

The Travel and Tourism Industry in Vermont

**A Benchmark Study of the Economic
Impact of Visitor Expenditures on the
Vermont Economy — 2003**

Prepared for

**Vermont Department of
Tourism and Marketing**

**Final Report
June 2005**

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A Benchmark Study of the Economic Impact of Visitor
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This Executive Summary reports on research carried out at the request of the Vermont Department of Tourism and Marketing to provide a definitive benchmark of the travel industry in Vermont during the calendar year 2003. In May 2004, Economic & Policy Resources, Inc. was commissioned by the Department to undertake a comprehensive examination and to prepare a fully documented economic impact assessment of the travel industry in Vermont. This Executive Summary and related presentations set forth the conclusions from those studies and analyses. A detailed discussion of the methods and conclusions may be obtained by visiting www.epeconomics.com to arrange for a downloadable version of the report in Adobe® format. The appendices are only available by contacting Economic & Policy Resources by e-mail and requesting a copy on CD ROM.



The Travel and Tourism Industry in Vermont

A Benchmark Study of the Economic Impact of Visitor Expenditures on the Vermont Economy — 2003

Executive Summary

Visitors made approximately 12.8 million trips to Vermont in 2003 for leisure, business, and personal business purposes bringing with them needs and desires for services and goods amounting to \$1.46 billion in visitor spending.¹ In response to that visitor demand, thousands of Vermont businesses, their employees and proprietors were set in motion supplying the services and goods required to attract and satisfy visitor demand. In 2003 visitor spending resulted in 36,470 jobs for workers and proprietors in Vermont.

Some of those visitors came to Vermont as a final destination and stayed for an extended period while others came for the day or visited as they passed through to another destination. With these visitors comes a demand for travel and hospitality services and goods such as lodging accommodations, restaurant meals, entertainment and recreation, as well as groceries, gasoline and transportation services. Just as a manufacturer sells most of their products to customers outside of the Vermont economy, the travel and hospitality services provided by Vermont firms to visitors represents an export of services to demand originating outside of Vermont. Visitors are not fulltime participants in the Vermont economy so their demand for services generates business activity that would not otherwise be part of the Vermont economy. In this sense, the travel and hospitality industry is serving an export market by supplying services to “foreign” markets.

In exchange for accommodations and other services, visitors bring money into Vermont, benefiting the travel and hospitality industry by circulating dollars through the Vermont economy. As the proceeds of visitor spending circulate through the Vermont economy, those dollars generate opportunities for employment and investment return to industry workers and business owners, and in turn to the businesses and employees that supply the industry. That

¹ This estimate of visitor spending and each of the economic components reported here is based on a careful reconciliation of data from independent sources. For example, visitor survey data have been reconciled with taxable room receipts collected by the Vermont Department of Taxes. The impact estimate differs from previous estimates that projected economic impact primarily from visitor spending data using a different methodology.

economic ripple effect is further enhanced when industry workers and owners spend some of their income earned in the travel industry elsewhere in the Vermont economy. As a consequence of these indirect economic effects the total economic impact of visitor spending is greater than the initial dollars spent by visitors. The analysis reported here includes these indirect effects.

Traditionally we have called these visitors “tourists,” but they come for many reasons, participate in a multitude of activities, and bring motivations and desires that shape the Vermont travel and hospitality industry. They come to satisfy a desire for an experience and they often leave with only the intangible “product” of fond memories of their experience and a good time with traveling companions, family and friends or of pleasurable experiences. Some of their activities have direct impacts on the economy through expenditures for services and goods, such as ski lift or amusement tickets, lodging accommodations and purchased retail items. Other visitor activities have more indirect impacts on the economy, such as those of the second home owner/visitor through consumption of household goods and services during stays and expenditures for durable goods.

This report examines the structural economic impact of visitor activity on the Vermont economy by aligning the supply side activities of travel and hospitality industry businesses with the demand side activities of visitors. This perspective serves to avoid errors in estimation of the economic effect of visitor activities on the Vermont economy because it forces reconciliation between demand and supply. Visitor activity, however, impacts a wide spectrum of economic sectors and it is sometimes difficult to separate spending by visitors from spending by residents, these linkages must be thoroughly understood and expressed accurately to produce the highest quality estimate. This approach has the added benefit of providing a deeper understanding of the relationship between the demand for visitor related services and goods, the desires and motivations of visitors, and the structure of the travel and hospitality industry within the overall state economy.

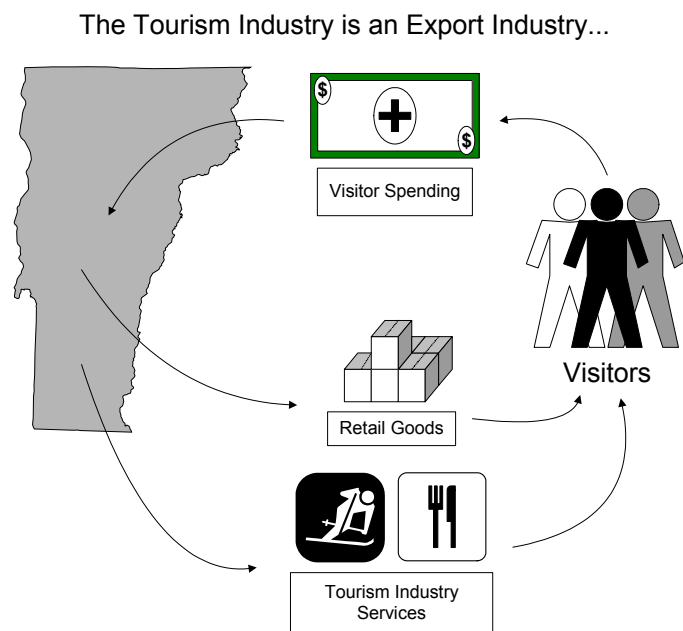
Visitors are attracted to Vermont for the entire experience the Green Mountain State provides. The health and development of the state travel industry is closely linked to the public good we know as the “Vermont Brand.” For that reason an accurate understanding of the economic and fiscal impact of the industry’s progress and development is important to public policy makers. Additionally, an accurate understanding of the economic structure of the industry and its impact on a region’s economy provides useful information to industry participants and groups in their public and private deliberations. Public expenditures and investments can be directed to produce greater value to a region’s residents when the impacts of those actions are more fully examined and understood. A thorough knowledge of visitor demand by market segment, industry structure, and associated trends is necessary for that understanding and discussion to be productive.

Key Definitions

To make effective use of this report it is essential to understand the following definitions and concepts:

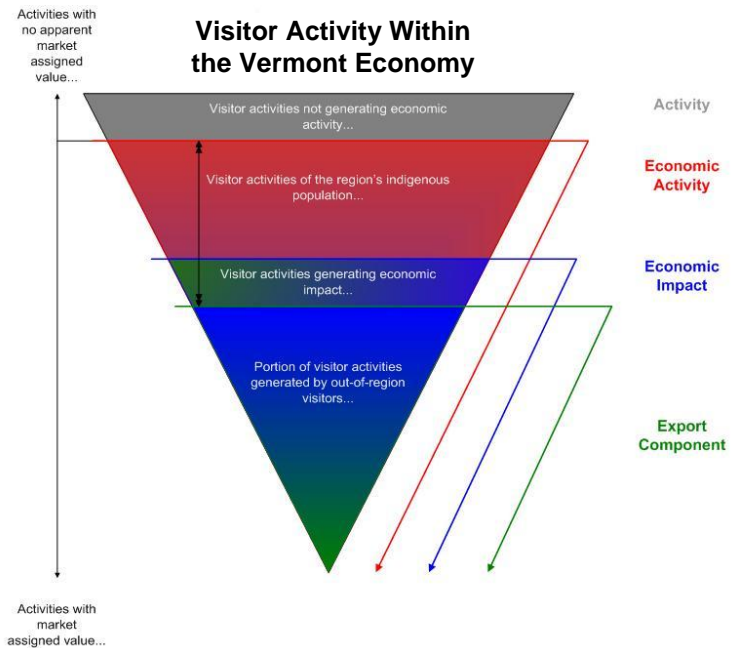
- A **visitor** is a person traveling to a place outside his or her normal commuting pattern for the primary purpose of leisure, business or personal business. This includes domestic visitors from other states and international visitors from Canada and other foreign countries, as well as Vermont residents when visiting other areas of the state.
- The term **tourist** has traditionally been applied to persons traveling to a place for leisure. Because the analysis reported here also measures business and personal business travelers, which is a broader concept of traveler, we use the term visitor to refer to all travelers.
- A **person trip** accounts for each individual in a travel party; two people on a trip equals two person trips. If an individual makes multiple trips is counted as a visitor on each trip.

- In economic terms, the Vermont travel industry is an **export industry**. When a visitor spends money in Vermont for activities, services or goods, the economic impact is comparable to exporting maple syrup, cheese, granite, and furniture or high tech goods to out-of-state markets. One advantage of exporting travel and recreation services is that much of the sales are retail rather than wholesale and the customer pays for the transportation.



- The conclusions reported as a result of this analysis are based on methods that recognize that **supply and demand must balance**. In this equation, the activities, goods and services sold to visitors' measures the **supply** produced by the travel industry and the money spent by the visitors is the measure of **demand**.

- **Reconciliation** requires that independent measures of visitor spending and the value of the services and goods sold be very close. For example, if the data is reasonably accurate, projections from surveys of visitor spending for commercial lodging will reconcile with the taxable room receipts lodging businesses report to the state.
- Some visitor spending is **incremental** because it adds to the base level of economic activity in Vermont. For example, the spending of visitors who are residents of another state is incremental to the Vermont economy. However, the spending by visitors who are residents of Vermont is generally not incremental to the Vermont economy but may be incremental to a sub-state region. This would be the case when a resident of Chittenden County is a visitor to Bennington County. The perspective taken in the analysis reported here is one of a statewide perspective. The spending of in-state visitors has been adjusted to reflect our best estimate of that portion that is incremental.



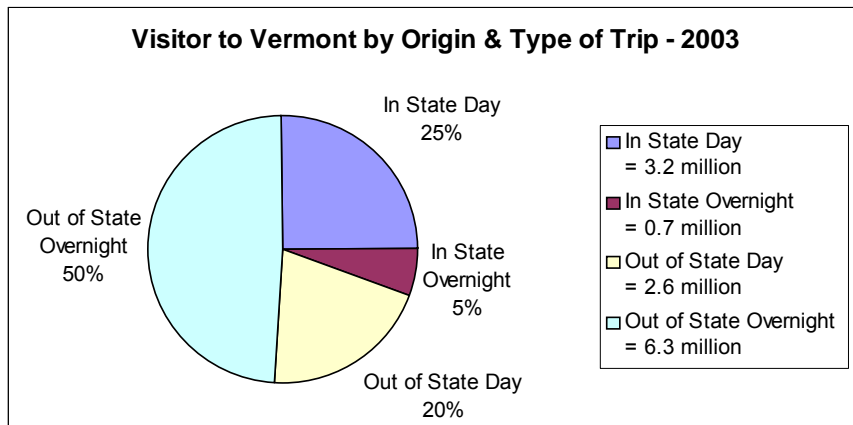
Significant Findings

Visitors

- Visitors made an estimated 12.8 million trips to Vermont in 2003 including those of domestic in and out-of-state, foreign and international origin.

Visitors to Vermont by Origin & Type of Trip - 2003

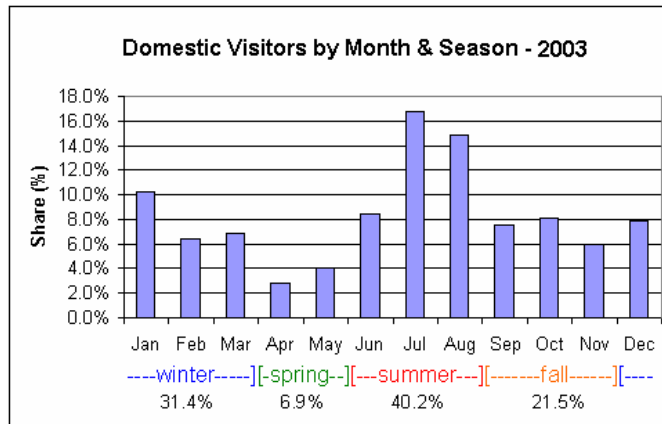
	Person trips (in thousands)
Domestic origin	
Day	880.0
Overnight	5,665.0
Foreign origin	
Canadian	
Day	1,731.8
Overnight	598.2
International	
Overnight	72.4
Vermont origin	
Day	3,156.4
Overnight	691.7
Total Person Trips 2003:	12,795.5



- 55% of all visitors in 2003, an estimated 7.0 million visitors spent one or more nights in Vermont. Of that total, 3.8 million stayed in commercial lodging such as a motel, hotel, B&B, rental home or campground.

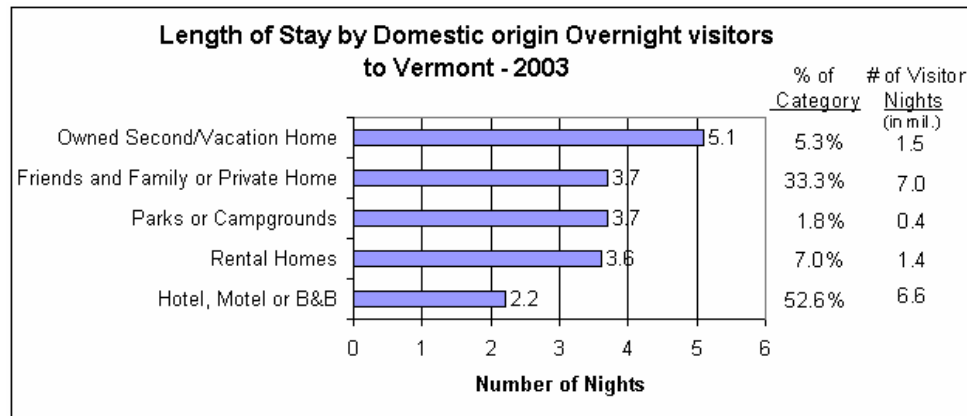
- A survey of lodging operators indicates that 40.5% of Vermont visitors staying in commercial lodging originated from the Mid-Atlantic States of New York, New Jersey and Pennsylvania. Visitors from New England States other than Vermont account for another 38.2% of visitors staying in commercial lodging.

- 40.2% of visitors originating from the United States but outside of Vermont visit during the summer months while 31.4% visit during the winter season.



Length of Stay

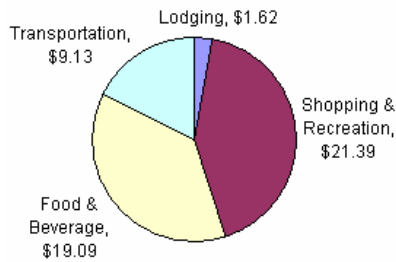
- Lodging survey results indicate that overnight visitors to Vermont stay an average of 2.3 nights ranging from those staying in hotels, motels and B&Bs at 2.2 nights per visit to 5.1 nights per visit for those staying in owned second and vacation homes.



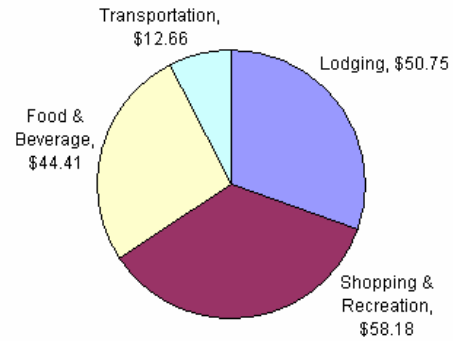
Visitor Spending

- Total visitor spending on all items in 2003 is estimated at \$1,462 million. This includes out-of-state and in-state day and overnight visitors to Vermont, but does not include the spending by second and vacation home owners on durable good items or initial purchase of a residence.

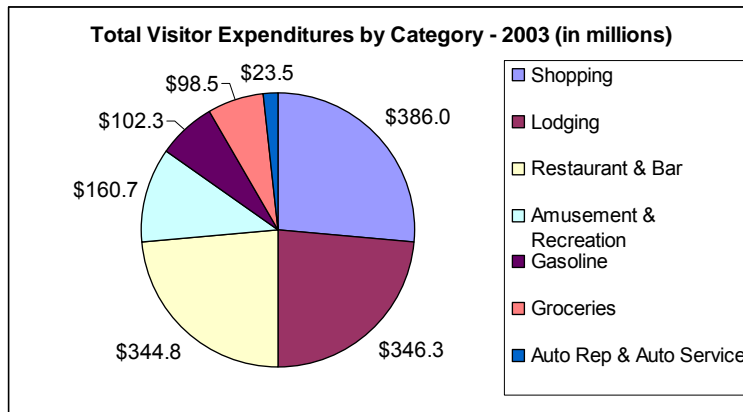
Day Visitor = \$51.22



Overnight Visitor = \$166.00

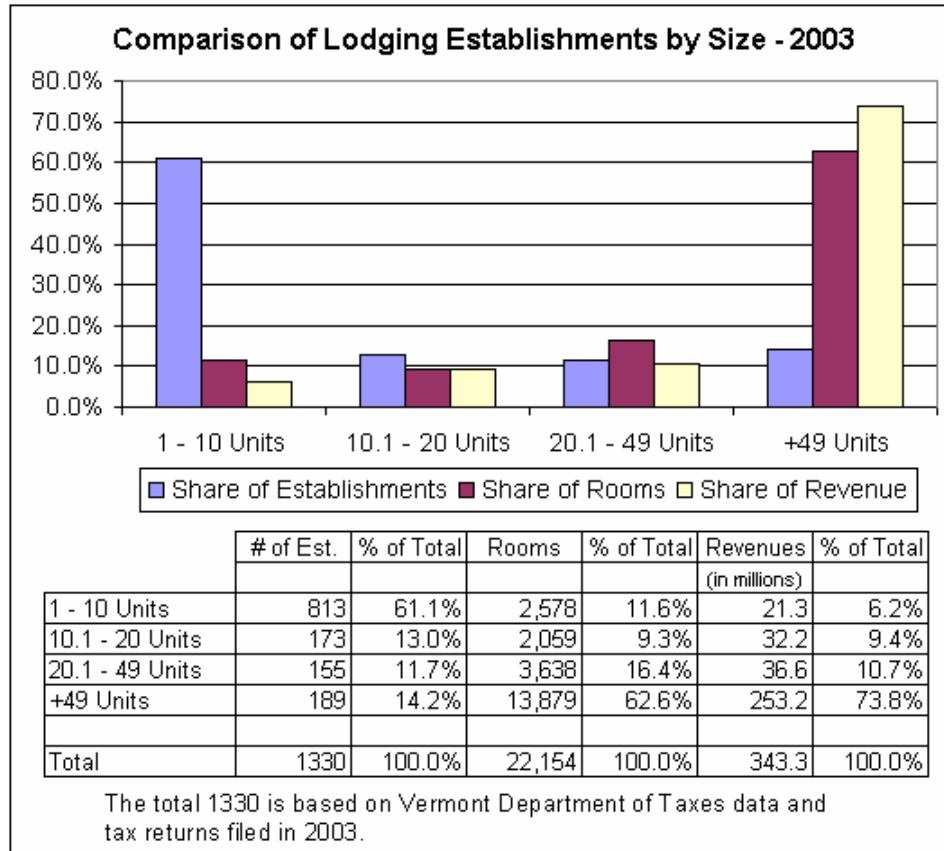


- The average overnight visitor to Vermont spends \$166.00 per person trip on transportation, lodging, food and beverages and retail shopping items. Visitors staying in commercial lodging spend more than those staying with family and friends or in owned second or vacation homes.
- The average day-visitor to Vermont spends \$51.22 per person trip on transportation, food and beverage and retail shopping items.
- Shopping and recreation account for the largest share of visitor spending while traveling in Vermont. This is followed by lodging for overnight visitors and food and beverage for day-travelers.

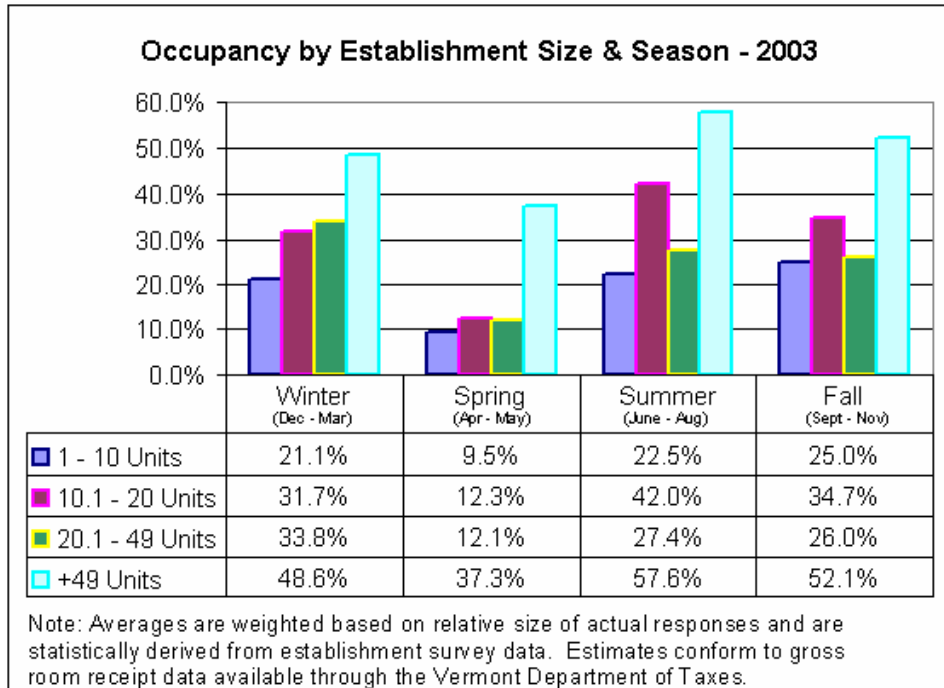


Overnight Lodging

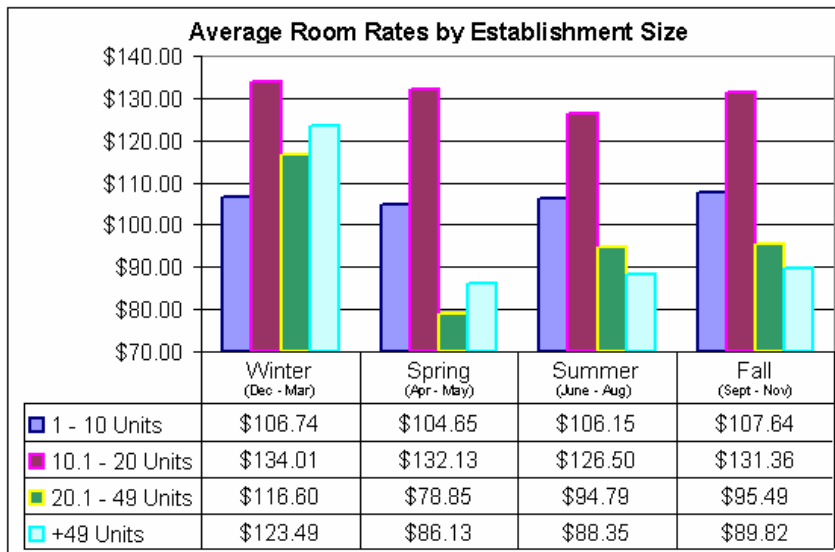
- A typical over night visitor party to Vermont staying in commercial lodging including motels, hotels B&Bs, rental housing and campgrounds spends \$599.84 per visit with an average party size of 2.3 persons and a stay of 2.4 nights.



- An estimated 1,330 active lodging establishments provided overnight accommodations to visitors in 2003.
- Vermont establishments offer an annual estimate of 22,154 rooms to accommodate overnight guests.
- A total of 813 establishments, or 61.1% of all establishments, offer 10 or fewer rooms.
- The 189 largest establishments offering 49 or more rooms account for 62.6% of the total number of rooms available during the peak season and nearly 74% of the total lodging receipts during 2003.
- Peak season occupancy occurs during the fall season for establishments with 10 or fewer rooms, during the summer for those establishments with more than 10 but fewer than 20 units, during the winter for those establishments with more than 20 but fewer than 49 rooms and during the summer for those with 49 rooms or more.



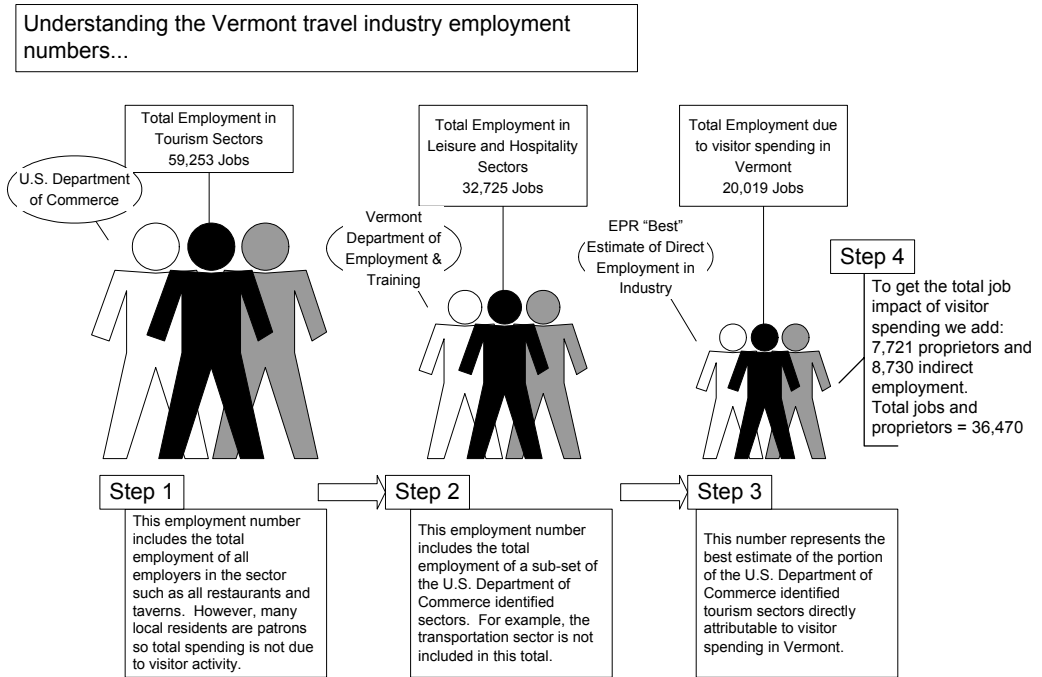
- Average room occupancy varies markedly by size of establishment with the larger establishments achieving higher occupancy rates.
- Intermediate and large establishments show a pattern of average room rates that vary by establishment size and season but small establishments display relatively uniform rates across the seasons.



- 40.8% of total 2003 commercial lodging receipts were the result of visitors during the four winter months of December through March; this was followed by 27.8% during the summer season, 23.5% for the fall, and 7.9% for the spring.

Industry Employment

- A total of 36,470 jobs are supported in the Vermont economy by visitor spending in the travel industry, including wage and salary employees and proprietors in the lodging, entertainment, transportation, food and beverage, retail and supporting sectors supplying the industry.



- An estimated 27,770 persons are directly employed or proprietors in direct visitor supplying service industries such as lodging, transportation, food and beverages and retail items.
- Another 8,700 persons are employed or proprietors supplying the needs of the travel industry and their employees/proprietors.

Jobs & Proprietors Attributable to Visitor Spending - 2003

Direct Wage & Salary Jobs		20,019
Proprietors in the Industry	+	7,721
<u>Indirect Wage & Salary Jobs</u>	+	<u>8,730</u>
Total Direct/Indirect Jobs & Proprietors		36,470

- The share of employment attributable to visitor activity in the sub-sectors of hotel and lodging, eating and drinking, recreation and entertainment, gasoline and retail sales is significantly higher in Vermont than on average nationally. The share in transportation is

lower because Vermont is not home to major transportation industries such as the airlines and shipping.

Share of Total Sector Jobs Supported by Visitor Spending - U.S. vs. VT

<u>Commodity Category-Sector</u>	<u>United States</u> (% Total Jobs in Sector)	<u>Vermont</u> (% Total Jobs in Sector)
Hotel and Lodging Places	80.8%	90.9%
Eating and Drinking Places	18.2%	30.6%
Transportation	43.9%	21.5%
Recreation and Entertainment	23.5%	35.0%
Gasoline and Oil	8.3%	23.9%
Retail and Retail-Related	2.8%	8.1%

- Visitor generated employment in the travel industry on a statewide basis accounts for 1 in every 10 jobs supported by the Vermont economy.
- Visitor spending supports 24.9 jobs for every \$1.0 million and .3 indirect jobs for every direct travel industry job. As a consequence of the concentration of visitor activity in some regions of the state, travel industry activity in those areas accounts for a larger portion of the local area's economy.
- What does it take to increase travel industry output by \$1.0 million? Answer: an additional 8,750 visitors.

State Tax Revenues

- Visitors to Vermont in 2003 contributed an estimated \$181.7 in tax and fee revenues to state coffers in the General, Transportation and Education Funds. This amount does not include a full accounting of expenditures by second and vacation home owners.

Tax and Fee Revenues From Visitors in Calendar 2003

State Tax or Fee Source	<u>\$ Millions</u>	<u>% of Total</u>
Total General Fund	\$91.7	10.2%
Personal Income Tax	\$7.2	
Sales & Use Tax (@6%)	\$15.2	
Rooms & Meals Tax	\$51.3	
Other Taxes/Revenues	\$18.0	
Transportation Fund	\$15.8	7.4%
Gasoline Tax	\$12.2	
Other Revenues	\$3.6	
Education Fund	\$74.2	12.4%
State Education Property Tax	\$65.8	
Other Revenues	\$8.4	
Total--All Funds	\$181.7	10.6%

Introduction

Travel related activities of visitors to Vermont represents economic activity similar to that of a manufacture of goods produced in Vermont for consumption by national or global markets. The distinction is that the demand for these goods and services is exogenous to Vermont and, therefore, represents a flow of money into the state. In response to that demand, Vermont businesses and workers combine capital and labor to provide goods and services to satisfy the needs and desires of visitors, who following a nice visit, go back home taking their experiences with them. Described in this manner, the travel industry is an export based business supplying somewhat intangible goods and services to foreign markets. The proceeds of visitor spending circulate through the Vermont economy producing opportunities for employment and investment return to industry workers, owners business, and their supplying businesses and employees. The cycle is further deepened when travel industry workers and owners spend their income in other sectors of the Vermont economy.

This document reports on studies and research carried out at the request of the Vermont Department of Tourism and Marketing to provide a definitive benchmark of the travel industry in Vermont during the calendar year 2003. In May 2004, Economic & Policy Resources, Inc. was commissioned by the Department to undertake a comprehensive examination of recent research studies undertaken by various departments at the University of Vermont, recognized third party data sources maintained by state and federal government agencies, relevant studies performed in other states and original survey work to prepare a fully documented economic impact assessment of the travel industry in Vermont. This report and related presentations and summaries set forth the conclusions from those studies and analyses.

This report is characterized as a work-in-progress report because additional studies are continuing to address other visitor impact topics. An examination of the costs and benefits of visitor activity is currently underway. A more detailed examination of industry career employment will be completed in the spring of 2005 as will an examination of the economic impact of the second home industry based on survey data and additional modeling. The results of these analyses will be reported in subsequent documents and presentations.

Broadly defined, tourism is an activity in which people are engaged in travel away from home for business, leisure or personal reasons. More specifically, tourism encompasses an array of activities that visitors to an area engage in to satisfy personal desires and a variety of motivations. These activities have a direct impact on the economy of a region or state through the spending patterns of these visitors. Visitor demand for services such as meals and lodging, entertainment and retail goods and the interplay between service and

goods providers in a region combine to describe the impact of tourism on a region's economy.

The activities of visitors through demand for services and goods generate the economic impacts that a particular area realizes from tourism. Some activities have direct impacts on a region's economy through expenditures for services provided to visitors such as ski lift or amusement tickets, lodging, and meals. Other activities have more indirect impacts on a region's economy such as those of the second home visitor through consumption of household goods and services during stays. As a consequence, it is clear that different types of tourist activities have different impacts—with some activities generating more impact than others. Further, what is true for the benefit side of the equation is also true for the cost side of the state and local fiscal equation.

When viewed from the perspective of the economy, tourism is an umbrella concept encompassing the demand for a wide array of goods and services by persons who are not full-time participants in a region's day-to-day economy. The gasoline and lunch purchase of the tourist is appropriate to credit directly to the impact column. However, the gasoline purchase of the resident to commute from home to work is not tourism spending, but rather a component of consumption of the resident population. This is not to say that the resident does not achieve some of their ability to consume locally through tourism related employment. However, those types of impacts are most appropriately measured indirectly through employment activity or induced consumer spending. To do otherwise would overstate the true economic impact of the industry.

To fully and accurately study and understand the impact of tourism on the Vermont economy, it is necessary to examine the activity of tourists—simultaneously looking backward to understand who participates in these activities and their demand for services and forward to the interaction between activities, associated tourist expenditures, and a region's economic structure. Because tourism impacts a wide spectrum of economic sectors and it is sometimes difficult to separate spending by tourist from spending by area residents, these linkages must be thoroughly understood and expressed accurately to avoid over-estimation through misallocation or double counting.

This report examines the structural economic impact of tourism on the Vermont economy by aligning and reconciling the supply side activities of travel industry service providers with the demand side activities of visitors. This perspective serves to avoid errors in estimation of the economic effect of tourism activities on the Vermont economy. This approach has the added benefit of providing a deeper understanding of the relationship between the demand for tourism related services, the desires and motivations of visitors, and the structure of the tourism industry within the overall state economy. By reconciling demand for services by visitors with service provided by industry

businesses under or over estimation can be reduced and a more accurate estimate of economic impact can be determined

Because visitors are attracted to Vermont for the entire experience and the health and development of the state travel industry is closely linked to the public good we know as the “Vermont Brand,” an accurate understanding of the economic and fiscal impact of the industry’s progress and development is important to public policy makers. Additionally, an accurate understanding of the economic structure of the industry and its impact on a region’s economy provides useful information to industry participants and groups in their public and private deliberations. Public expenditures and investments can be directed to produce greater value to a region’s residents when the impacts of those actions are more fully examined and understood. A thorough knowledge of visitor demand by market segment, industry structure and associated trends is necessary to that understanding and discussion.

The Travel Industry in the United States

According to the Travel Industry Association of America (TIA), there were over 1.1 billion person trips taken by U.S. residents in the United States in 2003. The TIA also estimates expenditures from travelers generated over \$550 billion in travel industry spending across the country in that year. For many geographic regions of the U.S., the business and economic activity generated by traveler spending represents a significant portion of the flow of dollars into a regional or local economy. Overall, TIA estimates that this activity in 2003 generated nearly \$100 billion in federal, state, and local tax revenue. These data portray an industry that has directly contributed to over seven million jobs. In this section, the study explores recent trends in the U.S. travel industry, including output and other impacts, and the changing profile of the visitor.

The travel industry in the United States in recent years has become an important part of the national economy, attracting domestic and foreign visitors to locations within the U.S. for a wide range of leisure, business, and personal business purposes. But like most industries in recent years given the most recent economic recession and the terrorist attacks in September of 2001, the travel industry is not growing as fast as it once was. As reported by the TIA, direct tourism spending totaled \$552.1 billion dollars in 2003 (see Table 1 below). This represented an industry growth of 2.7% over estimated 2002 levels.

Growth in direct travel spending in recent years has been solely attributable to increased domestic travel according to TIA analysis. Accounting for nearly 90% of tourist expenditures, domestic visitors spent \$490 billion in the U.S. for visitor activities during 2003. This represented a 3.5% increase over estimated 2002 expenditures of \$473.5 billion. However, while this domestic segment of the visiting population expanded, the foreign visiting population declined for the second year in a row in the aftermath of the September 2001

terrorist attacks. The TIA data shows that the expenditures by foreign visitors declined 3.0% in 2003 on the heels of a 7.4% decline in 2002—a likely reflection of heightened security concerns by that visitor category.

Table 1 - Direct Impact of Travel - United States

	Direct Spending			Jobs Generated by Spending		
	(in billions)			(in millions)		
	<u>2002</u>	<u>2003</u>	<u>% Chng</u>	<u>2002</u>	<u>2003</u>	<u>% Chng</u>
Domestic	\$473.5	\$490.0	3.5	6.5	6.4	-1.4
Foreign	\$64.1	\$62.1	-3.0	0.9	0.8	-6.5
Total	\$537.6	\$552.1	2.7	7.4	7.3	-2.0

Prepared By: Economic & Policy Resources, Inc.

Similar to the recent trends in total foreign visitor spending, the number of jobs generated by direct travel expenditures has also experienced downward pressure. The TIA estimates that tourist spending generated about \$150 billion in payroll and approximately 7.3 million jobs. This represented a 2.0% decline from the previous year's total of 7.4 million jobs. The decline in the number of travel supported employment was seen across both visitor types: domestic and foreign. TIA reports that domestic travel expenditures generated 1.4% fewer jobs in 2003, while foreign tourism spending created 6.5% fewer job opportunities in that year. This across the board decline between 2003 and 2002 followed a 3.0% overall decrease between 2002 and 2001.

As can be seen from the above data, the tourism industry has experienced a shift in the composition of visitors. The most recent trend in the industry since the period around September of 2001 has been the decline in foreign visitors and an off-setting increase in domestic visitors. But there also are additional underlying factors affecting domestic travel as well. At least some portion of the increase in domestic visitors is due to the well-known changes in the demographics of the U.S. population. The aging of the baby-boom generation, and the fact that the leading edge of the baby-boomers have recently begun to retire represents perhaps the most obvious of these demographic factors. This population has the time and the resources to engage in travel activities. In addition, a significant percentage of baby-boomers also have recently entered their peak earning capacity years. These higher earning households have historically demanded—and paid for—high quality leisure and recreation activities, often involving travel. The same type of quality experience—with quality amenities—that the Vermont brand has recently become more and more identified with.

In addition, it has become apparent that technology has also been a positive factor affecting activity levels in the U.S. travel industry. The availability of “real time” information has never been as timely. The personal computer and the internet have revolutionized travel planning. Trips no longer require significant planning and people are taking advantage of that changing

dynamic by making travel arrangements in increasingly shorter periods before actual departure. And, like most other aspects of modern lives and times, trips are becoming faster paced and shorter in duration. This trend in travel is manifest in trip-chaining where travelers seek multiple destinations within a single trip.

The Travel Industry in Vermont

There have been a number of studies over the years that have described the vital role of the travel industry in the Vermont economy. From the standpoint of visitors, the state has been host to people from all around the world. Excluding Vermonters traveling within Vermont, it is estimated that visitors from outside the state made nearly 9 million person trips to Vermont in 2003. This translates into nearly 14.5 out-of-state person trips for every man, woman and child in the state during that year.

The state's travel industry has historically been credited with being a significant economic segment. Past studies have referred to the travel industry as a "keystone" of the state's economy that has made significant contributions to the economic well-being and quality of life of many Vermonters. Estimates of total visitor spending in the state over the years have varied, but all studies are unanimous in the conclusion that the level of direct visitor expenditures is significant and supports thousands of Vermont job opportunities that provide the income to thousands more Vermont households and families. In many areas of Vermont the travel and hospitality industry is the principal economic driver generating employment, income and investment opportunity. That level of significance positions the travel industry as an important part of both the state's current economic situation and its long-term future.

Vermont has been successful in recent years in developing and promoting an image that has been employed to take advantage of Vermont's favorable geographic position in the northeastern U.S. population center. Many of the state's attractions are within relatively close proximity of the major customer markets in and around the greater Boston and New York metro areas. In fact, TIA data shows that the state's intriguing landscape, first class amenities and cultural heritage has allowed the industry to enjoy success in capturing at least its fair share of the of the overall travel industry business and economic development potential offered by visitor dollars that could come to the state from those important market areas.

However, that macro view of the importance of the travel industry on the aggregate or statewide level does not tell the whole story of the economic importance of the travel industry. While it is true that the travel industry is an important part of the economy in nearly every region of the state, the industry is the principal economic driver and wealth creator sector in some parts of Vermont. Indeed, in some travel industry-dominated portions of Vermont, it is

not an exaggeration to describe some communities as having been built for and by travel industry visitor dollars.

Goals of the Analysis

The report that follows systematically examines the economic and fiscal impact of the travel industry in Vermont. The study begins by developing a benchmark understanding of both demand and supply factors during calendar year 2003. A brief examination of current trends and conditions following September 2001 lead to the conclusion that, as of 2003, the immediate adverse impacts of travel have abated leaving the more structural aspects to be reflected in current trends and patterns. Accordingly, and considering the need for a recent measure of impact, we believe that calendar 2003 is a reasonable benchmark year as it represents the current structure of and typical demand for visitor activities in the Vermont economy. Subsequent re-benchmarking will be required because the travel industry is constantly changing in response to dynamic market variables such as an aging population with an increasing share in the key years where higher discretionary incomes translates into more travel expenditures.

As the study is continuing through 2004 and 2005, the fiscal impact component of the analyses will be presented in later editions of this report. At this time, the study reports estimates of the direct and indirect economic impact of visitor spending on the Vermont economy. Subsequent reports will detail further studies and analyses addressing visitor and travel activity in Vermont.

Report Format

The narrative portion of this report summarizes the data sources informing the analyses and methods employed and then reports the conclusions of the research. A series of appendices follows that address each research component in detail by explaining the data sources and methods employed to arrive at the intermediate measures and estimates. These appendices serve to document the work by explaining the methods and reasoning, which then are used to complete the overall estimates of economic impact. A summary report of the findings is available as an executive summary and a Power Point® presentation serves as an overview. Copies of these documents are available for downloading in Adobe® format at www.epreconomics.com. Some of the larger appendices are only available by contacting Economic & Policy Resources by e-mail and requesting a copy on CD ROM. There may be a nominal charge for those documents.

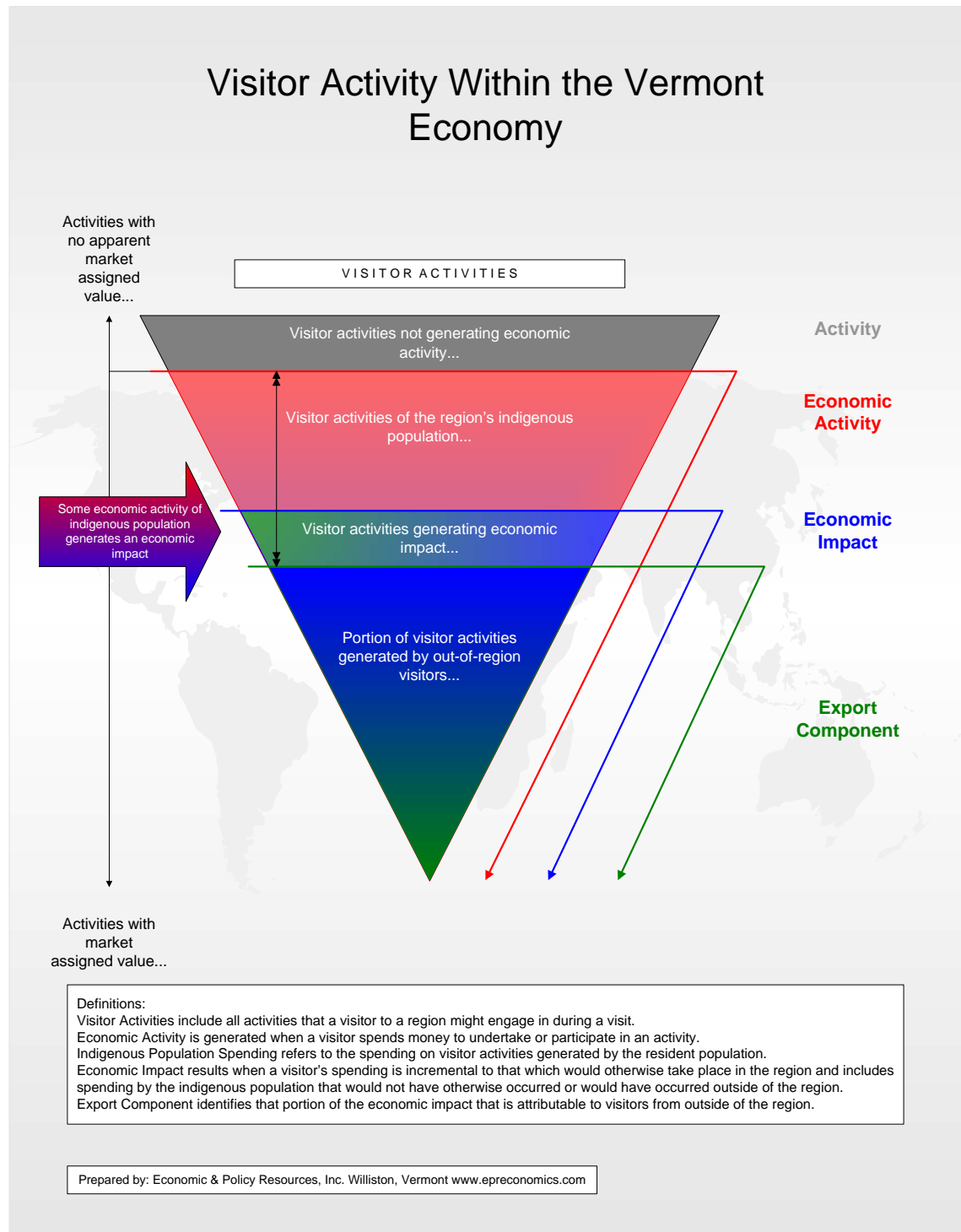
Concepts and Methods of Analysis

The expenditures of visitors to a state or region generate the economic activity that must be measured to estimate the impact of tourism on a particular area or state. Some activities have direct and obvious impacts on an economy through expenditures for services provided directly to visitors. These include items such as ski lift tickets, spending for overnight lodging, and spending for meals. Other visitor activities have less recognizable impacts on a region's economy. Examples of such activities include the purchase of household goods such as groceries and household items of the second home visitor during a trip to the state. These expenditures are difficult to distinguish from similar expenditures that are made by the indigenous Vermont households/residents.

Further, the problem is even more blurred when attempting to understand and estimate the visitor spending of Vermont residents as they often become visitors when traveling outside of their normal environment to other regions of the state. On one side, any estimate that excluded all of the entertainment/recreation spending by Vermont residents would significantly under-estimate the scope and economic importance of the industry. This is true because at least some of the entertainment/recreation expenditures by the indigenous Vermont population represent incremental activity to the state's economy because those residents chose to recreate in Vermont as opposed to some out-of-state destination. On the other side, it is equally true that any estimate that included all of the entertainment/recreation spending by Vermont residents would significantly over-estimate the scope and economic impact of the industry. This is so because at least some entertainment/recreation activity and other travel-like expenditures by Vermont residents in one part of the state "substitute for" similar expenditures or other spending that would have otherwise been made in another part of the state—such as within their normal household environment.

In the latter case, any "substitution effect" means that an expenditure gain in one region of the state is another region's expenditure loss. As the objective here is to estimate the expenditure gain on a statewide level it would be an error to only count one side of the expenditure equation—the gain—without counting the off-setting spending loss in the other region of the state. This "double-counting" is a common error in economic assessment analysis for travel and other industries. Double-counting such expenditure activity will result in inflated estimates of both visitor activity and the importance of the travel industry as a state "economic engine."

Chart 1: Visitor Activity within the Vermont Economy



This figure displays these relationships as defined and employed in this report. The distance from the top of the triangle to the tip is symbolic of the sum of all traveler/visitor activities in Vermont. The very top segment of the

inverted triangle depicts activities by visitors to an area and residents of an area that do not result in a direct exchange of money for participation so there is no immediately apparent economic activity. This is not to say that there isn't a benefit or a cost associated with this activity but only that there is no market exchange directly associated with participation. An example might be wildlife viewing or sight seeing where an admission fee is not normally charged. Below this in the inverted triangle is an area that represents activities that include a direct or obvious exchange of value for participation in the activity. For example, the direct out-of-pocket cost of a lift ticket at a ski area or, less obvious, the expenditures such as the cost of gasoline for travel to and from the ski area. This area graphically defines economic activity and specifically captures the spending of persons on traveler/visitor related activities. Included in this segment of the inverted triangle are the expenditures of residents engaged in these pursuits. As such, the residents generate economic activity such as lift ticket sales, meals and beverage receipts and gasoline for travel. However, most of this spending is driven by the demand of residents for recreational and travel like activities as part of their normal course of daily living. These expenditures are important to the economic activity levels of the travel industry but that spending is derived from within the economy and, hence, does not represent a flow of new money into the economy from outside.

The tip of the triangle symbolizes the activities and associated spending of visitors from outside of Vermont. This segment represents demand for travel related activities that causes a flow of money into the Vermont economy. The industry located in Vermont supplies goods and service and receives payment to satisfy this demand resulting in an in-flow of money into the Vermont economy. As demand originates from outside of the Vermont economy, this portion of the activity triangle symbolizes the export component of the Vermont travel industry. Increases or decreases to this segment of visitor activity and any associated indirect effect results in economic activity that is incremental to the state's economy. If we wanted to maximize the benefit of additional visitor activities, this is the segment that produces the desired multiplier effects.

The economic impact discussed in this report examines and measures the segments of visitor activity symbolized by the middle two layers of the inverted triangle including the spending of out-of-state visitors and that portion of spending by Vermont residents while outside of their normal commuting patterns and visiting other areas of Vermont. For this reason not all travel industry output or employment can be credited to visitor expenditures. As businesses in the travel and hospitality industry serve visitor and resident consumer demand, total employment and industry output exceeds that which is supported by visitor demand alone. For these same reasons not all employment in the identified travel related economic sectors is dependent on visitor spending. The Vermont Department of Employment and Training publishes employment data on the Vermont Leisure and Hospitality industry.

The businesses included in the data series serve both resident and visitor consumer demand, such as restaurant meals, so not all employment in those sectors is visitor dependent.

To fully and accurately study and understand the impact of visitors to the Vermont economy, this study was undertaken from the standpoint that it was necessary to examine the activity of visitors: (1) looking backward to understand who participates in these activities as a demand concept, and (2) looking forward to the interaction between activities, associated visitor expenditures, and the state's economic structure as a supply concept. In the end the estimates are tested to compare the demand derived estimates to the supply derived estimates.

Because visitor travel activity impacts such a broad array of economic sectors and because it is difficult to separate spending by visitors from spending by residents, this study undertook an effort to thoroughly understand each demand segment of the travel industry and then align each visitor demand segment with the supply side activities of traveler service providers. This research design was adopted to capture the likely benefits of developing a deeper understanding of the relationship between the demand for traveler related services, the desires and motivations of visitors, and the structure and functioning of the Vermont travel sector overall. Additionally, this research design was adopted so that these demand and supply inter-relationships were expressed accurately from many different angles of approach thus serving as a means of reconciliation. These different analytical approaches were vital to avoiding—or at least minimizing—under and over-estimation and double-counting errors as the results of these independent approaches/analyses quantifying the industry's inter-relationships were reconciled.

In addition to the demand-supply study construct, the research design for this study also includes a combination of targeted primary and secondary research to map and dimension the relationships that comprise the overall tourism/recreation industry in the state. The secondary research component includes consideration of past tourism studies and survey research by the University of Vermont, data from authoritative government sources including those of the U.S. and Canadian government, and other “best practices” research and studies directly and indirectly addressing the issue of assessing the economic impact of tourism and other industries.

The targeted primary research component principally includes three surveys, (1) A survey of lodging establishments—to help quantify the supply-side of the accommodations sub-sector, (2) a “Vermont visitor/family and friends” survey—to develop an understanding of one of the most important choice of accommodations by the state's visitors and to dimension the tourism and tourism-like behavior of Vermont residents, and (3) a survey of second home owners—to help develop an understanding of the expenditure patterns of one of the state's most important and growing demand segments. Follow-up work

is also underway to complete the industry compensation study and the case study assessments of the tourism industry's impact on three representative communities in the state.

The final component of this study involves using "best practices" approaches to complete an estimate of the economic impact and the fiscal importance of the travel industry to Vermont. The economic impact assessment portion of the study has been undertaken using the REMI dynamic input-output analysis. The fiscal impact portion of this study—which included the construction of a state fiscal impact model—includes a comprehensive evaluation of the state fiscal benefits (e.g. revenues, fees, etc.) and costs (e.g. state education, appropriate parts of the general budget, transportation, etc.) related to the direct and indirect impacts of the state's travel industry during calendar year 2003.

A process including 11 distinct steps is employed to arrive at the estimates reported here. These steps include the following components:

1. Background Research and Definition of Research Objective
2. Identification of and Industry Inventory by Segment
3. Compilation of and Secondary Data Reconciliation
4. Primary Data Collection/Survey
5. Visitor Expenditure Estimation
6. Estimate of Visitor Incidence/Frequency
7. Aggregate Expenditure Compilation
8. Dynamic Input/Output Impact Modeling
9. Tabulation-Analysis of Results
10. Industry Estimate of Relative Contribution to the State Economy
11. Prototypical Community Profile Development (pending)

A detailed discussion of these steps is provided in the technical appendix. This report reflects the progress with the research as of the date on the cover of this report. As such it should be considered a work-in-progress document. As subsequent components are completed the documentation will be compiled and subsequent sections or standalone documents will be forthcoming.

The results of this approach present a benchmark estimate of the travel industry and its economic-fiscal importance to the State of Vermont. The results are described in a series of reports, including an executive summary, a summary Power Point presentation, and detailed technical appendices with supporting documentation of the study's methods. It is important to note that each of the above-listed reports is intended to be a "living presentation-document." Over subsequent years, it is the goal of this research effort to continuously update and improve the understanding of each distinct element of the industry to refine the estimate of the scope and size of the industry with improved data and methods. This research design is employed so that these estimates can evolve and improve over time as the industry itself evolves and changes.

Defining the Travel and Tourism Industry in Vermont

When viewed from the perspective of the economy, tourism is an umbrella concept encompassing the demand for a wide array of goods and services by persons who are not full-time participants in a region's day-to-day economy. The gasoline and lunch purchase of the tourist is appropriate to credit directly to the impact column. However, the gasoline purchase of the resident to commute from home to work is not tourism spending, but rather a component of consumption of the resident population. This is not to say that the resident does not achieve some of their ability to consume locally through tourism related employment. However, those types of impacts are most appropriately measured indirectly through employment activity or induced consumer spending. To do otherwise would overstate the true economic impact of the industry.

Seminal studies on the subject of tourism economies and impact give rise to an understanding of the composition of the industry. Surveys of visitor spending conducted by numerous researchers and studies overseen by the U. S. Department of Commerce support the segmentation of traditional industrial sectors to include the majority of travel/visitor related spending to be realized in the following sectors:

- Hotels and Lodging Places
- Eating and Drinking Places
- Transportation
- Recreation and Entertainment
- Gasoline and Oil
- Retail and Retail Related

The modeling employed in the analyses undertaken distributes visitor spending to these sectors based on survey and third-party research results and to indirect impacts using the REMI dynamic input-output model. The analysis of spending is undertaken in as refined a manner as current data permits.

Defining Visitors

A vitally important part of the research design for this examination is the attention to detail in developing a clear definition of how the term visitor and related activities is defined. First, an exhaustive review of the literature was undertaken in order to understand the “best practices” standard for such a definition. The similarities and differences in definitions across empirical studies have been thoroughly examined and discussed with the project’s Technical Working Group and Vermont Department of Tourism and Marketing staff. These definitions were also subjected to additional review-comment by Thomas Kavet of Kavet, Rockler and Associates. Mr. Kavet is also the contract economist for the Vermont Legislative Joint Fiscal Office.

The definition employed in this analysis is more refined than generally employed in studies of this type. This is done to establish a consistent and relevant definition for future research purposes and after a thorough review of currently employed definitions and practices. Additionally, this definition captures the important and significant concept of visitor within the borders of Vermont. Many Vermonters visit other parts of Vermont, participating in visitor activities on a frequent basis. In short, they represent a segment of visitor demand that is not insignificant to the total.

The definition employed for traveler/visitor in this study is:

“A person traveling to a place outside of his or her normal commuting pattern for the primary purpose of leisure, business or personal business.”

Of significance is that this definition captures Vermonters when they visit other areas of the state outside of their normal range of activity. Travel and related travel activities are a part of the demographic makeup of Vermonters and New Englanders in general. Many definitions define tourist as those from outside of the political jurisdiction under study. This definition captures reality—today’s population is quite mobile and travels freely for multiple purposes. Additionally, there is no mileage limitation as is often employed in other studies as mileage is only relevant in context. A 100 mile trip in Texas is a trip to the corner market relative to 100 miles in Vermont where that much travel can put you well into Canada or another state.

The definition of the term “visitor” and “visitor/traveler” along with the definition of other important terms employed in this study and a further discussion of the

rationale for employing this definition are presented in Appendix II of this report.

The Economic Impact of Visitor Expenditures on Vermont

The quantification of the economic impact of the travel industry hinges on a well developed understanding of total spending by visitors in the Vermont economy. The estimate is improved with the addition of detail regarding the characteristics of the visitors, their spending patterns, and an understanding of the activities they participate in while visitors to Vermont. In simple terms, total visitor spending is derived by multiplying the estimated number of visitors by visitor category by the average spending by spending category for each visitor category and then summing across the visitor and spending categories to arrive at a total visitor spending estimate. As there are significant differences between visitor categories regarding the number of persons traveling in a party, the length of their stay and spending patterns, visitor estimates are developed by key characteristic such as whether and where visitors stay overnight. In general, the more refined the visitor and spending categories the better the estimates of visitor volume, spending patterns and hence total visitor spending.

The analyses here employ data from third party sources, existing survey data and new survey data developed specifically to improve the understanding of visitor counts, activity, and spending patterns. In some instances the data are stronger than in others and hence the accuracy of the estimates varies with the strength of the data. In the aggregate however the estimates of total visitor spending and the distribution of that spending are felt to be quite accurate. This conclusion is borne out through a series of test undertaken to reconcile the overall estimates to data known to be highly accurate. The discussion below explains the tests and analyses undertaken to develop each component leading to the estimate of total visitor spending.

Estimating the Total Number of Visitors

Developing a valid and defensible estimate of the total number of visitors to Vermont is an important foundation-component of any economic impact study on the state's travel and tourism industry. This is because nearly all impact estimates and the calculations employed to make those estimates are dependent on the estimate of the number of visitors to the state. An over-estimate or under-estimate of the total number of visitors can dramatically impact average and total expenditure calculations to the detriment of the study's validity and usefulness. Unfortunately, there are no hard and direct counts of the number of visitors to Vermont. This is particularly true because travel within the borders of United States is virtually unregulated, and the majority of visitors to Vermont arrive by personal vehicle. As a consequence of this situation, this analysis began by examining and testing alternative means of estimating the total number of visitors in calendar 2003. In this section, this study undertakes a review of previous methods of visitor

estimation and the estimation process employed in this study. Lastly, this section describes the methods used for reconciliation and quality control of the calendar year 2003 visitors estimate used in this study.

Overview of Past Studies

Previous studies that set forth an estimate of visitors, however the visitor was specifically defined, employed two general estimating methods: (1) the factor method, and (2) the survey method. Although the factor method in each case reviewed relied to some degree (e.g. from moderately to heavily) on survey information, the distinguishing characteristic of that approach was that survey data was not the main determinant of the visitor estimate. An example of the factor method can be found in the University of Vermont's study "The Impact of the Tourism Sector on the Vermont Economy 1999–2000" (see: Appendix IV. E, This appendix includes a complete discussion of this estimation process).

In essence, the factor method looks to derive a total visitor count from secondary information sources. In the UVM study, investigators chose visitor reported total lodging expenditures to be the focal point of their factor method analysis. By starting with lodging and using survey response calculations, such as average spent on lodging and percent of visiting population that used lodging, the expenditure figure was "factored" to develop a total visitor count indirectly. Although the usual problems of recall error and sampling problems associated with survey data still exist with the factoring method, the key to this approach is the reliability and accuracy of the focal point—in this case visitor reported lodging expenditures. The benefit of the factor method is that the employed survey data represent only a part of the visitor estimation method—the part being estimating the number of visits and length of stay—or the parts least susceptible to recall errors. As such, the survey data used under this method only needs to be representative of the incidence of visitation and the length of stay of the visitor population.

The underlying theory for the second general approach to estimating visitor counts—the survey method—utilizes results developed by taking an appropriate sample of the entire population and drawing inferences based on the surveyed responses to the population itself. As stated above, it is important that the sample population be representative of the entire population both with regard to incidence of visitation and the activities of participation. Assuming a representative sample and valid responses, data from the sample can be used to make inferences about the size (e.g. the number of) and activities (e.g. length of stay) of the total visitor population. The Travel Industry Association (TIA) periodically publishes estimates of the domestic visitor population for all 50 states using this method. For all its difficulties, if conducted with proper care and controls, the survey method has been demonstrated to provide accurate visitor count estimate results.

Overview of Estimating Procedures Used in this Study

The initial step in the estimation process for this study is to define conceptually just who makes up Vermont's visitor population. By this study's definition, visitors do not just include U.S. visitors (frequently referred to as domestic visitors), but also international visitors. Since it would not be possible to develop a statistically valid survey using a representative sample of visitors from around the world, it is unlikely that the survey method would work for this component.

Because of the issues outlined above with the methods employed under previous studies, this analysis employs the strongest parts of both approaches—essentially completing a “build-up method” by examining each visitor component separately. This is completed by breaking down the state's visitor population into its individual and measurable parts, and then developing the best possible estimates of those parts and summing the results.

Under this approach, the total number of visitors to Vermont is the sum of U.S. visitors and foreign visitors for calendar year 2003.¹ But because there is wide variation in the definition of the visitor across these past studies, this study employs great care in examining the respective data to ensure compatibility across the data sets. As an example, specific steps are taken to avoid data comparability issues by segmenting the U.S. population into In state visitors and out of state or domestic visitors. The term “domestic visitors,” as defined under this study, includes visitors from other U.S. states—except for Vermonters.

The foreign visitor segment of the visiting population to Vermont also is delineated further with the methodology employed. Because of Vermont's proximity to the Canadian border, this study separates Canadian visitors from all other foreign visitors. The foreign segment of the visitor population estimate in this study therefore excludes Canadian visitors, because this important component is estimated separately. With this delineation or typology of the Vermont visitor, this study deals with the measurement problem of estimating the total visitor population to Vermont by separating each into its component parts. This approach is taken to separate the analysis of the total visitor population into a manageable task of developing estimates for four separate and distinct visiting population components. Once the parts were estimated, the sum of those four component parts (domestic, in state, Canadian, and international) comprise the build-up approach for estimating the total visitor count for calendar year 2003. This approach has the additional advantage of establishing a structure for future examination and refinement of the impact estimates. Future studies will be designed to examine additional levels of detail on each visitor segment in a prioritized and orderly fashion.

¹ See Appendix II for a detailed definition of a Vermont visitor and a discussion of related visitor concepts employed in this study.

The estimate of the domestic visitor population is developed using the panel survey and estimating procedures expertise of the TIA. This organization has been conducting the most comprehensive domestic travel survey for the past ten years. Using total TIA visiting population estimates for the state of Vermont, the estimated visiting population who originated from within the state is subtracted out, thereby leaving an estimate of the number of domestic visitors to Vermont in calendar year 2003 as a residual. This subtraction approach is undertaken to ensure data comparability—specifically because the TIA definition of the “in state” visitor is inconsistent with the definition used in this study. TIA defines a visitor as someone traveling more than 50 miles and or someone who uses overnight lodging. As previously stated, the definition of the in-state visitor employed here does not have a mileage or overnight lodging requirement and therefore imposes no such restrictions on a visitor’s travel distance or activities-routine.²

In order to develop an accurate estimate of in-state visitors that is consistent with this study’s definition of terms, a survey is undertaken of Vermonters regarding their in-state travel and tourism activities in 2003. The survey is conducted during the months of September and October of calendar year 2004. Referred to as the friends and family survey, Vermonters were asked questions about their traveling patterns within the state during calendar year 2003, the frequency of their travel, the length of stay per trip taken, the type or types of accommodations used (if applicable), and a series of questions regarding their expenditures during their trips. Utilizing these survey responses and weighting those responses for the Vermont population, an estimate of in-state portion of the total number of visitors in calendar year 2003 is developed. The completion of this step leaves two unknowns in the development of the total visitor estimate: the number of Canadian and international visitors.

The former estimate of the number of Canadian visitors was developed and provided by Statistics Canada. Statistics Canada is the official statistician or statistics division of the Canadian government. Statistics Canada maintains robust data and measures on virtually anything economic-business activity or economic-demographic account related to Canada and Canadians. This organization, through the use of panel surveys (similar to those employed by TIA) and border surveys, asks visitors to provide estimates of travel to Vermont from Canada. The Statistics Canada estimates are compared against U.S. (Vermont)—Canada border traffic estimates and noted to reasonably reconcile.

² In making the determination to use the TIA domestic visitor estimates, an examination of the overnight lodging segment of the visitor estimate was compared with Vermont Department of Taxes, Rooms Tax receipts for 2003. Through a process of factoring the TIA estimate of the number of visitors in 2003 was compared to gross revenues of lodging establishments. This comparison reasonably reconciled with the TIA estimates. A discussion of this reconciliation process is included in Appendix IV

Conversations with the Office of Tourism Industries, which is a division within the U.S. Department of Commerce, resulted in EPR obtaining an estimate of international visitors to Vermont. This estimate is based on so-called I-94 forms (which documents international visitors' primary destination within the United States) and supplemented by in-flight surveys conducted on international flights (which detail foreign visitors' multiple destination trips). For the purposes of this study, it is assumed that all international visitors to Vermont are overnight visitors. This was an important assumption since the spending estimates for international visitors employed in this study are organized on a per trip level as opposed to a per day level. Given the distance traveled and the travel expense associated with visiting Vermont by international visitors, the assumption that international travelers (considering Canadian visitors are excluded from this group) were overnight visitors is felt to be reasonable.

Table 2 presents estimates of each visitor group—including the results of the summed total of person trips to Vermont in calendar 2003. From the table, domestic visitors account for over half the total number of person trips at approximately 51.0% of the total. The next largest group is in state visitors comprising 30.0% of the total. Although the percentage of in-state visitors represents a large portion of the person trips in calendar year 2003, over 82% of in-state trips were day trips. Canadian visitors in 2003 accounted for 18.2% of the total number of person trips, and the international visitor population count was 72,400 person trips or 0.6% of the total in calendar year 2003.

Although there is no reliable way to complete a quality control check on the international visitor count estimate, this estimate appears to be the best, most comprehensive estimate of such visitors that is available following the September 11, 2001 terrorist attacks. The U.S. government has instituted additional monitoring activities to estimate the number and activities international visitors to the U.S. since September 2001 making this subject is ripe for further investigation and research. While it is true that the international visitor population before and after the September 11, 2001 terrorist attacks represents only a fraction of Vermont's total visitor count, it is felt that this component is one of the fastest growing components of the state's visitor total and it represents an area of future growth for the travel industry.

In summary, the analysis estimates the total number of visitors to Vermont in calendar year 2003 by estimating the various visitor components—domestic visitors, in state visitors, Canadian visitors, and international visitors—and

Table 2: Vermont Visitors by Category - 2003

	Person trips	
	(in thousands)	
Domestic origin		
Day	880.0	
Overnight		5,665.0
Foreign origin		
Canadian		
Day	1,731.8	
Overnight		598.2
International		
Overnight		72.4
Sub-total Out of State origin		8,947.4
Vermont origin		
Day	3,156.4	
Overnight		691.7
Sub-total Vermont origin		3,848.1
Total Day	5,768.2	
Total Overnight		7,027.3
Total Person Trips 2003:		12,795.5

Prepared By: Economic & Policy Resources, Inc.

summing the individual categories. The strength of this approach is that it utilized the best of the existing secondary data sources (the TIA, Statistics Canada, and the U.S. Department of Commerce), and compliments those secondary high quality secondary data sources with targeted, primary research (designed to compensate for their weak areas) to arrive at a high quality estimate of Vermont visitors.

The last step in the study estimating process is to reconcile this estimate with a known benchmark measure: state lodging receipts in calendar year 2003. Using an estimate of the total lodging expenditures in the state consistent with the above visitor counts, this study cross-checks the validity of the total visitor count estimate by reconciling them to lodging receipts data for calendar year 2003 as provided by the Vermont Department of Taxes (including estimates of non-reported exempt receipts) and to the results of the visitor surveys. From the above methods and discussion, this study estimates that there were a total of 12.8 million visitors to Vermont in calendar year 2003.

Estimating Total Visitor Expenditures

Considering the “build-up method” used to estimate the total visitor population, a similar “build-up” methodology is employed to estimate total visitor expenditures. More specifically, the total amount of visitor spending is developed consistent with the previous approach where visitor spending must equal the sum of the individual parts or visitor segments. The previously mentioned visitor segments form the total amount of visitor spending by domestic, in-state, Canadian and international visitors. The summation of spending of these four parts must equal the total expenditure by visitors as defined in this study. In order to convert previously estimated visitor population counts to aggregate estimates of visitor spending, average dollar amounts of spending are estimated for each classification of visitor. It should be noted that this classification crosses beyond the question of origin and incorporates trip duration—for example day trip versus overnight. This section details the methods used to develop expenditure estimates for each visitor category, and ultimately, the total of those individual segments into an estimate of total visitor expenditures.

In 2002, the University of Vermont (UVM) in cooperation with a national household research firm, IPSOS, conducted a national survey that asked a representative sample of American households—but excluding Vermont households—about their 2001 travel experiences. The focus of this survey was travel to Vermont. Respondents who reported visiting Vermont in 2001 were sent a more detailed supplemental survey designed to collect additional information about their visit or visits.

Although there are questions regarding how representative the initial responses were of the total U.S. population, an analysis of the second round of responses indicated that they were representative of the domestic Vermont visiting population after appropriate data cleaning steps were taken. Because this study is not attempting to make inferences about the activities of total U.S. population and only the domestic visiting population to Vermont, the survey responses are employed in the development of this estimate of visitor expenditures. Subject to the normal recall errors that any survey of this type would typically encounter, the survey overall did an excellent job capturing trip and detailed expenditure data. Analyzing these data, which included a combination of trip characteristics and spending patterns, a number of relationships are discovered. This includes the ability to segment the respondent population into day-trippers versus overnight visitors. That segmentation proved to be an important distinction when attempting to calculate total visitor expenditures related to the variation in spending patterns by trip duration. As a result, it is estimated that a domestic overnight visitor spent on average \$174.75 per trip versus \$58.44 per trip spent by a domestic day visitor in 2003 dollars. Clearly, these expenditure averages are

influenced by the length of stay. However, as will be documented later, the types of goods and services purchased also affects those averages as well.

The same survey instrument, which allowed for an estimation of the in-state visiting population, is employed to develop an estimate of in-state expenditures. The friends and family survey specifically asked questions of visitors about expenditures on day trips and about expenditures on overnight trips following the respondents confirmation of having participating in a Vermont day or overnight trip. Although the percent difference was not as pronounced as the domestic segment (130% versus 199%), the Vermont overnight visitor spent more per trip than the Vermont day-tripper. These results are found to be intuitively logical in that out-of-state visitors spend more per visit than in-state visitors whether classified as day-trippers or overnight visitors. That difference can be seen across the board within the spending categories (see Table 3 below).

Table 3: Average Expenditure per Trip

	Day	Overnight
	(Dollars)	(Dollars)
Domestic origin visitor	\$ 58.44	\$ 174.75
Vermont origin visitor	\$ 45.25	\$ 104.20

Prepared By: Economic & Policy Resources, Inc.

After isolating spending patterns for both domestic and Vermont visitors on the day level as well as overnight, the next step in the estimating process involves developing an estimate of the average expenditures of foreign visitors. Unfortunately, little information is known about foreign visitor spending whether those visitors are from Canada or elsewhere. Accordingly, in this study we classify all foreign visitors as “international” for spending purposes. The travel industry generally accepts the conclusion that foreign visitors spend four times more than American visitors. While they may spend four times more, it is also true they typically stay four times longer and visit multiple states while on their trip in the U.S. (See: 2004 U.S. Lodging Industry Profile). Considering the relative absence of valid expenditure data for international tourists, this represents a priority area for future travel industry studies.

For the purposes of developing the estimate of visitor spending for this study, several assumptions are employed to complete an internally consistent estimate of total visitor expenditures. The first assumption involves an estimate of Canadian day trip visitors, where it is assumed that Canadian day-trippers had the same spending pattern average and profile as domestic day trip visitors. Therefore, this estimate assumes that the average Canadian day visitor spent \$58.44 in 2003 U.S. dollars. This is determined to be a

reasonable assumption when compared to the alternative which is to use Statistics Canada's average expenditure by Canadian day trip visitors to Vermont. A reported average expenditure of \$13.02 per trip—an amount less than one quarter that of the typical domestic day visitor. After investigation, the Statistics Canada reported average is determined to be unreasonably low, and in all likelihood is suffering from severe under-reporting bias given the strong incentive of Canadian respondents to underestimate expenditures to avoid paying the national and provincial GST.³ Further, the survey instrument used by Statistics Canada—a border survey—likewise appeared to have a downward bias on respondents' answers since the amount of GST due at the border crossing would be determined by the amount of outside-of-the-country purchases that the returning Canadian citizen reported. This represented just one the explanations of why there is a lack of information about foreign visitors' expenditure available for this study.

The second assumption employed to develop this estimate of visitor expenditures involves the expenditure average and profile of overnight Canadian visitors. Like the Canadian day visitor assumption employed previously, this estimate of visitor expenditures assumes that overnight visitors from Canada have the same spending averages and pattern as international visitors overall. This is felt to be a plausible assumption given the fact that Canadian overnight visitors are foreign overnight visitors. The estimated spending for these two groups of foreign overnight visitors is derived from an International visitor survey conducted by affiliates of the University of Vermont in 2001. This survey was completed in an informal matter through the dissemination of a questionnaire to foreign visitors at commercial lodging establishments in Vermont—including Canadian overnight guests. Targeting foreign visitors at commercial lodging establishments also is consistent with the issue of assuring that the questionnaire was answered only by overnight guests (thereby exclude day-trippers). The sample size of 130 was small and again indicative of the need for further study in this area of the spending levels and patterns of international visitors. These results are then translated to 2003 dollars using the Chain-Weighted Price Deflator for Consumer Expenditures.

The results of that survey showed that overnight foreign visitors spent \$155.83 per trip while in Vermont in 2003 dollars. This amount is lower than the domestic overnight visitor that same year by 10.8%. These results are initially thought to be counter-intuitive given what is perceived to be the experience by those in the industry. However, after further analysis these results are determined to be plausible because, while it is true that foreign visitors spent four times as much as domestic visitors per trip, evidence

³ The term GST refers to the general Goods and Services Tax assessed on all Canadian citizens' purchases whether inside or outside of the country. The GST on outside of the country purchases is assessed upon their return to Canada as they report those purchases at the border upon re-entry.

indicates that international visitors stay four times longer per trip in comparison to domestic visitors. Additionally, this also is an intuitively logical result given the fact that international travels have a significantly higher cost of travel to come to the U.S. and Vermont and would therefore be more likely to stay for a longer period. While it is true that the international visitor may spend more in absolute dollar terms, it is not at all clear that the state has received all or even the majority of the benefit of that average trip expenditure—since Vermont was typically not a sole destination for the trip.

Table 4 highlights the results of the estimating procedures. The top to bottom, left to right structure of the table shows the progression of the calculations. By taking the estimated total number of person trips in 2003 for a single group of visitors (For example: domestic day-trippers equals 880,000 person trips) and multiplying the group estimate by their average spending per trip (domestic day-trippers who spent \$58.44 per trip), an estimate of the amount spent by that segment of visitors in 2003 is derived (estimated total expenditures by domestic day trippers equals \$51.4 million). Replicating these steps for all groups and summing the results yields an estimate of the total visitor expenditures for 2003. As shown in the table, these procedures produced an estimate of \$1,462.0 million in visitor expenditures in Vermont in calendar year 2003.

Table 4: Vermont Visitors, Average and Total Spending -- 2003

	Person trips (in thousands)	X	Mean Expenditure per Person Trip by Category =	Visitor Spending (in millions)
Domestic origin				
Day	880.0		\$58.44	\$51.4
Overnight	5,665.0		\$174.75	\$990.0
Foreign origin				
Canadian				
Day	1,731.8		\$58.44	\$101.2
Overnight	598.2		\$155.83	\$93.2
International				
Overnight	72.4		\$155.83	\$11.3
Sub-total Non-Vermont origin	8,947.4		Average \$139.38	\$1,247.1
Vermont origin				
Day	3,156.4		\$45.25	\$142.8
Overnight	691.7		\$104.20	\$72.1
2003 TOTALS	12,795.5		Average \$114.26	\$1,462.0

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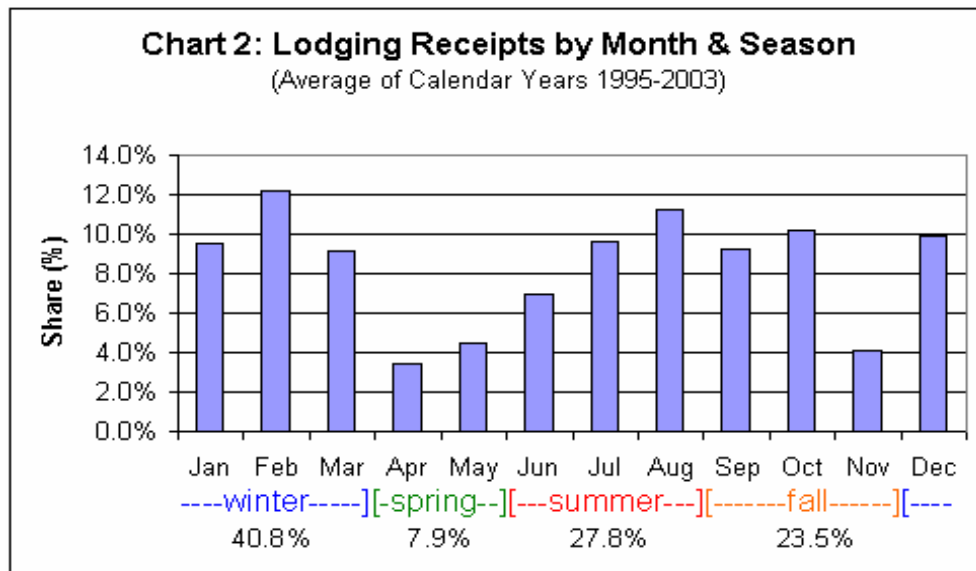
Using the best available information, an estimate of the total visitor expenditures for 2003 is constructed and tabulated to equal \$1.462 billion. This estimate is reconciled with one or more independent data sources, including data compiled and/or reported by the Vermont Department of Taxes, the TIA, the U.S. Department of Commerce (Bureaus of the Census and

Economic Analysis) as well as a series of independent visitor surveys conducted by Portland Research Group for 2003 which are presented in Appendix IX.

The Seasonal Impacts of Visitor Spending

Because of the nature of the businesses that comprise the travel industry in Vermont, the flow of receipts varies from season to season across the months of the calendar year. This study defines the four seasons as follows: (1) the Winter Season—including the months of December, January, February, and March, (2) the Spring Season—including the months of April and May; (3) the Summer Season—including the months of June, July, and August; and (4) the Fall Season—including the months of September, October, and November.

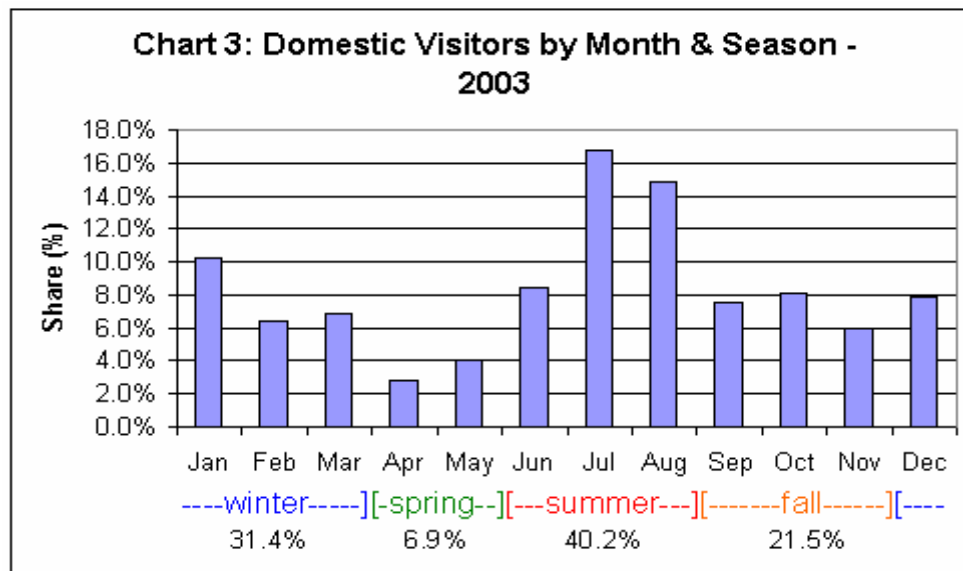
Chart 2 illustrates the flow across the calendar year of lodging receipts by month. The chart shows that lodging receipts are not evenly distributed across the calendar year, with some seasons and individual months representing more of the annual total than others. The chart indicates that the Winter Season has over time generated the highest proportion of lodging receipts in a given year at 40.8% of the annual total, with the Spring Season typically having the smallest share at a 7.9% average of the annual total.⁴ The Winter Season is followed in order of size of share by the Summer Season (at an average 27.8% share of the annual total) and the Fall Season (at an average share of 23.5% of the annual total).



Just as the flow of lodging receipts activity is uneven across a typical calendar year, so too, is the flow of visitors in any given calendar year.

⁴ In this case the time frame corresponded to the 1995-2003 calendar year.

Chart 3 shows the month-to-month flow of visitors in 2003 and indicates that the Summer Season had the largest number of visitors—accounting a 40.2% share of the domestic visiting population in 2003. The Winter Season ranked second with a 31.4% share of the 2003 visitor total. The Fall Season and the Spring Season were estimated to be the seasons with the lowest shares in terms of the number of domestic visitors in 2003, with shares of 21.5% and 6.9%, respectively.



The indicated differing pattern of visitor counts relative to expenditures for lodging is illustrative of an important dynamic of the state’s travel industry. Although the Winter Season has not typically been the largest season of the year for visitor counts, the Winter Season has been the most significant from the standpoint of generating visitor expenditure activity for many categories of spending. This appears to reflect the more financially intensive nature of Winter Season activities such as downhill skiing and snowboarding. In addition, visitors undertaking these activities also appear to be more inclined to take advantage of overnight accommodations at commercial lodging establishments such as those available at the state’s resorts and hotels, and/or the rental of seasonal homes. Alternatively and during the summer months, there are more day-visitor oriented activities and significantly less expensive lodging options are available to overnight visitors (e.g. in the form of parks and campgrounds). Appendix 7 expands on the seasonality of visitor types and the expenditure patterns associated with popular activities.

Input/Output Modeling to Estimate Indirect Visitor Impacts

The economic impact of visitor expenditures on Vermont can be separated into two broad categories. The first includes the direct impact of visitors’ spending for lodging, meals and food, entertainment, transportation and retail purchases such as clothing, recreational equipment and gifts. The direct

impact includes visitor demand for goods and services while on a trip to Vermont. It does not include the spending by the visitor at their place of origin in anticipation of travel or while traveling in-route to Vermont. Spending in preparation for travel might include the purchase of recreational equipment or airline tickets. Expenditures in-route includes purchases of lodging, meals and gasoline while traveling but not made by the visitor while actually in Vermont.

The second category of impact includes the indirect impact of the visitor's direct spending on the Vermont economy. In 2003, Vermont was host to an estimated 12.8 million person visits. Included in that total, are visitors from other states, Canada, and international visitors and the travel activities of Vermont residents visiting within the state but outside of their normal travel routine. A person visit is one person visiting a place for a portion of a day or more and includes those visiting for part of a day, termed *day-travelers*, persons passing through Vermont to another destination, termed a *pass-through traveler*, and *overnight travelers* including those staying in commercial accommodations and with family and friends.

Indirect economic effects refer to economic activity generated by direct visitor spending but felt elsewhere in the economy. Also commonly referred to as the multiplier effect of an industry, indirect effects correspond to the sum of indirect and induced economic-business activities that are stimulated by direct visitor expenditures. Put another way, the indirect effects correspond to activities such as travel industry participants buying supplies from other non-travel industry suppliers and a portion of the everyday spending of employees who are employed in the travel industry employees on a wide range of goods that are not directly attributable to serving the needs of the state's visitors.

The analytical tool employed to estimate the sum of these impacts is called an Input/Output model (I/O model). In next section, the study discusses the concept of I/O modeling, defines and further explains the aforementioned impacts, and the methods used to estimate the magnitude of total economic impact attributable to visitor spending—the travel industry sector.

Introduction to Input/Output Modeling

In essence, an I/O model is an elaborate matrix of relationships between participating members-sectors of a defined regional economy—in the case of this study the state of Vermont. I/O models are constructed to enable industry analysts to estimate the realized total effect of a potential stimulus. The estimate is based on the size of the initial shock or action and the measurement of the aftershocks which follow. The direct impact is the initial action (i.e. a tourist expense like renting a hotel room) and this goes directly to the costs of providing the good or service (i.e. towards paying worker's wages and buying additional inputs). The indirect impact is the second wave of economic activity generated by the workers spending their wages and or the local firms that benefit from the additional purchase of supplies as a result of

the increased level of business in the travel sector. These effects continue to reverberate like a ripple in water throughout the economy. Some of the impact stays local (salaries and local businesses who provide inputs to other local businesses), but eventually, some of the impact will leak out of the area and be lost to this continuous economic feedback mechanism.

It is important to understand that the economic multiplier effect begins with an industry that sells its good or service outside of the regional or state economy. It is measurable because this process of serving external demand results in the importing of dollars into the region. It is the total of that new, incremental dollar flow from the spending and re-spending of that initial stimulus to the regional or state economy that is measured in the multiplier effect. This is why the multiplier effect is typically attributed to export—or dollar importing—industries. A significant part of the travel industry is export-oriented. It is that portion of the industry that is the subject of I/O modeling and analysis.

In application, it is not always clear what portion of a mixed export-local industry such as travel and tourism corresponds to the part that should be included in I/O analysis. Since only incremental activity produces the multiplier effect, extreme care must be exercised in determining what portion of the travel and tourism industry's activity is export-oriented (and therefore subject to measurement in I/O analysis) and which portion of the industry serves the recreation and entertainment needs of the Vermont population (and therefore should not be measured in I/O analysis). With respect to the travel industry, the majority of visitor expenditures made represent incremental (export) activity because they are made to meet out of state demand. By satisfying outside demand, the industry is acting economically like an export industry even though no thing is being sold out of the state.

However, in the case of expenditures made by in state residents on travel industry goods and services, not all can be considered export-based or incremental to the Vermont economy. Some Vermonters live in Vermont for many of the same reasons that out of state visitors come to the state—to participate in outdoor recreation and activities related to the state's natural beauty. Therefore, in state expenditures made by state residents which are part a residents normal, everyday entertainment and recreation spending budget cannot be viewed as export or incremental activity within the context of I/O modeling analysis-measurement. This is because this spending serves local demand—even though it is made for travel activities such as skiing. This type of local visitor spending is akin to a New York City resident going to the theater in New York City in lieu of going to a major league baseball game—where one form of expenditure is directly substituted for the other and is not incremental to the state's economy.

To the extent Vermonters' recreation expenditures are part of the day to day living in Vermont, they do not represent new, export activity if they are within the normal routine of residents. One situation where Vermonters' recreation

spending would be export-oriented (and therefore subject to I/O modeling and measurement) would be if a Vermonter decided to vacation in Vermont versus using those same dollars to vacation in Florida. In that case, that spending would be considered incremental to the Vermont economy because it is not substituting for expenditures made elsewhere in Vermont. In essence those expenditures were re-captured and made in Vermont from spending that would have otherwise occurred outside of the state economy.

Methods of Analysis

This study employed a dynamic input-output model known as the REMI Policy Insight model to help measure the indirect impact of visitor spending in the travel industry during calendar year 2003. The REMI Policy Insight model is a product of Regional Economic Modeling, Inc. of Amherst, Massachusetts (For a full description of the REMI Policy Insight Model, see Appendix VI of this report). The REMI policy model is a highly regarded and widely recognized tool that has been successfully used to undertake the exact type of analysis of the travel and tourism's economic significance that was one of the primary objectives of this study. Input-Output modeling, and the REMI model in particular, has an over 20 year record of development and history of use to assess the economic impact of travel activities as an industry in many other states as well as on the national level.

A REMI model for the state of Vermont was used for this study. Inputs to the REMI model included the development of estimates of direct visitor spending activity by specific sector where travel expenditures were made during calendar year 2003. These visitor spending estimates were developed according to the methods described previously and in the Appendix I through Appendix V of this report.

Working closely with REMI technical personnel, it was determined that the a change in Industry Sales approach was the technically superior approach for input-output modeling, using the variables that these collective discussions determined to best correspond to a study of the economic impact or importance of the travel industry.⁵ Further, these technical discussions determined that the best way to employ the REMI model in this analysis was to: (1) remove the travel industry permanently from the Vermont economy (through a reduction in industry sales), and (2) measure the impact of the absence of the industry on the output, employment, income, and other variables of the Vermont economy and the state's demographics over time. The time dimension was thought to be important because the Vermont economy—like any regional economy—is a dynamic one. It would take a period of time for all of the labor force effects to manifest themselves fully using the above-referenced modeling technique. This is because REMI is

⁵ Including the REMI model's originator Dr. George Treyz and Dr. Frederick Treyz, the current President of REMI.

constructed as an equilibrium model, and results of any I/O simulation from the REMI model need to be reported and presented within that context.

For I/O modeling purposes, estimated changes in Industry Sales for visitor expenditures in the: (1) Hotels-Motels sector, (2) the Eating & Drinking Establishments sector, (3) the Amusement & Recreation sector, (4) the Auto Service & Repair sector, and (5) the Rest of Retail are employed in modeling the permanent removal of total visitor spending in the travel and tourism industry. The expenditures in all categories are spread across three regions in Vermont based on the distribution of reported taxable and exempt lodging receipts by region in calendar year 2003 from the Vermont Department of Taxes. This distribution of reported receipts is assumed to be a reasonable proxy of regional distribution of visitor spending. This distribution is employed in the REMI simulations as a proxy to compose the geographic profile of the reduced industry sales in Vermont as the visitor expenditures attributable to the travel industry are removed from the Vermont economy in calendar year 2003.

Reduced travel industry sales are apportioned as I/O modeling inputs in the following manner: (1) roughly 20% of the total was applied to the three northwest counties of Vermont—including Chittenden, Franklin and Grand Isle counties in calendar year 2003, (2) Just under 25% of industry sales was applied to the counties of Rutland and Bennington, and (3) the 55% was applied to the remaining Vermont counties. A series of REMI model simulations is then completed to develop statewide estimates of employment change, indirect employment change, population change, the change in personal income, the change in gross regional product, and the change in capital investment for calendar year 2003. Several other simulations are completed as a quality control check, including a similar simulation using the IMPLAN I/O model from the Minnesota IMPLAN Group.⁶

Direct and Indirect Impacts of Visitor Spending

This analysis recognizes that there is a time dimension to these impacts that should be recognized. This is perhaps best described from the vantage point that the first year effects of the permanent loss of an entire industry on the Vermont economy (e.g. the first shock related to a very large economic loss for the state) may be different from the fifth year effects of that permanent economic change—particularly for the economic and demographic variables that have lagged relationships (e.g. population migration and residential housing construction). The best illustration of that difference may be in the population effect where their total population impact of such a change may take several years to completely work through their way through the Vermont economy. This is intuitively logical given the I/O modeling approach used—as it may take several years for displaced industry workers to become

⁶ The IMPLAN Model was developed by the U.S. Forest Service to assist in planning efforts at the U.S. Department of Agriculture.

discouraged and actually migrate out of the state in search of new job opportunities to replace those industry jobs lost in the economic simulation approach used.

It should be noted at this point that this economic impact assessment analysis of the state's travel sector does not include two important components of visitor spending: (1) the direct and indirect impact of second home construction activity, and (2) the direct and indirect impact of consumer spending on durable goods. Durable goods expenditures include those for items such as appliances and other long-lasting goods over and above expenditures associated with just souvenir spending or spending on Vermont food products. Durable goods spending is at least in part related to the second home construction investment spending although it can an likely does include more than just spending for second home construction activity. Data gathering on both of those components is still underway as of this writing. The results of this study will be augmented as the results of that research is added to this economic impact assessment.

Table 5 shows the estimated impact of travel and tourism visitor spending on the Vermont economy using output, employment, income and selected demographic variables. For calendar year 2003, visitor spending contributed to an estimated 36,470 direct and indirect jobs in the Vermont economy during calendar year 2003. By impact year 5 (or calendar year 2007), the contribution of the travel industry is estimated to decline to a total of 31,920 direct and indirect jobs as alternative job opportunities emerge as partial replacements for the lost job opportunities over time. The table shows that the travel and tourism industry contributes an estimated \$0.689 billion in nominal dollar personal income in calendar year 2003. In impact year 5, that contribution was estimated to total \$0.933 billion in nominal dollar personal income. In terms of total output in calendar year 2003, the industry was estimated to account for a total of \$2.197 billion in constant (or inflation-adjusted) 1996 dollars. In impact year 5, the estimated calendar year 2003 impact declined to an estimated to be \$1.915 billion, again in inflation-adjusted 1996 dollars.

Table 5: Estimated Direct and Indirect Impact of Visitor Spending In Vermont

Variable	Impact Year	Impact Year
	#1	#5
	(Calendar 2003)	(Calendar 2007)
Total Jobs (Thousands)	36.470	31.920
Personal Income (Billions of Current Dollars)	\$0.689	\$0.933
Output (Billions of 1996 Dollars)	\$2.197	\$1.915
Labor Force (Thousands of Workers)	6.943	18.470
Population (Thousands of Residents)	7.272	25.140

MEMO:

Percentage of Estimated Total Private Sector Jobs in Calendar Year 2003	10.0%
Number of Indirect Jobs Per Direct Job in Calendar Year 2003	0.31

Sources:

EPR and REMI Policy Insight Model Input-Output Simulation (December 2004)

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The table also shows the contribution of the travel and tourism industry to the state's population and labor force. In year 1, the loss of the industry is estimated to be responsible for a total of 7,272 persons living in Vermont, rising to 25,140 state residents as the lagged effects of the industry's contribution measured in impact year 5 (or calendar 2007). This estimated population contribution of the industry is mirrored by the estimated labor force contribution of the travel and tourism industry to the state's economy in calendar 2003 and 2007. Regarding the former, the year 1 contribution of the industry to the state's labor force totals an estimated 6,943 workers. Regarding the latter, the industry's contribution to the state labor force is estimated to total 18,470 workers according to this economic impact assessment.

These results indicate that visitor expenditures in the travel industry accounted for an estimated 10.0% of total estimated full-time and part-time jobs in the Vermont economy in calendar year 2003. These results also indicate that the industry activity in calendar 2003 resulted in an estimated 0.31 indirect full-time and part-time jobs for each direct job in the travel industry. Again, it should be noted that this impact assessment does not include second home construction expenditures or visitor purchases of durable—or long-lasting—items.

Table 6 presents these impact assessment results in comparison to other studies which sought to measure the economic impact of the travel industry in other states and on the national level—using first year economic effects from this study. Although it is difficult to find a study with a methodology that is precisely comparable to the methodology used in this study (e.g. many studies employ different definitions of what is a “visitor”), the comparisons are

nevertheless useful. The table shows that the impact assessment analysis has a generally comparable indirect job-to-direct job multiplier at .31, but this impact assessment appears to be in the lower end of the range of results considering the results in other similar studies where this statistic is presented.⁷ Looking at the results of the TIA, this direct job-to-indirect job multiplier is roughly one-fourth of the U.S. industry average of 1.20 indirect jobs per direct job as calculated by that reputable national trade group in calendar year 2002. However, the TIA estimate for 2002 seems to be in the upper range of other impact studies. This may in part be tied to the significant differences between the states and the U.S. as a whole in the relatively higher value-added, higher-paying U.S. transportation sector and the accounting for significant nationally based business activities such as chain hotels and resorts. However, it is unlikely that that factor accounts for all of this reported difference direct job-to-indirect job multiplier. In addition, the table shows that this impact assessment study falls in the middle of the range of studies on such evaluative variables as jobs per \$100,000 in visitor spending, and tax receipts and nominal dollar personal income per dollar of direct visitor spending.

⁷ Although it should again be stressed that these results still do not include second home construction or visitor purchases of durable—long lasting—goods.

Table 6: Comparison of Other Economic Impact Assessment Studies' Results Versus the Calendar Year 2003 EPR Impact Assessment Study(1)

Variable	EPR '03	Connecticut '01	UVM '99-00	UVM '01	UVM '02	Wisconsin '02	Wisconsin '03	Massachusetts '01	Idaho '97
Direct Spending (\$ Billions)	\$1,462	\$9,890	\$2,530	\$2,840	\$2,000	\$11,677	\$11,710	\$11,700	\$1,694
Total Jobs	36,470	146,178	75,200	84,577	55,132	323,759	311,117	147,600	24,309
Jobs/\$100,000 in Direct Visitor Spending	2.49	1.48	2.91	2.98	2.76	2.77	2.66	1.26	1.44
Tax Revenues (Including Federal, State, and Local Unless Otherwise Indicated)	\$0.2	\$2.4 s.(2)	\$0.2 (3)	\$0.2 s.I	\$0.1 s.I	\$1.9 s.I	\$1.9 s.I	\$0.8 s.I	\$0.1
Tax Revenue per \$1 of Direct Visitor Spending	\$0.13	\$0.24	\$0.09	\$0.09	\$0.07	\$0.16	\$0.16	\$0.07	\$0.08
Personal Income (Wage, Salary, and Proprietors' Income)	\$0.7	\$10.3	\$1.4	\$1.0	\$1.0	\$6.6	\$6.6	\$3.7 (4)	\$0.3
Personal Income per \$1 of Direct Visitor Spending	\$0.47	\$1.04 (5)	\$0.54	\$0.35	\$0.52	\$0.57	\$0.56	\$0.32	\$0.16
Number of Indirect Jobs per Direct Job	0.31	NA	0.48	0.34	0.36	NA	NA	NA	NA

	U.S. '01	TIA U.S. '02	Clinton City NY '03	Pennsylvania '00	New London County Connecticut '98	Virginia '01	Montana '98	Portland, Oregon '03	Northern Ontario '96
Direct Spending (\$ Billions)	(6) \$537,200	\$537,600	\$0,108	\$21,400	\$2,300 (7)	\$12,900 (8)	\$1,513 (9)	\$2,400	(10), (11) \$0,852
Total Jobs	7,900,000	16,300,000	2,686	563,440	45,873	211,000	31,000	26,800	32,893
Jobs/\$100,000 in Direct Visitor Spending	1.47	3.03	2.48	2.63	1.99	1.64	2.05	1.12	3.86
Tax Revenues (Including Federal, State, and Local Unless Otherwise Indicated)	\$98.7	\$94.0	\$0.0 s.I	\$4.0	NA	\$1.1 s.I	NA	\$0.1 s.I	\$0.4
Tax Revenue per \$1 of Direct Visitor Spending	\$0.18	\$0.17	\$0.18	\$0.19	NA	\$0.08	NA	\$0.04	\$0.42
Personal Income (Wage, Salary, and Proprietors' Income)	\$173.9	\$409.2	\$0.0	\$11.5 (4)	\$0.7	\$4.1 approx.	NA	\$0.6 (4)	\$0.2
Personal Income per \$1 of Direct Visitor Spending	\$0.32	\$0.76	\$0.44	\$0.54	\$0.30	\$0.32	NA	\$0.27	\$0.19
Number of Indirect Jobs per Direct Job	NA	1.20	0.33	0.46	0.42	NA	NA	NA	0.38

Notes:

- NA means Not Available
- (1) Year in study title indicates study year and therefore the jobs and the year the dollars are reported.
- (2) The Connecticut study includes significant amounts of dollars spent on gaming which may explain the "high" Tax Revenue-Visitor Spending ratio.
- (3) The study lists \$245 million in "indirect business taxes for the state."
- (4) Study lists number as "Payroll" or "Earnings" such as Wages and Salaries.
- (5) This study concluded that each \$1 of direct visitor spending increases Personal Income by \$1.04—the highest ratio of all studies reviewed.
- (6) U.S. statistics come from "The Economic Impact of Travel on Tennessee Counties 2001" study conducted by the Tennessee Department of Tourism.
- (7) This county contains two large casinos and would explain large expenditures with limited job creation. Includes the direct effect only.
- (8) Employment is direct jobs only.
- (9) The study measures tourist activity by estimating "Nonresident Travel". Employment is based on the direct employment effect only.
- (10) Conversion of Canadian dollars done using exchange rate as of July 1, 1996 from www.x-rates.com.
- (11) Canadian Taxes - Federal, Provincial and Municipal in U.S. dollars.

Prepared By: Economic & Policy Resources, Inc.

The Travel Industry in Context

The size of the relative contribution of an industry in a regional or state economy is a subject of great interest. At this point, the study moves back to the measurement of direct impact by sector to gauge the relative contribution of key sectors to the Vermont economy. The use of direct employment is necessary because of the need for an “apples-to-apples” comparison. Even though using direct employment does not include indirect impacts, this information is still useful to dimension the differing sizes of the direct impacts of each industry sector to the state economy. Considering that tourism includes parts of so many different industries, this is an important comparison.

Table 7 displays the relative ranking in terms of importance for direct wage and salary employment in calendar 2003. For this relative ranking, the number of proprietors is excluded from the employment counts because there currently is no reliable way to allocate the state’s farm and non-farm proprietors by major sector for 2003. This is true, even though proprietors are in fact a very important part of the travel industry’s job picture. This method of approach likely is a conservative way of assessing the industry’s relative economic importance because of that employment dynamic within the industry. Even so, the industry ranks 4th out of the 17 major NAICS industry categories. This indicates that the travel industry remains as one of the more important sectors in the Vermont economy—ranking in terms of direct wage and salary job numbers among the most significant in the state.

Table 7: Rank Order of Major Vermont Sectors--Estimated Direct Employment in 2003 [1]

Rank	Industry Sector	NAICS Code	QCEW [2] Direct Employment
1	Retail Trade [4]	44,45	36,948
2	Health Care and Social Assistance	62	31,377
3	Durable Goods Manufacturing	---	26,741
4	Travel & Hospitality (Visitor Portion) [3]	---	20,019
5	Construction	23	15,378
6	Non-Durable Goods Manufacturing	---	10,745
7	Wholesale Trade	42	10,256
8	Finance and Insurance	52	6,780
9	Information	51	6,495
10	Transportation-Warehousing [4]	48,49	6,250
11	Professional and Technical Services	54	6,073
12	Educational Services	61	5,243
13	Other Services, except Public Administration	81	4,874
14	Natural Resources	11	2,946
15	Utilities	22	1,726
16	Real Estate and Rental and Leasing	53	1,380
17	Mining	21	772

Industry Sector	NAICS Code	Employment
Hotels & Lodging PLUS	721	
Eating & Drinking Places	722	15,808
Recreation & Entertainment	71	1,315
Transportation	48	324
Gasoline & Oil	447	902
Retail and Retail-Related	44,45	1,669
Total		20,019

Notes:

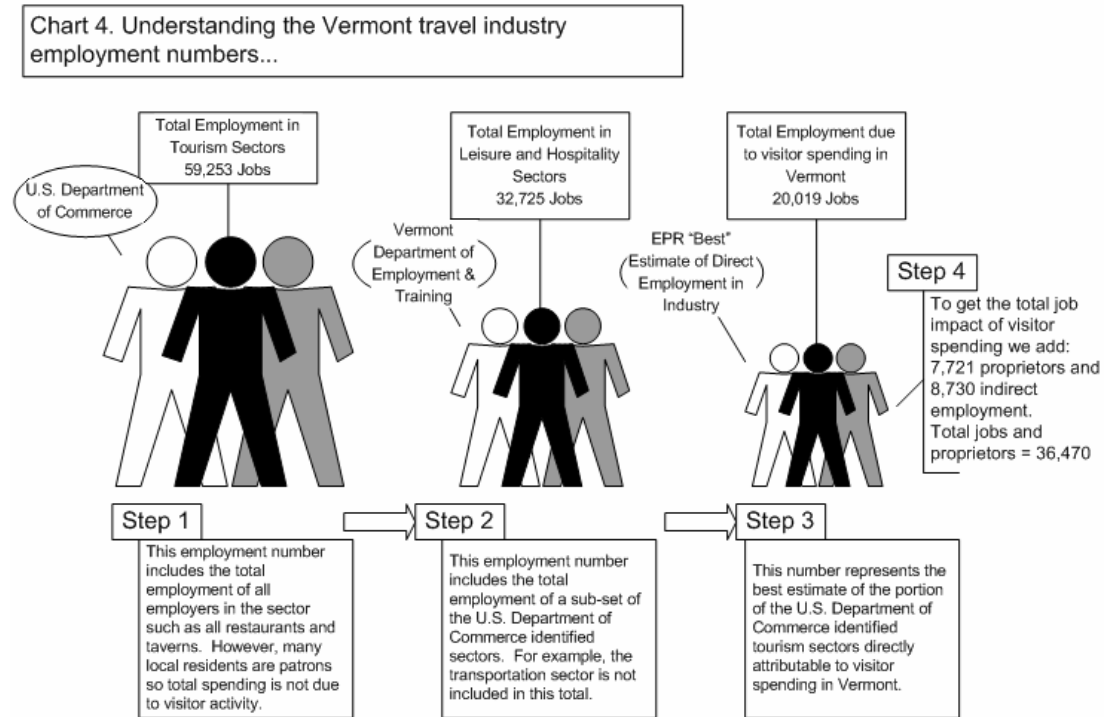
- [1] Includes wage and salary employment only.
- [2] QCEW refers to the Quarterly Census of Employment and Wages. This employment concept excludes proprietors.
- [3] "Visitor Portion" refers to employment directly attributable to visitor spending.
- [4] Excludes employment attributed to visitor spending.

Sources:

EPR and Vermont Department of Employment and Training

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Table 7 details direct wage and salary employment attributable to visitor spending in the Vermont economy. These numbers may be confusing to some because of differing employment concepts and published numbers by federal and state agencies. The differences can be explained by reference to perspective and definition. Chart 4 and Table 7 show the relationship between employment in all travel related industry sub-sectors as defined by the U.S. Department of Commerce, employment in travel and hospitality sectors as defined by the Vermont Department of Employment and training and the results of the analysis reported here.



The U.S. Department of Commerce identifies as tourism related portions of the following industry sectors: Hotel & Lodging Places, Eating & Drinking Places, Transportation, Recreation and Entertainment, Gasoline and Oil and Retail and Retail-Related. Total average annual wage and salary employment in these sectors in 2003 in Vermont amounted to 59,253. The number of wage and salary Travel and Hospitality Industry jobs reported by the Vermont Department of Employment and Training is a sub-set of this number including Arts, Entertainment and Recreation, and Accommodations and Food Services. Accommodations and Food Services include Hotels and Motels and Food Services and Drinking Places. Not included here are transportation or retail sub-sectors. The Vermont Department of Employment and Training reported an annual average wage and salary employment of 32,725 in 2003. The Department of Commerce and the Department of Employment and Training job numbers include all wage and salary employment in the sectors identified. As such, these numbers include more jobs than what are supported by visitor spending alone. Step 3 in Chart 4 and Table 7 identifies a best estimate of direct wage and salary employment

supported by visitor spending in the Vermont economy—20,019.⁸ This number includes a portion of the jobs reported by the U.S. Department of Commerce and the Vermont Department of Employment and Training. It is a sub-set of a portion of each of these numbers. Table 7 shows the development of this estimate and Appendix IV contains a detailed explanation of the steps employed.

Step 4 in Chart 4 indicates that an additional 8,730 wage and salary jobs are indirectly reliant on visitor spending as they are employed in industries that service travel and hospitality industry businesses. To this we add an estimated 7,721 proprietors to arrive at a total employment and proprietor estimate of 36,470 attributable to visitor spending in the Vermont economy. Table 8 shows the accounting from direct wage and salary jobs, indirect employment and self employed proprietors.

Table 8: Best Estimate of Job Impact of Visitor Spending in Vermont - 2003

Direct Wage & Salary Jobs		20,019
Proprietors in the Industry	+	7,721
Indirect Wage & Salary Jobs	+	8,730
Total Direct/Indirect Jobs & Proprietors		36,470

Prepared By: Economic & Policy Resources, Inc.

Estimating State Tax Revenues from Direct Visitor Spending

This part of the analysis brings together the results of previous analyses to estimate the direct impacts of visitor spending in the travel industry and completes the linkages to Vermont state revenues. The results of this analysis are highlighted in Table 9 (below). From the table, visitor spending in the travel industry was estimated to have contributed an estimated \$181.7 million to Vermont state coffers in calendar 2003. An estimated \$91.7 million or 50.5% of the total in calendar year 2003 was contributed by the state's General Fund revenue sources. Another \$15.8 million or 8.7% of the total was contributed by Transportation Fund sources. The Education Fund sources were estimated to have contributed \$74.2 million or 40.8% of the total in that year. Further, it was estimated that \$14.3 million or 7.9% of the total in 2003 was contributed by in-state visitor spending. The other 92.1% of the total for calendar 2003 corresponding to \$167.4 million was attributable to expenditures made by out of state visitors.

The table also indicates that there are two important revenue contributions that require quantification through further research—the state revenue

⁸The results shown here exclude second home construction and durables purchases activity by visitors.

contribution of in-state residents through the purchase of second homes (through the Property Transfer Tax) and the contribution of in-state residents of State Education Property Tax through the ownership of their second homes. That, in combination with the forthcoming estimates of second home construction expenditures and visitor purchases of durable goods items, means that a significant portion of the direct state tax and revenue contributions of visitor spending in the travel industry requires further research. In addition, once the aforementioned contribution of second home construction and durable retail purchases are quantified, it will then be possible to add the indirect effects to this state revenue benefit contribution as well.

Table 9: Estimated Direct State Revenue Impact of the Tourism Industry from Visitor Demand (Calendar 2003\$)

Fund-Component	Revenue Benefit	Related to:	
	(Millions)	In-State Visitors	Out-of-State Visitors
	(Millions)	(Millions)	(Millions)
General Fund:			
Personal Income Tax	\$7.2	\$1.1	\$6.2
Sales & Use Tax (@6%)	\$15.2	\$2.2	\$12.9
Rooms & Meals Tax	\$51.3	\$4.0	\$47.4
Property Transfer Tax	\$1.8	NA	\$1.8
Other Taxes/Revenues	\$16.2	\$2.5	\$13.8
Total	\$91.7	\$9.7	\$82.0
Transportation Fund:			
Gasoline Tax	\$12.2	\$2.8	\$9.4
Motor Vehicle Purchase & Use Tax (@6%) [1]	\$1.7	\$0.3	\$1.5
Other Transportation Revenues	\$1.8	\$0.3	\$1.5
Total	\$15.8	\$3.4	\$12.4
Education Fund:			
Sales & Use Tax (@6%)	\$7.6	\$1.1	\$6.5
Motor Vehicle Purchase & Use Tax (@6%) [1]	\$0.9	\$0.1	\$0.7
State Education Property Tax	\$65.8	NA	\$65.8
Total	\$74.2	\$1.2	\$73.0
Total Combined Funds Revenue Impact	\$181.7	\$14.3	\$167.4

Notes:

NA means Not Available

[1] Includes Rental Portion Only

Prepared By: Economic & Policy Resources, Inc.

This above estimate was developed through a series of steps. These included: (1) devising Vermont state tax-fee revenue linkages to several REMI model output concepts (e.g. for the Sales & Use Tax, the Corporate Tax, and miscellaneous revenue categories), (2) estimating calendar year 2003 tax receipts from requested activity and receipts data for calendar 2003 from the Vermont Department of Taxes (e.g. for the Meals & Rooms Tax, the Property Transfer Tax, and the Education Property Tax), (3) requesting activity data for calendar 2003 from the Vermont Agency of Transportation (for the Gas Tax, the Motor Vehicle Purchase and Use Tax—the short-term vehicle rental portion only), (4) developing a Personal Income tax estimate for calendar 2003 using the detailed sector by sector direct wage and salary job estimates

based on 2003 average wages per sector from the Quarterly Census of Employment and Wages (QCEW), and (4) developing a calendar year estimate of proprietors and an average income per proprietor for calendar 2003, and then applying an average effective personal income tax rate for that year.⁹ These results also were apportioned by visitor category—to either in state or out of state categories.

Estimating the Fiscal Costs of Visitor Spending

The process for estimating state cost involves four general steps as shown in Chart 5. This process begins with the development of an inventory of all state expenditures included in the General, Transportation, and Education Funds that are funded by the state taxpayers. The second step involves converting state fiscal year expenditures to calendar year 2003, and then distinguishing between those costs that are directly attributable to visitor spending and those that are indirect costs. In the third step, appropriate cost allocation factors are developed that tie to the economic and demographic impacts of visitor spending to the outputs from the economic impact assessment modeling described earlier in this report. The fourth step includes the development of cost estimates for the calendar 2003 benchmark year based on the economic, population, and consumption impacts that directly and indirectly result from visitor spending activity.

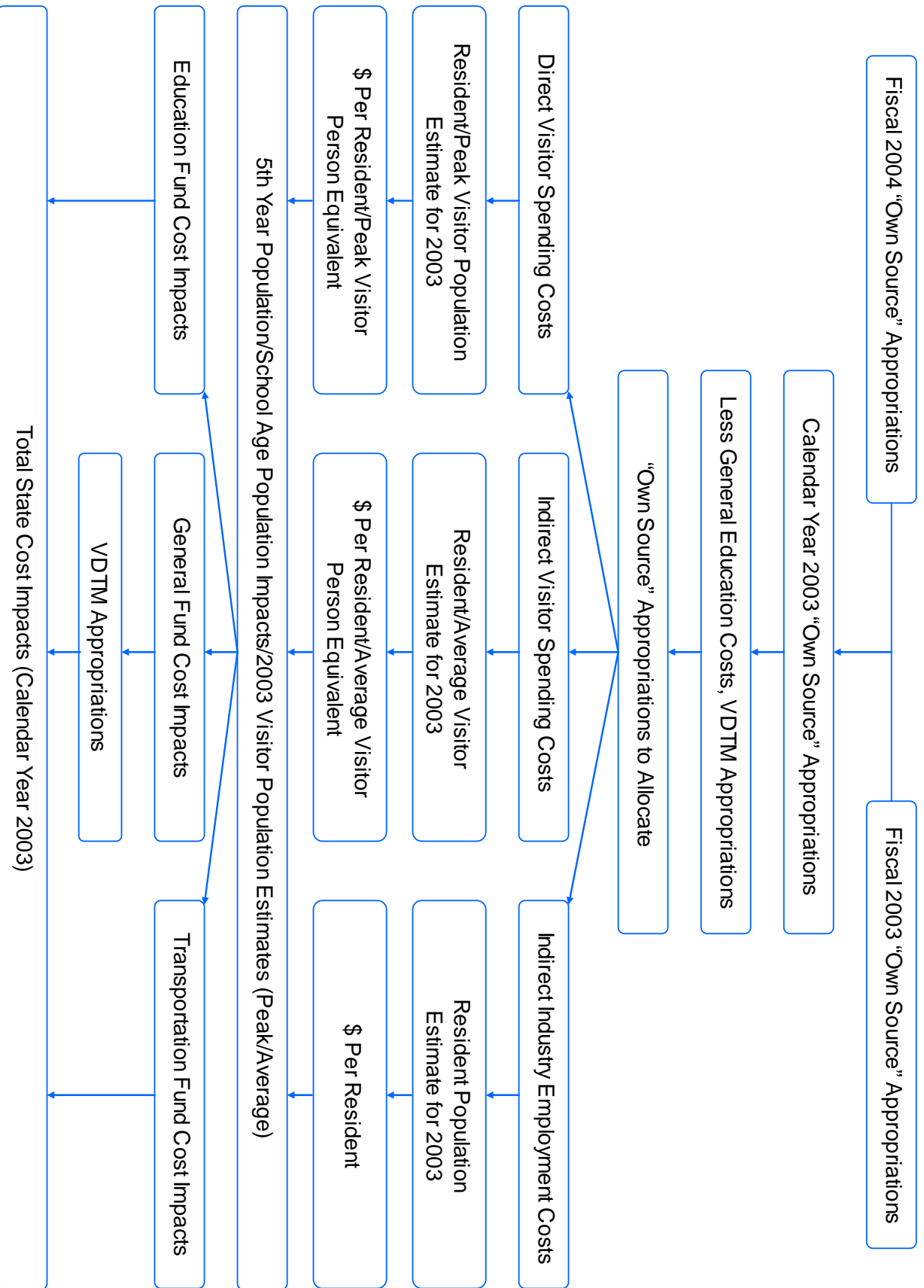
For the purposes of this analysis, costs are defined as those incurred at the state level, which is consistent with the revenues discussed in the previous chapter. Additionally, these costs include only those that can be quantified in monetary terms. Costs which cannot be defined in monetary terms such as increased air pollution from the vehicle emissions of state visitors are not included in this accounting. However, this cost estimate is comprehensive in that it includes both the direct and indirect costs of visitor spending activity that is estimated to have occurred in Vermont during the calendar 2003 benchmark year.

The Inventory and Categorization of State Costs

In order to get an accurate picture of the fiscal costs of visitor spending, all of the state's expenditures had to be assigned to one of two cost categories: (1) those attributable to the visitor category, or (2) those attributable to the resident population (or non-visitor) category. This is a particularly challenging task because the impacts of visitor spending include elements of both cost categories. First, there are those costs that are directly attributable to the spending or activities of visitors or non-residents (such as the need to keep major state thoroughfares open in the winter time to allow access to ski resorts). Second, there are those state costs that are only indirectly attributable to visitor spending. This second category of state costs includes

⁹ A time series compiled and published by the Vermont Department of Employment and Training.

Chart 5: Profile of the cost impact estimation process



items such as the child of a tourism industry or related industry worker that attends public schools in Vermont. More broadly speaking, indirect state cost impacts are those that are incurred due to Vermont resident workers (and their families) that earn all or part of their living in a sector that is impacted by visitor spending activity. In that context, this second category of costs includes those that are attributable to Vermont residents which owe their livelihood, and hence their presence in Vermont, to the economic activity tied to visitor spending. In that context, resident state costs attributable to visitor spending are commingled with those resident costs that result from economic activity in all industry sectors of the Vermont economy. A cost allocation approach to un-bundle those commingled costs is needed in order to develop a defensible estimate of the net fiscal impact of visitor spending.

As mentioned above, the first step in the estimation process involves the development of an inventory of all costs by major fund, including all line items in the state's General Fund, Transportation Fund, and Education Fund. For that inventory, this study uses the state appropriations bills for fiscal years 2003 and 2004 as a starting point. Total expenditures in each fiscal year are first adjusted to make sure the estimate includes only those expenditures that are directly funded by Vermont's taxpayers—or the state's "Own Sources." This state-supported appropriations concept therefore excludes state expenditures that are supported by other non-state funding sources. These include those expenditures supported by federal funds,¹⁰ grant funds, and/or funds that come from dedicated user fees state revolving and/or enterprise funds. This approach of using only state taxpayer supported expenditures is consistent with "best-practices" procedures for industry economic and fiscal impact assessment studies.

This study uses calendar year 2003 as its benchmark time period. Because input-output models work on a calendar year basis, the next task in the estimating process involves converting fiscal year-based state costs (appropriations) to calendar years. This is accomplished by taking the average of state-supported appropriations for fiscal years 2003 and 2004.¹¹ The concept of average appropriations for fiscal years 2003 and 2004 is used because these two fiscal years each cover one-half of calendar year 2003, the benchmark year. State fiscal year 2003 includes the period from July 1, 2002 through June 30, 2003—corresponding to the first half of calendar year 2003. State fiscal year 2004 covers the period beginning July 1, 2003 through June 30, 2004—corresponding to the July-December period or the back end of calendar year 2003.

Once average expenditures for the benchmark year are calculated, the next step involves reviewing line items within each major state government

¹⁰ Because Vermonters pay only a very small relative share of those expenditures.

¹¹ In the case of this study, the average used in this estimate is the arithmetic mean.

appropriations function. A two-step assessment is applied, with the first step including the assessment of whether or not the appropriations line item is directly impacted by visitor spending activity. The second step includes an assessment of whether or not the appropriations line item is indirectly impacted by visitor activity. With respect to the first, the question is asked for each state appropriations line item as to whether the presence of a visitor in Vermont would directly cause a cost to the state. In the instance of an item like winter road maintenance in Transportation Fund, the answer is “yes.” The reasoning here is that the state expends more funds for salting-sanding and plowing on priority state highways in order to keep ground transportation routes open during the winter for visitors to the state’s ski areas. In the area of human services, visitors to the state generally do not file for things like TANF¹² assistance or Medicaid assistance for dependent children—since they are not Vermont residents. In this case, visitor spending activity would only have an indirect impact on state costs. For example, the population impact of workers’ families in sectors of the Vermont economy that support sectors that meet visitor demand.

In instances where this assessment concludes there is a quantifiable direct impact on state costs, those costs are allocated to a combination of the resident population and the peak visitor population in the benchmark year (see below). At the other end of the spectrum there are cost items where there is only an indirect cost connection to the visitor through employment opportunities created in tourism and supporting sectors. In those instances, there is no cost allocation made to visitors at all. Instead, any indirect impacts are allocated through the resident population impacts that tied to the job opportunities created by visitor spending.

Also with respect to the indirect cost impacts, there is another category of indirect costs attributable to the job opportunities created by the visitor industry. An example of such costs is expenditures made by the state to protect environmental quality. Those costs are incurred to support the natural and constructed recreational resources that are a necessary prerequisite to attract visitors. In those instances, costs are allocated to a combination of the resident population and the “average” visitor population in the benchmark year. This is done to recognize that at least a portion of those environmental protection costs are incurred by the state to the benefit visitors. Because there is no direct connection, or only an indirect connection that can be made to employment, this approach captures a significant category of state costs made on behalf of visitors that otherwise would not be properly allocated.

To complete this cost allocation discussion, it should be noted here there are, of course, some costs that are neither directly nor indirectly attributable to visitor spending. In that case, 100% of those costs are considered to be

¹² TANF refers to Transitional Assistance to Needy Families—or today’s version of welfare payments.

outside of the realm of this fiscal impact analysis of visitor spending because they arise from, and are attributable to, activities in other non-related sectors in the Vermont economy.

It should be pointed out that two significant areas of state costs are allocated differently than the methods described above. First, all state appropriations for K-Grade 12 education are allocated using the change in the school-age population and the per pupil general education services block grant amount plus a per student amount for special education costs. This was done so that only the state-sponsored education costs were accounted for in this net fiscal impact analysis. Secondly, it also should be noted that the expenditures made by the Vermont Department of Tourism and Marketing (VDTM) in calendar 2003 are included as a direct cost in this analysis. VDTM expenditures are deducted directly from the revenue benefit as an offset to state revenues because they are viewed as being the marketing costs associated with encouraging visitors to come to the state.¹³ This approach is identical to the procedures used for incentives costs in the state fiscal benefit-cost accounting practices of the Vermont Economic Progress Council in the state's economic development incentives program. The underlying rationale for this approach is that it is unlikely that any of the VDTM expenditures would be undertaken in any given year "but for" the existence of the visitor sector as an important industry in the Vermont economy.

Lastly, in each cost area discussed previously, all cost items are adjusted to include their proportional share of administrative overhead costs. This is true whether costs are direct or indirect visitor costs, and whether these costs involve the resident or the visitor population. This is necessary in order to make sure all state costs are fully-burdened with the state's administrative function thereby making them all-inclusive in nature.

The Estimating Process for the Cost Allocation Factors

Allocation factors represent the bridge between the measured impacts of visitor spending on consumption, job and population, and the state cost concepts. For the purposes of this analysis, a total of three categories of resident and resident-visitor population aggregates are used for cost allocation purposes. These include: (1) the peak visitor plus resident population (to allocate the first category of direct costs listed above), (2) the average visitor and resident population (used to allocate the second category of direct costs listed above), and (3) the Vermont resident population (used to allocate all indirect costs). These population-based allocation factors are designed to correspond to the theoretical underpinning of the direct and two in-direct fiscal cost categories outlined above.

¹³ This means that no VDTM monies are allocated to Vermont residents that are not "visitors" as defined by this study.

The resident population cost allocation approach that is used to allocate all indirect state costs attributable to indirect employment involves obtaining the mid-year population estimate of the resident Vermont population in 2003 from the U.S. Bureau of the Census. Because this mid-year estimate from the U.S. Bureau of the Census includes the number of Vermont estimates as of July 1st and corresponds to the mid-point of the 2003 calendar year, this estimate is used directly in the cost analysis as reported.

For the visitor population concepts, two similar but slightly different estimating approaches are used. In each case the average and peak visitor populations, the visitor population is calculated to approximate a full-time resident equivalent based on length of time they are in Vermont. The average visitor population component is estimated using the visitor day estimate described earlier. The estimate of total visitor days in the 2003 benchmark year is divided by 365 days to calculate the number of visitors in resident population equivalents. This visitor population equivalent is then used with the resident population to complete the benchmark year cost allocations for the cost concepts applied to the resident and average visitor population.

The peak visitor population in residential equivalents is calculated by comparing the monthly arithmetic mean of the annual estimate of visitors to the estimate of visitors in a given month and selecting whichever is higher. The peak visitor season population estimate is important because it is clear that a distinct seasonal pattern of visitor activity exists across the year. This seasonal pattern needs to be recognized and accounted for because state service delivery systems need to have the capacity to meet the combined service demands of both the resident and visiting population concurrently at any point in time during a given year—regardless of whether or not this capacity is actually used. Peak periods such as 4th of July, Vermont City Marathon weekend, the leaf-peeping season, and the President's Day and Martin Luther King peak weekends during the winter season determine the peak level of service required. In other words, the peak visitor population concept is important because even in months of lower visitation, the state still needs to substantially maintain its visitor services delivery network to meet peak demand.

In order to estimate the peak visitor population, visitors by month are estimated using TIA data by type (e.g. day versus overnight). The share of the total visitors by type during the 2003 benchmark year is calculated for each month in order to observe high and low shares of the visiting population during the benchmark year. For overnight visitors, the total estimated number of visitor days is calculated for each type by multiplying the number of nights stayed times the number of overnight visitor such as in state, domestic, Canadian, and other international. The sum of the estimated visitor days for overnight visitors is then distributed to each month using the distribution of visits per TIA data referred to above. The visitor days of overnight visitors is further adjusted to account for seasonal variations in length of stay (see

“Length of Stay Estimates by Season” write up in this report for full description of this methodology). This adjustment is made to capture the fact that survey data show that overnight trips during the winter and summer seasons are longer than overnight trips in the spring and fall.

Day visitor estimates by month are then calculated using a similar methodology as is used in the overnight visitor estimates by month. However, because all day trips are presumed to have the same trip duration—one day—no seasonal length of stay adjustment was necessary. Day visitor estimates by month are calculated by using the TIA monthly trip distribution with the duration of one visitor day per trip. By summing the calculated visitor days for overnight visitors and day visitors, a total estimate of monthly visitor days is calculated. Using this methodology, the sum of the peak visitor population is estimated to be 30.6 million visitor days. This peak visitor population estimate converts to an annual full time resident equivalent of 83,896 resident equivalents. The result of this approach, along with the resident population, is used as the cost allocation factor for all identified costs that correspond to the peak visitor population.

The final step in the estimating process for state costs involves developing the specific cost estimates by fund attributable to visitor activity. Overall, the process used in this study parallel the estimating procedures followed in the fiscal impact assessment model employed by the Vermont Economic Progress Council (VEPC) in the state economic development incentives program. The main difference in this study is that the visitor population is brought into the estimating equation as opposed to the VEPC approach which attributes all state fiscal costs to Vermont residents. The economic and demographic outputs of the statewide REMI model are used to drive costs attributable to visitor spending activity. This approach uses and refines the state expenditure to economic and demographic output bridges established in the VEPC model for many cost categories with the addition of the estimates of visitor population as described above.

Cost Estimation Results

Specific estimating procedures by major fund and by cost component for the fiscal benefit-cost impact model used in this study are described here.

Estimate of Education Costs

The first step in the calculation of the total state fiscal cost impact attributable to visitor spending is an estimate of the change in state education costs in the benchmark year. The benefit-cost estimate employs an average of the fiscal year 2003 and 2004 education block grant amount of \$6,643 per equalized pupil. This average statewide education block grant amount is multiplied by the reported change in the number of school-age children due to visitor spending in year #5 using the input-output model results. Because the accounting is for state costs only the state education spending supported by

statewide education property taxes are included in this analysis. Above block and local education spending is not considered to be relevant in this state-level fiscal impact analysis.

In terms of the cost impact categorization, this cost concept is an indirect cost. It is therefore attributable only to the resident population effect of the job opportunities due to visitor spending—in this case only the school-age portion population effect. The fifth year school-age impact is employed in this analysis to properly account for the any relative competitive effects that are captured in the input-output model that would tend to equilibrium over time. This analysis estimates that a total of \$38.4 million in state education costs are attributable to visitor spending in the benchmark year (see Table 10).

Table 10: Estimated Cost Impact of the Tourism Industry from Visitor Demand (Calendar 2003)

Fund Component	Total State Fiscal Costs	Representative Items
General Fund:		
Resident Only	\$16.2	All state costs other than visitor-adjusted costs
"Peak" Visitor Population	\$15.2	Libraries; State Police; Judiciary; Health Correction
Indirect Costs	\$2.1	All Non-Peak ANR Costs
Total	\$33.5	
Transportation Fund:		
Resident Only	\$0.6	All state costs other than visitor-adjusted costs
"Peak" Visitor Population	\$28.9	All Categories except Motorcycle Training
Indirect Costs	\$0.1	State Parks; Fish & Wildlife
Total	\$29.6	
Education Fund:		
Per Student Block Grant Basis	\$38.4	Allocated through the Basic Block Grant
Total	\$38.4	
VDTM Offset	\$5.4	Entire VDTM Budget
Total Cost Impact	\$106.9	

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Estimate of General Fund Costs

The second area of cost impacts involves the development of an estimate of General Fund costs directly and indirectly attributable to visitor activity. For estimating this cost component, average appropriations for the benchmark year from state revenue sources are categorized into the three areas described above. These cost totals are then divided by the appropriate population cost allocation factor—including those costs in the resident population allocation category, the resident population plus average visitor residential population equivalents allocation category, and the resident population plus peak visitor residential population equivalents allocation category.

These per person equivalent population amounts in the benchmark year were then multiplied by the estimated visitor and year #5 year-round resident population impacts to estimate the total General Fund cost impact of visitor spending net of the appropriations to the VDTM. Based on this analysis, a total of \$33.5 million in state General Fund costs are estimated to be attributable to visitor spending in the benchmark year (see Table 10).

Estimate of Transportation Fund Costs

Transportation Fund appropriations for the benchmark year from state revenue sources are categorized into the three classifications of expenditures. These cost totals are then divided by the appropriate population cost allocation factor to determine the per person amounts. These per person amounts are then multiplied by the estimated visitor and year-round resident population impacts to estimate the total Transportation Fund cost impact attributable to visitor spending. Based on this analysis, a total of \$29.6 million in state Transportation Fund costs are estimated to be attributable to visitor spending in the benchmark year of calendar year 2003 (see Table 10).

Estimate of Direct VDTM General Fund Costs

The final step in this cost analysis involves the adjustment for state-supported VDTM appropriations. To make this adjustment, VDTM appropriations for fiscal year 2003 and 2004 are summed and averaged to obtain an estimate for the calendar 2003 benchmark year. These direct VDTM costs were then added to the other costs due to visitor spending as a direct offset to the revenue benefits calculated previously (see the bottom of Table 10).

The effect of that offset approach is to consider 100% of the VDTM appropriations a visitor spending cost. This differs from the population-based allocations described above in that the population allocation method would attribute at least some of the state's costs to the resident population. This approach is not used for VDTM appropriations because it is unlikely that the state would undertake significant expenditures to promote tourism activity if it did not have a significant visitor base. A total of \$5.4 million is employed as a direct off-set to visitor fiscal benefits in the fiscal impact assessment equation.

Estimate of Net Fiscal Impact

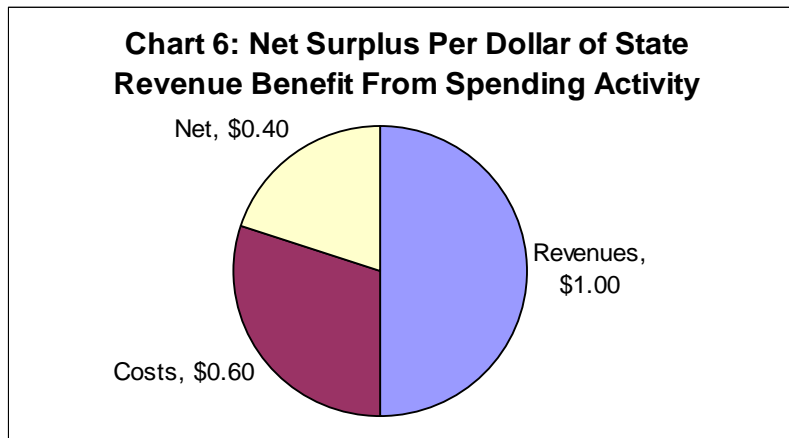
Comparing the cost estimates with the revenue benefits yields an estimate of net fiscal impact to the state, which is presented in Table 11. The result is an integrated fiscal benefit/cost impact estimate that includes all state fiscal benefits and costs attributable to visitor activity—except for the construction spending and associated durables goods purchases related to construction in the state's second home market. This analysis shows that visitor activity as measured by their spending in the Vermont economy is an important engine for the state's economy and fiscal health with a net positive benefit to the state in 2003 of \$77.6 million.

Table 11: Estimated Net Fiscal Impact of Visitor Spending (Calendar Year 2003\$)

Fund-Component	State Revenue Benefit	State Fiscal Costs	Net Fiscal Impact
	(Millions of Calendar 2003\$)	(Millions of Calendar 2003\$)	(Millions of Calendar 2003\$)
General Fund:			
Personal Income Tax	\$10.1		
Sales & Use Tax (@6%)	\$15.2		
Rooms & Meals Tax	\$51.3		
Property Transfer Tax	\$1.8		
Other Taxes/Revenues	\$16.2		
Total	\$94.5	\$33.5	\$61.1
Transportation Fund:			
Gasoline Tax	\$12.2		
Motor Vehicle Purchase & Use Tax (@6%)	\$1.7		
Other Transportation Revenues	\$1.8		
Total	\$15.8	\$29.6	-\$13.8
Education Fund:			
Sales & Use Tax (@6%)	\$7.6		
Motor Vehicle Purchase & Use Tax (@6%)	\$0.9		
State Education Property Tax	\$65.8		
Total	\$74.2	\$38.4	\$35.8
Total Combined Funds Impact	\$184.5	\$101.5	\$83.1
VDTM Off-set	---	\$5.4	---
Net Fiscal Impact	\$184.5	\$106.9	\$77.6

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That net positive fiscal impact corresponds to a total of 42 cents of every dollar of state revenue benefit that flows to the state from visitor spending. From a fiscal impact perspective, that means visitor spending provides a substantial net fiscal benefit to Vermont's taxpayers that can be used to help pay for state costs in other parts of the budget.



The Prototypical Community

A comprehensive analysis of the economic and fiscal impact of visitor activity at the local level is beyond the scope of this analysis. However, to develop a sense of the impact of visitor activity in selected local situations, a prototypical community case study approach is employed. As a means of dimensioning this understanding, three communities typical of Vermont are specified and the economic impact of visitor activity is analyzed and compared. The defining characteristics of the three types of communities are modeled to more accurately represent the most popular or frequent definitions of travel related communities. The three prototypical communities are delineated by the general titles of rural, resort and small urban.

For each of the three prototypical communities, the same methodology is employed to determine direct and indirect employment and contribution to personal income. In the first step of estimating the impact of tourism attributable to a specific community type, it is necessary to specify the visitor related amenities that define the local economy and its public and private infrastructure. By using existing community and state level data, a hypothetical community of similar characteristics is defined.

Consistent with prior components of this study, supply must reasonably be in balance with demand in this prototypical community analysis. However, there is more room at the local level for this condition to be out of balance as a single community rarely defines an economic region. This is why a hypothetical community approach is adopted. It is difficult to consider one community as an isolated economic region due to the constant flow of services and products in and out of the community. The knowledge that most people do not live in the same town where they work indicates how a community is not an all inclusive economic region.

In addition, the hypothetical community approach also helps to avoid informal and incorrect comparisons to any individual community in Vermont. The natural tendency towards such comparisons is inappropriate as the material and context of reported results often differ to the casual observer's reality of "their" local community or a community with which they may be familiar. The hypothetical approach allows interested parties to understand the concepts and impacts of tourist activity on a community comprised of certain characteristics and apply these concepts and impacts to known communities of similar characteristics, adjusting accordingly for differences. Hence, the hypothetical approach is readily applicable to numerous tourist related communities throughout the state versus the finite results of modeling actual communities.

This chapter investigates the benefits received on a community level for tourism related activities. Three hypothetical prototypical tourism communities are developed, investigated, and discussed. The three communities are

denoted as rural, resort, and small urban based on each unique set of characteristics. For each community, a stock of industry variables will be assessed and described. Following this discussion of the supply side, the estimated measures of personal income and direct and indirect employment will be reported including the methodology employed. This constitutes visitor activity such as spending by individuals, groups and aggregate level reporting. The estimates of these benefits are converted into measures of impact segmented by direct and indirect impacts. The modeling employed in the analyses undertaken distributes visitor spending to these sectors based on survey and third-party research results and to indirect impacts using the REMI dynamic input-output model. The analysis of spending is undertaken in as refined a manner as current data permits.

The Rural Prototypical Community

Like the majority of municipalities in Vermont, this prototypical community is rural in nature and character. It has a small centralized village with a modest amount of services surrounded by farm and forest land. With a total year-round population of fewer than 1,500, this community is the quintessential small town Vermont experience. The town has a housing stock of 771 homes, of which 129 are second or seasonal use homes. Based on adjusted state level measures, it is estimated that 59.7% or 77 of the second homes are owned by individuals whose primary residence is not in Vermont.

A travel brochure may describe the community as follows: “(this rural community) is nestled in a valley and is equipped with desirable access to the vast hiking trail system encoded in the Green Mountains. Solidifying the attractiveness of this community’s hiking experience, a state funded park is located within town boundaries abutting the access trail to the Green Mountains. Providing trail information, lodging, and ample parking, the state park anchors this prototypical rural community as a desirable destination for visitors of all categories looking for outdoor adventure.” A healthy mixture of both in-state and out-of-state, day and overnight visitors formulates the visiting population for this prototypical rural community.

This small rural community has a variety of lodging establishments available to travelers looking for accommodations. The most unique to the community is a state park. The park contains 11 lean-to sites and 33 tent sites. Similar to most communities, this hypothetical rural community also provides more “formal” accommodations. The community possesses one small inn with an available room count of 14 and 2 bed and breakfast establishments or B&Bs. Each B&B contains 5 rentable rooms. Using percentages derived from the “Establishment Survey,” estimates of utilization for each establishment were created. These estimates are segmented by establishment sizes consistent with the groupings previously discussed in this report.

Eating and drinking places service the local population as well as visitors to the community. It is only the activity attributable to the visitor population that is measured and reported here. The rural community is equipped with three eating and drinking establishments.

Table 12: General Characteristics of the Prototypical Communities

	Rural	Resort	Small Urban
Population	1,477	2,133	13,900
Total Housing Units	771	3,328	6,868
Seasonal Housing Units	129	2,303	76
Towns typical of such characteristics:	Craftsbury Greensboro Brandon	Killington Ludlow Stratton Jeffersonville	Rutland Brattleboro Bennington

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Completing the commerce description of the community, there are eleven retail shops clustered together to form a semblance of a “Main Street”. Of these eleven, four of these retail shops do significant business with the tourism industry. This sub-set includes two local markets, a gas station/convenience store, and a craft/antique store.

Estimates of overnight visitor trips are bound by the supply of available accommodations. Therefore, by taking stock of the lodging supply and applying state level measures of utilization and specific estimates related to visitor party characteristics, a total measure of commercial lodgers can be determined. Using housing counts for both primary and secondary residence, and comparable measures of utilization by visitors, a total measure of noncommercial lodgers can be determined. The sum of these two parts equals the total overnight visitor population.

Focusing on community specific attractions and aggregate state level measures of visitor counts by segments allows for estimates to be made for day visitor populations. By segmenting each group by trip duration and lodging type, completed state level expenditure estimates can be sorted and specially segmented to correspond to each group on a community basis. It is the summation of utilization estimates which are bound by capacity limitations, combined with expenditure measures which determine the total benefits of visitor activity by community.

Based on the above description of the infrastructure of establishments providing services to visitors to the community, it is estimated that the prototypical rural community plays host to nearly 15,000 person trips annually. This total can be segmented approximately into 8,000 overnight trips versus the balance of nearly 7,000 day trips. Using estimates of average length of

stay by various lodging types from the Establishment Survey, the Friends and Family Survey and the Second Home Survey, the number of person trips to the rural community is converted into over 30,000 visitor days.

The activity generated from these visitor days is estimated to contribute over \$1.6 million to the Vermont economy. Of this \$1.6 million, 70% or nearly \$1.2 million is estimated to occur locally in the rural community. Throughout the rural community, these expenditures support 28 direct and indirect jobs adding over \$492,000 to local personal income. On the state level, the total visitor spending related to visitors of this prototypical rural community (i.e. \$1.6 million) supports 39 direct and indirect jobs. This equates to a contribution of \$677,100 in personal income statewide.

The Resort Prototypical Community

Perhaps the most important segment of the prototypical communities to the industry overall is the resort community due to the sheer intensity of the travel industry activity. Resort communities specialize in attracting visitor dollars from both out-of-state as well as in-state sources. Representing the majority of economic activity in a resort community, visitor spending supports the living and lifestyle of community residents.

In comparison to the modest state park which acts as a “feature attraction” of the rural community, the resort community offers a comprehensive visitor wonderland with a wide range of attractions and activities which change with the seasons. Initially specializing in downhill skiing and related winter activities, over the last few years, the resort community has developed recreation and cultural amenities to attract visitors during all times of the year. These amenities include golf courses, shopping, cultural events and refined trail systems for hiking, biking and horseback riding.

Table 13: Lodging Establishments by Prototypical Community Type

	Rural	Resort	Small Urban
Number of Rooms per Establishment			
--- 1-10	2	12	7
--- 10+-20	1	2	5
--- 20+-49	1*	3	3
--- 49+	0	4	5

Notes:

* This lodging establishment is the state park with 33 tent sites and 11 lean-to sites thereby equating to 44 "rooms".

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In addition to providing entertainment opportunities, the resort community has been busy developing additional lodging facilities to accommodate growth in the visitor population. Beyond conventional lodging developments such as

hotels, inns and B&Bs, the resort community has been actively developing the second home housing stock. The resort community augments typical visitor expenditures by facilitating investment into the second home market thereby preserving the likelihood of future visitor expenditures at the local shops, restaurants and recreational attractions. Housing counts dimension the second home investment activity. While the resort community has an approximate population of 2,100 people, it has a total housing stock of over 3,300 units. Over two thirds of the total housing count are defined as seasonal or vacation homes. Out-of-state residents own 83.0% or 1,912 of the approximate total of 2,300 vacation homes.

Table 14: Visitor Activity by Prototypical Community

	Rural	Resort	Small Urban
Person Trips			
Overnight	7,912	101,750	155,532
Day	6,837	75,167	147,755
Total	14,750	176,917	303,286
Visitor Days			
Overnight	23,179	259,484	354,606
Day	6,837	75,167	147,755
Total	30,017	334,651	502,361

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Aside from the 2,300 seasonal home units, visitors have multiple lodging options in the resort community. The hypothetical resort community includes 4 large lodging establishments with over 50 rooms each, 3 medium-sized hotels each with an average available room count of 33 rooms, two inns adding a total of 28 available rooms and lastly 12 B&Bs each providing 5 rooms. This heavy mix of commercial lodging (hotels, inns, and B&Bs) and non-commercial lodging (second homes and staying with family and friends) makes the resort community a highly desirable destination for overnight visitors.

Similar to the rural community, there are a number of local establishments providing services to residents and visitors alike. There are 10 eating and drinking establishments. Of the 10, two specialize on both eating and drinking while the remaining 8 focus predominately on eating. These 8 establishments can be thought of as cafes, fast-food places, diners, and restaurants lacking a large bar crowd. The community also contains 24 retail and service for hire shops which gain significant revenue from visitors. The shops include two local markets, two gas station/convenience stores, an auto repair shop, a property management company and 18 assorted stores and services. These stores and services include souvenirs, crafts, antiques, equipment rental/purchasing, assorted lessons and clothing retail.

Based on the above infrastructure of accommodation types, the resort community hosts over 100,000 person trips per year. An additional 75,000 day trips are made annually bringing the communities total to nearly 177,000 person trips. This equals over 330,000 visitor days. Visitors are estimated to spend \$32.8 million or 85.9% of their total trip expenses while in Vermont within the resort community. These monies translate to 772 direct and indirect jobs within the community increasing local personal income by nearly \$13.5 million.

As for statewide impacts, the visitors associated with these trips spend a total of \$38.2 million on non-durable goods in Vermont each year and this excludes an additional \$3.2 million associated with durable spending by second home owners. By modeling the impact of the non-durable spending, it is estimated that this spending supports 889 direct and indirect jobs in the Vermont economy. Statewide, personal income is increased by over \$15.4 million due to this tourism related economic activity.

The Small Urban Prototypical Community

Based on current information, Vermont is home to only one true urban area – Burlington. As Burlington is more of an anomaly than typical of the tourism experience, a small urban community is developed and modeled for the third of the prototypical communities. The small urban community closely resembles communities like Rutland, St. Johnsbury, Bennington, Brattleboro, and the Barre-Montpelier area.

Unlike the resort community, the small urban community survives on non-tourism related activity, though the general health of the community is greatly augmented by visitor expenditures. The small urban community is a buzz of activity with a vibrant population base of just less than 14,000. The resident population lives in the 6,900 housing units of which only 76 are second homes. The majority of these 76 (45) are owned by in-state residents.

Though the small urban community is not dependant on visitors, it still possesses and maintains an active tourism industry. Generally these communities are at traditional travel cross roads and have evolved to accommodate the traveling public. Often there are local attractions such as museums and natural history attractions. The community has 5 large lodging establishments each averaging 92 rooms, 3 medium hotels adding 100 rooms in aggregate, 5 inns with 14 rooms each, and 7 5-room B&Bs. The high population count adds significant non-commercial room capacity (i.e. staying with family and friends) thereby offsetting the limited availability of second homes. But while there is ample supply of overnight accommodations, the small urban community has a proportionately higher incidence of day-trip visitors.

Table 15: Visitor Spending by Prototypical Community (2003\$)

	Rural	Resort	Small Urban
Expenditure in Community			
Overnight	\$995,460	\$27,837,150	\$26,720,087
Day	\$175,819	\$4,961,949	\$6,054,653
Total	\$1,171,279	\$32,799,099	\$32,774,740
Total Expenditure in State			
Overnight	\$1,412,921	\$32,400,550	\$33,400,255
Day	\$249,551	\$5,775,371	\$7,568,349
Total	\$1,662,473	\$38,175,921	\$40,968,604

Prepared By: Economic & Policy Resources, Inc.

The day visitor is attracted to the cultural opportunities which are more abundant in a small urban community than a rural or resort area. Cultural opportunities present themselves in many different ways including festivals, theater and music performances and also shopping experiences. By servicing a wider and more diverse population, a small urban community can support a variety of retail establishments and attractions that ultimately attract visitors. These include galleries, clothing boutiques, specialized craft shops and museums and attractions. An example is the granite quarries in the Barre/Montpelier area. The small urban community hosts over 100 retail options who seek to attract visitor spending. They are local markets, gas station/convenience stores, and theaters (such as movie and stage).

The small urban community hosts over 300,000 person trips per year with nearly half of these trips being day trips. Using the same survey sources listed above, these person trips equate to over ½ million visitor days. By dividing visitor days by the 365 days in the year, this amount of travel activity has a year round equivalent of an additional 1,376 full time residents to the small urban community. However, the small urban community is no exception to the seasonal swells and lulls of the tourism industry and therefore can at times experience visitor levels well beyond this smoothed annual number.

The overnight visitor population to the small urban community spends \$33.4 million statewide during their travels, the majority of which (80.0%) is spent locally in the small urban community. Including day visitors, the total spent by visitors to the small urban community is \$41.0 million statewide. These expenditures support 953 direct and indirect jobs throughout the state. Looking solely at expenditures within the community, visitors spend an estimated \$32.8 million which supports 765 local direct and indirect jobs which contributes over \$13.5 million to local personal income.

Table 16: Impacts of Visitor Activity by Prototypical Community

	Rural	Resort	Small Urban
Direct and Indirect Employment			
Local Impact	28	772	765
Statewide Impact	39	889	952
Personal Income (2003\$, in '000s)			
Local Impact	\$492.1	\$13,470.0	\$13,540.0
Statewide Impact	\$677.1	\$15,540.0	\$16,640.0

Prepared By: Economic & Policy Resources, Inc.

Limitations

There are some significant limitations to a hypothetical analysis such as this that must be recognized by the reader. The examples here are scaled to what a typical community in the category might resemble. However, all communities are somewhat unique as they may be home to specific attractions or amenities, en-route to a major visitor attraction or at a particularly important juncture in the transportation network. Additionally, no community is an economic island—South and North Hero included. The proximity of towns in Vermont is such that economic activity most often transects community boundaries. Accordingly, economic impacts are more likely spread across communities with geospatial relationships defined by the size of the impact and the nature of the transportation network. As such, the examples given here serve to offer some guidance as to the scale of activity a similar community can expect *Ceteris paribus*—all other things being equal.

Conclusion

Visitor related travel activity is demonstrated as a significant component of the Vermont economy employing workers and affording proprietors a return on their investment and to both a way of life. In many areas of Vermont visitor activity forms the basis for the majority of economic activity, providing an inflow of dollars to cover payroll, pay trade vendors and encourage new investment. In recent years the industry has grown in part due to Vermont's strong image of a pleasant place to recreate, visit with family and friends and to be in a relaxing pleasant environment. Rising incomes in general, an aging population with increased leisure time, and a renewed emphasis on family togetherness, seem to be combining to foster additional growth in travel activities. Vermont's travel industry participants are closely tied to the natural and cultural resources of Vermont. They add value and package those resources to attract visitors and economic activity. Taken together, these natural and cultural resources and the value added by the industry together are recognized as the "Vermont brand." Because of this interdependence, there is a strong interest in developing and enhancing the common understanding that the "Vermont brand" is the property of all Vermonters.

The analysis reported here quantifies both the economic and state fiscal impact of visitor activity in Vermont for the benchmark year of 2003. It reports the direct and in-direct economic impact of visitor activity and estimates the total state revenue and cost impacts of visitor activity as well. To accomplish that objective, terms and definitions have been developed, standardized methodological procedures and reconciliations have been designed and employed. These procedures have been designed to produce estimates of visitor impact that are as accurate as current recognized methods and data availability allow. As such, they set forth a standard to be employed with future research on this topic.

The findings and conclusions discussed represent the best estimate of visitor activity reconciled to known data and information. Although the analysis includes all of the economic and state level fiscal impacts recognized as associated with visitor activities, there are a few notable exceptions where further research is needed. Most significant of these items is the development of a more complete understanding of the second home component of the industry. As noted in the report narrative, the activity of visitors traveling to and from and staying at second and vacation homes in Vermont has been estimated as part of the accounting shown here. Additional work is underway to refine those estimates and to capture the investment activity associated with the construction of second homes and the associated visitor spending on durable goods items such as appliances and vehicles. Additionally, we also will be reporting on a more in-depth look at industry employment patterns, the

compensation and benefit levels of industry workers, and some of the reasons why Vermonters work in the industry.

This narrative summarizes the data sources informing the analyses and methods employed and then reports the conclusions of the research. A series of technical appendices are available that address each research component in detail by explaining the data sources and methods employed to arrive at the intermediate measures and estimates. These technical appendices serve to document the work by explaining our methods and reasoning, which then are used to complete the overall estimates of economic impact.

A summary report of the findings is available as is a summary Power Point® presentation. Copies of these documents are available for downloading in Adobe® format at www.epreconomics.com. Some of the larger appendices are only available by contacting Economic & Policy Resources, Inc. by e-mail and requesting a copy on CD ROM. There may be a nominal charge for those documents.

Frequently Asked Questions

Q. How does this study define a visitor?

A. For the purposes of this study, the term visitor or traveler/visitor is employed to identify a person traveling to a place outside of his or her normal commuting pattern for the primary purpose of leisure, business or personal business. This term was employed because it is consistent with “best practices” in the national and global travel industry and it more accurately fits a working definition for purposes of examining the economic impact of travel related activities. The definition recognizes that a person traveling from his or her home area in Vermont to another area in Vermont would be considered a visitor to the later area. As such this definition recognizes a common reality of visitor travel that often includes travel close to home but of no less significance than travel of greater distance or by a person from further away. The term visitor easily equates to the term “tourist,” which has common usage but lacks specificity. The choice of the term visitor relates closely to the concepts necessary to understand the economic impact results. See the below discussion regarding these concepts.

Q. Does this definition include Vermonters and their families who are making travel expenditures and recreating within Vermont? If so how?

A. Yes. The study includes all expenditures and activities for those travelers/visitors who are undertaking activities that are outside of their normal routine. That is, they are visitors to areas of Vermont outside of their normal home area.

Q. How do these results compare to the previous studies undertaken by the University of Vermont?

A. The analyses reported here were specifically prepared to estimate and measure the economic impact of visitor activity on the Vermont economy employing the specific definition set out above to define a visitor and his or her related activities. The University of Vermont research is based on survey results of various segments of visitors to Vermont. The university studies provide useful information about the characteristics and travel activities of these populations but were not designed to compile an accurate estimate of overall visitor related activities. Additionally, the University of Vermont research explicitly or implicitly employs differing definitions of visitors in their survey work and therefore the results are not directly comparable to those reported here. The definition of a traveler/visitor employed in this study is more inclusive than the past UVM work. Lastly, the university research was

not undertaken to independently reconcile estimates of demand for services by visitors with supply of services by the travel industry thus; they cannot be employed in policy analyses without additional research and interpretation.

Q. The studies draw a distinction between economic activity and economic impact. What's the difference between measuring traveler/visitor activity and economic impact?

- A.** Although they are intuitively similar, there is a major difference between the two concepts of “activity” and “impact” as presented in the report. The distinction between these concepts has to do with where the consumers that demand travel and tourism services provided by Vermont businesses come from. The concept of economic activity captures the sum of all of the economic activity in an area (e.g. Vermont) or an industry measured in dollars and regardless of the source of consumer demand. When we measure the economic impact, we are only interested in that portion of total activity that is attributable to customer demand arising from out side of the area..

In most sectors of Vermont's tourism economy, total demand for services comes from both residents and out-of-state visitors. The portion of demand from Vermont's residents does not generate a new flow of economic benefit into the regional economy because it represents spending of dollars already in the economy. By this concept, economic “impact” captures the incremental economic activity because it represents “new dollars” to the economy from out-of-state sources.

An example may be helpful. The output of the IBM plant in Essex Junction is computer chips. Virtually all of that output is shipped to customers out side of Vermont—out side of Vermont's economy. As a consequence the demand for IBM's computer chips represents a flow of dollars into the Vermont economy. The economic impact of that production activity recognizes that nearly all of the industry's output serves market demand from outside of the Vermont economy. We call industries like this “export” industries. Travel and tourism is an export industry when it serves visitors from out side of Vermont.

Complicating the understanding of these concepts is the matter of how a regional economy is defined to measure economic impact. For example, when examined from a state wide perspective, which would be the case when attempting to measure the impact on visitor spending on state tax revenues, demand from out side of the region is defined as that of the out-of-state origin visitor. When examined from the perspective of one of the state's 14 counties such as Lamoille County, demand from out side of the region legitimately includes spending by visitors to Lamoille County from Chittenden County and the other 12 counties of the state. The results reported here take the

statewide perspective as a prelude to further public policy discussions. The reader must keep this perspective in mind when reviewing and employing the results of these analyses.

Q. I own a lodging establishment and I charge over \$100 per night for my rooms, and I know other businesses who charge similar rates. How can the average per night in the study be different than what I and other establishments charge?

A. There are some traveler/visitors who do not pay directly for lodging during their trip because they stay with their family and/or friends or in owned second or vacation homes. Most recent Vermont studies show that over 1/3 of overnight travelers/tourists do not stay in lodging establishments. In addition, another portion uses lodging accommodations for only part of their trip. As a result, travelers/tourists patronize accommodations establishments less than 100% of the time, and these estimates reflect the fact that there are some travel parties that have no lodging expenditures for all or some nights during their trip. To help put lodging expenditures in perspective the report includes data on the average spending by those staying in commercial lodging.

Q. How can the study's estimate of the number of jobs in the tourism industry be different than the estimate of jobs in the Leisure and Hospitality sector as estimated by the Vermont Department of Employment and Training?

A. The Department of Employment and Training estimates Leisure and Hospitality industry jobs by including all jobs in those sectors regardless of whether they are directly tied to serving the demand of the traveler/visitor or meeting the needs of the local Vermont population. The estimated number of travel/tourism jobs in the study carefully differentiates between all jobs in all travel/tourism sectors that serve a mix of the Vermont population and travelers/visitors and those that are directly tied to visitor spending. The estimate builds upon the initial estimating work that was recently done by the U.S. Department of Commerce and tailors it specifically to the scope and characteristics of Vermont's industry.

Q. Do international and foreign visitors spend more than domestic travelers?

A. Although total trip spending for international and foreign visitors to the U.S. is significantly greater than domestic trip spending, there is no empirical evidence to suggest that international visitors who travel to Vermont spend more than domestic visitors. Specifically, on average, total trip expenditures by international visitors exceeds domestic spending by a ratio of 4 to 1. But as a stand alone fact this can be

misleading since the average international trip lasts 16.2 days or over four times the length of the average domestic trip. In addition, the average international visitor travels to three or four different states while in the U.S. Therefore, since Vermont is not usually the sole destination of an international visitor, the actual spending of international visitors in comparison to domestic visitors while on a Vermont trip is unknown. Our estimate is derived from survey response data taken by UVM. Unfortunately, the sample size is small (130 respondents), but to its credit, the survey targets international visitors and their spending while in Vermont. We find the estimate obtained from this data to be comparable to national levels of expenditures when travel expenses for airfares and rental cars made outside of Vermont are factored out. Hence, on a per trip level to Vermont, we estimate domestic travelers will spend more than international visitors while in Vermont due to proportionately larger travel expenses spent outside the state for international visitors. This subject is ripe for additional study.

Q. How come ski resorts are included with Hotels & Lodging Places in the travel industry job breakdown?

A. Resort areas are categorized in the job and output data in two areas depending upon whether there are resort-owned lodging establishments attached to the resort facilities. The travel industry job breakdown presented in the study is categorized by the North American Industry Classification System (NAICS) utilizing data from the U.S. Travel and Tourism Satellite Accounts (TTSAs), even though the TTSAs are presented in the now out-dated Standard Industrial Classification (or SIC) system format. Under the NAICS system, resort areas can fall under two neighboring codes such as Skiing Facilities (NAICS Code 713) and Traveler Accommodations (NAICS Code 721). In completing the cross-walk between those two systems, resorts were grouped together under two SIC-like subdivisions named Hotels & Lodging Places for those resorts with resort-owned accommodations, and Amusement and Recreation Services for those that do not supply resort-owned accommodations.

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Appendix I: Glossary

ACTIVITIES

The category of activities or pursuits that visitors undertake while visiting a place such as skiing, boating, and shopping.

PURPOSE

Refers to one of three categories describing the person's overall reason for taking a trip or making a visit. These three categories include Leisure, Business and Personal Business.

TRIP OR VISIT

The act of undertaking travel outside of the person's normal routine.

TRAVELER/VISITOR

A traveler/visitor is any person traveling to a place outside of his/her normal commuting pattern for the primary purpose of leisure, business or personal business. There is no minimum length of stay but the visitor should not be at the destination for longer than a year. A visitor may or may not be compensated for making the trip but may not be remunerated from within the place visited. Travelers passing through a place en route to their final destination are also visitors.

OVERNIGHT-TRAVELER/VISITOR

An overnight-traveler/visitor is a visitor to a place with a stay including at least one overnight period.

DAY-TRAVELER/VISITOR

A day-traveler/visitor is a visitor to a place with a stay of less than one day.

HOUSEHOLD

Includes all persons who occupy a house, apartment, or other living quarters.

TRAVEL PARTY

One or more persons traveling together as a group. Households traveling as a group would be referred to as a household travel party.

PERSON TRIP

A person on a trip. The total number of person trips is determined by multiplying the number persons in a travel party by one. That is 3 person trips may be 3 people traveling as a travel party for one trip or a single person traveling three times. In the first instance we have one trip in the second we have three trips.

LENGTH OF STAY

In the case of overnight trips is defined by the number of nights spent in a place or on the entire trip as may be appropriate to the use of the term. In the case of day travelers is defined a one day even when the visit may be for only a portion of a day.

LODGING

May refer to over night accommodations such as a hotel, motel or bed and breakfast, a condominium or time share unit, a private home, a recreational vehicle or tent or other place where a visitor spends the night. Commercial lodging refers to accommodations where a fee is charged for the use of the accommodations.

BUSINESS TRAVELER

A person or party traveling where the purpose is primarily for business such as a conference, business meeting or sales call. See purpose above.

LEISURE TRAVELER

A person or party traveling where the purpose is primarily for leisure such as a vacation, get away or recreation. See purpose above.

PERSONAL TRAVELER

A person or party traveling where the purpose is primarily for personal business such as to attend a family function or deal with family affairs. See purpose above.

TOURIST

The tourist is synonymous with the definition of the leisure traveler.

ECONOMIC ACTIVITY

Is generated when a visitor spends money to undertake or participate in an activity.

ECONOMIC IMPACT

Results when a visitor's spending is incremental to that which would otherwise take place in the region—includes spending by the resident population that would not have otherwise occurred or would have occurred outside of the region.

EXPORT COMPONENT

Identifies that portion of the economic impact that is attributable to visitors from outside of the region.

IN STATE VISITOR

A person whose main residence is in Vermont.

OUT OF STATE VISITOR

A person whose main residence is outside Vermont. This includes US and international visitors.

DOMESTIC VISITOR

A person whose main residence is outside of Vermont but still within the US.

INTERNATIONAL VISITOR

Includes visitors from all countries outside the US EXCEPT Canada.

FOREIGN VISITOR

Includes visitors from all countries outside the United States.

DIRECT IMPACT

Refers to the effect that visitor expenditures such as for lodging, meals and food, entertainment, transportation and retail purchases such as clothing, recreational equipment, and gifts has on the Vermont economy while on a trip to Vermont. This impact excludes spending by the visitor at their place of origin in anticipation of travel or while traveling en-route to Vermont.

INDIRECT IMPACT

Commonly referred to as the multiplier effect of an industry, this category refers to all economic activity that occurs because of direct visitor spending but falls outside of the business activity that occurs to specifically meet the needs and wants of visitors. For example, an indirect effect could include the purchase of supplies by a supermarket in a resort community to provide food for the family of a worker employed at a regional resort.

Appendix II: Discussion of Common Terms and Definitions

A. Summary Common Definitions of Traveler/Visitor

For purposes of determining economic activity and impact on the Vermont economy, the following definitions are employed:

“TRAVELER/VISITOR”

A traveler/visitor is any person traveling to a place outside of his/her normal commuting pattern for the primary purpose of leisure, business or personal business. There is no minimum length of stay but the visitor should not be at the destination for longer than a year. A visitor may or may not be compensated for making the trip but may not be remunerated from within the place visited. Travelers passing through a place en route to their final destination are also visitors.

“OVERNIGHT-TRAVELER/VISITOR”

An overnight-traveler/visitor is a visitor to a place with a stay including at least one overnight period.

“DAY-TRAVELER/VISITOR”

A day-traveler/visitor is a visitor to a place with a stay of less than one day.

Travelers/Visitors may be further defined by the purpose of their travel and by the segment in their travel when they become a traveler/visitor. Inclusion in these categories is not exclusive.

The primary purpose of a visitor’s travel further defines the visitor. These definitions follow the American Travel Survey typology. There are three categories that define visitor by purpose:

- **LEISURE:** Travel taken to pursue a primary activity such as rest and relaxation, visiting friends and family, outdoor recreation, or entertainment/sightseeing. A leisure traveler/visitor may be referred to as a “tourist.”

-
- **BUSINESS:** Travel taken to pursue a primary activity such as attending conferences or for a business purpose other than commuting to and from work.
 - **PERSONAL BUSINESS:** Travel made for personal reasons or family business. Travelers/visitors may be further categorized as destination travelers/visitors or pass-through travelers/visitors.

DESTINATION TRAVELER/VISITOR:

is one identifying the place as the intended destination.

PASS-THROUGH TRAVELER/VISITOR:

may be an overnight or day traveler/visitor in a place but is en-route to another place.

B. Overview and Discussion of Definitions

The Traveler/Visitor Defined

The following section includes a brief review of relevant travel definitions as presented by the Travel Industry Association of America (TIAA), The 1995 American Travel Survey (ATS), the University of Vermont, and The 2001 National Household Travel Survey (NHTS). These surveys are the primary resources for secondary data. After a consideration of the definitions is presented, a preliminary recommendation for a comprehensive definition is outlined below.

The traveler/visitor is defined by both duration of stay and purpose of trip. The overarching label is broken into two categories: (1) the overnight traveler/visitor and (2) the day-traveler/visitor. The traveler/visitor is further defined as person taking a trip for the purpose of (1) leisure, (2) business, or (3) personal business. A leisure traveler may be referred to as a tourist. Travelers/visitors may be further categorized as destination travelers/visitors or pass-through travelers/visitors.

Traveler

Review

- TIAA defines a traveler as one taking an overnight trip away from home in paid accommodations, or one taking a day trip to a place more than 100 miles away from the home. Pass-through travelers are considered separately.

- The ATS defines travelers as those taking trips of over 100 miles from the point of origin.

■ The terms visitor, tourist and traveler are used as synonyms for the most part in the UVM reports. However, those who traveled to Vermont 45 or more times per year are considered to be commuters. Pass-through travelers are acknowledged and appear to be grouped into the day-traveler category.

■ The NHTS refers to short and long distance travelers. Short distance travelers are those taking trips of less than 50 miles one way, and long distance travelers are those taking trips of over 50 miles each way.

Recommendation

A “traveler/visitor” is any person traveling to a place outside of his/her normal commuting pattern for the purpose of leisure, business or personal business. A day – traveler/visitor is a visitor with a stay of less than one day. An overnight traveler/visitor is a visitor with a stay including at least one overnight period. The distinction between pass-through and destination travelers/visitors will be noted.

Leisure Traveler

Review

■ TIAA defines leisure or pleasure travel as a trip where the primary activity pursued is visiting friends or relatives, outdoor recreation, entertainment, or personal.

■ The ATS separates travelers by main purpose of trip. “Pleasure” is a category, under which travelers are further classified as those visiting friends and relatives, and those pursuing leisure activities such as rest and relaxation, sightseeing, outdoor recreation, and entertainment.

■ UVM uses the terms tourist and pleasure traveler synonymously.

■ The NHTS defines leisure travelers as those taking trips consisting of vacations and sightseeing excursions, as well as those taken for the primary purpose of rest and relaxation, visiting friends and family, and outdoor recreation.

Recommendation

A leisure traveler should be defined as someone taking a trip outside of his/her normal commuting pattern. While there need not be a minimum length of stay, the leisure traveler should not be at his/her destination for longer than a year. The leisure traveler should not be compensated for his/her trip, and the primary purpose for travel should be leisure.

Tourist

Review

- TIAA avoids use of the term tourist in its report citing the vague meaning.
- The ATS refers only to short and long distance travelers.
- In each of its National Surveys of the Vermont Visitor the University of Vermont refers to its subjects as tourists. No minimum mileage requirement is specified. The International Overnight Tourist in Vermont report surveys not only pleasure travelers but also business travelers. The terms visitor and tourist are used interchangeably throughout the report.
- NHTS avoids the term tourist.

Recommendation

The term tourist should be synonymous with the term leisure traveler.

Business Traveler

Review

- TIAA defines business travel as a trip where the primary activity pursued is business, conventions/seminar, or combined business and pleasure.
- The ATS includes a category for “business travelers.”
- University of Vermont only includes business travelers in its The International Overnight Tourist in Vermont report.
- The NHTS defines business travel as trips taken to attend conferences and meetings for any business purpose other than commuting to and from work.

Recommendation

The business traveler category is the only one in which all sources offer nearly identical definitions. A business traveler takes a trip for any business purpose other than commuting to and from work. Primary purposes for the trip may include: meetings, conferences, consulting, sales seminars or training.

Personal Business Traveler

Review

- TIAA includes personal travel in its leisure travel category.
- The ATS includes a category of “personal business” travelers.
- The University of Vermont does not refer to personal travelers, but does survey those visiting friends and relatives in its 2001 Survey of the Vermont Visitor: An Examination of the Visiting Friends and Relatives Traveler (VFR).
- The NHTS defines personal travel as trips made for personal reasons or family business, such as shopping trips or medical visits.

Recommendation

The personal traveler should be defined broadly as someone traveling for the primary purpose of taking care of personal or family business.

C. Review of the Literature

Tourist

A tourist is generally defined by his length of stay, purpose of trip, and distance traveled. The requirements that experts set for these three trip characteristics vary. The only condition to which all agree is that a tourist must leave his home community.

The minimum length of stay requirement ranges from an overnight trip to a day trip. Clare Gunn sets no precise minimum: he states that tourism encompasses any travel that is not commuting (CCEA 2001). Conversely, the World Tourism Organization precisely defines a tourist as a visitor staying at least one night (Egyptian State Info. Service 2003). The Central Statistics Office of Mauritius adopts the WTO definition (2004), as does the Philippines Statistical System (1997). Ultimately, the CCEA chooses to set no minimum stay requirement for those travelers it surveys in its report, The 2001 Economic Impact of Connecticut’s Travel and Tourism Industry. The center does, however, establish a one year limit for trip duration. Several other sources including the New Zealand Tourism Research Council, and the British Columbia Work Info Net set the same twelve month limit (2001). The Economic Impact of Expenditure by Travelers in Wisconsin report places a narrower 30 day limit on length of stay for a tourist (2003).

Experts that choose to disregard the length of stay requirement tend to set a distance-traveled one. A tourism professor at North Carolina State University labels someone traveling further than 100 miles a tourist, and someone traveling less an “excursionist.” The British Columbia Work Info Net requires one to travel at least 60 kilometers in order to be considered a tourist. The Bureau of Economic Analysis states that one must travel at least 50 miles from home (BEA 2003). Other sources such as the Tourism Industry Association of Nova Scotia do not offer any distance requirements. TIANs merely requires that a tourist be “a person spending dollars in one community that were earned in another” (2000). The New Zealand Tourism Research Council broadly defines a tourist as “one traveling outside his usual environment for a limited time” (2001). Three of the surveys offering data relevant to the Vermont industry –the NHTS, ATS, and UVM surveys – choose not to define a maximum length of stay.

Some experts define both business and leisure travelers as tourists. Others consider the purpose of the trips, and label only leisure travelers as tourists. The Kotler Marketing Group defines a tourist as a traveler seeking leisure, relaxation, fun and personal enrichment (1999). In UVM’s 1999 Survey of the Vermont Visitor, tourists are defined as pleasure travelers (UVM 1999). Claudia Silverman echoes that, stating that a tourist must be a pleasure seeker, someone who wants to be hard at play rather than hard at work (UVA 1998). CCEA acknowledges such definitions, but arrives at a broad one: “tourism is defined as the activities of those traveling for leisure or business purposes.” The BEA also chooses to acknowledge both business and leisure travelers as tourists (2003).

Traveler

Experts generally agree that all tourists are travelers, but not all travelers are tourists. The New Zealand Tourism Research Council labels a traveler broadly: as a person moving from one place to another (2000). The Oxford English Dictionary narrows that definition by requiring that a traveler be someone who is on a journey. The NHTS labels short distance travelers as those taking a trip under 50 miles, and long distance travelers as those traveling over 50 miles. Within the long distance category, the traveler is further classified as traveling for pleasure, business, commuting or personal reasons (NHTS 2001).

Leisure Traveler

The National Household Travel Survey defines a leisure traveler as one traveling for a vacation, sightseeing excursion, for the purpose of rest and relaxation, to visit friends and family, or for outdoor recreation (2001). A Wisconsin Tourism Report adds visits to historical places and museums to the list (Domestic Travel: A Year in Review 2001). The American Travel Survey includes a nearly identical definition in its 1995 Report. UVM states

that a pleasure traveler travels for recreation, visiting friends and relatives, etc.

Personal Traveler

The NHTS and the ATS are the only available sources that include a “personal traveler” category. In the NHTS survey, the personal traveler is someone who made a trip for personal reasons, for family business, for shopping trips, or for medical visits. The ATS does not further define the personal traveler other than to label it as someone traveling in order to take care of “personal business.” While UVM does not separately categorize the personal traveler, its surveys do provide data on travelers with a primary purpose that falls within the personal category.

Business Traveler

The business traveler category is the only category in which all sources offer nearly identical definitions. A business traveler takes a trip for any business purpose other than commuting to and from work. The traveler may not be remunerated from within the place visited (CCEA 2001). Primary purposes for the trip may include: meetings, conferences, consulting, sales, conventions, client services, seminars or training (NHTS 2001).

D. Works Cited

Traveler and Tourist Defined

- A Guide to the BC Economy and Labour Market. BC Workinfo Net. April, 2001. <<http://www.guidetobceconomy.org/chap6/chap6-3.html>>

We usually think of a tourist as someone who's vacationing somewhere that's far from home. But the technical definition of a tourist is a little different. It counts anyone who travels to a place outside his or her usual environment and stays away for no more than a year. The motivation for the trip is irrelevant: the person could be traveling for business reasons, to visit family and friends, or simply for pleasure.⁵ It is also not necessary for a person to stay overnight in order to be considered a tourist. Day trips (also known as excursions) are an important type of tourism. However, to be considered a tourist, you do need to travel at least 60 kilometres away from your home.

- BEA Reports Sales of US Tourism Industries Grew 3.5 Percent in 2003. Bureau of Economic Analysis, US Department of Commerce. 2003. <www.bea.gov>

Visitors are people whose travel for pleasure or business takes them 50 miles or more away from home, or outside of their normal environment.

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- Central Statistics Office. Republic of Mauritius. 2004.
<<http://statsmauritius.gov.mu/ei440/intro.doc>>

A tourist is defined as a non-resident staying for more than 24 hours but less than a year, who is not involved in any gainful occupation in the country during his/her stay.

- The 2001 Economic Impact of Connecticut's Travel and Tourism Industry. Connecticut
- Center for Economic Analysis. 2001.
<<http://ceea.uconn.edu/studies/2001%20Travel%20&Tourism%20Impact%20Full%20Report.pdf>>
- Hunt and Layne (2000) ...say that travel was the most accepted term until 1987; since tourism is the accepted term, used to singularly describe the activity of people taking trips away from home and the industry which has developed to support them.
- Gunn (1994) believes that tourism encompasses all travel with the exception of commuting.
- McIntosh and Goedner suggest that "tourism can be defined as the science, art, and business of attracting and transporting visitors, accommodating them, and graciously catering to their needs and wants."

** Sources containing the previous three quotes will be collected and reviewed.*

While acknowledging the diversity of definitions, CCEA defines tourism in a comprehensive way, including both 'free and independent travelers' as well as business travelers." The following definition, accepted by well-known international organizations and their representatives, captures this perspective: 'Tourism is defined as the activities of persons traveled to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited.

- The Economic Impact of Travel on Tennessee Counties 2001.
Tennessee Department of Tourism. 2001.
<<http://www.state.tn.us/tourdev/pdf/economicimpactreport.pdf>>

U.S. Residents traveling to Tennessee includes both state residents and out-of-state visitors traveling away from home overnight in paid or unpaid accommodations, or on day trips to places 50 miles or more away from home.

- The Economic Impact of Expenditure by Travelers on Wisconsin. Wisconsin Department of Tourism. 2003.
<http://agency.travelwisconsin.com/Research/EconomicImpact_Active/03highlightsummary.pdf>

If someone remains in an area for more than 30 days, they cease to be a traveler.

The report includes second homeowners as tourists, but requires that they include trip expenditures for non-routine visits only (once a month or less).

- Frequently Asked Questions. South Carolina Tourism Expenditure Review Committee. 2004. <<http://www.atax.sc.gov/faqs.html>>

According to Section 6-4-5 (a)(4), 'travel' and 'tourism' mean the action and activities of people taking trips outside their home communities for any purpose, except daily commuting to and from work. Because there is no clear definition of "home community," the Tourism Expenditure Review Committee has adopted a guideline set by other travel industry entities, which states that a tourist is **generally** one that comes from 50 miles outside of their homes. However, the Committee **looks at every event on a case-by-case basis**. The Committee considers any project or event that increases visitors to the region and boosts the economy.

- Glossary: Philippines Statistical System. Philippines National Statistics Coordination Board. 1997.
<<http://www.nscb.gov.ph/glossary/>>

Technically, a tourist is a 'temporary visitor staying at least twenty four hours in the country visited for a purpose classified as either holiday] recreation, leisure, sport and visit to friends or relatives], business, official mission, convention, or health reason'.

- Miller, Joe. Mall Ranks as No. 1 State Attraction. The News & Observer/Triangle.com. March 26, 2004.
<http://www.triangle.com/travel/nc_piedmont/v-print/story/1091027p-7150456c.html>

According to Gene Brothers, an associate professor in the Department of Parks, Recreation and Tourism Management at N.C. State University who works with the tourism division, a tourist is someone who goes somewhere and stays overnight or takes a day trip more than 100 miles away. An "excursionist," on the other hand, is someone who takes a day trip of less than 100 miles.

- The Impact of the Tourism Sector on the Vermont Economy. UVM. 1999. <http://www.uvm.edu/~snrvtdc/publications/State_Report_20001.pdf>

For the purpose of this study, "tourists" are defined as pleasure travelers. Tourist activities include trips for pleasure only as such, as recreation, visiting friends and relatives, etc. The tourists defined in this study include both out-of state residents and Vermont residents. The reason for including Vermont residents is that clearly a person is a tourist if he/she stays in southwestern Vermont for a weekend, whether he/she lives in Montpelier or New York City. Moreover, in some recreation industries such as ski areas, Vermont visitors account for a very significant number.

- National Survey of the Vermont Visitor, 1998. University of Vermont. 1998. <http://www.uvm.edu/~snrvtdc/publications/visitors_study.pdf>

Visitors traveling to Vermont 45 or more times per year were considered commuters, not tourists, and were not included in the survey.

- Provisional Tourism Satellite Account 2000-2002. Tourism Research Council, New Zealand. 2000. <<http://www.trcnz.govt.nz/Topics/Economic+Contribution/Tourism+Satellite+Account+2000-2002/Appendix+A.htm>>

A tourist is any person traveling to a place other than their usual environment for less than 12 months and whose main purpose is other than the exercise of an activity remunerated from within the place visited.

It should be noted that not all travelers (persons moving from one place to another) are tourists. They must also be traveling to places outside their usual environment (defined below) for a limited time.

The 12-month time limit is analogous with the SNA93 definition that a person staying in a country for longer than 12 months is a resident.

Hence, a place becomes part of a tourist's usual environment after the tourist spends more than 12 months there.

The following types of persons are not considered visitors:

1. Persons such as traveling salespersons for whom travel is an intrinsic part of their job
2. Persons who travel for the purpose of being admitted to, or detained in, a residential facility, such as a hospital, prison or long-stay care
3. Persons traveling to a place of study for the purposes of education
4. Persons traveling as part of a shift to a new permanent location
5. Persons undertaking military duties
6. Persons traveling between two parts of their usual environment.

- Silverman, Claudia. American Tourists: The Grand Tour Comes Home. American Studies, University of Virginia. 1998.
<<http://xroads.virginia.edu/~HYPER/DETOC/tourist/intro.html>>

Generally a tourist is understood to be a pleasure seeker, someone who wants to be hard at play rather than hard at work on their journey.

- Study on Egyptian Tourism Industry. The Egyptian State Information Service. May 5, 2003.
<<http://www.uk.sis.gov.eg/online/html9/o050523r.htm>>

According to the definition laid by the World Tourism Organization, the tourist is the visitor who stays for at least one night in a special residence in the country that he visits.

- Tourist. Merriam-Webster Dictionary. 2004.
<www.webster-dictionary.org>

One who makes a tour, or performs a journey, especially for pleasure.

- Traveler, Tourist. Oxford English Dictionary Definitions. 2004.
<www.dictionary.oed.com>

Traveler: A person who is traveling or going from place to place, or along a road or path; one who is on a journey; a wayfarer, a passenger.

Tourist: One who makes a tour or tours; esp. one who does this for recreation; one who travels for pleasure or culture, visiting a number of places for their objects of interest, scenery or the like.

- Valuing our Forests Beyond Clear Cutting: A Tourism Perspective. Tourism Industry Association Nova Scotia. May 10, 2000. <<http://www.tians.org/forests/>>

It depends on which Tourism or Economics text book you read, but quite simply TIANS' definition is – a Tourist is a person who is spending dollars in one community that were earned in another. Some of you here today are Tourists and I urge you to assist the HRM economy by purchasing as much as you can.

- White Paper: Destination Marketing in the United States. Kotler Marketing Group. October 11, 1999. <[http://www.kotlermarketing.com/resources/whitepapers/KM G-destination.marketing.best.practices.pdf](http://www.kotlermarketing.com/resources/whitepapers/KM_G-destination.marketing.best.practices.pdf)>

The tourist is understood as someone who is seeking values such as leisure, relaxation, fun, personal enrichment. The tourist is most often traveling with a family or partners.

Leisure, Personal and Business Travel Defined

- 2003 Annual Travelscope Survey: Vermont. Travel Industry Association of America. 2002.

Business travel includes trips where the primary purpose is business, convention/seminar or combined business and pleasure.

Leisure travel includes trips where the primary purpose is visiting friends and relatives, outdoor recreation, entertainment, or personal.

- 2001 Domestic Travel: A Year in Review. Wisconsin Department of Tourism. 2001. <http://agency.travelwisconsin.com/Research/MarketResearch_Active/DomesticTravel2001.shtm>

Leisure travel includes visits to friends and relatives, outdoors recreation, entertainment, travel for personal reasons, visits to historical places/museums, shopping.

Business travel includes visits for meetings, presentations, consulting, sales, conventions or seminars.

- The Economic Impact of Expenditure by Travelers on Wisconsin. Wisconsin Department of Tourism. 2003.
<http://agency.travelwisconsin.com/Research/EconomicImpact_Active/03highlightsummary.pdf>

The Wisconsin report divides trip purpose by business, pleasure and meetings/conventions.

- Highlights of the 2001 National Household Travel Survey. U.S. Department of Transportation. 2001.
<<http://nhts.ornl.gov/2001/index.shtml>>

Business: Trips taken to attend conferences and meetings or for any business purpose other than commuting to and from work.

Personal: Trips made for personal reasons or family business, such as shopping trips, medical visits.

Leisure: Trips consist of vacations and sightseeing excursions, as well as trips taken for the purposes of rest and relaxation, visiting friends and family, and outdoor recreation.

- The Most Common Reasons for Visiting Pennsylvania. Pennsylvania Department of Economic Development. 2001.
<http://www.inventpa.com/default.aspx?id=23#What_are_the_most_common_reasons_for_visiting_Pennsylvania?>

Leisure travel includes visiting friends or relatives, special events, other personal, getaway weekend, general vacation.

Business travel includes other business, conventions and meetings, seminars and training, client services and consulting, sales calls, government and military.

- National Survey of the Vermont Visitor. UVM. 2001, 2002.
<http://www.uvm.edu/~snrvtdc/?Page=pubindex.html>

In its 2001 and 2002 National Survey of the Vermont Visitor, UVM surveys only people heading to Vermont for “pleasure trips.”

- Survey of the International Overnight Tourist. UVM. 2002.
<http://www.uvm.edu/~snrvtdc/?Page=pubindex.html>

In its 2002 International Overnight Visitor in Vermont Survey, UVM surveys both business and pleasure travelers.

- Travel Economic Impact Model: Definition of Terms. Travel Industry Association of America. www.tia.org

TIAA avoids the term tourist because of its vague meaning.

Travel is defined as all overnight trips from home, and all day trips in excess of 100 miles one way.

- Vermont: Summary Travel Characteristics. American Travel Survey. 1995.
<http://www.bts.gov/publications/1995_american_travel_survey/summary_travel_characteristics/states/vermont/>

ATS divides “Main Purpose of Trip” into the following categories and subcategories:

- Business
- Pleasure
- Visit Friends and Family
- Leisure
- Rest or relaxation
- Sightseeing
- Outdoor Recreation
- Entertainment
- Personal Business
- Other

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Appendix IV: Methodological Support Documents

Introduction

The following is a summary of the step-by-step approach of the research design used in this study:

1. **Background Research and Definition of Research Objective:** An extensive literature search and review of methods was undertaken to understand the current best practices regarding estimation and measurement of tourism activities relevant to state and regional economies. Recognized data sources were inventoried and evaluated for quality and relevance to the defined scope of work. Recognized methods of analysis were reviewed for relative strengths and weaknesses, adequacy, and accuracy. A conceptualization of the research problem was formulated and compared to the array of available data sources. Analytical methods were also reviewed for relevance to the conceptual research design. Following this phase of the research common definitions, survey methods, data sources and analytical methods were finalized.
2. **Industry Inventory by Segment:** The research team developed an inventory of resort/lodging properties and other services-providing establishments in the industry from third party data by broad category of type using databases maintained by the Department of Tourism and Marketing, the Vermont Department of Health, and other third party sources. Seasonal property owners were identified from property tax records and other means to develop a contact list for surveying purposes. The goal of this inventory was to develop a comprehensive approach for gathering the primary and secondary data needed to complete the industry activity level estimate and the economic impact assessment analysis.
3. **Secondary Data Reconciliation:** After completing the industry segmentation process, the next step in the study involved inventorying and obtaining the most authoritative and appropriate secondary data to: (1) develop a “best practices” initial estimate of the level of activity in each demand segment, and (2) reconciling and refining those estimates to credible estimates/benchmarks on the supply side. For example, the estimate of rooms rentals were reconciled to the level of reported rooms receipts and credible estimates of expenditures for room rentals that were made at places exempt from the state’s room tax levy (see Appendix IV.A.). The research design was to approach the activity estimates of each segment

of the tourism industry and the estimate of economic impact—importance of the industry from a number of different directions—looking for a congruence of independent data and analysis. Examples of independent data sets consulted include state tax receipts-revenue and state expenditure data from the Vermont Agency of Administration (including the Vermont Department of Taxes, the Vermont Department of Education, and the Department of Financial Operations of the Agency of Administration), data from the U.S. Department of Commerce-Bureau of Economic Analysis (the “BEA”), including the BEA’s estimates of personal income (e.g. Proprietors’ Income), full-time and part-time jobs, and estimates of wages and salaries of full-time and part-time workers. In addition, this study also employed the BEA’s developed set of Travel and Tourism Satellite Accounts (the “TTSAs”) to assist in the estimation of the portions of the many sectors and sub-sectors of the Vermont economy that account for the state’s travel industry.¹ Further, the study also employed authoritative secondary data on domestic visitor activity and trip expenditures from the Travel Industry Association, data from the IMPLAN Model for the state of Vermont from the Minnesota IMPLAN Group, Inc.—a widely respected analytical tool used in a wide variety of applications including the U.S. Forest Service, and valid survey data from past travel industry studies conducted by the University of Vermont. The study also utilized a comprehensive input-output model for the Vermont economy from Regional Economic Models Inc. of Amherst, MA—a well-tested input-output model that has been successfully employed in measuring the economic impact of industries, public programs, and development projects on state and regional economies (e.g. county economies) for at least the past two decades.

4. Primary Data Collection/Survey: A total of three surveys and one follow-up interview were conducted under this part of the study design. The first involved a survey of lodging business establishments to reconcile and gain information needed to estimate final demand in that industry segment. The second

¹ The TTSA is a system of accounts that is designed to assist in the analysis of complex, multi-layered national or state industries within the national economic accounting framework. In other words, TTSA assist in the quantification of and help in the understanding of the details of an industry that includes only parts of many individual sectors in the existing set of national/state accounts—including output, employment, and compensation. The BEA has developed satellite accounts in this way for other industries, including transportation services, research and development, and environment-resources. For a complete description of the TTSA accounts, see Survey of Current Business, July 1998, pp. 22, and Survey of Current Business, July 2000, pp. 8-24.

survey was developed to gain important information from Vermont households about: (1) the incidence, and demographics of visitors to the homes of Vermont relatives and friends, and (2) their own in-Vermont tourism-recreation activities. The third survey includes areas of inquiry in the second home component of the industry needed to be able to understand and estimate levels of activity in this increasingly important component of the tourism-recreation industry. The results of that primary research were then combined with secondary data to develop estimates of demand for each spending segment for use in the economic/fiscal impact assessment portions of the study. The final component of this part of the study research design involved the employment/compensation follow-up interviews. These interviews were conducted in order to: (1) develop a more refined understanding of the actual compensation levels of career-oriented tourism establishment employees, and (2) understand the actual earnings level of tourism workers relative to pay or wage levels of tourism jobs by business establishment to improve our understanding of the frequency of and earnings levels of multiple job holders in the industry.

5. Visitor Expenditure Estimation: Under this work element, the research team gathered and assessed expenditure survey data from previous studies by the University of Vermont and other third party sources. This data was segmented into a prototypical visitor typology and reconciled with the surveys above and national and segment specific data to produce the most reliable estimates of expenditure by broad visitor segment. Requirements for supplemental data were identified and collection methods were designed for recommended application in this and subsequent expenditure assessment analyses.
6. Estimate of Visitor Incidence/Frequency: Visitor incidence data was gathered or determined from the surveys above, the UVM produced studies, and other third party sources. The data was correlated to the segmented expenditure data by prototypical visitor to produce the most reliable estimates of frequency of visit by segment. Multiple estimation techniques were employed to compare and reconcile differences and obtain the best possible estimates of traveler and tourist volume. Requirements for supplemental data were identified and collection methods were designed for this and subsequent analyses.
7. Expenditure Compilation: A compilation of frequency and expenditure data gathered above was completed and employed to estimate the total expenditures by tourist/visitors by broad

segment of visitor type and activity. Data developed during this part of the investigation was organized by visitor and activity segment, nature of visit, season of visitation, category of impact, and supply-side visitation factors.

8. **Dynamic Input/Output Modeling:** Total direct tourism spending impacts by broad category were examined for indirect and induced impact by modeling the flow of expenditures through the Vermont economy. Under this work element, the research team will procure and employ a credible input-output model for the state economy. Prior to actually undertaking this project, we anticipate using a Vermont input-output model from REMI. In addition to the above discussed applications, the REMI model has been employed for years in Vermont by the Vermont Economic Progress Council and the Legislative Joint Fiscal Office. Moreover, for nearly ten years it was employed in the energy planning function of the Vermont Department of Public Service. This study utilized the information and estimates compiled under steps 1-7 above to develop the appropriate economic and expenditure inputs for the purposes of input-output and fiscal impact modeling. The output from this component of the study was estimates of the indirect and induced impact of tourism expenditures by defined tourist segment and an estimate of the net fiscal impact of the industry on the state during calendar year 2003.
9. **Tabulation-Analysis of Results:** The results of steps 1 through 8 were then assembled, aggregated, and tabulated. An analysis was completed that corresponded to the primary conclusions of what was learned through the investigation process. Appropriate analytical visuals were developed in order to appropriately convey the results of the study to several target audiences—including department personnel, legislators, participants in the industry, and the general public. Tabular data was developed in this regard in order to explain the economic impact and net fiscal impact of the tourism-recreation industry during the calendar 2003 base year of the study.
10. **Industry Estimate of Relative Contribution to the State Economy:** This component of the study included the development of an estimate of the dimension and scope of tourism-recreation industry as a whole compared to the dimension and scope of other major Vermont industries. After comparing the relative size and overall impact that the tourism-recreation sector has to other aspects of Vermont's economy, the overall contribution of the tourism-recreation sector

compared to other selected major sectors in the Vermont economy were calculated and compared.

11. Prototypical Community Profile Development: [This section under development.] The final component of the study involved the development of prototypical community-type impact assessments of the tourism-recreation industry on three representative communities. This part of the study included estimates presented in tabular and narrative format for an urban (the City of []), resort-oriented (the Town of []), and rural community (Town of []). For this component of the analysis, a demand to supply analysis and compilation of sector activity data was (is currently being) completed employing techniques similar to those employed to estimate statewide impacts. Demand for tourist related services was accounted for by identified activity segments. Each prototypical community was assessed for the expected impact by tracking visitor expenditure activity by defined activity segment. Direct impacts were described through expenditure patterns and indirect and induced impacts were described through input-output model specification. The impacts of tourism-recreation for the three prototypical communities were then (will be) described in a parallel fashion to the statewide description.

A. Overview of Approach: Estimating Visitor Demand for Lodging

Rooms Use-Rental Reconciliation Analysis
Vermont Department of Tourism and Marketing
October 15, 2004

Overview

This study estimates that there was between \$367.5 million to \$375.3 million in total room use-rental receipts in calendar year 2003. This estimate includes estimated activity in both the taxable and exempt portions of the state's rooms rental market. A range estimate is offered because there are several aspects of this initial estimate that are ripe for further investigation and refinement. This is especially true for the room use-rental activities of establishments in the state that are "exempt" from the states Rooms tax statute. This estimate nevertheless represents an important foundation for other parts of this study in that it defines the scope of total taxable and exempt lodging activity for both visitors and the Vermont population.

Definitions and Data Sets

The state of Vermont imposes a rooms tax on receipts received for the right to use-occupy any room in a "hotel." State statute defines the term "hotel" for rooms tax purposes to be "an establishment that holds itself out to the public as offering sleeping accommodations for a charge." When applied in practice, the definition of a "hotel" is broad, covering many types of accommodations. These include: inns, motels, tourist homes, cabins, ski dormitories, ski lodges, lodging homes, room houses, furnished-room houses, boarding houses, private clubs, bed and breakfasts, and rentals of condominiums, rooms, or houses.

Tax Department regulations carefully point out that an overnight stay is not required for a rooms tax to be assessed. Currently, the rooms tax is assessed at the rate of 9.0% of taxable receipts for any "charge that gives a person the right to use rooms, furnishings, or services of a hotel." The rooms tax is assessed whether or not the room includes sleeping accommodations, and it is assessed even if the person did not actually exercise the right to use the room, furnishing, or services of the "hotel."

There are a number of exceptions under the rooms tax that encompass certain types of rentals, or they reflect use-occupancy of a certain type of venue that is not defined as a "hotel" under Vermont statute. Regarding the former, exempt rentals include:

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- (1) Total rentals that are less than 15 days per year, as long as the property is not marketed for rental with a real estate broker or real estate agency,
 - (2) Rentals to a permanent resident. A permanent resident is defined as someone who occupies a room for more than 30 consecutive days. If the resident is under a pre-existing lease for more than 30 days, the entire rental is exempt for the lease term. In all other situations, the first 30 days of the rental are taxable and the rental charges after 30 days are exempt,
 - (3) Otherwise taxable room rentals sold directly to the federal or state governmental entities where the government itself pays directly for the rental (although room rentals by non-Vermont state governments are generally taxable),²
 - (4) Rentals to foreign diplomats that have an exemption issued by the U.S. Department of State,
 - (5) Rentals sold to and paid by the American Red Cross, non-profit medical, and hospital insurance organizations (Blue Cross and Blue Shield), and
 - (6) Rentals sold to and directly paid for by credit unions.

Regarding exempt establishments, room use-rental charges at facilities that are not defined as “hotels” under Vermont statute include the following:

- (1) Stays at hospitals, sanatoriums, convalescent homes, nursing homes, and homes for the aged,
- (2) Any facility operated by the state of Vermont or the federal government (except for facilities operated by the state Department of Forests, Parks, and Recreation),
- (3) Facilities operated by non-profit corporations-associations provided the facility is operated in the furtherance of their tax exempt purpose, and

² In this case, direct payment includes charges paid for by the governmental entity itself

- (4) Dormitories, living quarters or household accommodations provided to a student attending school (consistent with 32 VSA Section 9202(9)) or provided to a child attending summer camp.

Charges for optional services—that is, charges for services other than for the use of a room—by a “hotel” are not subject to the rooms tax provided it is listed separately on a guest’s bill. Other than the specific exempt organizations listed above, there are no exemptions in the rooms tax law for rentals to non-profit organizations in general. Groups such as 501(c)(3) organizations, school groups, athletic departments, religious organizations, and senior citizens groups are generally subject to the rooms tax for their room rentals.

Estimated Lodging Revenue, 1999–2003

Monthly and quarterly filers of rooms tax returns are required to report total rooms receipts—both taxable and exempt—to the Vermont Department of Taxes as part of the department’s routine audit function. The department maintains a reliable data base of these total and taxable receipts data on the Vermont Integrated Revenue Collection System (VIRCS) dating back to September of calendar year 1999. Table 4A-1 presents total receipts, taxable receipts, and

Table 4A-1: Profile of "Reported" Rooms Revenues by Calendar Year

Year	Total Revenues (\$ Millions)	Taxable Revenues (\$ Millions)	Exempt Revenues (\$ Millions)	Taxable % of Total (%)	Exempt % of Total (%)
1999	\$302.0	\$284.6	\$17.4	94.2%	5.8%
2000	\$319.9	\$304.9	\$15.0	95.3%	4.7%
2001	\$327.9	\$313.6	\$14.4	95.6%	4.4%
2002	\$334.7	\$318.2	\$16.5	95.1%	4.9%
2003	\$337.2	\$323.1	\$14.1	95.8%	4.2%

MEMO:

Mean	95.2%	4.8%
Median	95.3%	4.7%

Basic Data Source: Vermont Department of Taxes (VIRCS)

Prepared By: Economic & Policy Resources, Inc.

exempt receipts for the calendar 1999-2003 period. From the table, non-exempt rooms tax filers reported an average of 4.7%-4.8% of total reported room use-rental receipts were exempt from the state’s rooms tax over this five year time frame—with 4.2% of reported rooms receipts exempt from taxation in calendar 2003, the subject year for this study. It should be noted here that the exempt receipts reported by those who must file either monthly or quarterly rooms tax return represent only a portion of the exempt room use-rental activity that occurs within the state. There are exempt organizations (see above) that comprise the balance of exempt activity.

After thorough review and following consultation with knowledgeable persons in the Vermont Department of Taxes involved in the department's audit function, this level of exempt lodging activity in Vermont reported by "hotel" facilities was determined to be reasonable for several of the exemptions listed in the rooms tax statute (above). This level of reported exempt receipts is adequate to cover rooms use-rental activities for 5 of the 6 activity-based exemptions listed above, including: exemptions #2, #3, #4, #5, and #6. By that, this analysis concludes that the overwhelming majority of rooms expenditures by "permanent residents" under the state's rooms tax statute, federal and state governments, exempt organizations, foreign diplomats, and credit unions would likely be at facilities defined as rooms tax return filing "hotels" under Vermont statute. Therefore, the overwhelming majority of that exempt activity would therefore be reported as exempt receipts with those "hotel" facilities' monthly/quarterly rooms tax return. In addition, room charges at exempt state and federal establishments, dormitories or living quarters for students, and room charges at exempt facilities such as hospitals, nursing homes and sanatoriums, while significant in scope, were deemed to be inconsistent with the objective function of this study. Therefore, these "room charges" were not investigated further for the purposes of providing an estimate of rooms use activity for this study.

Upon analysis, there were three exemptions under the statute that represented potentially significant exclusions from the above reporting "hotel" establishments estimate that related to activity of importance to the objective function of this study to estimate levels of tourism activity—including activity by both visitors and residents. These include: (1) excluded room rental receipts from occasional accommodations rentals totaling less than 15 total days per year (provided these properties are not listed by a real estate broker or real estate agency), (2) non-profit organizations/health facilities operated by non-profit organizations where business is conducted within the boundaries of the furtherance of their tax exempt purpose, and (3) exempt rooms activity at the state's summer camps for children.

Regarding the first area of concern, the method employed in this analysis for estimating occasional rental or rentals that meet the Tax Department's less than 15 days per year that are not listed with a real estate firm or agent per year included the following general steps:

-
- (1) Using data from the 2000 Census, estimate the number of second homes in Vermont in calendar 2003.³
 - (2) Using “cleaned” expenditure diary data from the 2001 University of Vermont expenditure study, determine the average room-lodging bill per party by season for those using overnight accommodations. Adjust to the average daily rate (or nightly rate) by dividing reported lodging expenditures per trip by the average length of stay for those reporting spending on overnight accommodations (e.g. versus those parties staying with family or friends). Adjust to 2003 dollars using the U.S. Consumer Price Index (CPI).
 - (3) Estimate the number of seasonal/second homes by type (Winter, Hunting Camps, Lake-water properties) using 2000 Census seasonal/second home counts in selected communities by type (e.g. ski resort areas, areas dominated by hunting activities, lake-side communities).
 - (4) Estimate the probability of a “less than 15 days rental” by type of second/seasonal home (at a 20% probability for the Low Estimate and a 33% probability in the High Estimate).
 - (5) Using 7.5 days as a conservative estimate of the average number of nights rented per estimated unit by season, estimate the amount of exempt room use-rental expenditures by type of seasonal/second home unit using the mean per night lodging expenditure estimate by type: a) Winter-Skiing, b) Lake-Summer, and c) the mean of Spring and Fall per night expenditure for hunting.

For room use-lodging expenditures at exempt facilities furthering their “tax exempt mission” under the Meals and Rooms Tax statute, an estimate of 1% of the total level of taxable and exempt receipts reported by “Hotels” was employed for the LOW estimate and a 2% of the total level of taxable and exempt receipts reported by “Hotels” was employed for the HIGH estimate. This estimate is intended to address all of the exempt room

³ For the purpose of this estimate, the actual April 1, 2000 Census estimate was employed in order to be conservative. Although conversion rates from primary residences to seasonal/second homes has slowed in recent times and may even have reversed itself in response to rising home prices and safety-security reasons in the aftermath of the 9-11 terrorist attacks, the April 1, 2000 Census estimate likely still under estimates the number of seasonal/second homes—especially considering the level of real estate development activity at several Vermont resorts.

use-rental activity occurring at exempt institutions (e.g. religious, health care, etc.) not specifically captured above. Improving the estimates of exempt activity in this area is obviously ripe for further investigation and development in subsequent years of study.

For the third category relating to the summer camp activity exemption, a review of licensed summer camps bed capacity was undertaken. This review began with an assessment of the total bed capacity and occupancy of all licensed camps in Vermont (according to the Vermont Department of Health), with Summer Camp establishment portion for children being limited to those establishments with licensed beds for three calendar months or less. From this list, it was found that there were rough 7,350 total beds available at various times of the year, with roughly 20% of the beds licensed year-round (corresponding to 1,600 licensed beds) and roughly 7 of every 10 beds available for 3 months or less in any given calendar year—the component determined to be the “Summer Camp” component (at just under 5,100 licensed beds).

A telephone survey of a mix of exempt establishments was undertaken corresponding to roughly 19% of the total bed base to establish an average per day rate for room and board for the Summer Camps portion. Responses from licensed establishments for a total of three months and less were employed to estimate the level of activity attributable to exempt summer establishments (corresponding to approximately 69% of the bed base at licensed establishments). A weighted average room and board rate was estimated to be \$79 per day, with 90% attributable to room and 10% attributable to meals (board) as indicated by the survey results. Although the survey was not a “probability sample,” the results indicate at total of \$22.76 million in additional exempt rooms activity assuming a survey indicated 87% occupancy rate at such exempt establishments (corresponding to a total of 360,725 exempt room nights). One area of additional concern in this exempt area was lodging expenditures by families (both in-state and out-of-state) dropping off children at such overnight camps. However, it was concluded after some analysis that such lodging expenses are likely part of the reported, taxable activity already captured in Tax Department data.

It should be noted that because this area of exempt activity represents a special type of activity—because this activity is largely self-contained and is specific to the camp facilities area itself. This activity therefore generally has a more limited multiplier effect and is therefore treated differently for economic impact purposes. It is listed as a separate item on Table 4A-2 below.

Table 4A-2: Estimate of Total Lodging Revenues Expended in Vermont--Calendar 2003

	(\$ Millions)	
Total Taxable Room Revenues Reported by Vermont "Hotels" (2003) [A.]		\$323.1
Total Exempt Room Revenues Reported by Vermont "Hotels" (2003)	--	
Rentals to "Permanent Residents" [B.]	--	
Rentals to sold to and paid for by the federal and state government [C.]	--	
Exempt rentals to foreign diplomats [D.]	--	
Rentals to exempt non-profit medical and health insurance organizations [E.]	--	
Rentals sold to and paid for by credit unions [F.]	--	\$14.1
Total Taxable and Exempt Room Revenues from "Hotels" Filing Tax Returns [G.]		<u>\$337.2</u>
LOW:		
Estimate of Vermont Non-Hotel Exempt Room Revenues (2003)-LOW:		
Short-Term Rentals for Properties (<15 days per year.) not listed with realtors [H.]	\$6.7	
Exempt Room Rentals by Non-Profit Organizations-OTHER [I.]	\$3.4	\$10.1
Estimated Lodging Revenues in Vermont (2003)-LOW [Before Summer Camps]		\$347.3
ADD: Rentals in overnight Summer camps for children (J.)		<u>\$20.2</u>
Total Estimated Lodging Revenues Expended in Vermont (2003)-LOW		<u>\$367.5</u>
HIGH:		
Estimate of Vermont Non-Hotel Exempt Room Revenues (2003)-HIGH:		
Short-Term Rentals for Properties (<15 days per year.) not listed with realtors [K.]	\$11.1	
Exempt Room Rentals by Non-Profit Organizations-OTHER [L.]	\$6.7	\$17.8
Estimated Lodging Revenues in Vermont (2003)-HIGH [Before Summer Camps]		\$355.1
ADD: Rentals in overnight Summer camps for children (J.)		<u>\$20.2</u>
Total Estimated Lodging Revenues Expended in Vermont (2003)-HIGH		<u>\$375.3</u>
Notes:		
A. Room Receipt returns are filed by "Hotels" on either a monthly or quarterly basis.		
B. "Permanent Residents" as defined by Vermont statute are those staying 31+ days.		
C. Includes situations where room use payment is made directly by the government entity.		
D. Where an exemption is issued by the U.S. Department of State.		
E. Specifically includes health care providers, Blue Cross-Blue Shield and the American Red Cross.		
F. Includes situations where room use payment is made directly by the credit union.		
G. Reported taxable plus exempt rooms receipts at "Hotels" as defined by Vermont statute for 2003.		
H. Assumes 43,000 second homes (20% probability of being rented) for an average of 7.5 days at of \$100/night.		
I. Estimated at 1% of total reported (exempt and taxable) rooms receipts for all other exempt activity.		
J. Based on telephone survey of registered camps with the VT Department of Health.		
K. Assumes 43,000 second homes (33% probability of being rented) for an average of 7.5 days at \$100/night.		
L. Estimated at 2% of total reported (exempt and taxable) rooms receipts for all other exempt activity.		

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Calendar 2003 Range Estimate

As a result, this examination estimates that of the likely level of room use- rental activity at exempt facilities (see above) is similarly likely to be negligible with respect to the objective function of this analysis (e.g. hospital stays, stays at senior-assisted living facilities, student dormitories, etc.). The range corresponds to the estimate of rooms use activity at exempt facilities—those that do not report any activity in this area to the Vermont Department of Taxes. Therefore, this study concludes that there

was between \$367.5 million to \$375.3 million in total room use-rental receipts in calendar year 2003.

This estimate represents an important foundation for other parts of this study in that it defines the scope of total taxable and exempt lodging activity for both visitors and the Vermont population. This estimate is then employed in developing the estimates of the various types of other tourism activities undertaken by industry participants (including those activities undertaken in conjunction with the three basic tourism categories in this study—business, personal business and pleasure).

We offer a range estimate in this important foundation-building estimate of activity. This is because there are several aspects of this initial estimate that are ripe for further investigation and refinement. This is especially true for the room use-rental activities of establishments in the state that are “exempt” from the states Rooms tax statute. We nevertheless believe this estimate represents a reasonable range estimate of rooms-use activity in Vermont during the 2003 calendar year.

Reconciliation of Exempt Activity Room Use-Rental Estimates in Vermont with Estimates in Other States

Because it is possible that the above approach resulted in the exclusion of significant amounts of non-reported room use-lodging exempt activity, this study consulted the tourism assessment study literature and travel research web-sites of other states to specifically explore this concern. From this review, the most developed, on-going state monitoring system to measure excluded room use-rental was found in Texas—where the results of a quarterly rooms receipts survey by county is reported by Source Strategies, Inc. under contract to the Texas Economic Development & Tourism Department. Since the third quarter of calendar year 1990, the estimated level of exempt activity for the state of Texas for untaxed government business (with a roughly similar—though not identical—list of exemptions such as over 30-day visitors, and for exempt charitable and education purchases⁴) averages 12% of reported activity over the course of a given year.

The 2001 study of the economic impact of travel and tourism in the state of Connecticut employed the Texas “exempt activity percentage” in its analysis, with an adjustment for gaming and gaming-related activities on tribal lands in the state. More specifically, in the Connecticut study the 12% average percentage estimate for exempt activity was increased for the level of estimated exempt receipts for room rentals on the

⁴ See “Methodology of Texas Hotel/Motel Reports,” Source Strategies, Inc., February 27, 2004 for the Department of Texas Economic Development & Tourism.

Manhantucket Pequot Tribal nation land.⁵ Therefore by comparison, Vermont's 4.8% average exempt receipts level percentage as reported by those filing rooms returns would therefore be roughly 40% of the reported 12% estimate of exempt room use-rental activity estimate employed by the state of Texas for approximately the same list of exemptions—but excluding exempt activity by exempt rooms facilities providers. Adding in the above estimates of exempt activity by exempt Vermont providers-establishments results in a 12.1% (for the LOW estimate) to 13.9% (for the HIGH estimate) range for exempt room use-rentals activity—including both reporting and non-reporting facilities offering rooms for use-rent that is consistent with the objective function of this study.

In order to assess the validity of this range estimate of total exempt activity in Vermont, a comparison-contrast assessment for the traveling populations in Texas versus that of Vermont was completed. For this assessment, the American Tourist Survey from 1995 was employed to compare the purpose of travel and the choice of lodging for both intrastate and interstate travelers for the two states. This review and assessment found that the purpose of travel for intrastate travelers in Texas and Vermont were very similar, although in Texas intrastate travelers were 10% more likely to stay in hotel type lodging (e.g. not surprising given the differences between the two states due to sheer size).

For interstate travelers, there is a large difference in purpose of trip. For people coming into Texas, visitors were well balanced between business and pleasure. In Vermont, out of state visitors were overwhelmingly traveling for pleasure—comprising 72.8% of the state's visitors versus only 17.8% for business. This difference likely has a large impact on the type of lodging used by visitors. People visiting Texas stayed in hotels 55% of the time versus visitors to Vermont's where only 32.7% of visitors opted for that option for accommodations. Leisure travelers in Vermont were more likely to stay with friends, in cabins, and other types of outdoor related lodging facilities than leisure travelers to and in the state of Texas. Visitors traveling for pleasure, staying with friends, and/or residing in cabins are more likely to fall outside the net of reported taxable and exempt activity under the Vermont rooms tax. In addition, given the higher percentage of second homes in Vermont (Vermont, along with the states of New Hampshire and Maine, comprise the top three states in the country in terms of the percentage of state housing units as second homes), the possibility of a non-reported, exempt rental likewise seems higher in Vermont than in the State of Texas.

⁵ See "The 2001 Economic Impact of Connecticut's Travel and Tourism Industry, Connecticut Center for Economic Analysis, May 2003, p. 65.

Finally, when compared to Vermont, Texas had an approximate 29-to-1 ratio of travelers, and those Texas travelers—on average—stayed one day longer than travelers to Vermont. These data tend to infer that there is a greater likelihood of a reported, taxable or exempt lodging event taking place in Texas vis-à-vis Vermont. In Texas, more business travelers led to more lodging in hotels and therefore would increase the probability of a reported, taxable event occurring. Overall, the pluses and minuses seem to indicate that it is not unreasonable to expect a consistent, but slightly higher percentage of visitors to be outside of the “taxable” portion of lodging activity—the result of this initial reconciliation.

Estimating Visitor Rooms Expenditures

With the above estimate of total rooms-use rental activity, the next step in the estimation process involved developing a reasonable estimate of the portions of activity estimate attributable to visitors versus the indigenous Vermont population. This estimation procedure began with the data that is assembled by the Vermont Department of Taxes on taxable and exempt room rental-use receipts from monthly and quarterly filers. However, this estimate of the total level of room use-rental expenditures does not differentiate between the room rentals receipts-expenditures of visitors versus those expenditures made by the indigenous Vermont population and Vermont businesses. This is a crucial distinction when estimating economic impact or economic importance of the tourism industry versus simply measuring the level of tourism/tourist-like activity in the state.⁶ The approach used here was to develop a reasonable estimate of each type of rooms-use rental spending using third party data sources as an important alternative methodology to the primary survey results-data assembled from the study’s survey-based estimating approach.

Overview of Estimating Methods

The first step in the data assessment process involved using the data sets described above regarding total and taxable rooms receipts statistics for a representative period of activity. For the total taxable and exempt receipts data we again used the calendar 1999-2003 data set employed in developing the total aggregate level of rooms use-rental receipts collected by the Vermont Department of Taxes. Recognizing that just over 5 years of total receipts data may be insufficient for this research purpose, an alternative data set was constructed using the Department’s taxable receipts data base.

Working in consultation with the Tax Policy Statistician of the Department, data for taxable room rentals were compiled for the period from July of 1994 through December of 2003 using the department’s 180 day report

⁶ For a further explanation of this distinction, please refer to the inverted triangle activity explanation earlier in this report.

data from the Tax Department's VIRCS data base. This period corresponded to the longest period where reliable historical data were available, and covered the period that defined the state's 1995 through 2003 fiscal years. Because input-output modeling needs to comport to a calendar year configuration, the relevant period for analysis of taxable receipts was the calendar 1996-2003 time frame—the list of complete calendar year's where a full set of 180-day receipts data was available.

Overview of the Annual Data

A review of taxable receipts data over the calendar 1995 to 2003 period shows that, Vermont's taxable lodging receipts grew at an average annual rate of 5.3% (see Table 4A-3). Table 4A-3 shows that strongest annual rates of increase in lodging receipts occurred during the mid-1990s, with a 13.9% rate of increase in calendar 1997. The weakest rates in increase occurred during the 2001-03 time period—corresponding to the most recent period of economic recession in the state and national economies, and corresponding to the period that included the tragic terrorist attacks of September 11, 2001—with its subsequent period of significantly reduced tourism activity.

This review of the annual data also illustrates the wide range of variability for rooms receipts activity in the state that can occur year-to-year. Just as overall tourism activity in Vermont reflects economic factors, safety-security concerns, and weather conditions, so, too, does rooms use-rental activity. From the data, it is not unusual for taxable rooms receipts to experience year-to-year swings of four-to-five percentage points or more—in both the upward and downward direction.

Table 4A-3: Profile of "Reported" Taxable Receipts by Calendar Year

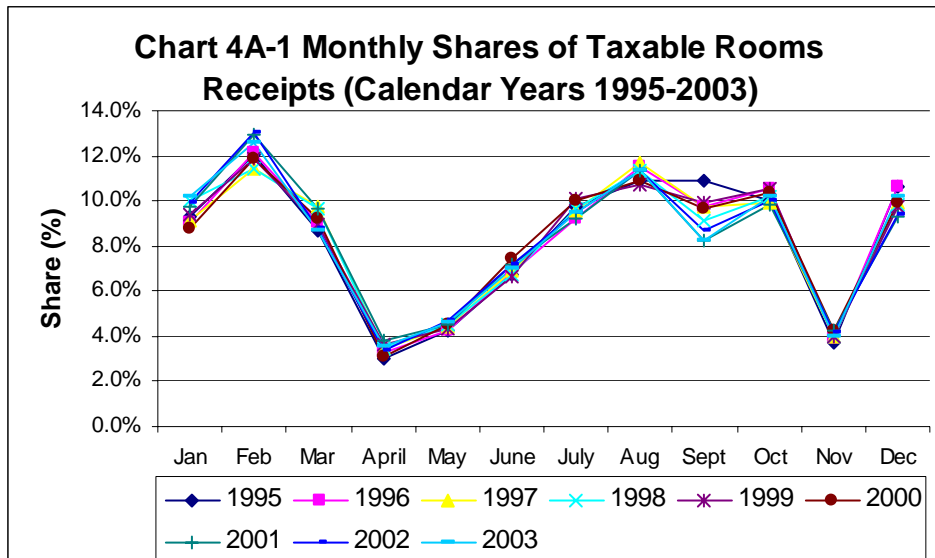
Year	Taxable Revenues (\$ Millions)	Taxable % Change
1995	\$205.6	NA
1996	\$225.0	9.4%
1997	\$256.3	13.9%
1998	\$263.9	3.0%
1999	\$284.6	7.9%
2000	\$304.9	7.1%
2001	\$313.6	2.8%
2002	\$318.2	1.5%
2003	\$323.1	1.5%
MEMO:		
Compound Annual Rate of Change (1996-2003)		5.3%
Median (1996-2003)		7.9%
Note:		
NA means Not Available		
Source:		
Basic Data: Vermont Department of Taxes (VIRCS)		
Prepared By: Economic & Policy Resources, Inc.		

Overview of the Monthly Data

Although the annual figures for room rentals display a clear upward trend and a sometimes high degree of year-to-year variability, a review of the month-to-month flow of room rentals receipts across the calendar year reveals a clear and relatively consistent seasonal trend. Chart 4A-1 illustrates this flow over the last eight calendar years for taxable room use- rental receipts.

According to the graph, monthly room use-rental receipts have a predictable seasonal pattern where the month of February has consistently showed the highest level of monthly receipts activity in any given calendar year. The summer months (corresponding to the months of July and August) similarly have represented a period of relatively higher rooms-lodging activity in the state, with a small, but consistent up-tick in receipts activity during the month of October—corresponding to the state’s fall foliage season.

Across the calendar year, the flow of receipts begins with a strong month of January corresponding to the state’s ski season, followed by the typical annual peak in receipts during the month of February and a strong month of March. Relatively lower levels of receipts activity (relative to the months of January through March) is characteristic of the two month period of April and May—with the month of April including a typical between season “lull” before the state’s tourism sector begins to gear up for its Summer season in June. The summer season typically lasts through the month of August,



followed by a pause before the state’s foliage season that results in a characteristic increase in receipts related to the more lodging-intensive activity of leaf-peeping in October—which has an impressive share despite a season that typically lasts for only a part of late September and

early October. From October, lodging receipts normally experience a second “lull” period during the month of November, before rooms-lodging activity ramps up as the state’s winter season begins to take hold in December.

On average, the month of February typically has the largest share of taxable receipts in any given calendar year (with a median share of 12.0% of annual taxable rooms-lodging receipts over the calendar year 1995-2003 period). The month of February is then followed by August (with a median share of 11.3% of annual calendar year taxable rooms-lodging receipts over the calendar year 1995-2003 period), as the second largest month of the calendar year—reflecting receipts activity from the state’s Summer tourism season. On the other end of the spectrum, April (with a median share of just 3.4% of taxable rooms-lodging receipts over the 1995-2003 period) and November (with a 4.0% median share of calendar year 1995-2003 taxable rooms-lodging receipts) are clearly the lowest months for rooms-lodging receipts activity in a typical calendar year, with the month of April experiencing the lowest percentage of total annual receipts in all nine years of data.

Estimation Results

As stated before, tax receipts do not delineate between in state and out of state consumers. To obtain an estimate of total visitor activity, a methodology for isolating consumer groups had to be developed. There are three consumer groups who comprise the total rooms receipts spending. The three groups, in order of magnitude by this estimating methodology in calendar 2003 were: (1) out of state visitors, (2) in state visitors, and (3) the indigenous Vermont population or local consumers. Total visitor spending on rooms is the sum of out of state visitor spending and in state visitor spending. It is intuitive that the indigenous Vermont population, or the industry’s local consumers, would represent the smallest group in terms of dollars spent. The indigenous population use rooms for reasons such as temporary housing needs due to natural disaster (e.g. a flood), in the event of a house fire and the family needs interim housing, and for other needs such as renting a hall for family events (e.g. a wedding), or for other family business-business meetings. The above examples outline several situations where spending is comprised of local demand—and are not directly linked to export-based tourism activity. Therefore, to accurately estimate visitor expenditures of the tourism industry, this indigenous demand by the local population needs to be estimated. It also needs to be factored out of export industry demand in the economic impact portion of this study to avoid overestimation errors.

Estimating Indigenous Spending

Using the 2002 Consumer Expenditure Survey (CES) data, an estimate of Vermonters' expenditures on "Other Lodging" was calculated for calendar year 2003. According to the CES, "Other Lodging" is a subcategory of the heading "Housing" and includes expenditures on second homes, housing while attending school and out of town lodging. "Out of town lodging" is a residual category used to capture expenditures in hotels, motels, camps and other assorted lodging establishments. Because the CES does not delineate between home and place of expenditure, the name "out of town lodging" is partially a misnomer. "Out of town lodging" does not specifically imply that all the expenditures were made out of an individual's local area. Hence, not all spending from this category can be construed as visitor spending.⁷

In order to develop an estimate of lodging expenditures for the state of Vermont and considering there are no CES data published that are specific for the state, a conversion method was needed to take the most appropriate CES data and tailor it to Vermont. This was accomplished by devising an approach to convert CES data for Northeastern U.S. households to Vermont utilizing actual expenditures by income class and then normalizing them to the Vermont household income distribution via expense ratios and then inflating the 2002 CES data to 2003 using the Chain Weighted Price Index for Consumer Expenditures. These per household expenditures were then converted to expenditures per person to yield what the "average individual in Vermont" spends on "out of town lodging". This per capita estimate is converted to total state expenditures by using 2003 population numbers for Vermont. However, this aggregate number is only an intermediate step. Similar to before, Vermonter rooms expenditures have three components—out of state spending, in state visitor spending, and indigenous or local spending. From the standpoint of the aforementioned "Total Rooms Receipts", Vermont money that is spent out of state is not included. So Vermonter room expenditures need to be disaggregated into its three components to correctly factor the objective function of this analysis: to estimate visitor spending.

Intuitively, the farther an individual travels, the more likely that individual is to utilize commercial lodging facilities. So from the standpoint of Vermont lodging expenses, this logic goes, the majority will be spent out of state, followed by lodging expenditures by in state visitors, and, lastly, expenditures by the indigenous population in the local area. This rationale is consistent with the inverse of a regional economic model based on length of time traveled. The standard model assumes that the farther an individual travels, the less the individual spends as if to imply that the bulk

⁷ Data and definitions of terms are provided by 2002 Consumer Expenditure Survey.

of an individual's spending takes place within the individual's local area. Adaptations of this model have been used in various scenarios and have been found to yield reasonable estimates. As will be discussed later, an example of a good that behaves in accordance with the traditional time travel model is food. For most consumers, the majority of food expenditures are done within an individual's local area of residence and the amount spent diminishes incrementally as you travel away from your home or local area. As stated above, lodging expenses behave in the exact opposite way. The farther an individual travels away from home, the more likely that consumer is to utilize commercial lodging facilities and to have lodging expenditures for temporary shelter needs. By this description, lodging expenditures apparently have an inverse propensity to consume based on miles traveled.

Chart 4A-2: Estimates of Local Area for In State Traveler

Local Area =	20 mile radius
Estimate of Average Mileage - In State Trip	
Vermonters near border	
Farthest In State Trip	160
Shortest In State Trip	20
AVERAGE	90
Vermonters in Central VT	
Farthest In State Trip	80
Shortest In State Trip	20
AVERAGE	50
AVERAGE FOR ALL VERMONTERS	
	70

Estimate of Average Mileage - Out of State Trip	
Vermonters near border	
Farthest Out of State Trip	170
Shortest Out of State Trip	20
AVERAGE	95
Vermonters in Central VT	
Farthest Out of State Trip	100
Shortest Out of State Trip	80
AVERAGE	90
AVERAGE FOR ALL VERMONTERS	
	92.5

Ave Miles	1/(t*t)	Ratio	%
20	0.0025	21.390625	88.62%
70	0.00020408	1.74617347	7.23%
92.5	0.00011687	1	4.14%
			100.00%

Source: <http://www.fhwa.dot.gov/policy/ohim/hs02/ps1.htm>
Ave Annual Mileage (Vt) **15,688**

Travel within Local Area	13,903
Commuting Alone	5,926
In State Travel	1,135
Out of State Travel	650

Utilizing the above logic, the first step in developing an estimate of the indigenous population is to establish average travel miles for each type of Vermont traveler for the purposes of developing a time travel model to estimate lodging expenditures. Using a map of Vermont, commuting times from the 2000 Census, an estimate of average commuting miles developed from the commuting time data, and estimated distances between various points, an average distance of travel was established for each of the three types of Vermonter expenditure group. On average, a Vermonter going out of state will travel farther than during an in state trip and consumers traveling within their local area will have the lowest estimate of mileage traveled. Using these estimates within the time travel model (see Chart 4A-2), a ratio was calculated to approximate the propensity to consume of one group to another, consistent with the inverse expenditure relationship described above. By applying this ratio to the CES calculation of state level spending on "Other Lodging", an estimate of the breakdown of where Vermont expenditures on lodging are

made was developed (see Table 4A-4 below).

From the Table, it is estimated that almost 89% of money spent on lodging by Vermonters in calendar 2003 occurred outside of the state. This is consistent with data documented in previous Vermont tourism activity studies (TIA 2002, UVM 2000), in state travelers are more likely to stay with family or friends and thereby avoid lodging expenditures altogether. Looking at Vermonter lodging expenditures, these same sources also show that only about 7% of Vermont expenditures on lodging are made by in state visitors. This leaves roughly a \$2.6 million residual as an estimate of local spending on rooms use-rental by the indigenous population spending on lodging for the above-mentioned reasons such as renting halls, rooms and conference areas. These expenditures are all part of the taxable and exempt tax receipts data reported to the Vermont Department of Taxes' VIRCS.

Table 4A-4: Total Lodging Expenditures by Person Categories
Demand Segment

	Estimate	
	(\$ Millions)	% Total
In State Residents	\$63.9	100.0%
Local Expenditures	\$2.6	4.1%
In State Visitor	\$4.6	7.2%
Outside Vermont	\$56.7	88.6%

	LOW	HIGH
Total Lodging Expenditures	\$347.3	\$375.3
Out of State Visitors	\$340.1	\$368.0
Total Visitor Lodging Expenditures	\$344.7	\$372.6

MEMO:

Local/In State Expenditures (% of the Total)	0.8%	0.7%
--	------	------

Notes:

- A. In State Residents' Estimate based on CES category "Other Lodging".
- B. Spending outside Vermont not included in totals for Vermont.
- C. Sum of In State and Out of State Visitor Expenditures equals Total Visitor.

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By excluding Vermont spending out of state and subtracting the sum of indigenous population and in state visitor, the residual amount represents an estimate of out of state visitor spending. The sum of out of state visitor spending and in state visitor spending results in an estimate of Total Visitor Spending on lodging for calendar year 2003 of between \$344.7 million and \$372.6 million. This number represents nearly all (or 99.3%) of the total lodging expenses for the state of Vermont. Previous studies have included an implicit—and sometimes explicit—assumption that ALL, or 100%, of expenditures on lodging were due to visitor activity.

B. Overview of Approach: Estimating Visitor Demand for Gasoline Demand

Gasoline Tax Reconciliation Analysis
Vermont Department of Tourism and Marketing
October 15, 2004

Overview

This appendix describes the results of the EPR estimate of visitor gasoline consumption in calendar 2003. Using the EPR estimate of 8.947 million out of state person trips to Vermont, this reconciliation analysis finds that an estimated 49.5 million gallons of gasoline was consumed by out-of-state visitors in calendar 2003. Combined with the in-state visitor total of 14.9 million gallons, this study estimated that a total of 64.4 million gallons was consumed during the year by visitors in total or a total of \$102.4 million—when converted to expenditures at 2003 average retail prices.

Definitions and Data Sets

For tax purposes, the state of Vermont Department of Motor Vehicles (the DMV) maintains accurate records of the quantity of gasoline distributed through out Vermont based on the monthly reports of the state's licensed distributors. The reported gallons from these distributor tallies are collected monthly by the DMV and are used in this analysis as proxies for gasoline consumption in Vermont. Because gas sold at the distributor level is taxed and sold to retailers for final sale, actual retail consumption of gasoline is assumed to lag by one month,⁸ with the 1 month time lag ostensibly assumed to equal "accumulated distributor and retail inventories." Although there is no direct empirical data to support this assumption, this in our view represents a reasonable approach for this analysis considering the limited inventory capacity that distributors have and the "cash basis" nature of today's energy products industry.⁹ The net effect of this approach means that gasoline that is reported by distributors, taxed, and distributed during the month of X, is assumed to have actually have been consumed during the month of X+1. As a result, the gallons distributed in month X are reported as month X+1's data point in the subject time series analysis.

In addition, it should be mentioned that the initial stages of this analysis are conducted in gallons—not expenditures. This is because not all "final consumers" pay the retail price of gasoline (especially commercial consumers and purchases made by the public sector). Of course, the

⁸ More specifically, a one month lag between the distributor-reported gallons—less the state's allowance for losses and evaporation—and tax payment to the state of Vermont and the actual retail sale is assumed for this analysis.

⁹ This assumption could be further refined in subsequent years of study.

retail price for gasoline is very important to a reconciliation of visitor expenditures on gasoline, and this information is available in a well-kept retail price time series collected and published by the Vermont Department of Public Service (See Table 4B-1 below). This price series reflects the results of a monthly survey of the retail price for gasoline across the state.

However, this survey has little relevance to the price paid for gasoline by the public sector—such as for the purchases of public safety and public works departments of local government. It also has limited application to several commercial sectors—especially for off-road commercial uses such as those directly involved in production agriculture. After the shares of those public sector and commercial uses are factored for the calendar year 2003 base year, the remaining gallons were estimated to have been consumed by the general Vermont population and visitors to the state during calendar 2003. This consumption calculation was then converted to gasoline expenditures using the average retail price for the calendar 2003 reference year.

Table 4B-1: Weighted Average Retail Price of Gasoline in Vermont (Calendar 2003)

Month	\$/gallon	Total Gallons [A.]	Line 26 Allowance [B.]	Net Gallons Sold/Consumed	Weighted Average Price
Jan-03	\$1.52	30,080,052	270,495	29,809,557	
Feb-03	\$1.56	30,749,294	287,297	30,461,997	
Mar-03	\$1.68	26,798,621	250,178	26,548,443	
Apr-03	\$1.67	27,752,619	261,648	27,490,971	
May-03	\$1.60	25,140,555	237,013	24,903,542	
Jun-03	\$1.54	29,766,187	283,082	29,483,105	
Jul-03	\$1.49	29,701,536	281,800	29,419,736	
Aug-03	\$1.53	32,773,636	312,500	32,461,136	
Sep-03	\$1.73	33,299,569	316,734	32,982,835	
Oct-03	\$1.65	29,609,607	281,563	29,328,044	
Nov-03	\$1.62	32,146,001	301,403	31,844,598	
Dec-03	\$1.56	26,323,644	255,218	26,068,426	
		354,141,321	3,338,931	350,802,390	\$1.59

Notes:

A. Lagged one month (Gallons reported/Tax paid on distributor or wholesale level)

B. Line 26 Allowance corresponds to estimated gallons lost due to evaporation and other factors

Data Sources:

Price Data [VT Dept of Public Service]

Gallons Data [Department of Motor Vehicles]

Prepared By : Economic & Policy Resources, Inc.

Overview of Factoring Adjustments

In addition to the above and within the overall demand for gasoline, there exist a number of nuances which need to be accounted and adjusted for in this analysis. Keeping in mind that the objective is to estimate visitor

consumption, we must first understand how gas consumption is divided. In order to accomplish this objective, a top-down procedure was developed to facilitate the development of that visitor estimate. By constructing a top-down structure of the demand for gas, this analysis seeks to be more certain of the division between total demand expenditures for gasoline and visitor consumption expenditures while ensuring that no segment with significant demand-consumption is omitted from this reconciliation analysis. Building on conversations with individuals who work with transportation data and gas consumption estimates for the Department of Transportation (DOT) and the U.S. Energy Information Administration (USEIA), gas consumption can be seen as relatively predictable in the short run (or over a 1-3 year time frame). Thus, using consumption and use data within that 1-3 year short-run time frame to develop estimates of consumption for calendar year 2003 was deemed appropriate for this analysis. This was because shifts in technology or preferences move the demand for gasoline and therefore change the nature and magnitude of these adjustments only incrementally over time. The data used under this approach was generally within that short-term window where technology and preference changes were unlikely.

Following the top-down reconciliation method, the first factoring adjustment involved apportioning total gas consumption in gallons to public versus private consumption. This first factoring adjustment follows a well documented division between public sector and private sector demand and an estimate for Vermont was readily attained. Applying one minus the estimated percentage of total public consumption in gallons for calendar year 2003 to total gallons consumed for the subject time period resulted in an estimate of total private consumption in gallons.

Given the fact that total private consumption must equal the total of commercial plus household consumption, the second factoring adjustment involved separating the commercial consumption component from household consumption. Unfortunately, this analysis showed that information was not as readily available as the first factoring adjustment that delineated public versus private consumption. This is because each published survey-calculation consulted in this regard adopted their own terminology and involved a somewhat different objective function or purpose of their respective study. In addition, level of data (whether national or by major geographic region of the U.S.) proved to have a significant impact on factoring calculations. This made a Vermont factoring calculation challenging, as described below in the following section Reconciliation.

Once commercial consumption was estimated, this factoring method next moved to the development of household consumption estimates for in state and out of state consumers. The out of state consumption was the final objective function of this factoring approach and does not need to be broken down further. But in order to understand total visitor expenditures, in state spending was disaggregated by location consumed (e.g. whether it was local, in state while touring, or out of state). Once again, indigenous consumption was separated from consumption that occurred during the subject year while traveling—excluding out of state purchases by Vermonters. With estimates of each category in gallons for calendar year 2003, the total gallons consumed were then converted to expenditures (in dollars) for the calendar year 2003 reference year. The final step in the process involved the development of estimates of in state visitor spending and out-of-state spending.

Reconciliation

Using distributor data assembled by the Vermont Department of Motor Vehicles data covering the period from December 2002 to November 2003, an estimate of total gas consumption in gallons was developed. Total gallons consumed were lower than total gallons reported by distributor due to allowances for spillage and evaporation—the so-called reported Line 26 gallons. As stated above, gas consumption and expenditures by percentage are relatively predictable based on prior information over the short-run (roughly the prior 1-3 years). This also holds true when making adjustments for spillage and evaporation—so called Line 26 gallon adjustments per the DMV distributor report. Starting at the bottom of Table 4B-1, total amount of gasoline gallons consumed by all consumer sectors in calendar year 2003 was estimated to be 350.8 million gallons per DMV distributor reports. This forms the starting point of the factoring process. It also is important to point out that this estimated level of total gasoline consumption in Vermont for calendar year 2003 is separate and apart from the consumption of diesel fuel within the state. This is an important distinction since many of the goods consumed in the state enter via motor carrier—which likely reflects a mix of gasoline-powered (probably a minority) and diesel-power vehicles (probably the majority).

The second step in the factoring process was to factor the division between public and private consumption during calendar 2003. To accomplish this, estimates of gallons consumed for each category for calendar years 2000, 2001, and 2002 were obtained from the USEIA. From these data, an annual average factoring percentage was calculated for calendar 2003 using a weighted average approach for the previous three calendar years. The range across these three points was small. Therefore, this approach that uses this weighted annual average approach for forecasting the percentage of total gallons consumed for calendar year

2003 was determined to be a reasonable approach—in keeping with the 1-3 calendar year short-term time horizon guideline presented above. From this approach, it was estimated that a total of 1.75% of total annual consumption in gallons was apportioned to public sector consumption. By factoring out 1.75% of total consumption for public use, it was estimated that a total of 344.7 million gallons were consumed in calendar year 2003 for private use.

As stated above, the next step in the factoring process—the division between commercial and household expenditures in the private sector was not as clear or easily delineated. Estimates of commercial consumption in the literature, as a percentage of total private gasoline consumption, range across a fairly broad range of from 15% to 40% of private consumption. This disparity can be attributed to inconsistent definitions and, at time, inappropriate applications of source data. Therefore, our approach included a “building up method” utilizing consumer expenditure data that estimates of household spending for both the in state Vermont population and spending by out of state visitors.

Estimated Household Expenditures

In previous sections, the Northeast data—adjusted for the differing household income distribution in Vermont vis-à-vis the northeast average—from the consumer expenditure data were used as a basis for estimates of individual/household spending patterns of residents of Vermont. The implicit assumption in that factoring approach being that expenditures for food, alcohol, and lodging, the Northeast averages from the CES were representative of household spending for those same household income categories in Vermont—after adjusting for obvious household income differences—since Vermont is a smaller subset of the northeast U.S. region.

But since this analysis which sought to develop a reasonable estimate of gasoline consumption for visitors, the above assumption which worked well in other areas was not employed in this expenditure item for obvious reasons. First, Vermont is a rural state with limited options and use intensity for public or mass transportation services. In most cases, the highest intensity of use of those options occurs in and around the state’s only one relatively small metro area. Because of the state’s primarily rural character, most Vermonters and Vermont households find it a necessity to either own or at least have access to a personal vehicle or vehicles. This is supported by statistics on miles driven per year where, according to data from the Federal Highway Commission, the average Vermonter drove a total of 15,688 miles during calendar 2002, ranking Vermont

second in the nation in total miles driven behind only the even more rural state of Wyoming in total vehicle miles traveled.¹⁰

Conversely, the CES estimate of total gasoline consumption expenditures for the northeastern U.S. was the lowest of the four major CES geographic regions in calendar 2002. This average level of expenditure was, of course, due to the large influence of metropolitan areas such as Boston and New York City on the household and per capita expenditure averages—where many households and individuals find it unnecessary and even prohibitively expensive to own their own vehicles. Both of those metropolitan areas also have well established and utilized forms of public-mass transportation services as well, further reducing the need and financial incentive for vehicle ownership. These factors clearly influenced the CES estimates of gasoline consumption in the northeastern region of the country. Therefore, because Vermonters have the second highest average of miles traveled per year by state, the Northeast average was adjusted upward to approximate the average expenditure levels of the highest average expenditures for gasoline in other regions of the country (e.g. by households in the Western U.S. region). These adjusted expenditures were employed because they were believed to more accurately reflect the actual expenditures by Vermont households given the Vermont population's higher relative degree of dependency on personal transportation vis-à-vis the northeastern U.S. regional averages for each household income classification.

Table 4B-2 presents the results of this estimation method. The table indicates that an estimated total of 350.80 million gallons in gasoline were consumed in Vermont during calendar 2003—reflecting a summation of the factored CES categories (converted to gallons) including the “Gasoline” and “Gasoline-Out of Town” Expenditure categories. Therefore, the category “Gasoline” as a stand alone category was estimated to be equal to total local consumption. Consumption calculated from “Gasoline Out-of-Town” needed to be separated into two categories—including the in state visitor and out of state consumption. This division was again based on a propensity to travel ratio—equaling a 3 to 1 ratio of incidence for the likelihood of an in-state trip versus a trip out of state. It is important to note that the ratio used was not strictly based on frequency of trip but primarily relies on expenditure patterns (as converted to gallons) while en route. This was an important step because it was important to recognize that even on route to another state, it is possible that a Vermonter may stop in another Vermont municipality to fill up—even though that customer may not have reached his/her final destination. However, once again, it is important to factor spending out-of-state so that

¹⁰ It should be noted that the national average in calendar 2002 was 9,905 miles.

our estimates of tourist activity are as fully-considered/accurate as possible.

Table 4B-2: Estimate of Total Gas Consumption in Vermont--Calendar 2003 (in gallons)

PRIVATE CONSUMPTION:		(Millions of Gallons)
Commercial Consumption		69.44
Vermont Household Consumption [A.]		230.60
In State Consumption		225.65
Local Consumption [B.]	210.80	
In State Visitor Consumption [C.]	14.85	
Out of State Consumption [D.]	4.95	
Out of State Visitor Consumption [E.]		49.58
Estimate of Vermont Private Gas Consumption in Percent [F.]	98.25%	
Total Estimated Private Gas Consumption in Vermont (2003)		344.67
PUBLIC CONSUMPTION:		
Estimate of Vermont Public Gas Consumption in Percent	1.75%	
Total Estimated Public Gas Consumption in Vermont (2003)		6.13
Total Taxable Gas Consumption (Calendar 2003)		350.80
Total Visitor Consumption of GAS [G.]	64.43	
Total Visitor Consumption of GAS (in Millions of Dollars)		\$102.4

Notes:

- A. All CES monies have been converted to gallons by dividing by \$1.59 - the average price of gas 2003.
- B. Based on CES "Gasoline Consumption" estimates for consumption by the local Vermont population.
- C. The summation of In State Visitor and Out of State Spending equals CES "Out of Town Gasoline Consumption." Breakdown of "Out of Town Gasoline Consumption" from the CES into In State Visitor and Out of State Consumption is based on likelihood of travel and equates to a 3 to 1 ratio for In State over Out of State Gasoline consumption.
- D. This amount is money spent outside Vermont and is not included in Total Vermont Expenditures.
- E. Calculation equals 8.947 mil (Domestic person trips per TIA + Canadian visitors per Statistics Canada + International visitors per U.S. Dept of Commerce) X \$8.81 (EPR Estimate of per person gas expense) converted to gallons (see note A above).
- F. Reflects an average of calendar years 2000, 2001 and 2002.
- G. Equals sum of In state and out of state visitor consumption. Using \$1.59 per gallon, total visitor expenditures on gasoline equaled **\$102.4 million** in calendar 2003.

Basic Data Sources:

- U.S. Energy Information Administration [Gasoline Consumption Data by Category]
- U.S. Department of Labor [Consumer Expenditure Survey]
- Vermont Department of Motor Vehicles (Vermont Gasoline--gallonage)

Prepared By : Economic & Policy Resources, Inc.

Out of state visitor spending (converted to gallons) was the last factoring calculation that was completed during this analysis. To estimate that consumption category, the EPR estimate of 8.947 million out of state person trips to Vermont was multiplied by an average expenditure per person on gasoline of \$8.81 and converted to gallons using the weighted average retail price level for calendar year 2003. The \$8.81 estimate was based on adjusted survey responses from the UVM 2001-02 expenditure study and was adjusted to calendar year 2003 dollars. This multiplication yielded an estimate of 49.5 million gallons consumed for out-of-state

visitors. Combining this figure with the in-state visitor total of 14.9 million gallons resulted in the estimate of total visitor consumption of 64.4 million gallons for 2003. When converted to expenditures, total visitor expenditures on gas was estimated to be \$102.4 million. The in-state visiting population was estimated to represent 23% of the total.

Returning back to the discussion of commercial versus households, the table also shows that the residual category of commercial consumption equal to an estimated 69.4 million gallons. That estimate translates to approximately 20% of total gas consumption in the state of Vermont. Because these figures do not include diesel fuel, this estimate is within the range of estimates in previous studies. With the New England average estimated at 15% and the national average estimated at roughly 20% according to the U.S.E.I.A.¹¹, this estimate of approximately 20% for Vermont appears reasonable—given what is understood about the state vis-à-vis the northeast region and its roughly national average position.

C. Overview of Approach: Estimating Visitor Demand for Meals/“On-Premise” Alcohol Consumption

Taxable Meals-Tax Exempt Meals/On-Premise Alcohol
Reconciliation Analysis
Vermont Department of Tourism and Marketing
October 15, 2004

Overview

This component of the study estimates there was \$781.65 million in total restaurant and “on-premises” alcohol expenditures by both visitors and the indigenous Vermont population in calendar year 2003. Total visitor expenditures were estimated to be \$245.46 million in calendar year 2003—equating to 31.4% of total spending for “on-premises” meals and alcohol. As with the other expenditure reconciliations presented earlier, there is a range of uncertainty surrounding this estimate because a significant portion of this estimate is derived in-directly from secondary data sources. The size of this range could easily be as much as plus or minus 10 percent.

This analysis includes estimates of: (1) taxable and exempt meals expenditures as defined by Vermont statute, and (2) estimates of alcohol expenditures subject to tax under the 10% alcohol tax, generally assessed for on-premises consumption. The retail portion of alcohol beverage expenditures in Vermont—that is, expenditures for alcoholic beverages that are made for “off-premises” consumption through the Vermont Department of Liquor Control retail and agent outlets, and for beer and

¹¹ U.S. E.I.A. means U.S. Energy Information Administration.

wine purchases—are dealt with separately in the retail expenditure portion of this assessment analysis.

Definitions and Data Sets

Visitor expenditures for meals and alcohol consumed outside of the home were combined under this analysis for two reasons. First, this approach corresponds to the current configuration of the structure of the National Income Product Accounts (the so-called “NIPA accounts”) as set forth by the U.S. Department of Commerce. Therefore, utilizing this configuration will be important to correctly completing the input-output modeling component of the study that will be needed to measure the direct and indirect impacts of the travel and tourism industry in Vermont. Secondly, this approach also comports to the manner in which the Vermont Department of Taxes assesses and collects taxes under Vermont statute which can be reported without suppression because of confidentiality-disclosure rules. Thus, this configuration also gives the study’s investigators access to reliable, secondary data to be used in this analysis that otherwise would not be available for use.

Meals Receipts/Expenditures

The state of Vermont assesses a meals tax on receipts of “taxable meals.” During calendar year 2003, the tax rate on taxable meals receipts was equal to 9%. The state defines a “taxable meal” as “any food or beverage sold by a restaurant and certain other food sales in Vermont for which a charge is made. The tax applies whether the food or beverage is consumed on or off the restaurant premises”. Examples of the “certain other food sales” mentioned above would be sandwiches (except if frozen), heated food or beverages, salad bar items, party platters and prepared foods.

Restaurants are not the only entity exposed to meals tax, but are a subset of the larger group: “eating and drinking establishments”. Under state statute, “eating and drinking establishments” include “every restaurant, café, private and social club, tavern, diner, hotel, or other place where food, food products or beverages, including alcoholic beverages, are served and also every counter, stand, fountain, drive-in, vending device, or other facilities (whether stationary or mobile) where meals, sandwiches, snacks, or beverages are sold.” The definition for “eating and drinking establishments” specifically does not include retail food stores which sell packaged food products and/or candy and confectionaries.

State regulations exclude packaged food products from the meals tax, including “pre-packaged foods sold in bulk in unopened original containers or packages, including items such as loaves of bread, quarts of milk, canned goods, packaged ice cream, cartons of soda and beer, etc.” It

also excludes “over-the-counter sales of food sold by weight or measure and packages by the eating place, ‘delicatessen type sales’, and bulk sale of bakery products.” A combination restaurant-delicatessen selling ready-to-eat meals and prepackaged foods has a tax liability under the meals tax, but only on the items sold in individual portions and that are ready-to-eat items. This would include prepared meals, snacks, sandwiches and beverages.

There are a number of exceptions under the meals tax that are specific to type of meal service provider and the recipient of meal services. Based on type of meal service provider, exemptions from the meals tax exist when food or beverage is served on site or furnished by one of the following entities:

- (1) Nonprofit corporation or association organized and operated exclusively for religious or charitable purposes with the net proceeds of the sales used exclusively for the purposes of the corporation or association,
- (2) A grade K-12 school or a college-university,
- (3) Any institution of the State of Vermont and its political subdivisions or the United States, who provides meals for the consumption by its inmates and employees of the institution,
- (4) A hospital (which includes sanatorium, convalescent home, nursing home or home for the aged),
- (5) Any person while transporting passengers for hire by train, bus or airplane,
- (6) Any person while operating a summer camp for children at the camp,
- (7) An operator of a business providing meals to an employee as payment for employment, and
- (8) Recognized organizations and industries such as the American Red Cross, Blue Cross/Blue Shield and credit unions.

As defined by the recipient of meal services, exceptions to the state meals tax exist and would be applicable when the recipient of meal services could be classified as or constituted one of the following:

- (9) An operator who intends on reselling the purchased meal (in this instance the tax burden rests with the reselling party),
- (10) Foreign diplomats who can produce a meal exemption issued by the U.S. Department of State, and
- (11) Individuals paying for “meals” with food stamps.

Nonprofit organizations who go on location (i.e. a bazaar, fair, picnic, church supper etc.) to sell food or beverages would not be subject to meals tax as long as the cumulative number of sales days do not exceed four in a calendar year. If sale days exceed four in a calendar year, a nonprofit organization is required to have a meals license, thereby making all sales subject to taxation.

Over the years, the interpretation of what does and does not constitute a taxable meal has been subject to considerable controversy. There also have been inconsistencies in reporting taxable and exempt receipts across the spectrum of establishments reporting taxable and exempt receipts. This inconsistency is particularly evident in the reporting of taxable and exempt meals receipts by smaller convenience store establishments where it is suspected, given the nature of the relatively higher percentage of exempt receipts reported, that a significant portion of reported exempt receipts are commingled with other receipts that are not actually for “meals-beverages” in the statutory meaning of the term(s). As a result of these apparent definitional inconsistencies, total taxable meals-beverage receipts served as the starting point for this reconciliation analysis.

Alcohol Receipts/Expenditures [Restaurant/Establishment Portion]

Similar to the purchasing of prepared foods and the use-rental of lodging, the state of Vermont assesses a tax on alcohol consumed at establishments such as at restaurants and bars throughout the state. In calendar year 2003, the alcohol tax was imposed a rate of 10% of taxable receipts. It should be noted that the state of Vermont also regulates the retail market for liquors and spirits and assesses a state tax on the sale of beer and wine (including a 6% sales tax on retail sales of wine). This study employs taxable receipts of alcohol that are reported as part of the state Rooms and Meals Tax statute to estimate expenditures of on-premises alcohol consumption. The only exemptions for this tax, unlike

the rooms and meals component explained above, are for purchases made by Vermont state agencies or Federal agencies. Taxable alcohol sales for calendar year 2003 as reported under the Rooms and Meals Tax source totaled \$117.16 million.

Overview of Factoring Adjustments

With the above as context, this analysis next moves on to begin to develop an estimate of total Meals and Alcohol receipts in calendar 2003—using the above known taxable and exempt receipts data as a starting point. The factoring process begins with developing an assessment of the exemptions, estimating which exemptions or parts of those exemptions may already be captured in taxpayer reports of taxable and exempt receipts.

This examination begins with an assessment of each exemption by source for the meals tax. First, exemption #9—which is perhaps the most troublesome of all listed exemptions with respect to our objective function—is in all likelihood already captured in the taxable receipts and exempt receipts data. This study avoids the possibility of double-counting the receipts related to a meal purchased for re-sale by excluding non-taxable meals receipts as reported by the Tax Department to develop the aggregate meals expenditure estimate for the state.

Because of the use of taxable receipts as a starting point, this analysis must develop estimates of the other exemptions listed above. Looking at the exemption for foreign diplomats' spending on meals (exemption #10), it was determined that this exemption likely totals only a negligible amount—given the relative lack of embassies and other diplomatic facilities in the state. While it is true that diplomats could visit Vermont, this level of activity is likely to be very small in the overall scheme of the industry. For exemption #11 which deals with the food stamp exemption, an analysis was completed to estimate the component of food stamp purchases that correspond to meals. According to federal rules in the program, only the elderly can use food stamps to purchase meals. For the most part, food stamps are generally intended for use on grocery items by most recipients, and not for prepared meals-foods. This analysis first subtracted all of the food stamp expenditures by non-elderly households to develop an estimate of the number of elderly households making food stamp expenditures in the state. Of that total, an estimate of spending per elderly food stamp household for meals was estimated through a factoring process using U.S. food stamp spending data. At the end of this factoring process, an estimate of \$3.87 million of exempt food stamp meal spending was added to taxable receipts and added to the indigenous Vermonter spending ledger (an estimated 4,000 elderly Vermont households spending an average of \$80 per month on meals).

To account for potential missing meals expenditures relative to the first eight exemptions listed above, this assessment assumed that those exemptions in total could comprise roughly 5% of total taxable meals receipts. There is no empirical data to support or refute this assumption. Obviously, this is an area ripe for further research to test and perhaps further refine this assumption. Table 4C-1 details the above calculations as well as lists the total meals expenditures for 2003 at \$701.58 million.

Table 4C-1: Estimate of Total Meal Expenditures in Vermont--Calendar 2003	Estimate (\$ Millions)	
Total Taxable Meal Receipts Reported by Vermont "Restaurants/Other Filers" (2003) [A]		\$664.5
Total Exempt Meal Receipts Reported by Vermont "Restaurants/Other Filers" (2003)		
Exempt Meals sales to foreign diplomats	--	
Food Stamps (Estimated Portion for Meals Purchases in 2003) [B]	\$3.9	\$3.9
Total Taxable and Exempt Meal Revenues from "Restaurants" Filing Tax Returns [C]		\$668.4
Estimate of Vermont Non-Restaurant Exempt Meal Revenues (2003):		
Meals Provided On Route by Transportation for Hire Firms	--	
Exempt Meal Activity by Non-Profit Organizations [D]	\$33.2	\$33.2
Total Estimated Meals Expenditures in Vermont (2003) [E]		\$701.6

Notes:

- A. Source Vermont Department of Taxes; Monthly and Quarterly filers for calendar 2003 [180 day data].
- B. Per tax receipts "Exempt Meal" = \$104.47; Remaining difference of \$71.82 million.
- C. To avoid double counting, this figure does not include meals purchased for resale.
- D. Estimated at 5% of Total Taxable Meal Revenues.
- E. Per tax receipts "Total Meal" = \$768.94; Our estimate is lower due to Note C from above.

Prepared By: Economic & Policy Resources, Inc.

Estimation Results

Combining meals and alcohol receipts together, holding the assumption that consumption of meals by visitors is proportionately equivalent to consumption of alcohol in relation to indigenous spending, estimates of visitor expenditures are ready to be calculated (see Table 4C-2). Once again using the CES estimates of expenditures by Vermonters, this analysis factors these expenditures to partition local spending and expenditures of visitors tied to tourism.

Using the CES categories "food away from the home" and "alcohol away from the home," a per capita level of spending is derived for Vermont households using the expenditure average of households in the northeastern U.S. from the U.S. consumer expenditure survey estimates as they are "normalized" to the Vermont comparative income distribution. This CES calculation yielded an estimate of total "away from home" combined consumption of food and alcohol of \$581.5 million. This figure represented total spending by all Vermonters—locally, during in state travel, as well as during travel out-of-state. This estimate was then

factored further to estimate visitor expenditures. This factoring process was completed utilizing the previously mentioned method of calculating expenditures by distance traveled, to derive estimates of local, in-state visitor, and out-of-state visitor spending, respectively.

Table 4C-2: Total Meal & Alcohol Expenditures by Person Categories

Demand Segment	Estimates (in millions)
In State Residents	\$605.03
Local Expenditures	\$536.19
In State Visitor	\$43.77
Outside Vermont	\$25.07
Out of State Visitors	\$201.69
Total Meal and Alcohol Expenditures	\$781.65
Total Visitor Expenditures	\$245.46

Notes:

- A. Based on estimates calculated from CES expenditure data.
- B. Breakdown under In State Residents based on derived Vermonter spending patterns.
- C. Spending outside Vermont not included in totals.
- D. Residual amount=Tax Receipts minus CES expenditures data.
- E. Sum of Meals and Alcohol data provided by Vermont Department of Taxes.
- F. Sum of In-State and Out-of-State Visitor Expenditures.

Prepared By : Economic & Policy Resources, Inc.

Using the same mileage estimate employed in Appendix IV, Section A. above, this assessment once again calculated a ratio to illustrate an individual's propensity to consume based on miles traveled. As opposed to lodging, where it was assumed that there was an inverse relationship as estimated by a typical time travel model, the theory was that meals and alcohol spending will behave as set forth under a more conventional methodology. Specifically, the farther one travels from home the lower the amount of annual expenditures. Again, the premise is that the majority of an individual's expenditures are spent within their local area. By comparison, it is clear that food and alcohol businesses are less dependent on tourism than the lodging industry. The majority of food and alcohol expenditures are made by the local population—specifically \$536.19 million of \$781.65 million or roughly 68.6% of the total. In-state visitors are estimated to have made expenditures equal to roughly 5.5% of total Vermont meal and alcohol receipts in calendar year 2003. The above-described approach results in a fully-factored estimate of \$245.46 million in visitor expenditures for on-premises meals and alcohol. This equates to 31.4% of total spending for “on-premises” meals and alcohol.

D. Overview of Approach: Estimating Economic Output and Employment Related to Travel and Tourism

Estimates of Output and Direct Employment
Vermont Department of Tourism and Marketing
December 15, 2004

Overview

This component of the study estimates there was a total of \$1,455.3 million in total Travel and Tourism industry output supported by visitor spending during calendar year 2003. Output estimates by major travel and tourism industry sector ranged from a total of \$537.8 million in retail and retail-related sector (corresponding to an estimate 9.0% of total industry output) and an estimated \$358.7 million in the Hotels & Lodging sector (or 99.3% of the total Hotels & Lodging industry's output in the year) to a low of \$59.8 million in Vermont's Transportation industry sector (corresponding to an estimated 63.0% of total industry output in that sector in Vermont in that year) and \$102.8 million in the Gasoline-Oil sector during calendar year 2003 (corresponding an estimated 18.3% of the industry's total output in Vermont during calendar 2003).¹² These estimates were developed using the system of U.S. travel and tourism satellite accounts developed by the U.S. Department of Commerce as a starting point and factoring those estimates for known and demonstrable differences between the structure between the U.S. and Vermont travel and tourism industries.

An estimated 27,740 direct full-time and part-time jobs (including Proprietors) were estimated to have been supported by visitor spending in Vermont during calendar 2003. An estimated 15,808 jobs were found to be supported by visitor expenditures in the Hotels & Motels and Eating & Drinking-Property Management part of the industry. Another 1,315 direct full-time and part-time jobs and an estimated 1,669 full time and part-time jobs were estimated for the Recreation and Entertainment sector and the Retail and Retail-Related sector of the broader travel and tourism industry in calendar year 2003, respectively. These estimates were developed using the total industry output estimates developed under this analysis described above using weighted average U.S. travel and tourism

¹² The reader should note that all estimates here have been translated from the Standard Industrial Classification typology to the North American Industry Classification System (NAICS). The category labels are similar to the older Standard Industrial Classification system (SICs) that are relevant to each NAICS code for clarity (for non-economists) since the TTSA's from the U.S. Department of Commerce that form the basis for this analysis were reported in under the SIC code configuration for calendar years 1992, 1996 and 1997.

employment ratios by sector from the U.S. Travel and Tourism Satellite Accounts—as adjusted (e.g. factored) for known differences between the U.S. and Vermont travel and tourism industries. In each case, these estimates of full-time, part-time, and proprietors employment represent “best estimates” within a range. As with the other expenditure reconciliations presented earlier, there is a range of uncertainty surrounding this estimate because a significant portion of this estimate is derived in-directly from secondary data sources. The size of this range could easily be as much as plus or minus 10 percent of the point estimate presented in this analysis.

Definitions and Data Sets

This part of the research was undertaken to develop an estimate of total industry output and direct industry employment for Vermont’s travel and tourism industry. This analysis begins with a discussion of how the U.S. Department of Commerce estimates activity in the U.S. travel and tourism industry. An estimate of activity—including an estimate of industry output and direct employment—is then completed for the Vermont travel and tourism industry through a series of factoring adjustments that are designed to account for differences between the state and U.S. industries.

U.S. Travel and Tourism Satellite Accounts

The consumption and production activities of the travel and tourism industry are all included in the way the government measures general economic activity in the U.S. economy. However, these measurements are contained within many different economic sectors within the government’s system of economic accounts, and these accounts does not separately identify or measure the specific production and expenditures of visitors engaged in travel and tourism activities. Instead, those travel and tourism production and expenditures are collected and reported as part of the government’s broader system of accounts that measure total production and expenditure activities for industry categories in total without consideration of the purpose of that output and purchases activity within each industry category.

There are several sectors of the U.S. and Vermont economies where the majority of output and purchase activities are due to visitor activities—and are therefore part of a multi-faceted travel and tourism industry. For example, nearly all of the output and purchases in the Hotels & Motels category and air transportation are related to visitors—and therefore travel and tourism—activity. In others, such as the retail sector and the eating and drinking sector which are a mix of visitor spending and spending activity by local (state) residents. Excluding visitor-related retail output and expenditures or visitor-related spending and output at the state’s eating and drinking places from an estimate of travel and tourism activity because the majority of spending and output is not driven by visitor activity

or because it is difficult to estimate them would under-estimate the economic value of visitor spending to the Vermont economy. Conversely, including all of the expenditures and output in the retail and retail-related and in the eating and drinking sectors would result in a grossly over-stated economic value of the economic activity resulting from visitors—and therefore travel and tourism sector—because it would also include a significant amount of expenditures and production activity tied to the local (the state, in this case) population.

Over the years, there have been many attempts to measure the scope of travel and tourism as an industry. These studies have varied in terms of the application of regional economic theory and in the rigorousness of the methods employed to make such estimates. In addition, many of these studies do not have a consistent approach that would permit travel and tourism to be directly compared with the economic activities of other industries-sectors of the economy. Because of this the travel and tourism industry during the mid-1990s recommended and the U.S. Department of Commerce reached agreement to devise a consistent system of national economic accounts that could be used to help measure the level of travel and tourism activity within the existing, widely-used national income product accounting framework. Further, this system of accounts was to be consistent with the definitions, framework, and estimating methods (to the extent practical) that were developed and used by the World Tourism Organization (WTO) and the Organization for Economic Cooperation and Development (OECD).

From this charge and using the approach and estimating methods of those organizations already in place, the system of U.S. Travel and Tourism Accounts were devised and estimated. Known as the TTSA's, the U.S. in 1998 joined Canada and Norway with a formal system of national economic accounts to measure activity in the travel and tourism industry. The accounts are designed to estimate and analyze travel and tourism "expenditures in a systematic and consistent way that links tourism demand expenditures to the industries that produce tourism goods and services."¹³ Further, this system of accounts is consistent with the framework and general estimating methods of both the WTO and OECD.

The TTSA system of accounts is consistent with several other satellite accounts efforts by the U.S. Department of Commerce that were devised previously for sectors such as transportation services, environment and mineral resources, and research and development. The TTSA accounts

¹³ See "U.S. Travel and Tourism Satellite Accounts for 1992," Survey of Current Business (July 1998), pp. 8-22, and "U.S. Travel and Tourism Satellite Accounts for 1996 and 1997," Survey of Current Business (July 2000), pp. 8-24.

are particularly useful to the travel and tourism industry because much of its activity involves only parts of the several sectors of the overall economy that the industry cuts across. The U.S. TTSA's use a definition of the visitor and visitor activity that closely mirrors the terms and definitions used in this study. These, in turn, are consistent with the definitions and terms used in the WTO and OECD satellite accounts systems as well (See Appendix II, "Discussion of Common Terms and Definitions" above for the definition of the terms employed in this study).

The TTSA's are based on the nation's system of economic accounts, including the national input-output accounts that measure input requirements, output, income, and other economic relationships between the various U.S. industry sectors. These accounts include the expenditures of visitors as both those of individual consumers or by businesses in the production of services to consumers. The later category is accounted for in these accounts as intermediate purchases. The purchases of government employees are accounted for as government final purchases. International visitor spending in the TTSA's is determined by an in-flight survey conducted by the International Trade Administration and is reported net of U.S. visitor spending abroad.

Under the TTSA's, the procedures used to develop visitors' share of consumption and output depended on the source of the demand: (1) consumer, (2) business, and/or (3) government. For consumer demand, the TTSA's divide expenditures into pure-tourism commodities spending (such as hotels and air travel) and mixed-demand spending (such as restaurant meals—which include a combination visitor spending and the spending of the "local population"). The TTSA's apportion visitor versus local population shares of total spending using data from the Bureau of Labor Statistic's Consumer Expenditure Survey (CES). The CES is a quarterly survey of roughly 5,000 households that includes data on tourism—including out-of-town trips—for selected commodities. The TTSA's also recognize that the CES has experienced measurement problems from time to time, including measurement errors due to small sample size, the length and complexity of the survey, high non-response rates and recall error. These problems have been well documented over time in the economic literature.¹⁴

The CES is a general purpose, household survey of spending, and is not a survey designed to specifically address travel and tourism spending. Some of the limitations of the CES for measuring visitor expenditures include: the travel-related questions come at the end of a long survey, the

¹⁴ E. Raphael Branch, *The Consumer Expenditure Survey: A Comparative Analysis*, Monthly Labor Review (December 1994), pp. 47-55.

questions ask one member of the household to respond and provide spending estimates for all such individuals in the entire household, and the sample size of households responding to those questions tend to be smaller than the sample size of responding households for other questions. Others have pointed out that specific surveys of travel expenditures have tended to yield higher estimates of travel expenditures than the CES.

Because of the issues associated with using the CES to measure visitor spending, the TTSA's employ three methods to develop a range of estimates for consumer spending in mixed-demand commodities sectors. The three methods reflect a range of relative assessments and include various off-setting adjustments (including data from other tourism spending research) to compensate for those perceived under-estimation errors—including data from the Travel Industry Association and D.K. Shiflet and Associates which are two well-known travel industry trade information sources. For business and government demand, I-O table data were employed to estimate spending for pure-tourism commodities. This is the same approach used in the consumer segment. For mixed-demand commodities, various data sources were employed ranging from travel industry trade sources and ratios from the CES as applied to business spending for similar items such as taxi cab fares. National industry output in the TTSA's in 1996 was estimated using the national input-output accounts. Estimates for 1997 were completed through the process of applying annual rates of change to the 1996 output estimates through various sources depending on the sector, including: Services Annual Survey, Annual Retail Trade Survey, Annual Survey of Manufactures, and industry sources that report revenues for selected transportation sectors.¹⁵

Estimates of travel and tourism employment in the TTSA's were developed using estimates of average monthly employment by industry from the U.S. Bureau of Labor Statistics (BLS) and job estimates made by the Bureau of Economic Analysis.¹⁶ Since the BEA job concept includes both wage-salary jobs and proprietors, the TTSA's apply industry ratios from the more detailed BLS job counts to the broader BEA concept so that proprietors are included in the total job count for the industry. National travel and tourism employment were then estimated by applying the appropriate tourism industry ratio as determined by the industry apportionment methods summarized above and described in detail in U.S. Travel and

¹⁵ See U.S. travel and Tourism Satellite Accounts for 1996 and 1997, Table 7, page 13 for a listing of those sources by sector.

¹⁶ The Bureau of Economic Analysis defines employment as the total of full-time and part-time payroll jobs plus proprietors. The BEA excludes volunteers and other unpaid workers from their job count.

Tourism Satellite Accounts in 1992 (July 1998 Survey of Current Business, pp. 8-22) and U.S. Travel and Tourism Satellite Accounts in 1996 and 1997 (July 2000 Survey of Current Business, pp. 8-24).

Vermont Travel and Tourism Industry Output Estimates

With the above discussion as a backdrop, estimates of industry output and direct employment were developed utilizing a blend of approaches. For three sectors—including the Hotels-Motels, Gasoline, and Eating and Drinking Places sectors—the estimating methods described in the previous three sections of this appendix describe in great detail how output was estimated. For the other three travel and tourism sector categories which were mixed-commodity sectors in the typology of the U.S. TTSA—Recreation & Entertainment, Transportation, and Retail and Retail Related sectors—estimates were developed utilizing the U.S. estimates and ratios as a starting point. Factoring adjustments were then made for known differences in industry structure-activity levels and for relative differences in industry concentration.

Overview of Factoring Adjustments

With the above as context, this analysis next moves on to begin to develop an estimate of total output and direct employment by sector for calendar 2003—building on the output estimates already developed, completing the factoring adjustments to Vermont output estimates using U.S. average ratios, and developing direct employment estimates building off those output estimates with adjustments for differences in industry structure, concentration and compensation levels. The factoring process for output estimates begins with an assessment of differences in industry structure-activity levels and staffing-earnings levels. The factoring process concludes with adjustments to U.S. TTSA ratios based on reconciliation estimates of visitor versus local population (in this case, the state’s population) demand-expenditures by sector.

The first factoring adjustments were made in the Recreation and Entertainment sector (see table 4D-1). Using the 1997 Census of Arts, Entertainment, and Recreation, the first adjustment involved making adjustments for the differing level of receipts per person (they were higher per person in Vermont) and adjusting those receipts for the differing income distribution in Vermont (where income is generally lower per person). In each case, the higher per person receipts levels (known as per capita) for the U.S. relative to Vermont were attributed to visitors (see adjustments A and B on the Table). This difference was then multiplied by the number of Vermont residents to complete the estimate of total receipts attributed to the U.S. Vermont differences.

Table 4D-1: Recreation-Entertainment Output Reconciliation

U.S. Receipts Per Capita (1997\$)	\$312.08
Vermont Receipts Per Capita (1997\$)	\$379.98
Reconciliation (1997\$):	
Diff. U.S. to Vermont	\$40.5 [A]
Income Adjustment Amt. (@100%)	\$20.9 [B]
Add-Back for Excluded Items	\$11.6 [C]
Vermont Visitor Spending In Vermont	\$66.8 [D]
Total Arts, Ent., Rec Demand	<u>\$139.8</u>
[A]	
Per Capita Diff.	<u>\$67.9</u>
	<u>\$40.5</u>
[B]	
Income Adjusted	\$247.8
Total Sales	<u>\$226.9</u>
	<u>\$20.9</u>
[C]	
Rec. Portion of NAICS #721,#722,#487,#51	\$29.64
T2 Portion @TTSA Average US	39.07%
	<u>\$11.6</u>
[D]	
VT T2 @USTTSA Ave. [Spent Everywhere]	\$88.7
Spent Out-of-State State	<u>\$21.9</u>
	<u>\$66.8</u>
Adjusted to 2003\$	<u>\$154.7</u>

Source: 1997 Census of Arts, Entertainment, and Recreation

The second set of adjustments involved apportioning the remaining portion of receipts that was not attributable to the per capita differences above that were attributable to visitors (versus spending by the population in Vermont and out-of-state). Adjustments C and D accomplished these adjustments by apportioning recreation receipts for NAICS sectors 721, 722, 487, and 51 using the TTSA portion of those categories and by allocating the remainder using the CES to apportion Vermont household tourism spending in state versus out of state, and adding those amounts to the total. These results in 1997 dollars were then brought forward to estimates of 2003 dollars using the Chain-Weighted Price Index for Gross Domestic Product (see Table 4D-2).

Table 4D-2: Annual NIPA Chain-Weighted GDP Deflator

Calendar Year	Index
	1996=100
1995	98.13
1996	99.98
1997	101.99
1998	103.25
1999	104.73
2000	106.94
2001	109.46
2002	110.75
2003	112.83

1.106258 Adjustment Factor

Notes:

NIPA means National Income Product Accounts

GDP means Gross Domestic Product

Source: U.S. Department of Commerce

For the Retail Trade and Related sector, the same general approach was followed (see Table 4D-3). The first two adjustments were made to account for the higher level of retail receipts per capita using reported by businesses in the 1997 Census of Retail Trade. The difference in receipts per capita—including the second adjustment for Vermont’s relatively lower income distribution—were assigned to the visitor category (see adjustments A and B) after multiplying those per person differences by Vermont’s estimated 1997 population. The third adjustment (see step C), was made to adjust durables categories out of the retail receipts to assure that the retail receipts concepts mirrored the non-durables only composition of the U.S. TTSA’s. This estimate was then subtracted for the total retail receipts estimate developed under steps 1 and 2.

The final adjustment in this area involved adding in the resident Vermonter estimate of visitor retail activity (see step D). For this adjustment, we used some of the data developed by the Portland Research Group estimate on in state visitor purchases—consistent with this study’s definition of the Vermont visitor. From these data, it was estimated that a total of \$10.4 in Vermont visitor non-durable retail spending was included in the total receipts of retail businesses. This estimate was then put in 1997 dollars for consistency using the Chain-Weighted Price Index for Gross Domestic Product. The sum of the calendar year 1997 receipts data was then brought forward to calendar 2003 using the procedure followed in the Recreation and Entertainment sector.

Table 4D-3: Retail Output Reconciliation

U.S. Retail Sales Per Capita (1997\$)	\$9,190	
Vermont Retail Sales Per Capita (1997\$)	\$10,020	\$830.00

Reconciliation (1997\$):

Diff. US to VT	\$495.7 [A]	
Income Adjustment Amt. (@35%)	\$222.8 [B]	
Less Durables Adjustment	\$255.1 [C]	
VT Visitor Spending In VT	\$10.4 [D]	
Total Retail Demand	<u>\$473.8</u>	

Assumes Durables/Nondurables evenly distributed

[A]

Per Capita Diff.	\$830.0	
597,239	<u>\$495.7</u>	

[B]

Income-Adjusted	\$6,535.2	
Total Retail Sales	<u>\$5,898.6</u>	
	<u>\$636.5</u>	

[C]

Durables/Non-Durables Adjustment:

Total Retail Sales (\$ Mil.)	\$6,018.3	
Mv Parts/Dealers	\$1,212.4	
Furn/Home Furnishings	\$102.0	
Electronics/appliances	\$110.7	
Bldg. Materials, etc.	\$583.8	
Sporting goods, etc.	\$127.7	\$2,136.6
	<u>\$3,881.7</u>	
Nondurables Percentage	<u>64.50%</u>	

[D]

Per Capita Shopping from EPR Survey on In-State Visitor Purchases

\$/Capita on Non-Durables in 2003	\$19.3	From F&F survey
\$/Capita on Non-Durables in 1997	\$17.5	
1997 Population Estimate	597,239	
In-State Retail Spending in 1997 (\$ Mil.)	\$10.4	

Adjusted to 2003\$\$524.2

Source: 1997 Census of Retail Trade

The remaining sector requiring adjustment was the Transportation sector. Several adjustments were made here to account for differences in industry structure (e.g. the fact that Vermont's scheduled air transportation sub-sector is small compared to the U.S. average). Embedded in the estimate of industry output in this sector is the assumption that the level of output per employee in Vermont is only about 50% of the level per employee on the U.S. level (based on differences in compensation levels per wage and

salary employee). Using that assumption and the actual number of wage and salary jobs in 1997 (provided by the Vermont Department of Employment and Training—this estimate of the number of jobs is not public because of federal disclosure rules) an estimate of industry output was developed for that sector. Estimates for the remaining categories in the transportation sector were completed using the U.S. TTSA percentages for all other sectors in the Transportation category and applying them to Vermont. The lone exceptions were the exclusion of all international air output (since access to Vermont by international visitors is indirect through domestic connecting flights) and the other air transportation category (which related to the parcel sub-sector), where output from activities by such companies as Federal Express, United Parcel Service and related companies were removed from this sector because they were assumed to be non-tourism output—exactly as it is done on the national level for the TTSA's.

Estimation Results

The results of the above factoring adjustments are presented in Table 4D-4 below. From the table, it is estimated that there was a total of \$1.492 million in industry output directly attributable to visitor activity in calendar 2003—ranging from a low end of the range estimate of \$1.419 million to a high end of the range estimate of \$1.492 million. As a percentage of total

Table 4D-4: Vermont Industry Output Serving Visitor Demand (Calendar Year 2003)

Commodity Category-Sector	Average	Vermont Tourism	Tourism Output
	U.S. Tourism Output Ratio (% of Total Output in Sector)	Output Ratio (% of Total Output in Sector)	"Best Estimate" (Millions of 2003\$)
Hotels & Lodging Places	100.0%	99.3%	\$358.7
Eating & Drinking Places	19.4%	31.4%	\$245.5
Transportation (i.e. public transit, ferries, vel arrangement of passenger transportation)	80.6%	63.0%	\$59.8
Recreation and Entertainment	36.8%	41.8%	\$151.1
Gasoline and Oil	6.6%	18.3%	\$102.4
Retail and Retail-Related	3.1%	9.0%	\$537.8
Total--All Categories			\$1,455.3
MEMO:		LOW ESTIMATE	HIGH ESTIMATE
LOW-HIGH Range (Millions of Dollars)		\$1,418.7	\$1,491.9

Prepared By: Economic & Policy Resources, Inc.

industry output, Vermont has a greater than U.S. industry travel and tourism percentage in the Eating and Drinking, Recreation and Entertainment, Gasoline and Oil, and Retail and Retail-related sectors. Vermont has roughly the same percentage concentration in the Hotels-Motels sector, and a significantly lower level of travel and tourism importance in the state's Transportation sector as a percentage of total output in calendar 2003.

The last step in this process was to develop an estimate of direct employment related to the estimates of direct visitor spending activity and these industry output estimates. Table 4D-5 presents those estimates by major travel and tourism industry sector. These estimates for Vermont were developed using a two step process that involved requesting and receiving job count and wage data from the Quarterly Census of Employment and Wages (the QCEW—formerly known as the ES-202 Covered Employment program) for the state's pure travel and tourism commodity and mixed travel and tourism commodity sectors and applying the U.S. job ratios (using a weighted average of the 1992 and 1997 U.S. TTSA's and applying them to the calendar year 2003 TTSA-based, but fully factored Vermont output estimates for 1997. Because the QCEW does not include proprietors and proprietors have been determined to be an important part of the employment mix of the travel and tourism industry, a 2003 estimate of proprietors was developed for the industry on a sector by sector share basis—assuming that the total number of non-farm proprietors involved in the travel and tourism sector was proportional to the economy-wide percentage of wage and salary jobs involved in the industry.

From the Table, it was estimated that a total of 27,740 direct jobs in calendar year 2003 were directly attributable to visitor spending, ranging from a low end of the range estimate of 26,134 direct jobs to a high end of the range estimate of 29,747 direct jobs. An estimate 15,808 (which includes a portion of resort employment) is estimated to be in Hotels-Motels and the Eating and Drinking sectors, corresponding to 79.0% of the industry's direct employment total. Another 8.3% of the total (or 1,669 jobs) was found in the retail and Retail-Related sector, and a total of 1,315 jobs—corresponding to 6.6% of the total—was found in the Recreation-Entertainment sector. In total, an estimated 7,721 proprietors are employed in the industry, a number corresponding to 27.8% of the industry's direct employment total.

Table 4D-6 sets forth comparative data on the percentage of direct industry jobs by sector in comparison to the U.S. TTSA percentage of the total estimates. Like the output estimates presented above, Vermont has a greater than U.S. industry travel and tourism direct employment

concentration percentage in the Eating and Drinking, Recreation and Entertainment, Gasoline and Oil, and Retail and Retail-related sectors. Vermont has roughly the same percentage employment concentration according to these estimates in the Hotels-Motels sector, and a significantly lower level of travel and tourism importance in the state's Transportation sector as a percentage of total output in calendar 2003.

Table 4D-5: Estimate of Vermont Industry Employment Serving Visitor Demand (in Calendar Year 2003)

Commodity Category-Sector [A]	NAICS Code	Total Industry Employment [B]	Direct VT Tourism Employment "Best Estimate" [C] #
Hotels & Lodging Places/Property Managers	721/531311	---	---
Eating & Drinking Places	722	---	---
Group Total		---	15,808
Transportation			
Passenger Rail	4852		---
Passenger Bus & Other	4853		---
Taxicabs	4855		---
Domestic Passenger Air Fares	532111		---
International Air Fares	812930		---
Passenger Water	483212		---
Auto & Truck Rental	481111		---
Other Vehicle Rental	4881		---
Arrangement of Passenger Transportation	5615		---
Group Total		1,506	324
Recreation and Entertainment			
Recreation & Entertainment	711		---
Participant Sports	712		---
Movie, Theater & Musical Events	713		---
Sports Events	487		---
Group Total		---	1,315
Gasoline & Oil	447	3,769	902
Retail and Related			
	445		---
	448		---
Personal Consumption Expenditure Non-Durable Commodities (not gas & oil)	451		---
Parking, Auto Repair & Highway Tolls	452		---
Group Total		20,660	1,669
Total--All Categories of "Covered Employment" [E]		<u>59,253</u>	<u>20,019</u>
Memo:			
Total "Covered" Employment (2003)-Private Industries			244,531
Direct Employment-Percentage of Total (2003)			8.2%
ADD:			
Estimate of Proprietors [Not included in "Covered Employment"]			7,721
Total Direct Tourism Employment			<u>27,740</u>
MEMO:			
LOW-HIGH Range Employment Estimate		<u>LOW</u> <u>26,134</u>	<u>HIGH</u> <u>29,747</u>
Memo:			
Total Private Industries Employment (Estimate for Calendar Year 2003)			363,351
"Best Estimate" Tourism Direct Employment-Percentage of Total (2003)			7.6%
Reference:			
U.S. Direct Tourism Employment-Percentage of the Total (1997)			3.5%
Notes:			
[A] Based on Standard Industrial Classification (SIC) system.			
[B] From the Vermont Department of Employment & Training ES 202 "Covered Employment" data.			
[C] Based on the average of Methods 1-3 of the U.S. TTTAs (see Survey of Current Business, July 2000, page 14).			
[D] TTSA means Travel and Tourism Satellite Accounts.			
[E] ES 202 job portion (excluding "Proprietors").			
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Table 4D-6: Percentage Ratios of Total Industry Jobs in Travel-Tourism -- U.S. TTSA (1997) & Vermont (2003) [A]

Commodity Category-Sector [B]	NAICS Code	Average U.S.	Average Vermont
		TTSA Ratio [D] (% Total Jobs in Sector)	TT Ratio [C] (% Total Jobs in Sector)
Hotels & Lodging Places/Property Managers	721/531311	80.83%	90.92%
Eating & Drinking Places	722	18.20%	30.60%
Group Total			
Group A: Transportation			
Passenger Rail	4852		
Passenger Bus & Other	4853		
Taxicabs	4855		
Domestic Passenger Air Fares	532111		
International Air Fares	812930		
Passenger Water	483212		
Auto & Truck Rental	481111		
Other Vehicle Rental	4881		
Arrangement of Passenger Transportation	5615		
Group Total		43.89%	21.49%
Group B: Recreation and Entertainment			
Recreation & Entertainment	711		
Participant Sports	712		
Movie, Theater & Musical Events	713		
Sports Events	487		
Group Total		23.46%	34.98%
Gasoline & Oil	447	8.33%	23.93%
Group C: Retail and Related			
	445		
	448		
Personal Consumption Expenditure Non-Durable Commodities (not gas & oil)	451		
Parking, Auto Repair & Highway Tolls	452		
Group Total	453	2.82%	8.08%

Notes:

[A] TTSA means Travel and Tourism Satellite Accounts.

[B] Based on Standard Industrial Classification (SIC) system.

[C] Estimated Vermont ratios per average of Methods 1-3 of the U.S. TTSA's (Survey of Current Business, July 2000, page 14).

[D] Based on the average of Methods 1-3 of the U.S. TTTAs (see Survey of Current Business, July 2000, page 14).

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E. Overview of Approach: Visitor Count Methodology

An Evaluation of Sources for Developing a Domestic Visitors Count For Vermont
 Vermont Department of Tourism and Marketing
 December 1, 2004

Overview

An important part of any tourism study is the methodology used to derive visitor counts. In this study, the estimated number of visitors is an integral

part because it determines the magnitude of the spending impact on the aggregate level. An inaccurate visitor population estimate leads to an inaccurate estimate of visitor spending. This, in turn, ultimately leads to an inaccurate benchmark study. Therefore, because of the importance and sensitivity of this variable, a comprehensive comparison was conducted between the methodologies of the two recent significant sources of domestic visitor counts for Vermont: the University of Vermont (UVM) and the Travel Industry Association of America (TIA). This section details that comparison.

UVM Results

In the 1999 – 2000 impact study conducted by UVM, it was reported that 12.24 million person trips were taken to Vermont over the study period from April 1, 1999 to March 31, 2000. According to the UVM study, this total excludes U.S. visitors from Hawaii, Alaska, and all international visitors. The cornerstone of the calculation that created this aggregate level figure of 12.24 million person trips was “Total Lodging Sales in 1999”. On a conceptual level, the methodology was fundamentally solid. Starting with lodging sales, the first step in the UVM study was to factor out the percentage of total lodging sales attributable to international visitors. By removing the lodging expenditure activity by international travelers, the UVM study was left with an estimate of lodging activity resulting from the domestic visitor total. By taking total lodging sales for domestic travelers and dividing it by the average domestic tourist lodging expenditure per person per trip and then dividing that by the percent of travelers that used paid lodging accommodations in the subject year, the UVM study arrives at an estimated total number of person trips (see Table 4E-1).

In addition to the issue of including Hawaiian and Alaskan travelers in the domestic total without a basis in the survey, there was a second issue relating to the UVM study’s overall estimate of \$703 million in Total Lodging Sales for the study’s subject year. This estimate grossly suffered from survey bias. It was derived from responses from lodging establishments and then inflated based on the assumption that the sample represented the population thereby magnifying the problem. Due to disclosure issues, it is unclear if the lodging responses themselves were overstated or if the sample establishments were not representative of the actual lodging establishment population. Nonetheless, the UVM lodging estimate was 129% higher than the Vermont Department of Taxes reported taxable and exempt room rental receipts for the same year. Therefore, by starting with a number that was unable to be reconciled to any known benchmark of lodging receipts activity and was significantly higher than any known level of receipts activity in the lodging industry, the UVM study’s visitor count calculation was determined to be too high,

which instituted an upward bias into all of the study's inferences which followed the development of this visitor estimate.

Table 4E-1: Visitor Count Methodology ~ UVM 1999 - 2000

The Impact of the Tourism Sector on the Vermont Economy 1999 - 2000 - Appendix B

Description	Numbers	UVM Original Source
Total Lodging Sales 99 - including rooms/meals tax	703 mil	Lodging Business Survey
multiplied by		
% Domestic Origin Tourists	72 %	Lodging Business Survey
Domestic Tourist Lodging Expd	506.16 mil	
Domestic Tourist Lodging Expd.	506.16 mil	
divided by		
Ave Lodging Expd per person per trip	87.59	Visitor Follow-Up Survey - only those who used lodging businesses
divided by		
Ave Trips per Party	1.95	National Survey, 2000
divided by		
% Tourist Using Lodging Est.	47.2 %	National Survey, 2000
Number of Tourists	6.278511 mil	
Number of Tourists	6.278511 mil	
multiplied by		
Ave Trips per Party	1.95	National Survey, 2000
Number of Person Trips	12.2431 mil	

Note:
Domestic travelers only; Excluding Alaska & Hawaii

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In the later 2001 impact study performed by UVM, an entirely different approach was taken towards estimating the total visitor count. Working with the results of a survey, UVM estimated a total of 13.87 million person trips to Vermont. This total again excludes international travelers, residents of Hawaii and Alaska, but also residents of Vermont for that year. Therefore, even with the exclusion of Vermont in-state travelers, there was an increase in person trips. The main underlying assumption for this estimate of 13.87 million person trips is that the original panel surveyed and its respondents were representative of visitors to Vermont and all United States households. With the assumption that the panel was well constructed and representative of the entire United States, it is possible to accurately approximate total visitor counts. However, it should be noted that the sampled panel was not based on the entire United States. The panel was based on the U.S. less the states of Vermont, Hawaii, and Alaska. Therefore, by using the entire U.S. household number against a sample that did not include all states, an upward bias

was placed into the calculations. As a percentage, this error may seem small (about 0.9% on a static scale). However, as the numbers are used in subsequent analyses, the error becomes magnified.

In the case of the UVM 2001 impact study, household counts are first broken out by season where each estimate is multiplied by the frequency of trips per season. The season totals are summed to yield a yearly estimate of household trips. This figure is multiplied by number of household members in traveling party to equal a total number of person trips of 13.87 million (see Table 4E-2). Above and beyond the calculations behind the survey, one issue with the survey itself was present. Due to time constraints, the survey was sent out prior to the completion of the time period under analysis. Consequently, the first question needed to be worded so as to include the past as well as the up coming future: "For each month below, please indicate how many pleasure trips any member of your household made, or will make, to Vermont between December 1, 2000 and November 30, 2001." By asking about possible future activities certain biases may be introduced into the responses. Prospective information-responses are not the preferred method of data collection under survey circumstances.

Table 4E-2: Visitor Count Methodology ~ UVM 2001

The Impact of the Tourism Sector on the Vermont Economy 2001 - Appendix B

Description	Numbers				UVM Original Source
	Winter	Spring	Summer	Fall	
# Visiting HH by season multiplied by	863,856	645,290	1,373,843	1,415,474	2001 Geodemographic Report of VT Visitor
Ave # Trips by season	1.923	1.313	1.397	1.316	
Total # HH trips by season	1,661,407	847,453	1,919,398	1,862,919	National Survey Data, 2001
Total # HH trips by season summing 4 seasons	1,661,407	847,453	1,919,398	1,862,919	
Total # HH trips in year	6,291,177				National Survey Data, 2001
Total # HH trips in year multiplied by	6,291,177				
Ave # HH members traveling	2.204				National Survey Data, 2001
Total # Person Trips	13,865,754				
Total # Person Trips divided by	13,865,754				National Survey Data, 2001
Ave # People in Party	2.96				
# of Party Trips	4,684,376				
Total # Person Trips	13.865754 mil				

Note:

Domestic travelers only; Excluding Alaska, Hawaii, & Vermont.

Assumption: Sample data is representative of US population.

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TIA Results

Similar the UVM 2001 impact study, TIA uses a survey panel and survey responses to construct an estimate of visitors to Vermont. TIA maintains a panel of over 400,000 U.S. households (compared to 250,000 household panel employed by the UVM survey) designed “to match the U.S. census population on five variables: census region, market size, age of household head (female, if present), income and household size”¹⁷. According to the TIA study, a visitor is defined as a person traveling over 50 miles and or staying overnight. The survey is nationwide, and is sent out monthly asking respondents to recall only their last month’s travel activity (as opposed to the UVM survey asking for the last 10 months of travel activity and the up coming two months). A shorter time frame would minimize the potential for recall error by a respondent. After the survey responses are collected, the responses are again rebalanced to be representative of the population to minimize bias from either an un-represented or under-represented segment of the population. Therefore, under this criteria and methodology, TIA estimates 7.54 million person trips within Vermont of which 991,000 were Vermonters.

Summary

A reliable visitor count is an essential part of any tourist impact study. Based on the comparison between UVM and TIA visitor counts, this study concludes that the TIA calculation is a more appropriate estimate of the domestic visitor count to be used in this study. First, the TIA definition of a visitor is more consistent with this study’s definition of a visitor by including all U.S. visitors and a defined group of Vermont visitors. As a comprehensive source of U.S. travelers, the TIA data is accurate and consistent. It is based on transparent calculations, sound methodology, good survey design, and consistent definitions. The TIA visitor survey also has had the benefit of years of implementation as the TIA organization has been in existence since 1941 and conducting research using the same methodology since 1994.

F. Comparison of Visitor Spending Expenditures Estimates— Selected Surveys

Reconciliation With Previous Vermont Visitor Expenditure Studies
Vermont Department of Travel and Tourism
December 15, 2004

¹⁷ Quotation is from page 4 of the TravelScope Subscriber’s Manual, TIA July, 2003.

Overview

During the past several years a number of surveys have gathered and reported visitor expenditure information. As visitor spending is a key determinant of economic impact of the travel industry, we have examined several of the most relevant of these surveys to determine the usefulness of the spending data and to make comparisons between them. Generally, the survey results can be useful to this analysis: (1) when the survey population definition is consistent with the definition employed here (or a segment of the visitor population) or can be coded to meet that definition, (2) visitor spending has been reported by category comparable to those employed here or can be coded to comply, (3) the sampling methodology is available for review and interpretation, (4) the raw survey data can either be viewed for recoding and determination of outliers or detail methods taken to remove the outliers are available for review, and (5) a copy of the survey instrument is available for review.

Early in the analysis, the results from several recent studies were examined to determine the usefulness and comparability of the results and to develop an early range estimate of visitor spending in Vermont. The individual estimates used to formulate the range were calculated by examining these previous tourist studies' expenditure patterns. Distributions of spending were converted from a percentage into dollars by applying the initial estimate of total lodging revenues for the state of Vermont. This allowed us to better understand the results that were then pending survey results. These secondary sources were the UVM study and the Connecticut study. It was decided to not use the American Travel Survey results because that survey does not estimate expenditures or expenditure patterns. Likewise, we chose not to use the TIA survey results for expenditures as that survey does not breakdown expenditures into specific categories usable in the input/output modeling employed in the study and expenditures reported by TIA cover the entire trip of the respondent.

Rationale

Upon review of numerous tourist studies, it has been determined that each study is built on different definitions, assumptions and for different populations. Therefore most secondary sources will not directly coincide with our desired objective – understanding the expenditure patterns of Vermont visitors. Although underlying differences do exist, we believe that the common ground of tourism and expenditures may provide guidance towards understanding global issues regarding measurement and visitor spending in general. By excluding the actual dollar values and just using percent expenditures by category, we hope to create a range of possible results for future calculations. This range was employed as an initial basis of comparison.

Data

Each survey is different, which is why categories of expenditures vary across survey. The following tables detail expenditure dollars by category as derived from an individual secondary source. Not all categories of expenditures are represented in each source as the objective of the survey may have been quite different. The results are grouped as accurately as possible and explanations of variations will follow on a source by source basis.

UVM Results

By comparison, the UVM study has the closest objective to this study. Since both studies look to understand the effects of visitors on the Vermont economy, the UVM study of tourist expenditures held the best prospects to provide solid approximations. The expenditure patterns calculated by UVM were prompted by survey responses. Although we felt the survey responses provided inflated aggregate spending estimates, we feel that the underlying responses may be sufficient guides of expenditure patterns in tourist on a percentage level. Example: "I spent about \$100 on lodging and \$50 of food." People responding to surveys may not remember exact amounts spent but their estimates in relation to each other may hold true – in this case a 2 to 1 ratio.

Table 4F-1 displays details of the allocation across expenditure type as calculated through the UVM survey responses. The three largest categories for tourist spending are Retail Spending at 31.4% (which is the summation of

Table 4F-1: Expenditure Estimates of Vermont Tourist Using 2002 UVM Study

CATEGORY OF EXPENDITURE	UVM RESULTS % Of Expenditures	Using Tax Data for Lodging DOLLARS (in millions)	
Lodging	26.2%		\$358.7
Restaurants	19.5%		\$244.0
Retail Sales			
Shopping	18.6%	\$233.0	
Groceries	6.6%	\$83.1	
Gas	6.2%	\$77.3	\$393.4
Other Recreation	6.1%		\$75.9
Skiing	5.1%		\$63.7
Other Transportation	2.7%		\$34.1
Camping	2.4%		***
Movies & Theater	0.8%		\$9.9
Parks	0.5%		\$5.7
Other	5.4%		\$67.2
TOTAL TOURIST EXPENDITURES	100.0%		\$1,252.3

Note:

*** - Included in Lodging

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"shopping", "groceries", and "gas"), Lodging at 28.6% (Lodging and Camping combined) and Restaurants at just under 20%. The dollar values in column 2 are calculated by substituting the estimated total

lodging expenditure developed in this study as the percent lodging and proportionally solving the remainder of the categories. This method yields total expenditure spending by visitors of over \$1.2 billion. Because our primary issue with the UVM study was the magnitude of expenditure, this estimate of \$1.25 billion appears to be reasonable in comparison to the \$2.58 billion initially reported in their study.

Table 4F-2 provides a dollar estimate of the seven categories of expenditure plus an additional “Other” category from the original UVM survey. To convert the larger number of UVM categories into our seven, some grouping was performed. As stated, our “Lodging” is the summation of “Lodging” and “Camping” from Table 4F-1. “Food and Beverage” equals “Restaurants” plus “Retail Sales – Groceries”. “Amusement and Entertainment” is the sum of “Other Recreation”, “Skiing”, “Movies & Theaters”, and “Parks”. The two categories “Shopping” and “Gas & Oil” were taken one for one from the UVM studies: “Retail Sales – Shopping” and “Gas”. UVM’s category of “Other Transportation” was used as a proxy of “Local Transportation” in our survey. No information from this secondary source was useful in estimating “Other Auto”. The eighth category “Other” was taken forward as is because it could not be broken down accurately into its components.

Table 4F-2: Expenditure Categories Grouped for EPR Study - UVM Results

CATEGORY OF EXPENDITURE	DOLLARS (in millions)	% of Expenditures
Amusement & Entertainment	\$155.1	12.4%
Lodging	\$358.7	28.6%
Food & Beverage	\$327.1	26.1%
Shopping	\$233.0	18.6%
Gas & Oil	\$77.3	6.2%
Other Auto	n/a	n/a
Local Transportation	\$34.1	2.7%
Other	\$67.2	5.4%
TOTAL TOURIST EXPENDITURES	\$1,252.3	100.0%

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The second column in Table 4F-2 is a recalculation of the percent expenditures by category now more in line with our definitions of categories of spending. “Lodging” is the largest expenditure at 28.6% converting to \$358.7 million (the calculation employed in this study is based on state tax information). “Food and Beverage” represented 26.1% of expenditures and “Shopping” was the third largest at 18.6%. These percentage estimates as well as the absolute dollar amount were felt to be reasonable points of reference for our pending survey results—a gross variation would need to be explained.

The Connecticut Survey

Visitors travel to Connecticut for much different reasons than they do to Vermont and therefore it would be irrational to assume that Connecticut visitors are the same as Vermont visitors. An explicit example is that Vermont does not offer gaming opportunities that are a prime visitor attraction in Connecticut. However, on a broader sense a visitor is still a traveler and expenditures can only be limited to so many categories. Our breakdown and definition of expenditures is consistent with the Connecticut Survey (which will be referenced as the CCEA survey from this point forward). Because of these similarities, the expenditure patterns from the CCEA survey are worth investigating and converting to match the focus of the Vermont study. Table 4F-3 details the distribution by expenditure category as a percentage of the total. From the CCEA survey, “Lodging” and “Marina Sales” are combined to be “Lodging”. From this percentage and with the use of our calculation of total lodging revenue, an estimate of total expenditures and breakdown by category can be calculated.

Table 4F-3: Expenditure Estimates of Vermont Tourist Using 2001 Connecticut Study

CATEGORY OF EXPENDITURE	CCEA RESULTS % Of Expenditures	Using Tax Data for Lodging DOLLARS (in millions)
Lodging	11.0%	\$344.2
Meals	17.0%	\$418.0
Recreation	19.0%	\$467.1
Shopping	18.0%	\$442.6
Fuel	6.0%	\$147.5
Other Auto	3.0%	\$73.8
Local Transportation	2.0%	\$49.2
Wagers	21.0%	\$516.3
Marina Sales	3.0%	***
TOTAL TOURIST EXPENDITURES	100.0%	\$2,458.6

Note:

*** - Included in Lodging

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Each category from the CCEA survey is directly equivalent to a category in the Vermont study with the exception of two—“Marina Sales” is combined into “Lodging” because our working definition of “Lodging” equates marina and bay type establishments as campgrounds. The second category that needs to be discussed is “Wagers.” As a tourist attraction, Connecticut’s gambling establishments are very popular and unique to their area. Table 4F-4 includes “Wagers” in “Amusement and Recreation”, while Table 4F-5 removes expenditures on wagers from our estimate of Vermont tourism expenditures. Table 4F-5 is a more accurate estimate of tourist spending in Vermont because gamblers and gambling money would not be coming into Vermont. In the CCEA study, “Wagers” represented 21% of tourist expenditures. By removing “Wagers”, we more accurately portray a Vermont tourist and bring estimates more in line.

Table 4F-4: Expenditure Categories Grouped for EPR Study - CCEA Results With Wagers

CATEGORY OF EXPENDITURE	DOLLARS (in millions)	% of Expenditures
Amusement & Entertainment	\$983.5	40.0%
Lodging	\$344.2	14.0%
Food & Beverage	\$418.0	17.0%
Shopping	\$442.6	18.0%
Gas & Oil	\$147.5	6.0%
Other Auto	\$73.8	3.0%
Local Transportation	\$49.2	2.0%
TOTAL TOURIST EXPENDITURES	\$2,458.6	100.0%

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As seen in Table 4F-5, the distribution for expenditures is well balanced between Amusement and Recreation, Shopping, Food and Beverage, and Lodging (listed in descending order of magnitude). These four categories make up over 86% of tourist expenditures with the remaining three categories (Gas & Oil, Other Auto, and Local Transportation) making up the balance. Again, these are just estimates of possible outcomes and can be used only as a point of reference for comparison. Using the expenditure patterns of a Connecticut tourist (adjusted to not include gambling) and lodging revenue for Vermont produce a total expenditure estimate of \$1.9 billion.

Table 4F-5: Expenditure Categories Grouped for EPR Study - CCEA Results Without Wagers

CATEGORY OF EXPENDITURE	DOLLARS (in millions)	% of Expenditures
Amusement & Entertainment	\$467.1	24.1%
Lodging	\$344.2	17.7%
Food & Beverage	\$418.0	21.5%
Shopping	\$442.6	22.8%
Gas & Oil	\$147.5	7.6%
Other Auto	\$73.8	3.8%
Local Transportation	\$49.2	2.5%
TOTAL TOURIST EXPENDITURES	\$1,942.3	100.0%

Prepared By: Economic & Policy Resources, Inc.

The combination of the low estimate of approximately \$1.3 billion generated from the total expenditure patterns from the 2002 UVM study and the high estimate of \$1.9 billion generated from the total expenditure patterns from the CCEA study (excluding wagers) provide a range estimate from which to gauge initial results.

Comparison of Best Estimate with Prior UVM Studies

This initial estimate was significantly less than previous studies despite the fact that the previous work included visitor spending estimates for only a portion of the total visiting population to Vermont. Some possible explanations for these differences include: (1) the changing nature of

previous estimates, and (2) the negative impact of the September 2001 terrorist attacks—among others. Of particular interest in this regard was the year-to-year change in the definition of visitors. As reported in the UVM 2000 survey report, the 2000 tourism year saw a slight decline in the visiting population and a modest increase in the aggregate dollars spent by tourists for all U.S. visitors (see Table 4F-6 listed below). Moving forward to 2001, a subsequent study by UVM found a significant increase in both visitor count and total visitor expenditures in relationship to 2000—even though the study that year excluded Vermont visitors by definition. Stated another way, even though the UVM study of calendar year 2001 excluded Vermont visitors, travel activity still increased during the year 2001 despite the negative impact of the September 2001 terrorist attacks. Those results appeared to be counter-intuitive.¹⁸

While the explanation for the differences between the results of this and previous expenditure studies cannot be pinpointed to one reason, variations in working definitions of what constitutes a visitor, un-reconciled visitor counts and visitor estimates of spending per trip, and inconsistent methodologies between studies all or in part appear to account for the majority of the differences in results. The initial estimate developed in this latest study was constructed independently and reconciled back to independent and outside data sources.

Table 4F-6: Summary of Vermont Tourism Studies

Study	UVM	UVM	UVM	EPR
Study Year:	1999	2000	2001	2003
Origin of Visitors included:				
Vermonters	x	x		x
Domestic	x	x	x	x
Canadian				x
International				x
Number of Person Trips (in millions)	13.0	12.3	13.9	12.8
Total Visitor Expenditures (in billions)	2.50	2.58	2.84	1.46
Prepared By: Economic & Policy Resources, Inc.				

¹⁸ According to EPR estimates, Vermonters contributed 14.7% of total visitor expenditures in 2003.

Appendix V: Travel Studies and Surveys Performed by the University of Vermont

STUDIES:

Baker, William E. "Geo-Demographic Analysis of the Vermont Visitor 2000." University of Vermont: School of Business Administration. (2000).

Baker, William E. "A Further Examination of the Vermont Visitor: The 1999 Phase Three National Reports – Report #2 Products Purchased in Vermont." University of Vermont. (2000).

Baker, William E. "A Further Examination of the Vermont Visitor: The 1999 Phase Three National Reports – Report #3 Cultural and Historic Activities Pursued in Vermont." University of Vermont. (2000).

Baker, William E. "1999 Geo-Demographic Analysis of the Vermont Visitor." University of Vermont: School of Business Administration. (1999).

Brown, Logan H. "Profile of the Annual Fall Foliage Tourist in Vermont: Travel Year 2001." University of Vermont: Vermont Tourism Data Center. (2002).

Brown, Logan H. "The International Overnight Tourist in Vermont." University of Vermont: Vermont Tourism Data Center. (2002).

"The Economic Impact of Tourism in Vermont: Fall 2001." University of Vermont: Department of Community Development & Applied Economics and the Vermont Tourism Data Center. (2002).

"The Economic Impact of Tourism in Vermont: Spring/Summer 2001." University of Vermont: Department of Community Development & Applied Economics and the Vermont Tourism Data Center. (2002).

"The Economic Impact of Tourism in Vermont: Winter 2001." University of Vermont: Department of Community Development & Applied Economics and the Vermont Tourism Data Center. (2002).

“Employment and Wages in Vermont’s Lodging Industry in 1999: Executive Summary.” University of Vermont. (2001).

Gilbert, Alphonse H. and Robert E. Manning. “Economic and Social Values of Vermont State Parks.” University of Vermont: School of Natural Resources. (2002).

“The Impact of the Tourism Sector on the Vermont Economy: The Input-Output Model.” University of Vermont: Department of Community Development & Applied Economics. (1999).

Noordewier, Tom. “2002 Geo-Demographic Analysis of the Vermont Visitor.” University of Vermont: Vermont Tourism Data Center. (2003).

Noordewier, Tom. “2001 Geo-Demographic Analysis of the Vermont Visitor.” University of Vermont: Vermont Tourism Data Center. (2003).

Wood, Nancy E. and Kathleen Liang. “The Impact of Tourism on the Retail Economy in Vermont.” University of Vermont: Department of Community Development & Applied Economics. (2002).

Wood, Nancy E. and Kathleen Liang. “The Impact of the Tourism Sector on the Vermont Economy 1999-2000.” University of Vermont: Department of Community Development & Applied Economics. (2001).

SURVEYS:

Baker, William E. “2000 National Survey of the Vermont Visitor.” University of Vermont: Vermont Tourism Data Center. (2001).

Baker, William E. “A National Survey of the Vermont Visitor: Outdoor Recreation Supplement.” University of Vermont: Vermont Tourism Data Center. (2001).

Baker, William E. “A National Survey of the Vermont Visitor: Alpine Ski Edition.” University of Vermont: School of Business Administration. (2000).

Baker, William E. “1999 National Survey of the Vermont Visitor.” University of Vermont: Vermont Tourism Data Center. (2000).

Baker, William E. "1998 National Survey of the Vermont Visitor." University of Vermont: Vermont Tourism Data Center. (1999).

Martin, Bonnie S. and William A. Valliere. "2000 National Survey of the Vermont Visitor: The Cultural Heritage Visitor." Western Carolina University: Hospitality and Tourism Program and University of Vermont: Vermont Tourism Data Center. (2002).

Noordewier, Tom. "2002 National Survey of the Vermont Visitor." University of Vermont: Vermont Tourism Data Center. (2003).

Noordewier, Tom. "2001 National Survey of the Vermont Visitor." University of Vermont: Vermont Tourism Data Center. (2002).

Noordewier, Tom. "2001 National Survey of the Vermont Visitor: An Examination of the Visiting Friends and Relatives Traveler." University of Vermont: Vermont Tourism Data Center. (2002).

Appendix VI: The REMI Input/Output Model

REMI Model

The REMI model is a structural model, meaning that it clearly includes cause-and-effect relationships. The model shares two key underlying assumptions with mainstream economic theory: *households maximize utility* and *producers maximize profits*.

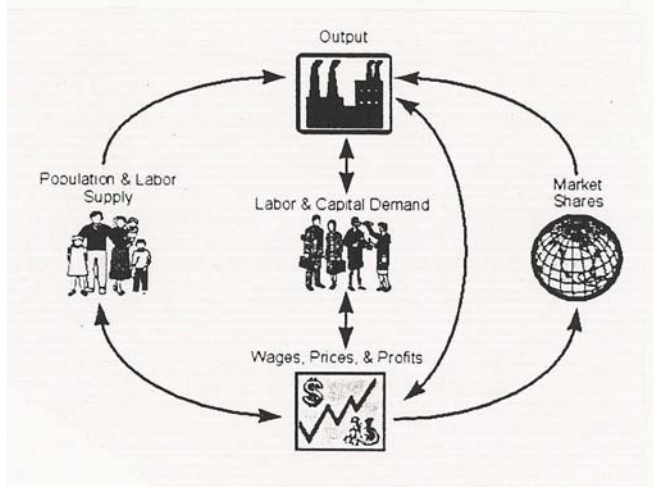
In the model, businesses produce goods to sell to other firms, consumers, investors, governments and purchasers outside the region. The output is produced using labor, capital, fuel and intermediate inputs. The demand for labor, capital and fuel per unit output depends on their relative costs, since an increase in the price of any one of these inputs leads to substitution away from that input to other inputs. The supply of labor in the model depends on the number of people in the population and the proportion of those people who participate in the labor force. Economic migration affects the population size. People will move into an area if the real after-tax wage rates or the likelihood of being employed increases in a region.

Supply and demand for labor in the model determine the wage rates. These wage rates, along with other prices and productivity, determine the cost of doing business for every industry in the model. An increase in the cost of doing business causes either an increase in price or a cut in profits, depending on the market supplied by local firms. This market share combined with the demand described above determines the amount of local output. Of course, the model has many other feedbacks. For example, changes in wages and employment impact income and consumption, while economic expansion changes investment and population growth impacts government spending.

Model Overview

Figure 1 is a pictorial representation of the model. The Output block shows a factory that sells to all the sectors of final demand as well as to other industries. The Labor and Capital Demand block shows how labor and capital requirements depend on both output and their relative costs. Population and Labor Supply are shown as contributing to demand and to wage determination in the product and labor market. The feedback from this market shows that economic migrants respond to labor market conditions. Demand and supply interact in the Wage, Price and Profit block. Once prices and profits are established, they determine market shares, which along with components of demand, determine output.

Figure 1



The REMI model brings together all of the above elements to determine the value of each of the variables in the model for each year in the baseline forecasts. The model includes all the inter-industry relationships that are in an input-output model in the Output block, but goes well beyond the input-output model by including the relationships in all of the other blocks shown in Figure 1.

In order to broaden the model in this way, it was necessary to estimate key relationships. This was accomplished by using extensive data sets covering all areas of the country. These large data sets and two decades of research effort have enabled REMI to simultaneously maintain a theoretically sound model structure and build a model based on all the relevant data available.

The model has strong dynamic properties, which means that it forecasts not only what will happen, but when it will happen. This results in long-term predictions that have general equilibrium properties. This means that the long-term properties of general equilibrium models are preserved without sacrificing the accuracy of event timing predictions and without simply taking elasticity estimates from secondary sources.

Understanding the Model

In order to understand how the model works, it is critical to know how the key variables in the model interact with one another and how policy changes are introduced into the model. To introduce a policy change, begin by formulating a policy question. Next, select a baseline forecast that uses the baseline assumptions about the external policy variables and then generate an alternative forecast using an external variable set that includes changes in the external values, which are effected by the policy issue.

Figure 2

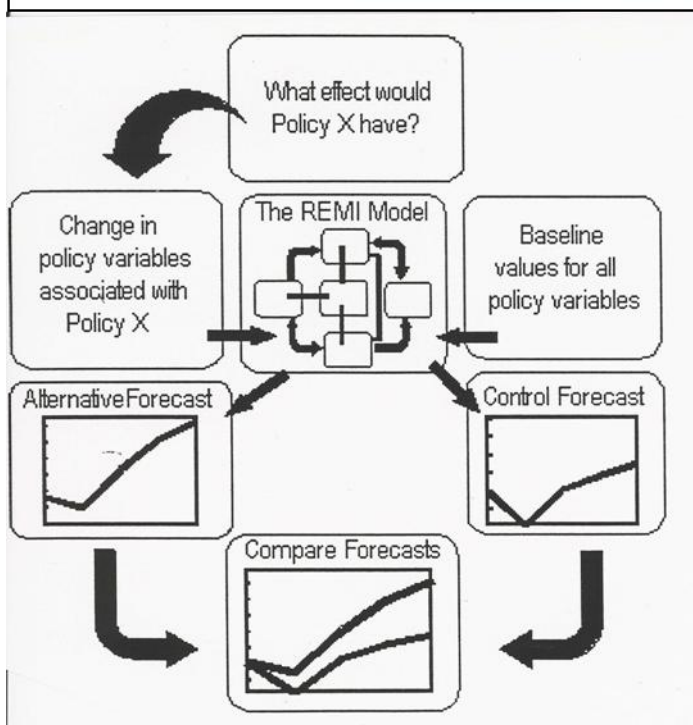


Figure 2 shows how this process would work for a policy change called Policy X.

In order to understand the major elements in the model and their interactions, subsequent sections examine the various blocks and their important variable types, along with their relationships to each other and to other variables in the other blocks. The only variables discussed are those that interact with each other in the model. Variables determined outside of the model include:

- Variables determined in the U.S. and world economy (e.g., demand for computers).
- Variables that may change and affect the local area, but over which the local area has no control (e.g., an increase in international migration).
- Variables that are under control of local policy (e.g., local tax rates).

For simplicity, the last two categories are called policy variables. Changes in these variables are automatically entered directly into the appropriate place in the model structure. Therefore, the diagram showing the model structure also serves as a guide to the organization of the policy variables (see Figure 3).

Output Block

The Output Block variables are:

- State and Local Government Spending
- Investment
- Exports
- Consumption
- Real Disposable Income

These variables interact with each other to determine output and also depend on variable values determined in other blocks as follows:

Variable in Output Block	Variables Outside of the Output Block that are Included in its Determinants
State and Local Government Spending	Population
Investment	Optimal Capital Stock (also the actual capital stock)
Output	Share of Local Market (The proportion of local demand supplied locally, called the Regional Purchase Coefficient)
Exports	The Regional Share of Interregional and International Trade
Real Disposable Income	Employment, Wage Rates and the Consumer Expenditure Price Index

Labor and Capital Demand Block

The Labor and Capital Demand block has only three types of key variables:

- Employment - determined by the labor/output ratio and the output in each industry, determined in the Output block.
- Optimal Capital Stock - depends on relative labor, capital and fuel costs and the amount of employment.
- Labor/Output Ratio - depends on relative labor, capital and fuel costs.

Simply put, if the cost of labor increases relative to the cost of capital, the labor per unit of output falls and the capital per unit of labor increases.

Population and Labor Supply Block

The model predicts population for 600 cohorts segmented by age, ethnicity and gender. This block also calculates the demographic processes - births, deaths and aging. The models deal with different population sectors as follows:

- Retired Migrants are based on past patterns for each age cohort 65 and over.
- International migrants follow past regional distributions by country of origin.
- Military and college populations are treated as special populations that do not follow normal demographic processes.
- Economic migrants are those who are sensitive to changes in quality of life and relative economic conditions in the regional economies. The economic variables that change economic migration are employment opportunity and real after-tax wage rates.

This block allows determination of the size of the labor force by predicting the labor force participation rates for age, ethnicity and gender cohorts, which are then applied to their respective cohorts and summed. The key variables that change participation rates within the model are the ratio of employment to the relevant population (labor market tightness) and the real after-tax wage rates.

Wage, Price and Profit Block

Variables contained within the Wage, Price and Profit block are:

- Employment Opportunity
- Wage Rate
- Production Costs
- Housing Price
- Consumer Price Deflator
- Real Wage Rate
- Industry Sales Price
- Profitability

The wage rate is determined by employment opportunity and changes in employment demand by occupation for occupations that require lengthy training. The housing price increases when population density increases. The Consumer Expenditure Price Index is based on relative commodity prices, weighted by their share of US nominal person consumption expenditures. The model uses the price index to calculate the real after-tax wage rate for potential migrants that includes housing price directly, while the price index used to deflate local income uses the local sales price of construction.

Wage rates affect production costs, as well as other costs, and they in turn determine profitability or sales prices, depending on whether the type of industry involved serves mainly local or external markets. For example, a cost increase for all local grocery stores results in an increase in their prices, while an increase in costs for a motor vehicle factory reduces its profitability of production at that facility but may not increase their prices worldwide.

Market Shares Block

The Market Shares Block consists of:

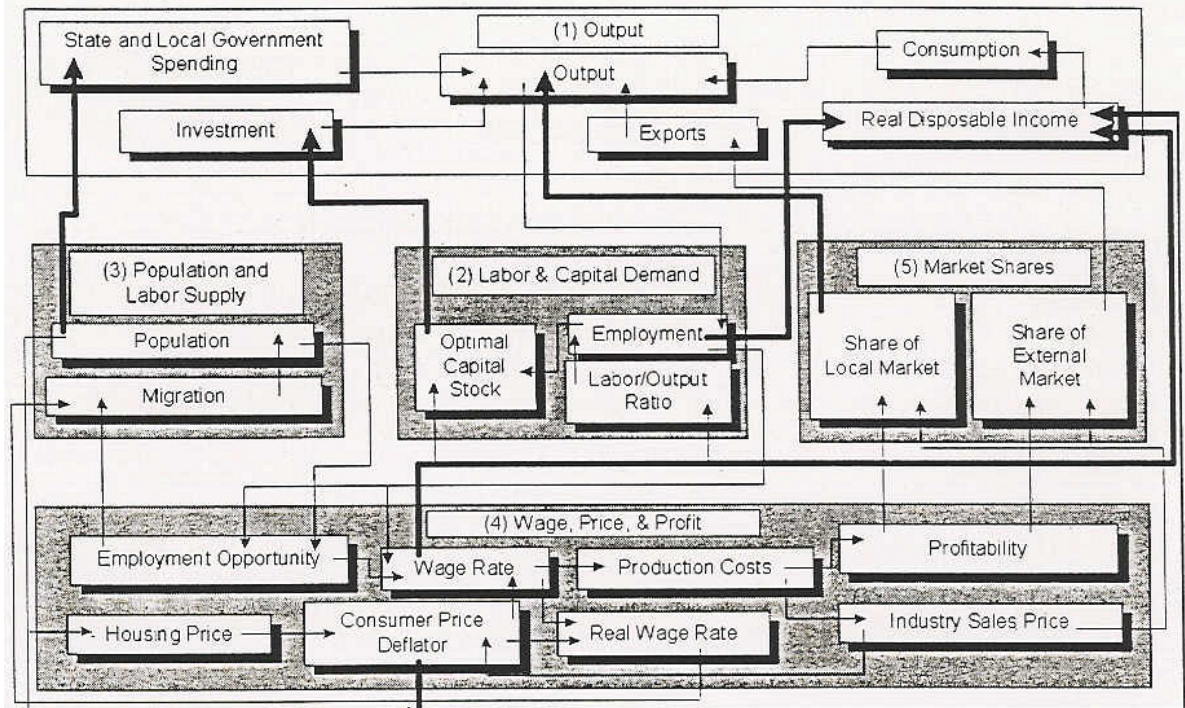
- Share of Local Market
- Share of External Market

An increase in prices leads to some substitution away from local suppliers toward external suppliers. Also, a reduction in profitability for local factories leads to less expansion of these factories relative to those located in areas where profits have not decreased. These responses occur because the US is an open economy where firms can move to the area that is most advantageous for their business.

The Total Model

Figure 3 illustrates the total model and its components and linkages. This diagram is helpful in order to understand the complex relationships shared by variables within the various blocks discussed above, as well as their relationships to variables in other blocks.

Figure 3



Appendix VII: Estimated Vermont Visitor Segmentation by Primary Activity

Introduction

Estimates of the economic impact of traveler/visitors on a region's economy are improved with more detail and comprehensive understanding of visitor activities. In short, not all visitors are created equal when it comes to their spending. For example, visitors that stay overnight in commercial lodging stay on average 2.2 nights while visiting in Vermont while visitors staying with family and friends stay more than 3.7 nights on average. The spending of visitors staying in commercial lodging is markedly larger than that of visitors staying with family and friends. This is not to say that one visitor is better than another but rather to point out that the more knowledge we have about visitor activity and patterns at a level of detail the better we are able to make estimates of economic impact and consequence. Clearly, the more that is understood about visitor demand and behavior the better the industry and policy makers can be at attracting the more valuable end of the visitor market.

The information below was extracted from numerous sources to improve our understanding of travel/visitor behaviors with specific focus on frequency of visit, length of stay and spending patterns. To the extent that the data is relevant and comparable to other sources employed in the analysis it has been used to form our estimates. Perhaps more importantly, the information here begins to form a map for future research on visitor behavior by primary activity. As a future phase of this research, we will prepare an agenda of future research with priorities assigned to those segments appearing to offer the best potential economic impact considering both fiscal benefits and costs.

Segment 1: Visitor Type—Pass Through and Destination Visitors—Day vs. Overnight Totals

All data presented in Table 7-1 is derived from TIA's 2003 Travelscope. TIA Table # 16 provides the total day person trips and total pass through trips for U.S. visitors to Vermont. The difference between those two totals is the number of destination visitors. The sum of the category "checked lodging type, did not indicate number of nights" and "1 night" through "10+ nights" was used to calculate total overnight visitors. A summation of the pass through visitors in those night categories gives the total number of overnight pass through visitors (TIA Table # 17). The difference between the two totals indicates the number of destination overnight visitors.

Respondents that did not indicate a lodging type or number of nights at destination were included in the “no answer” category.

Table 7-1: Pass Through and Destination US Visitors to Vermont - 2003

Day vs. Overnight Totals	Day		Overnight		No Answer		Overall	
	Number (000)	% of Total	Number (000)	% of Total	Number (000)	% of Total	Number (000)	% of Total
Pass Through Visitors	405.0	5.4%	474.0	6.3%	670.0	8.9%	1,549.0	20.6%
Destination Visitors	1,414.0	18.8%	4,537.0	60.2%	36.0	0.5%	5,987.0	79.4%
Total	1,819.0	24.1%	5,011.0	66.5%	706.0	9.4%	7,536.0	100.0%

Source:

"Travelscope: Vermont." TIAA. (2003).

Prepared By: Economic & Policy Resources, Inc.

Segment 2: Primary Purpose of Trip

The percent of person trips per primary purpose was derived from TIA Table #4 (see Table 7-2 below). Because not all respondents indicated a primary purpose, TIA Table #4 is based to 7,494,000 person trips rather than the total of 7,536,000 person trips. In order to estimate the primary purpose of all visitors, the assumption was made that those not answering shared the same distribution of primary purposes as those answering. The primary purpose shares for those answering were then applied to the total number of person trips. Information on the breakdown of primary purposes for Vermont residents vs. non-residents is not yet available.

Table 7-2: Primary Purpose of US Visitors to Vermont - 2003

Travel by Primary Purpose	Residents	Non-Residents	All US Visitors	
			Percent	Number (in 000s)
Leisure				
Visit Friends or Relatives			38.9%	2,931.5
Outdoor Recreation			20.2%	1,522.3
Entertainment/Sightseeing			11.0%	829.0
Other (Pleasure/Personal)			22.5%	1,695.6
TOTAL LEISURE			92.6%	6,978.3
Business				
Business			4.0%	301.4
Convention/Seminar			2.1%	158.3
Combined Business/Pleasure			1.3%	98.0
TOTAL BUSINESS			7.4%	557.7
TOTAL			100.0%	7,536.0

Source:

"Travelscope: Vermont." TIAA. (2003).

Prepared By: Economic & Policy Resources, Inc.

Segment 3: Primary Purpose—Resident vs. Non-Resident

TIA Table #30 provides total leisure person trips and business person trips for Vermont resident and non-Vermont U.S. resident “destination-

overnight trips,” or all trips excluding day pass through trips. It is not fair to apply the primary purpose ratio of destination-overnight trips to total trips. The ratio for overnight-destination trips is 4.7% business/ 95.3% leisure while that for total trips is 7.4% business/ 92.6% leisure. An estimate of the number and percent of person trips with a leisure primary purpose versus a business one was determined by taking a weighted average. The purpose ratio for pass through visitors (from TIA Table #4) was applied to day pass through residents and non-residents (see Table 7-3 below). The given ratio for destination-overnight person trips was applied to the remainder of the residents and non-residents.

Table 7-3: Primary Purpose ~ VT Resident vs. Domestic Visitor to Vermont - 2003

Primary Purpose	LEISURE		BUSINESS		TOTAL	
	Percent	Number	Percent	Number	Percent	Number
VT RESIDENT VISITORS	11.7%	878.3	1.5%	112.7	13.2%	991.0
DOMESTIC VISITORS	82.5%	6,219.7	4.3%	325.3	86.8%	6,545.0
ALL US VISITORS	94.2%	7,098.0	5.8%	438.0	100.0%	7,536.0

Source:

"Travelscope: Vermont." TIAA. (2003).

Prepared By: Economic & Policy Resources, Inc.

Segment 4: Person Trips by Season and Primary Purpose

Table 7-4 (shown below) details primary purpose of US visitors to Vermont by month and summed to each season. In order to estimate the primary purpose of trips by month, a weighted average was used in order to acknowledge the variation in purpose distribution between day pass through and overnight-destination trips. The assumption was made that monthly day pass through trips have the same business/leisure ratio as pass through visitors do throughout the year. TIA Table #54 provides total person trips by month. Months were grouped into seasons following EPR’s seasonal divisions.

Table 7-4: Person Trips by Season and Primary Purpose for US Visitors to Vermont - 2003

WINTER			SPRING			SUMMER			FALL		
Months	%(1)	Number (000)	Months	%	Number (000)	Months	%	Number (000)	Months	%	Number (000)
January			April			June			September		
Business	0.8%	62.1	Business	0.3%	22.3	Business	0.3%	22.9	Business	0.4%	27.5
Leisure	9.4%	706.9	Leisure	2.6%	193.7	Leisure	8.2%	617.1	Leisure	7.2%	540.5
February			May			July			October		
Business	0.5%	37.3	Business	0.5%	36.4	Business	0.3%	24.4	Business	0.5%	34.1
Leisure	6.0%	448.7	Leisure	3.6%	267.6	Leisure	16.5%	1,242.6	Leisure	7.7%	577.0
March						August			November		
Business	0.2%	16.0				Business	0.8%	63.7	Business	0.2%	16.2
Leisure	6.6%	498.0				Leisure	14.0%	1,058.3	Leisure	5.7%	429.8
December											
Business	0.7%	53.1									
Leisure	7.2%	541.9									
TOTAL			TOTAL			TOTAL			TOTAL		
Business	2.2%	168.6	Business	0.8%	58.7	Business	1.5%	111.0	Business	1.0%	77.7
Leisure (2)	29.1%	2,195.5	Leisure	6.1%	461.3	Leisure	38.7%	2,918.0	Leisure	20.5%	1,547.3

Source:

"Travelscope: Vermont." Travel Industry Association of America. (2003).

Notes:

1) % Primary purpose applied to total number of visitors, including non-respondents.

2) TIA's leisure category includes person trips defined as "Other (Personal/Pleasure)".

Prepared By: Economic & Policy Resources, Inc.

Segment 5: Vermont Visitor by Season and Primary Leisure Activity

Below, Table 7-5 uses the primary activity list and the percent of person trips per primary activity data from the UVM 2002 Visitor Survey. The person trips per season derived in Table 7-4 is applied to UVM's percents. The UVM 2002 study excluded Vermont residents.

Table 7-5: Estimates of US Visitors to Vermont by Season and Primary Leisure Activity - 2003

Primary Activity	WINTER		SPRING		SUMMER		FALL	
	% ¹	Number ² (000)	%	Number (000)	%	Number (000)	%	Number (000)
Visit Friends and Family								
Visit Friends	7.9%	173.4	11.7%	54.0	9.7%	283.0	7.6%	117.6
Visit Family	18.2%	399.5	22.7%	104.7	18.9%	551.5	13.9%	215.1
Outdoor Recreation								
General Outdoor Recreation	0.0%	-	1.2%	5.5	4.0%	116.7	2.8%	43.3
Tennis	0.0%	-	0.0%	-	0.0%	-	0.0%	-
Golf	0.0%	-	0.0%	-	1.0%	29.2	1.2%	18.6
Biking	0.0%	-	0.0%	-	0.3%	8.8	0.7%	10.8
Hiking	0.0%	-	1.2%	5.5	2.7%	78.8	0.9%	13.9
Wildlife Assoc. Recreation	0.0%	-	1.6%	7.4	1.4%	40.9	1.1%	17.0
Fishing	0.0%	-	1.6%	7.4	1.0%	29.2	0.3%	4.6
Hunting	0.0%	-	0.0%	-	0.2%	5.8	0.3%	4.6
Watching Wildlife	0.0%	-	0.0%	-	0.2%	5.8	0.5%	7.7
Snow Activities	38.3%	840.7	2.0%	9.2	1.3%	37.9	1.5%	23.2
Downhill Skiing	28.7%	630.0	0.8%	3.7	0.6%	17.5	1.2%	18.6
Snowboarding	4.0%	87.8	0.8%	3.7	0.2%	5.8	0.3%	4.6
X-C Skiing	2.3%	50.5	0.0%	-	0.3%	8.8	0.0%	-
Snowmobiling	3.3%	72.4	0.4%	1.8	0.2%	5.8	0.0%	-
Water Activities	0.0%	-	0.4%	1.8	2.4%	70.0	0.2%	3.1
Water Recreation	0.0%	-	0.4%	1.8	2.2%	64.2	0.2%	3.1
Sailing	-	-	-	-	-	-	-	-
Motorboat	-	-	-	-	-	-	-	-
Canoeing and Kayaking	0.0%	-	0.0%	-	0.2%	5.8	0.0%	-
Entertainment/Sightseeing								
Viewing Scenery	4.0%	87.8	13.4%	61.8	17.2%	501.9	36.0%	557.0
Auto Touring	1.7%	37.3	6.9%	31.8	9.8%	286.0	5.7%	88.2
Fall Foliage Touring	0.3%	6.6	1.6%	7.4	0.6%	17.5	24.1%	372.9
Relaxed in beauty/serenity	1.7%	37.3	4.5%	20.8	6.0%	175.1	5.9%	91.3
Rode Ferry	0.3%	6.6	0.4%	1.8	0.8%	23.3	0.3%	4.6
Attractions/Events	2.7%	59.3	5.6%	25.8	9.5%	277.2	8.0%	123.8
Cultural Events	1.0%	22.0	2.4%	11.1	3.5%	102.1	1.9%	29.4
Visited Historic Sites/Museum	0.7%	15.4	2.4%	11.1	3.5%	102.1	3.0%	46.4
Attended Fairs	0.7%	15.4	0.4%	1.8	1.4%	40.9	1.6%	24.8
Agricultural Tourism	0.3%	6.6	0.0%	-	0.8%	23.3	0.5%	7.7
Attended Sporting Events	0.0%	-	0.4%	1.8	0.3%	8.8	1.0%	15.5
Shopping	12.2%	267.8	14.2%	65.5	9.8%	286.0	11.4%	176.4
Bought VT Products	3.3%	72.4	5.3%	24.4	3.8%	110.9	3.1%	48.0
General Shopping	8.9%	195.4	8.9%	41.1	6.0%	175.1	8.3%	128.4
Antiquing	-	-	-	-	-	-	-	-
Get Away	9.6%	210.7	11.8%	54.4	12.5%	364.8	8.7%	134.6
Romantic Getaway	4.0%	87.8	4.5%	20.8	3.8%	110.9	4.9%	75.8
Family Getaway	5.6%	122.9	7.3%	33.7	8.7%	253.9	3.8%	58.8
Other³	7.3%	160.2	15.0%	69.2	13.3%	388.1	8.5%	131.5
TOTAL	100.2%*	2,199.4	99.6%	459.5	100.0%	2,918.0	99.7%	1,542.7

Source:

"National Survey of the Vermont Visitor." UVM. (2002).

"Travelscope: Vermont." TIAA. (2003).

Notes:

1) Share of visitors per primary activity is based on UVM 2002 Data.

2) Total number of person trips per season is derived from TIA 2003 monthly data. (TIA Table 2).

3) "Other" is a combination of UVM's "Other" Category, and UVM's "Visited a School or College" category.

* Total does not add to 100% due to rounding.

Prepared By: Economic & Policy Resources, Inc.

Segment 6: Visitors to Vermont by Season and Primary Leisure Activity

Table 7-6 follows the same format as Table 7-5, but the percent per primary leisure activity is derived from the UVM 1999-2000 Visitor Survey. Unlike the 2002 survey, this one includes Vermont residents as visitors.

Table 7-6: Estimates of US Visitors to Vermont by Season and Primary Leisure Activity - 2003

Primary Activity	WINTER		SPRING		SUMMER		FALL	
	% ¹	Number ² (000)	%	Number (000)	%	Number (000)	%	Number (000)
Visit Friends and Family								
Visit Friends	12.9%	283.2	18.0%	83.0	19.8%	577.8	11.3%	174.8
Visit Family	16.0%	351.3	18.7%	86.3	20.5%	598.2	13.0%	201.1
Outdoor Recreation								
General Outdoor Recreation	0.7%	15.4	0.6%	2.8	2.4%	70.0	0.7%	10.8
Tennis	-	-	-	-	-	-	-	-
Golf	0.0%	-	0.3%	1.4	0.5%	14.6	0.0%	-
Biking	0.0%	-	0.0%	-	0.2%	5.8	0.2%	3.1
Hiking	0.7%	15.4	0.3%	1.4	1.7%	49.6	0.5%	7.7
Wildlife Assoc. Recreation	0.9%	19.8	4.5%	20.8	2.2%	64.2	3.1%	48.0
Fishing	0.0%	-	2.7%	12.5	1.5%	43.8	1.2%	18.6
Hunting	0.7%	15.4	0.5%	2.3	0.0%	-	1.4%	21.7
Watching Wildlife	0.2%	4.4	1.3%	6.0	0.7%	20.4	0.5%	7.7
Snow Activities	39.2%	860.6	3.8%	17.5	0.0%	-	4.7%	72.7
Downhill Skiing	34.0%	746.5	3.2%	14.8	0.0%	-	3.3%	51.1
Snowboarding	-	-	-	-	-	-	-	-
X-C Skiing	1.4%	30.7	0.3%	1.4	0.0%	-	0.8%	12.4
Snowmobiling	3.8%	83.4	0.3%	1.4	0.0%	-	0.6%	9.3
Water Activities	0.0%	-	0.3%	1.4	2.7%	78.8	0.3%	4.6
Water Recreation	0.0%	-	0.0%	-	2.4%	70.0	0.0%	-
Sailing	-	-	-	-	-	-	-	-
Motorboat	-	-	-	-	-	-	-	-
Canoeing and Kayaking	0.0%	-	0.3%	1.4	0.3%	8.8	0.3%	4.6
Entertainment/Sightseeing								
Viewing Scenery	7.2%	158.1	11.9%	54.9	18.2%	531.1	31.5%	487.3
Auto Touring	4.3%	94.4	6.2%	28.6	12.2%	356.0	5.3%	82.0
Fall Foliage Touring	0.0%	-	0.0%	-	0.7%	20.4	19.9%	307.9
Relaxed in beauty/serenity	2.9%	63.7	5.7%	26.3	5.3%	154.7	6.3%	97.5
Rode Ferry	-	-	-	-	-	-	-	-
Attractions/Events	2.6%	57.1	8.0%	36.9	10.5%	306.4	8.1%	125.3
Cultural Events	1.9%	41.7	3.0%	13.8	4.2%	122.6	2.6%	40.2
Visited Historic Sites/Museum	0.5%	11.0	2.2%	10.1	3.9%	113.8	2.7%	41.8
Attended Fairs	0.0%	-	0.3%	1.4	0.7%	20.4	1.7%	26.3
Agricultural Tourism	0.0%	-	2.0%	9.2	1.4%	40.9	0.9%	13.9
Attended Sporting Events	0.2%	4.4	0.5%	2.3	0.3%	8.8	0.2%	3.1
Shopping	4.6%	101.0	4.7%	21.7	8.8%	256.8	8.1%	125.3
Bought VT Products	4.6%	101.0	4.7%	21.7	8.8%	256.8	8.1%	125.3
General Shopping	-	-	-	-	-	-	-	-
Antiquing	-	-	-	-	-	-	-	-
Get Away	4.1%	90.0	10.9%	50.3	11.2%	326.8	8.3%	128.4
Romantic Getaway	2.4%	52.7	5.7%	26.3	3.1%	90.5	3.0%	46.4
Family Getaway	1.7%	37.3	5.2%	24.0	8.1%	236.4	5.3%	82.0
Other³	11.8%	259.1	17.9%	82.6	3.9%	113.8	11.2%	173.3
TOTAL	100.0%	2,195.5	99.3%*	458.1	100.2%	2,923.8	100.3%	1,551.6

Source:

"National Survey of the Vermont Visitor." UVM. (1999-2000).

"Travelscope: Vermont." TIAA. (2003).

Notes:

1) Share of visitors per primary activity is based on UVM 1999-00 Data.

2) Total number of person trips per season is derived from TIA 2003 monthly data. (TIA Table 2).

3) "Other" is a combination of UVM's "Other" Category, and UVM's "Visited a School or College" category.

* Total does not add to 100% due to rounding.

Prepared By: Economic & Policy Resources, Inc.

Segment 7: Visitor Spending by Activity

Table 7-7 documents average expenditure by activity. This table provides “best estimates” of the spending patterns of assorted visitors classified by activity participation. While the information comes from a number of different sources, all dollars are converted to 2003 levels. However, it is important to note that because the information is compiled from a variety of sources, not all the dollars are in comparable formats. More specifically, some expenditure measures are on an individual person level while others are by group. Some expenditure measures are on a per day level while others are on a per trip level. Unfortunately, converting all estimates to like formats was impossible due to a lack of detail in some studies. Therefore pay close attention to the “Notes” and “Special Delineations” sections of the table because they provide extremely relevant information.

Table 7-7: "Best Estimates" of Visitor Spending by Activity Based on Various Sources (2003 \$)

ACTIVITY	Skating (1) day per skier	XC Skiing (2) length stay unknown Overnight Traveler	Snowmobiling (3) by day By Party	Fishing (4) by day By Party	Hunting (5) per trip per hunter	Trail Use (6) per day per person (nonlocal)	Biking (7) per trip per biker	Golf (8) per day per golfer	Boating (9) per day per boater	Museum (10) per trip per person	VFR (11) per trip per person
Notes											
Special Delineations											
CATEGORY of EXPENDITURE											
Lodging	\$27.73	\$155.92	30.11	\$26.48	\$46.70	\$8.50	\$1.01	\$59.56	\$29.86	\$6.98	\$19.68
Camping	---	---	---	\$5.52	---	\$2.46	---	---	\$5.35	---	\$1.41
Entertainment	\$1.95	---	---	\$1.77	---	\$1.59	---	\$42.43	\$2.60	\$2.47	\$18.74
Transportation	---	\$30.29	18.38	\$11.39	---	---	\$4.83	\$25.96	\$10.92	---	---
Private or Rental Car	---	---	---	---	---	\$0.49	---	---	---	---	---
Gasoline	\$5.87	---	---	---	---	\$8.82	---	---	---	---	\$16.87
Other Transp	\$2.48	---	---	---	---	\$4.71	---	---	---	\$1.17	\$9.37
Shopping / Retail	\$10.47	---	---	---	---	\$1.29	\$4.28	---	---	\$11.41	\$38.36
Food and Beverages	---	\$48.23	---	---	---	---	\$8.16	\$29.16	---	---	---
Restaurant	\$16.77	---	31.24	\$11.10	\$18.84	\$8.61	---	\$10.78	\$16.78	\$16.78	\$32.33
Grocery Store	\$5.41	---	20.80	\$14.04	\$49.11	\$7.99	---	\$15.90	\$2.34	\$2.34	\$13.59
Other Expenses	\$0.85	\$44.87	5.81	\$5.28	---	\$4.44	---	\$6.57	---	---	\$1.41
Activity Related Expenses	\$35.57	\$44.87	25.17	\$14.96	---	---	---	\$94.77	\$22.64	\$19.12	---
TOTAL	\$107.10	\$324.17	131.50	\$90.53	\$115.65	\$48.91	\$18.28	\$251.89	\$104.62	\$62.92	\$152.77
Sources:											
1) Estimated expenditures by skiers is an average of three studies: Groothuis - Impact NC Ski Areas 2003; Synes - Impact Michigan 2000; and UVM Alpine Survey 1999. All dollars converted to 2003 prior to averaging.											
2) 1997 Ski Fest Survey.											
3) Lynch - Snowmobiling Michigan 1997.											
4) Recreation Visitor Spending - 12 Corps Lakes 1990. Estimated spending calculated by averaging 4 groups: boat anglers "camping" & "other overnight" and shore anglers "camping" & "other overnight".											
5) Wild Side of Lodging in PA 1996.											
6) Alward, ". Expenditure Profiles Forest Visitor" 1995.											
7) Bicycle Tourism in Maine 2000.											
8) Sun/Synes - Michigan Golf 1997.											
9) Recreation Visitor Spending - 12 Corps Lakes 1990.											
10) Synes - Impact Grand Rapids Art Museum 2002.											
11) UVM Visiting Friends and Relatives Survey 2001.											

Prepared By: Economic & Policy Resources, Inc.

Appendix VIII: Bibliography/Studies of Tourism in Other States

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“Whitehall Area Explores Tourism Potential.” University of Montana. (2000).

B. Synopsis of Tourism Studies

Connecticut

Definition	Travel outside of daily commuting is included
Survey	Witan Intelligence Inc. surveyed tourists at Ct attractions: lodging, camping, boatyards, marinas. This hard data in addition to TIA, Travelscope, the CT Department of Revenue Services, and the CT Vacation Guide Data is used.
Spending Estimation Techniques	CCEA developed a "spending ratio by visitor type," and a "spending ratio by expenditure category."
Data (segment/ Activity)	The basic purpose is to estimate visitor spending according to accommodation type. Expenditure was broken down into five categories: lodging, meals, shopping, local transport and marina related spending.
Economic Impact	Various modeling methods are used to obtain the impact numbers from tourism. For the main modeling part they backed out current receipts in order to show the impact as if those industries were not here. The difference between current, unaltered numbers and the deducted numbers is the impact of the industry
Presentation	Thorough analysis and documentation of results. More academic than marketing oriented.
Author	CCEA
Available	

Florida

Definition	Study includes residents and non-residents.
Survey	Two separate surveys were used. One was given to auto, air, and cruise ship companies. The other was given to customers that participated in at least one recreational activity.
Spending Estimation Techniques	
Data (segment/ Activity)	Profiles of residents and visitors include information on age, race/ethnicity, sex, income, education, origin, activity participation, and spending. Spending is calculated by season, by mode of transportation and by type of accommodation.
Economic Impact	
Presentation	Results are presented in detailed charts. Some analysis - good presentation
Author	National Ocean Service, NOAA, U.S. Dept Commerce
Available	

Idaho

Definition	Someone traveling outside of their daily commuting pattern.
Survey	
Spending Estimation Techniques	Survey data, room tax receipts, camping attendance data, and payroll and employment data used.
Data (segment/ Activity)	Destination spending by accommodation type presented. Spending by segment: accommodations, eating, grocery, recreation, retail, ground transport and air transport is included.
Economic Impact	RTIM used to measure expenditure and impact on the state and each of its 44 counties.

Presentation	The report presents an overview of findings through a series of charts and relevant bullet points. Statewide findings are presented, then regional findings.
Author	Dean Runyan Associates
Available	

Idaho

Definition	A traveler is a person traveling outside the commuting pattern for business, pleasure, shopping, meetings, personal, medical or educational purposes.
Survey	Survey done by University of Idaho (no information on methods)
Spending Estimation Techniques	
Data (segment/ Activity)	Expenditure info: broken down by type of accommodation. Also, expenditure by item purchased is included.
Economic Impact	Economic Impact is calculated using the Regional Travel Impact Model. Expenditure, Payroll, Employment, Local Tax Receipts, and State Tax Receipts are included in the impact analysis.
Presentation	data presented by county.
Author	Dean Runyan Associates
Available	

Massachusetts

Definition	TIA definition
Survey	The report used TIA, Travelscope data.
Spending Estimation Techniques	Spending was presented by share of visitors, not total \$.
Data (segment/ Activity)	Impact results were broken down by sector: public/auto transportation, food and lodging, entertainment and recreation, retail. Share of visitors per primary purpose was included, but spending was not recorded by purpose.
Economic Impact	To determine econ impact, the report looked at expenditure, payroll, employment #s, state and local tax receipts.
Presentation	Combination of charts of results and bullet points. Econ impact assessed at a regional level. Total person trips and total spending is reported. The presentation is more "marketing" oriented than academic.
Author	Mass. Office of Travel & Tourism
Available	

Michigan

Definition	Travel is an overnight trip or a day trip of over 50 miles.
Survey	DK Shifflet performs a monthly survey of 45,000 households. Each household reports their last three months of travel.
Spending Estimation Techniques	
Data (segment/ Activity)	Data on participation in a variety of activity segments is presented. The average and median spending per day per person is reported for: transportation, rental cars, food, entertainment, shopping, and lodging. There is no data on primary purpose activities.
Economic Impact	There is no discussion of economic impact.
Presentation	The report presents an overview of findings through a series of charts and relevant

	bullet points. Statewide findings are presented, then regional findings. All results are compared with those from prior years.
Author	D.K. Shifflet & Associates
Available	

Montana

Definition	N/A
Survey	No explanation
Spending Estimation Techniques	No explanation
Data (segment/ Activity)	Expenditure per segment presented by mode of transport and purpose of trip (VFR, Business, Pass through, Leisure).
Economic Impact	N/A
Presentation	N/A
Author	U Montana
Available	*Only a chart of nonresident expenditures.

Nebraska

Definition	None specified
Survey	Summer visitor surveys
Spending Estimation Techniques	Lodging taxes form the basis for direct tourism expenditure estimates. For other expenditures, survey results are used.
Data (segment/ Activity)	
Economic Impact	
Presentation	Summary of findings.
Author	Brian Hill, Extension Community Tourism Specialist
Available	*Description of how to use lodging tax stats to estimate econ impact.

New Hampshire

Definition	None specified
Survey	A survey was handed out at various locations throughout the state. Recipients were instructed to complete the survey at the end of their NH stay, and then return it.
Spending Estimation Techniques	Spending data was collected from survey results and presented as \$/person/day.
Data (segment/ Activity)	Spending was categorized by item and presented for overnight vs. day travelers.
Economic Impact	Nothing on econ impact
Presentation	The report offers a brief explanation before each section, but most data is presented in chart form.
Author	Institute for NH Studies, Plymouth State University
Available	* Winter study

New London, CT

Definition	None specified
Survey	No explanation
Spending Estimation Techniques	No explanation
Data (segment/ Activity)	Spending not segmented.
Economic Impact	An export-based methodology applied to economic accounts for 21 tourism-related industry sectors from an IMPLAN database was used.
Presentation	A very non-specific discussion of overall results. Most of the report outlines the methods for determining economic impact of tourism. Total spending is reported.
Author	Impact Research Associates
Available	

Ontario

Definition	Tourists stay in a place no longer than a year. Temp. workers are excluded. One must travel at least 40 kilometers if the length of stay is less than one day or the lodging is non commercial.
Survey	Used International Travel Survey, Statistics Canada
Spending Estimation Techniques	Spending calculated for all travelers, inbound visitors, and resource-based visitors by dollars spent and by share of all expenditures. No explanation of spending estimation.
Data (segment/ Activity)	Spending reported in \$ and share of total by segment: accommodation, food, transport, recreation, retail, public transport.
Economic Impact	Economic Impact is calculated using the TREIM and MEDTT models. Province wide impacts and Northern Canada impacts are calculated for total tourism and for resource-based tourism.
Presentation	Minimal analysis, mostly documentation of results.
Author	Ontario Ministry of Tourism
Available	

Pennsylvania

Definition	None specified
Survey	No explanation
Spending Estimation Techniques	No explanation
Data (segment/ Activity)	A pie chart of expenditure per segment (retail, transport, entertainment, food, lodging) is included.
Economic Impact	No detailed explanation
Presentation	charts and bullets
Author	
Available	*Highlights of summary.

Portland, OR

Definition	None specified
Survey	Longwoods International Visitor Survey
Spending	No explanation

Estimation Techniques	
Data (segment/ Activity)	Total spending is reported for: food, accommodations, retail goods, and entertainment and recreation. Expenditure is also recorded for total spending by type of accommodation.
Economic Impact	Regional Travel Impact Model (RTIM) used. Only direct impacts included.
Presentation	Charts of findings with bullets explaining trends.
Author	Dean Runyan Associates
Available	

Rhode Island

Definition	None specified
Survey	
Spending Estimation Techniques	No explanation
Data (segment/ Activity)	Spending calculated by segment: accommodation and food services, entertainment and recreation, retail, ground transport, air transport, travel arrangement services.
Economic Impact	No detailed explanation
Presentation	Summary of findings (no charts). Total number of visitors and total spending is reported.
Author	URI
Available	

Virginia

Definition	None specified
Survey	TIA data, each month in 97/98 surveys were mailed out to 10,000 households asking about travel to VA within the previous month
Spending Estimation Techniques	No explanation
Data (segment/ Activity)	Spending recorded by place of visitor origin.
Economic Impact	No detailed explanation
Presentation	Bullet points of facts.
Author	VA Tourism Corp.
Available	*Overview of findings

Wisconsin

Definition	A traveler is anyone who visits an area while traveling outside his or her normal routine and spends money. They can't remain at the destination for longer than 30 days. 2nd homeowners traveling once a month or less are included as visitors.
Survey	Census information used.
Spending Estimation Techniques	Sales tax data or industry receipts are not employed; measurements begin with every dollar travelers spend; SIC codes are not used; instead travelers define where they spend money.
Data (segment/ Activity)	Expenditure by season, and by accommodation type included.

Activity)	
Economic Impact	The procedure employed was the T-MAP-I econ impact model.
Presentation	Combination of charts of results and bullet points. Pie charts are used to illustrate size of spending categories.
Author	Davidson-Peterson Associates
Available	

Appendix IX: Survey Instruments Employed

A. Establishment Survey

Methodology Brief

VDTM 2004 Establishment Study
Issued: 12.14.04 (version 6 – Final)

This document is intended to serve as a point of reference to the research methodology used for the VDTM 2004 Establishment Study as commissioned by VDTM for the 2004 Tourism Research Project. To this end, this document contains the following 6 sections:

Document Overview

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II.	Sampling Methodology	2
III.	Questionnaire Items.....	2
IV.	Data Collection	5
V.	Analysis	9
VI.	Summary of Results.....	16

I. Sample Frame Definition

The target population of this research segment is identified as a Vermont “Establishment”. *Establishment* includes any business which has:

- ✓ Two or more commercial beds registered with the Vermont Department of Health for the purpose of providing lodging accommodations to *Vermont Travelers* and/ or,
- ✓ A campgrounds facilities registered with the Vermont Parks Service including tent oriented facilities as determined by the Vermont Business Registry and campground guides and/ or,
- ✓ Waterfront recreational facilities with access for 20 or more watercraft (i.e., Marinas) registered with the Lack Champlain Basin Program (LCBP).

The research seeks to develop a complete understanding of the economic activity of a *Vermont Traveler* as he or she interacts with an *Establishment*. A *Vermont Traveler* is any individual who is involved in non-routine spending on personal leisure, personal business, or employed business activities in Vermont.

These operational definitions are intended to capture expenditures made by visitors at bed and breakfasts, cabins & cottages, camping and RV parks, farm stays, hostels, hotels, inns, motels, resorts, and marinas¹.

¹ Note that condominiums/ vacation rentals will be covered in the Second Homeowner study, and rooming – guest housing will be covered in the Family & Friends study. Both the Second Homeowners study and the Family & Friends study will be addressed under separate cover.

For the purposes of this survey, *Establishment* does not include food or drink based businesses such as bars/pubs, family dining, fast food, or fine dining. In addition, it does not include any recreation or event based businesses other than those fitting the definition outlined above.

II. Sampling Methodology

The following steps were taken to draw an Establishment Survey sample:

1. The Travel Planner database managed by the VT Department of Tourism and Marketing (VDTM) was received in June of 2004 and cross-referenced against the Vermont Department of Health's records of licensed establishments.
2. The Department of Employment and Training campground list was received in June of 2004 and cross-referenced against the online (www.campvermont.com) and offline (2004 Vermont Campground Guide) publications of the Vermont Department of Forestry, Parks & Recreation.
3. The Vermont Agency of Natural Resources list of marinas was received in June of 2004 and cross referenced against the online resource (www.boatowners.com). In addition, the Lake Champlain Basin Project (LCBP) was contacted and their list was cross-referenced against the two lists above.

Facilities that didn't have a primary contact name and/ or email address were cross-referenced against response data from the VDTM ongoing availability and occupancy research. The remaining Facilities without a primary contact were called and a name recorded. When a primary contact was not identified, the generic title "Vermont Tourism Colleague" was used.

A total of 1002 lodging facilities were identified and invited to participate in the research study.

III. Questionnaire Items

The survey contained the following questions and related information:

[START OF SURVEY]

Thank you for taking the time to complete this survey. The following questions address your experiences (past or present) as a travel and tourism related lodging business in Vermont. When responding, please focus on your business during the 2003 calendar year. Please note that we intend this to include January 1, 2003 through to December 31, 2003.

Your feedback is greatly appreciated and your responses are totally confidential. **Results will be reported as overall averages and individual responses will not be identified.** It will be helpful to have monthly occupancy and receipts information for calendar year 2003 on hand when you complete the survey. While we won't ask you for specific revenue figures, the survey will ask about how revenue is distributed.

The survey should not take you any longer than 15 to 20 minutes to complete. If you manage more than one lodging related business in Vermont, please answer for all of the businesses combined.

1. **How many** Vermont lodging related businesses did you manage in 2003?

2. Which of the following **best describes** the establishment(s) you manage? *(Please check all that apply):*
3. Which of the following months were you **open for business** in 2003? *(Please check all that apply.)*
 - 3b. How many rental rooms (units) would you estimate were **available daily (on average)** at your facility during 2003 as a whole and if different by month? **Note** that by “rooms (units)” we mean all rooms, boat slips, and individual campsite locations.

If different, please provide an stated number of rooms (units) by month.
 - 3c. How about the **number of people you can accommodate** in a given night? What is the maximum number of overnight guests you could accommodate per night at your facility during 2003 overall and if different by month?

If different, please provide an estimated number of overnight guests you could accommodate per night by month.
 - 3d. How does the total number of rooms (units) you had in 2003 **compare** to the total number you had in 2002. Would you say you had...
 - More** rooms (units) in 2003 than in 2002 (Please specify: _____ % more)
 - About the same** number of rooms (units) in 2003 as in 2002, or
 - Fewer** rooms (units) in 2003 than in 2002 (Please specify: _____ % less)

The next set of questions focus on your occupancy rates in 2003. **Please answer the questions below even if you have** already participated in the Vermont Department of Tourism and Marketing’s Occupancy Survey

4. What was the **total number of room nights** rented each month in 2003? *(Example: One room rented for five nights equals five room nights)* Please provide an estimate by month.

RESEARCH NOTE: This question was changed on 07/29/04 at 11:15 AM after 60 completed interviews. The original wording asked, “What was the average number of room nights rented each month in 2003?”. The word “average” was removed and the example in the parentheses added. A review of responses before and after this change did not reveal a systematic instrument bias.

- 4b. What was the **average length of stay** for a typical room (unit) party in 2003 overall and if different by month?
- 4c. What about the **average number of guests** per room (unit) in 2003 overall and if different by month?
5. Thinking about **all of your guests** in 2003, what percentage would you say came from each of the following areas:

	% guests from
5a. Vermont residents:	%
5b. Other New England States (i.e., Maine, New Hampshire, Massachusetts, Rhode Island):	%
5c. New York State (including New York City)?	%
5d. New Jersey?	%
5e. Pennsylvania?	%
5f. Other States?	%
5g. Canada?	%

17. Finally, for notification of the report's availability, award drawing, and general tracking purposes, **please enter the email address at which you received this survey** invitation.

[END OF SURVEY]

IV. Data Collection

Data was collected through a 3 phase process. Phase one included a 4 step web-based data collection process, phase two involved a telephone follow-up with non-respondents, and phase three involved contacting select chambers of commerce and related associations to help encourage response from low response counties.

Phase 1: Web-Based Data Collection

Of the 1002 establishments identified, 905 provided valid email addresses. These email addresses were used to send 4 email communications:

1. Advance project description (sent 07/23/04)
2. Email invitation (sent 07/27/04)
3. Reminder email (sent 07/30/04)
4. Deadline extension email (sent 08/03/04)

The following email text was used:

Advanced Email Text

<From> Bruce Hyde <bruce.hyde@surveylab.net>

SUBJECT TEST.1: Vermont Business Managers - Important tourism survey coming!
SUBJECT TEST.2: Vermont Lodging Managers - Important tourism survey coming!
SUBJECT TEST.3: Our Tourism Industry - Important tourism survey coming!
SUBJECT TEST.4: Vermont Tourism Colleague - Important tourism survey coming!

Friday - July 23, 2004

Dear <First Name or Vermont Tourism Colleague>,

I am writing you to request your assistance with an important research project being conducted by the Vermont Department of Tourism and Marketing. This important survey will provide information to guide the Department's marketing and economic development responsibilities.

The survey will be sent to your email inbox next week. Please reply directly to this email if you have any questions or comments. The survey will take approximately 15 to 20 minutes to complete. As a small token of our appreciation, we will be giving away **three American Express gift cards worth one-hundred dollars each** through a drawing of respondents. Details will be provided in the forthcoming email.

**All survey participants will be provided
a top-line copy of the results.**

In order to ensure the highest level of objectivity and confidentiality, we have asked Economic & Policy Resources along with Portland Research Group for assistance with this project.

Regards,

Bruce Hyde, Commissioner
Vermont Dept. of Tourism & Marketing
c/o Portland Research Group

P.S. We've done our best to send this survey to all and only those businesses that provide lodging to Vermont visitors. If you believe that your organization does not fit this profile, please accept our apologies and [use this link](#) to advise us that we sent this email to you in error.

WHAT SHOULD I DO NEXT?

You do nothing at this time. Look for the official invitation and survey from me next week. It will be helpful to have monthly occupancy and receipts information for calendar year 2003 on hand when you complete the survey. While we won't ask you for specific revenue figures, the survey will ask about how revenue is distributed.

Email Invitation Text

<From> Bruce Hyde <bruce.hyde@surveylab.net>

SUBJECT: Vermont Tourism Colleague - This is the tourism survey I told you about (Reply requested before August 3rd)

Tuesday - July 27, 2004

Dear Vermont Tourism Colleague,

We invite you to participate in a survey about your experiences (past or present) as a travel and tourism business in Vermont.

The survey will take about 15 to 20 minutes to complete. Your participation will greatly help us better serve you and other Vermont travel and tourism businesses. To access the survey, please use the link below.

<http://www.surveylab.net/survey/vdtm>

It will be helpful to have monthly occupancy and receipts information for calendar year 2003 on hand when you complete the survey. While we won't ask you for specific revenue figures, the survey will ask about how revenue is distributed.

All participants will be provided a top-line copy of the results and will be eligible to win one of three American Express gift cards worth one-hundred dollars each. We will notify the awardees by August 16, 2004.

WHY ARE WE DOING THIS?

The Vermont Department of Tourism and Marketing is collecting information about the industry to better understand the impact of travelers on the Vermont economy. The information will be used to assist with targeted marketing activities and develop industry economic policy.

WHAT IS SURVEYLAB?

In order to ensure the highest level of objectivity and confidentiality, the Department has asked Economic & Policy Resources along with Portland Research Group to assist us with this project. SurveyLab is a division of Portland Research Group.

WHAT SHOULD I DO NEXT?

Your feedback is very important! Please use the link below to provide your feedback by completing a brief questionnaire. All responses need to be received by Tuesday, August 3, 2004. Your feedback is greatly appreciated and your responses are totally confidential. Results will be reported as overall averages and individual responses will not be identified.

Regards,

Bruce Hyde, Commissioner
Vermont Dept. of Tourism & Marketing
c/o Portland Research Group

Survey Link: <http://www.surveylab.net/survey/vdtm>

P.S. We've done our best to send this survey to all and only those businesses that provide lodging to Vermont visitors. If you believe that your organization does not fit this profile, please accept our apologies and [use this link](#) to advise us that we sent this email to you in error.

Reminder Email Text

(Note: Sent only to non-respondents)

<From> Bruce Hyde <bruce.hyde@surveylab.net>

SUBJECT: Vermont Tourism Colleague - Just 3 days left (Deadline: 08/03/04 - this Tuesday!)

Friday - July 30, 2004

Dear Vermont Tourism Colleague,

This email is a reminder that the Vermont Department of Tourism & Marketing Lodging Establishment Study will end the data collection phase of the project this coming Tuesday (08/03/04).

If you have not already completed the survey, please use the link below to access the survey online.

<http://www.surveylab.net/survey/vdtm>

It will be helpful to have monthly occupancy and receipts information for calendar year 2003 on hand when you complete the survey. While we won't ask you for specific revenue figures, the survey will ask about how revenue is distributed.

Thank you very much for your time. You can use the "SafeUnsubscribe" link at the bottom of this email to withdraw yourself from any future reminders.

Regards,

Bruce Hyde, Commissioner
Vermont Dept. of Tourism & Marketing
c/o Portland Research Group

Survey Link: <http://www.surveylab.net/survey/vdtm>

P.S. We've done our best to send this survey to all and only those businesses that provide lodging to Vermont visitors. If you believe that your organization does not fit this profile, please accept our apologies and [use this link](#) to advise us that we sent this email to you in error

Extension Email Text

(Note: Sent only to non-respondents)

<From> Bruce Hyde <bruce.hyde@surveylab.net>

SUBJECT: Vermont Tourism Colleague - Deadline extended to 08/09/04 (this Monday)

Tuesday - August 3, 2004

Dear Vermont Tourism Colleague,

Thank you to those of you who have participated in the Vermont Department of Tourism & Marketing Lodging Establishment Study thus far.

In order to ensure all managers have the chance to participate in this study and because the results are so important to Vermont's industry, we've gained permission to extend the data collection phase of the project by 5 days. The new deadline for your response is Monday, August 9, 2004. We'll be closing the data collection portion of the project at 10:00 AM EST that morning.

If you haven't already, please use the link below to access the online survey and enter your response.

<http://www.surveylab.net/survey/vdtm>

It will be helpful to have monthly occupancy and receipts information for calendar year 2003 on hand when you complete the survey. While we won't ask you for specific revenue figures, the survey will ask about how revenue is distributed.

Remember, all respondents are eligible to win one of three American Express gift cards worth one-hundred dollars each. We will notify awardees by August 16, 2004. **In addition**, you will be provided information on how to access the study results after completing the survey.

Thank you for your time. Please remember that any information you provide will be totally confidential. **This will be the last email we send related to this project.** However, you can still use the "SafeUnsubscribe" link at the bottom of this email to withdraw yourself from the database assigned to this project.

Regards,

Bruce Hyde, Commissioner
Vermont Dept. of Tourism & Marketing
c/o Portland Research Group

Survey Link: <http://www.surveylab.net/survey/vdtm>

P.S. We've done our best to send this survey to all and only those businesses that provide lodging to Vermont visitors. If you believe that your organization does not fit this profile, please accept our apologies and [use this link](#) to advise us that we sent this email to you in error.

Phase 2: Telephone Follow-up

A follow-up call was made to all non-respondents to confirm that they didn't have any trouble with the online component of the survey. The primary contact was targeted directly and when he or she was not available, a voice mail message was left.

The following script was used:

Hello, my name is _____ and I am calling from Portland Research Group to follow-up on the Vermont lodging survey invitation you received by email from Vermont Tourism Commissioner, Bruce Hyde.

VOICEMAIL SCRIPT: "The questionnaire takes just 15 to 20 minutes to complete. We would greatly appreciate it if you could respond to the survey by the end of the week. Because having as many participants as possible will give us strong regional as well as statewide data, feedback from every business is vital to the overall success of the project. If you have any questions, you can contact us at 800.944.0597 x4." (TERMINATE)

- A. Did you receive the email invitation from Bruce Hyde? (IF YES SKIP TO C)
- B. The invitation contains a link to the web-based survey. It is important for us to receive responses from as many establishments like yours as possible. Would you mind if we send you another invitation?

TERMINATE

- C. The questionnaire takes just 15 to 20 minutes to complete. We would greatly appreciate it if you could respond to the survey by the end of the week. Because having as many participants as possible will give us strong regional as well as statewide data, feedback from every business is vital to the overall success of the project.

Thank you very much for providing your input in support of the Vermont Department of Tourism and Marketing.

Phase 3: Chamber of Commerce and Association Follow-up

After phases one and two were completed, a map was developed that cross-referenced respondents by county of operation. Counties lacking appropriate representation were targeted. Calls were made from The Department of Tourism and Marketing and Economic and Policy Resources, Inc. to contacts at relevant Chambers of Commerce, related associations, and key establishments. A word-of-mouth initiative was started to encourage response from these counties.

These three phases of data collection yielded a total of 150 qualified and complete responses. The average response time was 14.1 minutes.

V. Analysis

The following data cleaning efforts were applied to the final dataset before analysis:

- ✓ All responses were reviewed for duplicate response. This was based on respondent system information record at the time of submission (e.g., IP address, Browser type and version,

computer operating system and version). In addition, the length of time required for complete was also reviewed to identify duplicate responses.

- ✓ All respondents answering less than 5 questions were deleted.
- ✓ All respondents completing the survey in less than 1 minute were deleted.
- ✓ All respondents reporting answers for more than one establishment were deleted. (i.e., Q1 > 1)

Other data cleaning efforts that did not result in a respondent's entire response removed included:

- ✓ All out-of-range data that could not be obviously interpreted was recoded to missing.
- ✓ Where an overall total (e.g., Q3b) was obviously answered as a monthly total instead of a nightly total, data was recoded to answer divided by number of days in the month.
- ✓ Recoded overall measures (i.e., Q3b, Q3c, Q4b, Q4c, Q8) to the average of the monthly measures as available. Likewise, when an overall measure was provided and no monthly measure was provided. The overall was filled in for each month the establishment was open (as defined by Q3).
- ✓ If a question set was designed to add up to 100% (i.e., Q5 and Q9) and did not, the following actions were taken:
 - If total was less than 90% or greater than 110%, all answers were recoded to missing.
 - If total was between 90% and 99.9% and all options (e.g., Q5a through Q5h) were answered, the difference from 100% was divided by the number of responses answered greater than 0% and evenly added to all responses greater than 0%.
 - If total was between 100.1% and 110% and all options were answered, the difference from 100.0% was divided by the number of answers greater than 0% and evenly subtracted from all responses greater than 0%. (Note: If subtracting evenly across all data points would cause one or more data points to be less than 0%, all responses were recoded to missing.)
 - If the sum of the answers did not equal 100% and all of the possible responses were not answered, all data was recoded to missing.
- ✓ If calculated occupancy ($Q4/[Q3b*\text{days in the month}]$) was less than 5% for all 12 months and Q4 was less than Q3b for all 12 months, then Q4 was recoded to $Q4*\text{days in the month}$. This was done to response IDs 8, 24, 26, 78, 88, 91, 111, 121, 122, and 149.

- ✓ If calculated occupancy ($Q4/[Q3b*\text{days in the month}]$) was greater than 100% for 1 or more months AND there was no systematic reason why, then the Q4 data was recoded to missing. This was done to response IDs 42, 61, 64, 85, 99, and 154.
- ✓ If Q4 is less than 1 (i.e., response answered as a percent) on all 12 months then Q4 was recoded to $Q3b*\text{number of days in the month}*Q4$.
- ✓ If a review of Q4 and Q3b by month revealed that the data consistently trended towards the fewest rooms available during the months of greatest occupancy (and the reverse was also true), all data for Q4 was recoded to missing. This was done to response IDs 57, 66, 86, and 159.

The data was then organized into four primary segments based on establishment size and analyzed by season where appropriate:

1. 1.0 to 10 rooms
2. 10.1 to 20 rooms
3. 20.1 to 49 rooms
4. 49.1 rooms or more.

An establishment needed to report revenue for at least one month of a given season in order to be included in a particular seasonal analysis. The seasons were broken down into calendar months:

- ✓ Winter (December, January, February, and March)
- ✓ Spring (April and May)
- ✓ Summer (June, July, and August)
- ✓ Fall (September, October, and November)

All variables were reported as a direct percentage or as an average depending on the nature of the variable. The Inter-Quartile Range was calculated and any data points greater than $1.5*IQR$ from Q_3 were removed as outliers. All zero responses were used as a base calculation for frequency and the average score was then based on all responses greater than zero.

The following pages (**Tables 1 through 4**) provide an overview of the raw research findings overall and by season (where appropriate) for each of the four primary establishment type segments.

Table 1: Establishments with 1 to 10 rooms

Variable	Survey Reference	Research Findings			
	Overall	Winter	Spring	Summer	Fall
# in VT	812.63	812.63	812.63	812.63	812.63
% Open for Business	--	57.3%	59.6%	75.4%	70.4%
Q3b - Rooms Avg/night	--	4.85	4.95	4.86	4.75
Q3c - Guests Avg/night	--	12.04	12.15	12.06	11.77
Q3d - % More Rooms	12%	--	--	--	--
Q3d_more - Avg. Rate of Growth	20.40	--	--	--	--
Q3d - % About the Same	73%	--	--	--	--
Q3d - % Fewer Rooms	15%	--	--	--	--
Q3d_fewer - Avg. Rate of Reduction	25.73	--	--	--	--
Q4 -Rooms Rented	--	30.48	14.40	33.46	36.16
Q4b -Avg. Length of Stay	--	2.05	2.08	2.11	2.13
Q4c -Avg. Number of Guests	--	2.18	2.08	2.09	2.07
Q5a -% from VT	3.93	--	--	--	--
Q5b -% from Other NE	32.63	--	--	--	--
Q5c -% from NY	20.07	--	--	--	--
Q5d -% from NJ	8.08	--	--	--	--
Q5e -% from PA	4.30	--	--	--	--
Q5f -% from Other States	11.93	--	--	--	--
Q5g -% from Canada	1.53	--	--	--	--
Q5h -% Foreign Guests	2.39	--	--	--	--
Q7 -Freq. w/Rev. from Non-Overnight Guests	35%	--	--	--	--
Q7 -% Rev. from Non-Overnight Guests	17.80	--	--	--	--
Q8 - \$/night	--	\$106.74	\$104.65	\$106.18	\$107.63
Q9a -Freq. w/Rev. from Vac/Leisure Guests	100%	--	--	--	--
Q9a -% Rev. from Vac/Leisure Guests	89.44	--	--	--	--
Q9b -Freq. w/Rev. from Conv/Meeting Guests	13%	--	--	--	--
Q9b -% Rev. from Conv/Meeting Guests	12.23	--	--	--	--
Q9c -Freq. w/Rev. from Other Business Guests	53%	--	--	--	--
Q9c -% Rev. from Other Business Guests	6.03	--	--	--	--
Q9d -Freq. w/Rev. from Day Meetings/Events	11%	--	--	--	--
Q9d -% Rev. from Day Meetings/Events	7.50	--	--	--	--
Q11 -Freq. having Perm. Full-Time Employees	48%	--	--	--	--
Q11 - # of Perm. Full-Time Employees	1.78	--	--	--	--
Q12 -Freq. Having Seasonal Full-Time Employees	--	8%	4%	7%	5%
Q12 - # of Seasonal Full-Time Employees	--	1.60	1.67	1.50	3.00
Q13 -Freq. Having Part-Time Employees	38%	--	--	--	--
Q13 - Total # of Part-Time Employees	2.26	--	--	--	--
Q14 -Freq. Having Seasonal Part-Time Employees	--	23%	16%	28%	28%
Q14 - # of Seasonal Part-Time Employees	--	4.00	3.05	2.25	2.27

Table 2: Establishments with 10.1 to 20 rooms

Survey Reference	Research Findings				
Variable	Overall	Winter	Spring	Summer	Fall
# in VT	172.90	172.90	172.90	172.90	172.90
% Open for Business	--	82.2%	66.7%	90.5%	88.9%
Q3b - Rooms Avg/night	--	14.16	14.45	14.38	14.26
Q3c - Guests Avg/night	--	35.82	37.07	36.26	36.18
Q3d - % More Rooms	5%	--	--	--	--
Q3d_more - Avg. Rate of Growth	5.00	--	--	--	--
Q3d - % About the Same	74%	--	--	--	--
Q3d - % Fewer Rooms	21%	--	--	--	--
Q3d_fewer - Avg. Rate of Reduction	10.33	--	--	--	--
Q4 -Rooms Rented	--	133.19	55.14	185.87	152.79
Q4b -Avg. Length of Stay	--	2.18	2.11	2.05	2.17
Q4c -Avg. Number of Guests	--	2.04	2.11	2.18	2.17
Q5a -% from VT	6.43	--	--	--	--
Q5b -% from Other NE	29.43	--	--	--	--
Q5c -% from NY	18.56	--	--	--	--
Q5d -% from NJ	8.89	--	--	--	--
Q5e -% from PA	3.97	--	--	--	--
Q5f -% from Other States	19.58	--	--	--	--
Q5g -% from Canada	2.28	--	--	--	--
Q5h -% Foreign Guests	1.44	--	--	--	--
Q7 -Freq. w/Rev. from Non-Overnight Guests	55%	--	--	--	--
Q7 -% Rev. from Non-Overnight Guests	10.35	--	--	--	--
Q8 - \$/night	--	\$134.00	\$132.12	\$126.50	\$131.28
Q9a -Freq. w/Rev. from Vac/Leisure Guests	100%	--	--	--	--
Q9a -% Rev. from Vac/Leisure Guests	86.13	--	--	--	--
Q9b -Freq. w/Rev. from Conv/Meeting Guests	33%	--	--	--	--
Q9b -% Rev. from Conv/Meeting Guests	3.53	--	--	--	--
Q9c -Freq. w/Rev. from Other Business Guests	67%	--	--	--	--
Q9c -% Rev. from Other Business Guests	12.50	--	--	--	--
Q9d -Freq. w/Rev. from Day Meetings/Events	28%	--	--	--	--
Q9d -% Rev. from Day Meetings/Events	9.63	--	--	--	--
Q11 -Freq. having Perm. Full-Time Employees	90%	--	--	--	--
Q11 - # of Perm. Full-Time Employees	3.00	--	--	--	--
Q12 -Freq. Having Seasonal Full-Time Employees	--	31%	38%	46%	54%
Q12 - # of Seasonal Full-Time Employees	--	4.00	2.00	5.00	4.14
Q13 -Freq. Having Part-Time Employees	89%	--	--	--	--
Q13 - Total # of Part-Time Employees	5.79	--	--	--	--
Q14 -Freq. Having Seasonal Part-Time Employees	--	54%	46%	69%	69%
Q14 - # of Seasonal Part-Time Employees	--	2.43	2.17	2.14	2.29

Table 3: Establishments with 20.1 to 49 rooms

Survey Reference	Research Findings				
Variable	Overall	Winter	Spring	Summer	Fall
# in VT	155.61	155.61	155.61	155.61	155.61
% Open for Business	--	63.2%	63.2%	84.2%	70.2%
Q3b - Rooms Avg/night	--	32.69	35.30	32.75	33.54
Q3c - Guests Avg/night	--	108.52	111.47	114.63	113.41
Q3d - % More Rooms	11%	--	--	--	--
Q3d_more - Avg. Rate of Growth	60.00	--	--	--	--
Q3d - % About the Same	83%	--	--	--	--
Q3d - % Fewer Rooms	6%	--	--	--	--
Q3d_fewer - Avg. Rate of Reduction	17.50	--	--	--	--
Q4 -Rooms Rented	--	329.84	133.91	275.65	261.03
Q4b -Avg. Length of Stay	--	2.31	2.24	3.30	2.43
Q4c -Avg. Number of Guests	--	2.38	2.21	2.51	2.27
Q5a -% from VT	7.69	--	--	--	--
Q5b -% from Other NE	27.53	--	--	--	--
Q5c -% from NY	19.31	--	--	--	--
Q5d -% from NJ	13.36	--	--	--	--
Q5e -% from PA	4.86	--	--	--	--
Q5f -% from Other States	5.13	--	--	--	--
Q5g -% from Canada	2.53	--	--	--	--
Q5h -% Foreign Guests	2.32	--	--	--	--
Q7 -Freq. w/Rev. from Non-Overnight Guests	72%	--	--	--	--
Q7 -% Rev. from Non-Overnight Guests	7.82	--	--	--	--
Q8 - \$/night	--	\$116.48	\$78.05	\$94.74	\$95.26
Q9a -Freq. w/Rev. from Vac/Leisure Guests	100%	--	--	--	--
Q9a -% Rev. from Vac/Leisure Guests	91.22	--	--	--	--
Q9b -Freq. w/Rev. from Conv/Meeting Guests	44%	--	--	--	--
Q9b -% Rev. from Conv/Meeting Guests	8.13	--	--	--	--
Q9c -Freq. w/Rev. from Other Business Guests	61%	--	--	--	--
Q9c -% Rev. from Other Business Guests	6.05	--	--	--	--
Q9d -Freq. w/Rev. from Day Meetings/Events	28%	--	--	--	--
Q9d -% Rev. from Day Meetings/Events	2.50	--	--	--	--
Q11 -Freq. having Perm. Full-Time Employees	79%	--	--	--	--
Q11 - # of Perm. Full-Time Employees	5.62	--	--	--	--
Q12 -Freq. Having Seasonal Full-Time Employees	--	69%	44%	69%	63%
Q12 - # of Seasonal Full-Time Employees	--	5.40	2.33	6.30	6.11
Q13 -Freq. Having Part-Time Employees	67%	--	--	--	--
Q13 - Total # of Part-Time Employees	9.17	--	--	--	--
Q14 -Freq. Having Seasonal Part-Time Employees	--	59%	24%	71%	65%
Q14 - # of Seasonal Part-Time Employees	--	6.10	2.25	4.45	5.00

Table 4: Establishments with 49.1 or more rooms

Survey Reference	Research Findings				
Variable	Overall	Winter	Spring	Summer	Fall
# in VT	188.86	188.86	188.86	188.86	188.86
% Open for Business	--	79.4%	76.1%	79.7%	82.6%
Q3b - Rooms Avg/night	--	92.02	91.29	91.78	93.32
Q3c - Guests Avg/night	--	309.59	319.58	305.90	311.50
Q3d - % More Rooms	4%	--	--	--	--
Q3d_more - Avg. Rate of Growth	5.00	--	--	--	--
Q3d - % About the Same	82%	--	--	--	--
Q3d - % Fewer Rooms	14%	--	--	--	--
Q3d_fewer - Avg. Rate of Reduction	11.67	--	--	--	--
Q4 -Rooms Rented	--	1344.83	1040.85	1626.24	1490.64
Q4b -Avg. Length of Stay	--	2.10	1.93	1.97	1.95
Q4c -Avg. Number of Guests	--	2.27	2.06	2.14	2.04
Q5a -% from VT	6.23	--	--	--	--
Q5b -% from Other NE	25.16	--	--	--	--
Q5c -% from NY	17.48	--	--	--	--
Q5d -% from NJ	10.36	--	--	--	--
Q5e -% from PA	3.73	--	--	--	--
Q5f -% from Other States	10.45	--	--	--	--
Q5g -% from Canada	2.05	--	--	--	--
Q5h -% Foreign Guests	2.53	--	--	--	--
Q7 -Freq. w/Rev. from Non-Overnight Guests	82%	--	--	--	--
Q7 -% Rev. from Non-Overnight Guests	10.53	--	--	--	--
Q8 - \$/night	--	\$123.47	\$86.12	\$88.34	\$89.87
Q9a -Freq. w/Rev. from Vac/Leisure Guests	100%	--	--	--	--
Q9a -% Rev. from Vac/Leisure Guests	71.68	--	--	--	--
Q9b -Freq. w/Rev. from Conv/Meeting Guests	50%	--	--	--	--
Q9b -% Rev. from Conv/Meeting Guests	14.00	--	--	--	--
Q9c -Freq. w/Rev. from Other Business Guests	68%	--	--	--	--
Q9c -% Rev. from Other Business Guests	26.67	--	--	--	--
Q9d -Freq. w/Rev. from Day Meetings/Events	36%	--	--	--	--
Q9d -% Rev. from Day Meetings/Events	1.86	--	--	--	--
Q11 -Freq. having Perm. Full-Time Employees	95%	--	--	--	--
Q11 - # of Perm. Full-Time Employees	41.17	--	--	--	--
Q12 -Freq. Having Seasonal Full-Time Employees	--	74%	32%	68%	68%
Q12 - # of Seasonal Full-Time Employees	--	11.85	3.00	9.45	6.45
Q13 -Freq. Having Part-Time Employees	84%	--	--	--	--
Q13 - Total # of Part-Time Employees	26.13	--	--	--	--
Q14 -Freq. Having Seasonal Part-Time Employees	--	71%	47%	76%	71%
Q14 - # of Seasonal Part-Time Employees	--	5.40	2.00	6.17	3.18

VI. Summary of Findings

In 2004, the Vermont Department of Tourism and Marketing commissioned Economic and Policy Resources of Williston, Vermont and Portland Research Group of Portland, Maine to undertake a comprehensive economic assessment that benchmarks the Vermont travel industry. The primary objectives of this benchmark study were to A) Improve understanding of the economic function of the tourism industry in Vermont, B) Assist the industry to direct marketing resources toward the best and most profitable visitor prospects, and C) Facilitate future economic development policy discussions related to the industry.

To this end, Vermont lodging establishment owners were identified as a key supply-side segment which services the tourist economy. Therefore, a web-based survey was conducted to measure the dynamics of the tourist economy from this supply-side perspective.

Research Methodology

Vermont establishment managers were identified by three means: Vermont Department of Tourism and Marketing's Travel Planner database, Vermont Department of Health's records of licensed establishments, Vermont Department of Forestry, Parks, & Recreation campground lists. These three primary sources were cross-referenced and the name and email address of each establishment manager identified.

This process yielded a total of 905 establishment managers. These managers were contacted by email and invited to participate in an online survey. Follow-up telephone and email techniques were used to achieve 16.6% response rate. This provided 150 valid, clean, and complete responses available for analysis permitting overall interpretation of the data at 95% confidence with a margin of error plus or minus 7.6 percentage points.

Research Findings

Three-fifths (61%) of all Vermont establishments have 10 rooms or less, comprising the biggest segment of establishment types. This is followed by 49.1 plus units (14% of all establishments), 10.1 to 20 units (13% of all establishments), and 10.1 to 49 units (12% of all establishments).

Occupancy

Seasonal occupancy varies by establishment type. For those establishments with 1 to 10 rooms, Fall is the strongest season with an average occupancy of 25%. Establishments with 10.1 to 20 rooms are busiest in the Spring with an average occupancy of 42% reported. Those with 20.1 to 49 rooms have the highest occupancy in Winter (34%), and the largest segment (49.1 or more rooms) is busiest in the Summer with an average of 58% occupancy reported.

All establishment types have the lowest levels of reported occupancy in the spring (10%: 1 to 10 rooms; 12%: 10.1 to 20 rooms; 12%: 20.1 to 49 rooms; 37%: 49.1 or more rooms).

Room Rates

The different establishment types manage room rates differently. The smaller establishments tend to have little variation in what is charged for a room night across the seasons. This is strongly

contrasted with the larger establishments who employ a strategy of significantly shifting the room rate depending on the season.

Establishments with 1 to 10 rooms have an annual room rate that varies from a low of \$104.65 in the Spring to a high of \$107.64 average rate in the Fall. This variation (\$2.99) is the smallest of all establishment types. The largest variation (\$37.75) is seen among the establishments with 20.1 to 49 rooms which report an average low of \$78.85 in the Spring and a high of \$116.60 in the Winter.

Source of Guests

Overall, all establishments tend to report the majority of their guest from New England (43%) and other Mid-Atlantic states (41%; i.e., NY, NJ, PA). "Other US States" compose roughly 13% of all visitors to a Vermont establishment, followed by Canadian visitors (2%) and other non-US origins (2%).

Establishment Survey

Final - VDTM Tourism Research

Delivered: 07/22/04 (version 6.5)

Anticipated Schedule

- Send advanced email.....Fri -
07/23/04 (day 1)
- Send email invitation.....Tue -
07/27/04 (day 3)
- Send reminder emailFri -
07/30/04 (day 5)
- Send extension email.....Tue -
08/03/04 (day 8)
- Finish data collection.....Mon -
08/09/04 (day 12)

Advanced Email Text

<From> Bruce Hyde <bruce.hyde@surveylab.net>

SUBJECT TEST.1: Vermont Business Managers - Important tourism survey coming!

SUBJECT TEST.2: Vermont Lodging Managers - Important tourism survey coming!

SUBJECT TEST.3: Our Tourism Industry - Important tourism survey coming!

SUBJECT TEST.4: Vermont Tourism Colleague - Important tourism survey coming!

Friday - July 23, 2004

Dear <First Name or Vermont Tourism Colleague>,

I am writing you to request your assistance with an important research project being conducted by the Vermont Department of Tourism and Marketing. This important survey will provide information to guide the Department's marketing and economic development responsibilities.

The survey will be sent to your email inbox next week. Please reply directly to this email if you have any questions or comments. The survey will take approximately 15 to 20 minutes to complete. As a small token of our appreciation, we will be giving away **three American Express gift cards worth one-hundred dollars each** through a drawing of respondents. Details will be provided in the forthcoming email.

All survey participants will be provided a top-line copy of the results.

In order to ensure the highest level of objectivity and confidentiality, we have asked Economic & Policy Resources along with Portland Research Group for assistance with this project.

Regards,

Bruce Hyde, Commissioner
Vermont Dept. of Tourism & Marketing
c/o Portland Research Group

P.S. We've done our best to send this survey to all and only those businesses that provide lodging to Vermont visitors. If you believe that your organization does not fit this profile, please accept our apologies and [use this link](#) to advise us that we sent this email to you in error.

WHAT SHOULD I DO NEXT?

You do nothing at this time. Look for the official invitation and survey from me next week. It will be helpful to have monthly occupancy and receipts information for calendar year 2003 on hand when you complete the survey. While we won't ask you for specific revenue figures, the survey will ask about how revenue is distributed.

Email Invitation Text

<From> Bruce Hyde <bruce.hyde@surveylab.net>

**SUBJECT: Vermont Tourism Colleague - This is the tourism survey I told you about
(Reply requested before August 3rd)**

Tuesday - July 27, 2004

Dear Vermont Tourism Colleague,

We invite you to participate in a survey about your experiences (past or present) as a travel and tourism business in Vermont.

The survey will take about 15 to 20 minutes to complete. Your participation will greatly help us better serve you and other Vermont travel and tourism businesses. To access the survey, please use the link below.

<http://www.surveylab.net/survey/vdtm>

It will be helpful to have monthly occupancy and receipts information for calendar year 2003 on hand when you complete the survey. While we won't ask you for specific revenue figures, the survey will ask about how revenue is distributed.

All participants will be provided a top-line copy of the results and will be eligible to win one of three American Express gift cards worth one-hundred dollars each. We will notify the awardees by August 16, 2004.

WHY ARE WE DOING THIS?

The Vermont Department of Tourism and Marketing is collecting information about the industry to better understand the impact of travelers on the Vermont economy. The information will be used to assist with targeted marketing activities and develop industry economic policy.

WHAT IS SURVEYLAB?

In order to ensure the highest level of objectivity and confidentiality, the Department has asked Economic & Policy Resources along with Portland Research Group to assist us with this project. SurveyLab is a division of Portland Research Group.

WHAT SHOULD I DO NEXT?

Your feedback is very important! Please use the link below to provide your feedback by completing a brief questionnaire. All responses need to be received by Tuesday, August 3, 2004. Your feedback is greatly appreciated and your responses are totally confidential. Results will be reported as overall averages and individual responses will not be identified.

Regards,

Bruce Hyde, Commissioner
Vermont Dept. of Tourism & Marketing
c/o Portland Research Group

Survey Link: <http://www.surveylab.net/survey/vdtm>

P.S. We've done our best to send this survey to all and only those businesses that provide lodging to Vermont visitors. If you believe that your organization does not fit this profile, please accept our apologies and [use this link](#) to advise us that we sent this email to you in error.

Reminder Email Text

(Note: Sent only to non-respondents)

<From> Bruce Hyde <bruce.hyde@surveylab.net>

SUBJECT: Vermont Tourism Colleague - Just 3 days left (Deadline: 08/03/04 - this Tuesday!)

Friday - July 30, 2004

Dear Vermont Tourism Colleague,

This email is a reminder that the Vermont Department of Tourism & Marketing Lodging Establishment Study will end the data collection phase of the project this coming Tuesday (08/03/04).

If you have not already completed the survey, please use the link below to access the survey online.

<http://www.surveylab.net/survey/vdtm>

It will be helpful to have monthly occupancy and receipts information for calendar year 2003 on hand when you complete the survey. While we won't ask you for specific revenue figures, the survey will ask about how revenue is distributed.

Thank you very much for your time. You can use the "SafeUnsubscribe" link at the bottom of this email to withdraw yourself from any future reminders.

Regards,

Bruce Hyde, Commissioner
Vermont Dept. of Tourism & Marketing
c/o Portland Research Group

Survey Link: <http://www.surveylab.net/survey/vdtm>

P.S. We've done our best to send this survey to all and only those businesses that provide lodging to Vermont visitors. If you believe that your organization does not fit this profile, please accept our apologies and [use this link](#) to advise us that we sent this email to you in error.

Extension Email Text

(Note: Sent only to non-respondents)

<From> Bruce Hyde <bruce.hyde@surveylab.net>

SUBJECT: Vermont Tourism Colleague - Deadline extended to 08/09/04 (this Monday)

Tuesday - August 3, 2004

Dear Vermont Tourism Colleague,

Thank you to those of you who have participated in the Vermont Department of Tourism & Marketing Lodging Establishment Study thus far.

In order to ensure all managers have the chance to participate in this study and because the results are so important to Vermont's industry, we've gained permission to extend the data collection phase of the project by 5 days. The new deadline for your response is Monday, August 9, 2004. We'll be closing the data collection portion of the project at 10:00 AM EST that morning.

If you haven't already, please use the link below to access the online survey and enter your response.

<http://www.surveylab.net/survey/vdtm>

It will be helpful to have monthly occupancy and receipts information for calendar year 2003 on hand when you complete the survey. While we won't ask you for specific revenue figures, the survey will ask about how revenue is distributed.

Remember, all respondents are eligible to win one of three American Express gift cards worth one-hundred dollars each. We will notify awardees by August 16, 2004. **In addition**, you will be provided information on how to access the study results after completing the survey.

Thank you for your time. Please remember that any information you provide will be totally confidential. **This will be the last email we send related to this project.** However, you can still use the "SafeUnsubscribe" link at the bottom of this email to withdraw yourself from the database assigned to this project.

Regards,

Bruce Hyde, Commissioner
Vermont Dept. of Tourism & Marketing
c/o Portland Research Group

Survey Link: <http://www.surveylab.net/survey/vdtm>

P.S. We've done our best to send this survey to all and only those businesses that provide lodging to Vermont visitors. If you believe that your organization does not fit this profile, please accept our

apologies and [use this link](#) to advise us that we sent this email to you in error.

Data Collection Complete Webpage Text

The data collection portion of this project has ended.

Thank you for taking the time to visit this online survey. We completed the data collection phase of the project and are now processing the feedback we received.

If you have any questions regarding this project, please feel free to contact me directly.

Sincerely,

Christopher H. Clegg
Senior Research Manager
Portland Research Group

On behalf of:
Vermont Dept. of Tourism & Marketing

T 207.874.2077 x4
cclegg@portlandresearch.com

PS [Click Here](#) Web-Page

Thank you for helping us ensure the accuracy of this study.

In an effort to include all lodging businesses operating in Vermont, we expect that a small number of non-lodging businesses might have been included in the survey list.

Your email address has been noted and will be removed from our database for any future mailings related to this project within the next 12 hours.

Please help us complete our records audit by answering the following three questions:

What is the name of your business/ organization?

What type of service does your business provide?

Do you believe you should still be included in this study? (Yes | No)

If you have any questions regarding this project, please feel free to contact me directly.

Sincerely,

Christopher H. Clegg
Senior Research Manager
Portland Research Group

On behalf of:
Vermont Dept. of Tourism & Marketing

T 207.874.2077 x4
cclegg@portlandresearch.com

Web Survey

Thank you for taking the time to complete this survey. The following questions address your experiences (past or present) as a travel and tourism related lodging business in Vermont. When responding, please focus on your business during the 2003 calendar year. Please note that we intend this to include January 1, 2003 through to December 31, 2003.

There are two ways you can complete this survey:

- A. You can answer the questions below on-line and submit your results by clicking on the button at the bottom of this webpage, or
- B. You can [click here](#) to download the survey, print it out, complete it off-line, and fax the completed survey toll-free back to us.

Your feedback is greatly appreciated and your responses are totally confidential. **Results will be reported as overall averages and individual responses will not be identified.** It will be helpful to have monthly occupancy and receipts information for calendar year 2003 on hand when you complete the survey. While we won't ask you for specific revenue figures, the survey will ask about how revenue is distributed.

The survey should not take you any longer than 15 to 20 minutes to complete. If you manage more than one lodging related business in Vermont, please answer for all of the businesses combined.

18. **How many** Vermont lodging related businesses did you manage in 2003?

_____ # of lodging businesses managed in 2003

19. Which of the following **best describes** the establishment(s) you manage?

(Please check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Hotel | <input type="checkbox"/> Resort (Cottages and Cabins) |
| <input type="checkbox"/> Motor Hotel or Motel | <input type="checkbox"/> Condos or Apartments |
| <input type="checkbox"/> Bed and Breakfast | <input type="checkbox"/> Guest House |
| <input type="checkbox"/> Country Inn | <input type="checkbox"/> Campground |
| <input type="checkbox"/> Hotel and Cottages | <input type="checkbox"/> Marina |
| <input type="checkbox"/> Resort Hotel | <input type="checkbox"/> Other (Please specify): |

20. Which of the following months were you **open for business** in 2003? *(Please check all that apply.)*

- | | |
|-----------------------------------|------------------------------------|
| <input type="checkbox"/> January | <input type="checkbox"/> July |
| <input type="checkbox"/> February | <input type="checkbox"/> August |
| <input type="checkbox"/> March | <input type="checkbox"/> September |
| <input type="checkbox"/> April | <input type="checkbox"/> October |
| <input type="checkbox"/> May | <input type="checkbox"/> November |
| <input type="checkbox"/> June | <input type="checkbox"/> December |

3b. How many rental rooms (units) would you estimate were **available daily (on average)** at your facility during 2003 as a whole and if different by month?

Note that by "rooms (units)" we mean all rooms, boat slips, and individual campsite locations.

_____ Total number of rooms (units)

If different, please provide an estimated number of rooms (units) by month.

January _____	July _____
February _____	August _____
March _____	September _____
April _____	October _____
May _____	November _____
June _____	December _____

3c. How about the **number of people you can accommodate** in a given night? What is the maximum number of overnight guests you could accommodate per night at your facility during 2003 overall and if different by month?

_____ Number of people you could accommodate in a given night during 2003

If different, please provide an estimated number of overnight guests you could accommodate per night by month.

January _____	July _____
February _____	August _____
March _____	September _____

_____	_____
April _____	October _____
May _____	November _____
June _____	December _____

3d. How does the total number of rooms (units) you had in 2003 **compare** to the total number you had in 2002. Would you say you had...

- More** rooms (units) in 2003 than in 2002 (Please specify: _____ % more)
- About the same** number of rooms (units) in 2003 as in 2002, or
- Fewer** rooms (units) in 2003 than in 2002 (Please specify: _____ % less)

The next set of questions focus on your occupancy rates in 2003.

Please answer the questions below even if you have already participated in the Vermont Department of Tourism and Marketing's Occupancy Survey.

21. What was the **total number of room nights** rented each month in 2003?
(Example: One room rented for five nights equals five room nights)

Please provide an estimate by month

January _____	July _____
February _____	August _____
March _____	September _____
April _____	October _____
May _____	November _____
June _____	December _____

4b. What was the **average length of stay** (in nights) for a typical room (unit) party in 2003 overall and if different by month?

_____ Nights - Average length of stay for a typical room (unit) party during 2003

If different, please provide an estimate by month

January _____	July _____
February _____	August _____

March	_____	September	_____
April	_____	October	_____
May	_____	November	_____
June	_____	December	_____

4c. What about the **average number of guests** per room (unit) in 2003 overall and if different by month?

_____ Average number of guests per room (unit) in 2003

If different, please provide an estimate by month.
--

January	_____	July	_____
February	_____	August	_____
March	_____	September	_____
April	_____	October	_____
May	_____	November	_____
June	_____	December	_____

22. Thinking about **all of your guests** in 2003, what percentage would you say came from each of the following areas:

	%
	guests from
5a. Vermont residents:.....	_____ %
5b. Other New England States (i.e., Maine, New Hampshire, Massachusetts, Rhode Island):	_____ %
5c. New York State (including New York City)?	_____ %
5d. New Jersey?	_____ %
5e. Pennsylvania?	_____ %
5f. Other States?	_____ %
5g. Canada?	_____ %
5h. Foreign guests (percentage - non-US citizens)?	_____ %
Total % should equal	_____ 100%

23. What percent of your total 2003 room (unit) revenue/receipts do you estimate came from long-term room (unit) rentals (i.e., "long-term" is defined as 31 days or more)

_____ % of total 2003 room (unit) revenue/receipts from long-term room rental

6b. What about a **year or longer**? What percent of your total 2003 room (unit) revenue/receipts would you estimate came from long-term room (unit) rentals lasting 1 year or longer?

_____ % of total 2003 room (unit) revenue/receipts from long-term room (unit) rentals lasting 1 year or longer

24. Excluding overnight guests, what percent of your 2003 room (unit) revenue/receipts comes from business meetings, weddings, and other functions?

_____ % of total 2003 room (unit) revenue/receipts from business meetings, weddings, etc.

25. What was your average room (unit) **rate per night** (excluding tax and gratuity) in 2003 overall and if different by month?

\$ _____ average room (unit) rate per night

If different, please provide your 2003 room (unit) rate month.

January _____	July _____
February _____	August _____
March _____	September _____
April _____	October _____
May _____	November _____
June _____	December _____

8b. Do you **automatically add a gratuity** to the rooms (units)? (Yes | No)

8c. **If yes**, what percent do you automatically add?

_____ % gratuity automatically added to the room (unit) rate

26. **Approximately**, what percentage of your 2003 room (unit) revenue/receipts came from:

	% of room rental from:
9a. People on vacation or leisure trips:	_____ %
9b. People at conventions or meetings on the premises	_____ %
9c. People on business other than conventions or meetings on the premises	_____ %
9d. Daily room (unit) revenue/receipts from meetings and other events (not involving an overnight stay).....	_____ %
	should total to 100%

27. Do you have a **restaurant** open to the public? (Yes | No)

10b. **If yes**, what percent of your 2003 meal revenue/receipts is **attributed to overnight** guests?

_____ % **meal** revenue/receipts from overnight guests

This last section is about your full-time and part-time employees.

Note that a full-time employee is someone who works, on average, 35 hours or **more** per week. A part-time employee is someone who works, on average, 34 hours or **less** per week.

28. How many **permanent** (work for you year-round) **full-time** year-round employees on average did your business employ in Vermont in 2003 (including owners and managers)?

_____ # of permanent full-time year-round employees in 2003

29. How many **seasonal** (work full-time for a portion of your year) **full-time** employees on average did your business employ in Vermont in 2003?

Summer: _____ # of seasonal full-time employees in 2003
 Fall: _____ # of seasonal full-time employees in 2003
 Winter: _____ # of seasonal full-time employees in 2003

Spring: _____ # of seasonal full-time employees in 2003

30. How many **total part-time** employees on average did your business employ in Vermont in 2003?

_____ # of part-time employees in 2003

31. How many **seasonal part-time** employees on average did your business employ in Vermont in 2003?

Summer: _____ # of seasonal part-time employees in 2003

Fall: _____ # of seasonal part-time employees in 2003

Winter: _____ # of seasonal part-time employees in 2003

Spring: _____ # of seasonal part-time employees in 2003

32. What percent of your 2003 total **cost of operations is attributable to compensation** for personnel or staff (including employer paid benefits and your own compensation)?

_____ % of 2003 expense for all personnel/staff

33. In what Vermont town/city **is your establishment located?**

34. Finally, for notification of the report's availability, award drawing, and general tracking purposes, **please enter the email address at which you received this survey** invitation.

_____ email address (**at which you received this survey invitation**)

Thank you for taking the time to participate in this important study. Would you be willing to provide the names and telephone numbers of a couple of your full-time or part-time employees for possible inclusion in an in-depth interview about their employment in a tourism related industry.

We will follow-up with a selection of employees with more information about this portion of the study and ask if they are interested in participating.

We will never link their responses to your business and all resulting information will be strictly anonymous. Our hope is to spend 30 or so minutes on the phone

with a cross-section of industry employees to get a better understanding of their experience working in the Vermont tourism industry.

Please enter the names and contact numbers of up to 4 employees below. We'll contact a selection of the people listed by respondents to this survey to tell them more about this opportunity. Any employees included in the in-depth interview portion of this study will be compensated for their time.

1.	_____	_____	_____	_____
	(Employee Name)	(Primary Phone)	(Alt. Phone)	(Avg. Hours/ Week)
2.	_____	_____	_____	_____
	(Employee Name)	(Primary Phone)	(Alt. Phone)	(Avg. Hours/ Week)
3.	_____	_____	_____	_____
	(Employee Name)	(Primary Phone)	(Alt. Phone)	(Avg. Hours/ Week)
4.	_____	_____	_____	_____
	(Employee Name)	(Primary Phone)	(Alt. Phone)	(Avg. Hours/ Week)

Again, thank you for your time!

<SUBMITT BUTTON>

Make sure you click this button (once) when you finish answering the questions above !!!



B. Family and Friends Visitor Survey



Methodology Brief

VDTM 2004 Family & Friends Study

Issued: 12/08/04 (Version 4)

This document is intended to serve as a point of reference to the research methodology used for the VDTM 2004 Family & Friends Study as commissioned by VDTM for the 2004 Tourism Research Project. To this end, this document contains the following 6 sections:

Document Overview

- VII. Sample Frame Definitions.....1
- VIII. Sampling Methodology1
- IX. Questionnaire Items.....2
- X. Data Collection5
- XI. Analysis5
- XII. Summary of Results.....9

VII. Sample Frame Definition

The target population of this research segment is identified as a *Vermont Resident*.

A *Vermont Resident* is any individual over the age of 18 who has lived in Vermont for the past 6 or more consecutive months.

The research for this group will focus on *Vermont Resident* economic activity and *visitors*

A *Visitor* is any person or party who spends the night at the home of a *Vermont Resident* while on a non-routine trip in Vermont.

VIII. Sampling Methodology

Vermont Residents were interviewed by phone. A listed sample was purchased that randomly selected from all known Vermont residents.

IX. Questionnaire Items

The following questions were asked of all survey respondents:

INTRODUCTION

Hello, my name is _____ and I'm calling from Portland Research Group, an independent market research firm. We are conducting a research study on behalf of the Vermont Department of Tourism and Marketing about travel within Vermont in 2003 and any out of state visitors you may have had last year.

Please be assured that we will not try to sell you anything and that your responses will be kept strictly confidential.

(IF RESPONDENT DOES NOT HAVE THE TIME, ASK FOR A BETTER TIME TO CALL)

(IF ASKED ABOUT LENGTH, SAY: "This interview will last no more than 12 minutes".)

SCREENER

- A. Are you eighteen years of age or older? (NO = TERMINATE)
- B. How long have you been a resident of Vermont? (LESS THAN 6 MONTHS = TERMINATE)

MAIN QUESTIONNAIRE

- 1. We'd like to ask you about any non-routine trips to a Vermont destination you might have taken in 2003. By "non-routine", we mean any trips that were outside your normal daily routine. These might have included day or overnight personal or recreational trips, non-routine travel for business, or any leisure travel within the state. This includes any trips you might have made to a second home or camp inside Vermont. Be sure to think about all four seasons last year - Summer, Fall, Winter, and Spring.

Did you take any non-routine trips to a Vermont destination in 2003? (IF NO SKIP TO Q21)

(RANDOMIZE THE ORDER OF QUESTION SETS A, B, AND C. SETS ARE DEFINED AS:
A) Q2 & Q3, B) Q4 & Q5, AND C) Q6 & Q7.)

- 2. I'm going to describe three types of non-routine trips someone might make in Vermont. After I read each description, please tell me if this describes at least one of the non-routine Vermont trips you took in 2003?

The first type is a leisure trip. A leisure trip is the kind of trip you would take to visit friends or relatives, for outdoor recreation, or entertainment and sightseeing. Does this describe at least one of your non-routine 2003 Vermont trips? (IF NO SKIP TO Q4)

- 3. On how many different occasions did you take a Vermont leisure trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)
- 4. The second is personal business trip. A personal business trip is the kind of trip you would take to visit a school, manage a medical need, or attend a family event such as a wedding or funeral. Does this describe at least one of your non-routine 2003 Vermont trips? (IF NO SKIP TO Q6)
- 5. On how many different occasions did you take a Vermont personal business trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)
- 6. The third is a business trip. A business trip is the kind of trip you would take to attend a convention or seminar, or attend a business meeting. Does this describe at least one of your non-routine 2003 Vermont trips? (IF NO SKIP TO Q8)
- 7. On how many different occasions did you take a Vermont business trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

8. How many of the trips you mentioned above were Vermont daytrips where you left and returned home the same day and how many were overnight trips where you spent the night somewhere other than your home during the trip?

(IF Q8A IS GREATER THAN ZERO, CONTINUE, ELSE SKIP TO Q13)

9. What was the average number of people in your party for a typical non-routine Vermont daytrip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

10. What would you estimate was the total vehicle miles for a typical non-routine Vermont daytrip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

11. What would you estimate you spent during a typical non-routine Vermont daytrip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

12. I'm going to read you a list of different areas where someone might spend money during a non-routine Vermont daytrip. For each of the categories below, please provide your best estimate for what you spent on a typical daytrip in 2003.

Your responses do not have to be exact - a "best estimate" will help greatly. Let's start with... (READ LIST. RANDOMIZE ORDER.)

Q13: Spend

- a. Prepared meals and beverages such as from a restaurant, snack bar, or deli - including alcoholic beverages \$ _____
- b. Grocery food items purchased at a super market, grocery or convenience store - including alcoholic beverages \$ _____
- c. Shopping - purchases such as sporting equipment, clothes, furniture, toiletries \$ _____
- d. Gas for vehicle - including a rental car \$ _____
- e. Amounts spent on transportation other than for a personal vehicle - for example vehicle rentals, bus or taxi fares. \$ _____

(IF Q8B IS GREATER THAN ZERO, CONTINUE, ELSE SKIP TO Q21)

13. What was the average number of people in your party for a typical non-routine Vermont overnight in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

14. What would you estimate was the total vehicle miles for a typical non-routine Vermont overnight in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

15. Did you stay with family or friends during any of your non-routine Vermont overnight trips in 2003? (IF NO SKIP TO Q17)

16. What was the average number of nights you stayed with a friend or member of your family during a typical non-routine Vermont overnight trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

17. Did you stay at a commercial lodging establishment such as a hotel, inn, or bed and breakfast during any of your non-routine Vermont overnight trips in 2003? (IF NO SKIP TO Q19)

18. What is the average number of nights you stayed at a commercial lodging establishment during a typical non-routine Vermont overnight trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)
19. What would you estimate you spent during a typical non-routine Vermont overnight trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)
20. I'm going to read you a list of different areas where someone might spend money during a non-routine Vermont overnight trip. For each of the categories below, please provide your best estimate for what you spent on a typical overnight trip in 2003.

Your responses do not have to be exact - a "best estimate" will help greatly. Let's start with... (READ LIST. RANDOMIZE ORDER.)

- | | |
|--|-------------------|
| | Q23: Spend |
| a. Prepared meals and beverages such as from a restaurant, snack bar, or deli - including alcoholic beverages | \$ _____ |
| b. Grocery food items purchased at a super market, grocery or convenience store - including alcoholic beverages | \$ _____ |
| c. Shopping - purchases such as sporting equipment, clothes, furniture, toiletries | \$ _____ |
| d. Gas for vehicle - including a rental car | \$ _____ |
| e. Amounts spent on transportation other than for a personal vehicle - for example vehicle rentals, bus or taxi fares. | \$ _____ |
| f. Commercial lodging such as a hotel, motel, bed and breakfast, condominium, cabin, campground, etc. | \$ _____ |
21. Next we'd like to ask you about your own family and friends and how frequently, if at all, they stay the night at your home while on a non-routine trip. Did you have any non-routine overnight guests stay at your home in 2003? (IF NO SKIP TO Q29)
 22. On how many occasions did you have an overnight travel party stay at your home in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)
 23. On average, how many people are in a typical travel party that stays with you? (IF NOT SURE, TRY TO GET BEST ESTIMATE)
 24. On average, how many nights did a typical party stay with you during their trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)
 25. On average, did Vermont tend to be the final destination for a typical overnight guest in 2003 or was your overnight guests more likely to be traveling through to a final destination outside Vermont?
 26. The rest of the questions are for classification purposes only. Which of the following categories best describes your age? (READ LIST)
 27. What is your marital status? Would you say... (READ LIST)? (ACCEPT ONE RESPONSE)
 28. Do you have any children under the age of 18 living in your household? (IF NO SKIP TO Q30)
 29. Do you have children in your household who are... READ LIST?

	<u>YES</u>	<u>NO</u>	<u>REFUSED</u>
a. Under 6 years old	1	2	8
b. Between 6 and 12 years old	1	2	8
c. Between 13 and 18 years old	1	2	8

30. What is the highest level of education you have completed? (DO NOT READ LIST)

31. Into which of the following broad categories did your total 2003 household income from all sources fall? Would you say... (READ LIST)?

32. Gender (RECORD BY OBSERVATION)

Those are all the questions I have. Thank you for participating. I just need to verify your FIRST NAME, TELEPHONE NUMBER, CITY/TOWN, STATE, ZIP CODE. Again, thank you.

TERMINATE

X. Data Collection

Data collection was conducted from August 25, 2004 to September 8, 2004. A total of 803 telephone interviews were completed. The average interview length was 6.5 minutes. Nine-tenths (89%) of the people contacted were qualified for the research (i.e., over the age of 18 and a Vermont resident for 6 months or longer). Three-fifths (57%) of the qualified respondents agreed to participate in the research.

Respondents were split almost evenly between men (45%) and women (55%). Over half of all respondents (57%) reported that they had taken a non-routine trip in Vermont in 2003. Three-fifths of respondents (58%) reported hosting at least one overnight guest who was on a non-routine trip in 2003.

XI. Analysis

The data was organized into 2 primary segments for analysis:

1. Those who took a leisure trip in Vermont in 2003 and only stayed with family and friends
2. Those who took a leisure trip in Vermont in 2003 and only stayed at commercial lodging

All variables were reported as a direct percentage or as an average depending on the nature of the variable. The Inter-Quartile Range was calculated and any data points greater than 1.5I*QR from Q₃ were removed as outliers. All zero responses were used as a base calculation for frequency (i.e., 95% reported spending money on groceries) and the average score was then based on all responses greater than zero. Average scores were reported as median, mean, mode, and standard deviation. Confidence intervals were calculated for each average score at the 95% confidence level.

The following pages provide an overview of the raw research findings overall (**Table 1**) and by the two primary segments (**Tables 2 and 3**) outlined above.

Table 1: Overall Non-Routine Trips Activity

Survey Reference		Research Findings (Avg. of Averages)						
ID	Variable (Note: DT = Daytrip(s); OT = Overnight Trip(s))	n	Freq.	Med.	Mean	Mode	StDev	Conf.
Q.1	Non-routine Trips	803	57%	--	--	--	--	--
Q.2	Gone on Leisure Trips	458	95%	--	--	--	--	--
Q.3	# of Leisure Trips	395	--	5	7.47	2	6.32	0.62
Q.4	Gone on Personal Business Trips	458	48%	--	--	--	--	--
Q.5	# of Personal Business Trips	199	--	3	4.51	2	3.77	0.52
Q.6	Gone on Business Trips	458	33%	--	--	--	--	--
Q.7	# of Business Trips	126	--	2	2.90	2	1.67	0.29
Q.8a_1	Took DT (calculated)	458	89%	--	--	--	--	--
Q.8a_2	# of DT	375	--	7	10.05	2	9.31	0.94
Q.9	Avg # of People in Party for a DT	371	--	2	2.34	2	1.6	0.16
Q.10	Total Vehicle Miles for an Avg. DT	357	--	80	92.33	100	65.92	6.84
Q.11_1	Spent \$ During Typical DT (calculated)	397	97%	--	--	--	--	--
Q.11_2	Amount Spent During Typical DT	351	--	30	46.79	10	43.52	4.55
Q.12a_1	Spent \$ On Meals and Beverages (DT) (calculated)	406	88%	--	--	--	--	--
Q.12a_2	Amount Spent on Meals and Beverages (DT)	326	--	20	29.24	10	25.91	2.81
Q.12b_1	Spent \$ On Grocery Food (DT) (calculated)	400	69%	--	--	--	--	--
Q.12b_2	Amount Spent on Grocery Food (DT)	246	--	10	13.51	10	13.17	1.65
Q.12c_1	Spent \$ On Shopping (DT) (calculated)	395	58%	--	--	--	--	--
Q.12c_2	Amount Spent On Shopping (DT)	205	--	20	33.77	5	41.06	5.62
Q.12d_1	Spent \$ On Gas (DT) (calculated)	395	97%	--	--	--	--	--
Q.12d_2	Amount Spent On Gas (DT)	351	--	15	15.74	20	11.86	1.24
Q.12e_1	Spent \$ On Other Transportation (DT) (calculated)	404	5%	--	--	--	--	--
Q.12e_2	Amount Spent On Other Transportation (DT)	20	--	30	33.29	20	16.99	7.45
Q.8b_1	Took OTs (calculated)	458	54%	--	--	--	--	--
Q.8b_2	# of OTs	227	--	3	3.63	1	2.66	0.35
Q.13	Avg # of People in Party for an OT	223	--	2	2.43	2	1.42	0.19
Q.14	Total Vehicle Miles for an Avg. OT	231	--	100	123.49	100	87.71	11.31
Q.15	Stayed with Family/Friends During any OTs	246	52%	--	--	--	--	--
Q.16	Avg. # of Nights Staying with Family/Friends on OTs	112	--	1	1.66	1	0.94	0.17
Q.17	Stayed at Commercial Lodging Est. During any OTs	246	47%	--	--	--	--	--
Q.18	Avg. # of Nights Staying at Commercial Lodging Est. on OTs	108	--	2	1.75	1	0.96	0.18
Q.19_1	Spent \$ During Typical OT (calculated)	238	96%	--	--	--	--	--
Q.19_2	Amount Spent During Typical OT	207	--	75	108.99	100	106.02	14.44
Q.20a_1	Spent \$ On Meals and Beverages (OT) (calculated)	240	83%	--	--	--	--	--
Q.20a_2	Amount Spent on Meals and Beverages (OT)	179	--	25	40.87	20	39.57	5.80
Q.20b_1	Spent \$ On Grocery Food (OT) (calculated)	243	71%	--	--	--	--	--
Q.20b_2	Amount Spent on Grocery Food (OT)	157	--	20	28.73	10	23.92	3.74
Q.20c_1	Spent \$ On Shopping (OT) (calculated)	245	59%	--	--	--	--	--
Q.20c_2	Amount Spent On Shopping (OT)	127	--	25	39.72	10	40.81	7.10
Q.20d_1	Spent \$ On Gas (OT) (calculated)	243	99%	--	--	--	--	--
Q.20d_2	Amount Spent On Gas (OT)	221	--	20	25.74	20	16.04	2.11
Q.20e_1	Spent \$ On Other Transportation (OT) (calculated)	246	7%	--	--	--	--	--
Q.20e_2	Amount Spent On Other Transportation (OT)	15	--	25	31.56	25	14.69	7.43
Q.20f_1	Spent \$ On Commercial Lodging (OT) (calculated)	244	56%	--	--	--	--	--
Q.20f_2	Amount Spent On Commercial Lodging (OT)	125	--	72.5	80.02	100	62.67	10.99
Q.21	Have Any Overnight Guests Stay at Home	792	58%	--	--	--	--	--
Q.22	# of Occasions having an Overnight Guest Stay at Home	414	--	4	4.51	2	3	0.29
Q.23	Avg. # of People in Party that Stays With You	422	--	2	2.34	2	1.16	0.11
Q.24	Avg. # of Nights Party Stays With You	413	--	2	2.56	2	1.69	0.16
Q.25	VT was Final Destination for Guest	461	90%	--	--	--	--	--

Table 2: Non-Routine Trip Frequency and Daytrips

Survey Reference		<u>Stayed with Friend or Family Member Only</u>							<u>Stayed at Commercial Lodging Only</u>						
		Research Findings (Avg. of Averages)							Research Findings (Avg. of Averages)						
Qx	Variable (Note: DT = Daytrip(s); OT = Overnight Trip(s))	n	Freq.	Med.	Mean	Mode	StDev	Conf.	n	Freq.	Med.	Mean	Mode	StDev	Conf.
Non-Routine Trip Frequency															
Q.1	Non-routine Trips	84	100%	--	--	--	--	--	97	100%	--	--	--	--	--
Q.2	Gone on Leisure Trips	97	99%	--	--	--	--	--	84	90%	--	--	--	--	--
Q.3	# of Leisure Trips	90	--	6	9.13	4	7.74	1.60	70	--	5	6.93	2	5.69	1.33
Q.4	Gone on Personal Business Trips	97	46%	--	--	--	--	--	84	56%	--	--	--	--	--
Q.5	# of Personal Business Trips	38	--	3	3.66	1	2.82	0.90	42	--	3	3.50	1	2.64	0.80
Q.6	Gone on Business Trips	97	30%	--	--	--	--	--	84	40%	--	--	--	--	--
Q.7	# of Business Trips	25	--	3	2.80	1	1.53	0.60	31	--	3	3.77	1	3.12	1.10
Daytrips															
Q.8a_1	Took DTs (calculated)	97	76%	--	--	--	--	--	84	83%	--	--	--	--	--
Q.8a_2	# of DTs	68	--	7	10.00	3	8.49	2.02	63	--	6	7.89	1	6.59	1.63
Q.9	Avg # of People in Party for a DT	69	--	2	2.34	2	1.07	0.25	64	--	2	2.35	2	0.97	0.24
Q.10	Total Vehicle Miles for an Avg. DT	64	--	60	77.44	50	60.28	14.77	59	--	100	104.66	100	80.57	20.56
Q.11_1	Spent \$ During Typical DT (calculated)	72	97%	--	--	--	--	--	67	100%	--	--	--	--	--
Q.11_2	Amount Spent During Typical DT	64	--	35	45.91	10	38.4	9.41	62	--	50	60.00	20	53.00	13.19
Q.12a_1	Spent \$ On Meals and Beverages (DT) (calculated)	74	84%	--	--	--	--	--	70	94%	--	--	--	--	--
Q.12a_2	Amount Spent on Meals and Beverages (DT)	57	--	20	30.11	10	29.76	7.73	60	--	20	35.57	10	30.97	7.84
Q.12b_1	Spent \$ On Grocery Food (DT) (calculated)	74	80%	--	--	--	--	--	66	70%	--	--	--	--	--
Q.12b_2	Amount Spent on Grocery Food (DT)	53	--	9	14.41	5	16.22	4.37	41	--	5	13.68	5	15.96	4.89
Q.12c_1	Spent \$ On Shopping (DT) (calculated)	73	58%	--	--	--	--	--	68	72%	--	--	--	--	--
Q.12c_2	Amount Spent On Shopping (DT)	37	--	25	30.34	10	32.67	10.53	43	--	40	50.31	50	44.33	13.25
Q.12d_1	Spent \$ On Gas (DT) (calculated)	72	99%	--	--	--	--	--	67	100%	--	--	--	--	--
Q.12d_2	Amount Spent On Gas (DT)	65	--	20	18.34	20	12.31	2.99	61	--	15	17.96	20	13.65	3.43
Q.12e_1	Spent \$ On Other Transportation (DT) (calculated)	73	5%	--	--	--	--	--	70	4%	--	--	--	--	--
Q.12e_2	Amount Spent On Other Transportation (DT)	4	--	50	43.86	50	11.54	11.31	3	--	50	40.00	50	16.58	18.76

Table 3: Overnight Trips and Personal Guests

Survey Reference		<u>Stayed with Friend or Family Member Only</u>							<u>Stayed at Commercial Lodging Only</u>						
		Research Findings (Avg. of Averages)							Research Findings (Avg. of Averages)						
Qx	Variable (Note: DT = Daytrip(s); OT = Overnight Trip(s))	n	Freq.	Med.	Mean	Mode	StDev	Conf.	n	Freq.	Med.	Mean	Mode	StDev	Conf.
Overnight Trips															
Q.8b_1	Took OT (calculated)	97	100%	--	--	--	--	--	84	100%	--	--	--	--	--
Q.8b_2	# of OT	84	--	3	3.45	1	2.49	0.53	81	--	3	3.07	1	2.22	0.48
Q.13	Avg # of People in Party for an OT	85	--	2	2.28	2	1.46	0.31	78	--	2	2.60	2	1.71	0.38
Q.14	Total Vehicle Miles for an Avg. OT	89	--	100	115.99	100	76.4	15.87	78	--	100	138.09	100	74.20	16.47
Q.15	Stayed with Family/Friends During any OT	97	100%	--	--	--	--	--	84	0%	--	--	--	--	--
Q.16	Avg. # of Nights Staying with Family/Friends on OT	83	--	2	1.71	1	0.86	0.19	0	--	0	0.00	0	0.00	--
Q.17	Stayed at Commercial Lodging Est. During any OT	97	0%	--	--	--	--	--	84	100%	--	--	--	--	--
Q.18	Avg. # of Nights Staying at Comm. Lodging Est. on OT	0	--	0	0.00	0	0	--	79	--	1	1.67	1	0.97	0.21
Q.19_1	Spent \$ During Typical OT (calculated)	94	96%	--	--	--	--	--	81	99%	--	--	--	--	--
Q.19_2	Amount Spent During Typical OT	75	--	40	59.49	30	60.34	13.66	73	--	150	167.48	200	121.90	27.96
Q.20a_1	Spent \$ On Meals and Beverages (OT) (calculated)	95	72%	--	--	--	--	--	81	95%	--	--	--	--	--
Q.20a_2	Amount Spent on Meals and Beverages (OT)	61	--	20	28.57	20	25.44	6.38	71	--	50	60.92	50	50.16	11.67
Q.20b_1	Spent \$ On Grocery Food (OT) (calculated)	97	75%	--	--	--	--	--	82	59%	--	--	--	--	--
Q.20b_2	Amount Spent on Grocery Food (OT)	67	--	20	27.52	10	22.73	5.44	43	--	20	21.79	10	14.60	4.36
Q.20c_1	Spent \$ On Shopping (OT) (calculated)	97	56%	--	--	--	--	--	84	63%	--	--	--	--	--
Q.20c_2	Amount Spent On Shopping (OT)	44	--	25	33.02	20	31.67	9.36	48	--	50	56.65	50	51.06	14.44
Q.20d_1	Spent \$ On Gas (OT) (calculated)	97	100%	--	--	--	--	--	82	98%	--	--	--	--	--
Q.20d_2	Amount Spent On Gas (OT)	91	--	25	24.08	20	10.5	2.16	72	--	20	23.00	20	14.25	3.29
Q.20e_1	Spent \$ On Other Transportation (OT) (calculated)	97	8%	--	--	--	--	--	84	5%	--	--	--	--	--
Q.20e_2	Amount Spent On Other Transportation (OT)	7	--	35	43.82	30	23.15	17.15	4	--	25	29.97	25	9.80	9.60
Q.20f_1	Spent \$ On Commercial Lodging (OT) (calculated)	97	15%	--	--	--	--	--	82	93%	--	--	--	--	--
Q.20f_2	Amount Spent On Commercial Lodging (OT)	15	--	25	32.11	20	21.63	10.95	74	--	100	107.30	100	65.57	14.94
Personal Guests															
Q.21	Have Any Overnight Guests Stay at Home	96	74%	--	--	--	--	--	84	76%	--	--	--	--	--
Q.22	# of Occasions having an Overnight Guest Stay at Home	65	--	5	5.88	4	3.68	0.89	61	--	5	6.66	10	5.17	1.30
Q.23	Avg. # of People in Party that Stays With You	67	--	2	2.47	2	1.3	0.31	61	--	2	2.61	2	1.39	0.35
Q.24	Avg. # of Nights Party Stays With You	64	--	2	2.17	2	1	0.25	61	--	2	2.79	2	3.22	0.81
Q.25	VT was Final Destination for Guest	71	92%	--	--	--	--	--	64	91%	--	--	--	--	--

XII. Summary of Results

In 2004, the Vermont Department of Tourism and Marketing commissioned Economic and Policy Resources of Williston, Vermont and Portland Research Group of Portland, Maine to undertake a comprehensive economic assessment that benchmarks the Vermont travel industry. The primary objectives of this benchmark study were to A) Improve understanding of the economic function of the tourism industry in Vermont, B) Assist the industry to direct marketing resources toward the best and most profitable visitor prospects, and C) Facilitate future economic development policy discussions related to the industry.

To this end, domestic non-routine resident activates were identified as contributing to the Vermont tourism economy. Therefore, a telephone interview was conducted to measure the dynamics and extent of this economic contribution.

Research Methodology

Vermont residents were interviewed by phone. A listed sample was purchased that randomly selected from all known Vermont residents. The telephone interview targeted any individual over the age of 18 who had lived in Vermont for the past 6 or more consecutive months. The focus of the interview also covered *Visitor* activity. A *Visitor* was defined as any person or party who spends the night at the home of a Vermont resident or commercial lodging establishment while on a non-routine trip in Vermont. A visitor could have their primary residence in or outside of Vermont. Data collection was conducted from August 25, 2004 to September 8, 2004. A total of 803 telephone interviews were completed. Respondents were split almost evenly between men (45%) and women (55%).

Research Findings

Over half of all respondents (57%) reported that they had taken a non-routine trip in Vermont in 2003. The majority of non-routine trips were leisure trips (95%) with an average reporting 7.5 trips taken. Half (48%) of all respondents reported at least one personal business trip with an average reporting 4.5 personal business trips taken in 2003. One-third (33%) reported having taken at least one business trip in 2003 (average 2.9 trips taken).

Daytrips

Nine-tenths (89%) of the “non-routine trippers” surveyed reported taking at least one non-routine daytrip with an average reporting 10.1 trips in 2003. The typical trip included 2.3 people and averaged a total of 92.3 vehicle miles. Almost all

respondents (97%) reported spending money during a typical day trip. The most expensive activity was "Shopping" with \$33.77 spent on a typical trip. This was closely followed by "Other Transportation" (\$33.29), "Meals and Beverages" (\$29.24), "Gas" (\$15.74), and "Grocery Foods" (\$13.51).

Overnight Trips

Slightly more than half (54%) reported taking at least one non-routine overnight trip with an average reporting 3.6 overnight trips in 2003. The typical overnight trip included 2.4 people and averaged a total of 123.5 vehicle miles. Half of all overnight trips (52%) involved a stay with family or friends. When staying with family or friends, the party tended to stay an average of 1.7 nights. Slightly less than half (47%) of all overnight trips involved a stay at a commercial lodge where the party stayed an average 1.8 nights.

As with daytrips, almost all respondents (96%) reported spending money during a typical overnight trip in 2003. The most expensive activity was "Commercial Lodging" (\$80.02) followed by "Meals and Beverages" (\$40.87), "Shopping" (\$39.72), "Other Transportation" (\$31.56), "Grocery Food" (\$28.73), and "Gas" (\$25.74).

Personal Guests

Three-fifths of respondents (58%) reported hosting at least one overnight guest who was on a non-routine trip in 2003. The typical respondent reported an average of 4.5 occasions where one or more overnight guests stayed at their home. The visiting party typically had 2.3 people staying for an average of 2.6 nights. Nine-tenths (90%) of respondents reported that Vermont was the final destination of their guests.

Family and Friend Visitor Telephone Survey

VDTM Tourism Research

(Ninth Version - August 19, 2004)

Final

INTRODUCTION

Hello, my name is _____ and I'm calling from Portland Research Group, an independent market research firm. We are conducting a research study on behalf of the Vermont Department of Tourism and Marketing about travel within Vermont in 2003 and any out of state visitors you may have had last year. Please be assured that we will not try to sell you anything and that your responses will be kept strictly confidential.

(IF RESPONDENT DOES NOT HAVE THE TIME, ASK FOR A BETTER TIME TO CALL)

(IF ASKED ABOUT LENGTH, SAY: "This interview will last no more than 12 minutes".)

SCREENER

C. Are you eighteen years of age or older?

YES	1	(CONTINUE)
NO	2	(ASK TO SPEAK TO SOMEONE IN HOUSEHOLD WHO IS 18 OR OLDER. REPEAT INTRO.)
REFUSED	8	(THANK AND TERMINATE)

D. How long have you been a resident of Vermont?

LESS THAN SIX MONTHS	1	(THANK AND TERMINATE)
SIX MONTHS OR MORE	2	(CONTINUE)
REFUSED	8	(THANK AND TERMINATE)

MAIN QUESTIONNAIRE

SECTION I : TYPE OF TRIP

33. We'd like to ask you about any non-routine trips to a Vermont destination you might have taken in 2003. By "non-routine", we mean any trips that were outside your normal daily routine. These might have included day or overnight personal or recreational trips, non-routine travel for business, or any leisure travel within the state. This includes any trips you might have made to a second home or camp inside Vermont. Be sure to think about all four seasons last year - Summer, Fall, Winter, and Spring.

Did you take any non-routine trips to a Vermont destination in 2003?

YES	1	(CONTINUE)
NO	2	(SKIP TO Q21)
REFUSED	8	(THANK AND TERMINATE)
DON'T KNOW	9	(THANK AND TERMINATE)

RANDOMIZE THE ORDER OF QUESTION SETS A, B, AND C. SETS ARE DEFINED AS: A) Q2 & Q3, B) Q4 & Q5, AND C) Q6 & Q7.

34. I'm going to describe three types of non-routine trips someone might make in Vermont. After I read each description, please tell me if this describes at least one of the non-routine Vermont trips you took in 2003?

The first type is a leisure trip. A leisure trip is the kind of trip you would take to visit friends or relatives, for outdoor recreation, or entertainment and sightseeing. Does this describe at least one of your non-routine 2003 Vermont trips?

YES	1	(CONTINUE)
NO	2	(SKIP TO Q4)
REFUSED	8	(THANK AND TERMINATE)
DON'T KNOW	9	(THANK AND TERMINATE)

35. On how many different occasions did you take a Vermont leisure trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

_____ TRIPS
REFUSED 998 (THANK AND TERMINATE)
DON'T KNOW 999 (THANK AND TERMINATE)

36. The second is personal business trip. A personal business trip is the kind of trip you would take to visit a school, manage a medical need, or attend a family event such as a wedding or funeral. Does this describe at least one of your non-routine 2003 Vermont trips?

YES 1 (CONTINUE)
NO 2 (SKIP TO Q6)

REFUSED 8 (THANK AND TERMINATE)
DON'T KNOW 9 (THANK AND TERMINATE)

37. On how many different occasions did you take a Vermont personal business trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

_____ TRIPS
REFUSED 998 (THANK AND TERMINATE)
DON'T KNOW 999 (THANK AND TERMINATE)

38. The third is a business trip. A business trip is the kind of trip you would take to attend a convention or seminar, or attend a business meeting. Does this describe at least one of your non-routine 2003 Vermont trips?

YES 1 (CONTINUE)
NO 2 (SKIP TO Q8)

REFUSED 8 (THANK AND TERMINATE)
DON'T KNOW 9 (THANK AND TERMINATE)

44. I'm going to read you a list of different areas where someone might spend money during a non-routine Vermont daytrip. For each of the categories below, please provide your best estimate for what you spent on a typical daytrip in 2003.

Your responses do not have to be exact – a “best estimate” will help greatly. Let’s start with... (READ LIST. RANDOMIZE ORDER.)

- | | |
|--|-------------------|
| | <u>Q13: SPEND</u> |
| f. Prepared meals and beverages such as from a restaurant, snack bar, or deli – including alcoholic beverages | \$ _____ |
| g. Grocery food items purchased at a super market, grocery or convenience store – including alcoholic beverages | \$ _____ |
| h. Shopping – purchases such as sporting equipment, clothes, furniture, toiletries | \$ _____ |
| i. Gas for vehicle – including a rental car | \$ _____ |
| j. Amounts spent on transportation other than for a personal vehicle – for example vehicle rentals, bus or taxi fares. | \$ _____ |

SECTION III: OVERNIGHT TRIPS

IF Q8B IS GREATER THAN ZERO, CONTINUE, ELSE SKIP TO Q21

45. What was the average number of people in your party for a typical non-routine Vermont overnight in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

_____ PEOPLE

REFUSED	998	(CONTINUE)
DON'T KNOW	999	(CONTINUE)

46. What would you estimate was the total vehicle miles for a typical non-routine Vermont overnight in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

_____ MILES

REFUSED	998	(CONTINUE)
DON'T KNOW	999	(CONTINUE)

47. Did you stay with family or friends during any of your non-routine Vermont overnight trips in 2003?

YES	1	(CONTINUE)
NO	2	(SKIP TO Q17)
REFUSED	8	(CONTINUE)
DON'T KNOW	9	(CONTINUE)

48. What was the average number of nights you stayed with a friend or member of your family during a typical non-routine Vermont overnight trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

_____ NIGHTS		
REFUSED	998	(CONTINUE)
DON'T KNOW	999	(CONTINUE)

49. Did you stay at a commercial lodging establishment such as a hotel, inn, or bed and breakfast during any of your non-routine Vermont overnight trips in 2003?

YES	1	(CONTINUE)
NO	2	(SKIP TO Q19)
REFUSED	8	(CONTINUE)
DON'T KNOW	9	(CONTINUE)

50. What is the average number of nights you stayed at a commercial lodging establishment during a typical non-routine Vermont overnight trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

_____ NIGHTS		
REFUSED	998	(CONTINUE)
DON'T KNOW	999	(CONTINUE)

51. What would you estimate you spent during a typical non-routine Vermont overnight trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

_____ DOLLARS		
REFUSED	998	(CONTINUE)
DON'T KNOW	999	(CONTINUE)

52. I'm going to read you a list of different areas where someone might spend money during a non-routine Vermont overnight trip. For each of the categories below, please provide your best estimate for what you spent on a typical overnight trip in 2003.

Your responses do not have to be exact – a “best estimate” will help greatly. Let’s start with... (READ LIST. RANDOMIZE ORDER.)

- | | <u>Q23: SPEND</u> |
|--|-------------------|
| g. Prepared meals and beverages such as from a restaurant, snack bar, or deli – including alcoholic beverages | \$ _____ |
| h. Grocery food items purchased at a super market, grocery or convenience store – including alcoholic beverages | \$ _____ |
| i. Shopping – purchases such as sporting equipment, clothes, furniture, toiletries | \$ _____ |
| j. Gas for vehicle – including a rental car | \$ _____ |
| k. Amounts spent on transportation other than for a personal vehicle – for example vehicle rentals, bus or taxi fares. | \$ _____ |
| l. Commercial lodging such as a hotel, motel, bed and breakfast, condominium, cabin, campground, etc. | \$ _____ |

SECTION IV: VISITORS TO VERMONT STAYING WITH FAMILY AND FRIENDS

53. Next we'd like to ask you about your own family and friends and how frequently, if at all, they stay the night at your home while on a non-routine trip.

Did you have any non-routine overnight guests stay at your home in 2003?

- | | | |
|------------|---|-----------------------|
| YES | 1 | (CONTINUE) |
| NO | 2 | (SKIP TO Q29) |
| REFUSED | 8 | (THANK AND TERMINATE) |
| DON'T KNOW | 9 | (THANK AND TERMINATE) |

54. On how many occasions did you have an overnight travel party stay at your home in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

- | | | |
|-----------------|-----|------------|
| _____ OCCASIONS | | |
| REFUSED | 998 | (CONTINUE) |
| DON'T KNOW | 999 | (CONTINUE) |

55. On average, how many people are in a typical travel party that stays with you? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

_____ PEOPLE
REFUSED 998 (CONTINUE)
DON'T KNOW 999 (CONTINUE)

56. On average, how many nights did a typical party stay with you during their trip in 2003? (IF NOT SURE, TRY TO GET BEST ESTIMATE)

_____ NIGHTS
REFUSED 998 (CONTINUE)
DON'T KNOW 999 (CONTINUE)

57. On average, did Vermont tend to be the final destination for a typical overnight guest in 2003 or was your overnight guests more likely to be traveling through to a final destination outside Vermont?

FINAL DESTINATION 1 (CONTINUE)
PASSING THROUGH 2 (CONTINUE)

REFUSED 8 (CONTINUE)
DON'T KNOW 9 (CONTINUE)

62. What is the highest level of education you have completed? (DO NOT READ LIST)

- | | |
|---|---|
| LESS THAN HIGH SCHOOL (UP TO 8 TH GRADE) | 1 |
| HIGH SCHOOL | 2 |
| SOME COLLEGE | 3 |
| TWO-YEAR/TECHNICAL DEGREE | 4 |
| FOUR-YEAR COLLEGE DEGREE (BA/BS) | 5 |
| SOME GRADUATE SCHOOL | 6 |
| GRADUATE DEGREE | 7 |
| REFUSED | 8 |

63. Into which of the following broad categories did your total 2003 household income from all sources fall? Would you say... (READ LIST)?

- | | |
|-------------------------------------|---|
| Under \$20,000, | 1 |
| \$20,000 to less than \$35,000, | 2 |
| \$35,000 to less than \$50,000, | 3 |
| \$50,000 to less than \$75,000, | 4 |
| \$75,000 to less than \$100,000, or | 5 |
| \$100,000 or more | 6 |
| REFUSED | 8 |
| DON'T KNOW | 9 |

64. Gender (RECORD BY OBSERVATION)

- | | |
|--------|---|
| MALE | 1 |
| FEMALE | 2 |

Those are all the questions I have. Thank you for participating. I just need to verify your:

FIRST NAME: _____

TELEPHONE NUMBER: (_____) _____

CITY/TOWN _____

STATE: _____ ZIP CODE: _____

C. Vermont Second Home Owners Survey

Methodology Brief

VDTM 2004 Second Home Study
 Issued: 12.10.04 (version 5 - Final)

This document is intended to serve as a point of reference to the research methodology used for the VDTM 2004 Second Home Owner Study as commissioned by VDTM for the 2004 Tourism Research Project. To this end, this document contains the following 6 sections:

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XIII. Sample Frame Definition

The target population of this research segment is identified as a *Second Home Owner*.

A Second Home Owner is any individual over the age of 18 who owns a residence in Vermont but did not use that residence for more than 6 months in 2003. A *Second Home Owner* can be a Vermont resident (lives elsewhere in the state) or an out-of-state resident.

XIV. Sampling Methodology

Second Home Owners were identified by town clerks and delivered as electronic and paper-based lists. These lists were then organized into common fields and prepared for data collection. Not all town clerks or *Second Home Owners* were contacted.

The following sampling protocol was designed to maximize the sample accuracy within recognized budget constraints. While randomly selecting from all 255 Vermont towns would be the ideal and most accurate method, the manual sampling process required for sample selection does not make this a viable option. Therefore, a multi-stage cluster sampling technique used used.

Step 1: City Clusters

Two cities were drawn from each of the 14 Vermont Counties so as to maximize the geographic representation of the sample. Two towns were randomly selected per county where each town had a probability of being selected proportional to the number of second homes located within the county.

This was done by sort ordering the cities by population of second homes for each county. A second field was created to calculate the incremental number of second homes as one moves down the list. A table of random numbers was consulted to identify the town to be selected based on a reference to the incremental number of second homes.

This process yielded the following clusters:

County	Town 1	Town 2
Rutland County	Killington	Wells
Windsor County	Ludlow	Chester
Addison County	Leicester	Starksboro
Windham County	Dover	Wilmington
Washington County	Warren	Fayston
Essex County	Brighton	Maidstone
Orleans County	Morgan	Jay
Chittenden County	Colchester	Shelburne
Bennington County	Winhall	Woodford
Caledonia County	Newark	Groton
Orange County	Fairlee	Thetford
Franklin County	St. Albans Town	Georgia
Lamoille County	Stowe	Morristown
Grand Isle County	North Hero	South Hero

Step 2: Supplemental Towns

Based on a review of the sample output above, 19 additional towns were selected manually to assure all possible Second Home Owner types are included in the research. These additional towns included:

Alburg	Ferrisburg	Manchester	Wardsboro
Castleton	Greenboro	Mount Holly	Westmore
Derby	Hartford	Plymouth	Woodbury
Dorset	Jamaica	Stratton	Woodstock
Elmore	Londonderry	Swanton	

A comprehensive list of all Second Home Owners was then sought and provided from town clerks from all of the towns listed above except for Shelburne (where the data was not available in time for data collection).

Step 3: Second Home Owner Selection

The research plan called for the selection of 6,000 Second Home Owners. Therefore, 130 Second homes were selected from each of the 46 towns using a *systematic sampling* technique where every *N*th record is chosen from a list of all second homes where *N* is equal to the total number of second homes divided by 130. A random numbers table was consulted to identify the position of the first record.

For example, Killington has 1953 second homes. The *N* value for the systematic sampling for Killington is 15 ($1953/130 = 15.02$, rounded down). Therefore, when referencing the list of 1953 Killington second homes, every 15th home were selected.

All available second homes were selected in cases where the complete list of a town's second homes was less than 130.

XV. Questionnaire Items

A mail based survey was designed that asked the following questions:

INTRODUCTION

Vermont Department of Tourism and Marketing Vermont Second Home Owner Survey

The survey is designed to ask you about any trips you might have taken to your Vermont Second Home in 2003. By "trip" we mean any visits to a house/cottage/cabin/camp you own in Vermont that does not serve as your primary place of residence.

Note that Vermont Second Home means a place you use less than 6 months/year. Also note that your responses are completely anonymous. Your response can not and will not be linked back to you. All data will be reported in total.

QUESTIONS

1. Did you or any member of your household take any trips **to your second home in Vermont in 2003?** (*Be sure to think about all four seasons last year – Summer, Fall, Winter, and Spring*).
2. The next few questions ask about who used your Vermont Second Home in 2003 and how often. When answering each of the three questions below, please answer for:
 - ✓ Part One: When you or a member of your household **was present** and
 - ✓ Part Two: When you or a member of your household **was not present** (e.g., you lent your home to a friend or associate. If the property was rented during 2003, please **do not include** information for those periods.)

(If you're not sure, please provide your best estimate.)

- | | <u>Part One:</u>
when you or household member <u>was present</u> | <u>Part Two:</u>
when you or household member <u>was not present</u> |
|--|---|---|
| a. On how many occasions did someone use your Vermont Second Home in 2003? | _____ | _____ |
| | # of trips in 2003 | # of trips in 2003 |
| b. On average, how many nights were spent at your Vermont second home during one of these trips in 2003? | _____ | _____ |
| | # of nights/trip | # of nights/trip |
| c. Including guests, what was the average number of people in a party for a typical visit to your Vermont Second Home in 2003? | _____ | _____ |
| | # of people/visit | # of people/visit |
3. **What is the distance** in vehicle miles between **your primary home to your Vermont Second Home?** *(If you're not sure, please provide your best estimate.)*

2003 Expenditure Related to Your Vermont Second Home

4. **What would you estimate you spent** while in Vermont during a typical trip **to your Vermont Second home in 2003?** *(If you're not sure, please provide your best estimate. Note that the amount reported here should be the average of all trips in 2003.)*
5. Please read the list below of areas where someone might **spend money during a Vermont trip.** For each of the categories, please provide your best estimate for what you spent while in Vermont on a typical trip to your Vermont Second Home in 2003. *(If you're not sure, please provide your best estimate. Note that the amount reported here should be the average of all trips in 2003.)*

Trip Related Expenditures while in Vermont Only

Avg. Per Trip
(Estimated)

- | | |
|---|----|
| a. Prepared meals and beverages such as from a restaurant, snack bar, or deli - including alcoholic beverages | \$ |
| b. Grocery food items purchased at a super market, grocery or convenience store - including alcoholic beverages | \$ |
| c. Shopping - purchases such as sporting equipment, clothes, furniture, toiletries | \$ |
| d. Gas for vehicle - including a rental car | \$ |
| e. Amounts spent on transportation other than for a personal vehicle - for example vehicle rentals, bus or taxi fares | \$ |
| f. Commercial lodging such as a hotel, motel, bed and breakfast, condominium, cabin, campground, etc. | \$ |

g. Recreation and entertainment – including fees, admission and movie tickets \$ _____

6. What would you estimate you **spent on general maintenance** and upkeep related to your Vermont Second Home in 2003 for each of the three categories below: *(Note that the amount reported here would be the total spent in 2003.)*

Maintenance Related Expenditures in Vermont Only

Total Spent
(Estimated)

a. Durable goods such as tools, appliances, furnishings purchased in Vermont	\$ _____
b. Hired property management services such as snow removal, lawn care, general upkeep from Vermont businesses	\$ _____
c. Other Maintenance related expenditures purchased from Vermont businesses	\$ _____

Some Questions about You

7. Where is your primary residence located? *(Please specify the state where your primary residence is located.)*
8. In what city/ town is your Vermont Second Home located?
9. The rest of the questions are for classification purposes only. Remember that your response is completely confidential and there is no way for us to link you with your response. In what year were you born?
10. What is your marital status? Would you say...
11. Do you have any children under the age of 18 living in your home?
12. What is the highest level of education you have completed?
13. Into which of the following broad categories did your total 2003 household income fall from all sources?
14. Gender
15. OPTIONAL:
If you would like to be included in the prize drawing and receive a top-line summary of the research results, please clearly print your email address and/or telephone number below.

Thank you for completing the questionnaire. Please return the completed survey in the postage paid envelope to: Portland Research Group, 408 Fore St., Portland, ME 04101

XVI. Data Collection

A total of 6,000 surveys were mailed on October 8, 2004. A reminder mailing that included the survey was mailed 11 days later on October 19, 2004. Surveys were data entered as they were received up until October, 29, 2004 when the field was closed. A total of 1684 surveys were returned to Portland Research Group's PO Box in Portland, Maine representing an adjusted response rate of 29.1% (214 surveys were returned undeliverable)

A total of 528 responses were excluded from the analysis because they either provided insufficient feedback or were received after the field cut-off date. This left a total of 1,156 complete responses available for analysis permitting overall interpretation of the data at 95% confidence with a margin of error plus or minus 2.8 percentage points.

XVII. Analysis

The following data cleaning rules were applied to the final dataset before analysis:

- ✓ If Q1 was answered "Yes" and both parts of Q2 were answered "zero", Q1 was recoded to "No" and all data for Q2 was excluded from the analysis.
- ✓ If Q2a was answered "zero" or left blank, any data provided for Q2b or Q2c was excluded from the analysis and the response to Q2a was recoded to "zero".
- ✓ If Q2c was answered "zero", all data for Q2b and Q2c was excluded from the analysis and any data provided for Q2a was recoded to "zero".
- ✓ If Q1 was answered "No" all data for Q3 was excluded from the analysis.
- ✓ If Q2a - "# when you or household member was present" was answered "zero" or left blank, all data for Q4 and Q5 was excluded from the analysis.

All variables were reported as a direct percentage or as an average depending on the nature of the variable. The Inter-Quartile Range was calculated and any data points greater than 1.5*IQR from Q₃ were removed as outliers. All zero responses were used as a base calculation for frequency and the average score was then based on all response greater than zero. Average scores were reported as median, mean, mode, and standard deviation. Confidence intervals were calculated for each average score at the 95% confidence level.

The data was organized into two primary segments for analysis:

1. Second home owners with a primary residence in Vermont
2. Second home owners with a primary residence outside of Vermont

The following pages provide an overview of the raw research findings overall (**Table 1**) and by the two primary segments (**Tables 2 and 3**). **Table 4** details the state of primary residence and town the second home was located in for all respondents.

Table 1: Overall Analysis

Survey Reference		Research Findings (* indicates Avg. of Averages)						
ID	Variable	n	Freq.	Median	Mean	Mode	Stan Dev	Conf.
Q.1	Did you take a trip to 2nd home in 2003?	1156	97%	--	--	--	--	--
Q.2_1a	Occasions where someone used your 2nd home (household present)	1025	--	10	11.76	1	9.83	0.60
Q.2_2a	Occasions where someone used your 2nd home (household not present)	765	--	0	1.39	0	1.76	0.12
Q.2_1b	Avg. # of nights spent at 2nd home - typical trip (household present)*	945	--	--	3.93	--	9.36	0.60
Q.2_2b	Avg. # of nights spent at 2nd home - typical trip (household not present)*	392	--	--	3.19	--	2.18	0.22
Q.2_1c	Avg. number of people in party - typical trip (household present)*	999	--	--	3.5	--	1.74	0.11
Q.2_2c	Avg. number of people in party - typical trip (household not present)*	390	--	--	3.56	--	1.56	0.15
Q.3	Distance in vehicle miles between your primary and VT 2nd home?	972	--	178	172.95	200	118.32	7.44
Q.4_1	Freq spending money while in VT during trip to 2nd home (Calculated)	960	98%	--	--	--	--	--
Q.4_2	Avg. spent while in VT during a typical trip to your VT 2nd Home*	891	--	--	221.91	--	384.75	25.26
Q.5a_1	Freq spending money on prepared meals and beverages (Calculated)	996	91%	--	--	--	--	--
Q.5a_2	Avg. spent - Prepared meals and beverages*	835	--	--	75.02	--	100.08	6.79
Q.5b_1	Freq spending money on grocery food items (Calculated)	998	97%	--	--	--	--	--
Q.5b_2	Avg. spent - Grocery food items*	897	--	--	69.22	--	114.71	7.51
Q.5c_1	Freq spending money on shopping (Calculated)	906	79%	--	--	--	--	--
Q.5c_2	Avg. spent - Shopping*	644	--	--	47.32	--	81.33	6.28
Q.5d_1	Freq spending money on gas for vehicle (Calculated)	968	97%	--	--	--	--	--
Q.5d_2	Avg. spent - Gas for vehicle*	883	--	--	35.39	--	45.13	2.98
Q.5e_1	Freq spending money on trans. other than personal vehicle (Calculated)	872	5%	--	--	--	--	--
Q.5e_2	Avg. spent - Transportation other than personal vehicle*	42	--	--	56.47	--	104.13	31.49
Q.5f_1	Freq spending money on commercial lodging (Calculated)	875	5%	--	--	--	--	--
Q.5f_2	Avg. spent - Commercial lodging*	42	--	--	136.83	--	191.25	57.84
Q.5g_1	Freq spending money on recreation and entertainment (Calculated)	947	67%	--	--	--	--	--
Q.5g_2	Avg. spent - Recreation and entertainment*	577	--	--	49.66	--	64.68	5.28
Q.6a	All 2003 general maintenance - Durable goods	976	--	250	438.03	0	518.5	32.53
Q.6b	All 2003 general maintenance - Hired property management services	961	--	200	459.38	0	618.7	39.12
Q.6c	All 2003 general maintenance - Other maintenance	897	--	200	424.19	0	600.1	39.27

Table 2: In-State Residence Only

Survey Reference		Research Findings (* indicates Avg. of Averages)						
ID	Variable	n	Freq.	Median	Mean	Mode	Stan Dev	Conf.
	Freq from In-State	1153	27%	--	--	--	--	--
Q.1	Did you take a trip to 2nd home in 2003?	310	95%	--	--	--	--	--
Q.2_1a	Occasions where someone used your 2nd home (household present)	243	--	10	12.67	1	10.27	1.29
Q.2_2a	Occasions where someone used your 2nd home (household not present)	184	--	0	1.11	0	1.46	0.21
Q.2_1b	Avg. # of nights spent at 2nd home - typical trip (household present)*	216	--	--	3.46	--	9.44	1.26
Q.2_2b	Avg. # of nights spent at 2nd home - typical trip (household not present)*	91	--	--	2.98	--	2.72	0.56
Q.2_1c	Avg. number of people in party - typical trip (household present)*	233	--	--	2.32	--	2.02	0.26
Q.2_2c	Avg. number of people in party - typical trip (household not present)*	93	--	--	3.40	--	1.37	0.28
Q.3	Distance in vehicle miles between your primary and VT 2nd home?	268	--	33	41.9	25	30.73	3.68
Q.4_1	Freq spending money while in VT during trip to 2nd home (Calculated)	207	95%	--	--	--	--	--
Q.4_2	Avg. spent while in VT during a typical trip to your VT 2nd Home*	174	--	--	68.21	--	120.75	17.94
Q.5a_1	Freq spending money on prepared meals and beverages (Calculated)	223	76%	--	--	--	--	--
Q.5a_2	Avg. spent - Prepared meals and beverages*	157	--	--	31.80	--	37.31	5.84
Q.5b_1	Freq spending money on grocery food items (Calculated)	224	93%	--	--	--	--	--
Q.5b_2	Avg. spent - Grocery food items*	196	--	--	46.12	--	71.4	10.00
Q.5c_1	Freq spending money on shopping (Calculated)	211	55%	--	--	--	--	--
Q.5c_2	Avg. spent - Shopping*	107	--	--	19.86	--	36.12	6.84
Q.5d_1	Freq spending money on gas for vehicle (Calculated)	210	94%	--	--	--	--	--
Q.5d_2	Avg. spent - Gas for vehicle*	180	--	--	18.28	--	21.41	3.13
Q.5e_1	Freq spending money on trans. other than personal vehicle (Calculated)	208	5%	--	--	--	--	--
Q.5e_2	Avg. spent - Transportation other than personal vehicle*	10	--	--	23.08	--	47.16	29.23
Q.5f_1	Freq spending money on commercial lodging (Calculated)	206	3%	--	--	--	--	--
Q.5f_2	Avg. spent - Commercial lodging*	6	--	--	116.64	--	168.6	134.91
Q.5g_1	Freq spending money on recreation and entertainment (Calculated)	212	37%	--	--	--	--	--
Q.5g_2	Avg. spent - Recreation and entertainment*	73	--	--	24.07	--	36.9	8.46
Q.6a	All 2003 general maintenance - Durable goods	254	--	200	272.98	0	313.92	38.61
Q.6b	All 2003 general maintenance - Hired property management services	244	--	0	64.51	0	127.45	15.99
Q.6c	All 2003 general maintenance - Other maintenance	241	--	50	170.18	0	247.35	31.23

Table 3: Out-of-State Residence Only

Survey Reference		Research Findings (* indicates Avg. of Averages)						
ID	Variable	n	Freq.	Median	Mean	Mode	Stan Dev	Conf.
	Freq from Out-of_State	1153	73%	--	--	--	--	--
Q.1	Did you take a trip to 2nd home in 2003?	846	97%	--	--	--	--	--
Q.2_1a	Occasions where someone used your 2nd home (household present)	763	--	8	10.77	1	8.66	0.61
Q.2_2a	Occasions where someone used your 2nd home (household not present)	587	--	1	1.55	0	1.96	0.16
Q.2_1b	Avg. # of nights spent at 2nd home - typical trip (household present)*	719	--	--	4.00	--	8.79	0.64
Q.2_2b	Avg. # of nights spent at 2nd home - typical trip (household not present)*	294	--	--	3.20	--	1.87	0.21
Q.2_1c	Avg. number of people in party - typical trip (household present)*	773	--	--	3.60	--	1.73	0.12
Q.2_2c	Avg. number of people in party - typical trip (household not present)*	297	--	--	3.61	--	1.61	0.18
Q.3	Distance in vehicle miles between your primary and VT 2nd home?	667	--	215	227.23	200	95.26	7.23
Q.4_1	Freq spending money while in VT during trip to 2nd home (Calculated)	753	99%	--	--	--	--	--
Q.4_2	Avg. spent while in VT during a typical trip to your VT 2nd Home*	696	--	--	271.84	--	434.76	32.30
Q.5a_1	Freq spending money on prepared meals and beverages (Calculated)	773	95%	--	--	--	--	--
Q.5a_2	Avg. spent - Prepared meals and beverages*	679	--	--	90.64	--	110.98	8.35
Q.5b_1	Freq spending money on grocery food items (Calculated)	774	98%	--	--	--	--	--
Q.5b_2	Avg. spent - Grocery food items*	699	--	--	77.81	--	126.12	9.35
Q.5c_1	Freq spending money on shopping (Calculated)	695	86%	--	--	--	--	--
Q.5c_2	Avg. spent - Shopping*	544	--	--	58.12	--	89.25	7.50
Q.5d_1	Freq spending money on gas for vehicle (Calculated)	758	97%	--	--	--	--	--
Q.5d_2	Avg. spent - Gas for vehicle*	694	--	--	41.69	--	50.10	3.73
Q.5e_1	Freq spending money on trans. other than personal vehicle (Calculated)	664	5%	--	--	--	--	--
Q.5e_2	Avg. spent - Transportation other than personal vehicle*	32	--	--	89.47	--	131.22	45.47
Q.5f_1	Freq spending money on commercial lodging (Calculated)	669	6%	--	--	--	--	--
Q.5f_2	Avg. spent - Commercial lodging*	36	--	--	139.93	--	194.61	63.57
Q.5g_1	Freq spending money on recreation and entertainment (Calculated)	735	76%	--	--	--	--	--
Q.5g_2	Avg. spent - Recreation and entertainment*	502	--	--	54.47	--	68.53	5.99
Q.6a	All 2003 general maintenance - Durable goods	708	--	250	478.50	0	546.02	40.22
Q.6b	All 2003 general maintenance - Hired property management services	729	--	400	700.16	0	844.83	61.33
Q.6c	All 2003 general maintenance - Other maintenance	618	--	200	427.76	0	549.11	43.29

Table 4: State of Primary Residence & Location of VT Second Home

State of Primary Residence			Location of Second Home			Location of Second Home (cont.)			Location of Second Home (cont.)		
Variable	n	Freq.	Variable	n	Freq.	Variable	n	Freq.	Variable	n	Freq.
Vermont	310	26.9%	Ludlow	50	4.35%	Morrisville	11	0.96%	Hartford	1	0.09%
Connecticut	186	16.1%	Morgan	46	4.00%	Wardsboro	10	0.87%	Manchester	1	0.09%
Massachusetts	165	14.3%	Fayston	43	3.74%	Elmore	8	0.70%	Chester Depot	1	0.09%
New York	149	12.9%	North Hero	42	3.66%	Thetford	8	0.70%	Island Pond	1	0.09%
New Jersey	91	7.9%	Fairlee	41	3.57%	Bondville	7	0.61%	Middlebury	1	0.09%
New Hampshire	59	5.1%	South Hero	41	3.57%	North Ferrisburg	6	0.52%	Andover	1	0.09%
Florida	55	4.8%	Wells	40	3.48%	Jamaica	5	0.44%	Lyndon	1	0.09%
Pennsylvania	25	2.2%	Jay	39	3.39%	Starksboro	5	0.44%	Essex	1	0.09%
Maryland	17	1.5%	Warren	38	3.31%	Lake Bomoseen	5	0.44%	South Alburg	1	0.09%
Rhode Island	12	1.0%	Groton	37	3.22%	Morristown	4	0.35%	Newfane	1	0.09%
Ohio	10	0.9%	Maidstone	37	3.22%	Lake Elmore	4	0.35%	Walden	1	0.09%
Virginia	10	0.9%	Leicester	35	3.05%	Woodstock	3	0.26%	South Burlington	1	0.09%
Outside US	8	0.7%	West Dover	34	2.96%	Waitsfield	3	0.26%	Essex Jct.	1	0.09%
North Carolina	7	0.6%	Newark	32	2.79%	Rutland	3	0.26%	West Danville	1	0.09%
Alaska	6	0.5%	Killington	31	2.70%	Jay Peak	3	0.26%	South Fayston	1	0.09%
Washington, D.C.	6	0.5%	Stowe	31	2.70%	South Londonderry	3	0.26%	Springfield	1	0.09%
Maine	4	0.3%	Colchester	29	2.52%	West Wardsboro	3	0.26%	Grand Isle	1	0.09%
Colorado	3	0.3%	St. Albans Town	29	2.52%	Belmont	3	0.26%	Williston	1	0.09%
Delaware	3	0.3%	Chester	28	2.44%	Dover	2	0.17%	Newport	1	0.09%
Georgia	3	0.3%	Westmore	28	2.44%	East Dover	2	0.17%	Westford	1	0.09%
South Carolina	3	0.3%	Woodford	28	2.44%	Newark Pond	2	0.17%	Cambridge	1	0.09%
Texas	3	0.3%	Georgia	24	2.09%	Montgomery	2	0.17%	West Newbury	1	0.09%
Illinois	2	0.2%	Derby	21	1.83%	Brandon	2	0.17%	Windham	1	0.09%
Kentucky	2	0.2%	Woodbury	20	1.74%	Maidstone Lake	2	0.17%	Kirby	1	0.09%
New Mexico	2	0.2%	Greensboro	18	1.57%	White River Jct.	2	0.17%	Montpelier	1	0.09%
Tennessee	2	0.2%	Winhall	18	1.57%	South Wardsboro	2	0.17%	Pittsford	1	0.09%
Wisconsin	2	0.2%	Londonderry	16	1.39%	East Warren	2	0.17%	North Fayston	1	0.09%
Alabama	1	0.1%	Swanton	16	1.39%	South Woodbury	2	0.17%	West Swanton	1	0.09%
Louisiana	1	0.1%	Castleton	15	1.31%	Barton	2	0.17%	West Fairlee	1	0.09%
Michigan	1	0.1%	Stratton	15	1.31%	Vergennes	2	0.17%	East Jamaica	1	0.09%
Missouri	1	0.1%	Alburg	13	1.13%	St. Johnsbury	2	0.17%	Granby	1	0.09%
Nevada	1	0.1%	Ferrisburg	12	1.04%	Lake Dunmore	2	0.17%	Bennington	1	0.09%
Utah	1	0.1%	Mount Holly	12	1.04%	Woodford Lake	2	0.17%	West Burke	1	0.09%
Washington	1	0.1%	Plymouth	11	0.96%	Stratton Mtn.	2	0.17%	East Montpelier	1	0.09%
West Virginia	1	0.1%	Wilmington	11	0.96%	Brighton	1	0.09%	Other	7	0.61%

XVIII. Summary of Findings

In 2004, the Vermont Department of Tourism and Marketing commissioned Economic and Policy Resources of Williston, Vermont and Portland Research Group of Portland, Maine to undertake a comprehensive economic assessment that benchmarks the Vermont travel industry. The primary objectives of this benchmark study were to A) Improve understanding of the economic function of the tourism industry in Vermont, B) Assist the industry to direct marketing resources toward the best and most profitable visitor prospects, and C) Facilitate future economic development policy discussions related to the industry.

To this end, Vermont second home owner visitor activities were identified as contributing to the Vermont tourism economy. Therefore, a mail-based interview was conducted to measure the dynamics and extent of this economic contribution.

Research Methodology

Vermont second home owners were surveyed by mail. A stratified cluster sampling technique was used to draw a systematic random sample from town registries. A total of 6,000 surveys were mailed on October 8, 2004 which yielded a 29.1% adjusted response rate. This provided a total of 1,156 complete responses available for analysis permitting overall interpretation of the data at 95% confidence with a margin of error plus or minus 2.8 percentage points.

Research Findings

Almost all (97%) of Vermont second home owner respondents took at least one trip to their Vermont second home in 2003. The typical respondent reported 11.8 trips where they or someone from their household visited their second home. This took them an average of 173.0 vehicle miles (one-way) from their primary residence where their traveling party of 3.5 people spent an average of 3.9 nights per trip.

Trip Expenditures

Almost all (98%) of the respondents reported spending some amount of money in Vermont during a typical trip in 2003. The most expensive expense was "Commercial Lodging" with \$136.83 spent on a typical trip. This was followed by "Prepared Meals and Beverages" (\$75.02), "Grocery Food Items" (\$69.22), "Other Transportation" (\$56.47), "Recreation and Entertainment" (\$49.66), "Shopping" (\$47.32), and "Gas" (\$35.39).

General Maintenance Costs

The year to year upkeep of a Vermont second home goes not without regular maintenance costs. The typical second home owner spent \$459.38 in 2003 on "Hired Property Management Services", \$438.03 on "Durable Goods", and \$424.19 on "Other Maintenance" items.

Family and Friends Usage

Two-fifths (39%) of second home owners reported having someone stay at their second home when they or a member of their household was not present. The typical respondent reported this occurring (non-occurrences included) an average of 1.4 times in 2003 where the typical party of 3.6 people spent an average of 3.2 nights.

PORTLAND RESEARCH GROUP

408 fore street

portland maine 04101

207 874 2077

FAX 874
2076

October 2004

<Owner's Name>

<Address 1>

<Address 2>

<City, State, Zip>

Dear <Owner's First Name>,

I am writing on behalf of the Vermont Department of Tourism and Marketing. Our records indicate that you own a second/vacation home in Vermont. As a second home owner, you are an important part of Vermont's tourism economy.

How **does your use** of your Vermont Second Home **compare** to other second home owners?

We are writing to request your assistance with a short, yet important, research project being conducted by the Vermont Department of Tourism and Marketing.

The 2-page survey included with this mailing will enable you to provide confidential information needed to guide the Department's marketing and economic development responsibilities.

Please complete the **short survey included with this mailing** and **return it to us** in the postage paid envelope provided.

As a small token of our appreciation, we will be giving away \$100 cash prizes to three winners of a drawing among those who return a completed Vermont Second Home Owner Survey.

All survey participants will have the option of being **provided** a top-line report of **the results**.

In order to assure the highest level of objectivity and confidentiality, The Vermont Department of Tourism and Marketing has asked us, Portland Research Group, to manage the survey process. All survey results will be reported in total and the individual surveys are not coded or identifiable to any individual. Individual responses will not be shared with any government agency, state or federal.

If you have any questions about this important research project, please contact me by email at clegg@portlandresearch.com.

Sincerely,

Christopher H. Clegg
Senior Research Manager
Portland Research Group

On behalf of:
Vermont Dept. of Tourism & Marketing

www.portlandresearch.com

Vermont Department of Tourism and Marketing Vermont Second Home Owner Survey

The survey is designed to ask you about any trips you might have taken to your Vermont Second Home in 2003. By "trip" we mean any visits to a house/cottage/cabin/camp you own in Vermont that **does not** serve as your **primary** place of residence.

Note that Vermont Second Home means a place you use less than 6 months/year. Also note that your responses are completely anonymous. Your response can not and will not be linked back to you. All data will be reported in total.

1. **Did you or any member of your household take any trips** to your second home in Vermont in 2003? *(Be sure to think about all four seasons last year – Summer, Fall, Winter, and Spring).*

*# Yes (Please continue with question 2 below)
question 6 page 2)*

No (Please skip to

2. The next few questions ask about who used your Vermont Second Home in 2003 and how often. When answering each of the three questions below, please answer for:

- ✓ Part One: When you or a member of your household **was present** and
- ✓ Part Two: When you or a member of your household **was not present** (e.g., you lent your home to a friend or associate. If the property was rented during 2003, please **do not include** information for those periods.)

(If you're not sure, please provide your best estimate.)

	<u>Part One:</u> # when you or household member <u>was present</u>	<u>Part Two:</u> # when you or household member <u>was not present</u>
d. On how many occasions did someone use your Vermont Second Home in 2003?	_____	_____
	# of trips in 2003	# of trips in 2003
e. On average, how many nights were spent at your Vermont second home during one of these trips in 2003?	_____	_____
	# of nights/trip	# of nights/trip
f. Including guests, what was the average number of people in a party for a typical visit to your Vermont Second Home in 2003?	_____	_____
	# of people/visit	# of people/visit

3. What is the **distance in vehicle miles between** your primary home to your Vermont Second Home? *(If you're not sure, please provide your best estimate.)*

_____ # miles

2003 Expenditure Related to Your Vermont Second Home

4. What would you estimate you **spent while in Vermont during a typical trip** to your Vermont Second home in 2003? *(If you're not sure, please provide your best estimate. Note that the amount reported here should be the average of all trips in 2003.)*

\$_____ spent *(Average per trip while in Vermont only)*

5. Please read the list below of areas where someone might **spend money during a Vermont trip**. For each of the categories, please provide your best estimate for what you spent while in Vermont on a typical trip to your Vermont Second Home in 2003. *(If you're not sure, please provide your best estimate. Note that the amount reported here should be the average of all trips in 2003.)*

<u>Trip Related Expenditures while in Vermont Only</u>	Avg. Per Trip (Estimated)
a. Prepared meals and beverages such as from a restaurant, snack bar, or deli - including alcoholic beverages	\$ _____
b. Grocery food items purchased at a super market, grocery or convenience store - including alcoholic beverages	\$ _____
c. Shopping - purchases such as sporting equipment, clothes, furniture, toiletries	\$ _____
d. Gas for vehicle - including a rental car	\$ _____
e. Amounts spent on transportation other than for a personal vehicle - for example vehicle rentals, bus or taxi fares	\$ _____
f. Commercial lodging such as a hotel, motel, bed and breakfast, condominium, cabin, campground, etc.	\$ _____
g. Recreation and entertainment - including fees, admission and movie tickets	\$ _____

6. What would you estimate you **spent on general maintenance** and upkeep related to your Vermont Second Home in 2003 for each of the three categories below: *(Note that the amount reported here would be the total spent in 2003.)*

Maintenance Related Expenditures in Vermont Only

Total Spent
(Estimated)

a. Durable goods such as tools, appliances, furnishings purchased in Vermont

\$ _____

Hired property management services such as snow removal, lawn care, General upkeep from Vermont businesses

\$ _____

c. Other Maintenance related expenditures purchased from Vermont
d. businesses

\$ _____

Some Questions about You

7. Where is your primary residence located? *(Please specify the state where your primary residence is located.)*

_____ State of primary residence

8. In what city/ town is your Vermont Second Home located?

_____ Vermont city/ town where Second Home is located

9. The rest of the questions are for classification purposes only. Remember that your response is completely confidential and there is no way for us to link you with your response. **In what year were you born?**

_____ Year of birth

10. What is your **marital status**? Would you say...

# Single, never married	# Married
# Living with a companion, but not married	# Previously married

11. Do you have **any children** under the age of 18 living in your home?

Yes # No

12. What is the **highest level of education** you have completed?

# Less than High School (up to 8 th grade)	# 4-Year College Degree (BA/BS)
# High School	# Some Graduate School
# Some College	# Graduate Degree
# 2-Year/ Technical Degree	

13. Into which of the following **broad categories** did your total 2003 household income fall from all sources?

# Under \$20,000	# \$75,000 to less than \$100,000
# \$20,000 to less than \$35,000	# \$100,000 to less than \$200,000
# \$35,000 to less than \$50,000	# \$200,000 to less than \$300,000
# \$50,000 to less than \$75,000	# \$300,000 or higher

14. **Gender**

Male # Female

15. **OPTIONAL:**

If you would like **to be included** in the prize drawing and receive a top-line summary of the research results, please clearly **print your email address and/or telephone number** below.

_____ (The top-line report is available by email only)

Thank you for completing the questionnaire.

Please return the completed survey in the postage paid envelope to:
Portland Research Group, 408 Fore St., Portland, ME 04101

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