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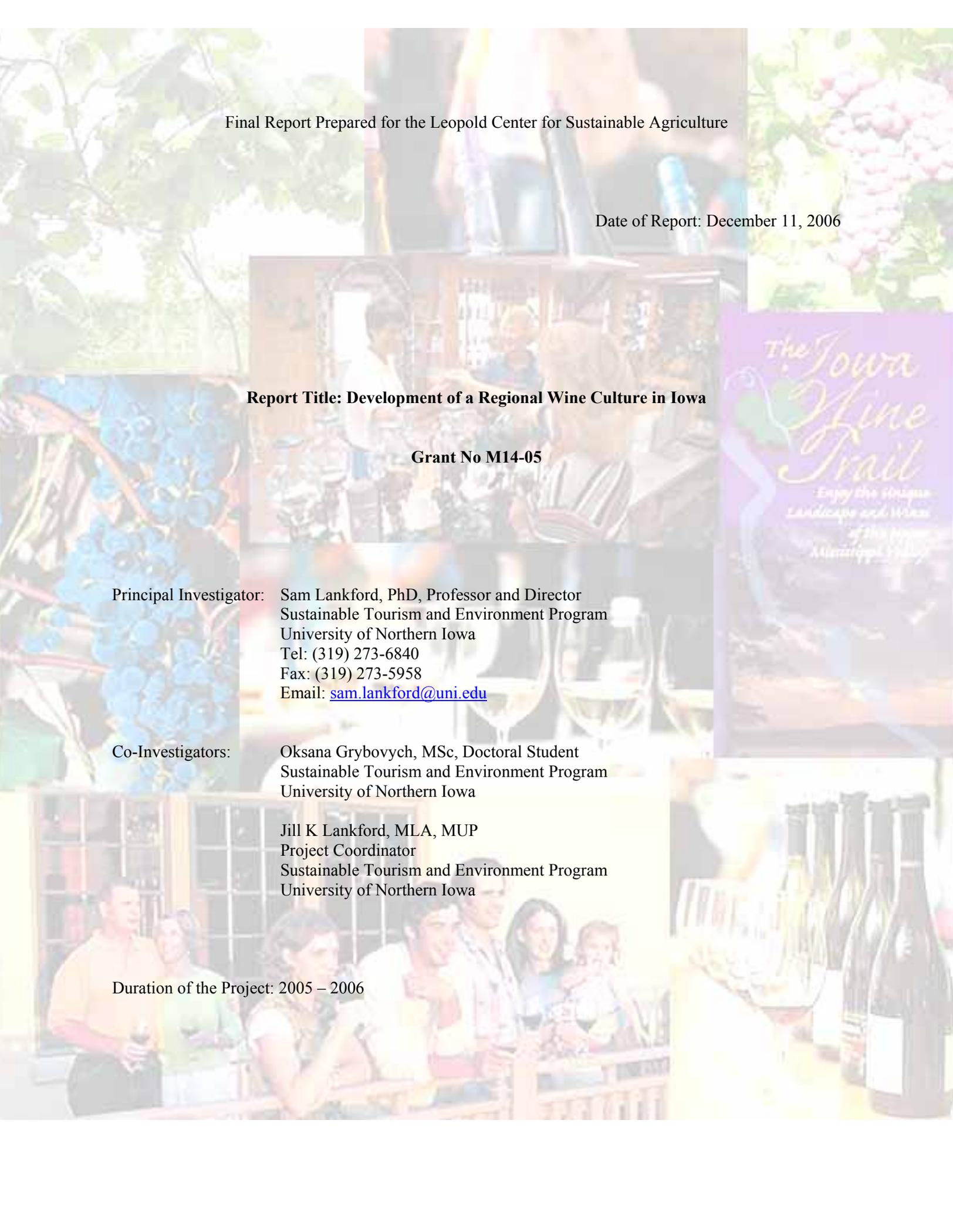
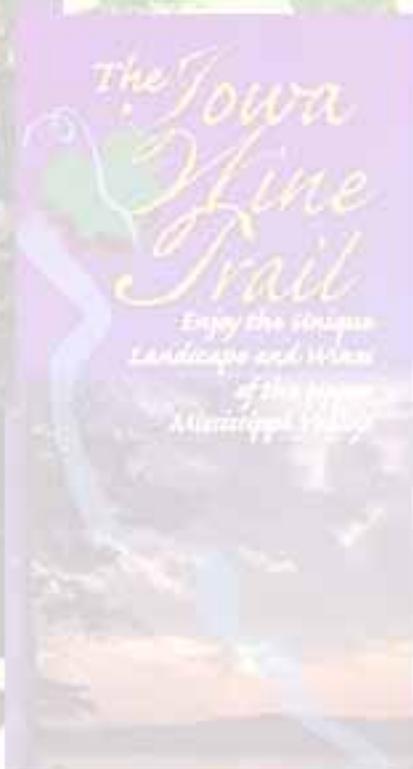
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Principal Investigator: Sam Lankford, PhD, Professor and Director
Sustainable Tourism and Environment Program
University of Northern Iowa
Tel: (319) 273-6840
Fax: (319) 273-5958
Email: sam.lankford@uni.edu

Co-Investigators: Oksana Grybovych, MSc, Doctoral Student
Sustainable Tourism and Environment Program
University of Northern Iowa

Jill K Lankford, MLA, MUP
Project Coordinator
Sustainable Tourism and Environment Program
University of Northern Iowa

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Non-Technical Summary

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Principal Investigator: Sam Lankford, PhD, Professor and Director
Sustainable Tourism and Environment Program
University of Northern Iowa
Tel: (319) 273-6840
Fax: (319) 273-5958
Email: sam.lankford@uni.edu

The wealth of research suggests tangible positive outcomes of food and beverage tourism on a community level, upon proper development. Not only does it enable the development of a “sense of place,” but it also has the potential to generate economic benefits and support sustainable community and tourism development.

This study examines profile, travel patterns and motivations of visitors to the wineries in Eastern Iowa communities, and also estimates economic impact of wine visitors spending on the region. The following aspects of wine tourism development are addressed:

- Profile of the visitors to wineries and vineyards in Eastern Iowa communities (party and trip characteristics, visitors demographic profile and socio-economic status)
- Visitors’ travel motivations and satisfaction
- Spending patterns, and
- Economic impact of wine visitors in Clayton, Dubuque, Jackson and contiguous counties

The data for the study was collected using a questionnaire based survey that was distributed to the visitors at the wineries on the Iowa Wine Trail over the period of April – November 2005. Out of the six wineries that were originally contacted, only three participated in the study. Therefore, the findings of the study are applicable only to selected counties in the state of Iowa.

Over the period of eight months, selected wineries on the Iowa Wine Trail have attracted both first-time and repeat visitors, who traveled to Eastern Iowa from around the state and neighboring states with the purpose to follow the Iowa Wine Trail or specifically visit the wineries on the trail. Over half of the visitors have previously visited the wineries and were familiar with the Iowa Wine Trail. The main sources of information used were traditional word of mouth, Websites, brochures and newspapers.

The main motives for visiting the wineries were to taste wine, to enjoy the scenery, to have a good time with friends and family, to relax, to support local wine producers, and to taste locally produced foods. Over 90% of respondents were very satisfied with their experience at Northeast Iowa wineries, and repeat visitors expressed higher levels of satisfaction as compared to the first-time visitors.

Sixty percent of the visitors were on a day trip, the rest stayed on average 1.63 nights in the area, most often in hotels or bed and breakfast establishments. Most of the visitors were Iowa residents, age 26 to 45, college educated, traveling in a party of two or four. The mean travel party size was 3.51 (median 2). Sixty percent of visitors were females. Over forty five percent of the visitors indicated their 2004 household income as \$50,000 - \$99,999 per year, which is higher than the median income in Iowa and on the federal level.

Lodging was the highest spending category ($\underline{M}=\$135.33$), followed by buying wine at the winery ($\underline{M}=\$72.07$), restaurant and bar meals and drinks ($\underline{M}=\$67.10$), shopping ($\underline{M}=\60.08), admissions ($\underline{M}=\$42.81$), transportation/ gas expenses ($\underline{M}=\$42.72$), and groceries ($\underline{M}=\28.99). The average total spending was \$206.52 per travel party (median \$155), which is higher than the mean total spending of the visitors to place-based food festivals in Northeast Iowa ($\underline{M}=\$70.04$), but lower than the mean total spending of the visitors to Silos and Smokestacks National Heritage Area ($\underline{M}=\$236.30$).

Initial wine visitors' expenditures of \$1.82 million generated \$2.65 million in terms of sales, \$1.35 million in terms of personal income, and created 53 new jobs. For every dollar spent by wine visitors, an output of \$1.45 was generated in terms of sales (gross output multiplier 1.45). Furthermore, an estimated income multiplier of 1.46 and employment multiplier of 1.23 were generated. These multipliers are slightly lower than those generated by place-based food tourism and visitors to Silos and Smokestacks National Heritage area, which in part is explained by the smaller area under examination (10 counties as compared to 30 counties).

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Introduction

The tourism and travel industry is widely recognized today as one of the most important and fastest growing economic sectors, generating 8.3% of total employment (214.7 million jobs), and contributing over 10.4 per cent of global GDP (WTTC, 2005). It has also emerged as a new “sunrise” industry for many rural destinations that wish to adjust themselves economically, socially, and politically to the new global environment (Hall & Mitchell, 2000). More and more rural areas seek to innovate and diversify their agricultural bases through tourism-related consumption and production (Hall, 2005). In this context, the relationship between food/ beverage and tourism presents significant opportunities for rural diversification (Hall & Sharples, 2003 in Plummer et. al, 2005). Wine tourism, being one subset of the food and beverage tourism, offers localities a wide range of benefits, including foreign exchange earnings, creation of full- and part-time jobs, as well as generation of the secondary economic activity (multiplier effect) (O’Neill & Charters, 2000). Furthermore, with wine having an agricultural base, it has the potential to play an important role in rural tourism development as well as local economic development (Plummer et. al, 2005; Telfer, 2001). Hall (2005) outlines the following components of the local economic development strategy seeking to encourage wine tourism:

- Reduction of economic leakage by using renewable resources (e.g. “buy local” campaigns)
- Recycling of financial resources within the system by buying local goods and services
- Addition of value to local produce (e.g. local bottling and packaging)
- Connecting up of local stakeholders, people and institutions (e.g. cooperatives, networks, “buy local” campaigns)
- Attraction of external resources (especially finances, skills and technology)
- Emphasizing of local identity and authenticity in branding and promotion strategies
- Selling directly to consumers
- Creation of a relationship between the consumer and the producer

Formal links between tourism and wine, especially through creation of wine roads, have existed since the first half of the [XX] century, although they have considerably expanded in recent years (Hall & Mitchell, 2000). More and more travelers are induced to visit wine-producing regions and wineries in particular, while traveling for other reasons. They thus create a form of special interest travel – wine tourism (Getz, 2000 in Brown & Getz, 2005).

Wine tourism can be defined as visitation to vineyards, wineries, wine festivals, and wine shows for which grape-wine tasting and/ or experiencing the attributes of a grape-wine region are the prime motivating factors for visitors (Hall, 1996 in Hall & Mitchell, 2000). It draws substantial numbers of tourists, not only in the renowned wine regions. Whereas there are about 10.5 million wine tourists annually in California, the northern state of Washington attracts 2 million visitors worth an estimated \$18.9 million a year (O’Neill & Palmer, 2004). This example reemphasizes wine tourism as a significant factor in sustainable rural development, most obviously through the creation of jobs and the sale of local merchandise (Hall & Mitchell, 2000).

With the number of wineries increasing and the number of wine tourists growing every year, managers are faced with the need to develop effective destination marketing and development strategies, as well as analyze existing and potential forms of consumer behavior in order to maximize their potential gains in sales and long-term customers (Charters & Ali-Knight, 2002). Current segmentation and consumer marketing strategies are based on general awareness rather than any accurate method of data collection and analysis (Charters & Ali-Knight, 2002). Consumer behavior research is therefore especially important for already existing and newly opened wineries and vineyards, striving to attract new and generate repeat visitors, as well as effectively segment their markets based on the nature of wine tourists, their intentions,

motivations and preferences (Brown & Getz, 2005; Charters & Ali-Knight, 2002; Jaffe & Pasternak, 2004).

This study addresses these and other important issues facing emerging wine tourism industry in Iowa. Famous as a "corn state", Iowa has focused on growing wine grapes in recent years. Acreage under vine is increasing rapidly, with 52 wineries already licensed and more being developed (Appellation America, 2006). The last several years have seen a rebirth of Iowa wineries and growth of wine production (133,728 gallons annually as of 2006). The average monthly wine sales have increased by 180% over the period of 2002 – 2006 (Tordsen, 2006). However, wine consumption in Iowa remains low as compared to other states, which is partly explained by the wine growing industry still in its infancy. The growth and development of the wine industry in Iowa therefore has a potential to increase wine consumption and spur economic growth (Tordsen and Holz-Clause, 2004). Grape growers see grapes not only as a high-value crop that diversifies their portfolio, but also as a crop that can bring high profits in the long run. Roughly, one acre of grapes has the same or even more earning potential than 150 acres of corn and beans, in terms of net profit per acre (Barker, 2006; White, 2005). In Iowa, limestone-based soils in the west, as well as a number of grape varieties well-adapted to Iowa climate, all favor the growth and development of the wine industry (Appellation America, 2006; Holz-Clause, 2005).

Rebirth of the Iowa grape growing and wine industry has been a timely development. In 2002, Americans spent over \$850 billion on food and drinks. The same year 595 million gallons of wine was consumed, bringing retail wine sales across the country to a record of \$21.1 billion, up from \$11.7 billion in 1990. In Iowa, per-capita wine consumption increased by 7.2 percent from fiscal year 2004 to 2005, reaching 1.11 gallons per person per year (Tordsen and Holz-Clause, 2004). For comparison, the national average is 13 bottles per person per year, with 72 bottles a year consumed in California. Finally, one of the most notable trends in the industry today is the constant increase of the wine's share of the alcoholic beverage market, as compared to decline of the market share of spirits (Adams Business Research, n.d.).

To support the Iowa wine and grape growing industry, the Iowa Grape Growers Association (later on renamed to Iowa Wine Growers Association) and the Iowa Wine and Grape Advisory Council (Dept. of Agriculture) were established in 2000. Both initiatives led Iowa Governor Tom Vilsack to sign a law enabling the legislature to provide up to \$75 000/year for grape and wine promotion (May 2001). The first portion of this Iowa wine tax money was received by the Iowa Grape and Wine Commission in October 2003.

The most recent development in the grape and wine industry was the establishment of the Iowa Wine Trail which currently includes Eagles Landing Winery (Marquette), Park Farm Winery and Vineyard (Bankston), Sutliff Cider Company (Lisbon,), Tabor Home Vineyards and Winery (Baldwin), Daly Creek Winery (Anamosa), Winneshiek Wildberry Winery (Decorah), and Wallace Winery (West Branch). Establishing strong links between wine and tourism industry stakeholders has been argued to play an important role in successful wine tourism development. Not only does it enable shared marketing strategies and more efficient use of resources, but also results in adding greater value to the wine and food product in rural areas (Hall & Mitchell, 2000; Telfer, 2001). In order to assist wineries on the Iowa Wine Trail to successfully segment their visitor market, this study profiles existing visitors to the wineries and the Iowa Wine Trail and examines the economic impact of wine tourism development in Eastern Iowa Communities. The following aspects of wine tourism development are addressed:

- Profile of the visitors to wineries and vineyards in Eastern Iowa communities (party and trip characteristics, visitors demographic profile and socio-economic status)
- Visitors' travel motivations and satisfaction
- Spending patterns, and
- Economic impact of wine visitors in Clayton, Dubuque, Jackson and contiguous counties

Organization of this report is as follows. After a brief discussion of study design and methodology, Section A describes visitor party and trip characteristics, Section B reports visitor spending patterns, followed by Section C outlining the economic impact of wine visitors in selected Iowa counties. Section D reports visitor travel motivations and satisfaction, and Section E presents demographic and socio-economic profile of visitors. Discussion of findings and recommendations are provided.

Study Design and Methodology

The data for this study was collected using a questionnaire based survey (see Appendix 2), consisting of four parts:

- The first part of the questionnaire included questions about party and trip characteristics (e.g. primary purpose of the trip, number of previous trips to the region, length of stay, travel party size etc.)
- The second part of the questionnaire included questions on spending patterns for lodging, restaurants, groceries, transportation, admissions, shopping, and buying wine at the winery visited.
- The third part of the questionnaire included questions on travel motivations and satisfaction with the visit.
- The fourth part of the questionnaire included questions on visitor's demographic profile and socio-economic status (e.g. age, gender, residence, income, and education level).

Prior to the beginning of the project, a number of pilot surveys were distributed by students from the University of Northern Iowa, Sustainable Tourism and Environment Program, at three wineries: Tabor Home Vineyards and Winery in Baldwin, Eagles Landing Winery in Marquette, and Park Farm Winery in Durango. Pilot testing allowed examination of the survey's limitations, hence minor modifications were made. The final version of the survey was mailed to the wineries on the Iowa Wine Trail¹ for further self-administered distribution over the period of June – November 2005.

A random sample of thirteen weekends was generated and mailed to the wineries in a table format, along with the memo on administering surveys, blank questionnaire surveys, and a self-addressed stamped envelope. Questionnaire surveys were also distributed during the two Wine Trail Events in April and November 2005. A memo on administering surveys provided the wineries with the information on how to intercept visitors (wineries were asked to intercept every third travel party in the case of large visitor numbers, and each travel party in the case of small visitor numbers).

Out of the six wineries on the Iowa Wine Trail, five were initially included in the study (the sixth winery had opened towards the end of the period of data collection). However, only three wineries agreed to participate in the study: Tabor Home Vineyards and Winery in Baldwin, Eagles Landing Winery in Marquette, and Park Farm Winery in Durango. By November 2005, a total of 170 surveys were collected. Data was analyzed using SPSS and IMPLAN software.

¹ See Appendix 1 for the map of Iowa Wine Trail

Study Results

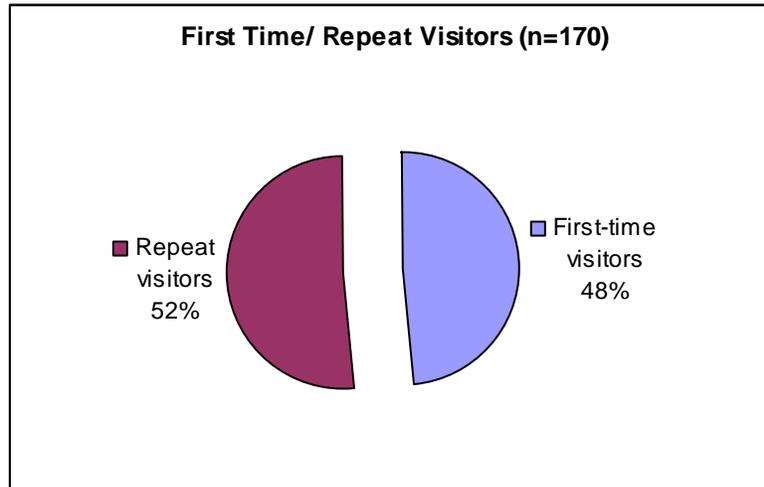
A. Party and Trip Characteristics

Several party and trip characteristics were identified:

- First/ repeat visit to a winery in Eastern Iowa
- Number of previous visits within the last year
- Wineries visited within the last year
- Primary purpose of the trip
- Length of stay and accommodation used
- Travel party characteristic and size
- Main sources of information about the winery visited

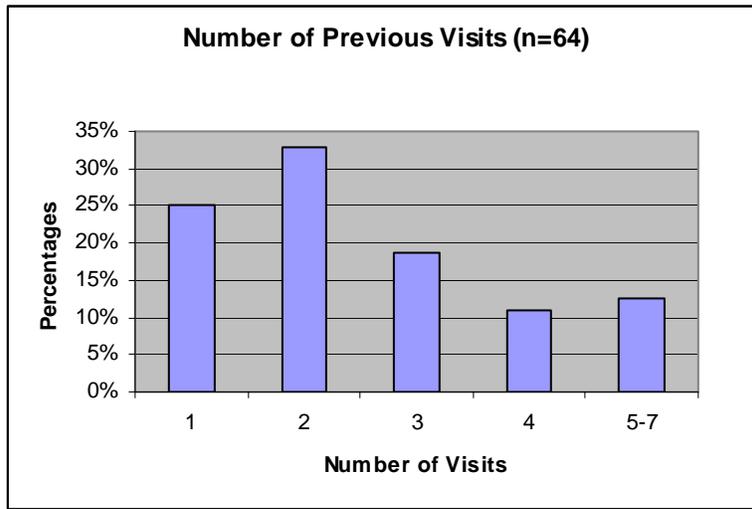
Fifty two percent (n=88) of visitors identified themselves as repeat visitors to the winery/ vineyard, as compared with forty eight percent (n=82) being first-time visitors (see Figure 1).

Figure 1 First time and repeat visitors (percentages)



Repeat visitors were asked to estimate how many times they have visited a winery in Eastern Iowa within the past year. Fifty eight percent of the repeat visitors (n=37) indicated they have been to a winery in Eastern Iowa at least once or twice within the past year, nineteen percent (n=12) have previously visited a winery in Eastern Iowa three times, eleven percent (n=7) – four times, and thirteen percent (n=8) – from five to seven times (see Figure 2). The mean number of previous visits was 2.64.

Figure 2 Number of previous visits (percentages)



Both first-time and repeat visitors were asked what wineries they have visited within the past year. Figure 3 shows the distribution of responses for each of the wineries on the Iowa Wine Trail.

Figure 3 Wineries visited within previous year

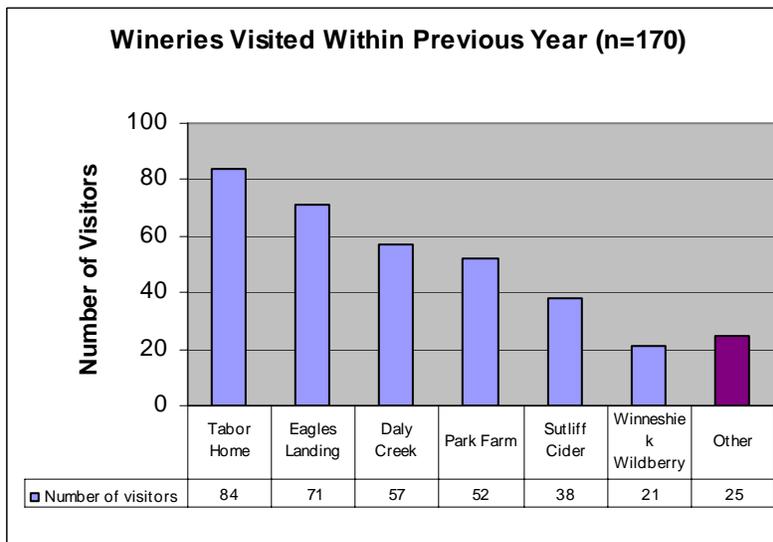
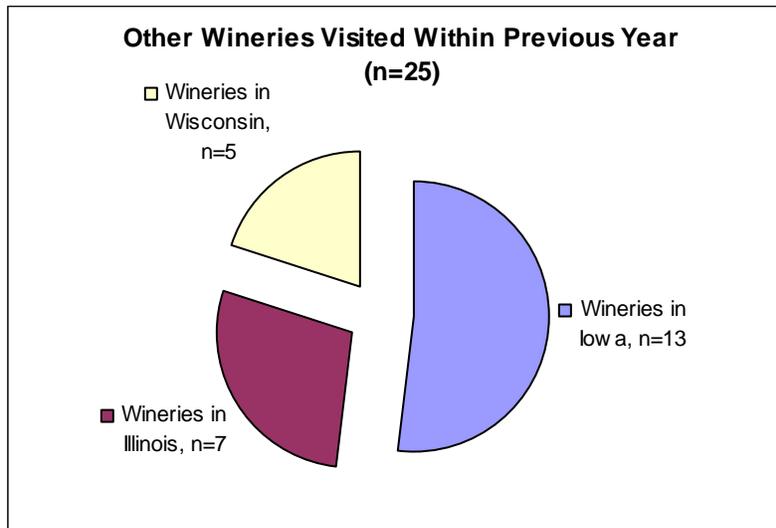


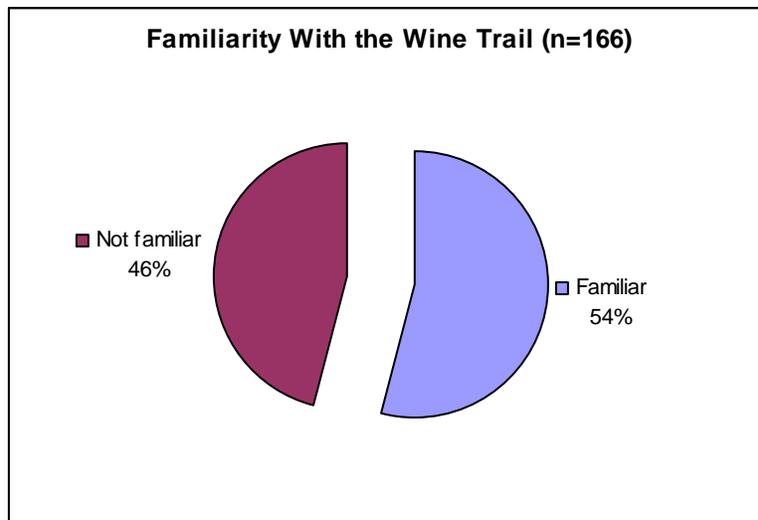
Figure 4 elaborates on the category of “other” wineries visited by survey respondents. Thirteen customers indicated they visited other wineries in Iowa, seven visited wineries in Illinois, and five visited wineries in Wisconsin. Among the wineries visited in the state of Iowa, were wineries in Amana Colonies (n=6), Summerset winery (n=3), Eagle City winery (n=2), and Stone Cliff winery (n=2).

Figure 4 Other wineries visited within previous year



Since many of the wineries on the Iowa Wine Trail organize events together, and recommend their customers visit other wineries on the trail, survey respondents were asked whether they were familiar with the newly established Iowa Wine Trail. Fifty four percent of customers indicated their familiarity with the trail, as compared to forty six percent who were not familiar with the Iowa Wine Trail (see Figure 5). This indicates the need for more extensive outreach and marketing, in order to attract more visitors to the wineries on the trail.

Figure 5 Familiarity with the Iowa Wine Trail (percentages)



When asked about the primary purpose of the trip, seventy three percent (n=122) of respondents indicated it was either to follow the Iowa Wine Trail, or to specifically visit the winery. For fifteen percent (n=26) of respondents it was a side trip or stop on a trip to another primary destination, for another nine percent (n=16) – visiting friends or relatives, and for the remaining three percent (n=5) – business trip or combined business/ pleasure trip (see Figure 6).

Figure 6 Primary purpose of the trip (percentages)

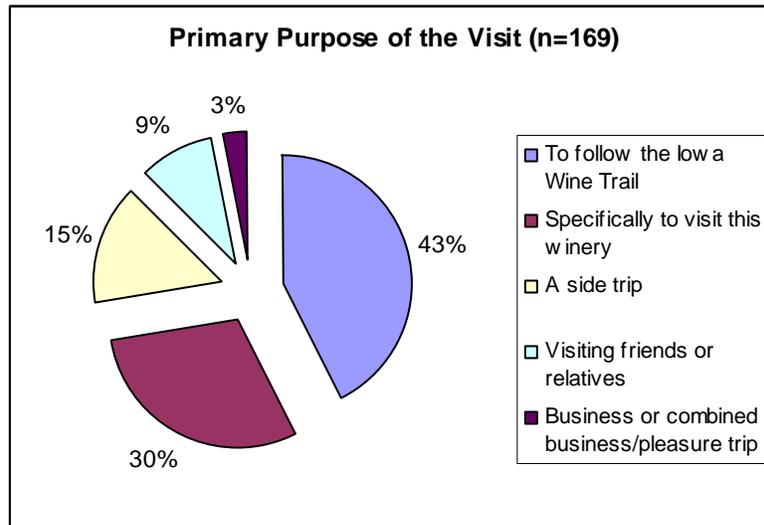


Table 1 explores the differences in primary purpose of the trip for first-time and repeat visitors. Over forty percent of repeat visitors (n=68) come to either follow the Iowa Wine Trail, or to specifically visit the winery (which is on the Iowa Wine Trail). For the first time visitors, these numbers were slightly lower, - over sixteen percent (n=28) of them come to specifically visit the winery, and one percent less enjoy following the Iowa Wine Trail (n=26). Overall, it is clear that almost half of the visitors (both first time and repeat visitors), were familiar with the Iowa Wine Trail.

Table 1 Cross-tabulation of the first time/ repeat visitors with the primary purpose of the trip (percentages)

Visitor type	To follow the Iowa Wine Trail	Specifically to visit this winery	A side trip	Visiting friends or relatives	Business/pleasure trip	Total percentage
First-time visitors	15.38	16.57	8.88	5.92	1.18	47.93
Repeat visitors	27.22	13.02	6.51	3.55	1.78	52.07
Total percentage	42.60	29.59	15.38	9.47	2.96	100.00

Next, repeat visitors were asked about the length of their stay (whether it was a day trip or an overnight trip, and if overnight, how many nights they stayed in the area). Sixty percent of the visitors (n=101) indicated it was a day trip for them, and for the remaining forty percent (n=68) it was an overnight trip. Furthermore, those who stayed overnight in the area, were asked how many nights they stayed. Sixteen percent (n=27) indicated they stayed one night, eleven percent (n=19) stayed two nights, and three percent (n=5) stayed three to five nights (see Figures 7-8). The mean number of nights stayed in the area was 1.63.

Figure 7 Day or overnight trip (percentages)

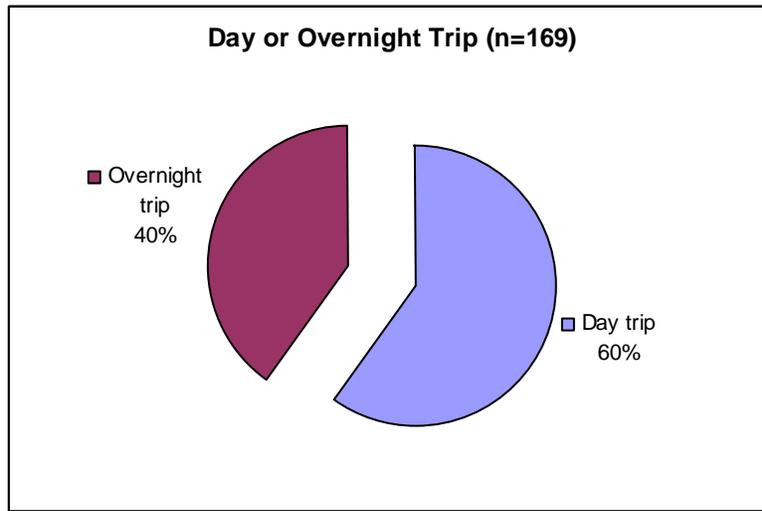
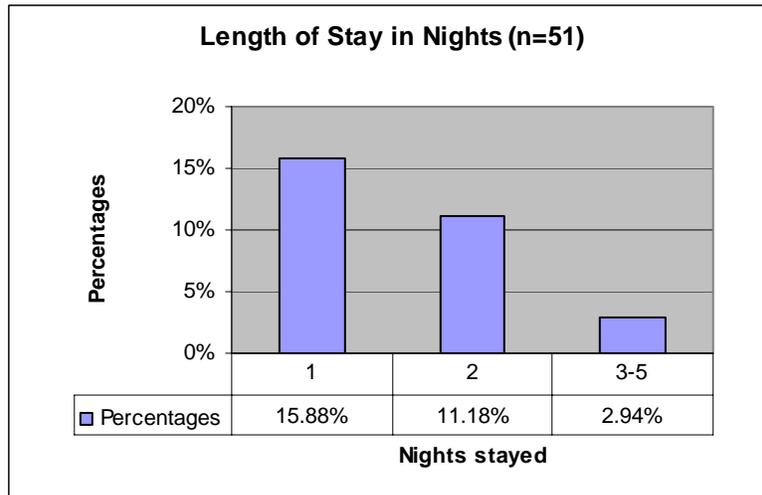
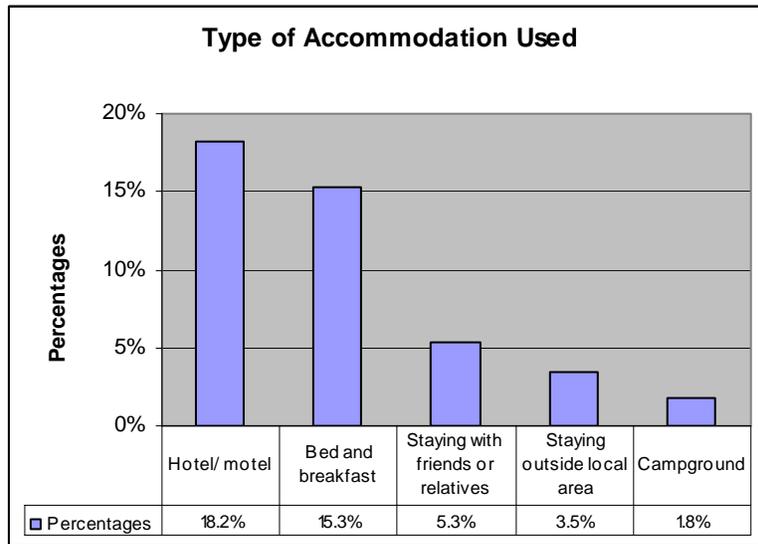


Figure 8 Length of stay in nights (percentages)



In regard to the type of lodging used, five options were available: hotel or motel, campground, staying outside the local area, bed and breakfast, and staying with friends and relatives. The two most popular types of accommodation used were hotels/ motels (eighteen percent of respondents, or n=31), and bed and breakfast establishments (fifteen percent of respondents, or n=26). About five percent (n=9) of visitors stayed with friends or relatives, three percent (n=6) stayed outside local area, and almost two percent (n=3) stayed at a campground (see Figure 9).

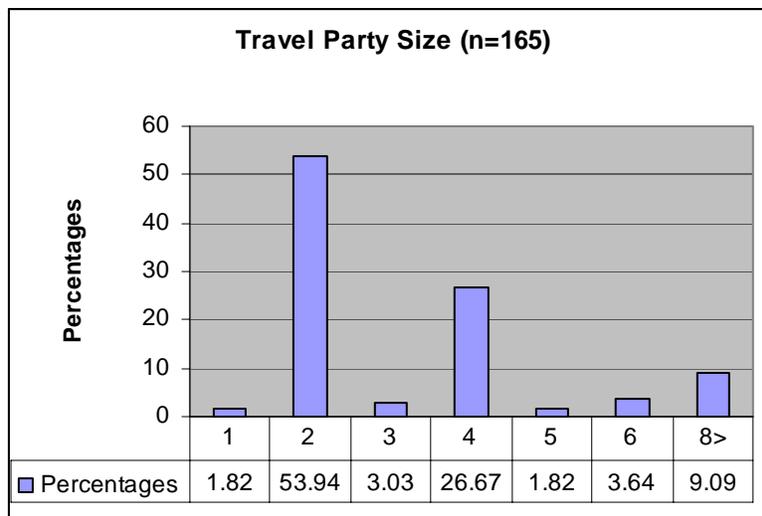
Figure 9 Type of accommodation used (percentages)



To complete the picture of visitor trip characteristics, survey respondents were asked to describe their travel party. Ninety seven percent of the visitors (n=163) indicated they were not part of an organized group, and only three percent (n=5) answered positively. Even though organized group tours are starting to play an important part of wineries’ marketing strategy, findings of this study suggest that an overwhelming majority of visitors to the wineries on the Iowa Wine Trail are coming by themselves.

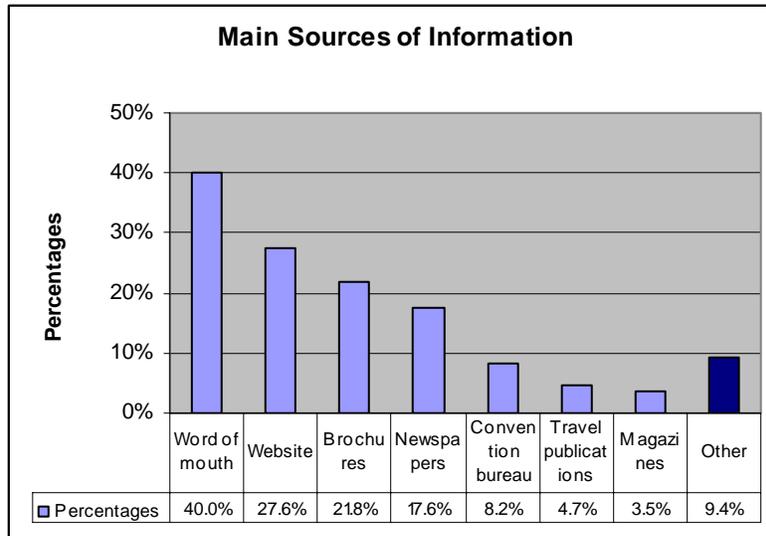
In regard to the travel party size, most of the visitors were traveling in a party of two (almost fifty four percent of respondents, or n=89); followed by the travel party of four (almost twenty seven percent of respondents, or n=44). The mean travel party size was 3.51, median was 2. Figure 10 shows the distribution of responses to the question about the travel party size.

Figure 10 Travel party size (percentages)



Finally, survey respondents were asked where they obtained information about the winery. Word of mouth appeared to be the main source of information for forty percent of the visitors (n=68), followed by information obtained from Websites (twenty seven percent of respondents, or n=47), brochures (almost twenty two percent of respondents, or n=37), newspapers (almost eighteen percent of respondents, or n=30), Convention Bureaus/ Visitor Centers (eight percent of respondents, or n=14), and travel publications and magazines (over eight percent of respondents, or n=14). Over nine percent of the visitors (n=16) indicated “other mediums” as sources of information, including referral by family members, information obtained at state fairs, road signs and referrals by other wineries on the Iowa Wine Trail (see Figure 11).

Figure 11 Main sources of information (percentages)



B. Spending Patterns

Survey respondents were asked to estimate their expenditures in Eastern Iowa on the following:

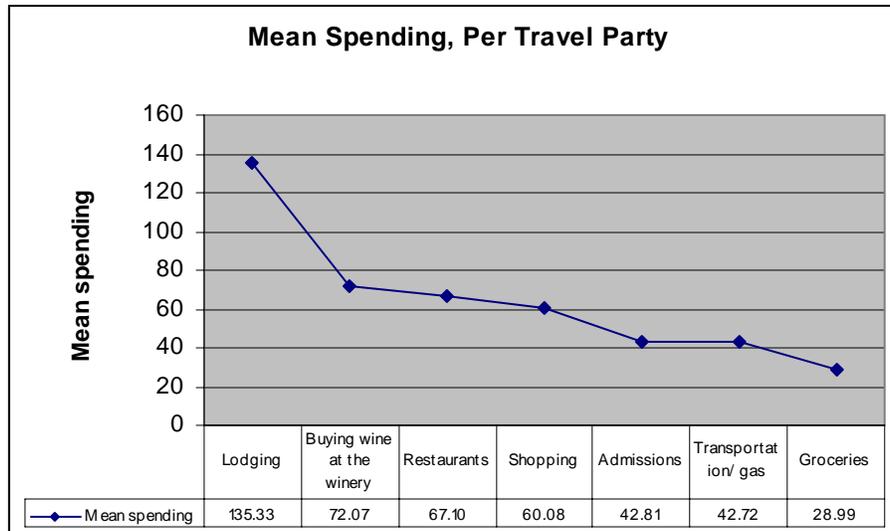
- Lodging
- Restaurant and bar meals and drinks
- Grocery/ convenience store purchases
- Transportation expenses/ gas
- Admissions
- Shopping (souvenirs, cloths etc.)
- Buying wine at the winery

Lodging was the highest spending category (\underline{M} =\$135.33, \underline{SD} =62.71), followed by buying wine at the winery (\underline{M} =\$72.07, \underline{SD} =63.48), restaurant and bar meals and drinks (\underline{M} =\$67.10, \underline{SD} =56.30), shopping (\underline{M} =\$60.08, \underline{SD} =141.01), admissions (\underline{M} =\$42.81, \underline{SD} =44.90), transportation/ gas expenses (\underline{M} =\$42.72, \underline{SD} =32.52), and groceries (\underline{M} =\$28.99, \underline{SD} =33.43). The average total spending was \$206.52 per travel party with the median of \$155. As mentioned previously, mean travel party size was 3.51 (median 2). Table 2 and Figure 12 show spending on different categories per party.

Table 2 Mean and median spending per travel party

Spending category	Mean	Median	SD
Lodging	135.33	100	62.91
Buying wine at the winery	72.07	50	63.48
Restaurant and bar meals and drinks	67.10	50	56.30
Shopping (souvenirs etc.)	60.08	25	141.01
Admissions	42.81	25	44.90
Transportation/ gas	42.72	40	32.52
Groceries/ convenience store food and drink	28.99	20	33.43
Total spending	206.52	155	216.13

Figure 12 Mean spending per travel party



To accurately estimate spending patterns, visitors were asked how many people in their travel party these expenses cover. The mean spending party size reported was 2.8 (median 2).

An independent t-test was performed in order to examine differences in means for the first-time and repeat visitors, and for the “wine tourists”² as compared to other visitors. Overall, first-time visitors ($M=\$271.92$, $SD=247.79$) spent more than repeat visitors ($M=\$220.01$, $SD=180.11$), however this was not statistically significant at $p=.106$, $t(142)=1.452$. On the other hand, total mean expenditures of “wine tourists” ($M=\$184.66$, $SD=145.70$) were lower as compared to other visitors ($M=\$266.58$, $SD=231.88$), and the mean differences between the two groups were statistically significant at $p=.044$, $t(141)= -2.035$. Further analysis of the findings revealed that lower mean expenditures of “wine tourists” could be attributed to lower mean spending on purchasing wine at the wineries ($M=\$54.27$, $SD=32.10$) as compared to other visitors ($M=\$79.01$, $SD=71.07$). These results were statistically significant at $p=.44$, $t(133)= -2.037$.

² For the purpose of an independent t-test and logistic regression analyses, “wine tourists” were identified as visitors who indicated their primary purpose of visit as either “to specifically visit this winery” or “to follow the Iowa Wine Trail”.

To shed some additional light on important variables/ factors that determine total expenditures, the spending variable was further dichotomized into higher spenders and lower spenders and regressed (in a binary logistic fashion) on the following factors: (a) primary purpose of the trip (wine tourists/ other); (b) day/ overnight visit; (c) traveling party size; (d) gender; (e) education high school/ above; and (f) household income below \$50,000 / higher. The dichotomous grouping variable was the spending level (higher/ lower than average in the state of Iowa). Two groups of visitors were identified – those who have spent over \$198, and those who have spent less than \$198 per travel party. The figure of \$198 was interpreted as a mean of total visitor expenditures that were reported in 6 sources: 5 studies conducted by STEP-UNI in 2004³, and total visitor expenditures reported by the Iowa Department of Economic Development in 2004 (\underline{M} =\$189.76). Table 3 reports results of logistic regression model.

Table 3 Logistic regression model for higher and lower spenders

Predictor	Wald	Exp[β]	p
Primary purpose of the visit: wine tourists/ other visitors	.893	.566	.345
Day/ overnight visit	34.503	.029	.000***
Traveling party size	4.689	1.368	.030**
Gender	2.779	2.532	.096*
Education high school/ above	2.073	3.576	.150
Household income below \$50,000/ higher	.559	.640	.455

*** p< .01; ** p< .05; * p< .10

The Hosmer and Lemeshow omnibus test was significant, $\chi^2(8) = 9.36$, $p = .31$ (the null being that at least one of the predictors is significant). In addition, both the Cox and Snell $R^2 = .44$ and the Nagelkerke $R^2 = .59$ were rather high, suggesting that variables included in the model predict visitors' spending patterns well. The classification confirmed that the model predicts 85.6% of cases correctly.

Of the variables selected as predictors of higher expenditures, three emerged as significant. They were (a) day/ overnight visit ($\beta = -3.533$, $\text{Exp}[\beta] = .566$, $p < .01$), (b) traveling party size ($\beta = .313$, $\text{Exp}[\beta] = 1.368$, $p < .05$), and (c) gender ($\beta = .929$, $\text{Exp}[\beta] = 2.532$, $p < .10$). Thus, overnight visitors are more likely to spend over \$198 per party as compared to day visitors/ and females were more likely to spend more as compared to males. For wineries located on the Iowa Wine Trail, these findings suggest that organizing events which take place in the late afternoon/ evenings, could encourage visitors to stay in the area overnight, hence increase the chance they will spend over \$198 during their visit.

³ The following studies were consulted:

STEP-UNI. (2004). Cedar Falls and Waterloo Visitor Study. (\underline{M} =\$190.73)

STEP-UNI. (2004). Cedar Rapids Area Convention and Visitors Bureau Visitors Study. (\underline{M} =\$301.91)

STEP-UNI. (2004). Silos & Smokestacks National Heritage Area Tourism Study. (\underline{M} =\$236.30)

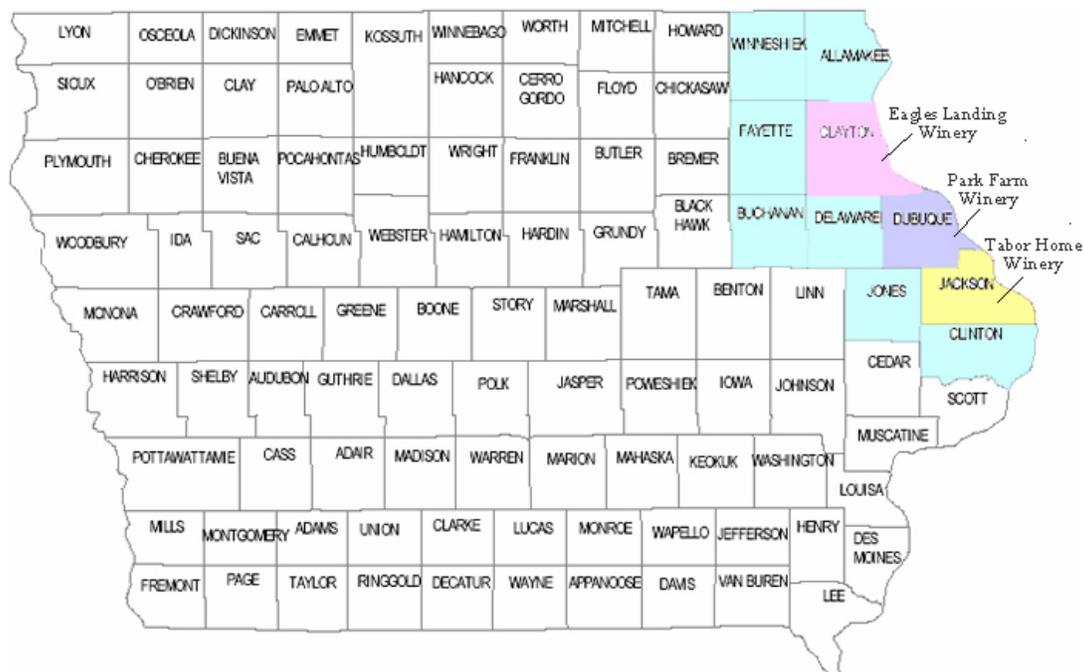
STEP-UNI. (2004). Cedar Falls/ Waterloo Community Festivals. (\underline{M} =\$198.97)

STEP-UNI. (2005). A Study of Place Based Food Tourism in Northeast Iowa Communities. (\underline{M} =\$67.76)

C. Economic Impact of Wine Visitors in Clayton, Dubuque and Jackson Counties

Estimation of the economic impact of wine visitors in Eastern Iowa was done using the IMPLAN Input-Output (I-O) Model, developed by the US Forest Service and currently operated by the MIG, Inc. – Minnesota IMPLAN Group (IMPLAN, 2006). The model included Clayton, Dubuque and Jackson counties, where Eagles Landing Winery, Park Farm Winery, and Tabor Home Vineyards and Winery are located respectively, as well as their contiguous counties (see Figure 13).

Figure 13 Map of Iowa*



* Highlighted are counties in Eastern Iowa that were included in the IMPLAN model

An impact analysis of the IMPLAN I-O model involves specifying a series of expenditures and applying them to the region’s multipliers. One of the very important aspects here is to correctly identify expenditures in terms of the sectoring scheme for the model. Thus, two options were available for this specific model: (a) include visitor expenditures on purchasing wine at the winery as a part of “groceries”, and (b) include visitor expenditures on purchasing wine at the winery as a part of “purchasing brewery products”. Even though purchasing wine at the wineries is not directly comparable to purchasing brewery products, the wine and brewing industries are closely related, therefore it was decided to choose the second model for further analysis. Moreover, it provided more conservative results which are discussed in the section that follows. The first model is provided for a review in Appendix 3.

In order to estimate the economic impact of visitors’ expenditures in these counties, the uses of the output from each sector were examined as inputs to other sectors of the economy. The resulting model estimates economic effects of wine visitors’ expenditures in Eastern Iowa on the total value of economic transactions, on the overall level of household income, and on the number of jobs created. The area under examination is 6,503 square miles, with the population of 294,538 residents, or 125,047 households (IMPLAN model).

Wine visitors' expenditures in Eastern Iowa had a direct economic impact of \$1.82 million in direct sales, \$921 thousand in value added/ income, and supported 43 jobs in the region. In total, accounting for the secondary effects, wine visitors to the wineries in Eastern Iowa supported \$2.65 million of direct sales, \$1.35 million in value added/ income, and 53 jobs in the area. Services and retail trade accounted for the largest portion in direct sales and value added, and both generated 46 jobs (see Table 4).

All reported estimates are based on the total number of wine visitors being 15,644. This number was derived in the following manner: the total number of visitors as reported by Eagles Landing Winery, Park Farm Winery, and Tabor Home Vineyards and Winery, over duration of the study, was 21,800. However, considering all visitors' expenditures could be misleading, since only 71.76% of those visitors came to specifically visit the winery, or follow the Iowa Wine Trail (see Figure 6 and Table 1, numbers corrected for the missing values). Therefore, the total number of wine visitors included in the IMPLAN model, was estimated as 12,644 (21,800*71.76%).

Table 4 Economic impact of wine visitors in Eastern Iowa

Industry	Output	Value added/ Income	Jobs
Agriculture	27,379	4,373	0.1
Mining	19	10	0.0
Utilities	40,930	22,783	0.0
Construction	15,290	5,744	0.2
Manufacturing	471,538	226,653	2.9
Transportation and warehousing	40,023	20,489	0.5
Retail trade	625,250	287,060	14.9
Information services	36,307	15,561	0.4
Finance, insurance & real estate	76,144	48,328	1.0
Professional and technical services	63,993	42,756	1.4
Other services	1,156,024	623,773	31.1
Government	92,730	50,241	0
Total	2,645,627	1,347,771	52.6
Multiplier	1.45	1.46	1.23

Source: IMPLAN model for Clayton, Dubuque, Jackson, and their contiguous counties in Iowa

Further examination of the economic impact of wine visitors in Eastern Iowa is given below. Table 5 reports the estimated effects of wine visitors' expenditures in Eastern Iowa on the total value of economic transactions. Direct injections in the economy are estimated at \$1.82 million. Indirect effects of \$404 thousand represent linkages of wineries with other local suppliers of products and services, and induced effects of \$418 thousand are attributed to further expenditures and turnovers resulting in further employment and revenues. In total, direct, indirect, and induced effects of wine visitors' expenditures account for \$2.65 million of direct sales in the area. These numbers produce an estimated gross output multiplier of 1.45 (total/ direct output effects), which could be interpreted as an output of \$1.45 for each \$1 that is spent by wine visitors in the region.

Table 5 Economic impact of wine visitors in Eastern Iowa (\$ sales/output)

Industry	Direct	Indirect	Induced	Total
Agriculture	0	18,600	8,777	27,379
Mining	0	12	6	19
Utilities	0	27,525	13,404	40,930
Construction	0	12,458	2,832	15,290
Manufacturing	301,956	117,309	52,276	471,538
Transportation and warehousing	0	29,181	10,844	40,023
Retail trade	544,968	20,087	60,195	625,250
Information services	0	29,121	7,188	36,307
Finance, insurance & real estate	1,365	36,982	37,796	76,144
Professional and technical services	1	50,812	13,182	63,993
Other services	951,122	53,930	150,970	1,156,024
Government	24,060	7,996	60,675	92,730
Total	1,823,472	404,013	418,145	2,645,627

Source: IMPLAN model for Clayton, Dubuque, Jackson, and their contiguous counties in Iowa

Table 6 reports the estimated effects of wine visitors' expenditures in Eastern Iowa on the overall value of household income. The \$921 thousand in direct personal income is only one component of \$1.82 million in direct visitor expenditures (see Table 5). The indirect personal income is almost \$199 thousand, and the induced personal income is over \$228 thousand. In total, direct, indirect, and induced effects of wine visitors' expenditures account for \$1.35 million of personal income in the area. These numbers produce an estimated income multiplier of 1.46.

Table 6 Economic impact of wine visitors in Eastern Iowa (\$ value added/ income)

Industry	Direct	Indirect	Induced	Total
Agriculture	0	3,037	1,332	4,373
Mining	0	7	4	10
Utilities	0	15,453	7,329	22,783
Construction	0	4,730	1,013	5,744
Manufacturing	161,864	43,539	21,253	226,653
Transportation and warehousing	0	15,415	5,072	20,489
Retail trade	240,889	11,857	34,315	287,060
Information services	0	12,114	3,447	15,561
Finance, insurance & real estate	952	24,835	22,543	48,328
Professional and technical services	1	33,609	9,147	42,756
Other services	516,358	30,297	77,117	623,773
Government	1,159	3,712	45,370	50,241
Total	921,223	198,605	227,942	1,347,771

Source: IMPLAN model for Clayton, Dubuque, Jackson, and their contiguous counties in Iowa

Lastly, the model examines the number of jobs created by wine visitors' expenditures in Eastern Iowa (see Table 7). In addition to 43 jobs created as a result of direct employment in wineries and on vineyards, 4 indirect and 5 induced jobs are generated in other wine-and-tourism-related sectors (indirect), and in sectors that are peripherally related to the wine and tourism industry. An estimated employment multiplier is 1.23.

Table 7 Economic impact of wine visitors in Eastern Iowa (employment/ jobs)

Industry	Direct	Indirect	Induced	Total
Agriculture	0.0	0.1	0.0	0.1
Mining	0.0	0.0	0.0	0.0
Utilities	0.0	0.0	0.0	0.0
Construction	0.0	0.1	0.0	0.2
Manufacturing	2.2	0.5	0.2	2.9
Transportation and warehousing	0.0	0.5	0.0	0.5
Retail trade	13.2	0.2	1.3	14.9
Information services	0.0	0.2	0.0	0.4
Finance, insurance & real estate	0.0	0.5	0.3	1.0
Professional and technical services	0.0	1.0	0.1	1.4
Other services	27.2	1.1	2.7	31.1
Government	0	0	0	0
Total	42.6	4.3	4.6	52.6

Source: IMPLAN model for Clayton, Dubuque, Jackson, and their contiguous counties in Iowa

D. Travel Motivations and Satisfaction

Visitors were asked to indicate their agreement with several motives for visiting the wineries/ wine trail, on a 5-point Likert-type scale (5=strongly agree, 4=agree, 3=neither agree nor disagree, 2=disagree, 1=strongly disagree). In order to group thirteen items in categories that would explain most of the variance observed, a factor analysis (principal components analysis with Varimax rotation) was performed. Interpretation of results revealed three main groups/ categories of motives for visiting the wineries/ wine trail: to learn about wine and winemaking process (Factor 1), to gain authentic Eastern Iowa experience (Factor 2), and to simply enjoy having a good time (Factor 3). The three factor solution accounted for 63.6% of all variation in the data (see Table 8).

Table 8 Alpha values and factor pattern coefficients for travel motivations (n=130)

Factor items	Factor loadings		
Factor 1 To learn about the wine and winemaking process			
To learn about wine label reading	0.896		
To learn about sparkling processes for ciders and wines	0.832		
To learn about grape varieties	0.815		
To learn about the winemaking process	0.712		
To gain knowledge about wine and cheese pairings	0.554		
Factor 2 To gain authentic Eastern Iowa experience			
To learn about things and places in Northeast Iowa	0.746		
To taste wine	0.717		
To taste locally produced foods	0.700		
To support local wine producers	0.652		
To do something I had always wanted to do	0.618		
Factor 3 To enjoy having a good time			
To have a good time with friends and family		0.888	
To relax		0.834	
To enjoy the scenery		0.588	
Eigenvalues	3.153	3.048	2.067
Explained variance	24.255	23.443	15.903
Alpha coefficients	0.858	0.779	0.774

Factor 1 was comprised of five items (.858 Alpha), Factor 2 was comprised of five items (.779 Alpha), and Factor 3 was comprised of three items (.774 Alpha). Factor 1 was interpreted as “motive to learn about the wine and winemaking process”, Factor 2 was interpreted as “motive to gain authentic Eastern Iowa experience”, and Factor 3 was interpreted as “motive to enjoy having a good time”. Table 9 shows distribution of responses for each of the factors, in percentages. Figures 14-16 explore mean scores for each of the factors separately.

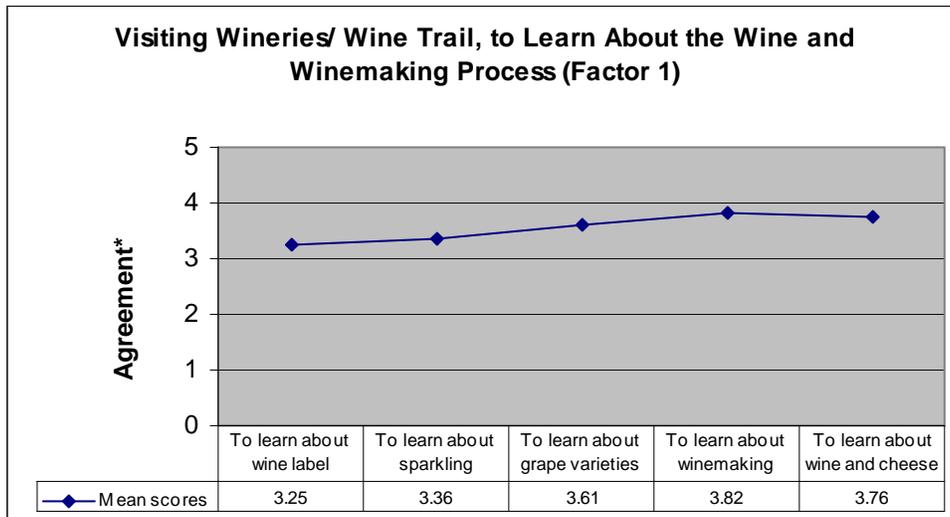
Table 9 Travel motivations for visiting the wineries/ wine trail (percentages)

Travel motivation	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Mean*	Std. Deviation
Factor 1 To learn about the wine and winemaking process							
To learn about wine label reading	7.06	19.41	45.29	7.06	2.94	3.25	0.87
To learn about sparkling processes for ciders and wines	9.41	20.59	44.12	7.06	1.18	3.36	0.85
To learn about grape varieties	12.35	30	38.24	2.35	0.59	3.61	0.80
To learn about the winemaking process	20.59	32.94	28.82	2.94	0.59	3.82	0.86
To gain knowledge about wine and cheese pairings	20	28.82	32.35	4.12		3.76	0.87
Factor 2 To gain authentic Eastern Iowa experience							
To learn about things and places in Northeast Iowa	31.18	31.76	17.65	4.71		4.05	0.89
To taste wine	64.71	24.71	4.71			4.64	0.58
To taste locally produced foods	42.35	25.29	20.59	0.59	0.59	4.21	0.87
To support local wine producers	40.59	36.47	11.76			4.32	0.70
To do something I had always wanted to do	32.94	30	20.59	1.76		4.10	0.84
Factor 3 To enjoy having a good time							
To have a good time with friends and family	54.71	34.12	1.76	0.59		4.57	0.57
To relax	52.35	37.06	3.53			4.53	0.57
To enjoy the scenery	58.24	35.29	0.59			4.61	0.50

*Scale 1-5: 5=strongly agree, 4=agree, 3=neither agree nor disagree, 2=disagree, 1=strongly disagree

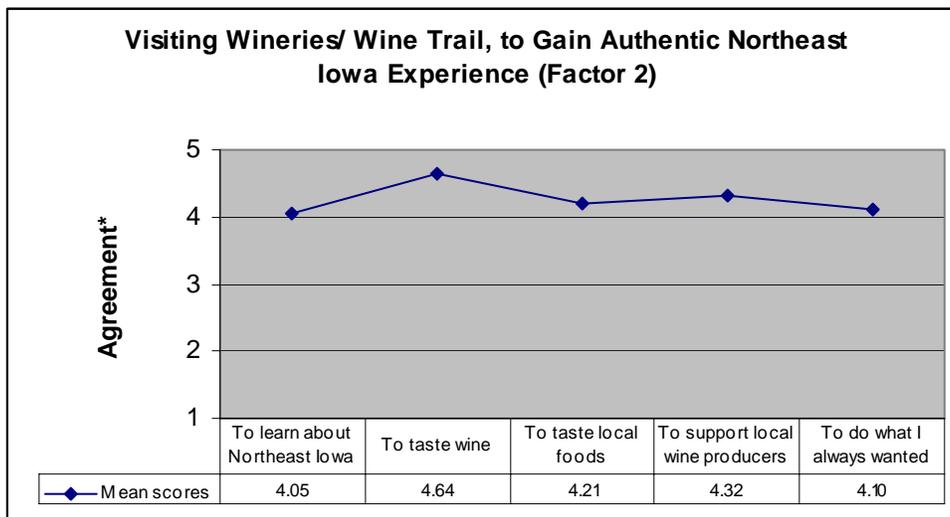
The main motives for visiting the wineries/ wine trail, as indicated by survey respondents, were (in order by mean scores) “to taste wine” (\underline{M} =4.64), “to enjoy the scenery” (\underline{M} =4.61), “to have a good time with friends and family” (\underline{M} =4.57), “to relax” (\underline{M} =4.53), “to support local wine producers” (\underline{M} =4.32), and “to taste locally produced foods” (\underline{M} =4.21).

Figure 14 Travel motivations for visiting the wineries/ wine trail: Factor 1 (mean scores)



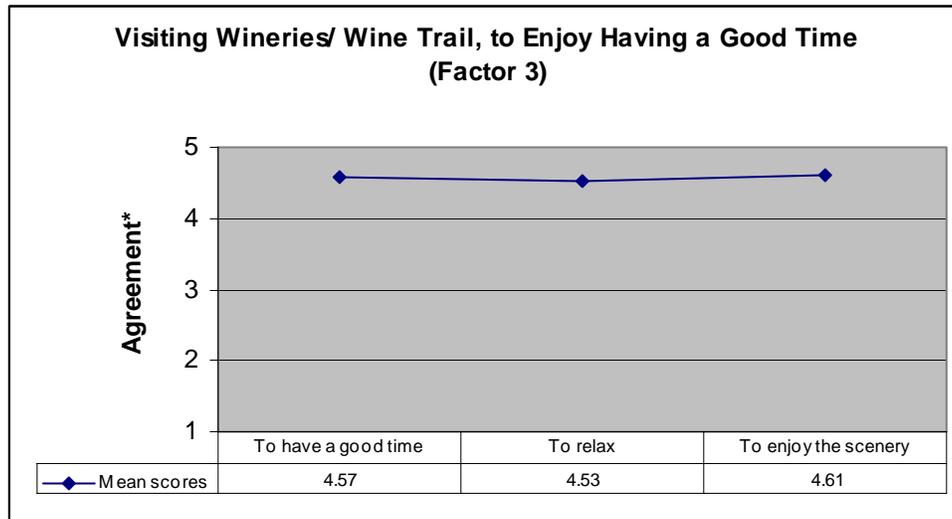
*Scale 1-5: 5=strongly agree, 4=agree, 3=neither agree nor disagree, 2=disagree, 1=strongly disagree

Figure 15 Travel motivations for visiting the wineries/ wine trail: Factor 2 (mean scores)



*Scale 1-5: 5=strongly agree, 4=agree, 3=neither agree nor disagree, 2=disagree, 1=strongly disagree

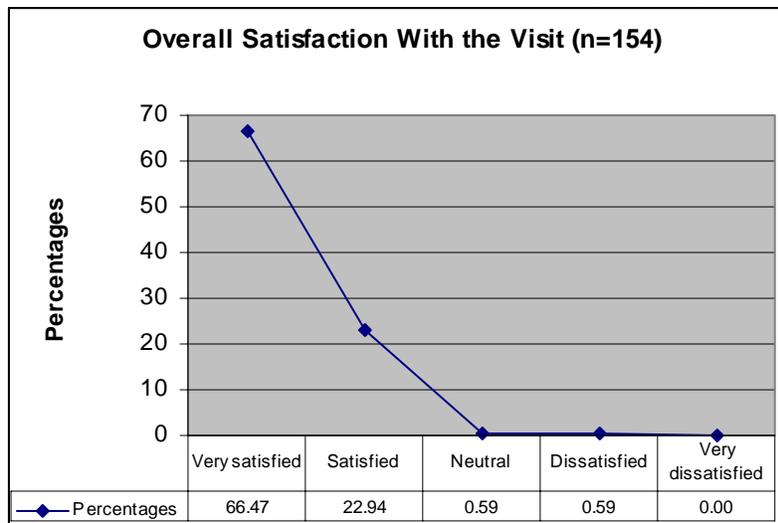
Figure 16 Travel motivations for visiting the wineries/ wine trail: Factor 3 (mean scores)



*Scale 1-5: 5=strongly agree, 4=agree, 3=neither agree nor disagree, 2=disagree, 1=strongly disagree

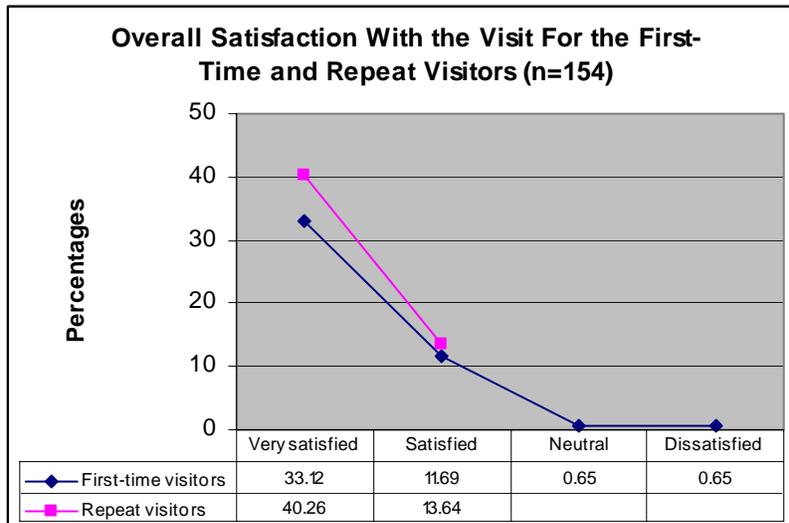
When asked about the overall satisfaction with the visit, over sixty six percent of respondents (n=113) indicated they were very satisfied, twenty three percent (n=39) were satisfied, and only one percent (n=2) were either “neutral” or “dissatisfied” (see Figure 17). The mean score of the overall satisfaction was 4.71 on a 5-point Likert-type scale, where 5=very satisfied, 4=satisfied, 3=neutral, 2=dissatisfied, 1=very dissatisfied (median 5).

Figure 17 Overall satisfaction with the visit (percentages)



The overall satisfaction with the visit for first-time and repeat visitors was compared (see Figure 18). The levels of satisfaction were slightly higher for the repeat visitors (53.9% of repeat visitors (n=83) were either “very satisfied” or “satisfied” with the visit), as compared to the satisfaction of the first-time visitors (44.81% of the first-time visitors (n=69) indicated they were either “very satisfied” or “satisfied” with the visit).

Figure 18 Overall satisfaction with the visit: first time versus repeat visitors (percentages)

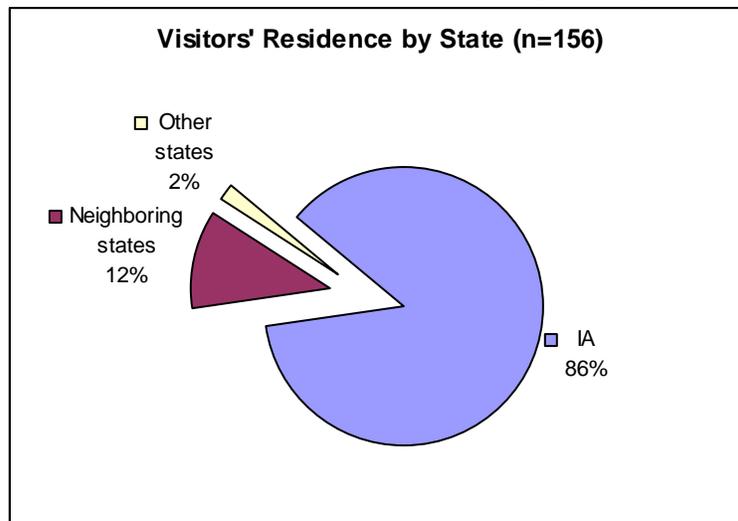


E. Visitors’ Demographic Profile and Socio-Economic Status

The last part of the questionnaire survey asked questions about the demographic characteristics, socio-economic status of the visitors, and where they came from.

Residence of the visitors is shown in Figure 19. The vast majority of respondents (98%, or n=156) were Americans, two respondents came from Canada, one respondent was British and one came from China. In regard to visitors’ residence by state, eighty six percent of respondents (n=135) came from Iowa, twelve percent (n=18) came from the neighboring states of Wisconsin (n=7), Illinois (n=5), Minnesota (n=4), and Nebraska (n=2), and only two percent (n=3) came from other US States (Colorado, Ohio and Pennsylvania).

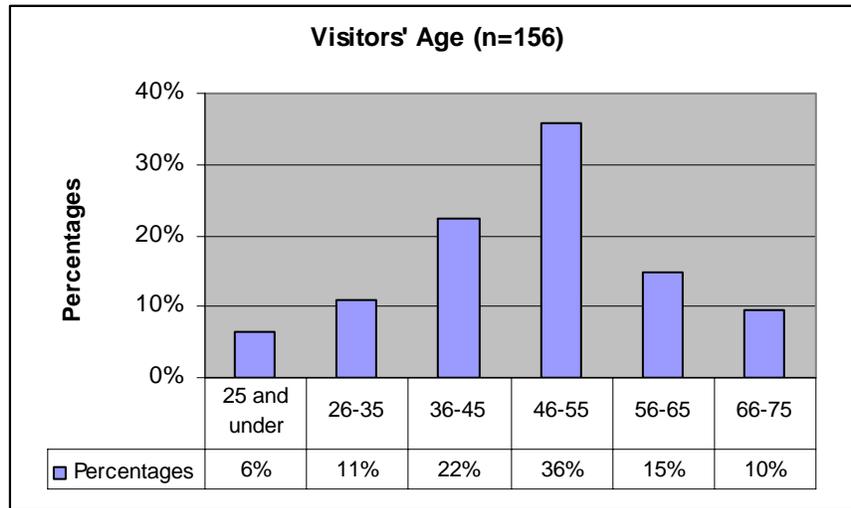
Figure 19 Visitors’ residence by state (percentages)



The largest group of the visitors – fifty eight percent (n=91) – was of middle age, 36 to 55 yrs. age bracket (see Figure 20). Fifteen percent of the respondents were 56 to 65yrs. (n=23), eleven percent were

26 to 35yrs. (n=17), ten percent were 66 to 75yrs. (n=15), and six percent were 21 to 25yrs. (n=10). The mean age of respondents was 47.5yrs (median 49).

Figure 20 Visitors' age (percentages)



A slight majority of respondents – sixty percent (n=95) – were female, and forty percent (n=64) were male (see Figure 21). The largest group of survey respondents – sixty percent (n=97) – were college graduates, twenty five percent (n=40) had post graduate degrees, thirteen percent (n=20) were high school graduates, and one percent (n=1) had a technical school education (see Figure 22).

Figure 21 Visitors' gender (percentages)

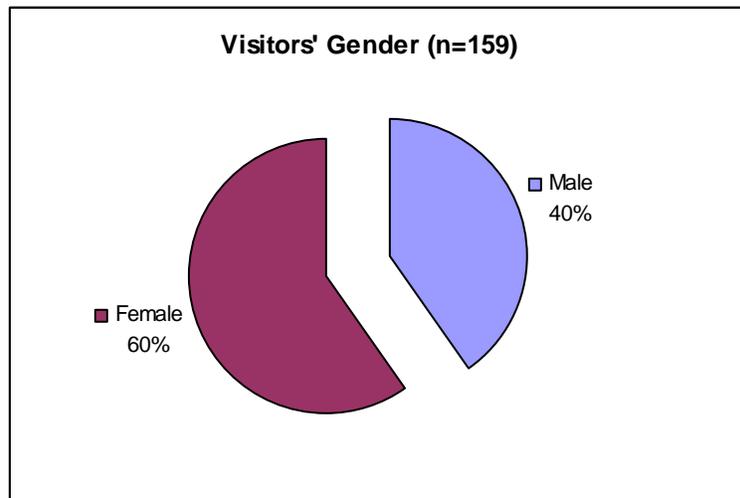
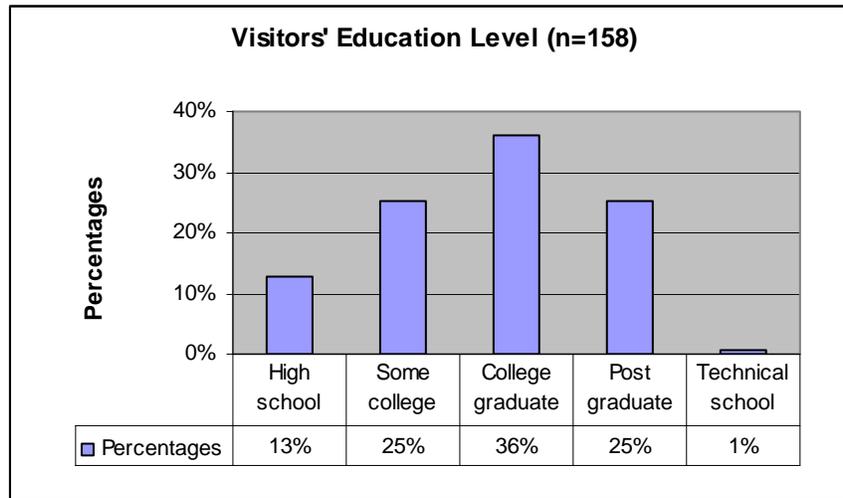


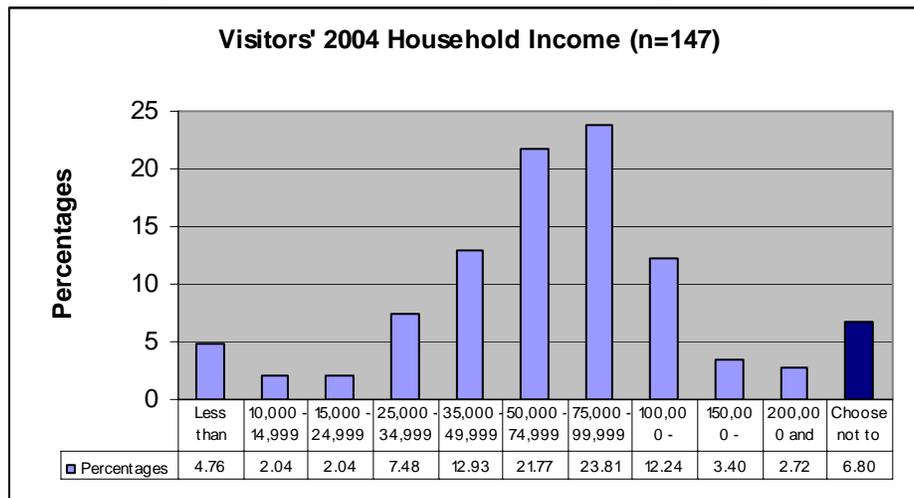
Figure 22 Visitors' education level (percentages)



Finally, survey respondents were asked about their 2004 annual household income before taxes. Over forty five percent of the visitors (n=67) indicated their 2004 household income as \$50,000 - \$99,999 per year, eighteen percent (n=27) indicated they earned over \$100,000 per year, and over twenty nine percent (n=43) earned less than \$35,000 per year (see Figure 23). In addition, less than seven percent of the visitors (n=10) chose not to disclose their annual household income.

According to the data from the US Census Bureau, the median household income in Iowa in 2004 was \$43,042 and \$44,473 on the federal level (US Census Bureau, 2004). Therefore, visitors to the Iowa Wine Trail tend to represent a group of the population with a higher income level.

Figure 23 Visitors' 2004 household income (percentages)



Discussion of Findings

A. Party and Trip Characteristics

Table 10 summarizes visitors' party and trip characteristics.

Table 10 Party and trip characteristics

First/ repeat visit to a winery in Eastern Iowa	Repeat visitors – 52% First-time visitors – 48%
Number of previous visits to wineries in Eastern Iowa within previous year	<i>(in descending order)</i> Once/ twice – 58% Three times – 19% Four times – 11% More than five times – 13% Mean number of previous visits - 2.64
Wineries visited within the last year	<i>(in descending order)</i> Tabor Home, Eagles Landing, Daly Creek, Park Farm, Sutliff Cider, Winneshiek Wildberry, others
Familiarity with the Iowa Wine Trail	Familiar – 54% Not familiar – 46%
Primary purpose of the trip	<i>(in descending order)</i> To follow the Iowa Wine Trail – 43% Specifically to visit this winery – 30% A side trip – 15% Visiting friends or relatives – 9% Business /pleasure trip – 3%
Day/ overnight trip	Day trip – 60% Overnight trip – 40%
Nights stayed	<i>(in descending order)</i> One night – 16% Two nights – 11% Three to five nights – 3% Mean number of nights – 1.63
Type of accommodation used	<i>(in descending order)</i> Hotels/ motels – 18% Bed and breakfast – 15% Staying with friends/ relatives – 5% Outside local area – 3% Campground – 2%
Traveling as an organized group	Not part of an organized group – 97% Part of an organized group – 3%
Travel party size	Party of two – 54% Party of four – 27% Mean travel party size - 3.51, median - 2
Main sources of information about the winery	<i>(in descending order)</i> Word of mouth – 40% Websites – 27% Brochures – 22% Newspapers – 18% Convention Bureaus/ Visitor Centers – 8% Travel publications and magazines – 8%

B. Spending Patterns

Tables 11-13 compare spending patterns of the visitors to the wineries in Eastern Iowa, with similar spending patterns of visitors to place-based food festivals in Northeast Iowa, and visitors to Silos and Smokestacks National Heritage Area (SSNHA).

Table 11 Mean expenditures per travel party for Iowa Wine Trail visitors, visitors to place-based food festivals, and visitors to SSNHA

Spending category	Iowa Wine Trail	Place-based food festivals*	Visitors to SSNHA**
Lodging	135.33	68.50	175.4
Buying wine at the winery	72.07	N/A	N/A
Purchasing locally produced foods	N/A	16.86	N/A
Restaurant and bar meals and drinks	67.10	30.86	73.5
Shopping (souvenirs etc.)	60.08	31.42	86.4
Admissions	42.81	16.52	37.7
Transportation/ gas	42.72	26.38	45.5
Groceries/ convenience store food and drink	28.99	19.64	41.6
Total spending	206.52	70.04	236.3

*Source: STEP- UNI (2005). A Study of Place-Based Food Tourism in Northeast Iowa Communities

**Source: STEP-UNI (2004). Silos & Smokestacks National Heritage Area Tourism Study

Lodging remains the highest spending category across all three studies, followed by restaurant and bar meals and drinks, and shopping. The mean total spending is highest for the visitors to SSNHA - \$236.30; however the median spending is highest for the Iowa Wine Trail visitors - \$155 (see Table 12).

Table 12 Mean and median total spending per travel party for Iowa Wine Trail visitors, visitors to place-based food festivals, and visitors to SSNHA

Mean/ median total spending, per party	Iowa Wine Trail	Place-based food festivals*	Visitors to SSNHA**
Mean	206.52	70.04	236.30
Median	155.00	50.00	140.00

*Source: STEP- UNI (2005). A Study of Place-Based Food Tourism in Northeast Iowa Communities

**Source: STEP-UNI (2004). Silos & Smokestacks National Heritage Area Tourism Study

Table 13 compares the mean and median spending party size for Iowa Wine Trail visitors, visitors to place-based food festivals, and visitors to SSNHA.

Table 13 Mean and median spending party size for Iowa Wine Trail visitors, visitors to place-based food festivals, and visitors to SSNHA

Mean/ median spending party size	Iowa Wine Trail	Place-based food festivals*	Visitors to SSNHA**
Mean	2.8	2.65	2.8
Median	2	2	2

*Source: STEP- UNI (2005). A Study of Place-Based Food Tourism in Northeast Iowa Communities

**Source: STEP-UNI (2004). Silos & Smokestacks National Heritage Area Tourism Study

C. Economic Impact of Wine Visitors in Clayton, Dubuque and Jackson Counties

The IMPLAN Input-Output (I-O) Model was used to estimate the economic effect of wine visitors' expenditures in 10 counties of Eastern Iowa. The model included Clayton, Dubuque, Jackson, and their contiguous counties in the state of Iowa. The area under examination is 6,503 square miles, with the population of 294,538 residents, or 125,047 households. The total number of wine visitors included in the IMPLAN model was estimated at 12,644 (the total number of visitors to the wineries, as reported by wineries, over duration of the study, was 21,800; 71.76% of those visitors came to specifically visit the winery, or follow the Iowa Wine Trail; hence, the total number of "wine visitors" was calculated as $21,800 \times 71.76\% = 12,644$).

Initial wine visitors' expenditures of \$1.82 million generated \$2.65 million in terms of sales, \$1.35 million in terms of personal income, and created 53 new jobs. For every dollar spent by wine visitors, an output of \$1.45 was generated in terms of sales (gross output multiplier 1.45). Furthermore, an estimated income multiplier of 1.46 and employment multiplier of 1.23 were generated. Table 14 provides a comparison of direct, indirect and induced economic impact resulting from expenditures of visitors to the wineries in Eastern Iowa, visitors to place-based food festivals in Northeast Iowa, and visitors to Silos and Smokestacks National Heritage Area (SSNHA).

Table 14 Summary of economic impact of wine visitors in comparison with visitors to place-based food festivals in Northeast Iowa, and visitors to SSNHA

Industry	Direct	Indirect	Induced	Total	Iowa Wine Trail multipliers	Place-based food festivals*	SSNHA multipliers**
Total economic impact (\$ sales/ output)	1,823,472	404,013	418,145	2,645,627	1.45	1.61	1.66
Total economic impact (\$ value added/ income)	921,223	198,605	227,942	1,347,771	1.46	1.64	1.72
Total economic impact (employment/ jobs)	42.6	4.3	4.6	52.6	1.23	1.29	1.34

Source: IMPLAN model for Clayton, Dubuque, Jackson, and their contiguous counties in Iowa

*Source: STEP- UNI (2005). A Study of Place-Based Food Tourism in Northeast Iowa Communities

**Source: STEP-UNI (2004). Silos & Smokestacks National Heritage Area Tourism Study

Higher multipliers generated by place-based food tourism and visitors to Silos and Smokestacks National Heritage Area, can be explained in part by the larger area under examination (e.g. 30 counties under examination for the place-based food festivals impact, as compared to 10 counties under examination for the Iowa Wine Trail visitors impact).

D. Travel Motivations and Satisfaction

The main motives for visiting the wineries/ wine trail, as indicated by survey respondents, were (in order by mean scores): *to taste wine, to enjoy the scenery, to have a good time with friends and family, to relax, to support local wine producers, and to taste locally produced foods*. The main motive for most of the visitors was to enjoy having a good time, followed by the motive to gain authentic Eastern Iowa experience, and to learn about the wine and winemaking process. Mean scores for travel motivations of the visitors to the wineries are provided in Table 15.

Table 15 Travel motivations for visiting the wineries/ wine trail (mean scores)

Travel motivation	Mean score*
To taste wine	4.64
To enjoy the scenery	4.61
To have a good time with friends and family	4.57
To relax	4.53
To support local wine producers	4.32
To taste locally produced foods	4.21
To do something I had always wanted to do	4.10
To learn about things and places in Northeast Iowa	4.05
To learn about the winemaking process	3.82
To gain knowledge about wine and cheese pairings	3.76
To learn about grape varieties	3.61
To learn about sparkling processes for ciders and wines	3.36
To learn about wine label reading	3.25

*Scale 1-5: 5=strongly agree, 4=agree, 3=neither agree nor disagree, 2=disagree, 1=strongly disagree

In addition, visitors were highly satisfied with their experience at Eastern Iowa wineries – almost 90% of respondents were either very satisfied or satisfied, and only 1% were either neutral or dissatisfied with their visit. The mean score of the overall satisfaction was 4.71 (median 5). Furthermore, repeat visitors were slightly more satisfied with their experience at the wineries as compared to the first-time visitors (53.9% of repeat visitors were either very satisfied or satisfied with the visit, as compared to 44.81% for the first-time visitors).

E. Visitors' Demographic Profile and Socio-Economic Status

Table 16 summarizes visitors' demographic profile and socio-economic status and compares visitors to the Iowa Wine Trail with the visitors to place-based food festivals and visitors to Silos and Smokestacks National Heritage Area.

Table 16 Characteristics of visitors to the Iowa Wine Trail in comparison with visitors to place-based food festivals in Northeast Iowa, and visitors to SSNHA

Visitors' characteristic	Iowa Wine Trail	Place-based food festivals*	Visitors to SSNHA **
Visitors' residence by state	Iowa – 86% Neighboring states – 12% Other US states – 2%	Iowa - 98.8% Illinois – 1.2%	N/A
Visitors' age	[25 and under] – 6%	13.9%	5.8%
	[26-35] – 11%	31.1%	12.2%
	[36-45] – 22%	24.5%	20%
	[46-55] – 36%	12.6%	21.5%
	[56-65] – 15%	9.3%	23.1%
	[66-75] – 10%	4.6%	11.8%
	Mean age - 47.5yrs. Median age - 49yrs.	Mean age – 40.48yrs. Median age - 38yrs.	Mean age – 50.9yrs. Median age - 51yrs.
Visitors' gender	Female – 60% Male – 40%	Female – 52.3% Male – 47.7%	Female – 56.5% Male – 43.5%
Visitors' education level	High school – 13%	27.4%	17.5%
	Some college – 25%	26%	25.9%
	College graduate – 36%	33.6%	26.3%
	Post graduate – 25%	12.2%	26%
	Technical school – 1%	0.8%	2.3%
Visitors' 2004 household income	[Less than 9,999] – 4.76%	1.9%	3.9%
	[10,000 - 14,999] – 2.04%	2.9%	1.3%
	[15,000 - 24,999] – 2.04%	6.7%	5.4%
	[25,000 - 34,999] – 7.48%	16.3%	10.3%
	[35,000 - 49,999] – 12.93%	16.3%	16.7%
	[50,000 - 74,999] – 21.77%	22.1%	22.7%
	[75,000 - 99,999] – 23.81%	13.5%	11.1%
	[100,000 - 149,000] – 12.24%	7.7%	9.4%
	[150,000 - 199,000] – 3.40%	0%	1.9%
[200,000 and above] – 2.72%	1.9%	1.5%	
	Choose not to answer – 6.80%	10.6%	15.8%

*Source: STEP- UNI (2005). A Study of Place-Based Food Tourism in Northeast Iowa Communities

**Source: STEP-UNI (2004). Silos & Smokestacks National Heritage Area Tourism Study

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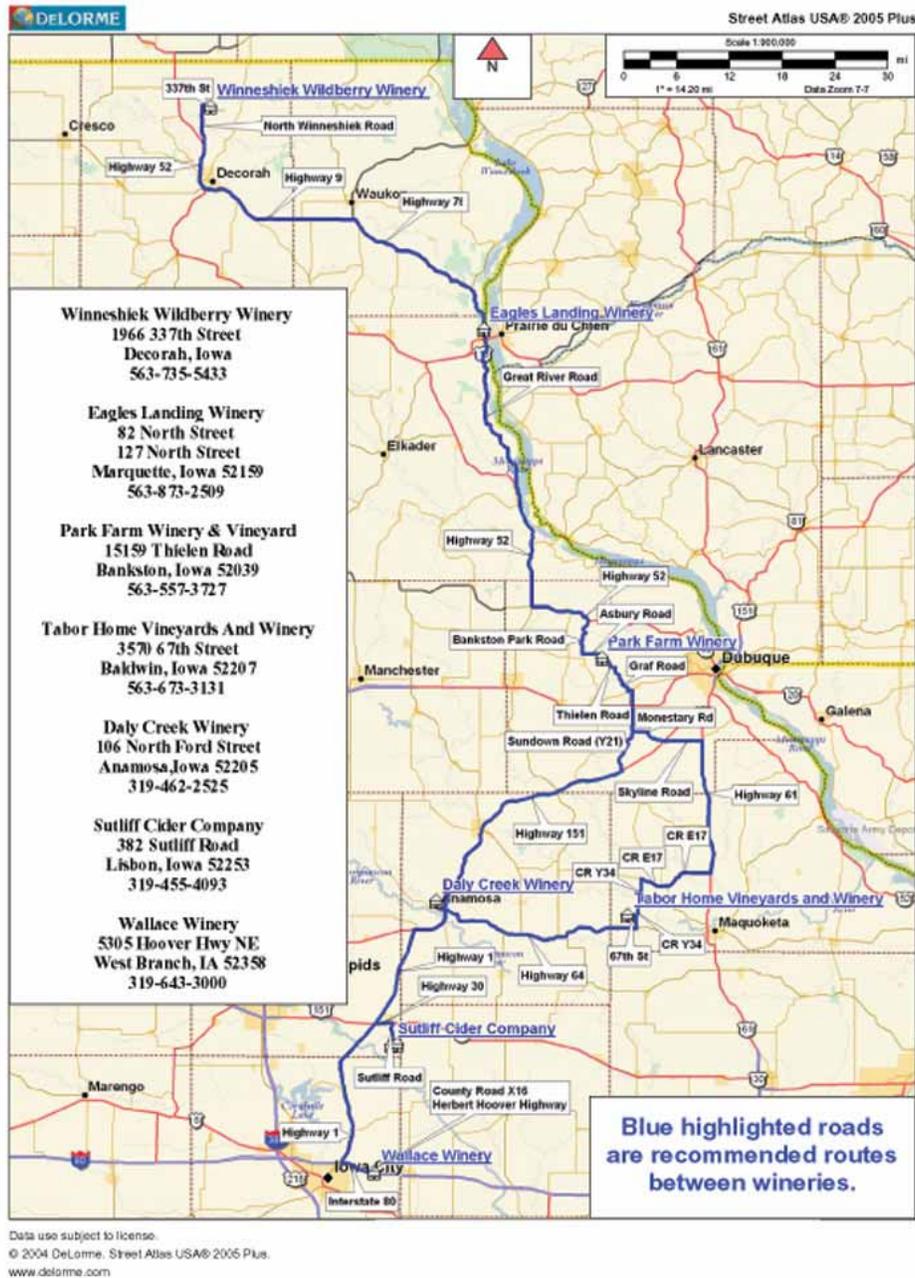
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Appendix 1 Map of the Iowa Wine Trail

Figure 24 shows the map of the Iowa Wine Trail. The map was taken from the Iowa Wine Trail Website <http://www.iowawinetrail.com/index.php>.

Figure 24 Iowa Wine Trail



Source: The Iowa Wine Trail, 2006

Appendix 2 Questionnaire Survey Development of a Regional Wine Culture in Eastern Iowa

Please take a few moments to fill out this questionnaire. Limestone Bluffs Resource Conservation & Development Area, and the Sustainable Tourism and the Environment Program at the University of Northern Iowa are identifying the economic benefits resulting from the creation of the regional wine culture in Eastern Iowa. Your answers will help us market these wineries. Thank you for your time and assistance.

1. Is this your first visit to a winery in Eastern Iowa? Yes No

If no, how many times have you visited in the last 12 months? _____

Which wineries have you visited? (Check all that apply)

- Tabor Home Vineyards and Winery (Baldwin) Sutliff Cider Company (Lisbon)
 Eagles Landing Winery (Marquette) Park Farm Winery (Durango)
 Daly Creek Winery (Anamosa) Winneshiek Wildberry Winery (Decorah)
 Other (please specify) _____

2. Are you familiar with the Iowa Wine Trail? Yes No

3. What is the primary purpose of your visit? (Check one)

- Specifically to visit this winery A side trip or stop on a trip to another primary destination
 Visiting friends or relatives Business or combined business/pleasure trip
 To follow the Iowa Wine Trail

4. What were the main sources of information about this winery? (Check all that apply)

- Convention Bureau/ Visitor Center Website
 Travel publication Brochure
 Newspaper Magazine (List if possible) _____
 Word of mouth Other medium (Please describe) _____

5. Is your visit part of a: Day trip or Overnight trip How many nights _____

If an overnight trip, what type of lodging are you using or do you plan to use in the local area?

- Hotel or motel B & B
 Campground Staying with friends or relatives in the area
 Staying overnight outside the local area or just passing through

6. Did you travel to this region as part of an organized group tour? Yes No

7. The total number of people (including yourself) in your immediate traveling party is: _____ people

8. How much money do you and other members of your travel party plan to spend on your trip? Include the amount of money spent so far and money you intend to spend. Report all spending **within the Northeast Iowa region**. (Enter spending to the nearest dollar in each category below. Leave space blank if you spent nothing in a category.)

Spending categories	Spending in Northeast Iowa
Lodging (hotel, motel, campground, cabin)	\$ _____
Restaurant and bar meals and drinks	\$ _____
Grocery/convenience store food and drink	\$ _____
Transportation expenses/ Gas	\$ _____
Admissions (recreation and entertainment)	\$ _____
Shopping (e.g., souvenirs, film, clothes)	\$ _____
Buying wine at the winery	\$ _____

9. How many people in your travel party do these expenses cover? _____

10. Please indicate your agreement with the following motives for visiting the wineries/ wine trail?
(Check one response for each item)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
To have a good time with friends and family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To relax	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To enjoy the scenery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To do something I had always wanted to do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To learn about things and places in Northeast Iowa	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To taste wine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To learn about the winemaking process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To learn about grape varieties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To learn about sparkling processes for ciders & wines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To learn about wine label reading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To gain knowledge about wine & cheese pairings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To support local wine producers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
To taste locally produced foods <i>(please specify)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Overall, how satisfied are you with this visit?
 Very satisfied Satisfied Neutral Dissatisfied Very dissatisfied

About You

12. Where do you live? City _____ State _____ Country _____ Postal zip code _____

13. You are: _____ years old You are ___ Female ___ Male

14. What level of education have you completed? (Select one)

- Some High School Some College Post Graduate Work Technical School
 High School Graduate College Graduate Post Graduate Degree Other _____

15. Which statement best describes your total 2004 annual household income (from all sources and before taxes)? *(Check one)*

- Less than \$9,999 \$25,000-34,999 \$75,000-99,999 \$200,000 and above
 \$10,000-14,999 \$35,000-49,999 \$100,000-149,999 Choose not to answer
 \$15,000-24,999 \$50,000-74,999 \$150,000-199,999

16. And finally, please write any further comments you might have about your trip to this winery:

THANK YOU VERY MUCH FOR YOUR INFORMATION! ENJOY YOUR DAY!

Appendix 3 Alternative IMPLAN Model

Table 17 Economic impact of wine visitors in Eastern Iowa

Industry	Output	Value added/ Income	Jobs
Agriculture	27,400	4,107	0.1
Mining	20	12	0.0
Utilities	43,867	24,769	0.1
Construction	17,102	6,431	0.2
Manufacturing	152,852	57,692	0.6
Transportation and warehousing	39,670	21,069	0.5
Retail trade	932,488	458,188	21.7
Information services	41,416	17,779	0.5
Finance, insurance & real estate	86,201	54,976	1.1
Professional and technical services	72,752	48,892	1.5
Other services	1,179,320	635,812	31.9
Government	100,911	56,269	0
Total effect	2,693,999	1,385,996	58.3
Multiplier	1.48	1.49	1.24

Source: IMPLAN model for Clayton, Dubuque, Jackson, and their contiguous counties in Iowa

Table 18 Economic impact of wine visitors in Eastern Iowa (\$ sales/output)

Industry	Direct	Indirect	Induced	Total
Agriculture	0	17,525	9,877	27,400
Mining	0	14	6	20
Utilities	0	28,783	15,085	43,867
Construction	0	13,917	3,186	17,102
Manufacturing	0	94,019	58,829	152,852
Transportation and warehousing	0	27,469	12,202	39,670
Retail trade	842,691	22,060	67,739	932,488
Information services	0	33,329	8,087	41,416
Finance, insurance & real estate	1,365	42,301	42,533	86,201
Professional and technical services	2	57,917	14,833	72,752
Other services	951,122	58,309	169,883	1,179,320
Government	24,864	7,775	68,273	100,911
Total	1,820,044	403,418	470,533	2,693,999

Source: IMPLAN model for Clayton, Dubuque, Jackson, and their contiguous counties in Iowa

Table 19 Economic impact of wine visitors in Eastern Iowa (\$ value added/ income)

Industry	Direct	Indirect	Induced	Total
Agriculture	0	2,608	1,500	4,107
Mining	0	8	4	12
Utilities	0	16,518	8,249	24,769
Construction	0	5,290	1,141	6,431
Manufacturing	0	33,766	23,919	57,692
Transportation and warehousing	0	15,362	5,709	21,069
Retail trade	406,552	13,020	38,616	458,188
Information services	0	13,903	3,879	17,779
Finance, insurance & real estate	952	28,655	25,369	54,976
Professional and technical services	1	38,600	10,291	48,892
Other services	516,358	3,2675	86,779	635,812
Government	1,624	3,594	51,052	56,269
Total	925,487	203,999	256,508	1,385,996

Source: IMPLAN model for Clayton, Dubuque, Jackson, and their contiguous counties in Iowa

Table 20 Economic impact of wine visitors in Eastern Iowa (employment/ jobs)

Industry	Direct	Indirect	Induced	Total
Agriculture	0.0	0.1	0.0	0.1
Mining	0.0	0.0	0.0	0.0
Utilities	0.0	0.0	0.0	0.1
Construction	0.0	0.2	0.0	0.2
Manufacturing	0.0	0.4	0.2	0.6
Transportation and warehousing	0.0	0.5	0.1	0.5
Retail trade	19.8	0.5	1.6	21.7
Information services	0.0	0.3	0.0	0.5
Finance, insurance & real estate	0.0	0.6	0.4	1.1
Professional and technical services	0.0	1.3	0.2	1.5
Other services	27.2	1.2	3.1	31.9
Government	0	0	0	0
Total	47.0	5.2	5.7	58.3

Source: IMPLAN model for Clayton, Dubuque, Jackson, and their contiguous counties in Iowa