4] Reading Terminal Market (Philadelphia, PA) was originally included as a Large City Market. Due to a lack of responses from vendors, however, it was excluded from our final analysis.

Figure 4.1
Detailed Vendor Survey

GENERAL

How would you classify yourself as a vendor? (Please check all that apply)

_____ Producer (Produce/grow and sell your own fresh food or produce)
_____ Non-Producer (Sell fresh food or produce but do not grow it yourself)
_____ Prepared Food Vendor/Restaurant
_____ Other (Please specify: _____)

QUESTIONS FOR FARMERS ONLY

Location (County) of farm: _____

Goods that you produce/grow at your farm: _____

How many employees do you have at your farm? _____

What % of the employees at your farm perform work related to the goods you sell at xxyxx Market? _____%

EMPLOYMENT

On average, how many workers do you have at xxyxx Market (full time & part time)? _____

_____ % of workers who live in the same region as **xxyxx** Market
_____% of workers who do NOT live in the same region as **xxyxx** Market

What was the total cost of your employees (full time, part time, casual labor, bonuses, cash and non-cash,etc.) related to your business at xxyxx Market in 2003? $_____

SALES

What were your total sales at xxyxx Market for 2003, broken down by the following categories?

$_____ Raw Goods (meat, produce, flowers, animal products, etc.)
$_____ Value Added Goods (baked goods, honey, jams, prepared foods, etc.)
$_____ Other (Please specify:_____)

What % of your sales at xxyxx Market come from food stamps/EBT or FMNP (Farmers Market Nutrition Program), including WIC and seniors)? _____%

On average, how many customers did you have at xxyxx Market on a daily basis? _____

EXPENSES

What were your TOTAL business expenses for 2003? $_____

Please categorize your TOTAL expenses for 2003, by the following categories:

	TOTAL $	*$ In xxyxx County*	*$ Outside of xxyxx County*
Fertilizers/Seed	$	$	$
Fresh Food Products	$	$	$
Prepared Food Products	$	$	$
Purchase of Heavy Equipment/Machinery	$	$	$
Machinery & Equipment Rental & Leasing	$	$	$
Rent	$	$	$
Marketing/Advertising/Public Relations	$	$	$
Financial Services & Institutions	$	$	$
Insurance	$	$	$
Transportation Costs	$	$	$
Business/Administrative Services/Office Expenses	$	$	$
Construction	$	$	$
Facility Maintenance/Repairs	$	$	$
Lawyers/Legal Fees	$	$	$
Utilities	$	$	$
Contracted Services	$	$	$
Miscellaneous Services	$	$	$
Miscellaneous Supplies	$	$	$
Taxes	$	$	$
Licenses and Permits	$	$	$
Other Please specify (_____)	$	$	$

Of your total business expenses for 2003, what % of those expenses were directly related to your business at xxyxx Market? _____ %

OPTIONAL INFORMATION

The information provided below will be used ONLY for the purposes of clarification and verification should we have any questions concerning your survey responses. No informtion will be disclosed to any person or party in any way whatsoever.

Contact Name/Name of Person Completing Survey: _____

Contact Phone Number: _____

Should you have any questions or concerns regarding this survey, please contact Chris Heitmann or Arianna Martinez at Project for Public Spaces at (212) 620-5660

Due to a very low response rate from vendors from certain markets in the initial round of surveys, a "shortened" survey was distributed. A combination of the detailed and shortened vendor surveys yielded plausible averages across different vendor types located in various market sizes and economies.

Upon completion of the first round of detailed and shortened surveys, specific vendor-type market-type combinations (e.g., prepared food vendors from large city markets) lacked sufficient data on expenditures to calculate economic impact multipliers. In order to fill these gaps, shortened vendor surveys were distributed to additional vendors. A sample shortened vendor survey appears below.

Figure 4.2
Shortened Vendor Survey

How would you classify yourself as a vendor? (PLEASE CHECK ALL THAT APPLY)
_____ Producer (Produce/grow and sell your own fresh food or produce)
_____ Non-Producer (Sell fresh food or produce but do not grow it yourself)
_____ Prepared Food Vendor/Restaurant
_____ Other (Please specify: _____)

On average, how many workers do you have at **xxyxx** Market (full time & part time)? _____

What were your total sales at **xxyxx** Market for 2003? $_____

What were your TOTAL business expenses for 2003? $_____

What were your business expenses JUST for the market for 2003? $_____
OR
What % of your business expenses were for the market component of your business in 2003? _____%

Questions for producers ONLY
Location (County) of farm/production facility: _____

Goods that you grow/produce at your farm/production facility:_____

How many employees do you have at your farm/production facility? _____

Detailed surveys distributed to market operators requested specific information on overall vendor mix, total square footage, leasable square footage, days of operations, and annual operating expenditures. All market managers were responsive in completing these surveys. The detailed market operator survey appears below.

Figure 4.3
Detailed Market Operator Survey

Location (County) of Market_____

Total Square Feet: _____

Total Leasable Square Feet: _____

Days of Operation: Mon Tue Wed Thu Fri Sat Sun

Months of Operation: Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Total # of Vendors: _____

# of Vendors, by type & size

	Small	Medium	Large	Total Vendors
Producers*	_____	_____	_____	_____
Non-Producers**	_____	_____	_____	_____
Prepared Food Vendors/Restaurants	_____	_____	_____	_____
Other	_____	_____	_____	_____

**Producers: Vendors who produce their own fresh food/produce)*
*** Non-Producers: Vendors who sell fresh food but do not produce it themselves*

Breakdown of Annual Expenditures/Spending
**Instead of filling out the fields below, another option is to attach your annual budget.*

$_____ TOTAL FOR 2003
$_____ Rent
$_____ Marketing/Advertising/Public Relatioins
$_____ Financial Services & Institutions
$_____ Insurance
$_____ Transportation Costs
$_____ Business/Administrative Services/Office Expenses
$_____ Construction
$_____ Facility Maintenance/Repairs
$_____ Lawyers/Legal Fees
$_____ Utilities
$_____ Contracted Services
$_____ Miscellaneous Services
$_____ Taxes
$_____ Licenses and Permits
$_____ Other (Please specify: _____)

$_____ Total Wages Paid to Employees
_____ % of employees residing in same county as market

5.0 ECONOMIC IMPACTS

The regional economic impact estimates and underlying impact multipliers presented in this report are based on a standard regional input-output model developed by the U. S. Department of Commerce, Bureau of Economic Analysis, the Regional Input-Output Modeling System.[5]

The estimation of economic impacts is a multi-step process. The first step is to compile data on all direct expenditures made by vendors and market management in the specified regions. The second step is to estimate the indirect and induced expenditures (impacts) generated by the direct spending inputs. Indirect economic impacts are defined as the additional economic activities stimulated by the direct expenditures. For example, market vendors may spend their earnings on various items (housing, food, clothing), and since some of these items are produced in the region, this will generate additional rounds of expenditures. The induced economic impacts are those that are generated through the spending of household earned income (salaries and wages) generated by the direct activity and the indirect activity of supplying firms. Together, the direct, indirect, and induced expenditures sum to the total economic output.

The main purpose of this study is to use the total calculated economic impacts to produce multipliers that can be used to estimate the economic impacts of specific market and vendor types in specific regional economic settings.

5.1 Estimating Direct Vendor Expenditures

In order to estimate direct expenditures attributable to market vendors, surveys were distributed to the various vendor types, as described in Section 2.0 above. Survey responses were broken down by vendor type and regional economy type, as presented in Table 5.1.1 below.

Table 5.1.1
Vendor Survey: Responses Received by Vendor and Regional Economy Type

Vendor Type	Large City Markets	Small City Markets	Small Town Markets	Total
Producers	20	3	22	**45**
Non-producers	5	4	0	**9**
Prepared Food Vendors, Including Restaurants	8	2	5	**15**
Other Vendor Types	13	7	12	**32**
Total Vendors	**46**	**16**	**39**	**101**

[5] See Appendix A for more details.

Since many market vendors do not live in the same region in which their respective markets are located, it was important to determine the total market-related expenses that occur in the same region as the market. Survey responses provided data on total expenses, which were then broken down into market-related expenses and market-related expenses occurring in the same region as the market.

Summary statistics for vendor survey responses, broken down by regional economy type are as follows:

Table 5.1.2
Vendor Survey: Summary Statistics by Regional Economy Type

Description	Large City Markets	Small City Markets	Small Town Markets
Responses	46	16	39
Total Sales	$215,530	$63,132	$9,551
Daily Customers	148	72	160
Total Expenses	$146,030	$42,413	$14,066
% Expenses Related to Market	68.00%	0.79	43%
Total Expenses Related to Market	$99,300	33612	$4,502
% Expenses in Same Region as Market	58.00%	0.56	41%
Total Expenses in Same Region as Market	**$57,892**	**18,830**	**$1,850**

Table 5.1.3 presents vendor survey responses broken down by vendor type.

Table 5.1.3
Vendor Survey: Summary Statistics by Vendor Type

Description	Producers	Non-Producers	Prepared Food Vendors, Restaurants	Other Vendors
Responses	45	9	15	32
Total Sales	$22,430	$487,307	$149,795	$122,058
Daily Customers	180	193	54	119
Total Expenses	$23,895	$252,056	$160,049	$79,347
% Expenses Related to Market	49.00%	100%	48%	64.00%
Total Expenses Related to Market	$11,661	$252,056	$77,027	$50,385
% Expenses in Same Region as Market	7.20%	86%	78%	80.40%
Total Expenses in Same Region as Market	**$839**	**$217,854**	**$59,822**	**$40,509**

Tables 5.1.4 through 5.1.6 present vendor survey responses for each specific regional economy type, broken down by vendor type. Note that fields containing values of "NA" are the result of insufficient survey responses and fields left blank by respondents.

Table 5.1.4
Vendor Survey: Summary Statistics by Vendor Type
Large City Economies

Description	Producers	Non-Producers	Prepared Food Vendors, Restaurants	Other Vendors
Responses	20	5	8	13
Total Sales	$32,671	$742,456	$249,441	$167,962
Daily Customers	244	140	NA	61
Total Expenses	$27,273	$401,539	$203,030	$169,098
% Expenses Related to Market	56.00%	NA	63%	78.40%
Total Expenses Related to Market	$15,273	NA	$128,382	$132,573
% Expenses in Same Region as Market	8.20%	NA	100%	41.90%
Total Expenses in Same Region as Market	**$1,252**	**NA**	**$128,382**	**$55,548**

Table 5.1.5
Vendor Survey: Summary Statistics by Vendor Type
Small City Economies

Description	Producers	Non-Producers	Prepared Food Vendors, Restaurants	Other Vendors
Responses	3	4	2	7
Total Sales	$41,106	$168,370	$65,000	$17,036
Daily Customers	67	300	45	33
Total Expenses	$26,500	$136,143	$40,800	$9,132
% Expenses Related to Market	54.00%	100%	100%	98.00%
Total Expenses Related to Market	$14,310	$102,573	$40,800	$8,949
% Expenses in Same Region as Market	100.00%	80%	100%	40.00%
Total Expenses in Same Region as Market	**$14,310**	**81784**	**$40,800**	**$3,580**

Table 5.1.6
Vendor Survey: Summary Statistics by Vendor Type
Small Town Economies

Description	Producers	Non-Producers	Prepared Food Vendors, Restaurants	Other Vendors
Responses	22	NA	5	12
Total Sales	$11,524	NA	$7,150	$5,287
Daily Customers	133	NA	57	219
Total Expenses	$18,868	NA	$15,316	$6,869
% Expenses Related to Market	35.40%	NA	23%	35.90%
Total Expenses Related to Market	$6,679	NA	$3,446	$2,438
% Expenses in Same Region as Market	56.60%	NA	NA	36.00%
Total Expenses in Same Region as Market	**$3,781**	**NA**	**NA**	**$878**

5.2 Estimating Direct Market Management Expenditures

Summary statistics for surveys distributed to market management are presented in Table 5.2.1 below.

Table 5.2.1
Market Management Survey: Summary Statistics by Regional Economy Type

Description	Large City	Small City	Small Town
Responses	4	3	3
Total Square Feet	193,923	24,500	26,700
Total Leasable Square Feet	80,333	16,482	28,450
Total Vendors	211	95	62
Producers	46	19	21
Non-Producers	11	18	2
Prepared Food Vendors, Restaurants	30	7	3
Other Vendors	121	50	8
Total Expenses	**$2,687,678**	**$578,724**	**$17,916**

As would be expected, total market management expenses are highest in large city economies, followed by small city and small town economies.

5.3 Calculating Vendor and Market Management Multipliers

Vendor Multipliers

In cases where sufficient survey responses were received, separate economic impact multipliers were calculated for each combination of vendor type and economy type. The method of calculation for each vendor-economy type combination was as follows:

Step 1: Average market-related expenditures within the region were calculated for all respondents.

Step 2: Regional multipliers for the appropriate regional economy type were applied to determine the overall regional economic impact.

Step 3: The resulting regional economic impact is divided by average *total* market-related expenditures for all respondents.

The result obtained in Step 3 represents the estimated regional multiplier for market-related expenditures by vendors. This regional multiplier controls for the fact that a portion of market-related expenditures incurred by vendors occur *outside* of the region in which a market is located. The resulting multipliers are presented below. Note that fields containing values of "NA" indicate that there was insufficient data to calculate impact multipliers.

Table 5.3.1
Calculated Vendor Impact Multipliers, by Regional Economy Type

Vendor Type	Large City Markets	Small City Markets	Small Town Markets
Producers	0.11	1.60	1.13
Non-Producers	NA	1.31	NA
Prepared Food Vendors	1.61	1.65	NA
Other Vendors	0.68	0.66	0.67

The calculated multiplier of 1.65 for prepared food vendors in small city markets indicates that for every $1.00 in *total* market-related expenditures, there will be $0.65 in indirect and induced expenditures, resulting in an overall economic impact of $1.65 in the given region.

The calculated multiplier of 0.11 for producers in large city markets indicates that for every $1.00 in *total* market-related expenditures, the overall economic impact in the given region will amount to $0.11. This low multiplier reflects the fact that the majority of producers' market-related expenditures occur *outside* the given region, thus resulting in a small overall economic impact.

The results suggest that the regional impacts of non-producers are generally higher, suggesting a larger proportion of production occurs within the region where the market is located.

Market Management Multipliers

We assume that all direct expenditures incurred by market management occur in the same region in which the market is located. For this reason, it is not necessary to take steps similar to those used in calculating overall vendor multipliers. Data for the "food services and drinking places" category in the RIMS II model were used in determining the overall market management impact multipliers by regional economy type.

Table 5.3.2
Calculated Market Management Impact Multipliers, by Regional Economy Type

Description	Large City Markets	Small City Markets	Small Town Markets
Market Management	2.27	1.86	1.65

The 2.27 multiplier for market management located in large city economies indicates that for each $1.00 in direct expenditures incurred by market management, there will be an additional $1.17 in indirect and induced expenditures, resulting in an overall economic of $2.27 in the given region.

As evidenced by the multipliers in Table 5.3.2, each dollar in direct expenditures in large city markets will have a greater impact in the region compared to small city and small town markets. This is attributable to the fact that larger economic markets will have less economic leakages and will thus experience greater economic impacts. For this reason, the direct operating expenditures of large city markets will have an overall greater impact compared to those of markets located in small city and small town markets[6].

Using Vendor and Market Management Multipliers

Using both the vendor and market management multipliers (Tables 5.3.1 and 5.3.2, respectively), it is possible for markets to estimate their overall economic impacts in their given region. If, for example, a small city market has $100,000 in annual operating expenditures and has 10 producers, 5 non-producers, 10 prepared food vendors, and 5 vendors specified as "other"[7], the market's overall economic impact could be calculated in the following way:

Market Management Impact
$100,000 in direct expenditures x 1.86 (market impact multiplier from Table 5.3.2) = $186,000

[6] While this is attributable to the fact that the market management impact multipliers are highest for large city markets, it is also due to the fact that large city markets require larger operating budgets for daily operations.
[7] In this example, we utilize average expenditure data obtained from surveys distributed to small city market vendors (see Table 5.1.5). If specific markets know (or can estimate) average expenditure data for specific vendors, those numbers could be substituted for those used in this example.

Vendor Impact

The overall vendor impact attributable to the market would be based on the total number of vendors, average vendor expenditures, and the appropriate vendor impact multiplier (i.e., large city, small city, or small town).

Vendor Type	Number of Vendors	Average Expenditures[8] (Table 5.1.5)	Small City Vendor Impact Multiplier (Table 5.3.1)	Total Impact
Producer	10	$14,310	1.60	$228,960
Non-Producer	5	$102,573	1.31	$671,853
Prepared Food Vendors	10	$40,800	1.65	$673,200
Other Vendors	5	$8,949	0.66	$29,532
Total	**30**			**$1,603,545**

Overall, in this particular example, the small city market's economic impact in the region would amount to the following:

Market management impact: $186,000
Vendor Impact: $1,603,545
Market's overall impact: $1,789,545

5.4 Qualitative Benefits

While the previous sections focused on a traditional method of calculating overall regional economic impacts, it does not account for many of the other benefits of public markets. Such qualitative benefits that would not be captured by economic impact modeling include:

- Expanded consumption possibilities resulting from the goods and services provided by various vendor types
- Increased travel and tourism
- Improved quality of life and enhanced image

While the impacts listed above are impossible to calculate or quantify, they represent significant impacts of public markets in any given regional economy type.

[8] As previously mentioned, actual markets could use actual (or estimated) average expenditure data for their specific vendors.

6.0 CONCLUSION

Economic activity multipliers differ significantly across vendor types and local economies. Differences in market management multipliers across market types are smaller, at least in terms of traditional economic impacts. It should be noted that large city markets like Pike Place Market are likely to have economic impacts associated with visitors and tourism that are fundamental export businesses and likely to have significant, additional local economic impacts.

The local economic multipliers appear to be generally largest in medium sized cities. These local economies are large enough to provide many business services to markets and vendors, and also have rural areas with farmers that are essentially in the same local economy. By contrast, in large city markets, virtually all of the purchases from producers flow outside the local economy. The outflow of funds from local economies from producers, are however, relatively small because, producers generally are much smaller in scale than other vendor types.

Finally, it is important to note that any multiplier for economic activity is dependent on the definition of geography. If the geography is very small, say a neighborhood, the corresponding multiplier will be small. As the geographic area becomes large, the "leakage" outside the area becomes smaller and the multipliers become larger. The multipliers presented in this analysis are county level multipliers; if they were to cover multiple counties, all of the multipliers would be larger, especially the producer multipliers.