Visitors to Tennessee Agri-Tourism Attractions

Demographics, Preferences, Expenditures, & Projected Economic Impacts

Report to Tennessee Department of Agriculture
by
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Executive Summary

Agri-tourism has the potential to serve as a means to profitably direct market farm products and services, to serve as an alternative use of farmland, or to supplement farm incomes. Agri-tourism may also bring economic activity to rural areas through visitor expenditures on goods and services both on-site and at locations nearby the agri-tourism businesses. A primary objective of this study is to provide market information for agri-tourism business owners regarding the visitor demographics and visitors' preferences for amenities and services at agri-tourism attractions. Another objective is to assess how visitor spending at agri-tourism attractions may impact the state's economy.

In order to collect information about visitors' preferences, expenditures, and demographics, on-site visitor surveys were conducted at several agri-tourism attractions across Tennessee during 2005. The attractions offered by the participating businesses included corn mazes, pumpkin patches, on-farm tours, petting zoos, on-farm eating establishment or snack bar, on-farm festivals or fairs, on-farm market, and a winery. A total of 464 visitors responded to the surveys.

The survey results suggest that most visitors to agri-tourism venues find their visits to be highly enjoyable and that certain amenities and services are of particular importance to their visit. Among the most important services or amenities are freshness of the farm's or business' products, on-site restrooms, adequate parking, learning about how products are grown or made, and easy transportation access. Most visitors are day visitors who come from in-state, with nearly half coming from the local county. Over half of the responding visitors stated they were repeat visitors. School groups are important, in particular, for agri-tourism businesses that include pumpkin patches, corn mazes, or farm tours. Important methods for visitors learning about agri-tourism attractions are word of mouth, brochures, and the newspaper. Because the majority of visitors are from in-state, their expenditures on the visit are primarily on-site. The largest share of expenditures is on purchasing the venue's products and the next large share for agri-tourism businesses that are not wineries are for admission or user fees.

Repeat visitors to agri-tourism attractions appear to place greater emphasis on freshness of products and also on pricing and admission fees than first-time visitors. These results suggest some promotional opportunities targeted at repeat visitors, such as special discounts or coupons to be used on repeat visits.

Projections statewide for businesses similar to those participating in the visitor surveys are that visitor expenditures at these types of businesses add about $16 to $17 million in economic activity directly. Furthermore, with multiplier effects throughout the economy taken into account, these expenditures stimulate a total of about $31 to 32 million in economic activity in the state. For every dollar spent at an agri-tourism attraction, an additional $.85 of economic activity is generated through multiplier effects. Over 412 jobs are projected to be added directly as a result of economic activity and an additional 145 jobs are projected to be added through multiplier effects throughout the economy.

The economic impacts from visitors to agri-tourism attractions across the state could be expanded by increasing the number of overnight visits. Overnight visitors might be those who wish to visit multiple venues in a given geographic region of the state. Future research might examine how to attract more visitors from outside the local area and what types and numbers of attractions, services, and amenities might draw them to stay for more than one day.

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Background and Objectives

Agri-tourism has the potential to serve as a means to profitably direct market farm products and services, to serve as an alternative use of farmland, or to supplement farm incomes. Agri-tourism may also bring economic activity to rural areas through visitor expenditures on goods and services both on-site and at locations near the agri-tourism businesses. Agri-tourism can be seen as a merger of the agriculture and tourism industries. Agri-tourism has been defined by several government agencies in order to identify agri-tourism operations. The Tennessee Agri-tourism Initiative Steering Committee defined agri-tourism as "an activity, enterprise or business which combines primary elements and characteristics of agriculture and tourism, and provides an experience for visitors which stimulates economic activity and impacts both farm and community income" (Bruch and Holland, 2004). The committee stated the attractions that often meet this definition include agriculture-related and on-farm events including places such as museums, festivals and fairs, century farms, corn-maze enterprises, farmers markets, tours, retail markets, vacations, festivals and fairs, petting zoos, fee-fishing, horseback riding, bed and breakfast, pick your own farms, and wineries.

Prior surveys of agri-tourism owners conducted in 2003 and 2004 assisted in characterizing the state's agri-tourism industry (Bruch and Holland, 2004; Jensen, et al., 2005). A finding from this prior research was that an important assistance need identified by the agri-tourism businesses surveyed was market research. A primary objective of this study is to provide market information for agri-tourism business owners regarding visitors' demographics and preferences for amenities and services at agri-tourism attractions. Another objective is to assess how visitor spending at agri-tourism attractions may impact the state's economy. This study ascertains socioeconomic and demographic characteristics of visitors to agri-tourism businesses, visitors' preferences for amenities and services, composition of their expenditures on-site at agri-tourism venues, and provides projections of economic impacts of these expenditures at these and similar agri-tourism operations on the state's economy. The results from this study should be helpful in identifying target markets for visitors to agri-tourism venues, understanding the types of services and amenities that are most important to visitors, and identifying the types of goods and services visitors spend their money on at agri-tourism venues, and the economic impacts of these expenditures. Demographic and visiting patterns can be helpful to the industry in identifying their target market. Information regarding preferences for amenities and services by visitors can also be helpful for businesses providing the types of services that are most desirable to their visitors. Finally, estimates of visitor expenditures and their resulting economic impacts are important for identifying how agri-tourism expenditures may affect the state's economy. The data for this study are from surveys of visitors to selected agri-tourism operations in Tennessee in 2005, from business owners' surveys by Bruch and Holland (2004) and Jensen et al. (2005), and the Tennessee IMPLAN model, an input output model of the state's economy.

Prior Research

A study by Jensen *et al*. (2005) examined the assistance needs and characteristics of agri-tourism businesses in Tennessee. The data for this study were collected through a 2004 mail survey which resulted in 125 responses from agri-tourism operators. The 125 responses came from a sample of 381 enterprises thought to be agri-tourism related that either were not included in or did not respond to a 2003 telephone survey conducted by Bruch and Holland. With the responses from the two surveys (2003 and 2004) combined, a total of 325 agri-tourism operators responded to the surveys. The results from the 2004 survey showed that the most needed types of assistance were: internet site development, liability and insurance issues, assistance identifying and making tour bus and travel group contacts, market research, and visitor safety analysis. Other results from the combined surveys (2003 and 2004) identified agri-tourism business' characteristics. Among the responding agri-tourism operations, the most common types of attractions included on-farm retail markets, on-farm restaurants/eating establishments, on-farm tours, pick-your-own farms, farm festivals and fairs, pumpkin patches, cut-your-own Christmas trees, and on-farm petting zoos. The median expenditure per visitor as estimated by the agri-tourism business owners was about $15.00. The majority of the spending was on purchasing the venue's product and admission or user fees. The most common types of advertisement used at the operations were word of mouth, business signs, websites, and newspaper advertising. From the 2003 survey by Bruch and Holland (2004), ten percent of total visitors in 2002 were part of organized group visits. Half of the visitors in groups were part of school groups, and another 15 percent of visitors in groups were part of travel or tour groups.

A New York Sea Grant and Cornell University study of New York State conducted a two-part study of agri-tourism business owners and their customers in order to provide farmers with up-to date information about agri-tourism (Hilchey and Kuehn, 1999). The customer survey was conducted in 1999 with the assistance of six agri-tourism business owners in New York State. A total of 299 customer surveys were completed and analyzed. In 2000, a survey of agri-tourism business owners was conducted. A mailing list of 2,416 farm-based businesses open to the public was generated with assistance from agriculture and tourism agencies and organization across the state of New York. A systematic random sample of 2,000 farm businesses was generated from this initial mailing list and 645 surveys were completed and used in this study. In both the customer and business owner surveys, more than half of the customers were reported to have come from either the home county of the business or counties adjacent to the home county. Only 18% of customers came from other states according to the visitor survey and only 9% came from other states according to the business owner's survey. Questions on both the customer and business owner surveys sought to identify visitor characteristics and found that most customers visit agri-tourism businesses with friends and/or family. The average group size was 6.5 individuals, but most groups contained 2 to 4 people. Both surveys show that a large percentage of children and adults between the ages of 20 and 59 visit agri-tourism businesses, while teenagers comprise only a small percentage of all visitors. Approximately 79% of the responding customers indicated that they were visiting the area just for the day, 7% stayed for two days and 5% stayed for three. Females comprised 57% of all visitors. About 48% of respondents reported that they were repeat customers according to the customer survey, while 72% were repeat customers according to the business owner survey. Both surveys showed that word-of-mouth is the most effective method of attracting visitors. About 95% of respondents to the customer survey reported that they enjoyed their visit "very much," while 4% indicated that they "somewhat enjoyed it" and 1% said they "did not enjoy it."

Coomber and Lim (2004) analyzed whether there are significant differences between the expectations and perceptions of participants of a guided tour in an organic farm. Kiwi Down Under, a small farm tourism enterprise, is located sixteen kilometers from the city of Coff's Harbour in New South Wales. The owner conducted traditional style walking tours for visitors. Thirty-six tertiary students from the education segment of the market responded to a pre-tour and post-tour survey that examined attitudes to twelve elements of the farm servicescape. Twelve close-ended questions on a five-point Likert-type scale are used to measure respondent attitude to a range of elements in the servicescape. The survey found participants expected more walking in the farm than they actually engaged in. While they found it easy to move around on the uneven and sloping terrain, it was not what they had expected. Also, the participants expected to stand at any one site longer than they actually had. The participants found farm noise and smell to be more pleasant than expected. Overall, the participants found the farm experience to be enjoyable and felt comfortable with the farm environment. Also, the guide provided the tourists a good understanding of farm activities through effective interpretative tours.

A study by Bernardo *et al*. (2004) looked at the potential of agri-tourism of a sub-region to Kansas. Data that were available from tourists visiting Kansas and its sub-region were examined. The sub-region comprised of states with similar characteristics including Oklahoma, Nebraska, South Dakota, North Dakota, Missouri, and Iowa. This sub-region provided sufficient responses to determine whether those participating in agri-tourism in the heartland may differ from tourists in other parts of the country, particularly the west coast and northeast. Based upon the National Survey on Recreation and the Environment, data on number of agri-tourism visits, distance traveled and overnight stays and on-farm spending, estimates of total direct spending by agri-tourists were developed. These expenditures were then fed into a Social Accounting Matrix (SAM) framework to estimate total economic impacts. Data for the State of Kansas were used to construct the economic accounts. The model was calibrated to the year 2001 and then after being fed into SAM, they were inflated to 2004 dollars. The combined direct and indirect economic impact associated with agri-tourism in 2000 was estimated to be between $25 and $78 million in 2004 dollars. The employment associated with this level of economic activity ranged between about 500 and 1,400 jobs. The total overall level of economic activity associated with agri-tourism spending ranged from about $26 million to $135 million, while labor income generated ranged from about $18 million to over $57 million. Households, accommodation and food, and transportation are the sectors of the economy most affected.

A study of New Hampshire's agricultural tourism (Rumbletree Incorporated for New Hampshire Department of Agriculture, 2002) conducted in-person interviews with 400 resident visitors (those traveling more than 25 miles from home) and 400 out-of-state visitors. The interviews were conducted during the summer and fall of 2002 at New Hampshire Visitor's Centers and Rest Areas and the Lakes Region Outlet Stores. This study showed that local visitors were nearly twice as likely as out-of-state visitors to have participated in agriculturally related activity. Open space was considered very important to the enjoyment of a New Hampshire visit. Over 60% of out-of-state visitors not planning a purchase cited lack of awareness as the reason. They either did not know where to find local products or they were not aware of the origin of products they saw. A second survey within the same research report was implemented in the fall of 2002 and completed February, 2003. This research team conducted telephone interviews with 435 residents. This survey found over 90% of those surveyed felt that keeping farms viable was important and virtually all respondents agreed that buying local produce was a way to keep farms viable. About 39% of those surveyed said they "definitely" would purchase a New Hampshire-grown product if identified as such and 56% said they "probably" would. The most popular agri-tourism activities among those surveyed were apple and berry picking. Ninety-four percent of those surveyed felt people should have more locally grown foods available to them. About 62% of respondents said they would be willing to pay more for food products labeled as New Hampshire-grown.

Curtis *et al*. (2002) conducted a survey which was sent by mail to Georgia's Chambers of Commerce in September 2001. Each Chamber was sent a memorandum describing the survey, its reasoning, a definition of agri/eco-tourism operations, and return contact information. A follow-up memorandum was sent in November 2001 to all Chambers that had not replied to the initial survey. This study separated agri-tourism and eco-tourism into two categories and defined nature-based, or eco-tourism, as travel and visitation to an operation not directly dependent upon agriculture and for the purpose of enjoyment, study, and the appreciation of nature and any accompanying cultural features. A total of 70 agri-tourism operations were identified by the Chambers of Commerce. The majority of the tourism attractions identified by the Chambers of Commerce offered agricultural tours. The peak season for the agri-tourism business identified was fall. The low season was identified as winter. The total number of visitors per year to the 70 agri-tourism enterprises was 243,139. The estimated mean number of visitors per year to each enterprise was 10,131, while the median was 500.

A study conducted by Lobo *et al*. (199) looked at the agri-tourism benefits to farmers in the agricultural-urban area of San Diego. According to the study, tourism and agriculture are big business in San Diego County, ranking second and fourth, respectively, as the county's largest industries. The survey was administered to visitors of The Flower Fields in Carlsbad, a popular agri-tourism attraction in San Diego County. The purpose of the study was to improve the understanding of potential consumers for this type of activity and to assess the awareness of visitors about issues that affect local agriculture. The survey used the questionnaire programming language developed by the U.S. General Accounting Office to create a computer generated questionnaire, which was administered to visitors through personal interviews. Between April 15 and April 30, 1998, they collected a total of 543 samples. According to The Flower Fields records, an estimated 200,000 people visited the site during the spring of 1998, with approximately 150,000 paid admissions. These visitors often traveled in groups with an average size of 3.77 people per group. Visitors traveled an average of 132 miles each way to get to The Flower Fields and spent an average of 8 hours in Carlsbad during their trip. This study used IMPLAN to estimate total economic impacts from expenditures at The Flower Fields in Carlsbad. The visitor expenditure data and information collected from the sample survey was projected to represent the 200,000 visitors. Visitors spent an estimated $2,329,137 at The Flower Fields. This study shows that expenditures through output multipliers made by visitors to The Flower Fields resulted in a total impact of $3,778,653 on the economy of Carlsbad. When taking into account the income multiplier, the study showed that it generated an estimated impact of $2,055,472 for Carlsbad. The value added multiplier showed an estimated economic impact of $2,357,741. Taking into effect the employment multiplier resulted in 69 jobs being created in Carlsbad as a result of expenditures made by visitors.

A study by Jolly and Reynolds (2005) looked at consumer demand for agricultural and on-farm nature tourism. The purpose of the survey was to assess the level of participation in agricultural and nature tourism, identify consumer preferences for agri-tourism experiences, assess on-farm spending, and uncover consumer values and habits regarding food and the agricultural system. They used a purchased mailing list and surveyed a random sample of residents from Sacramento and Yolo Counties in California. Questionnaires with cover letters were delivered to 1,919 residents in November 2004. A reminder postcard was mailed in December, and a second questionnaire was mailed in January 2005. Of 294 respondents, 27 percent were 44 years of age or younger and 48 percent of respondents were female. Sixty-five percent of the respondents indicated that they were "very interested" or "interested" in nature tourism, while 57.3 percent indicated interest in agri-tourism. Sixty-one percent of respondents indicated that they had spent an average of between $5 and $40 on the farm during their visits with 16 percent having spent more than $40. About 67 percent of the respondents who had purchased products at farm-related tourism sites indicated a willingness to pay a price equal to or more than what they would pay for the same or similar products in conventional outlets. Agri-tourism operators can realize revenue through entrance fees and this study found 68 percent of the respondents indicated that they were willing to pay between $1 and $15 while 5 percent were willing to pay more than $15.

Leones et al. (1994) found that visitor to direct farm marketing outlets in Cochise County, Arizona tended to have incomes and education significantly higher than average, to be primarily Caucasian, and travel in relatively large parties. They also found that the agricultural tourists generally visited two or three outlets per visit and were likely to return year after year.

Study Data and Methods

In June 2005 through December 2005, six agri-tourism businesses were identified as being interested in participating in on-site visitor surveys. These businesses were identified through the 2003-2004 surveys of business owners and/or Tennessee Department of Agriculture or UT Extension Service contacts. The identities and certain identifying information are not published in this document for reasons of confidentiality.   The attractions offered by the businesses included corn mazes, pumpkin patches, on-farm tours, petting zoos, on-farm eating establishment or snack bar, on-farm festivals or fairs, on-farm market, and a winery.

These six businesses agreed to participate in the on-site visitor surveys for a period of at least two-weeks. The data for this study was collected through both survey drop boxes and mail-in surveys during a two week time period placed at each business. The two week period was selected for each business based upon recommendations by the business owners as peak visitor periods. One of the businesses had an internet site and email box and the visitors were offered the opportunity to complete the survey online.

The survey instruments contained questions about the type of visitor's experiences, preferences for amenities and services, group sizes and types, transportation, and time at attraction, time in planning visit, spending and other visitor characteristics. A question also asked the visitor to rate the importance of amenities and services offered at the venue. A total of 1,400 mail surveys were distributed across the six businesses. However, the number of email recipients contacted to participate in the online survey was not available. A total of 464 completed surveys were collected from visitors across the six businesses.

Two types of analysis will be completed as part of this study. First, the data from the visitor surveys will be summarized and descriptive measures presented. For continuous variables, such as age of visitor, the mean will be used to describe the data. For categorical variables, such as yes/no, percents will be used to describe the data. Second, on-site expenditure data from the visitor surveys will be used, along with statistics from a previous business owners survey, to calculate projected amounts that might be spent on various goods and services provided by similar agri-tourism venues across the state. These statewide expenditures will then be used along with IMPLAN, an input/output model, to project the economic impacts from on-site visitor expenditures at similar agri-tourism venues across the state.

To identify the interrelationships in a regional economy, IMPLAN (Impact Analysis for Planning) software and data for the state of Tennessee are used. IMPLAN modeling software is based on input-output methods frequently used by planners and economists to assess impacts on economic development. IMPLAN software is distributed by the Minnesota IMPLAN Group (MIG, 2006). National and regional data from many state and federal agencies are used along with information from industry sources to account for transactions with the economy. Their software calculates both direct and secondary economic effects of different industries. In the IMPLAN model, input-output analysis has been extended beyond market-based transaction accounting to include non-market financial flows by using a social accounting matrix (SAM framework) (MIG, Inc. 1999). The model describes the transfer of money between industries and institutions, but also contains both market-based and non-market financial flows, such as interinstitutional transfers. Output from the model includes descriptive measures of the economy including total industry output, employment, and value-added for over 500 industries within Tennessee’s economy.

Results

Survey Data Descriptive Measures

A total of 464 business responded to the either the written drop box/mail survey or the email survey. Out of the 1,400 written surveys provided, a total of 361 responded (non-email surveys), for a response rate on the non-email surveys of 25.79 percent (361/1400) along with 103 email surveys. Throughout this document, “N” represents the number of responses to a particular question.

Enjoyment of Visit

Visitors were asked about how enjoyable their visit to the agri-tourism attraction had been. A total of 439 responded to the question. As shown in Figure 1, 55 percent of the visitors to the agri-tourism attractions said their experience was extremely enjoyable, 30 percent said their visit was highly enjoyable, 13 percent said their visit to be enjoyable and 2 percent said their visit to be somewhat enjoyable. None of the respondents said their visit was not enjoyable at all.

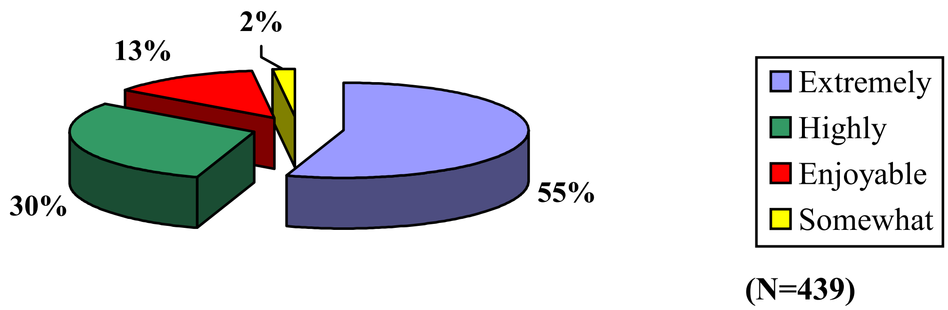


Figure 1. Visitors' Rating of Enjoyment of Visit to the Tennessee Agri-tourism Attractions, 2005.

Preferences for Services/Amenities

Respondents were asked to rate the importance of services/amenities to their visit. A rating of 1 was assigned for extremely important to 5 for not important at all. A summary of these results is presented in Table 1. Freshness of the farms' or business' products was rated as extremely important by over 61 percent of the respondents. Over 40 percent rated both on-site restrooms and learning about how products are grown or made as extremely important. For adequate parking, easy transportation access, and pricing of products, over 36 percent rated these amenities or services as extremely important. Using the mean ratings, amenities and services receiving an average rating of highly to extremely important included freshness of farm's or business' products, on-site restrooms, adequate parking, learning about how products are grown or made, and easy transportation access. Services or amenities receiving average ratings of moderately to highly important included pricing of products, farm scenery, admission or user fees, product samples, seating, picnic areas, and opportunity to pet or care for animals. Services or amenities receiving average ratings of little to moderate importance were food and drink for purchase and crafts or souvenirs.

Table 1. Visitors' Importance Ratings of Amenities/Services by the Tennessee Agri-tourism Attractions, 2005.

Amenity/Service	Percent Responding As: 1=Extremely Important	2= Highly Important	3=Moderately Important	4=Little Importance	5=Not Important at All	Mean Rating
Freshness of farm's or business' products (N=409)	61.37	24.69	10.02	3.42	0.49	1.57
On-site restrooms (N=432)	46.99	25.46	18.06	8.33	1.16	1.91
Adequate parking (N=430)	36.74	34.42	25.12	3.49	0.23	1.96
Learning about how products are grown or made (N=407)	41.03	31.94	18.67	6.88	1.47	1.96
Easy transportation access (N=434)	36.87	34.79	22.81	4.61	0.92	1.98
Pricing of products (N=417)	36.45	33.57	20.14	7.19	2.64	2.06
Farm scenery (N=416)	32.21	31.97	23.8	6.73	5.29	2.21
Admission or user fees (N=389)	29.56	30.85	24.68	9.25	5.66	2.31
Product samples (N=402)	22.89	33.08	27.86	11.94	4.23	2.42
Seating (N=414)	21.74	21.74	27.05	19.81	9.66	2.74
Picnic areas (N=412)	20.39	19.66	27.67	18.45	13.83	2.86
Opportunity to pet or care for animals (N=385)	16.88	24.42	22.86	17.66	18.18	2.96
Food and Drink for purchase (N=422)	18.96	13.03	26.54	27.25	14.22	3.05
Crafts or souvenirs (N=408)	8.33	11.76	29.17	28.68	22.06	3.44

Prior Visits

Respondents were asked whether they had visited the agri-tourism attraction before. A total of 456 visitors responded to this question. As shown in Figure 2, almost 53 percent of the visitors had visited the attraction at a previous time. From the 2003 survey of agri-tourism operators (Bruch and Holland, 2004), the business owner's estimate of one-time versus repeat visitors was about 50 percent one-time and 50 percent repeat visitors.

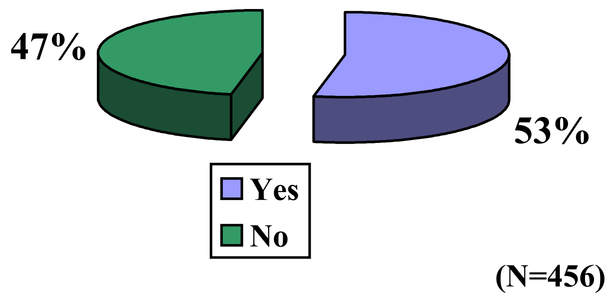


Figure 2. Prior Visits to the Tennessee Agri-tourism Attractions, 2005.

Group Size and Type

Visitors were surveyed about the size of group with which they were visiting the agri-tourism attraction. A total of 440 responded to the question regarding the size of their group. As shown in Figure 3, nearly 29 percent came to the attraction alone or with a small group of family/friends, while almost 71 percent came with a larger group.

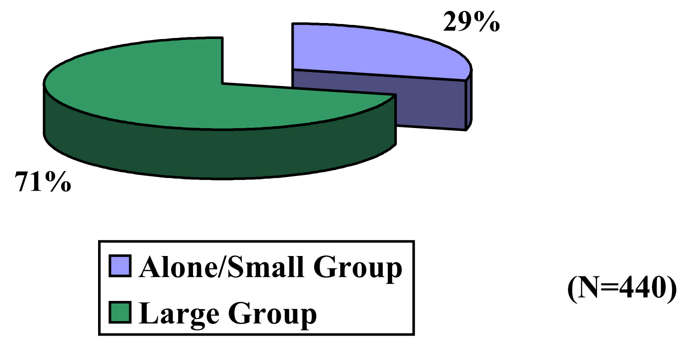
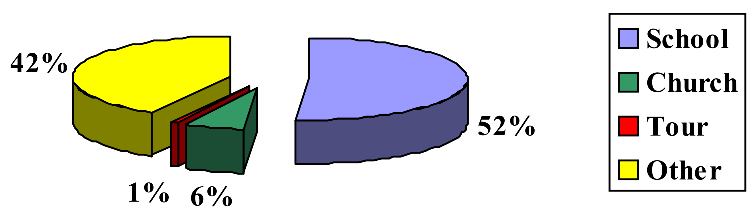


Figure 3. Visitors' Group Size When Visiting the Tennessee Agri-tourism Attractions, 2005.

Those visiting in a larger group were asked what type of group with which they were visiting. A total of 217 responded to this question. As shown in Figure 4, of those visiting with a larger group, nearly 52 percent came to the attraction with a school group, almost six percent came with a church group, less than one percent came with a tour, and nearly 42 percent came with a group other than the three previously mentioned groups. These groups included other types of groups such as Scouts, gardening groups or clubs, or other clubs.



(N=217)

Figure 4. Type of Visitor Group to the Tennessee Agri-tourism Attractions, 2005.

Length of Stay and Visit Planning Horizon

Visitors were surveyed about the length of their visit to the agri-tourism attraction, with 422 responding to this question. Displayed in Figure 5, almost 91 percent of the visitors planned to visit for one day only, less than one percent planned to visit for two days and nearly 9 percent planned to visit for more than 2 days. As shown in Figure 6, the majority (over 58 percent) of those visiting planned their visit at least one week in advance (N=420).

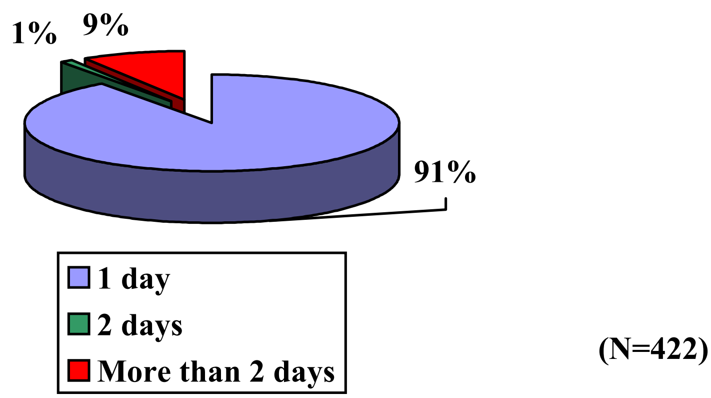


Figure 5. Length of Visit to the Tennessee Agri-tourism Attraction, 2005.

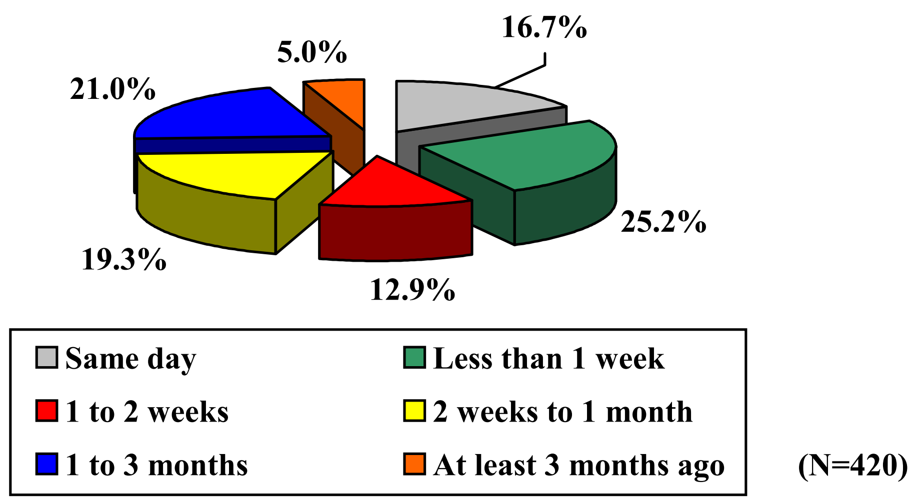


Figure 6. Advance Planning Time for Visit to the Tennessee Agri-tourism Attractions, 2005.

Methods of Learning About Agri-tourism Attractions

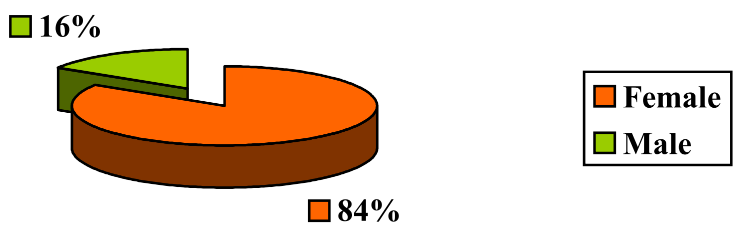
As shown in Table 2, 422 responded to a question regarding how they learned about the agri-tourism attraction. The largest percent of visitors, nearly 32 percent, learned about the attraction from word mouth, over 13 percent learned from brochures, over 12 percent learned from newspaper advertising, and almost 9 percent learned from a business sign. About 13 percent learned from other sources. In some cases this was through clubs or organizations while in other cases it was a combination of the sources listed. From the 2003/2004 surveys of agri-tourism operators (Bruch and Holland, 2004; Jensen, et al. 2005), the most commonly used forms of advertising the attractions were word of mouth, business signs, Tennessee Department of Agriculture website, and newspaper ads.

Table 2. Visitors' Methods of Learning About the Tennessee Agri-tourism Attractions, 2005.

Source of Information About Attraction	Percent Using Source (N=422)
Word of mouth	31.52
Other	13.27
Brochures	13.03
Newspaper advertising	12.32
Business sign	8.77
News releases	6.40
Business Internet site	3.55
Direct mail	3.55
Radio advertising	3.32
County or local tourism	1.42
Point of sale samples	0.95
Television advertising	0.71
Tennessee Agri tourism Attractions	0.71
Chamber of Commerce	0.24
Coupons	0.24
Tennessee Vacation Guide	0.00

Visitor Demographics

The visitors were asked several questions regarding demographics to help identify who visits agri-tourism attractions. These included gender, education level, residence location, income, and age. As shown in Figure 6, nearly 84 percent of the answering the survey were female, while 16 percent were male (N=437). Displayed in Figure 7, nearly 41 percent of the visitors were a college graduate, 31 percent had a post graduate degree, 18 percent had some college or technical school, 8.7 percent were a high school graduate and only about 1 percent of the visitors were less than a high school graduate (N=437).



(N=437)

Figure 7. Gender of Visitors to the Tennessee Agri-tourism Attractions, 2005.

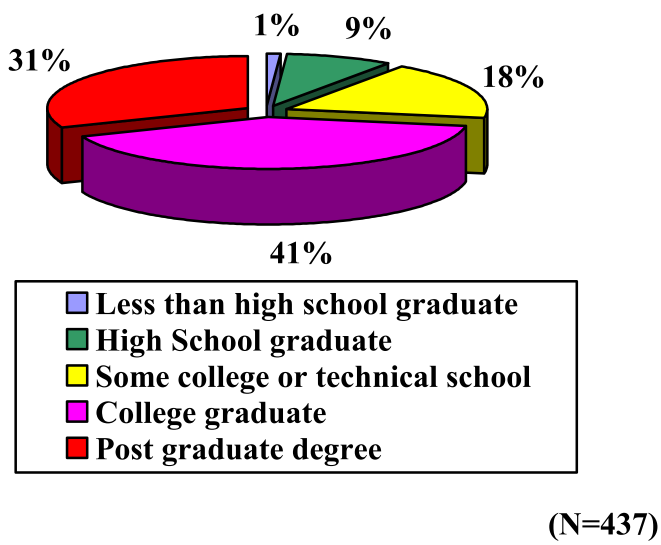
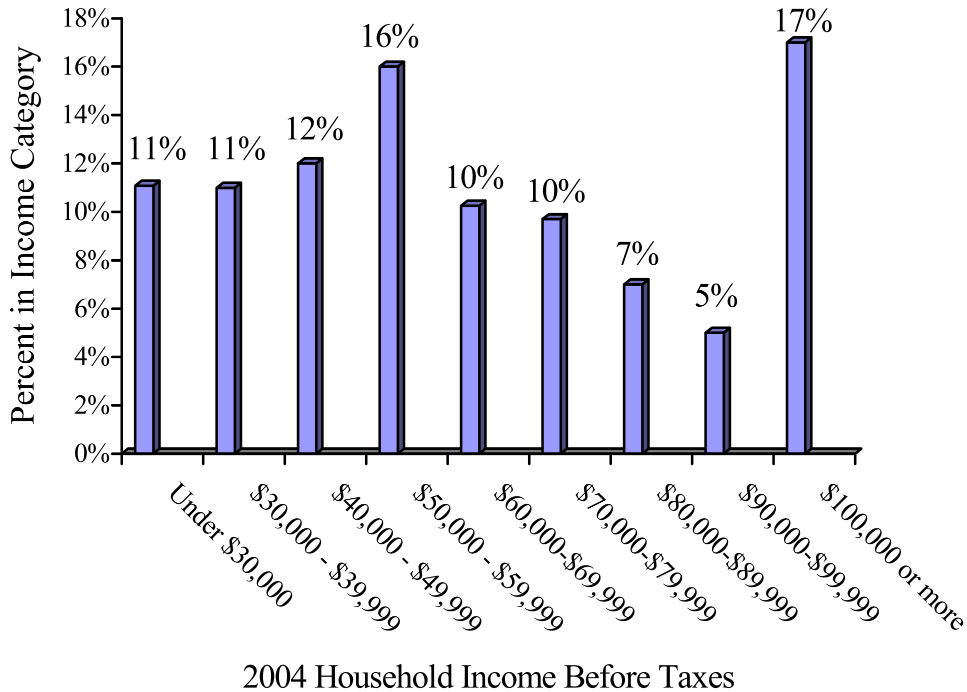


Figure 8. Highest Education Level of Visitors to the Tennessee Agri-tourism Attractions, 2005.

Nearly 17 percent of the visitors had a 2004 household income before taxes of $100,000 or more (Figure 9). About 5 percent had incomes between $90,000 and $99,999, another 7 percent had incomes between $80,000 and $89,999, and 10 percent had incomes of $70,000 to $79,999. About 10 percent had incomes between $60,000 and $69,999, 16 percent had incomes between $50,000 and $59,999, 12 percent had incomes between $40,000 and $49,999, and 11 percent between $30,000 and $39,999. About 11 percent of the visitors' incomes fell below the $30,000 per year level. A total of 361 responded to the income question. The average age of the responding visitors was 42.42 years (N=406). However, it is important to note that only adults were asked to complete the survey. Therefore, the overall age of visitors, especially with school groups, could be considerably lower.



(N=361)

Figure 9. 2004 Household Income (Before Taxes) of Visitors to the Tennessee Agri-tourism Attractions, 2005.

The location of the visitors' residences was also asked as part of the survey. As shown in Table 3, visitors primarily came from Tennessee (86.8 percent). However, out-of-state visitors also came from other states as far away as California. The second highest percent of visitors came from Georgia (5.38 percent). About 48.14 percent of the visitors who were visiting the attraction resided in the same county as the attraction (N=403).

Table 3. State of Residence of Visitors to the Agri-tourism Attractions, 2005.

State of Residence	Percent of Visitors from State (N=409)
Tennessee	86.8
Georgia	5.38
Florida	0.98
Kentucky	0.98
Alabama	0.73
Indiana	0.73
Missouri	0.73
North Carolina	0.73
Massachusetts	0.49
Mississippi	0.49
Virginia	0.49
California	0.24
Illinois	0.24
Minnesota	0.24
Ohio	0.24
South Carolina	0.24
Texas	0.24

Average Visitor Expenditures

The visitors were also asked to report their expenditures at the agri-tourism venue for that day. The average visitor expenditures are presented in Table 4. Because it is not known whether the visitors who did not complete the question regarding expenditures left it blank because they had no expenditures, two sets of averages are shown. First, in the upper half of the table, averages are shown assuming that non-responses represented zero expenditures. The expenditures including both winery and non-winery firms are shown under the column "Overall", while expenditures at winery firms and non-winery firms are presented in the adjacent columns. In the lower half of the table, averages are calculated only for those visitors with positive on-site expenditures. As can be seen, for non-winery and winery firms, the largest expenditure was on purchasing the venue's product. No expenditures were reported on admission or user fees for winery firms, but the second largest expenditure for visitors to non-winery firms was on admission or user fees. Among the winery and non-winery firms, the third largest expenditure was reported under the "Other" category. Among visitors to the non-winery attractions, the next largest expenditure was on food and drink, while among visitors to wineries, it was on non-food souvenir items.

Table 4. Average Visitor Expenditures on Goods and Services at the Tennessee Agri-tourism Attractions, 2005.

	Mean Per Visitor Expenditure Assuming Missing Values for Total Expenditures as Zero Expenditures		
	Overall (N=464)	Non-Winery (N1=431)	Winery (N2=33)
Admission or user fees	$2.15	$2.31	$0.00
Purchasing venue's product	$7.42	$6.14	$24.17
Other food and drink	$0.22	$0.22	$0.15
Non-food souvenir items	$0.11	$0.09	$0.34
Other	$0.57	$0.56	$0.76
Total	$10.47	$9.32	$25.42
	Mean Per Visitor Expenditure Using Only Observations with a Positive Total Expenditures		
	Overall (N=307)	Non-Winery (N1=280)	Winery (N2=27)
Admission or user fees	3.24	$3.55	$0.00
Purchasing venue's product	11.22	$9.46	$25.54
Other food and drink	0.33	$0.34	$0.19
Non-food souvenir items	0.16	$0.14	$0.42
Other	0.86	$0.86	$0.93
Total	$15.81	$14.35	$27.08

Visitor Preferences, Expenditures, and Characteristics Compared Across Repeat Visitorship

Because repeat visitorship can be critical to the long-term success of an agri-tourism business, several comparisons were made across repeat visitorship. The importance of services or amenities to visitors were compared across whether they were a repeat visitor. Also, expenditures were compared across repeat visitorship. Several demographics were compared across repeat visitorship (Table 5). Notably, freshness of products, pricing of products, and admission fees were more important to repeat visitors than to those who were not repeat visitors. Repeat visitors also had a higher average expenditure level than those who were not repeat visitors. Repeat visitors were also more likely to be from the local county. No gender differences were found across repeat visitorship. However, repeat visitors tended to be older and less likely to be a college graduate. No income level differences were found across repeat visitorship.

Table 5. Importance of Services/Amenties to, Expenditures by, and Characteristics of Repeat Visitors Compared with Non-Repeat Visitors to Tennessee Agri-tourism Attractions, 2005.

Variable	Repeat Visitor	Not Repeat Visitor	T-statistic[a]		Comparison of Repeat Visitors Relative To Non-Repeat Visitors
	Mean				
Importance of Service/Amenity (1=extremely important,…5=not important at all)					
Freshness of farm's or business' products	1.36 (N1=204)	1.79 (N2=200)	5.22	***	More Important
Easy transportation access	2.03 (N1=205)	1.94 (N2=223)	-1.03		Same Importance
On-site restrooms	2.18 (N1=201)	1.67 (N2=225)	-5.17[b]	***	Less Important
Food and drink for purchase	3.17 (N1=197)	2.93 (N2=219)	-1.80	*	Less Important
Seating	2.91 (N1=198)	2.58 (N2=210)	-2.68	***	Less Important
Picnic areas	3.14 (N1=197)	2.57 (N2=210)	-4.50	***	Less Important
Crafts or souvenirs	3.38 (N1=195)	3.49 (N2=208)	0.98		Same Importance

Table 5. Continued.

Variable	Repeat Visitor	Not Repeat Visitor	T-statistic[a]		Comparison of Repeat Visitors Relative To Non-Repeat Visitors
	Mean				
Opportunity to pet or care for farm animals	3.21 (N1=187)	2.72 (N2=193)	-3.55	***	Less Important
Farm scenery	2.26 (N1=205)	2.16 (N2=206)	-0.93		Same Importance
Pricing of products	1.90 (N1=210)	2.22 (N2=203)	3.24[b]	***	More Important
Admission or user fees	1.48 (N1=177)	2.16 (N2=207)	2.65	***	More Important
Product samples	2.53 (N1=194)	2.31 (N2=203)	-1.97	**	Less Important
Adequate parking	2.10 (N1=200)	1.88 (N2=225)	-1.94	*	Less Important
Learning about how products are grown or made	2.09 (N1=196)	1.84 (N2=207)	-2.58	**	Less Important
Expenditures ($ per visitor)	$16.58 (N1=142)	$9.50 (N2=162)	-3.82 [b]	***	Higher Expenditure
Demographics					
Reside in Local County (Percent)	50.58 (N1=213)	23.07 (N2=243)	-6.40	***	More Likely to be from Local County
Male Gender (Percent)	18.59 (N1=199)	13.25 (N2=234)	-1.51 [b]		Equally Likely to be Male
College Graduate (Percent)	64.32 (N1=213)	72.02 (N2=243)	1.77	*	Less Likely to be a College Graduate
Age (Years)	43.97 (N1=187)	41.01 (N2=216)	-2.36	**	Older in Age
2004 Household Income Level Before Taxes (1=Under $10,000, 2=$10,000 - $19,999, 3=$20,000 - $29,999, 4=$30,000 - $39,999, 5=$40,000 - $49,999, 6=$50,000 - $59,999, 7=$60,000 - $69,999, 8=$70,000 - $79,999, 9=$80,000 - $89,999, 10=$90,000 - $99,999, 11=$100,000 or more)	6.70 (N1=174))	6.95 (N2=185)	.86		Same Income Level

[a] *** represents significant difference between the two means at the 99% confidence level, ** at the 95% confidence level, and * at the 90% confidence level.

[b] For these means, the variances were unequal at the 90% confidence level or greater, so the Satterthwaite t statistic was used rather than the pooled t.

Economic Impacts Analysis

Total Visitor Expenditure Calculations

The average visitor expenditures reported in Table 4, information from the 2003-2004 surveys, and IMPLAN are used to project economic impacts from visitor expenditures at similar agri-tourism venues across the state. As stated earlier in this document, based on information contained in the company websites and/or visits to the company where the visitor surveys were administered, two main categories of agri-tourism firms participating in the visitor surveys were developed, non-winery and winery. The non-winery firms classified themselves as having on-farm markets, festivals or fairs, pumpkin patches, corn mazes, pick-your-own, petting zoos, and on-farm restaurants or eating establishments, for example, snack bars. The other type of firm was a winery.

An estimate of the direct impacts from visitor expenditures at similar agri-tourism attractions can be calculated by:

Total Expenditure=Expenditures per Visitor*Visitors to Agri-tourism Attractions*Number of Agri-tourism Attractions.

The calculations are shown in Table 6. The expenditures per visitor are taken from Table 4. The mean values among those reporting expenditures was used because, for example, for the non-winery firms, several of these had some type of admission or user fees that would have been paid by most visitors responding. The visitors per attraction are taken from the median values of visitors as estimated by the agri-tourism attraction operators responding to the 2003-2004 surveys (Bruch and Holland, 2004; Jensen et al., 2005). The median number of visitors among the operations that offered the same attractions as the "non-winery" firms participating in the visitor surveys was 2,000 (N=210).[1] Of the responding firms to the 2003-2004 surveys, 20 had wineries as an attraction. The median number of visitors was 10,800 (N=17). If the expenditure per visitor is multiplied by the median number of visitors, the projected visitor expenditures per venue are $14.35*2,000=$28,700 for non-winery firms and $27.08*10,800=$292,464 for winery firms.

Table 6. Calculations for Projecting Statewide Visitor Expenditures at Similar Agri-tourism Firms, 2005.

From 2005 Visitors Surveys	Non-Winery	Winery
Mean Expenditures Per Visitor On:	(N1=280)	(N2=27)
Admission or user fees	$3.55	$0.00
Purchasing venue's product	$9.46	$25.54
Other food and drink	$0.34	$0.19
Non-food souvenir items	$0.14	$0.42
Other	$0.86	$0.93
Total	$14.35	$27.08
From 2003-2004 Agri-tourism Operator Surveys		
Median Number of Visitors	2,000	10,800
Number of firms	270	20
Projected Expenditure per Firm=Expenditure per Visitor*Number of Visitors per Firm		
Admission or user fees	$7,100	$0
Purchasing venue's product	$18,920	$275,832
Other food and drink	$680	$2,052
Non-food souvenir items	$280	$4,536
Other	$1,720	$10,044
Total	$28,700	$292,464
Projected Numbers of Similar Agri-tourism Firms	379	21
Projected Total Expenditures Across All Venues=Expenditure per Firm*Number of Firms		
Admission or user fees	$2,690,900	$0
Purchasing venue's product	$7,170,680	$5,792,472
Other food and drink	$257,720	$43,092
Non-food souvenir items	$106,120	$95,256
Other	$651,880	$210,924
Total	$10,877,300	$6,141,744

[1] The median was used for the survey of agri-tourism operators because the survey conducted in 2003 (Bruch, et al, 2003) included along with the mail survey in 2004 (Jensen, et al, 2004) included off-farm festivals and fairs, some of which were very large in size. The 2004 mail survey only included on-farm festivals and fairs.

In the 2003 survey of agri-tourism business owners, a total of 210 agri-tourism businesses responded, in the 2004 survey, an additional 125 agri-tourism business owners responded, giving a total of 335 responding agri-tourism businesses. For the 2003 survey, a total of 291 could not be reached by telephone. Those who could not be reached in the 2003 survey and an additional 90 other potential agri-tourism businesses identified were contacted in the 2004 survey for a total of 381 contacted in the 2004 survey. In response to the 2004 survey, 58 responding out of the 381 contacted indicated they were not currently operating an agri-tourism business, while 125 responded that they were agri-tourism businesses. Therefore, the total number of known (335) and potential (198) agri-tourism businesses from the 2003-2004 surveys totaled 533. However, since only about 68.31 percent (125/183) of those responding to the 2004 survey were agri-tourism businesses, this percent can be used to adjust the 198 potential agri-tourism businesses to 135 likely to be agri-tourism businesses. From the 2003-2004 surveys, 270 classified themselves as having attractions like the non-winery firms that participated in the visitor surveys. Multiplying 135 by the percent who were "non-winery" (270/335) gives 109 likely to be "non-winery" agri-tourism firms. Adding this number of non-respondents who might be likely to be non-winery agri-tourism (109) to those responding who were non-winery agri-tourism (270) gives a projected total of 379 firms which are know to be or likely to be non-winery agri-tourism firms. An overall estimate of the number of wineries, 21, is taken from Tennessee Farm Winegrowers Association website (http://www.tennesseewines.com/about_tfwa.htm). The calculations to arrive at the projected total number of similar firms statewide are shown in Table 7.

If the projected number of 379 non-winery firms is multiplied by the projection of expenditures per venue of $28,700, the projected total expenditures statewide across similar venues is $10,877,300. If the number of wineries (23) is multiplied by the projection of expenditures per venue of $292,464, the projected total expenditures statewide across similar venues is $6,726,672.

Table 7. Calculations for Projecting Number of Similar Agri-tourism Firms in Tennessee.

Agritourism Firms Responding to 2003 Survey	210
Agri-tourism Firms Responding to 2004 survey	125
Total	325
Firms not Responding to 2004 Survey	198
Percent of All Firms Responding to 2004 Survey Which were Agri-Tourism	68.31%
Non-responding Firms Likely to Be Agri-tourism	135
Non-responding Firms Likely to Be Non-Winery Agri-tourism	109
Responding Non-Winery+Non-Responding Likely to be Non-Winery	**379**
Wineries	**21**

Expenditure Impacts in IMPLAN

In order to project the economic impacts of these on-site expenditures, the total expenditures and expenditures by category were used with IMPLAN. For the visitors to non-winery firms, admission or user fees expenditures were classified as sector 478, other amusement and recreation. Purchasing the venue's product was classified equally across three sectors, *sector 2, grain farming to represent corn production for mazes and on-farm markets, sector 3, vegetable and melon farming* to represent pumpkin production for pumpkin patches and on-farm markets, and *sector 5, fruit farming* to represent pick-your-own and on-farm markets. Other food and drink was classified as *sector 481, food service and drinking plac*es, and non-food souvenir items as *sector 410, general merchandise stores*. Because many of the respondents indicated that their other expenditures were for games and activities inside the venue, other was classified as *478, other amusement and recreation*. For visitors to the winery firms, the classifications were sector *87, wineries*, for purchasing the venue's product, other food and drink as *sector 481, food service and drinking places*, and non-food souvenir items as *sector 410, general merchandise stores*. Many of those responding under the other category purchased supplies, glassware, or utensils to complement their wine purchases, so other was categorized as *410, general merchandise stores*. The sectors and their impact amounts in 2005 dollars are presented in Table 9. The deflators used to convert each sector's impacts from 2005 dollars to 2003 dollars are also shown in Table 9. Note the totals vary slightly from those in Table 6 due to rounding in IMPLAN.

Table 8. Projected Direct Impacts from Visitor Expenditures at Tennessee Agri-Tourism Attractions, 2005.

Description	Sector	Direct Impact Amount in 2005 Dollars	Deflator to 2003 dollars
Non-winery Agri-tourism			
Grain farming (corn mazes)	2	$2,390,226	1.024
Vegetable and melon farming (pick-your-own and on-farm markets)	3	$2,390,226	1.024
Fruit farming (pick-your-own and on-farm markets)	5	$2,390,226	1.024
General merchandise stores (non-food souvenirs)	410	$106,120	1.060
Other amusement recreation (admission or user fees)	478	$2,690,900	1.031
Other amusement recreation (other)	478	$651,879	1.031
Food service and drinking places (restaurant or snack bar)	481	$257,720	1.046
Winery			
Winery (wine purchases)	87	$5,792,472	1.040
General merchandise stores (non-food souvenirs)	410	$95,256	1.060
General merchandise stores (other)	410	$210,924	1.060
Food service and drinking places (restaurant or snack bar)	481	$43,092	1.031

IMPLAN Results for Non-Winery Firms

The detailed total industry output (TIO) results are displayed in the tables in Appendix B. Shown in Table 9, for the participating agri-tourism firms that were not wineries, the projected direct TIO from on-site visitor expenditures was $10,877,297, while indirect TIO was $2,771,035, and induced TIO was $6,383,700. The total impacts for TIO including direct, indirect, and induced were $20,032,032. Therefore, the economic activity generated directly as a result of visitor expenditures at these types of businesses exceeded $10.8 million (54.30 percent of all TIO impacts), while purchases by these businesses as a result of their economic activity was over $2.7 million (13.83 percent of all TIO impacts). The economic activity induced by the increased spending from incomes associated with the economic activity from these visitor expenditures was over $6.3 million (31.87 percent of all TIO impacts).

Table 9. Projected Total Industry Output Impacts from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Total Industry Output Impacts	Dollars	Percent of Total Impacts
Direct Impacts	$10,877,297	54.30%
Indirect Impacts	$2,771,035	13.83%
Induced Impacts	$6,383,700	31.87%
Total Impacts	$20,032,032	

In Tables 10-12, the total industry output from visitor expenditures at non-winery agri-tourism businesses are broken out by industry across direct, indirect, and induced impacts. The impacts are ordered largest dollar amount to smallest dollar amount across the industries.

For the direct TIO impacts (Table 10), the largest are from the recreation industry and the farming-related industries. Direct impacts from economic activity in the recreation industry account for 30.73 percent of all direct TIO impacts. Activity in the farming related industries together account for nearly 66 percent of direct TIO impacts.

Table 10. Projected Direct Total Industry Output Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Industry		Dollars	Percent of Direct TIO
478	Other amusement- gambling- and recreation industries	$3,342,779	30.73%
2	Grain farming	$2,390,226	21.97%
3	Vegetable and melon farming	$2,390,226	21.97%
5	Fruit farming	$2,390,226	21.97%
481	Food services and drinking places	$257,720	2.37%
410	General merchandise stores	$106,120	0.98%

The indirect total industry output impacts by industry impacted are presented in Table 11. Among the indirect TIO impacts from the non-winery agri-tourism expenditures, the largest impacts are from real estate expenditures (15.64 percent of indirect TIO impacts), wholesale trade (8.71 percent of indirect TIO impacts), agriculture and forestry support activities (6.65 percent of indirect TIO impacts), and pesticide and agricultural chemical manufacturing (4.22 percent of indirect TIO impacts).

The induced total industry output impacts from agri-tourism expenditures by industry impacted are presented in Table 12. Among the induced impacts, the industries with the largest impacts are on owner-occupied dwellings (6.15 percent of induced TIO impacts), wholesale trade (4.55 percent of induced TIO impacts), new residential 1-unit structures- non-farm (4.20 percent of induced TIO impacts), real estate (4.18 percent of induced TIO impacts), and state and local education (4.01 percent of induced TIO impacts).

Table 11. Projected Indirect Total Industry Output Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Industry		Indirect TIO (Dollars)	Percent of Indirect TIO
431	Real estate	433,334	15.64%
390	Wholesale trade	241,226	8.71%
18	Agriculture and forestry support activities	184,284	6.65%
159	Pesticide and other agricultural chemical manufacturing	116,951	4.22%
43	Maintenance and repair of nonresidential buildings	82,476	2.98%
394	Truck transportation	69,217	2.50%
499	Other State and local government enterprises	68,980	2.49%
495	Federal electric utilities	62,311	2.25%
430	Monetary authorities and depository credit intermediaries	61,474	2.22%
142	Petroleum refineries	59,884	2.16%
425	Nondepository credit intermediation and related activities	56,744	2.05%
427	Insurance carriers	54,225	1.96%
120	Wood container and pallet manufacturing	46,457	1.68%
451	Management of companies and enterprises	43,107	1.56%
498	State and local government electric utilities	37,016	1.34%
422	Telecommunications	36,124	1.30%
439	Architectural and engineering services	33,299	1.20%
485	Commercial machinery repair and maintenance	30,956	1.12%
400	Warehousing and storage	29,954	1.08%
438	Accounting and bookkeeping services	28,247	1.02%
447	Advertising and related services	28,210	1.02%
	Other	966,560	34.88%

Table 12. Projected Induced Total Industry Output Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Sector		Dollars	Percent of Induced
509	Owner-occupied dwellings	392,749	6.15%
390	Wholesale trade	290,250	4.55%
33	New residential 1-unit structures- nonfarm	267,943	4.20%
431	Real estate	266,529	4.18%
503	State & Local Education	255,693	4.01%
481	Food services and drinking places	219,897	3.44%
504	State & Local Non-Education	213,000	3.34%
465	Offices of physicians- dentists- and other health	212,288	3.33%
467	Hospitals	210,814	3.30%
38	Commercial and institutional buildings	206,232	3.23%
344	Automobile and light truck manufacturing	173,902	2.72%
430	Monetary authorities and depository credit intermediaries	115,085	1.80%
401	Motor vehicle and parts dealers	105,688	1.66%
427	Insurance carriers	102,781	1.61%
350	Motor vehicle parts manufacturing	93,817	1.47%
422	Telecommunications	92,174	1.44%
405	Food and beverage stores	83,555	1.31%
394	Truck transportation	81,334	1.27%
35	New residential additions and alterations- nonfarm	73,737	1.16%
483	Automotive repair and maintenance- except car wash	71,086	1.11%
410	General merchandise stores	71,069	1.11%
499	Other State and local government enterprises	67,033	1.05%
495	Federal electric utilities	64,792	1.01%
	Other	2,652,252	41.55%

The detailed total value added (TVA) results for non-wineries agri-tourism businesses are displayed in the tables in Appendix B. Shown in Table 13, for the agri-tourism firms that were not wineries, the projected direct TVA was $6,772,909, while indirect TVA was $1,529,146, and induced TVA was $3,679,052. The TVA impacts including direct, indirect, and induced was $11,981,108. Therefore, the economic activity generated directly as a result of visitor expenditures at these types of businesses exceeded $6.7 million (56.53 percent of all value-added impacts), while purchases by these businesses as a result of their economic activity was over $1.5 million (12.76 percent of all value-added impacts). The economic activity induced by the increased spending from incomes associated with the economic activity from these visitor expenditures was over $3.6 million (30.71 percent of all value-added impacts).

Table 13. Projected Direct, Indirect, and Induced Total Value Added Impacts from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Total Value Added Impacts	Dollars	Percent of Total
Direct	6,772,909	56.53%
Indirect	1,529,146	12.76%
Induced	3,679,052	30.71%
Total	11,981,108	

In Tables 14-16, the TVA impacts are broken out by industry impacted across direct, indirect, and induced impacts. As with TIO, the impacts are ordered largest dollar value to smallest across the impacted industries.

Shown in Table 14, among the industries impacted, the largest direct TVA impacts were from the other amusement-gambling-and recreation industry (30.73 percent of direct TVA impacts), vegetable and melon farming (26.71 percent of direct TVA impacts), and fruit farming (21.18 percent of direct TVA impacts). This was followed in value by grain farming, food services and drinking places, and general merchandise stores.

The indirect TVA impacts are displayed in Table 15. Among the indirect TVA impacts, the largest impacts are on real estate expenditures (19.49 percent of indirect TVA impacts), wholesale trade (12 percent of indirect TVA impacts), and agriculture and forestry support activities (9.61 percent of indirect TVA impacts).

Table 14. Projected Direct Total Value Added Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Industry		Dollars	Percent of Direct
478	Other amusement- gambling- and recreation industries	2,081,142	30.73%
3	Vegetable and melon farming	1,808,709	26.71%
5	Fruit farming	1,434,391	21.18%
2	Grain farming	1,236,730	18.26%
481	Food services and drinking places	121,994	1.80%
410	General merchandise stores	89,944	1.33%
	Total Direct	6,772,909	

Table 15. Projected Indirect Total Value Added Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Sector		Dollars	Percent of Indirect
431	Real estate	298,020	19.49%
390	Wholesale trade	183,474	12.00%
18	Agriculture and forestry support activities	147,008	9.61%
425	Nondepository credit intermediation and related activities	46,069	3.01%
430	Monetary authorities and depository credit intermediation	43,265	2.83%
43	Maintenance and repair of nonresidential buildings	38,054	2.49%
159	Pesticide and other agricultural chemical manufacturing	37,449	2.45%
394	Truck transportation	34,738	2.27%
451	Management of companies and enterprises	23,900	1.56%
454	Employment services	22,665	1.48%
400	Warehousing and storage	22,433	1.47%
499	Other State and local government enterprises	20,487	1.34%
439	Architectural and engineering services	20,235	1.32%
427	Insurance carriers	19,146	1.25%
422	Telecommunications	18,962	1.24%
120	Wood container and pallet manufacturing	17,230	1.13%
438	Accounting and bookkeeping services	16,992	1.11%
437	Legal services	16,775	1.10%
495	Federal electric utilities	15,721	1.03%
485	Commercial machinery repair and maintenance	15,341	1.00%
	Other	471,182	30.81%

The induced total-value added impacts from non-winery visitor expenditures, by industry, are presented in Table 16. Among the induced impacts, the largest are from owner-occupied dwellings (8.53 percent of induced TVA impacts), state & local education (6.95 percent of induced TVA impacts), wholesale trade (6.00 percent of induced TVA impacts), state & local non education (5.79 percent of induced TVA impacts), and real estate (4.98 percent of induced TVA impacts).

Table 16. Projected Induced Total Value Added Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Industry		Dollars	Percent of Induced
509	Owner-occupied dwellings	313,971	8.53%
503	State & Local Education	255,693	6.95%
390	Wholesale trade	220,761	6.00%
504	State & Local Non-Education	213,000	5.79%
431	Real estate	183,302	4.98%
465	Offices of physicians- dentists- and other health	164,274	4.47%
467	Hospitals	109,620	2.98%
481	Food services and drinking places	104,090	2.83%
38	Commercial and institutional buildings	101,377	2.76%
33	New residential 1-unit structures- nonfarm	100,110	2.72%
401	Motor vehicle and parts dealers	82,882	2.25%
430	Monetary authorities and depository credit intermediation	80,996	2.20%
410	General merchandise stores	60,235	1.64%
405	Food and beverage stores	56,779	1.54%
422	Telecommunications	48,383	1.32%
468	Nursing and residential care facilities	44,100	1.20%
394	Truck transportation	40,820	1.11%
425	Nondepository credit intermediation and related activities	40,320	1.10%
426	Securities- commodity contracts- investments	37,677	1.02%
404	Building material and garden supply stores	37,325	1.01%
	Other	1,383,338	37.60%

The detailed projected employment impacts from visitor expenditures at non-winery agri-tourism businesses are displayed in the tables in Appendix B. A summary of the employment impacts from expenditures at non-winery agri-tourism attractions is shown in Table 17. The projected direct employment was 385 jobs, while indirect employment was 31 jobs, and induced employment was 64. The total employment including direct, indirect, and induced was 480 jobs. Therefore, the economic activity generated directly as a result of visitor expenditures at these types of businesses exceeded 385 jobs (80.30 percent of all employment impacts), while jobs generated as a result of purchases by the agri-tourism businesses was over 30 jobs (6.40 percent of all employment impacts). 64 jobs were created for the economic activity induced by the increased spending from incomes associated with the economic activity from these visitor expenditures at the non-winery agri-tourism businesses(13.30 percent of all employment impacts).

Table 17. Projected Employment Impacts from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Total Employment Impacts	Jobs	Percent of Total
Direct Impacts	385.39	80.30%
Indirect Impacts	30.70	6.40%
Induced Impacts	63.82	13.30%
Total Impacts	479.91	

In Tables 18-20, the employment impacts from visitor expenditures at non-winery agri-tourism businesses are broken out by industry across direct, indirect, and induced impacts. The employment impacts are ordered largest amount of jobs to smallest across the industries.

As shown in Table 18, the largest projected direct employment impacts were from grain farming (43.15 percent of direct employment impacts), fruit farming (26.63 percent of direct employment impacts), vegetable and melon farming (14.84 percent of direct employment impacts), and other amusement-gambling-and recreation industry (13.46 percent of direct employment impacts). Jobs in the food services and drinking places and general merchandise stores industries accounted for less than 2 percent of the projected direct employment impacts.

The projected indirect employment impacts, by industry impacted, from visitor expenditures at non-winery agri-tourism businesses are shown in Table 19. For the indirect employment impacts, the largest impacts are from agriculture and forestry support activities (28.96 percent of indirect employment impacts), real estate (8.94 percent of indirect employment impacts), and whole sale trade (5.87 percent of indirect employment impacts).

Table 18. Projected Direct Employment Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Sector		Jobs	Percent of Direct
2	Grain farming	166.28	43.15%
5	Fruit farming	102.62	26.63%
3	Vegetable and melon farming	57.15	14.83%
478	Other amusement- gambling- and recreation industries	51.80	13.44%
481	Food services and drinking places	5.37	1.39%
410	General merchandise stores	2.17	0.56%

Table 19. Projected Indirect Employment Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Industry		Jobs	Percent of Indirect
18	Agriculture and forestry support activities	8.89	28.96%
431	Real estate	2.75	8.94%
390	Wholesale trade	1.80	5.87%
2	Grain farming	1.41	4.59%
454	Employment services	1.05	3.42%
43	Maintenance and repair of nonresidential buildings	0.88	2.87%
394	Truck transportation	0.63	2.05%
471	Performing arts companies	0.53	1.73%
120	Wood container and pallet manufacturing	0.47	1.52%
481	Food services and drinking places	0.42	1.37%
400	Warehousing and storage	0.40	1.30%
13	Animal production- except cattle and poultry and eggs	0.39	1.28%
425	Nondepository credit intermediation and related activities	0.37	1.21%
473	Independent artists- writers- and performers	0.36	1.17%
499	Other State and local government enterprises	0.36	1.16%
458	Services to buildings and dwellings	0.35	1.12%
439	Architectural and engineering services	0.33	1.07%
11	Cattle ranching and farming	0.32	1.05%
	Other	9.00	29.32%

The projected induced employment impacts, by industry impacted, from expenditures at non-winery agri-tourism attractions are shown in Table 20. Among the induced impacts, the largest are from state & local education (9.31 percent of induced employment impacts), food services and drinking places (7.18 percent of induced employment impacts), state and local non-education (6.65 percent of induced employment impacts), commercial and institutional buildings (4.01 percent of induced employment impacts), and wholesale trade (3.40 percent of induced employment impacts).

Table 20. Projected Induced Employment Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Non-Winery Agri-tourism Attractions, 2005.

Industry		Jobs	Percent of Induced
503	State & Local Education	5.94	9.31%
481	Food services and drinking places	4.58	7.18%
504	State & Local Non-Education	4.25	6.65%
38	Commercial and institutional buildings	2.56	4.01%
390	Wholesale trade	2.17	3.40%
467	Hospitals	1.92	3.01%
33	New residential 1-unit structures- nonfarm	1.71	2.68%
431	Real estate	1.69	2.65%
465	Offices of physicians- dentists- and other health	1.69	2.64%
410	General merchandise stores	1.45	2.27%
405	Food and beverage stores	1.42	2.23%
468	Nursing and residential care facilities	1.13	1.77%
494	Private households	1.07	1.68%
401	Motor vehicle and parts dealers	1.02	1.60%
454	Employment services	1.02	1.59%
483	Automotive repair and maintenance- except car wash	1.00	1.56%
411	Miscellaneous store retailers	0.84	1.31%
408	Clothing and clothing accessories stores	0.83	1.30%
412	Nonstore retailers	0.79	1.24%
35	New residential additions and alterations- nonfarm	0.75	1.17%
394	Truck transportation	0.74	1.16%
470	Social assistance- except child day care services	0.72	1.12%
404	Building material and garden supply stores	0.65	1.02%
469	Child day care services	0.65	1.02%

IMPLAN Results for Winery Firms

The detailed total industry output (TIO) results for wineries are displayed in the tables in Appendix B. Shown in Table 21, for the agri-tourism firms that were wineries, the projected direct TIO was $6,141,742, while indirect TIO was $2,295,270, and induced TIO was $3,017,470. The TIO including direct, indirect, and induced was $11,454,483. Therefore, the economic activity generated directly as a result of visitor expenditures at these types of businesses exceeded $6.1 million (53.62 percent of all impacts), while purchases by these businesses as a result of their economic activity was over $2.2 million (20.04 percent of all impacts). The economic activity induced by the increased spending from incomes associated with the economic activity from these visitor expenditures was over $3 million (26.34 percent of all impacts).

Table 21. Projected Total Industry Output Impacts from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Total Industry Output Impacts	Dollars	Percent of Total
Direct Impacts	6,141,742	53.62%
Indirect Impacts	2,295,270	20.04%
Induced Impacts	3,017,470	26.34%
Total Impacts	11,454,483	

In Tables 22-24, the TIO impacts are broken out by industry impacted across direct, indirect, and induced impacts. The impacts are ordered largest dollar value to smallest across the industries. Shown in Table 22, for the direct TIO impacts, the largest are from the wineries (95.08% of direct TIO impacts) and general merchandise stores (4.33 percent of direct TIO impacts).

Table 22. Projected Direct Total Industry Output Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Industry		Dollars	Percent of Direct
87	Wineries	5,792,471	94.31%
410	General merchandise stores	306,180	4.99%
481	Food services and drinking places	43,092	0.70%

The indirect TIO impacts across industries impacted are shown in Table 23. For the indirect TIO impacts, the largest impacts are from wholesale trade (30.53 percent of indirect TIO impacts) and truck transportation (7.35 percent of indirect TIO impacts).

Table 23. Projected Indirect Total Industry Output Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Industry		Dollars	Percent of Indirect
390	Wholesale trade	700,756	30.53%
394	Truck transportation	168,617	7.35%
436	Lessors of nonfinancial intangible assets	105,394	4.59%
451	Management of companies and enterprises	104,531	4.55%
139	Commercial printing	77,096	3.36%
431	Real estate	72,478	3.16%
430	Monetary authorities and depository credit intermediation	56,145	2.45%
5	Fruit farming	52,279	2.28%
297	Packaging machinery manufacturing	40,913	1.78%
425	Nondepository credit intermediation and related activities	39,378	1.72%
422	Telecommunications	33,075	1.44%
447	Advertising and related services	33,049	1.44%
420	Radio and television broadcasting	27,346	1.19%
450	All other miscellaneous professional and technical	26,576	1.16%
495	Federal electric utilities	26,447	1.15%
43	Maintenance and repair of nonresidential buildings	24,946	1.09%
481	Food services and drinking places	23,814	1.04%
444	Management consulting services	23,790	1.04%
	Other	658,640	28.70%

The dollar values and percents of induced total industry output impacts across industries impacted are displayed in Table 24. Among the induced impacts, the largest are from owner-occupied dwellings (6.95 percent of induced TIO impacts), state and local education (5.33

percent of induced TIO impacts), wholesale trade (4.63 percent of induced TIO impacts), state and local non-education (4.43 percent of induced TIO impacts), and real estate (4.20 percent of induced TIO impacts).

Table 24. Projected Induced Total Industry Output Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Industry		Dollars	Percent of Induced
509	Owner-occupied dwellings	209,651	6.95%
503	State & Local Education	160,807	5.33%
390	Wholesale trade	139,809	4.63%
504	State & Local Non-Education	133,958	4.44%
431	Real estate	126,858	4.20%
481	Food services and drinking places	116,836	3.87%
465	Offices of physicians- dentists- and other health	111,460	3.69%
467	Hospitals	108,228	3.59%
33	New residential 1-unit structures- nonfarm	66,906	2.22%
38	Commercial and institutional buildings	65,994	2.19%
430	Monetary authorities and depository credit intermediation	59,065	1.96%
344	Automobile and light truck manufacturing	55,099	1.83%
427	Insurance carriers	53,636	1.78%
401	Motor vehicle and parts dealers	51,695	1.71%
422	Telecommunications	46,587	1.54%
405	Food and beverage stores	41,402	1.37%
483	Automotive repair and maintenance- except car wash	35,565	1.18%
410	General merchandise stores	34,792	1.15%
394	Truck transportation	34,539	1.14%
499	Other State and local government enterprises	34,520	1.14%
350	Motor vehicle parts manufacturing	34,018	1.13%
495	Federal electric utilities	33,622	1.11%
466	Other ambulatory health care services	31,715	1.05%
468	Nursing and residential care facilities	31,556	1.05%
426	Securities- commodity contracts- investments	31,423	1.04%
	Other	1,167,727	38.70%

The detailed total value added (TVA) results for agri-tourism wineries are displayed in the tables in Appendix B. As can be seen in Table 25, for the agri-tourism firms that were wineries, the projected direct TVA was $1,474,093, while indirect TVA was $1,383,281, and induced TVA was $1,819,830. The TVA including direct, indirect, and induced was $4,667,204.

Therefore, the economic activity generated directly as a result of visitor expenditures at these types of businesses created an additional 31 percent of all direct value-added impacts, while purchases by these businesses as a result of their economic activity were over $1.3 million (29.64 percent of all impacts TVA). The economic activity induced by the increased spending from incomes associated with the economic activity from these visitor expenditures was over $1.81 million (nearly 39 percent of all TVA impacts).

Table 25. Projected Total Value Added Direct, Indirect, and Induced Impacts from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

	Dollars	Percent of Total
Direct	1,464,093	31.37%
Indirect	1,383,281	29.64%
Induced	1,819,830	38.99%
Total	4,667,204	

In Tables 26-28, the TVA impacts are broken out by industry impacted across direct, indirect, and induced impacts. The impacts are ordered largest dollar value to smallest across the industries.

The direct total value added impacts by industry impacted are shown in Table 26. As displayed in Table 26, direct TVA impacts, the largest are from the wineries (80.88% of direct TVA impacts) and general merchandise (17.72 percent of direct TVA impacts).

Table 26. Projected Direct Total Value Added Impacts, by Industry, from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Industry		Dollars	Percent of Direct
87	Wineries	1,184,187	80.88%
410	General merchandise stores	259,508	17.72%
481	Food services and drinking places	20,398	1.39%
	Total	1,464,093	

The indirect total value added impacts by industry impacts are shown in Table 27. For the indirect TVA impacts, the largest impacts are from wholesale trade (38.53 percent of indirect TVA impacts), truck transportation (6.12 percent of indirect TVA impacts), and management of companies and enterprises (4.19 percent of indirect TVA impacts).

Table 27. Projected Indirect Total Value Added Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Industry		Dollars	Percent of Indirect
390	Wholesale trade	532,987	38.53%
394	Truck transportation	84,625	6.12%
451	Management of companies and enterprises	57,957	4.19%
139	Commercial printing	55,685	4.03%
436	Lessors of nonfinancial intangible assets	55,036	3.98%
431	Real estate	49,845	3.60%
430	Monetary authorities and depository credit intermediation	39,514	2.86%
425	Nondepository credit intermediation and related a	31,970	2.31%
5	Fruit farming	31,373	2.27%
422	Telecommunications	17,362	1.26%
447	Advertising and related services	16,155	1.17%
297	Packaging machinery manufacturing	14,506	1.05%
	Other	396,266	28.65%

The induced TVA impacts from visitor expenditures at wineries by industry impacted are shown in Table 28. Among the induced impacts, the largest are from owner-occupied dwellings (9.21 percent of induced TVA impacts), state & local education (8.84 percent of induced TVA impacts), state & local non education (7.36 percent of induced TVA impacts), wholesale trade (5.84 percent of induced TVA impacts) and real estate (4.79 percent of induced TVA impacts).

Table 28. Projected Induced Total Value Added Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Industry		Dollars	Percent of Induced
509	Owner-occupied dwellings	167,599	9.21%
503	State & Local Education	160,807	8.84%
504	State & Local Non-Education	133,958	7.36%
390	Wholesale trade	106,337	5.84%
431	Real estate	87,245	4.79%
465	Offices of physicians- dentists- and other health	86,251	4.74%
467	Hospitals	56,277	3.09%
481	Food services and drinking places	55,305	3.04%
430	Monetary authorities and depository credit intermediation	41,570	2.28%
401	Motor vehicle and parts dealers	40,540	2.23%
38	Commercial and institutional buildings	32,440	1.78%
410	General merchandise stores	29,488	1.62%
405	Food and beverage stores	28,134	1.55%
33	New residential 1-unit structures- nonfarm	24,998	1.37%
422	Telecommunications	24,454	1.34%
468	Nursing and residential care facilities	23,074	1.27%
425	Nondepository credit intermediation and related activities	20,306	1.12%
426	Securities- commodity contracts- investments	20,027	1.10%
427	Insurance carriers	18,938	1.04%
404	Building material and garden supply stores	18,319	1.01%
	Other	643,763	35.37%

The detailed employment results for agri-tourism wineries are displayed in the tables in Appendix B. A summary of the results is presented in Table 29, while impacts detailed by industry impacted for direct, indirect, and induced employment impacts are presented in Tables 30-32.

Shown in Table 29, for the agri-tourism firms that were wineries, the projected direct employment was 27.49 jobs, while indirect employment was 19.42 jobs, and induced employment was 31.78 jobs. The total employment including direct, indirect, and induced was 78.70 jobs. Therefore, the economic activity generated directly as a result of visitor expenditures at these types of businesses exceeded 27 (34.93 percent of all employment impacts), while purchases by these businesses as a result of their economic activity was over 19 jobs (24.69 percent of all employment impacts). The economic activity induced by the increased spending from incomes associated with the economic activity from these visitor expenditures was over 31 jobs (40.38 percent of all employment impacts).

Table 29. Projected Direct, Indirect, and Induced Employment Impacts from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Employment Impacts	Jobs	Percent of Total
Direct	27.49	34.93%
Indirect	19.43	24.69%
Induced	31.78	40.38%
Total	78.70	

In Table 30, the employment impacts are broken out by industry across direct, indirect, and induced impacts. The impacts are ordered largest amount of jobs to smallest across the industries. For the direct employment impacts, the largest are from the wineries (73.99 percent of direct) and general merchandise stores (22.74 percent of direct).

Table 30. Projected Direct Employment Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Industry		Jobs	Percent of Direct
87	Wineries	20.34	73.99%
410	General merchandise stores	6.25	22.74%
481	Food services and drinking places	0.90	3.27%
	Total	27.49	

For the indirect employment impacts displayed in Table 31, the largest impacts are from agriculture and wholesale trade (26.94 percent of indirect). This impact is followed in size by fruit farming (11.55 percent of indirect) and truck transportation (7.88 percent of indirect).

Table 31. Projected Indirect Employment Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Sector		Jobs	Percent of Indirect
390	Wholesale trade	5.23	26.94%
5	Fruit farming	2.24	11.55%
394	Truck transportation	1.53	7.88%
139	Commercial printing	0.94	4.85%
451	Management of companies and enterprises	0.70	3.61%
454	Employment services	0.52	2.69%
481	Food services and drinking places	0.50	2.55%
431	Real estate	0.46	2.36%
447	Advertising and related services	0.31	1.57%
43	Maintenance and repair of nonresidential buildings	0.27	1.37%
297	Packaging machinery manufacturing	0.26	1.36%
425	Nondepository credit intermediation and related activities	0.26	1.32%
430	Monetary authorities and depository credit intermediation	0.26	1.32%
413	Newpaper publishers	0.21	1.09%
483	Automotive repair and maintenance- except car wash	0.21	1.08%
400	Warehousing and storage	0.21	1.06%
444	Management consulting services	0.20	1.05%
	Other	5.12	26.34

As shown in Table 32, among the induced impacts, the largest are from state & local education (11.75 percent of induced) and state and local non-education, (8.41 percent of induced). These impacts are followed in magnitude by food services and drinking places (7.66 percent of induced), wholesale trade (3.29 percent of induced), and hospitals (3.10 percent of induced).

Table 32. Projected Induced Employment Impacts, by Industry Impacted, from Visitor Expenditures at Tennessee Winery Agri-tourism Attractions, 2005.

Industry		Jobs	Percent of Induced
503	State & Local Education	3.7	11.76%
504	State & Local Non-Education	2.7	8.41%
481	Food services and drinking places	2.4	7.66%
390	Wholesale trade	1.0	3.29%
467	Hospitals	1.0	3.10%
465	Offices of physicians- dentists- and other health	0.9	2.78%
38	Commercial and institutional buildings	0.8	2.57%
431	Real estate	0.8	2.53%
410	General merchandise stores	0.7	2.23%
405	Food and beverage stores	0.7	2.22%
468	Nursing and residential care facilities	0.6	1.86%
494	Private households	0.6	1.79%
401	Motor vehicle and parts dealers	0.5	1.57%
483	Automotive repair and maintenance- except car wash	0.5	1.57%
454	Employment services	0.5	1.56%
33	New residential 1-unit structures- nonfarm	0.4	1.34%
411	Miscellaneous store retailers	0.4	1.29%
408	Clothing and clothing accessories stores	0.4	1.28%
412	Nonstore retailers	0.4	1.23%
470	Social assistance- except child day care services	0.4	1.22%
469	Child day care services	0.4	1.11%
404	Building material and garden supply stores	0.3	1.01%
	Other	11.63	36.60

Summary and Conclusions

The results from this study suggest that most visitors to agri-tourism venues find their visits to be highly enjoyable and that certain amenities and services are of particular importance to their visit. Among the most important services or amenities are freshness of the farm's or business' products, on-site restrooms, adequate parking, learning about how products are grown or made, and easy transportation access. Most visitors are day visitors who come from in-state, with nearly half coming from the local county. Over half of the responding visitors stated they were repeat visitors. School groups are important, in particular, for agri-tourism businesses that include pumpkin patches, corn mazes, or farm tours. Important methods for visitors learning about agri-tourism attractions are word of mouth, brochures, and the newspaper. Because the majority of visitors are from in-state, their expenditures on the visit are primarily on-site. The largest share of expenditures is on purchasing the venue's products. For businesses that were not wineries, the next largest share was spent on admission or user fees.

Because repeat visits can be critical to the long-term well-being of an agri-tourism business, preferences and demographics of repeat visitors were compared with those of first time visitors. Repeat visitors to agri-tourism attractions appear to place greater emphasis on freshness of products and also on pricing and admission fees than first-time visitors. These results suggest some promotional opportunities targeted at repeat visitors, such as special discounts or a coupon to be used on a repeat visit.

Projections statewide for businesses similar to those participating in the visitor surveys are that visitor expenditures at these types of businesses add about $16 to $17 million in economic activity directly. Furthermore, with multiplier effects throughout the economy taken into account, these expenditures stimulate a total of about $31 to 32 million in economic activity in the state. For every dollar spent at an agri-tourism attraction, an additional $.85 of economic activity is generated through multiplier effects. Over 412 jobs are projected to be added directly as a result of economic activity and an additional 145 jobs are projected to be added through multiplier effects throughout the economy. It is important to note that these estimates are based upon estimates from visitors to a sample of agri-tourism businesses across the state. Certain types of attractions were not included in the visitor surveys, such as on-farm bed and breakfasts, on-farm vacations, museums, and Christmas tree farms. Therefore the economic impacts from agri-tourism projected from the visitor expenditures in this study are likely understated.

The economic impacts from visitors to agri-tourism attractions across the state could be expanded by increasing the number of overnight visits. Overnight visitors might be those who wish to visit multiple venues in a given geographic region of the state. Future research might examine how to attract more visitors from outside the local area and what types and numbers of attractions, services, and amenities might draw them to stay for more than one day.

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Appendix A

Survey Instrument

Agri Tourism Visitors Survey

This survey is designed to help this agri tourism business, the Tennessee Department of Agriculture, and the Tennessee Department of Tourist Development improve the goods and services provided to visitors like you. Your views and opinions will help this business offer a better package of products and services to make your visit as enjoyable as possible. Your individual information will be held confidential. Only project researchers will have access to the data itself. Please take 5-10 minutes to complete the survey. When you have completed the survey, you may either drop your survey in the box on site or mail it using the postage paid envelope at your convenience. Thanks! If you have questions about this survey, please contact Dr. Kim Jensen, Professor, University of Tennessee, 865-974-3716.

Your visit here

1. Has your experience at this attraction been: (Place an 'X' by the answer)

[ ] Extremely enjoyable? [ ] Highly enjoyable? [ ] Enjoyable? [ ] Somewhat enjoyable? [ ] Not enjoyable at all?

2. a. What was most enjoyable about your visit?____

____

____

b. What would make your visit more enjoyable? ____

____

3. Please rate the importance of each in your visit: (Circle the answer)

	Extremely Important	Highly Important	Moderately Important	Little Importance	Not Important at All	Not App-licable
Freshness of farm's or business' products	1	2	3	4	5	na
Easy transportation access	1	2	3	4	5	na
On-site restrooms	1	2	3	4	5	na
Food and drink for purchase	1	2	3	4	5	na
Seating	1	2	3	4	5	na
Picnic areas	1	2	3	4	5	na
Crafts or souvenirs	1	2	3	4	5	na
Opportunity to pet or care for farm animals	1	2	3	4	5	na
Farm scenery	1	2	3	4	5	na
Pricing of products	1	2	3	4	5	na
Admission or user fees	1	2	3	4	5	na
Product samples	1	2	3	4	5	na
Adequate parking	1	2	3	4	5	na
Learning about how products are grown or made	1	2	3	4	5	na

Other (Please describe: ____

____)

4. Have you visited this attraction before?
[ ] ***Yes*** (If "Yes", how many times, including this time ______) [ ] ***No***

5. Are you visiting?
[ ] Alone or with small group of family/friends?
[ ] With a larger group? Size of group ________ people

Type of Group: [ ]School? [ ]Church? [ ]Tour? [ ]Other ?(Describe__________________________)

6. Did you travel by
[ ] Car? [ ] School bus? [ ] Tour bus? [ ] Other? (Please describe:__________________)

7. How many days do you plan to visit this attraction?
[ ] Today only [ ] Today and tomorrow [ ] More than 2 days (______ number of days)

8. How did you learn about this attraction? (Place an 'X' by the answer)

[ ] Newspaper advertising
[ ] Business sign
[ ] Business Internet site
[ ] Brochures
[ ] Television advertising
[ ] Radio advertising
[ ] Word of mouth
[ ] Tennessee Agri tourism Attractions Directory ("Get Close to Your Country" at www.picktnproducts.org)
[ ] Tennessee Vacation Guide (TNVacation.com)
[ ] Direct mail
[ ] Point of sale samples
[ ] County or local tourism guidebooks or Websites
[ ] Chamber of Commerce
[ ] Coupons
[ ] News releases

[ ] Other (Please describe: ____)

9. How far in advance did you begin planning to visit this attraction?
[ ] The same day
[ ] Less than 1 week
[ ] 1 to 2 weeks
[ ] 2 weeks to 1 month
[ ] 1 to 3 months
[ ] At least 3 months ago

Spending on this visit

10. How much are you spending today <u>at this location</u> on the following:
$________ Admission or user fees
$________ Purchasing the farm/venue's product (for example, fruit from pick-your-own, wine from winery, plants from garden)
$________ Other food and drink (for example, meals, snacks, soft drinks)
$________ Non-food souvenir items
$________ Other (Please describe: ____)
=$ _________ **Total** I will spend here today

11. How much are you spending today at <u>locations nearby</u> this attraction on the following:
$__________ Restaurant food and drink
$__________ Overnight lodging
$__________ Gasoline and auto related
$__________ Groceries and food stands
$ __________Non-food souvenir items
$___________Other (Please describe: ____)
=$ _________ **Total** I will spend nearby today

12. Including yourself, how many people are you purchasing for ____________ ?

About You

13. What is your gender? **[ ] Male** **[ ] Female**

14. What is the highest education level you attained? (Place an 'X' by the answer)

[ ] Less than High School Graduate **[ ] Some College or Technical School** **[ ] Post Graduate Degree**
[ ] High School Graduate **[ ] College Graduate**

15. Where do you live?
City ________________ County _____________ State _______________Zip ____________

16. What was your household's income (before taxes) in 2004? (Place an 'X' by the answer)

[ ] Under $10,000 **[ ] $40,000 - $49,999** **[ ] $80,000 - $89,999**
[ ] $10,000 - $19,999 **[ ] $50,000 - $59,999** **[ ] $90,000 - $99,999**
[ ] $20,000 - $29,999 **[ ] $60,000 - $69,999** **[ ] $100,000 or more**
[ ] $30,000 - $39,999 **[ ] $70,000 - $79,999**

17. What is your age in years? ______________

End of Survey. Thanks for your participation! Return by mail in postage paid envelope or placing in drop box provided.

Appendix B

Detailed IMPLAN Results