

**Finger Lakes Wine Country
Economic Impacts, 1997-2001p**
Chemung, Schuyler and Steuben Counties

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prepared for the

Finger Lakes Wine Country Marketing Association
(representing Chemung, Schuyler and Steuben counties)

Dean Runyan Associates
833 SW Eleventh Avenue, Suite 920
Portland, Oregon 97205
503/226-2973
www.deanrunyan.com

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EXECUTIVE SUMMARY

- Visitors to the Finger Lakes Wine Country (Chemung, Schuyler and Steuben counties) spent \$294 million in 2001. Travel spending in the Finger Lakes Wine Country has increased an average of 5.3 percent per year since 1997. Most of this increase has occurred in the past two years. Travel spending increased by 15.6 percent from 1999 to 2001, as compared to 6.5 percent from 1997 to 1999.
- In total, 6,190 jobs were generated by travel spending in the Finger Lakes Wine Country. Visitor spending *directly* generated 4,770 jobs in 2001, with earnings of \$70.8 million. The re-spending of travel-generated earnings by employees and the travel-generated receipts of businesses created an additional 1,420 jobs, with earnings of \$44.5 million.
- Local and state tax revenues generated by visitor spending in the Finger Lakes Wine Country totaled \$19.4 million dollars in 2001. Local tax receipts (bed taxes and sales taxes) were \$7.7 million. State tax receipts (sales taxes, gasoline taxes and income taxes) were \$11.7 million.
- Visitors to Chemung County spent \$94.9 million in 2001. This spending directly generated 1,480 jobs, with earnings of \$22.3 million. The local and state tax receipts associated with visitor spending in Chemung County amounted to \$6.2 million.
- Visitors to Schuyler County spent \$42.4 million in 2001. This spending directly generated 720 jobs, with earnings of \$10.5 million. The local and state tax receipts associated with visitor spending in Schuyler County amounted to \$2.4 million.
- Visitors to Steuben County spent \$156.6 million in 2001. This spending directly generated 2,560 jobs, with earnings of \$38.0 million. Local and state tax receipts associated with visitor spending in Steuben County amounted to \$10.8 million.
- Visitors to the Finger Lakes Wine Country spent \$74 million on eating & drinking in restaurants and lodging establishments, \$73 million on retail purchases (including wine), \$57 million on ground transportation, \$40 million on accommodations, and \$36 million on recreation.
- Most of the jobs that were directly generated by travel spending in the Finger Lakes Wine Country were in service-related businesses. Restaurants, lodging establishments and a variety of recreational businesses and facilities had 3,850 jobs in 2001 that were directly generated by visitor spending.

PREFACE

The purpose of this study is to document the economic significance of the travel industry in Chemung, Schuyler and Steuben counties. Detailed estimates of travel spending, the employment and earnings generated by this spending, and travel-generated tax receipts from 1997 through 2001 are provided in this report. The estimates for 2001 are preliminary. In addition, the report provides estimates of the number of days visitors spend in the three-county area and the secondary (indirect and induced) impacts associated with visitor spending.

Dean Runyan Associates prepared this study for the Finger Lakes Wine Country Tourism Marketing Association. Dean Runyan Associates has specialized in research and planning services for the travel, tourism and recreation industry since 1984. With respect to economic impact analysis, the firm developed and currently maintains the Regional Travel Impact Model (RTIM), a proprietary computer model for analyzing travel economic impacts at the state, regional and local level. Dean Runyan Associates also has extensive experience in project feasibility analysis, market evaluation, survey research, and travel and tourism planning.

Many individuals and agencies provided information and advice for this report. Kevin Keeley of the Chemung County Chamber of Commerce, Margaret Cook of the Schuyler County Chamber of Commerce, and David Holder of the Steuben County Conference and Visitors Bureau provided invaluable assistance. Finally, special thanks are due to J. Anne Parker, Managing Director of the Finger Lakes Wine Country Tourism Marketing Association. Without her support and assistance, this report would not have been possible.

Dean Runyan Associates
833 SW 11th Ave., Suite 920
Portland, OR 97205

(503) 226-2973
info@deanrunyan.com
www.deanrunyan.com

I. INTRODUCTION

Visitors traveling in the Finger Lakes Wine Country represent an important component of the region's economy. Travel to the Finger Lakes Wine Country generates valuable business sales, earnings, employment and tax receipts for local jurisdictions and the state. Further, the viability of many businesses within the region is linked to the visitor industry.

OBJECTIVES

This report describes the direct economic impacts of travel in Chemung, Schuyler and Steuben counties from 1997 through 2001. The estimates for 2001 are preliminary. In addition, this report includes estimates of visitor days by type of visitor accommodation and the secondary (indirect and induced) impacts associated with visitor spending. A primary objective of this research is to provide reliable, detailed estimates, which allow comparisons from year-to-year at the region and county level.

DIRECT IMPACTS

The estimates of the direct impacts associated with traveler spending in Chemung, Schuyler and Steuben counties were produced using the Regional Travel Impact Model (RTIM) developed by Dean Runyan Associates. The input data used to detail the economic impacts of the travel industry in the three-county area were gathered from various local, state and federal sources.

Travel impacts consist of estimates of travel spending and the employment, earnings, and state and local taxes generated by this spending. These estimates are also broken out by type of traveler accommodation and by the type of business service. A description of RTIM methodology is included in Appendix A.

SECONDARY (INDIRECT AND INDUCED) IMPACTS

Direct impacts are reported for Chemung, Schuyler and Steuben counties. Secondary employment and earnings impacts over and above direct impacts are reported for the three-county area only for the year 2001. These indirect and induced impacts are generated from the direct impacts produced by the RTIM, discussed above, and an input-output model of the area economy prepared by the Minnesota IMPLAN Group, Inc. Indirect impacts represent the purchases of goods and services from other firms by businesses that directly receive expenditures from travelers. Hotels, for example, purchase maintenance services from independent contractors. Induced impacts represent the purchase of goods and services by employees whose earnings are in part derived from travel expenditures. The sum of the direct, indirect and induced impacts

equals the total impact of all spending by visitors in the state. The “multiplier” refers to the ratio of the total impacts to the direct impacts for employment or earnings.

TYPES OF TRAVEL IMPACTS INCLUDED

Most of the travel that occurs in the Finger Lakes Wine Country is included in the scope of this analysis. All trips to Chemung, Schuyler and Steuben counties by U.S. residents and international visitors are included.

The impacts associated with both overnight and day travel are included if the travelers either remain at the destination overnight, or the destination was more than fifty miles *one-way* from the traveler's home. These definitions are used to screen and, if necessary, to interpret and adjust local data used for travel impact measurements. The most conservative interpretation is employed where data limitations cause deviations from the above definition.

The terms “traveler” and “visitor” are used interchangeably in this report. Both represent a person who is traveling in the three-county area away from his or her home, on a trip as defined above. The purpose of such travel can be for business, pleasure, shopping, to attend meetings, or for personal, medical or educational purposes.

This analysis focuses on travel and tourism as a component of local and regional economies and therefore focuses on *destination-specific* impacts. Air transportation is not included in this analysis even though connecting air service to Elmira is a major factor for the regions visitor industry.

IMPACT CATEGORIES

The specific categories of travel impacts included in this analysis are as follows:

Impact Category	Description
Expenditures	Purchases by travelers during their trip, including lodging taxes and other applicable local and state taxes paid by the traveler at the point of sale.
Total Earnings	The wage and salary disbursements, earned benefits, and proprietor income of employees that receive travel expenditures. Only the earnings that are attributed to travel expenditures are included.
Employment	All employment associated with the above earnings. This includes wage and salary workers and proprietors, and full- and part-time positions. The employment estimates are <u>not</u> full time equivalents (FTE's). Individuals may be employed in more than one job.
Local Tax Receipts	Tax receipts collected by counties and municipalities, as levied on applicable travel-related purchases. Consists of county room taxes and local sales taxes. Property taxes are not included.
State Tax Receipts	State sales taxes, gasoline taxes, auto rental taxes, and personal and business income taxes

VISITOR CATEGORIES

Travelers are classified according to the type of accommodation in which they stay. The types of visitors are as follows:

Type of Visitor	Description
Hotel/Motel Guest	Travelers staying in hotels, motels, resorts, guest ranches, and other commercial accommodations where sales or lodging taxes are collected.
Bed & Breakfast Guest	Travelers staying in Bed & Breakfast establishments.
Private Camper	Travelers staying in a privately owned (i.e., commercial) campground.
Public Camper	Travelers staying in publicly managed campgrounds such as those managed by the State of New York.
Private Home Visitor	Travelers staying as guests with friends or relatives.
Vacation Home Visitor	Travelers using their own vacation home or timeshare and those borrowing or renting a vacation home where sales or lodging taxes are not collected.
Day Visitor	Visitors who reside outside of Chemung, Schuyler and Steuben counties and whose trip (at least 50 miles one way) does not include an overnight stay in the three-county area.

INTERPRETATION OF IMPACT ESTIMATES

Users of this report should be aware of several issues regarding the interpretation of the impact estimates contained herein:

- The estimates in this report are expressed in *current* dollars. There is no adjustment for inflation, with the exception of the graph on page 12.
- The employment categories found in the impact tables do not perfectly correspond to the industry categories used in various state and federal government publications. The employment categories used in this report refer to a particular business service, as opposed to an industry classification. For example, the *accommodations* category in this report includes only that employment attributable to spending on paid accommodations. It does not include employment attributable to spending on eating and drinking in a hotel restaurant or recreational services provided at a resort. In addition, government employees are not distinguished from the employees of commercial enterprises, as is often the case in other data series published by government agencies.
- The estimates of travel impacts published in this report will necessarily differ somewhat from estimates generated from different models, methodologies and data sources.

REPORT CONTENTS

Section II provides estimates of visitor days in Chemung, Schuyler and Steuben counties by type of traveler accommodation. Section III provides economic impact estimates for the three counties.

Appendix A provides an assessment of the economic impact of the wine trails in the Finger Lakes Wine Country. A description of the RTIM methodology is included in Appendix B. Definitions of the travel terms used in this report can be found in Appendix C. Appendix D provides a listing of the relevant business classifications (SIC codes) used to represent travel industry businesses. Secondary impacts are discussed in greater detail in Appendix E.

II. VISITOR VOLUME

This section provides estimates of the visitor volume in Chemung, Schuyler and Steuben counties. More precisely, these estimates refer to the total number of days that visitors spent in the three counties in 2001. The estimates are derived from the Regional Travel Impact Model and estimates of average daily spending by various types of visitors.

These estimates serve two primary purposes:

- a. Visitor day estimates provide a framework to assess the significance of visitation estimates provided by various visitor attractions and destinations, and
- b. Visitor day estimates provide a means for evaluating the overall economic impact estimates provided in this report.

The point of this section is not to provide detailed estimates of visits or trips on a year-to-year basis. Reliable estimates of this nature require the administration of well-designed surveys on an annual basis.

VISITOR VOLUME AND TRAVEL SPENDING

The following table provides estimates of the number of days spent by visitors (persons 18 years & older) and travel parties (1 or more adults traveling together) in the three-county area for different types of accommodations.

Visitation in Chemung, Schuyler and Steuben Counties, 2001

Type of Accommodation	Visitor Party Days (000)	Party Size (persons)	Visitor Person Days (000)
Hotel, Motel	513	1.9	975
Bed & Breakfast	37	2.0	75
Private Campground	171	2.2	375
Public Campground	30	2.2	66
Private Home	818	2.0	1,636
Vacation Home	321	2.0	642
Day Trip	511	2.0	1,021
Total	2,401	2.0	4,790

Note: Children 17 years and younger traveling with adults are not included in these estimates

Visitors (adults, 18 years and older) spent approximately 4.8 million days in the three-county area. This is equivalent to 2.4 million travel party days. The number of trips to the three-county area is necessarily less than the number of visitor days in that trips comprise a length of stay of at least one day. Conversely, the total number of visits to particular attractions (e.g., museums, wineries) will sum to considerably more than the number of visitor days.

The table, *Visitor Volume and Travel Spending*, below, shows the estimates of travel spending associated the number of days spent in the three-county area by travel parties, and the average daily spending amounts associated with the different types of travelers. The average daily spending estimates (per travel party) include spending on accommodations, eating and drinking, recreation & entertainment and shopping. Expenditures on ground transportation are not included in the average daily spending estimates. The average daily spending estimates of travelers staying in hotels, motels and bed & breakfasts are higher than the other categories because of spending on accommodations. The average daily spending of day travelers is also relatively high because of spending on retail goods and recreational activities. Day travel does not include routine shopping trips to the three-county area. Some day travelers will stay in overnight accommodations outside of Chemung, Schuyler and Steuben counties while visiting the area on a day trip.

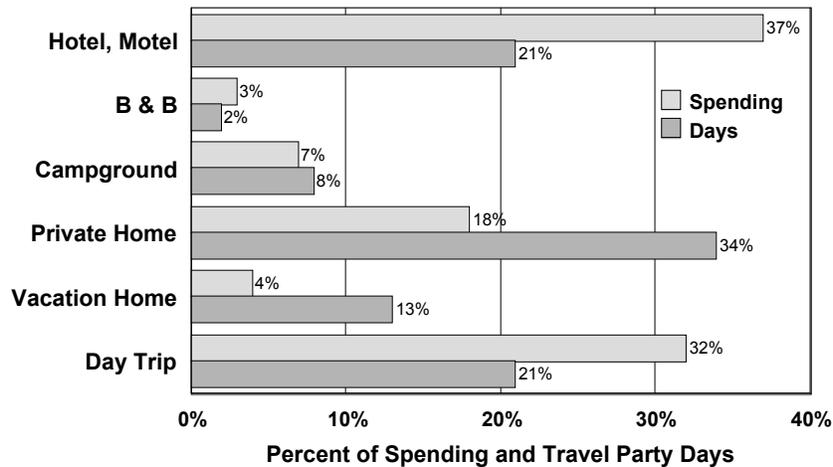
Visitor Volume and Travel Spending

Type of Accommodation	Travel Spending*	Visitor Party Days	Average Daily Spending*
	(\$M)	(000)	(\$)
Hotel, Motel	87	513	170
Bed & Breakfast	6	37	170
Private Campground	15	171	87
Public Campground	3	30	87
Private Home	42	818	51
Vacation Home	10	321	30
Day Trip	75	511	147
Ground Transportation	58		24
Total	295	2,401	123

Note: Travel spending and average daily spending estimates for travel parties by type of accommodation do not include ground transportation.

The following bar chart graphically represents the visitor volume and visitor spending estimates for each type of accommodation.

Travel Spending and Travel Party Days in Chemung, Schuyler and Steuben Counties, 2001



Note: Travel Spending does not include Ground Transportation.

VISITORS STAYING IN HOTELS AND MOTELS

Selected characteristics of visitors in the three-county area who stayed in hotels and motels during 2001 are shown in the table below. These visitors generated \$994,000 in room tax receipts in Chemung, Schuyler and Steuben counties with estimated room sales of \$33.2 million, allowing for some non-taxable room sales. If we assume approximately 2,750 rooms, these room sales would correspond to an average room rate of \$65 and an occupancy rate of 51 percent.

Selected Characteristics of Hotel/Motel Visitors

Hotels/Motel Visitors	
Visitor Party Days (000)	513
Room Tax Receipts (\$000)	994
Estimated Room Sales (\$000)	33,190
Daily room sales per party (\$)	65
Available Rooms (approx.)	2,750
Occupancy Rate (full year)	51%

VISITORS STAYING IN BED & BREAKFASTS

Because room taxes are generally not collected on rentals of rooms in bed & breakfasts in the three-county area, room sales must be estimated from an inventory of rooms, an occupancy rate, and an average room rate. Typically, occupancy rates of bed & breakfasts are somewhat lower than hotels and motels, while average room rates are slightly higher. However, the higher room rates generally reflect the cost of a meal, which in the regional travel impact model is allocated to eating and drinking. The associated characteristics of visitors staying in bed & breakfasts are shown in the table below.

Selected Characteristics of Bed & Breakfast Visitors

Visitor Party Days (000)	37
Available Rooms (approx.)	255
Occupancy Rate (full year)	40%
Estimated Room Sales (\$000)	2,461
<u>Daily room sales per party (\$)</u>	<u>66</u>

VISITORS STAYING IN PRIVATE AND PUBLIC CAMPGROUNDS

Similar to visitors in bed & breakfasts, visitors staying overnight at commercial and public campsites are estimated from the available campsites and an occupancy rate.

Selected Characteristics of Campground Visitors

Visitor Party Days (000)	201
Campsites (approx.)	2,250
Occupancy Rate (full year)	24%
Estimated Site Sales (\$000)	4,134
<u>Daily campsite sales per party (\$)</u>	<u>21</u>

VISITORS STAYING IN PRIVATE HOMES OF FRIENDS AND RELATIVES

Visitors staying in the private homes of friends and relatives (VFR's) have no expenditures for accommodations (and typically have lower than average expenditures for other categories of spending). In the case of the Finger Lakes, however, the volume of VFR's is probably substantial due to the number of owner-occupied residences and the attractions in the area. Many friends and relatives, for example, probably visit during events at Watkins Glen. The relatively high number of VFR's is reflected in the estimate of party days per residence (14).

Selected Characteristics of Private Home Visitors

Visitor Party Days (000)	818
Owner Occupied Residences (000)	58
Party Days per Residence	14

Source: Dean Runyan Associates and U.S. Bureau of the Census.

VISITORS STAYING IN VACATION HOMES

Vacation homes are second homes or residences used on a seasonal or recreational basis. There is a high proportion of this type of residence in Chemung, Schuyler and Steuben counties. Vacation homes that are regularly rented through property management firms are accounted for in hotels and motels.

Selected Characteristics of Vacation Home Visitors

Visitor Party Days (000)	321
Vacation Homes (000)	5.4
Party Days per Residence	60

Source: Dean Runyan Associates and U.S. Bureau of the Census.

DAY VISITORS

Survey data indicate that day visitors are a significant proportion of travel activity in Chemung, Schuyler and Steuben counties. This is consistent with the nature of the attractions in the area, the proximity of large urban areas, and the main thoroughfares that pass through the area. In this model, we assume that about one in five visitors to the three-county area is either on a day trip or passing through without staying

overnight. Although these visitors do not use overnight accommodations and have a short duration of stay, their economic impact is important, in part because their average daily expenditures are typically higher than VFR's and visitors staying in vacation homes.

III. ECONOMIC IMPACTS

The travel industry is an important sector of the Finger Lakes economy. This section provides an overview of the economic impacts of travel in Chemung, Schuyler, and Steuben counties from 1997 through 2001. Detailed travel impacts directly derived from travel spending are provided for the region and each county. The secondary impacts derived from travel-generated employment and earnings are presented for the three-county region as a whole.

DIRECT IMPACTS OF TRAVEL IN CHEMUNG, SCHUYLER AND STEUBEN COUNTIES, 1997-2001P

Visitors to the three-county area spent \$294 million in 2001 generating earnings of nearly \$71 million and 4,770 jobs. Over the past five years, travel spending has increased at an average annual rate of 5.3 percent. Travel-generated employment has increased by 1.3 percent. State and local tax receipts generated by travel spending increased by 5.8 percent from 1997 to 2001.

Summary of Travel Impacts in Chemung, Schuyler and Steuben Counties, 1997-2001p

	Travel			Tax Receipts		
	Spending (\$M)	Earnings (\$M)	Employ. (jobs)	Local (\$M)	State (\$M)	Total (\$M)
1997	238.9	57.4	4,530	5.9	9.6	15.5
1998	242.9	60.4	4,590	6.2	9.8	15.9
1999	254.4	63.1	4,600	6.6	10.4	17.0
2000	280.8	66.7	4,680	7.3	11.3	18.5
2001p	294.0	70.8	4,770	7.7	11.7	19.4
Annual Percentage Change						
00-01p	4.7	6.0	1.9	6.3	3.9	4.8
97-01p	5.3	5.4	1.3	6.9	5.2	5.8

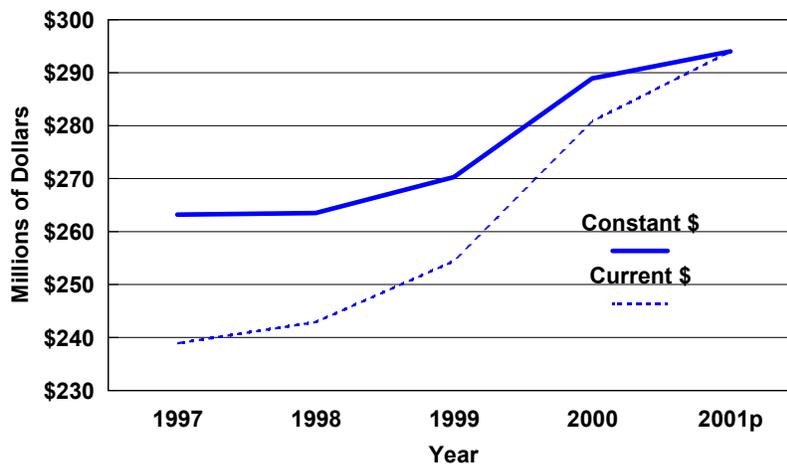
Note: Travel spending includes accommodations, eating & drinking, recreation, retail sales and ground transportation. Earnings include wages & salary, other earned income and proprietor income. Local taxes include local and county sales taxes and county room taxes. Property taxes are not included. State taxes include sales taxes, gasoline taxes, auto rental taxes, and personal and corporate income taxes. Estimates for 2001 are preliminary.

TRAVEL SPENDING TRENDS

Travel spending in constant dollars (adjusted for inflation) has increased in the three-county area by 2.8 percent per year since 1997. Most of this increase has occurred since 1999, as is shown below. This is especially noteworthy in that travel activity was generally down in 2001 throughout most of the Northeast and nation.

Travel Spending in Constant and Current Dollars

Chemung, Steuben & Schuyler counties

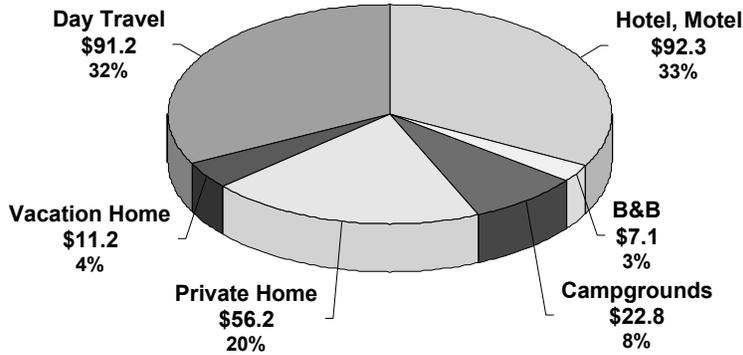


Note: CPI Northeast Urban (A) used as deflator to estimate constant dollars.

TRAVEL SPENDING BY TYPE OF ACCOMMODATION

Visitors staying in paid accommodations (hotels & motels, bed & breakfasts, and campgrounds) comprised about 44 percent of all visitors spending in Chemung, Schuyler and Steuben counties. Day travelers contributed about one-third of all spending in the three-county area. Almost one-fourth of all travel spending came from visitors staying in unpaid accommodations (homes of friends and relatives and vacation homes). See *Travel Spending by Type of Accommodation*, page 13.

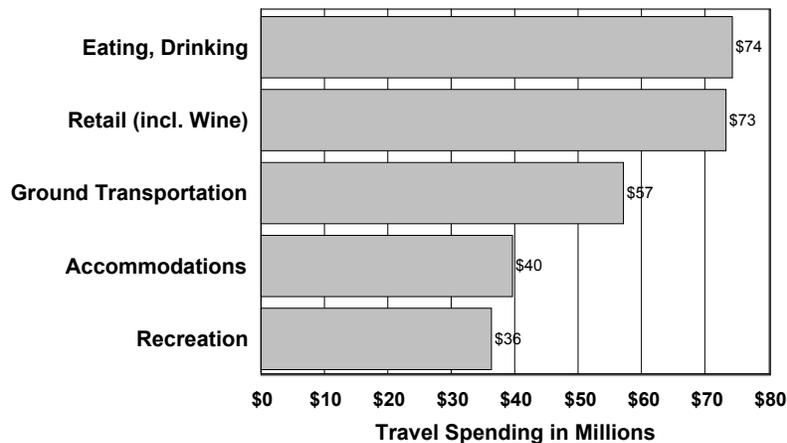
Travel Spending by Type of Accommodation, 2001p
Chemung, Steuben & Schuyler counties



TRAVEL SPENDING BY TYPE OF BUSINESS

Visitors to the Chemung, Schuyler and Steuben counties spent \$74 million on eating and drinking in restaurants, fast food establishments and taverns in 2001. They spent another \$73 million on retail goods and wine. The high volume of day travel to and through the three-county area contributed to the relatively high visitor expenditures for food services and retail goods. Visitors also spent \$56 million on ground transportation (including gasoline, parking, auto rentals, taxis, buses, etc.), \$40 million in accommodations and \$36 million on recreation and entertainment.

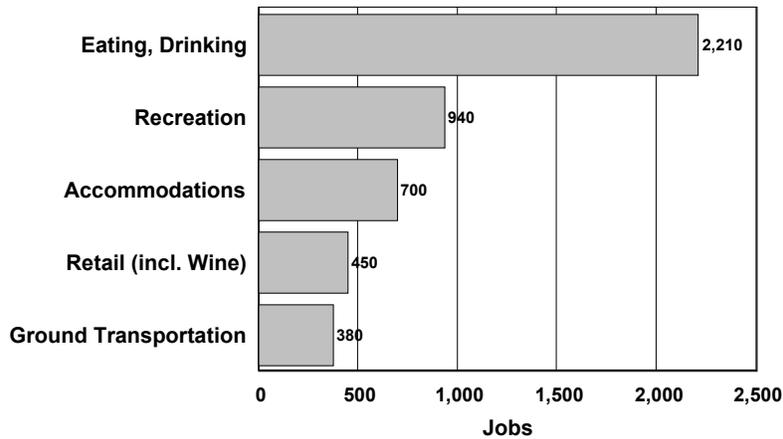
Travel Spending by Type of Business Service, 2001p
Chemung, Steuben & Schuyler counties



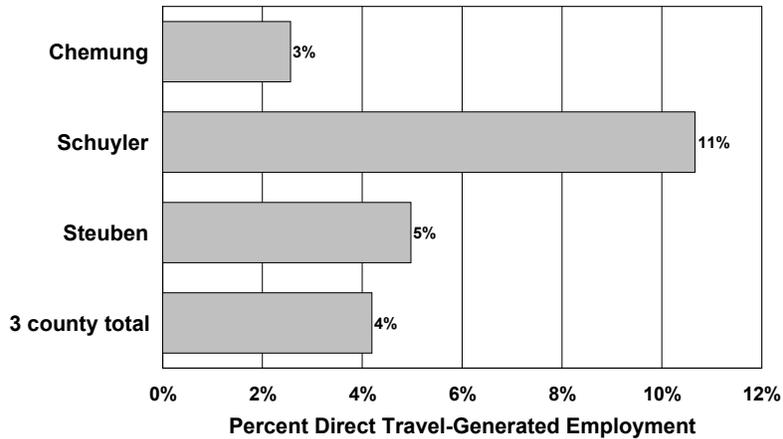
DIRECT TRAVEL-GENERATED EMPLOYMENT

Most of the employment that is directly generated by travel spending is in service intensive businesses, such as food services, recreation and accommodations (see Figure III-4). Schuyler County has the highest proportion of employment that is directly generated by travel spending.

Direct Travel-Generated Employment, 2001p
Chemung, Steuben & Schuyler counties



Direct Travel-Generated Employment as Percentage of Total Employment, 1999
Chemung, Steuben & Schuyler counties

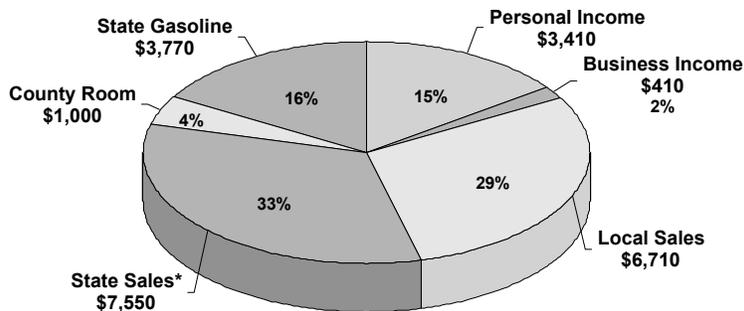


Note: Total estimated by Bureau of Economic Analysis, U.S. Department of Commerce. 1999 is the most recent year data is available.

TAX RECEIPTS GENERATED BY TRAVEL SPENDING

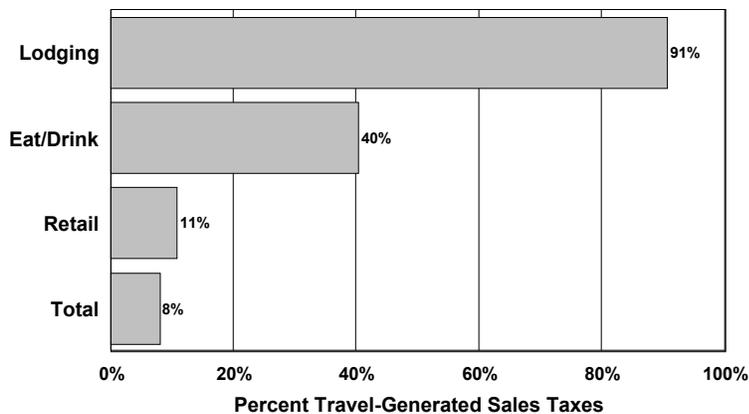
Most of the tax receipts generated by travel spending are point of sale taxes: sales and excise taxes levied on the purchaser of a good or service. More than one-half of all taxes paid by visitors were local and state sales taxes. Visitor spending generated almost all sales tax receipts in the lodging industry and 40 percent of those in the restaurant industry. Overall, visitor spending generated about 8 percent of all sales tax receipts.

Tax Receipts Generated by Travel Spending, 2001p Chemung, Steuben & Schuyler counties



Note: State Sales* tax receipts include state auto-rental taxes.
Property taxes are not included.

Travel-Generated Sales Tax Receipts as Percent of All Sales Tax Receipts. 1999 Chemung, Steuben & Schuyler counties



Note: State Sales tax receipts estimated from March 1999 to February 2000 taxable sales, New York State Department of Taxation and Finance.

Finger Lakes Wine Country Travel Impacts

(Chemung, Schuyler and Steuben counties)

	1997	1998	1999	2000	2001p
Travel Spending by Type of Accommodation (\$000)					
Hotel, Motel	73,220	76,790	81,530	92,340	102,670
B&B	6,500	6,540	6,730	7,100	7,310
Private Campground	17,350	17,140	17,750	19,210	19,530
Public Campground	2,450	2,700	2,860	3,580	3,190
Private Home	50,330	49,720	51,700	56,240	56,910
Vacation Home	10,150	10,170	10,510	11,170	11,440
Day Travel	78,950	79,800	83,310	91,170	92,940
Total Spending	238,940	242,860	254,390	280,810	293,990
Travel Spending by Type of Business Service (\$000)					
Accommodations	32,940	35,040	36,620	39,630	43,470
Eating, Drinking	65,090	67,980	70,710	74,220	78,110
Recreation	32,570	33,800	34,780	36,440	37,870
Retail	56,780	59,110	61,030	64,250	67,360
Wine	6,750	7,500	8,220	9,060	9,760
Ground Transportation	44,800	39,430	43,040	57,220	57,430
Total Spending	238,940	242,860	254,390	280,810	293,990
Total Earnings Generated by Travel Spending (\$000)					
Total Earnings	57,370	60,440	63,080	66,730	70,760
Total Employment Generated by Travel Spending (jobs)					
Accommodations	660	670	680	700	740
Eating, Drinking	2,170	2,190	2,190	2,210	2,240
Recreation	940	940	930	940	940
Retail	380	380	380	390	390
Wine	50	50	60	60	60
Ground Transportation	330	350	370	380	390
Total Employment	4,530	4,590	4,600	4,680	4,770
Tax Receipts Generated by Travel Spending (\$000)					
Local Taxes	5,900	6,170	6,580	7,260	7,710
State Taxes	9,600	9,760	10,390	11,290	11,730
Total Tax Receipts	15,490	15,930	16,960	18,550	19,440

Note: Details may not add to totals due to rounding. Estimates for 2001 are preliminary.

Chemung County Travel Impacts

	1997	1998	1999	2000	2001p
Travel Spending by Type of Accommodation (\$000)					
Hotel, Motel	24,490	24,300	25,050	29,880	38,330
B&B	830	830	860	920	930
Private Campground	3,290	3,230	3,370	3,700	3,690
Public Campground	0	0	0	0	0
Private Home	22,320	21,940	22,930	25,190	25,130
Vacation Home	520	520	540	590	590
Day Travel	22,540	22,320	23,230	25,960	26,240
Total Spending	74,000	73,140	75,980	86,240	94,900
Travel Spending by Type of Business Service (\$000)					
Accommodations	9,290	9,440	9,590	10,850	13,900
Eating, Drinking	18,810	19,240	19,750	21,040	23,590
Recreation	9,320	9,510	9,690	10,240	11,120
Retail & Wine	18,350	18,900	19,430	20,830	22,920
Ground Transportation	18,230	16,050	17,520	23,280	23,370
Total Spending	74,000	73,140	75,980	86,240	94,900
Total Earnings Generated by Travel Spending (\$000)					
Total Earnings	17,100	17,670	18,260	19,660	22,300
Total Employment Generated by Travel Spending (jobs)					
Accommodations	180	180	180	190	240
Eating, Drinking	630	620	610	630	680
Recreation	270	270	260	270	280
Retail & Wine	120	120	120	130	130
Ground Transportation	130	140	150	150	160
Total Employment	1,340	1,330	1,320	1,370	1,480
Tax Receipts Generated by Travel Spending (\$000)					
Local Taxes	1,620	1,650	1,690	1,850	2,150
State Taxes	3,230	3,220	3,420	3,780	4,070
Total Tax Receipts	4,850	4,870	5,110	5,630	6,230

Note: Details may not add to totals due to rounding. Estimates for 2001 are preliminary.

Schuyler County Travel Impacts

	1997	1998	1999	2000	2001p
Travel Spending by Type of Accommodation (\$000)					
Hotel, Motel	6,310	6,850	7,280	8,010	8,280
B&B	2,970	3,010	3,090	3,230	3,340
Private Campground	2,080	2,080	2,140	2,270	2,330
Public Campground	1,660	1,840	1,960	2,640	2,260
Private Home	4,310	4,320	4,470	4,730	4,870
Vacation Home	2,260	2,280	2,350	2,470	2,540
Day Travel	15,990	16,420	17,090	18,570	18,830
Total Spending	35,580	36,780	38,380	41,930	42,440
Travel Spending by Type of Business Service (\$000)					
Accommodations	4,440	4,760	4,960	5,350	5,420
Eating, Drinking	10,490	11,020	11,460	12,130	12,260
Recreation	5,470	5,720	5,890	6,280	6,300
Retail & Wine	11,070	11,660	12,120	12,910	13,180
Ground Transportation	4,110	3,620	3,950	5,250	5,270
Total Spending	35,580	36,780	38,380	41,930	42,440
Total Earnings Generated by Travel Spending (\$000)					
Total Earnings	8,840	9,350	9,740	10,310	10,460
Total Employment Generated by Travel Spending (jobs)					
Accommodations	90	90	90	100	90
Eating, Drinking	350	360	360	360	350
Recreation	160	160	160	160	160
Retail & Wine	80	80	80	80	80
Ground Transportation	30	30	30	30	40
Total Employment	710	720	730	740	720
Tax Receipts Generated by Travel Spending (\$000)					
Local Taxes	650	690	720	1,010	1,030
State Taxes	1,170	1,200	1,270	1,370	1,390
Total Tax Receipts	1,820	1,890	1,990	2,390	2,420

Note: Details may not add to totals due to rounding. Estimates for 2001 are preliminary.

Steuben County Travel Impacts

	1997	1998	1999	2000	2001p
Travel Spending by Type of Accommodation (\$000)					
Hotel, Motel	42,410	45,640	49,210	54,440	56,060
B&B	2,690	2,700	2,780	2,950	3,040
Private Campground	11,970	11,830	12,230	13,240	13,510
Public Campground	790	870	900	940	930
Private Home	23,700	23,450	24,300	26,320	26,910
Vacation Home	7,360	7,370	7,620	8,120	8,320
Day Travel	40,430	41,070	42,990	46,640	47,870
Total Spending	129,370	132,930	140,030	152,640	156,640
Travel Spending by Type of Business Service (\$000)					
Accommodations	19,220	20,830	22,070	23,430	24,140
Eating, Drinking	35,800	37,720	39,500	41,040	42,260
Recreation	17,780	18,560	19,190	19,910	20,440
Retail & Wine	34,110	36,050	37,700	39,570	41,010
Ground Transportation	22,450	19,760	21,570	28,680	28,780
Total Spending	129,370	132,930	140,030	152,640	156,640
Total Earnings Generated by Travel Spending (\$000)					
Total Earnings	31,420	33,420	35,090	36,770	38,000
Total Employment Generated by Travel Spending (jobs)					
Accommodations	380	400	410	420	410
Eating, Drinking	1,190	1,210	1,220	1,220	1,210
Recreation	510	510	510	510	510
Retail & Wine	230	240	240	240	240
Ground Transportation	160	170	180	190	190
Total Employment	2,480	2,530	2,560	2,580	2,560
Tax Receipts Generated by Travel Spending (\$000)					
Local Taxes	3,620	3,830	4,170	4,390	4,530
State Taxes	5,200	5,330	5,690	6,130	6,270
Total Tax Receipts	8,820	9,170	9,860	10,530	10,800

Note: Details may not add to totals due to rounding. Estimates for 2001 are preliminary.

SECONDARY IMPACTS

Travel spending within Chemung, Schuyler and Steuben counties brings money into communities within the area in the form of business receipts. Portions of these receipts are spent within the three counties for labor and supplies. Employees, in turn, spend a portion of their earnings on goods and services in the area. This re-spending of travel-related revenues creates *indirect and induced impacts*. To summarize:

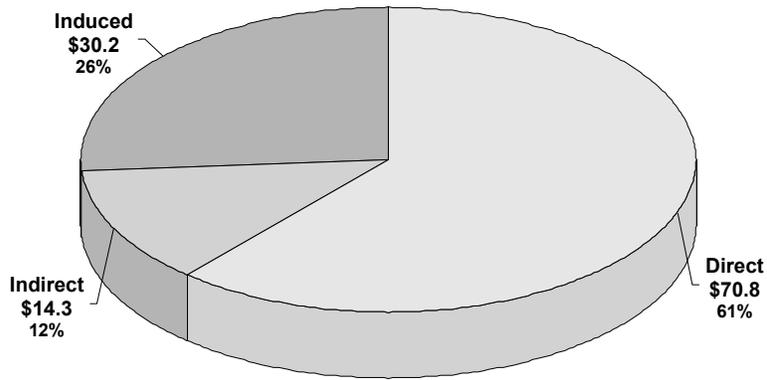
- **Direct** impacts represent the employment and earnings attributable to travel expenditures made directly by travelers at businesses throughout the three-county area.
- **Indirect** impacts represent the employment and earnings associated with industries that supply goods and services to the direct businesses (i.e., those that receive money directly from travelers throughout the area).
- **Induced** impacts represent the employment and earnings that result from purchases for food, housing, transportation, recreation, and other goods and services made by travel industry employees, and the employees of the indirectly affected industries.

This section describes important indirect and induced impacts generated by travel to and within Chemung, Schuyler and Steuben counties. These additional impacts are discussed in terms of employment (jobs) and earnings (wages and salaries, paid benefits and proprietor income). This section provides a picture of the magnitude and the types of industries that contribute to these additional impacts.

The following pie charts describe the total travel impacts in Chemung, Schuyler and Steuben counties for 2001. As can be seen, travel spending had a total employment impact of 6,190 jobs in 2001. Seventy-seven percent of these jobs (4,770) were directly generated by travel spending. Seven percent of the total employment impacts (420 jobs) were indirectly generated by businesses that supplied goods and services to travel industry firms. Sixteen percent (1,000 jobs) were induced by the spending of travel industry employees as well as the employees of suppliers to the travel industry.

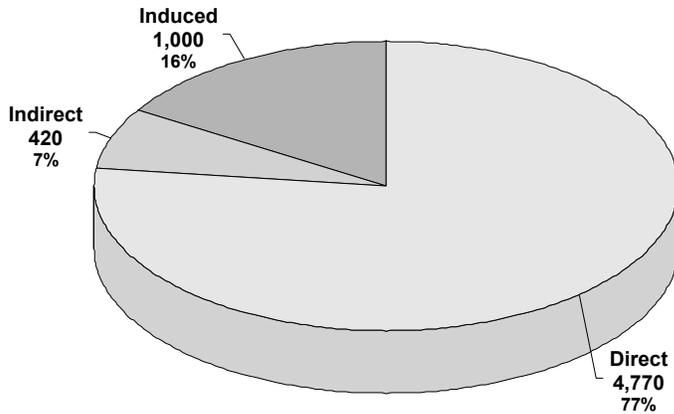
Similarly, the total earnings impact of travel spending in the area amounted to \$115 million in 2001. Induced impacts (\$30 million) and indirect impacts (\$14 million) comprised 38 percent of the total earnings impacts of visitor spending in Chemung, Schuyler and Steuben counties.

**Total Earnings Generated by Travel Spending in
Chemung, Schuyler and Steuben Counties, 2001**
(Millions)



Source: Dean Runyan Associates and Minnesota IMPLAN Group.

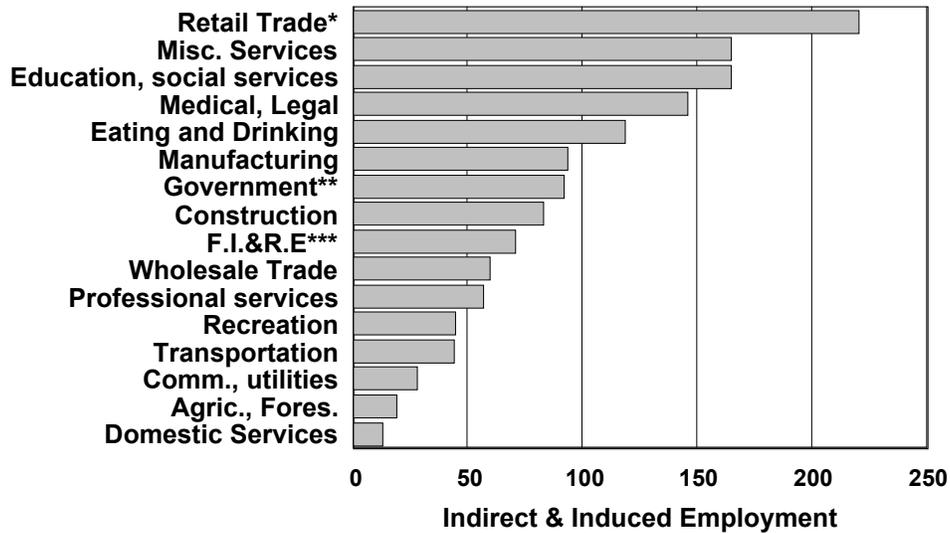
**Total Employment Generated by Travel Spending
in Chemung, Schuyler and Steuben Counties, 2001**



Source: Dean Runyan Associates and Minnesota IMPLAN Group.

More detailed secondary employment estimates are shown in the graph below. Travel spending generates secondary impacts in a variety of industries, including retail trade, professional services, manufacturing and government.

Secondary Employment Generated by Travel Spending in Chemung, Schuyler and Steuben Counties, 2001



Source: Dean Runyan Associates and Minnesota IMPLAN Group.

Note: *Retail Trade does not include eating and drinking or auto service station businesses (which is in transportation). **Government does not include public education. ***F.I.&R.E. denotes finance, insurance and real estate.

To conclude this section, it should be emphasized that the estimates of indirect and induced impacts reported here apply to Chemung, Schuyler and Steuben counties as a whole and do not necessarily reflect economic patterns of the individual counties. While total economic impacts can be calculated on a county basis, such a detailed analysis is not included in this study. In general, geographic areas with lower levels of aggregate economic activity will have smaller (i.e., lower 'multipliers') secondary impacts within those same geographic boundaries. Conversely, many of the secondary impacts of visitor spending within the three-county area accrue to other counties in the Finger Lakes Wine Country and western New York.

APPENDICES

Appendix A. Economic Impact of Finger Lakes Wine Trails

Appendix B. RTIM Methodology

Appendix C. Definition of Terms

Appendix D. Travel Industry Business Classifications

Appendix E. IMPLAN Modeling System

ECONOMIC IMPACT OF FINGER LAKES WINE TRAILS

An assessment of the visitor impacts associated with the Keuka Lake and Seneca Lake wine trails is complicated by the fact that the wine trails themselves include Yates and Seneca counties. Much of the available data pertains to each of the wine trails (or the larger Finger Lakes region as a whole). Perhaps more importantly, many of the visitors to the wineries in Schuyler and Steuben counties also visit other wineries (and attractions, lodging facilities, etc.) in surrounding counties. Nonetheless, it is possible to arrive at an approximation of the economic impact of wine trail visitors. Tables A-1 and A-2, below, provided two estimates of wines sales to visitors.

The first estimate (Table A-1) is based upon production estimates. According to the *2000 New York Winery Survey* (conducted by the New York Wine and Grape Foundation in cooperation with various government agencies), there were 709,000 gallons of wine produced by the Keuka Lake and Seneca Lake wineries in 2000. Also according to this survey, approximately 70 percent of all sales are made directly to the customer (versus distribution through a wholesaler). The estimate of \$30 per gallon of wine is based on national data compiled in *Adams Wine Handbook*.

The second estimate (Table A-2) is based upon estimates of the number of visitors (customers) to the wine trails and an estimate of sales per customer. Both of these estimates are derived from the *2000 New York Winery Survey*. Both of these estimates assume that somewhat more the half of the production and sales for the two wine trails takes place in Schuyler and Steuben counties.

Table A-1
Wine Sales to Visitors in Schuyler and Steuben Counties, 2000
Estimate based on Production

Estimated Wine Production* (000 g.)	450
Direct sales*	70%
Sales per Gallon**	\$30
Total Visitor Sales in (000)	\$9,450

Source: Dean Runyan Associates, *Adams Wine Handbook* (*), and *2000 New York Winery Survey* (**).

Table A-2
Wine Sales to Visitors in Schuyler and Steuben Counties, 2000
Estimate based on Visitor Spending

Visitors/customers in (000)	600
Sales per customer	\$15
<u>Total Visitor Purchases in (000)</u>	<u>\$9,000</u>

Source: Dean Runyan Associates and 2000 New York Winery Survey.

It should be noted that the estimates of visitor sales or purchases roughly correspond to the estimates of wine sales found on page 16 in this report (which were based in part on the analysis presented here).

The larger economic impacts associated with wine trail visitors concerns their expenditures on lodging, eating and drinking, and other activities in the three-county area. An estimate of the total impact is necessarily more difficult because there is no data on visitor days (as opposed to visits). Furthermore, we do not know the types of accommodations used, expenditures on other activities, etc. Table A-3, below, provides one estimate of the total spending by visitors to wineries that is based upon a set of assumptions. The first key assumption is that each wine trail visitor actually visits two wineries per day. Secondly, an average daily per party spending estimate of \$175 is assumed. The underlying assumption here is that most winery visits are by travelers staying overnight in the three-county area, or are day travelers staying overnight elsewhere in the region. The resultant calculations are displayed in Table A-3.

Table A-3
Estimate of Total Impacts of Wine Trail Visitors in Schuyler and Steuben Counties, 2000

Visitors (000)	600
# wineries visited per day	2
Visitor Person Days (000)	300
# adults per travel party	2
Visitor Party Days (000)	150
Spending per party day	\$175
<u>Total Spending by Visitors to Wineries (000)</u>	<u>\$26,250</u>

Table A-4, below, relates the total spending of visitors, and the number of visitor days to the total spending and visitor day estimates for the three-county area. The analysis here indicates that, based on the given assumptions, visitors to wineries comprise about 6 percent of all visitor days in the three-county area and generate about 9 percent of the total visitor spending. Finally, it should be emphasized that these estimates do not imply that the presence of wine trails cause this amount of visitor activity. Rather, the wine trails are associated with this level of visitor volume and visitor spending. If the wine trails did not exist (or were less well marketed), some of these visitors will still spend time and money in the area.

Table A-4
Estimated Share of Wine Trail Visitor Impacts in Chemung, Schuyler and Steuben Counties, 2000

	All Visitors	Wineries	Percent
Spending (\$000)	\$295,000	\$26,250	9%
Visitor party days (000)	2,400	150	6%

**REGIONAL TRAVEL IMPACT MODEL (RTIM)
TRAVEL IMPACT ESTIMATION PROCEDURES**

TRAVEL SPENDING

Hotel, Motel, B&B. Spending on commercial accommodations is estimated from applicable local lodging tax receipts and state sales tax receipts. Spending by hotel, motel and resort guests in other business categories, such as food and transportation, is estimated using spending distributions reported in the visitor survey data. The spending distribution shows how travelers divide their spending between lodging and other purchases.

Private Campground. Spending by campers using commercial campgrounds is estimated from the number of commercial campsites, the average occupancy of these campsites, and the average daily expenditures of visitor camp parties reported in survey data. Spending in other business categories is estimated in the same way as for hotel guests.

Public Campground. Spending by campers using public campgrounds is estimated from visitor counts at national and state parks and recreation areas, and daily spending estimates from the visitor survey.

Private Home. Spending by private home guests is determined from visitor survey data estimating the number of visitors staying as guests of friends and relatives and applying these rates to the household population base in individual counties.

Vacation Home. Estimated spending by vacation home renters and owners (where no lodging or sales tax is collected) is based on the inventory of vacation homes (2000 U.S. Census) expenditure survey data of vacation home visitors that made trips of 30 days or less.

RELATED TRAVEL IMPACTS

Earnings generated directly from traveler expenditures is estimated from the payroll-to-receipts ratios derived from the 1997 Economic Census and earnings data provided by the Bureau of Economic Analysis (U.S. Department of Commerce).

Employment in each business category is calculated from wage data provided by the New York Department of Labor and Employment and earnings data provided by the Bureau of Economic Analysis.

Local Taxes consist of local lodging taxes, sales taxes and other local taxes applicable to traveler purchases (e.g., automobile rentals). Property taxes are not included.

State Taxes consist of state sales taxes, gasoline taxes, and income taxes on travel-generated earnings and business income.

DEFINITION OF TERMS

Accommodation: Lodging at hotels, motels, bed & breakfasts, campgrounds and rented vacation homes comprise paid accommodations. Unpaid accommodations are private homes of friends and relatives and second (vacation) homes.

Campers: Travelers staying at RV parks and commercial campgrounds or at public campgrounds such as those in state and national parks.

Earnings: Total earnings include wage and salary disbursements, other earned income, and proprietor income. Only the earnings attributable to travel expenditures are included.

Eating, Drinking: Businesses serving food and beverages for immediate consumption. In addition to table service restaurants, this category includes fast-food outlets and refreshment stands.

Employment: Industry employment (jobs) associated with the travel-generated payroll and proprietors. This includes both full- and part-time positions. Employed members of the labor force may hold multiple jobs.

Expenditures: Purchases by travelers during their trip, including lodging taxes and other applicable local and state taxes paid by the traveler at the point of sale.

Ground Transport: Spending on car rentals, gasoline and other vehicle operating expenses and on local transportation such as taxi, bus and train.

Local Tax Receipts: Tax revenue collected by counties and municipalities, as levied on applicable travel-related businesses. Consists of transient lodging tax and local sales taxes.

Lodging Tax: A local tax charged on lodging. Also referred to as room tax, transient lodging tax, or bed tax.

Private Home Guests: Travelers staying as guests with friends or relatives.

Receipts: Travel expenditures less the sales and excise taxes imposed on those expenditures. Also referred to as business receipts.

Recreation: Spending on entertainment and recreation, such as admissions to tourist attractions or artistic events.

Retail Sales: Spending for gifts, souvenirs and other items. Excludes spending listed separately, such as food stores or recreation.

Spending Distributions: Information from visitor surveys showing how spending by each type of visitor is divided among various business categories.

State Tax Receipts: State sales taxes, motor fuel taxes, and income taxes on visitor-generated earnings and business income.

Travel: An overnight trip that is not of a local or commuting nature, or a day trip of 50 miles or more one-way that is not of a routine or commuting nature. Travel may be for business or pleasure purposes.

Traveler: A person traveling in Chemung, Schuyler and Steuben counties. The terms traveler and visitor have the same meaning in this report.

Vacation Home User: Travelers using their own vacation home or timeshare and those renting a vacation home or privately owned cabin where a lodging or sales tax is not collected. Vacation home users are limited to stays of thirty days.

Visitor Day: A visit by a person or travel party of one-day duration. Visitors may “visit” multiple destinations or attractions during a visitor day. Conversely, a “trip” may have a length of stay of more than one day.

**TRAVEL EXPENDITURE CATEGORIES AND RELATED TYPES OF BUSINESS
BY STANDARD INDUSTRIAL CLASSIFICATION (SIC)**

Expenditure Category	Type of Business	SIC Code
Accommodations (Hotel, motels and other lodging places)	Hotels, Motels, Resorts, and B&B Inns	701
	Camps and Recreation Vehicle Parks	703
Eating & Drinking (Food and drink purchased for on-premise consumption)	Eating and Drinking Places	58
Food & Beverages (Food and drink purchased for off-premise consumption)	Food Stores	54
Amusement/Recreation (Admissions, recreation fees, recreation equipment rentals, etc.)	Recreation Services	79
	Museums	84
	Water Transportation	4489
Ground Transportation	Gasoline Service Stations	554
	Passenger Car Rental	7514
	Local Transportation	411
	Taxicabs	412
	Intercity and Rural Bus Transportation	413
	Bus Charter Service	414
Retail Trade (Personal items, gifts and other miscellaneous purchases)	General Merchandise Stores	53
	Miscellaneous Retail Stores	59

IMPLAN MODELING SYSTEM¹

IMPLAN is a widely used, nationally recognized economic impact model, first developed by the U.S. Forest Service. IMPLAN provides estimates of the additional economic activity associated with a sale of a good or service to a traveler. This methodology has been packaged, along with the necessary data files, as IMPLAN Pro by the Minnesota IMPLAN Group, Inc. (MIG) of Stillwater, Minnesota, and is the basis for the analysis in this report. Some of the conventions used by IMPLAN follow.

DATABASE COMPONENTS

The IMPLAN databases consist of two major parts: 1) national-level matrices and tables and 2) economic and physical data at the county and/or state level. The national matrices are combined with regional data to create a regional model that can be edited to reflect local conditions.

The IMPLAN data is divided into four main categories:

1. Industry Output
2. Employment
3. Value Added (includes employee compensation)
4. Final Demands

Industry output represents the dollar value of an industry's total production. The data is derived from a number of sources including Bureau of Census economic censuses and the BLS employment projections.

Employment is listed as a single number of jobs for each industry. The data is derived from ES202 employment security data supplemented by county business patterns and Regional Economic Information System (REIS) data. All IMPLAN databases (after 1985) include both full-time and part-time workers in employment estimates.

Value Added includes employee compensation, proprietor income, other property type income, and indirect business taxes. Employee compensation includes the total payroll costs (including benefits) of each industry in the region. Proprietary income consists of payments received by self-employed individuals (includes private business owners, doctors, and lawyers). Other property type income consists of payments from rents, royalties, dividends, and interest. Indirect business taxes consist primarily of excise and sales taxes paid by individuals to businesses.

Final Demands are the dollar value of goods and services purchased by consumers and institutions (federal, state, and local government). Personal consumption expenditures are the largest component of final demand. It consists of payments by

¹Minnesota IMPLAN Group, Inc., "Micro IMPLAN Users Guide", version 91-F, March 1994.

individuals/households to industries for goods and services used for personal consumption. IMPLAN final demands are measured in terms of producer prices.

Producer Prices are the prices paid at the factory door. This is the money an industry receives for its output. Input-output models such as IMPLAN are concerned with effects on industries and all dollar values are in terms of producer price.

Purchaser Prices are those paid at the retail level. A purchase price includes retail markup, wholesale markup, transportation costs, and the price at the factory door. *If an impact analysis involves purchaser prices, the values need to be subdivided to work with the producer-priced input-output model.* This is done using margins.

Margins represent the difference between producer and purchaser prices. Margins split a purchase (sales) price into the appropriate producer values and assign each value to the correct industry. Margins do not apply to service businesses (includes lodging and food services) that produce the service at the same time it is purchased.

TRADE FLOWS

Trade flows describe the movement of goods and services between a defined region and the outside world (imports and exports into and out of the study region). To estimate how much of the local production of a commodity will be used to supply local demand and how much will be exported from the region, IMPLAN offers a choice of two methods; Regional Purchase Coefficients (RPC's) and Supply/Demand Pooling. RPC's represent the portion of local demand purchased from local producers for each commodity. IMPLAN software automatically generates RPC's for each commodity with a set of econometrically based equations. Supply/demand pooling assumes that local demand will buy as much locally as possible. Since this minimizes imports into the region it will maximize local economic activity.

MULTIPLIERS

Input-output models are driven by final consumption (or final demand). Industries respond to meet demands directly or indirectly (by supplying goods and services to industries responding directly). Each industry that produces goods and services generates demands for other goods and services. These other producers, in turn, purchase goods and services. These indirect purchases (indirect effects) continue until "leakage" from the region (imports, wages, profits, etc.) stop the cycle. These iterations are described by multipliers.

IMPLAN generates three types of multipliers, "Type I", "Type II", and "Type III". A Type I multiplier measures the direct and indirect effects of a change in economic activity. It captures the effect of industries buying from other local industries. A Type II multiplier measures the direct and indirect effects and also takes into account the income and expenditures of households employed in both the direct and indirect businesses within the Finger Lakes Wine Country economy (i.e., induced effect). The induced effect is based on changes in the associated value added component (employee compensation etc.). A "Type II" multiplier was used estimate indirect and induced effects in this study.

A Type III multiplier measures the same effects as a Type II; however, a Type III multiplier bases the induced effect on changes in the associated number of jobs. Each job is associated with an average household population and average expenditures per person for the study area. All jobs are treated equally regardless of income potential.

Each of these multiplier types can be calculated for output, employment, and income (value added).

Output multipliers are derived by dividing the total (direct, indirect, and induced) output effects by the direct output. An output multiplier provides an indicator of the total output created (direct, indirect and induced) for each dollar of direct output.

Income multipliers (or any of the value added components) are derived by dividing the total (direct, indirect, and induced) income effects by the direct income. An income multiplier provides an indicator of the total income created (direct, indirect and induced) for each dollar of direct income.

The **employment multiplier** is created in the same manner as the income multiplier, but using employment rather than income. An employment multiplier provides an indicator of the total jobs (direct, indirect and induced) for each direct job.

FINGER LAKES WINE COUNTRY DATA AND ANALYSIS CONVENTIONS

The Finger Lakes Wine Country analysis makes use of a data set representing Chemung, Schuyler and Steuben counties for 2000. All impact amounts expressed in 2000 dollars were adjusted to 2001 dollars using IMPLAN deflators based on the U.S. Bureau of Labor Statistics' Consumer Price Index.

Through IMPLAN, direct employment from the RTIM model was used to estimate all of the associated indirect and induced effects. Employment associated with retail trade was evenly divided between general merchandise stores (sic 53) and miscellaneous retail (sic 59). Employment associated with ground transportation was divided between auto rental, gasoline service stations, and local transportation based on the expenditure distribution data used for the RTIM model.

Other pertinent conventions include:

- Regional purchase coefficients were used to estimate trade flows.
- Type II multipliers were used to estimate indirect and induced effects.
- IMPLAN household margins were applied to all applicable manufactured commodities.