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Estimating Employment Impacts of the Fountain Inn Farmers Market

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Background

In December of 2008, Dr. Lamie was asked to estimate employment impacts as an extension of an existing economic impact study conducted by Dr. Robert Brookover and Anthony Dixon of the Clemson Department of Parks, Recreation, and Tourism Management.¹

The Brookover and Dixon study used a multiplier suggested as appropriate for small town farmers markets by the Project for Public Spaces. Actual multiplier effects in a community can vary greatly, depending mostly on the ability of the community to contain leakages of additional rounds of spending outside their local economy. However, obtaining highly accurate multipliers for any specific small community entails a large amount of effort and expense. Thus, the use of this multiplier, especially given its modest magnitude, seems reasonable and, therefore, should not be heavily scrutinized. In

In order to derive employment effects from the existing estimate of farmers market sales and associated multiplier effects, estimates of the dollar amount of sales required to support a full-time equivalent (FTE) job are necessary. These estimates were obtained by creating an input-output model for Greenville County (using IMPLAN)ⁱⁱⁱ. IMPLAN produces employment estimates associated with economic impact estimates through the use of employment/sales ratios.

Results

The IMPLAN model estimated that 20.8 jobs (directly) and 24.8 (including multiplier effects) would be created for each million dollars of sales in the agricultural sector. Table 1 provides a summary of the results obtained by Brookover and Dixon and the associated employment estimates calculated using these ratios. Note that the Brookover and Dixon study created a range of results by altering expectations of number of vendors and their associated sales. This approach one to easily see the variation in impact that one might expect due to external factors that affect the relative success of the farmers market (e.g. shifts in consumer demand, market management, etc.). The resulting employment estimates indicate fairly modest level of employment associated with the farmers market, ranging from 1.3 to 15.6, depending on the number of vendors and the dollar value of their sales.

Potential Extensions of this Work

An important potential shortcoming of this estimation approach is that it fails to capture the impact the farmers market might have on what regional economists refer to as forward linkages. Forward linkages would include such things as the impact the existence of a robust farmers market might have on creating a lively downtown atmosphere that, in turn, serves to help attract population and/or businesses. Future studies might be considered to ascertain the importance of the farmers market to individual and firm relocation decisions.

In addition, this study was concerned with the immediate need to develop employment estimates directly associated with the sales estimates of Brookover and Dixon. Given the current interest in obtaining funds for a more robust streetscape and associated downtown development plan, a study to estimate the economic and employment impacts of this more developed scenario would be appropriate.

Table 1 Economic and Employment Impacts of Fountain Inn Farmers Market

Impact Results from Brookover and Dixon Study					Calculated Employment Impacts (FTEs)		
Number of Vendors	Average Vendor Annual Sales	Total Revenue	Indirect/Induced Impact	Total Impact	Direct	Indirect and Induced	Total
15	\$3,500	\$52,500	\$34,125	\$86,625	1.1	0.2	1.3
15	\$7,000	\$105,000	\$68,250	\$173,250	2.2	0.4	2.6
15	\$10,500	\$157,500	\$102,375	\$259,875	3.3	0.6	3.9
30	\$3,500	\$105,000	\$68,250	\$173,250	2.2	0.4	2.6
30	\$7,000	\$210,000	\$136,500	\$346,500	4.4	0.8	5.2
30	\$10,500	\$315,000	\$204,750	\$519,750	6.6		7.8
40	\$3,500	\$140,000	\$91,000	\$231,000	2.9	0.6	3.5
40	\$7,000	\$280,000	\$182,000	\$462,000	5.8	1.1	6.9
40	\$10,500	\$420,000	\$273,000	\$693,000	8.7	1.7	10.4
50	\$3,500	\$175,000	\$113,750	\$288,750	3.6	0.7	4.3
50	\$7,000	\$350,000	\$227,500	\$577,500	7.3	1.4	8.7
50	\$10,500	\$525,000	\$341,250	\$866,250	10.9	2.1	13.0
60	\$3,500	\$210,000	\$136,500	\$346,500	4.4	0.8	5.2
60	\$7,000	\$420,000	\$273,000	\$693,000	8.7	1.7	10.4
60	\$10,500	\$630,000	\$409,500	\$1,039,500	13.1	2.5	15.6

References

Brookover, Robert and Anthony W. Dixon. "Estimating Total Revenue, Indirect, and Induced Economic Impacts and Total Impact of the Fountain Inn Farmers Market". Clemson University, Department of Parks, Recreation and Tourism Management, 16 June 2008.

ii It should also be noted that the Brookover-Dixon study considered only the impact of the operation (not the actual construction) of the farmers market. Additional economic and employment impacts associated with the construction and/or maintenance of the market itself are often considered separately since they are typically one-time and short-term in nature.

iii IMPLAN is a commonly used input-output modeling system developed and maintained by the Minnesota IMPLAN Group of Minneapolis, Minnesota. (see www.implan.com).