2018 Updated Report on the Economic Contributions of the Moscow Farmers Market

A Report to the City of Moscow Farmers Market Commission

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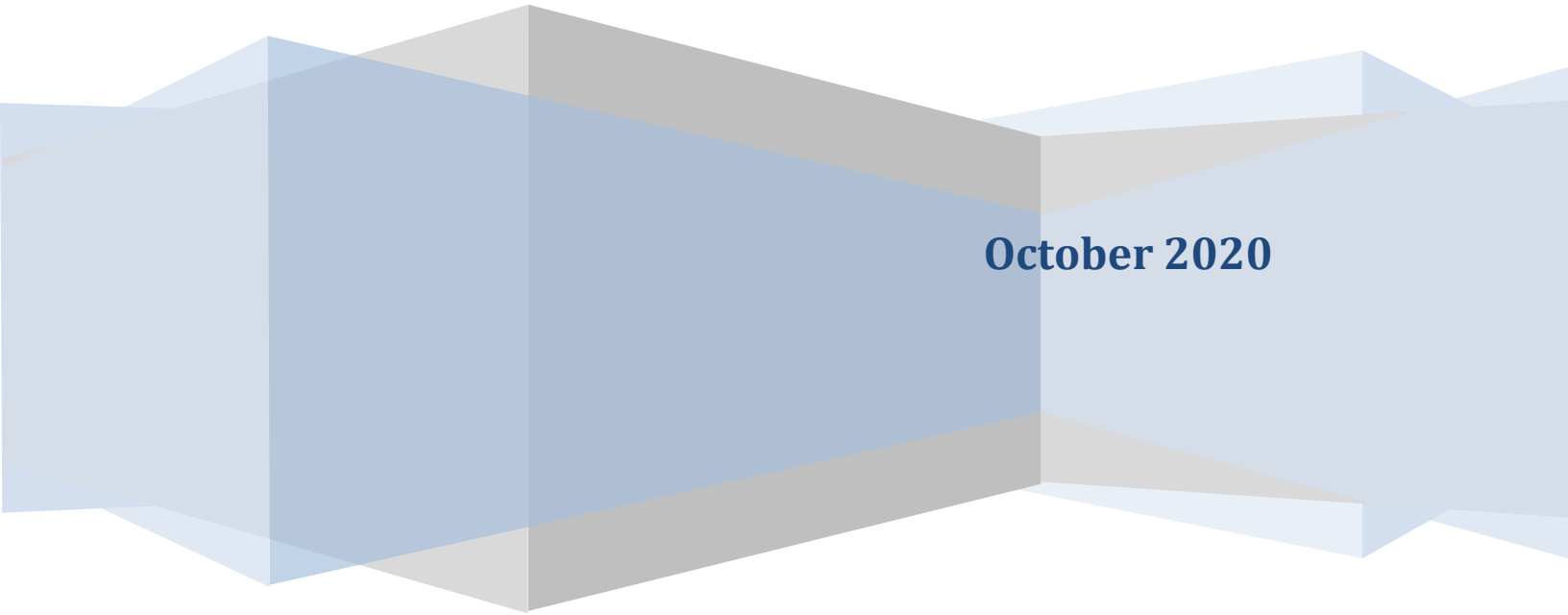

October 2020

Executive Summary

- **This report is an *updated* economic assessment of the Moscow Farmers Market. It was conducted for the City of Moscow Farmers Market Commission and completed in October 2020. The study is an update of a previous study conducted in 2016. The author of the study is Steven Peterson[a], Research Economist and Clinical Associate Professor, Economics, College of Business and Economics, University of Idaho. The market's current location is Main Street between 3rd Street and 6th Street, every Saturday, May 1st to October 30th, 8 am to 1 pm, averaging six months or 26 weeks per year (1/2 year).**

Key Conclusions:

- **The Moscow Farmers Market is a vibrant, vital, 42-year-old institution founded in 1977.**
- **<u>The Moscow Brand:</u> The Moscow Farmers Market's most important contribution to Moscow and Latah County economy is the contribution to the branding of Moscow as a place to live, shop, dine, raise children, attend college, and work.[i] The Moscow Farmers Market:**
  - **Acts as a social glue that helps hold the diverse elements of the downtown community together.**
  - **Works as a key partner with the local foods movement and helps vendors sell approximately $300,000 annually of local agricultural products from Latah County.**
  - **Collaborates with Moscow's annual Artwalk and the Moscow artistic community.**
  - **Enhances other Moscow signature events including Renaissance Fair and the Rendezvous in the Park.**
  - **Partners with the Moscow Food CO-OP, which produces $11 million in revenues (2018), employs 130 full-time and part-time employees, and annually buys $778,000 of products from 200 local and regional firms.**
- **<u>Incubator for Entrepreneurs:</u> The Moscow Farmers Market functions as a key community incubator for 67 current *Latah County* start-up firms and entrepreneurs:**
  - **13 vegetable, poultry, nursery, dairy, and other plant and animal local firms.**
  - **29 craft, artistic, pottery, and other firms engaging in local production.**
  - **11 eating and drinking establishments.**
  - **14 "value-added" enterprises including wineries, baked goods, honey, and others.**
- **<u>Brick and Mortar/Spinoffs:</u> Approximately 15-20 firms have spun-off from the Moscow Farmers Market. It functions as an incubator for future brick and mortar establishments that locate into permanent retail facilities. Examples include:**
  - **Tapped, Sisters Cookies, Humble Burger, Lodge Pole Restaurant, Brush Creek Creamery, Patti's Kitchen, and Mela Indian Food.**
- **<u>Beer and Wine Economic Cluster:</u> The market's promotion of locally produced foods and beverages has increased the visibility of the emerging craft beer and wine regional**

[a] Steven Peterson is employed as a Clinical Associate Professor, Economics, College of Business and Economics, University of Idaho. This analysis was conducted on a private platform and its conclusions is solely that of the author, and do not necessarily represent the views of the University of Idaho or any other individuals or organizations.

economic cluster. There are now over fifteen regionally produced wines and craft beers. Examples include:

- **Local Wines - Colter's Creek Winery, Camas Prairie Winery, and other regional wineries.**
- **Local Beers - The market's attraction of resident and nonresident patrons to Moscow's downtown core benefits the craft beer district in Moscow that now includes Moscow Brewing Company, Rants and Raves Brewery, and Hunga Dunga Brewery.**
- **Supporting restaurants and pubs: There are several Moscow restaurants and bars that specialized in serving local and regional craft beers and wines.**

- **(See the Palouse-Clearwater Story Map at http://www.pcfoodcoalition.org/our-stories/)**
- **Rapid Market Growth: 266,205 estimated annual visitors[ii] to the market in 2018, up from 84,084 in 2003; a 217% cumulative increase and an 8.0% average annual growth rate. Market visitors and shoppers are:**
  - **6.7 times the population of Latah County (39,473) in 2018 or 10.6 times the population of Moscow in 2017 (25,146).**
  - **Approximately 51% out-of-town visitors (135,816) bringing new money to the Moscow economy.**
  - **Approximately 161,373 people (61%) who visit the market before 11 am, creating a wave of shoppers every market Saturday at the start of the business day for Moscow firms.**
- **Annual Market Vendor Sales Exceed $ 1 Million: Estimated Farmers Market *reported* vendor sales[iii] were $1,391.908 in 2018 (Figure A):**
  - **51`% Agricultural products ($670,379)**
  - **26% Prepared food ($375,780)**
  - **20% Craft ($262,749)**
- **Annual Visitor Spending: $6.49 million**
  - **There have been at least five recent surveys of Farmers Market visitor spending (2003, 2009, 2011, 2013, and 2018). They report substantial market spending by customers, averaging over $5 million annually after adjusting for inflation, visitor estimates, and survey methodology.**
  - **The most recent 2018 survey results (the basis for this analysis):**
    - **Total estimated visitor spending inside[iv] the market: $3.65 million**
    - **Total estimated visitor spending outside the market in local businesses: $2.84 million**
- **Annual Economic Contributions of the Market Including Multiplier Effects (Figure B): [v]**
  - **$6.46 million (in output)**
  - **113 jobs**
    - **Vendor Expenditures - 13 jobs**
    - **Brick and Mortar/Spinoffs -48 jobs**
    - ***Net* additional market visitor spending (from RMA survey) - 22 jobs**
    - **Moscow visitor spending (outside the market)- 30 jobs**
- **Annual State and Local Tax Contributions of the Market - $405,170 Per Year:[vi]**
  - **Local Property Taxes - $138,558**

- State Sales, Excise, and Income Taxes - $266,613

- **The Moscow Farmers Market is Reaching Financial Sustainability when the Economic Contributions are Considered (2018):**
  - Total Vendor Revenue $49,875
  - Total Market Expenses $120,056
  - Subtotal Deficit ($70,181)
  - Property Taxes (generated by economic contributions) $138,558
    Net (including economic contributions) $68,377

  - *Note: Caution should be used to interpret these results. The key conclusion is the economic activity of the market generates tax revenues that help offset the City of Moscow expenses.*
- **Downtown is an Important Strength to Moscow's Economy**
  - Downtown Moscow has been compared to a great tidal basin: Each day the tide of workers and students flow outward to their jobs and studies and each night they flow back with nutrients (i.e. income) to the downtown economy.
  - Downtown is centrally located near the University of Idaho campus and near the major residential district of town. Downtown storefronts have few vacancies.
  - There are at least 344 firms in downtown with an approximate 3,691 workers. Downtown Moscow's economic clusters:
    - Health care – 753 jobs
    - Eating and drinking – 632 jobs
    - Retail – 586 jobs
    - Other – 387
    - Government – 385 jobs
    - Finance/insurance/real estate –291 jobs
    - Engineering and technology services – 233 jobs
    - Manufacturing/Craft Industries – 243 workers
    - Professional services – 140 jobs
    - Private Education – 41 jobs
- The Moscow Farmers Market has received substantial community support, encouragement, and assistance from the City of Moscow. Ongoing successful community enterprises such as the market need to be monitored and supported on a continuous basis.
- The University of Idaho's Lionel Hampton Jazz Festival is an example of the consequences of inadequate attention or benign neglect to a successful community enterprise. The jazz festival was begun in the late 1960s and by 2002 it boasted 18,000 visiting K-12 students every February and 16,000 concert attendees, supporting 125 local jobs including the multiplier effects. Due to reduced fiscal support and changes in event design, by 2014 attendees had dropped to 3,800 students with only 7,257 in concert attendance, a sharp decline that may threaten its future. Local government, university and community support and encouragement is vital for community enterprises to grow and prosper.

Figure A: 2018 Market Vendor Sales of $1,308,903

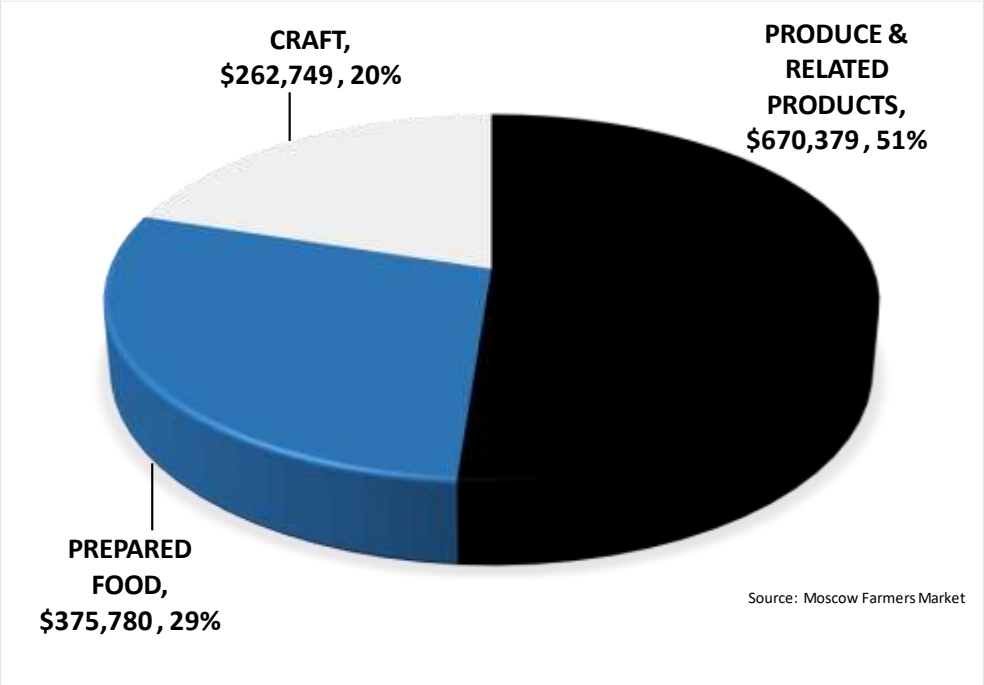

Figure B

Economic Contributions of Moscow Farmers Market
Includes the Direct, Indirect, and Induced Impacts

Category	Jobs	Wages/Salaries	Output
Visitor Spending (Vendor Survey)	13	$ 303,415	$ 734,574
Visitor Spending RMA (Net)	23	$ 542,333	$ 1,312,998
Brick and Mortar/Spinoffs	48	$ 988,621	$ 2,631,938
Visitor Spending Moscow	30	$ 599,272	$ 1,805,552
Total	113	$ 2,433,642	$ 6,485,062

Tax Impacts	Local	State	Total
Taxes Generated by Market Activity	$138,558	$266,613	$405,171

Table of Contents

Table of Figures

2018 Report on the Economic Contributions of the Moscow Farmers Market

October 14, 2020

Purpose of Study

This report is an economic assessment of the Moscow Farmers Market. It was prepared for the City of Moscow Farmers Market Commission and completed in October 2020. The author of the study is Steven Peterson[b], Research Economist and Clinical Associate Professor, Economics, College of Business and Economics, University of Idaho.

The report includes an analysis of the Farmers Market, a brief look at local foods production, and an examination of the downtown economic corridor.

Farmers Market Role in the Branding of Moscow

The focus of this study includes the role of the market in the brand definition of Moscow, its role in attracting new visitors and shoppers to Moscow, making Moscow a more desirable place to live and work, retention and attraction of world-class university employees, encouraging and facilitating entrepreneurship and new business creation, and its role as a social glue that holds downtown Moscow together.

Overview of the Farmers Market

Market Description

The Moscow Farmers Market is a vital Moscow institution which is 42 years old and was founded in 1976. The market is hosted on Main Street between 3rd Street and 6th Street, every Saturday between May 1st and October 30th, 8 am to 1pm, averaging 26 weeks per year. Visitors to the market were estimated to be 266,205 during 2018, up from 84,084 in 2003. This cumulative increase of 217% is 6.7 times the population of Latah County (39,473) in 2018 or 10.6 times the population of Moscow in 2017 (25,146) (Figure 1). It's important to note the market made a temporary move from the Jackson Street parking lot to Main Street in 2012 and the first full market season on Main Street was in 2013 which increased market participation.

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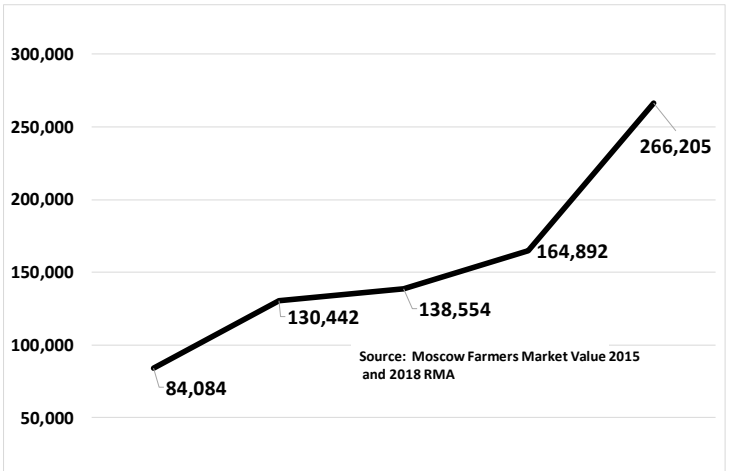
Figure 1: ***Estimated Annual Farmers Market Visitors Survey Years 2003-2018***



The Moscow Farmers Market has an advisory commission with 7 active members and one vacancy. The current members (2019) are Adam Reed, Colette DePhelps, Jenny Ford, Linda Heath, Jamie Hill (chair), Joann Muneta, David Pierce, and Renee Love. The market sources vendors from a 200-mile radius around Moscow (Figure 2), up from a 100-mile limit in 2014.[vii]

Market Ranked Number One in Idaho

The American Farmland Trust ranked the Moscow Farmers Market as the number one market in Idaho for the eighth year in a row and rated it as one of the top sixteen markets in the U.S. The market was ranked on five categories: People's Choice (1st Idaho, 16th Nationwide), Focus on Farmers (1st Idaho, 15th Nationwide), Healthy Food for All (1st Idaho, 16th Nationwide), Pillar of the Community (1st Idaho, 16th Nationwide), and Champion for the Environment (1st Idaho, 16th Nationwide).[viii]

Figure 2: Market Geographic Region

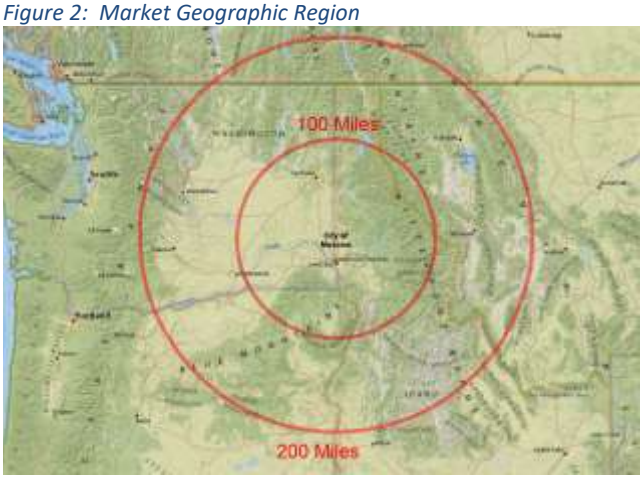


Figure 3: Daily and Annual Estimated Visitors Moscow Farmers Market by Survey

Daily and Annual Estimated Visitors Moscow Farmers Market by Survey

Time	8:00 a.m. – 9:00 a.m.	9:00 a.m. – 10:00 a.m.	10:00 a.m. 11:00 a.m.	11:00 a.m. 12:00 p.m.	12:00 p.m. 1:00 p.m.	Daily	Annually
2003 RMA	624	936	888	786	-	3,234	84,084
2009 RMA	869	1,379	1,685	1,084	-	5,017	130,442
2011 RMA	806	1,252	1,484	1,267	520	5,329	138,554
2013 SEED	730	1,362	1,713	1,679	858	6,342	164,892
2018 RMA*	1,653	1,972	2,582	2,634	1,398	10,239	266,205
Average	936	1,380	1,670	1,490	925	6,032	156,835
% Daily 2018	16%	19%	25%	26%	14%	100%	-
Ann. 2018	42,969	51,272	67,132	68,484	36,348	-	266,205

Source: Farmers Market Value 2015 and 2018 RMA | * Includes Opening Count

Market Visitors

The Moscow Farmers Market averages 10,239 adult visitors every Saturday (based on the 2018 RMA Survey), 1,497 children, and averages 6,032 visitors across all recent market surveys.[ix] For the 2018 RMA, approximately 16% of all visitors attend the market 8 am to 9 am; 19% between 9 am to 10 am, 25% between 10 am to 11 am, 26% between 11 am to 12 pm, and 14% between 12 pm and 1pm. Approximately 61% of the customers visit the market before 11 am, when most of the retail businesses to Moscow are just opening their doors, supplying a "wave" of potential customers available to all businesses in Moscow. The market attracts a cumulative of 161,373 visitors annually to downtown Moscow at the start of the "shopping day" at 11 am on market day Saturdays (Figure 3).

Figure 3 reports the estimate customer counts by hour and by market survey year (which is discussed in the methodology section of this report). The "average" row represents an average across all survey years. The annual totals are calculated by multiplying the survey by the 26 weeks of the market year.

The 2018 RMA survey estimated that 44% of the market customers were Moscow residents, 5% Latah County residents, 25% residents of Whitman County, and 26% out-of-area customers. Thus 49% of total customers were from Latah County and 51% were nonresident customers.[x] Nonresident revenues represents new monies to the Latah County economy.

Market Vendors

The Farmers Market had approximately 125 vendors in 2018. The vendors reported $1,308,908 in sales (adjusted for non-respondents). Approximately 51% of all sales were produce, nursery, livestock/poultry ($670,379), prepared food 29% ($375,780), Craft 20%, and ($262,749) (Figure 4).

Figure 4: 2018 Market Vendor Sales of $1,308,903

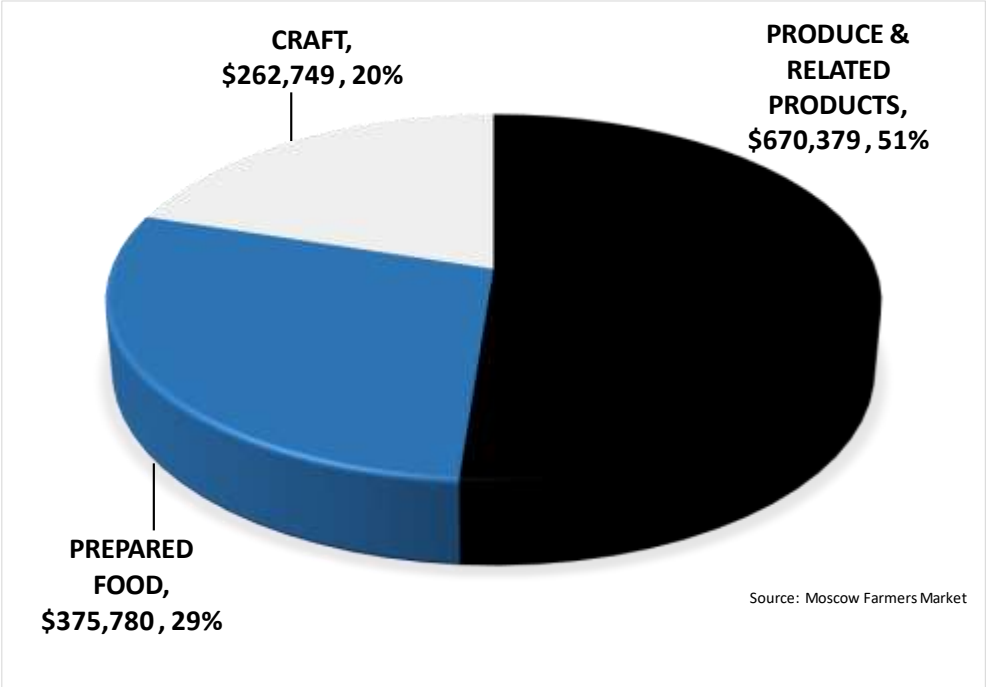


Figure 5 reports the vendor breakout for year 2018. Of the total number of vendors, about 46% are Tier 3 with over 70% market participation across the season, 28% are Tier 2 with 35%-65% participation, 26% are Tier 1 with 30% or less participation. The vendors are reported both by Tier and product type.

Figure 5: 2018 Total Vendor Counts by Tier

2018 Moscow Market Vendors by Tier and Product

	Agriculture	Craft	Food	Total	%
Tier 3	28	15	15	58	46%
Tier 2	7	21	7	35	28%
Tier 1	13	17	2	32	26%
Total	48	53	24	125	100%

Market Fees and Revenues

Figure 6 outlines the fee schedule for the Farmers Market. The market collected $49,875 in 2018, The fees are collected for vendors, truck spaces, children's spaces, performing artists, electrical hook-ups, and other services (Figure 6).

Figure 6: 2018 Market Space Vendor Fees

Fees	(1 – 8 Market Days)	(9 – 17 Market Days)	Season (18 – 26 days)
Annual Registration Fee	$15	$50	$125
Daily Full Booth Space Fee 11' x 15'	$30	$20	$15
Daily Shared Booth Space 5' x 15'	$15	$12	$9
Daily Table Space 3' x 3'	$10	$8	$6
Daily Electricity *Limited outlets, 16 amp max*	$10	$10	$10
Daily Truck Parking	$25	$20	$15
Daily Corner Space	$5	$5	$5
Daily Youth Vendor	$6	$6	$6
Daily Performance Art	$7	$7	$7

There has been an ongoing community discussion over the finances of the market and its financial sustainability. Included in that discussion, has been the issue of vendor fees including to what extent vendor fees ought to pay for annual market direct operating costs and annual fee increases. There has also been a change in the status of the market manager last year, moving from a part-time position to full-time position, which impacted the cost structure of the market. The total estimated budgeted cost of the market to the City of Moscow was approximately $164,852 in 2018. However, actual costs were considerably smaller at $120,056. Revenues generated from vendors are about $49,875, creating a deficit of $70,181.

The market has an economic footprint on Latah County, generating considerable economic activity, discussed elsewhere in this report. That activity generates approximately $405,170 in state and local taxes annually, of which $138,558 is local property taxes (including the multiplier effects). Factoring in these taxes creates an operating positive revenue of $63,377. Caution should be used to interpret these results. The key conclusion is the economic activity of the market generates tax revenues that help offset expenses. The market also creates intangible benefits in recruiting and retention of employees to firms in Moscow. A substantial number of Moscow residents also work in Pullman or Lewiston but choose to live in Moscow due to the quality of life, to which the market contributes. These intangible benefits are not captured in this report but should be considered when discussing market finances (Figure 7).[xi]

Figure 7: Market 2018 Budget

2018 Market Revenues/Expenses		$
Vendor Revenues	$	49,875
Market Expenses	$	120,056
Subtotal Deficit	$	(70,181)
Property Taxes*	$	138,558
Net (Including Economic Impacts)	$	68,377

Study Approach: Data and Methodology

Available Survey Data

Over the last fifteen years there have been a large variety of surveys and analyses of the market.[xii] There have been three Rapid Market Assessments (RMAs), the first by Larry Lev and John Potter (2003), followed by Cinda Williams (University of Idaho Extension, Moscow, Idaho) in 2009 and 2011. In addition to these, the 2012 Moscow Farmers Market Strategic Plan was authored by Arron Zaretsky, Public Market Development, Waterville, NC. There have also been three analyses developed by marketumbrella.org: 1) 2013 Sticky Economy Evaluation Device (SEED), 2) 2013 Neighborhood Exchange Evaluation Device (NEED), and 3) 2014 Food Environment Evaluation Device (FEED), all implemented and authored by Amanda Argona, AmeriCorps Volunteer Coordinator. In all, there were vendor surveys in 2012, 2013, and 2014. Community surveys occurred in 2003, 2009, 2011, 2012, 2013, and 2014. Business surveys occurred in 2012 and 2013. There was a new Rapid Market Assessment analysis let by Collette DePhelps in 2018 that updated visitor counts, visitor expenditures, and collected other data.

Across the various analyses, a variety of survey techniques were employed for targeting market participants and market decision makers. The survey methods included market day surveys, online surveys delivered at surveymonkey.com and managemymarket.com, mail surveys, and interviews. The target audience included market shoppers, vendors, local businesses, and other organizations and decision makers. The number of people surveyed ranged from 11 to 967, depending on the technique and venue.

Visitor and Market Customer Surveys

The 2003 RMA survey estimated daily (i.e. market Saturdays) attendance at 3,234 (84,084 annually), average "group" inside spending ($15.80), and average group outside spending ($21.69) for those groups doing additional shopping. The total inside sales for the market were $25,500.00, outside sales ($19,360), for a grand total of $44,909. Inside spending represents visitor spending inside the market. Outside spending represents additional downtown spending outside the market.

The 2009 RMA survey estimated daily attendance at 5,017 (130,442 annually), average "group" inside spending ($19.05), and average group outside spending was not reported for those groups doing additional shopping. The total sales for the market were $47,754.

The 2011 RMA survey estimated daily attendance at 5,329 (138,554 annually), average "group" inside spending ($19.92), and average group outside spending ($13.11) for those groups doing additional shopping. Total inside sales for the market were $53,067, outside sales ($34,925), for a grand total of $87,992.[xiii]

The 2013 SEED survey estimated average Saturday/daily attendance at 6,324 (164,892 annually). Inside market spending averaged $29.58 and average "individual" outside the market spending was $18.50.[xiv]

In order to make expenditure comparisons across all surveys, adjustments were made to account for three factors: 1) The surveys were made in different years, 2) The annual estimated number of visitors differ, and 3) The survey techniques differed.

The estimates of visitor spending are adjusted for inflation, and the 2013 visitor numbers were employed across all surveys for comparison. Per-person and per-wallet expenditure assumptions are compared.

The survey results are presented in Figure 8 which include four frames (or tables):

1) Top Frame: Original data sets for each survey by year.
2) Middle Frame: Original data sets adjusted to 2013 visitor levels, adjusted for inflation (2018 dollars), and estimating expenditures on a *per person* visitor basis.
3) Lower Middle-Frame: Original data sets adjusted to 2013 visitor levels, adjusted for inflation (2018 dollars), and estimating expenditures on a *per wallet or group* visitor basis (1.6 adults per group).
4) Bottom Frame: Actual 2018 RMA visitors and expenditures.

<u>Column Descriptions:</u>

Column 1: The first column reports the year of the survey.

Column 2: The estimated visitor data multiplied by 26 weeks of the market period.

Column 3: The estimated inside-the-market "per-party" average spending from the surveys taken in the 2003, 2009, 2011,2013, and 2018 average per-person (individual) or per-wallet (two adults shopping out of the same "wallet") spending.

Column 4: The estimated outside-the-market average per-person or per-wallet spending. spending.

Column 5: Total annual inside-the-market spending.

Column 6: Total annual outside-the-market spending. Note: in 2003, 2011 and 2013 average outside spending is the amount shoppers anticipated spending in the downtown area adjacent to the market, the 2018 average outside spending is the amount shoppers anticipated spending in Moscow (including, but not limited to, the downtown area).

Column 7: Grand total of all market-related estimated annual spending by visitors to the market.

Figure 8

Survey Results of Moscow Farmers Market Analyses

Original Data					
Year Study	Estimated Visitors 26 Weeks	AVG Spending Inside	AVG Spending Outside	Total Inside Spending	Total Outside Spending	Grand Total
2003	84,084	$ 15.80	$ 21.69	$ 664,264	$ 503,360	$ 1,167,624
2009	130,442	$ 19.05	$ -	$ 1,242,460	$ -	$ 1,242,460
2011	138,554	$ 19.92	$ 13.11	$ 1,379,998	$ 908,221	$ 2,288,219
2013*	164,892	$ 29.58	$ 18.50	$ 4,877,505	$ 3,050,502	$ 7,928,007
2018	266,205	$ 21.93	$ 17.05	$ 3,648,487	$ 2,836,614	$ 6,485,101
Per Visitor: Historical Data (2013 Visitors in 2018 Dollars)						
Year Study	Estimated Visitors 26 Weeks	AVG Spending Inside	AVG Spending Outside	Total Inside Spending	Total Outside Spending	Grand Total
2003	164,892	$ 22.05	$ 30.28	$ 3,636,506	$ 4,992,140	$ 8,628,647
2009	164,892	$ 22.22	$ -	$ 3,663,560	$ -	$ 3,663,560
2011	164,892	$ 22.94	$ 15.10	$ 3,782,507	$ 2,489,391	$ 6,271,897
2013	164,892	$ 32.35	$ 20.23	$ 5,334,529	$ 3,336,335	$ 8,670,863
2018	164,892	$ 21.93	$ 17.05	$ 3,615,893	$ 2,811,273	$ 6,427,167
Per Wallet: Historical Data (2013 Visitors in 2018 Dollars)						
Year Study	Estimated Visitors 26 Weeks	AVG Spending Inside	AVG Spending Outside	Total Inside Spending	Total Outside Spending	Grand Total
2003	164,892	$ 22.05	$ 30.28	2,272,816	3,120,088	$ 5,392,904
2009	164,892	$ 22.22	$ -	2,289,725	-	$ 2,289,725
2011	164,892	$ 22.94	$ 15.10	2,364,067	1,555,869	$ 3,919,936
2013	164,892	$ 32.35	$ 20.23	3,334,080	2,085,209	$ 5,419,289
2018	164,892	$ 21.93	$ 17.05	2,259,933	1,757,046	$ 4,016,979
Per Wallet: Actual Estimates from 2018 RMA						
2018	266,205	$ 21.93	$ 17.05	3,648,487	2,836,614	$ 6,485,101

* 2013 SEED Shopper/Visitor Estimates (6,342 Average Saturday Attendance)

After these adjustments, the differences between the survey results is substantially reduced. Total annual estimated market spending per wallet was $5.4 million in 2003, $2.3 million in 2009 (outside market spending was not reported), $3.9 million in 2011, $5.4 million in 2013, and $4.0 million in 2018. The primary difference between the 2013 and 2018 results are likely due to differences in the survey methodology conducted in the 2013 SEED study which measured

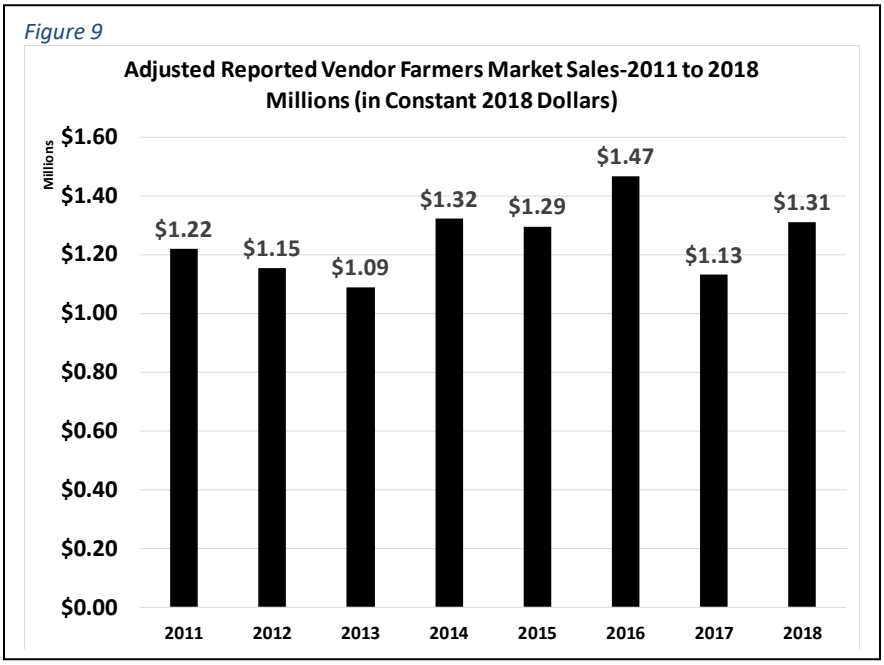
spending on a *per person basis* instead of *per wallet.* The study also employed personal interviews instead of the anonymous dot-poster method.

The 2018 RMA results are presented in frame 4 and employed in this study to conduct the economic contributions assessment. Total visitors were 266,205, inside-the-market spending averaged $21.93 per group, and outside-the-market spending averaged $17.05 per group (in Moscow). Total inside spending was $3.65 million, total outside spending was $2.84 million, for a grand total of $6.49 million.

Vendor Surveys

In addition to market customer and vendor surveys, there have been several vendor surveys (2011 to 2018) to estimate visitor market spending: $1.22 million (2011), $1.15 million (2012), $1.09 million (2013), $1.32 million (2014), $1.29 million (2015), $1.47 million (2016), $1,13 million (2017), and $1.31 million (2018). The market now requires the vendors to report their sales and vendor reporting has increased from 29% in 2012 to about 95%. We assumed 95% for years 2016 to 2018. Adjusted for the percentage reporting and for inflation, the estimated adjusted vendor sales ranged from $1.09 million in 2013 to $1.47 million in 2016 (Figure 9).[xv]

Figure 9



Methodology: Economic Model and Defined Geography

An economic contribution assessment was conducted on the various components of the Moscow Farmers Market. The focus of this study is the contribution of the market to the

Moscow, Idaho and Latah County economies. A 2017 Latah County IMPLAN (IMpacts-for-PLANning) model was created to measure these contributions.[xvi]

Methodology: Market Customer Spending Patterns and Retail Margins

The 2003 to 2013 RMA/SEED surveys did not fully address the composition of consumer spending. The survey of market vendors provides insight as to the composition of market sales and consumer spending. Based on vender surveys in any given year, approximately 50% of total sales are produce, farm products, and meat/poultry. Approximately 23% of reported vendor sales are prepared food, craft (18%), and value-added (9%). In calculating the economic contributions, the customer spending categories/ratios reflected in the vendor surveys were applied to the RMA/SEED survey-based spending.

The market region is a 200-mile radius around Moscow while the defined economic region is Latah County. A considerable portion of market agricultural products originates outside Latah County as does other value-added products as well. Based on the 2016 vendor survey approximately $300,000 or 50% of the agriculture sales reported by vendors is produced in Latah County and 50% outside the county.[xvii] Any product produced outside Latah County, was "margined" in economic terms and the cost of goods sold is *not* counted in the economic contributions. The craft products were margined but it was assumed the value-added products were produced in Latah County.

Methodology: Organization of Economic Contribution Analyses

Four categories of economic contributions were estimated:

1) Market customer spending based on the vendor surveys
2) Market customer spending based on the 2018 RMA surveys (net of Category #1 above to avoid double-counting)
3) Brick and mortar and other spinoffs from the market
4) Market customer spending outside the market in Moscow.

The following discussion expands on these four categories.

1) Estimated customer spending based on vendor surveys is the most conservative measure of market economic contributions employed in this study. The vendors are now required to report their annual sales to the market, but they are likely to be under reported for several reasons. Not all vendors report their sales and the quality of the record keeping varies greatly by vendor. There are also the implicit privacy concerns by vendors that can lead to under-reporting.
   Approximately $300,000 of the reported vendor agriculture sales (about 50%) are estimated to be produced in Latah County. The remaining agriculture, craft, and value-added products were margined. Total vendor sales for 2018 was $1,308,908.
2) The second economic contributions component is the market (inside) customer spending captured by the 2018 RMA surveys, which estimated inside market spending at $3.65

million. The expenditure patterns and categories were adopted from the vendor surveys discussed earlier. These results are *net* of the vendor contributions reported in (1) above to avoid double-counting.

3) There is a rich interaction between the market and new "brick and mortar" start-up firms in Moscow. There is also a close link between the Moscow Farmers Market and small local agriculture producers. The market is a great community business incubator encouraging entrepreneurship and fostering new business innovation. Many local firms got their start in the market and historically there have been over 15-20 individual firms with close connections to the market including Tapped, Sisters Cookies, Humble Burger, Lodge Pole Restaurant, Brush Creek Creamery, Patti's Kitchen, Mela Indian Food, and many others. Some of these firms might not exist if it were not for the market. We include an contribution assessment for these firms in our analyses. The inputs for the economic contribution assessment were based on a summer 2016 survey sent to these firms and personal interviews. It is assumed that 60% of the revenues of these firms are basic (i.e. new monies to Moscow) from nonresident customers (i.e. Pullman and elsewhere) and Moscow residents who would dine elsewhere in the absence of these firms. The remaining 40% is non-basic or substitutable and not counted in the calculation of economic contributions.[xviii]
4) The final component measures the contribution of additional downtown spending *outside* the market which was estimated at $2.84 million from the 2018 RMA studies. All retail spending was margined.

Methodology: Summarized Approach of Analyses

- The focus of this study is to examine the role of the market in its contribution to the brand of Moscow, its role in attracting shoppers to Moscow, making Moscow a more desirable place to live and work, and facilitating entrepreneurship and new business creation.
- The role of the market in the local foods industry was included in this analysis but it was not the focus of the study.
- Total annual direct community market customer spending was $6.49 million based on a per-wallet shopping group assumption of the 2018 RMA surveys (1.6 adults per group).
    - The total direct (basic) annual sales of brick and mortar and related market spinoffs is $1.683 million (i.e. based on 60% of total annual revenues).
    - Total direct annual gross sales related to the market is $8.312 million.
- Direct Latah County agricultural production included in the analysis is $300,000.[xix] Except for eating and drinking and some value-added producers, all other direct expenditures are margined (i.e. the cost of goods sold is not included in the contribution analysis).[xx]
- It was assumed that all market activity is 60% basic, i.e. included in the economic contribution analysis, and 40% non-basic, not included in the economic contributions. Of the basic activity, it is assumed that 51% originated from nonresidents (as validated by

the 2018 RMA surveys), and the balance of 9% represented Moscow patrons who would have spent their monies outside of Moscow (i.e. import substitution) for a total of 60%.

- The spending patterns or categories in the contribution assessment is based on a weighted average of the annual vendor survey expenditure patterns.

Methodology: Economic Base Assessment

This analysis is founded on economic base theory. A local or regional economy has two types of industries: base industries and non-base industries. Any economic activity that brings money into the local economy from the outside is considered a base industry. A base industry is sometimes identified as an export industry, which is defined as any economic activity that brings new monies into the community from outside. For example, base industries can include high-technology companies, medical services, retail trade services, federal government operations, as well as other manufacturing and service firms. Firms providing services to individuals living outside the region's trade center, such as medical and legal services, are included in the region's base. Payments from state and federal governments (including Social Security, Medicare, university funding, and welfare payments) are sources of outside income to businesses and residents. These are counted as part of the economic base.

Non-base industries are defined as economic activity within a region that support local consumers and businesses within the base sector. They re-circulate incomes generated within the region from the base industries. Such activities include shopping malls that serve the local population, business and personal services consumed locally, medical services consumed locally, and local construction contracts. Non-base industries support the base industries.

Base industries are sometimes confused with non-base industries. For example, some county economies have a large retail trade sectors that produce a paradox: they employ a substantial percentage of the workforce but contribute little economic contributions because most of the retail sales are local. They bring little new money into the community. Thus, it appears from the size effect that the retail trade sector contributes a large amount of employment and earnings to the economy. In reality, most of this employment and earning activity is allocated or attributed to other local "export" industries that bring revenues into the community from outside sales. From a "size" perspective, the retail trade sector appears large. However, from an economic base perspective which determines the economic "drivers" of the economy, the retail trade sector is much smaller. Only the retail trade activities serving visitors from outside the area can be counted as economic base activity and employment.

Economic base analysis is important for identifying the vital export industries of a region. Non-base industries, on the other hand, are important for keeping money within a region and stimulating local economic activity for residents. In this respect, non-base industries can function in the same manner as an export industry. For example, suppose an Idaho patient elect's surgery at a local hospital instead of traveling to a medical center in Spokane, Washington.

The substitution of local services for an imported service represents an increase in the demand for local business services. Keeping income in the community enhances the multiplier effects of the export industries. The overall effect of import substitution can be viewed as an

analogous increase in demand for an export industry. Our economic models are founded on economic base theory. Thus, Farmers' Market customers from outside Latah County are counted as base as well as local customers who would have traveled outside the regional economy in the absence of the market.

Methodology: Defining and Explaining Economic Contributions

Economic contributions measure the magnitude or importance of the expenditures of basic (export) industries. Our economic model estimates multipliers for each industrial and service sector. Suppose you have a (hypothetical) output (sales) multiplier of 1.25. Every dollar of direct expenditures creates $1.25 dollars of total new spending in the community economy. Contributions are apportioned into two levels. The first level is the direct contribution of the market expenditures on the Latah County economy – the jobs, payroll and earnings, value-added, and sales that are directly created by the market as an export or basic business.

The second is comprised of two parts: a) the contributions on other regional businesses that provide goods or services to the market – the indirect contributions - and b) the effect of employee and related consumer spending on the economy -- the induced contributions. The indirect and induced contributions are the so- called "ripple" or multiplier effects of the market in the economy. The multiplier or ripple effects are driven by the exports of an economy. Exports, the new money coming into an economy, set off a web of transactions as each business seeks to fulfill the demands of their customers. A market's contribution upon the economy is thus comprised of the magnitude of the multiplier(s) and the magnitude of the exports. The sum of the direct, indirect, and induced effects measures the total contribution of an industry to an economy.

Methodology: Market Customer Visitation and Spending - What Sticks to Moscow?

There are 266,205 estimated annual visitors to the market in 2018, up from 84,084 in 2003; a 217% cumulative increase and an 8.0% average annual growth rate. market visitors and shoppers are 6.7 times the population of Latah County (39,473) in 2018 or 10.6 times the population of Moscow in 2017 (25,146).

Approximately 51% of the visitors live outside of Latah County (excluding college students) or 135,816 customers for year 2018. In addition, it is assumed that approximately 9% of the Latah County customers would have traveled outside Moscow for Saturday shopping opportunities (import substitution) for a total of about 60% of the visitors that are considered "basic" or new monies to the market. One the benefits of the market is providing local shopping and family entertainment opportunities on summer and fall Saturdays, keeping local spending in Moscow instead of leaking outside the regional economy.

A key challenge in analyzing the large flow of market customers is assessing average market and community spending. The market 2003 to 2018 RMA/SEED studies surveyed consumer spending, reported in Figure 8.

For the 2018 RMA surveys, the average market (inside) spending was $21.93 and the average spending in Moscow (outside the market) was $17.05. The 2013 SEED spending survey was based on individual per-customer spending.[xxi] We assumed a per-wallet measure with a group size of 1.6 persons.

Results

Summary Results

The state economic contributions are reported in Figure 10. These contributions include the direct contributions of market-related expenditures and the backward linkages of that spending as it circulates throughout the economy, i.e. the multiplier effects. It also includes the contributions of consumer spending relating to this economic activity. The following economic model outputs were reported:

1) Sales – reflects the total transactions from all sources in dollars by direct, indirect, and induced economic activity (i.e. including the multiplier effects).
2) Earnings (payroll) – includes wage, salary, and other income payments including fringe benefits to workers (including the multiplier effects).
3) Employment – represents the total employment resulting from economic activity (including the multiplier effects).
4) Indirect business taxes – includes all taxes except personal income taxes and corporate income taxes. At the local level they primarily include property and sales taxes (including the multiplier effects).

The primary indicators of economic activity most relevant are earnings (payroll), jobs, and taxes.

The market creates total economic contributions of 113 annual jobs, wage and salary payments of $2,433,642, and total output (sales) of $6,485,062. Output (sales) is the broadest measure of contributions of which wages and salary contributions are a subcomponent. Figure 10 includes the contributions of each individual category. These contributions include the direct, indirect, and induced contributions (i.e. the multiplier effects).

- For vendor expenditures category, the contributions are 13 annual jobs, $303,415 in wages and salaries, and $734,574 in annual output.
- For visitor market (net) category, the contributions are 22 annual jobs, $542,333 in wages and salaries, and $1,312.998 in annual output.
- For brick and mortar/spinoffs category, the contributions are 48 annual jobs, $988,621 in wages and salaries, and $2,631,938 in annual output.
- For visitor expenditures in Moscow outside the market category, the contributions are 30 annual jobs, $599,272 in wages and salaries, and $1,805,062 in annual output.
- The market creates total economic contributions of 113 annual jobs, wage and salary payments of $2,433,642, and total output (sales) of $6,485,062. Figure 10 includes the contributions of each individual category.

- The total taxes generated by the market are $138,558 per year in local property taxes and $266,612 state sales, excise, and income taxes, for a total of $405,170.[xxii]
- The average "effective" sales (output) multiplier for the IMPLAN model was 1.45, labor income (1.29), and employment multiplier (1.18). For everyone direct job, a total of 1.18 jobs are added to the regional economy.

Are the Tax Estimates Reasonable?

The economic model (IMPLAN) has a tax module that estimates a wide array of local, state, and federal taxes. The model allocates tax contributions proportionally to the economic drivers of the market in long-run equilibrium. Tax revenues are created by community economic activity and local industries either directly or indirectly. Thus, any economic (basic) activity that creates jobs and income also creates tax revenues that can be estimated with the economic model.[xxiii] Are the results reasonable? One test is to compare these results of the model to the average tax payments per job in Latah County. Total 2017 Latah County property tax payments (all taxing districts) were $37,809,301.[xxiv] Note: Any worker living in Latah County pays property taxes, including renters (through their rents). Total county employment is 16,680 which equates to $2,267 in average property tax per job. The 113 jobs created by the market in the contribution estimate equals $256,142 of annual property tax generated. The property tax payments estimated by the economic model are $138,558, suggesting the model results are reasonable and conservative.[xxv]

Figure 10

2018 Economic Impacts of Moscow Farmers Market
Includes the Direct, Indirect, and Induced Impacts

Category	Jobs	Wages/Salaries	Output
Visitor Spending (Vendor Survey)	13	$ 303,415	$ 734,574
Visitor Spending Cust. Survey (Net)	22	$ 542,333	$ 1,312,998
Brick and Mortar/Spinoffs	48	$ 988,621	$ 2,631,938
Visitor Spending Moscow	30	$ 599,272	$ 1,805,552
Total	113	$ 2,433,642	$ 6,485,062

Tax Impacts	Local	State	Total
Taxes Generated by Market Activity	$138,558	$266,613	$405,171

Are the Economic Contributions Reasonable?

Are the economic contributions reasonable? The jobs contributions are 113 jobs including the multiplier effects. This study casts a wide net across all the important activities and functions of the market which are reflected in the results. We report the contributions by category so that the individual components of the contributions can be seen and measured.

Approximately 43% of the job contributions arise from the brick and mortar spinoffs and related local farm producers. Approximately 15-20 firms have incubated in the market or originated with the market. Many are well known eating and drinks establishments with a substantial number of direct employees. A portion of their activity (60%) is included in these economic contributions.

The second largest component of the contributions is the outside visitor spending arising (27%) from the 2018 RMA surveys. Over 266,205 customers visit the market annually of which 135,816 visitors or 51% are nonresidents. Given the high volume of visitors, even a relatively small amount of spending can have large economic contributions. The key question is how much of that spending "sticks" in the community and contributes to the economic contributions. Moscow has a vibrant downtown with a significant eating and drinking and small-firm specialty-shop sector. The market clearly is an important contributor to the economic activity that supports these firms.

Overview of the Moscow Economy

Latah County is situated in northern Idaho on Idaho-Washington border adjacent to Whitman County.

Idaho's economy is divided into three integrated regional economic areas that spill into six surrounding states. The regional economic area for Northern Idaho and much of Eastern Washington is centered in the Coeur d'Alene, Idaho-Spokane, Washington corridor, which includes Northern Idaho, Eastern Montana, and a portion of Southern Canada. The dominant geographical location in the trade hierarchy is Spokane, Washington, which is followed by the regional trade "hub" of Lewiston, Idaho, and the local hubs of Moscow and Pullman. The local integrated economic region is the Quad County region: Latah County, Nez Perce County in Idaho; and Whitman County and Asotin County in Washington. The primary trade and commuting patterns on the Palouse and in the Lewis-Clark Valley run East-West. The economies of Pullman and Moscow are woven tightly together as are the economies of Lewiston and Clarkston. [xxvi]

East-West Trade Linkages and Retail Trade

Commuting patterns and economic linkages run primarily east-west between Pullman and Moscow, and East-West between Clarkston and Lewiston. Whitman County (primarily Pullman) is a net job exporter as residents from surrounding counties commute daily to their jobs in Whitman County mostly to the region's top employers - Schweitzer Engineering and Washington State University (WSU). On average (net), approximately 2,367 individuals commute into Whitman County for work from Latah County (primarily Moscow), which is a net job importer.

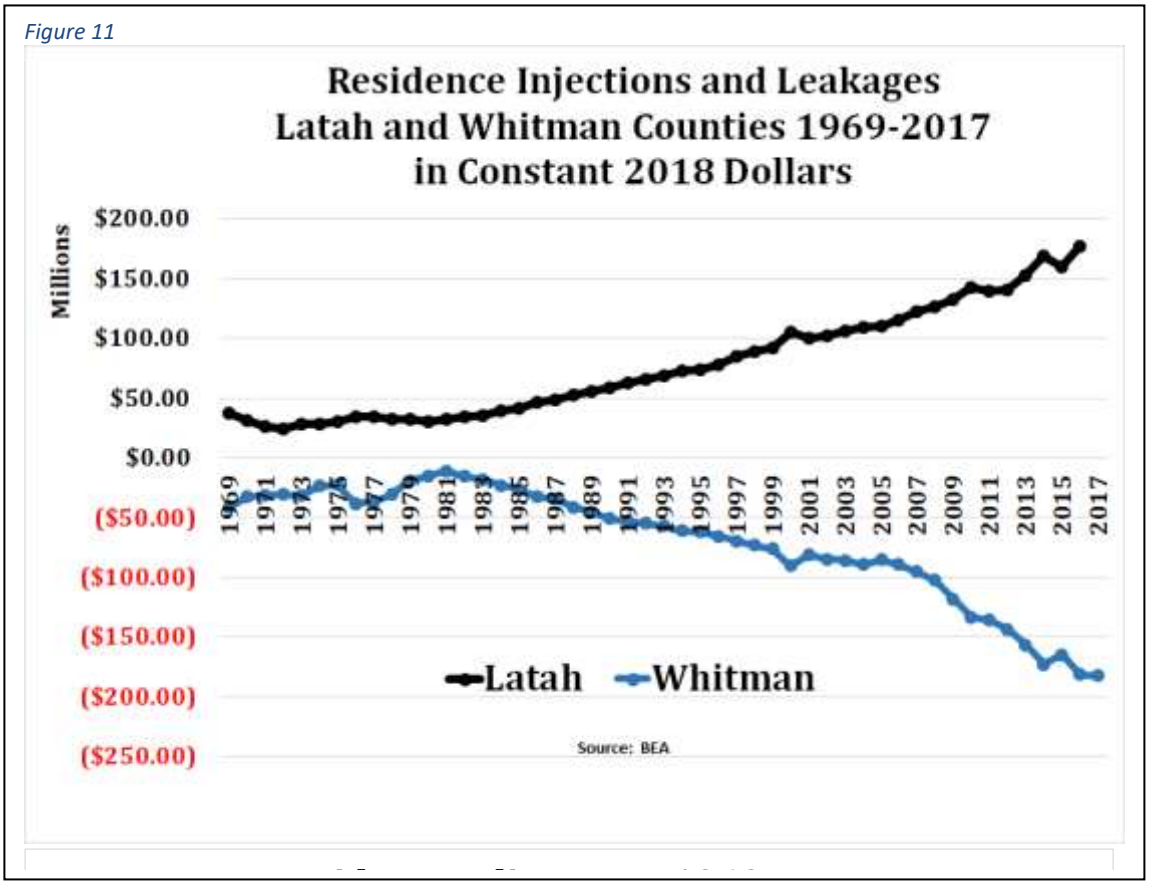
Moscow is the "home" of the Palouse and a significant number of residents work in Pullman or elsewhere and out-commute each day. They live in Moscow for the high quality of life even though they are required to pay Idaho income taxes on their out-of-state jobs.

The commuting patterns create income flows throughout the region. Latah County has a (positive) net income inflow of $179.4 million (2017) whereas Whitman County has a (negative)

net outflow of $182.2 million.[xxvii] This interdependence has been increasing over the last two decades as measured by the positive and negative residence adjustment (i.e. income flows from commuting) (Figure 11).

The net $179.4 million inflow to Latah County from other counties (primarily Whitman County) creates income and jobs (2017): 975 Latah County jobs, $108.5 million in sales transactions, $30.1 million in total compensation, $2.4 million in local taxes and $4.3 million in state taxes, including the multiplier effects. [xxviii] The Moscow Farmers Market enhances the quality of life that makes Moscow a desirable place to live and indirectly contributes to those income and job flows.

Figure 11



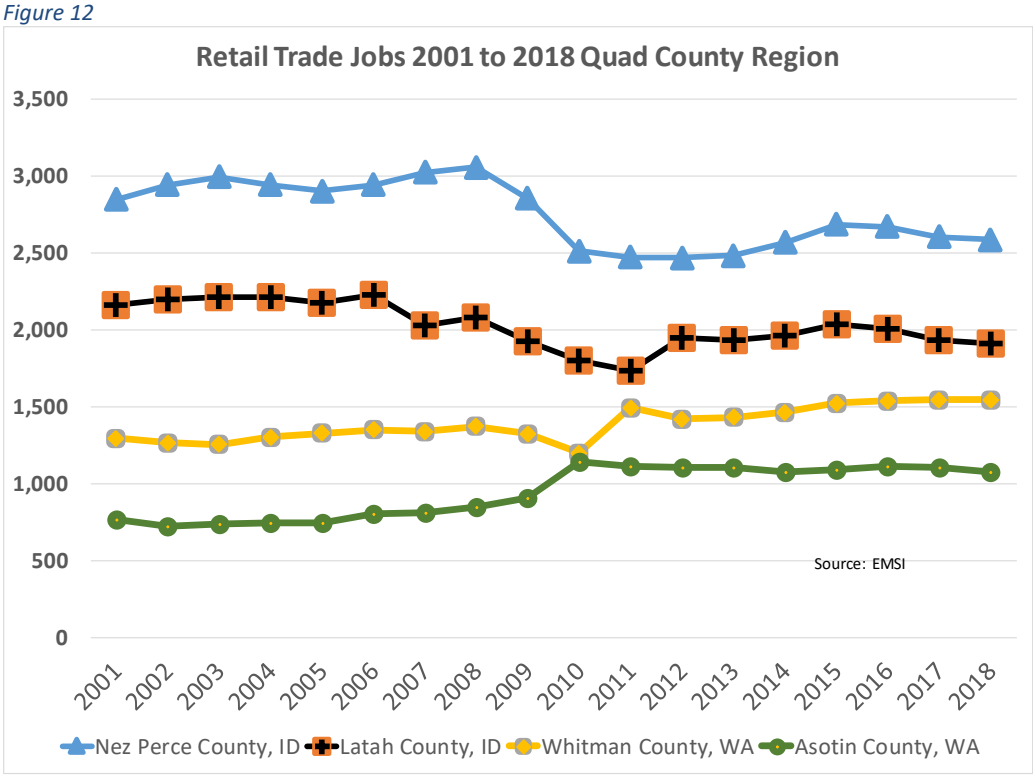
Retail trade is an import component to the regional economy and especially to the Latah County economy. Overall, Nez Perce County has approximately $747 million in retail sales, Latah County ($390 million), Whitman County ($365 million), and Asotin County ($313 million). Latah County has been the dominant local trade hub, but Whitman County is catching up (Figure 12).[xxix] Moscow is a very desirable location for shopping and eating-and-drinking on the Palouse which is important for future community growth. Total retail trade employment is presented in Figure 13. In 2018 Nez Perce County had 2,586 retail trade jobs, Latah County (1,908), Whitman County (1,543), and Asotin County (1,073).[xxx]

Figure 12
Retail Trade Sales - Economic Census by Year
in Constant 2018 Dollars

Region	2002	2007	2012
Whitman County	$324,874	$328,271	$364,824
Latah County	$390,123	$438,008	$389,445
Nez Perce County	$745,401	$851,349	$746,887
Asotin County	$218,456	$252,941	$312,648

Source: Bureau of the Census

Figure 12



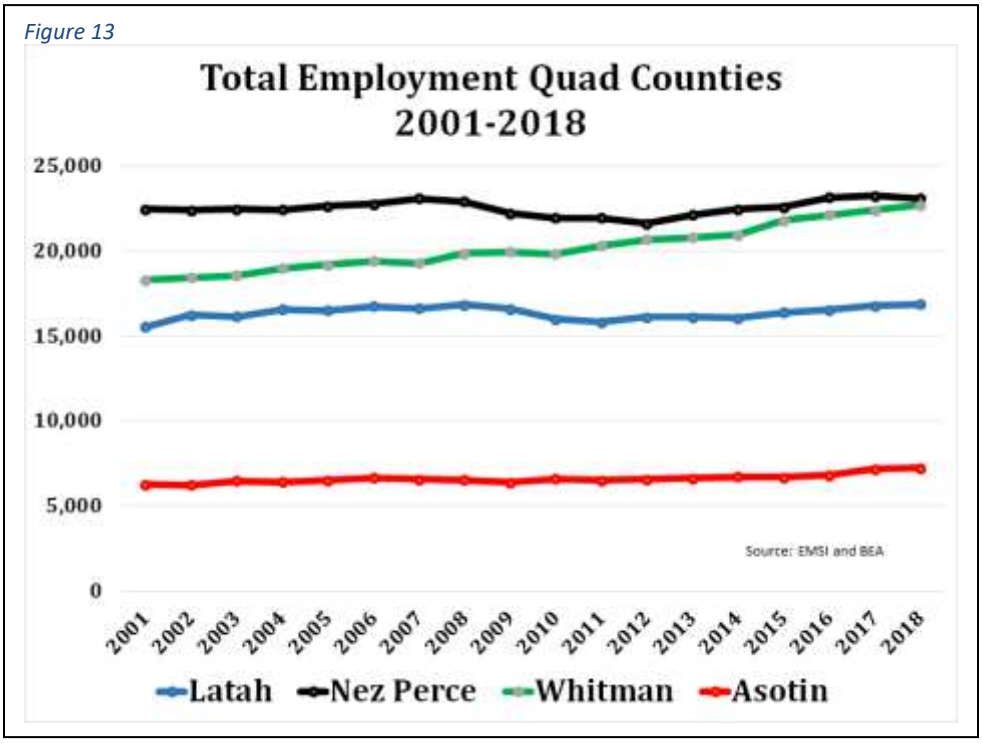
Population and Employment Growth

The major growth engines of the Palouse have been the increased student enrollment at WSU, over 3,000 students over the last 15 years and the growth of Schweitzer Engineering Laboratories that has added over 1,500 employees over the same time period.

The Palouse and the Quad County regions have historically been slow-growing but stable economic regions situated in two relatively fast-growing states. Whitman County transformed over the last twenty years from one of the region's slowest growing counties to one of the fastest

growing counties. Moscow has benefited from that growth in Whitman County because many of the new workers in Pullman live in Moscow and shop in Moscow. In 2018, Whitman County had a population of 49,531, Nez Perce County (40,492), Latah County (39,473), and Asotin County (22,607). The Quad County population was 152,103 in 2018 and by 2025 is expected to reach 156,693.

Figure 13



Total full and part-time 2018 Quad County employment (Bureau of Economic Analysis – BEA measure) was 69,912 jobs of which 23,106 jobs in Nez Perce County, Whitman County (22,689), Latah County (16,880), and Asotin County (7,237). Whitman County employment grew 24% cumulatively from 2001 to 2018, Asotin County (15.7%), Latah County (8.7%), and Nez Perce County (2.9%) Figure 13 illustrates the actual job growth by county and region from 2001 to 2015; and presents forecasts from 2015 to 2025.[xxxi] Whitman County is expected to surpass Nez Perce County in total employment by 2021.

Universities: Our Largest Core Industries

The three universities had about 35,187 regional students in the fall 2018 academic year which constituted about 23% of the region's population (Fall Enrollment Census, 2018). The importance of student growth on the regional economy cannot be understated: Every college student creates about $56,000 in sales, $33,000 in wage and salary earnings, and 0.71 of a job in the region, assuming that in the long-run all university activities and expenditures are dependent on student enrollments.[xxxii] The region's largest and most important industries are its university system (WSU, UI, and LCSC), which directly employ 13,946 people regionally and create 25,935

jobs including the multiplier effects. They contribute $2.0 billion in total sales transactions, $1.6 billion in gross regional product, and $1.2 billion in regional payrolls. [xxxiii]

The University of Idaho fall of 2018 enrollments are down approximately 8.2% cumulatively since 2003 (about 1,053 students). Subtracting out dual-enrolled high school students, UI enrollments may be down by approximately 22% or 2,858 students since 2003.[xxxiv]

This translates into a net loss to the City of Moscow of 2,029 jobs!

Without the positive spillover growth from Whitman County, Latah County would be in an economic recession. The Moscow Farmers Market has been instrumental in enhancing the quality of life factors that make Moscow an attractive place to live and shop.

High Technology Services

Moscow has several dozen emerging small high technology manufacturing and service companies such as, Alturas Analytics, Anatek Labs, Comtech EF Data, and firms throughout Moscow.

EMSI (an economic data and consulting firm) has increased from 130 employees to over 170 in 2018 and is situated in the downtown Moscow corridor. Other emerging technology-related firms in the downtown corridor include Populi (15 employees), Hodge & Associates (20 jobs), TerraGraphics (20 jobs), Wovax (12 jobs), Roman Roads (10 jobs), Moscow Works (10 jobs) and Biketronics (5 jobs).

Downtown Moscow

Downtown Moscow has been compared to a great tidal basin: Each day the tide of workers and students flow outward to their jobs and studies and each night they flow back with nutrients (i.e. income) to the downtown economy. Downtown is centrally located near the University of Idaho campus and near the major residential district of town. Downtown storefronts have few vacancies.

There are at least 344 firms in the broader downtown corridor running from the border north of town to the southern border and running east to the Latah County Courthouse and west to about Ashbury Street, employing an approximate 3,691 workers. There are a variety of economic clusters[xxxv]:

- Health care – 753 jobs
- Eating and drinking – 632 jobs
- Retail – 586 jobs
- Other – 387
- Government – 385 jobs
- Finance/insurance/real estate –291 jobs
- Engineering and technology services – 233 jobs
- Manufacturing/Craft Industries – 243 workers

- Professional services – 140 jobs
- Private Education – 41 jobs

Downtown Moscow has an important health care cluster led by Gritman Medical Center and a variety of physician offices and related services. Eating and drinking firms employ 632 people; retail establishments including the Moscow Food Co-op (586 jobs); city and county government (385 jobs); insurance; real estate; and finance sectors (291 jobs); engineering and technology services (233 jobs); manufacturing/professional craft industries including Northwest River Supply (243 workers); professional services (140 jobs); private education including New St. Andrews College (41 jobs) and variety of other firms (387 jobs).

The Market's Role in Downtown Moscow

The Moscow Farmers Market is the social glue that helps hold the diverse elements of the downtown community together.

The Moscow Farmers Market's most important contribution to the Latah County economy is the unique attraction it offers the community of Moscow as well as tourists, students, families of students and potential economic interests of Moscow as a place to live, shop, dine, raise children, attend college, and work. The market attracts 135,816 nonresident visitors annually

The market's elevation of locally produced foods and beverages has increased the visibility of the emerging *regional* craft beer and winery regional economic cluster now counting over fifteen regionally produced wines and craft beers. The market's attraction of community members and patrons outside Latah Co. to Moscow's downtown core benefits the craft beer district in Moscow that now includes Moscow Brewing Company, Rants and Raves Brewery, and Hunga Dunga Brewery. In addition, there are several Moscow restaurants and bars that specialized in serving local and regional craft beers.

The Moscow Farmers Market is a key partner with the local-foods movement, an important and notable reference label for Moscow and Latah County producers. The market partners with the Moscow Food Co-op, which produces $11.3 million in revenues (2018), employs 130 full-time and part-time employees and annually buys $778,000 of products from 200 local and regional firms. Local Food Restaurant Cluster: The market's attraction of community member and patrons outside Latah Co. to Moscow's downtown core benefits the 16 Moscow restaurants and cafes that have branded themselves as "local food" eateries featuring locally grown farm products and locally processed foods such as coffee and teas.

Market vendors sell approximately $300,000 annually of local agricultural products from Latah County.

The market supports Moscow's annual Artwalk, and the Moscow artistic community and enhances other signature events including Renaissance Fair, Rendezvous in the Park.

Conclusions and Considerations

The Moscow Farmers Market is a vibrant, vital, 42-year-old institution founded in 1977 that has developed strong linkages in virtually all industries of the downtown economy. The

Moscow Farmers Market's most important contribution to the Latah County economy, as noted in the CUSP Branding Project, is the market's value to Moscow and the region as a place to live, shop, dine, raise children, attend college, and work. This contribution to the Moscow brand has provided most of the recent economic growth to Moscow and helped offset the economic effects of enrollment declines at the University of Idaho, the region's largest employer. The Moscow Farmers Market acts as a social glue that helps hold the diverse elements of the downtown community together.

The market provides a steady flow of annual visitors to downtown Moscow - 266,205 in 2018 up from 84,084 in 2003; a 217% cumulative increase and represents an 8.0% average annual growth rate. Approximately 50% are out-of-town visitors (135,816), bringing new money to the Moscow economy. About 161,373 people (61%) visit the market before 11 am, creating a wave of shoppers every market Saturday at the start of the business day for Moscow firms.

Estimated Farmers Market reported vendor sales were $1,391,646 in 2018. Annual visitor spending was estimated at $6.49 million by the 2018 RMA surveys.

Economic contributions of the market including multiplier effects are $6.46 million (in output) and 107 local jobs. Annual state and local tax contributions of the market are $138,558 in property taxes and $405,170 in state sales, excise, and income taxes. *Factoring in the multiplier effects, with the net property tax contributions, the market is financially self-sustaining.*

The Moscow Farmers Market has received substantial community support, encouragement, and assistance from the City of Moscow. Ongoing successful community enterprises such as the market need to be monitored and supported on a continuous basis.

The University of Idaho's Lionel Hampton Jazz Festival is an example of the consequences of inadequate attention or benign neglect to a successful community enterprise. In 2002, Peterson and DiNoto conducted an economic contribution assessment on the Jazz Festival, which then boasted 18,000 visiting K-12 students every February along with world-class musicians and concerts which attracted 16,000 attendees. The annual economic contribution in terms of jobs was estimated at 125 local jobs including the multiplier effects.

By 2014, the Argonaut reported the visiting students had dropped to 3,800 and the concert attendance had dropped to 7,257, a decline that may threaten its future[xxxvi]. While there are many complex reasons for the decline of the Jazz Festival, benign neglect is a plausible ingredient, a concern held by the authors of the 2002 Jazz Festival Study. Too much attention may have been focused on Jazz Festival revenues instead of the broader university and community contributions and benefits of the festival. The festival was an important tool in recruiting and retention of future University of Idaho students. UI student enrollments peaked around this time period (2002) and has declined about 22% cumulatively[xxxvii].

The City of Moscow has an award-winning Farmers Market that is growing robustly and contributing economic benefits to the downtown community. Community support and encouragement is vital for community enterprises, such as the Moscow Farmers Market, to grow and prosper. It is clear from this analysis that the Moscow Farmers Market is a significant asset to the City of Moscow and has significant positive direct and indirect on the local economy.

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Watson, Philip, David Kay, Gregory Alward, Stephen Cooke and Alfonso Morales. "Evaluating the Extent and Economic Contribution of a Local Food System through an Import Substitution Framework," Department of Agricultural Economics and Rural Sociology, University of Idaho. (2015).

Williams, Cinda, et.al. "2011 Moscow Farmers' Market Rapid Market Assessment." (2011). https://www.ci.moscow.id.us/arts/Documents/fm_rma_2011.pdf

- Export activity: Any product or service whose sales bring money into a community from the outside.
- Sales of products to firms or consumers in other states are examples of export activity. Other examples include nonresident tourist spending, federal government payments, and income transfers.
- Sales: Total dollar transactions from direct, indirect, and induced economic activity.
- Earnings: Wage, salary, and other income payments including fringe benefits to individuals.
- Value-added (value-output): This is a measure of gross domestic product at the local or regional level. Value added is a measure of total net production and activity.
- Jobs: Total employment resulting from economic activity. The economic model reports these as full- time and part-time jobs.
- Indirect taxes: All taxes generated from economic activity excluding personal and corporate income taxes. These consist of mostly sales taxes and property taxes.
- Base industries: Any economic activity that brings money into the local economy from the outside is considered a base industry. For example, Ada County base industries include high-technology companies, medical services, retail services, federal government, and other manufacturing and service firms.
- Nonbase industries: Any economic activity within a region that support's local consumers and businesses re-circulating incomes generated within the region. These activities include shopping malls that serve the local population, business and personal services consumed locally, and local construction contracts. Nonbase industries support the base industries.
- Economic contributions: Economic contributions measure the magnitude or importance of the expenditures of base (export) industries. Our economic model estimates multipliers for each industry. If you have a multiplier of 1.61, for example, every dollar of base expenditures creates $1.61 dollars of new spending in the community. The total multiplier has three components: direct effects, indirect effects, and induced effects.
- Direct effects (spending): This represents the actual sales, income, and jobs from hospital operations.
- Indirect effects: These are the downstream economic effects on sales, payroll, jobs, and indirect taxes that results from direct spending in the regional economy. For example, a medical center purchases community goods and services which supports other area businesses. These firms, in turn, purchase even more goods and services as the effects ripple throughout the economy. They are part of the overall multiplier effects.
- Induced effects: These are downstream economic effects of employee and consumer spending on the economy. They are part of the multiplier effects.

Figure 15: Farmers Market 2011 Location (Source: Moscow Farmers Market Value) 2015)

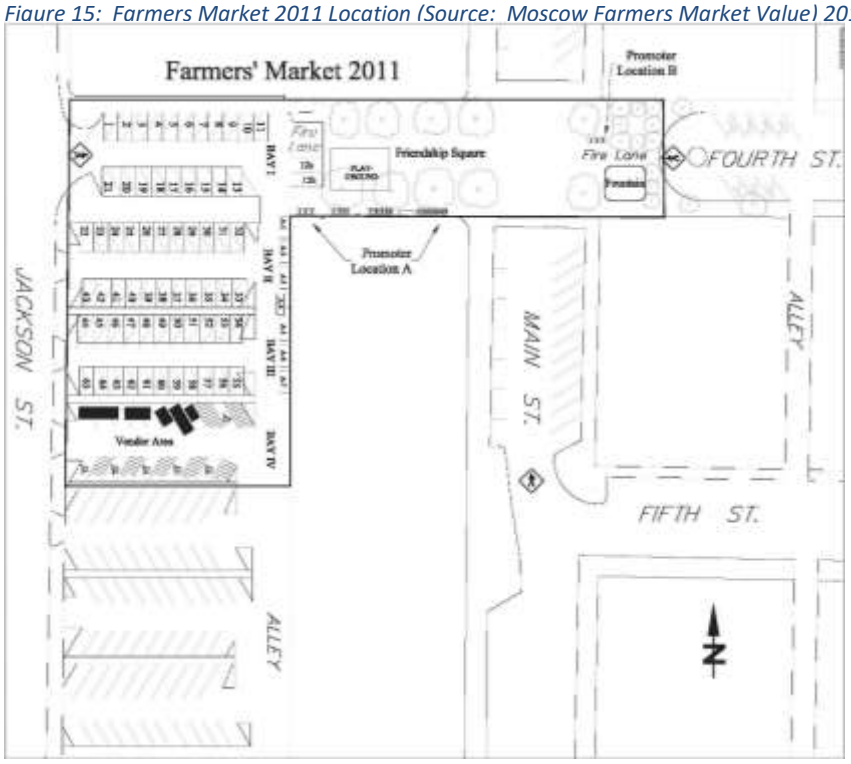

Figure 16: Farmers Market 2016 Location (Source: Moscow Farmers Market Value) 2015)

Notes

[i] Moscow Mystique – Process and Research behind the CUSP Moscow Brand. Developed by BHW1 Sponsored by Moscow Chamber of Commerce, City of Moscow 2016, University of Idaho. http://www.ci.moscow.id.us/records/Publications/Moscow%20Mystique%20Book.pdf

[ii] DePhelps, Collete, Rapid Market Assessment, 2018, cdephelps@uidaho.edu.

[iii] The 2018 vendor sales total includes an estimate for non-respondents (5%). The vendor sales are self-reporting and likely understate total "true" actual vendor sales and should be viewed as a lower bound for estimated market visitor spending.

[iv] The market surveys of visitor spending inside the Market *implicitly* includes the reported annual Market vendor sales. These are netted out in our analysis to avoid double-counting.

[v] The economic contribution analysis: 1) Measures the economic contributions on Latah County instead of the 200-mile defined Market region radius (i.e. most of the agricultural and craft products are margined). 2) Measures net new monies to the Latah County (non-substitutable spending) or about 60% of total market visitor spending. 3) The contributions include the direct, indirect, and induced contributions (i.e. multiplier effects) 4) An IMPLAN input-output model was created for the Latah County economy.

[vi] Including the multiplier effects.

[vii] : Andrew Jenson. "Increasing the scope — Moscow City Council votes to expand Farmers Market radius." https://www.uiargonaut.com/2014/02/10/increasing-the-scope-moscow-city-council-votes-to-expand-farmers-market-radius/. 02/10/2014.

[viii] American Farmland Trust's Farmers Market Celebration. Moscow Farmers Market. http://markets.farmland.org/market/moscow-farmers-market/. Accessed 4/6/2018. See also: Chey, Scott. "Moscow Farmers Market named Idaho's best; local market season wraps up soon." http://www.inlander.com/Bloglander/archives/2015/10/02/moscow-farmers-market-named-idahos-best-local-market-season-wraps-up-soon. 10/2/15.

[ix]Amanda Argona, Volunteer Coordinator & AmeriCorps member. "Moscow Farmers Market Value 2015," Published by the City of Moscow. https://www.ci.moscow.id.us/records/Publications/MFM-Value-Report-2015.pdf.

[x]This is relatively consistent across surveys. However, the percent of Whitman County visitors is growing relative to the total.

[xi]City of Moscow Farmers Market Commission Minutes 4/2/19. https://moscowid.civicclerk.com/web/UserControls/DocPreview.aspx?p=1&aoid=404.

[xii] Amanda Argona, Volunteer Coordinator & AmeriCorps member. "Moscow Farmers Market Value 2015," Published by the City of Moscow. https://www.ci.moscow.id.us/records/Publications/MFM-Value-Report-2015.pdf.

[xiii] Cinda Williams, et.al. 2011 Moscow Farmers' Market Rapid Market Assessment. https://www.ci.moscow.id.us/arts/Documents/fm_rma_2011.pdf. July 30, 2011.

[xiv] The original 2013 SEED analysis employed a more conservative average Saturday attendance of 5,000 visitors or 130,000 per year in their economic analysis instead of the 6,342 daily shoppers (164,892 annually) estimated by their study. The higher estimate was utilized in the 2016 market study in anticipation of the market numbers rising in future RMA studies, validated by the 2018 RMA study. See: Amanda Argona. "Applying value of the Moscow Farmers Market.".https://www.ci.moscow.id.us/records/Publications/SEED-NEED-Study.pdf. 2013.

[xv] Example adjustment: 2012 - actual reported vendor revenues = $303,962 / 28.85% = $1,053,593/0.91433 = $1,152,315. The reported sales are first adjusted for the percentage reporting and then adjusted to 2018 dollars.

[xvi] IMPLAN Database and Documentation. IMPLAN Group LLC (2017).

[xvii] An informal survey of vendors was conducted in June-July 2016 as a component of the 2016 study.

[xviii] The 60% assumption is based on the 2018 RMA surveys which showed that about 51% of the market customers were nonresidents and this is consistent with previous surveys. We also assumed that about 9% of Moscow residents would leave Moscow and dine elsewhere in the absence of Moscow's varied assortment of eating and drinking establishments (i.e. import substitution).

[xix] Technically the calculation of economic contributions for Latah County agriculture production included in the analysis was treated as a shock to exports rather than creating a formal import substitution model, given the relatively small proportion of these agriculture production contributions to the total market economic contributions. The likely net outcome of this approach is a slight understatement of the true economic contributions. See Philip Watson, David Kay, Gregory Alward, Stephen Cooke and Alfonso Morales, "Evaluating the Extent and Economic Contribution of a Local Food System through an Import Substitution Framework," Department of Agricultural Economics and Rural Sociology, University of Idaho, 5/23/15.

[xx] The analysis of local foods production is complex. The actual costs of production (i.e. cost of goods sold) are not included in the contribution analysis for these products but all other costs (i.e. the margins) are included in the analysis such as the marketing, selling costs, returns to entrepreneurship, etc. For firms located outside of Latah County even this approach can overstate the economic contributions because some of the remaining returns leak out and return home with the vendors. However, it was found that many nonresident vendors hire local Moscow employees and have a considerable long-term economic presence in the city. Since the estimate of local Latah County agriculture production is likely understated, there is some offsetting effects. This issue will be revisited in the future update of this study.

[xxi] The $17.05 estimate corresponds to the question "Do you plan on doing any additional shopping or eating in MOSCOW this morning?" This is different than the July 2018 and July 2011 RMAs that asked, "Do you plan on doing any additional shopping or eating in the downtown area this morning?" which averaged $13.05 and $13.11 respectively. This helps account for the difference in the questions which accounts for the significant increase from the 2011 report and the 2018 report.

[xxii] The model tax estimates include the direct tax payments from the firms and entities, and the taxes generated from backward linkages of downstream business and firms benefiting from the new economic activity, and the induced contributions of employee and consumer spending.

[xxiii] The tax module is not a tax forecast model and the results should be interpreted carefully.

[xxiv] Associated Taxpayers of Idaho, "State of Idaho 2017 Property Tax Levies" Boise, Idaho, http://www.ati-taxinfo.com/.

[xxv] Average property taxes per homeowner or other related measures would lead to similar or higher magnitudes in comparison. Note that renters indirectly contribute to property taxes through their rent payments.

[xxvi] The regional analysis results were reported: Peterson, Steve, "The 2015 Economic Impacts of the Pullman-Moscow Airport and Realignment Project," Sponsored by the PUW Airport, 3/16/2016.

[xxvii] Residents Adjustment is from the BEA regional accounts and were adjusted for inflation to 2018 dollars using the Consumer Price index. http://www.bls.gov/cpi/. The commuting patterns comes from the Bureau of the Census, On-the-Map application, http://onthemap.ces.census.gov/.

[xxviii] The residents' adjustment income economic contributions were estimated using an IMPLAN model of Latah County and measured as an increase in regional household income. The inputs were adjusted savings and taxes (10% rate).

[xxix] The Economic Census produced by the U.S. Department of Commerce, Bureau of the Census, is conducted every five years and includes estimates of retail trade and the components of retail trade. These are 2012 estimates adjusted to 2018 numbers by the Consumer Price Index.

[xxx] The employment numbers in this report use the *Bureau of Economic Analysis* BEA equivalent measure from the Emsi data base, which is a more conservative employment metric than was reported in the 2016 study. That study included *extended proprietors, making t*he retail trade numbers lower than reported in 2016.

[xxxi] Forecasts are derived from EMSI forecasts.

[xxxii] Steve Peterson (2014). *Economic Drivers: The Economic Impacts of the Higher Education and Health Care Sectors*

[xxxiii] These results were reported in: Peterson, Steve, "The 2015 Economic Impacts of the Pullman-Moscow Airport and Realignment Project," Sponsored by the PUW Airport, 3/16/2016.

[xxxiv] Note: there are many different metrics of enrollment and they can be complex, so caution should be utilized in interpreting these numbers. What is clear, is that UI student enrollments are down substantially.

[xxxv] The jobs estimates are taken from a variety of sources, secondary sources and databases, personal interviews, and phone surveys. These estimates should be view with caution as employment numbers can fluctuate greatly and there can be errors in some of the reporting sources.

[xxxvi] "The waning sound of music– The Lionel Hampton Jazz Festival lacks funds, attendees" (2/13/2014). Argonaut. https://www.uiargonaut.com/2014/02/13/the-waning-sound-of-music-the-lionel-hampton-jazz-festival-lacks-funds-attendees/. See also: Steve Peterson and Michael DiNoto (2002). "Economic Impact of the Lionel Hampton Jazz Festival", Sponsored by the Lionel Hampton Jazz Festival.

[xxxvii] University enrollments are complex and the recruitment of new students by the festival is just one factor among many for UI enrollment challenges.