# Economic Impact of Domestic Travel on the Main Nine Communities in Blackstone Valley at Rhode Island in 2004

Prepared for:
Blackstone Valley Tourism Council
on Behalf of
the Blackstone Valley National Heritage Corridor Communities
Pawtucket, Rhode Island

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courism industry at national, state and local levels; defines the size, characteristics and growth
of existing and emerging travel markets; and provides qualitative trend analysis and
quantitative forecasts of future travel activity and impact.

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# **PREFACE**

This study was conducted by the research department of the Travel Industry Association of America (TIA) for the *Blackstone Valley Tourism Council On Behalf of the Blackstone Valley National Heritage Corridor Communities*. The study provides travel impact on the U.S economy during 2004, preliminary 2004 estimates of domestic traveler expenditures on the main nine communities in Blackstone Valley at Rhode Island and the total Blackstone Valley Rhode Island/Massachusetts region, as well as the employment, payroll income, and state and local tax revenue directly generated by these expenditures. The list of communities and associated zip codes is on page 2.

All data and estimates covered in this report are on a calendar year basis.

Research Department Travel Industry Association of America Washington, D.C. August 2006

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# Introduction

This study provides a base line statistics of travel in the main nine communities in Blackstone Valley at Rhode Island and the total Blackstone Valley at Rhode Island/Massachusetts region during 2004. Economic impact covers domestic traveler spending, travel-generated employment and payroll income, and travel-generated tax revenue for state and local governments for both the main nine communities in Blackstone Valley at Rhode Island and the total Blackstone Valley at Rhode Island/Massachusetts region.

U.S. residents traveling to the main nine communities in Blackstone Valley at Rhode Island and the total Blackstone Valley Rhode Island/Massachusetts region include both state residents and residents from other states and the District of Columbia. Travel as measured in this report, is based on trips of 50 miles or more, one way, away from home or trips including one or more nights' stay. Travel commuting to and from work, travel by those operating an airplane, bus, truck, train or other form of common carrier transportation, military travel on active duty, and travel by students away at school, are all excluded from this study (see Appendix B for details).

TIA uses its proprietary Travel Economic Impact Model (TEIM) to estimate travel expenditures and the resulting employment, payroll income, and tax revenue generated by these expenditures. The Travel Economic Impact Model (TEIM) employs highly detailed data from a variety of government and proprietary sources, e.g., county/zip code-level Economic Census data, County/zip Business Patterns, ES-202/QCEW employment series and Smith Travel Research reports.

Since additional data relating to travel and its economic impact in 2004 will become available subsequent to this study, TIA reserves the right to revise these estimates in the future.

For purposes of this report, the main nine communities in Blackstone Valley at Rhode Island and the total Blackstone Valley Rhode Island/Massachusetts region comprise the following communities and associated zip codes (shown on page 2):

Main	Nine
Commun	ities-

Blackstone/RI Zip Code
Burrillville 02830
Central Falls 02863
Cumberland 02864

Glocester 02814, 02829, 02859 Lincoln 02802, 02865

North Smithfield 02824, 02896

Pawtucket 02860, 02861, 02862 Smithfield 02828, 02917

Woonsocket 02895

Communities/RI	Zip Code	Communities/MA	Zip Code
Burrillville	02830	Blackstone	01504
Central Falls	02863	Douglas	01516
Cumberland	02864	Grafton	01519
East Providence	02914, 02915, 02916	Leicester	01524
Glocester	02814, 02829, 02859	Millbury	01527
Lincoln	02802, 02865	Millville	01529
North Smithfield	02824, 02896	Northbridge	01534
Pawtucket	02860, 02861, 02862	Upton	01568
Providence	02901, 02902, 02903,	Uxbridge	01569
	02904, 02905, 02906,	Millbury	01586
	02907, 02908, 02909,	Sutton	01590
	02910, 02911, 02912,	Worcester	01601, 01602, 01603,
	02918, 02940		01604, 01605, 01606,
Smithfield	02828, 02917		01607, 01608, 01609,
Woonsocket	02895		01610, 01612, 01613,
			01614, 01615, 01653,
			01654, 01655
		Hopedale	01747
		Mendon	01756

# **Executive Summary**

- Domestic travelers to the main nine communities in Blackstone Valley/Rhode Island directly spent \$99.2 million during 2004 on transportation, lodging, food, entertainment and recreation, and incidentals, 21 percent of the Blackstone Valley Rhode Island/Massachusetts regional total.
- In 2004, domestic travelers' spending also directly generated 1,240 jobs and \$24.4 million in wages and salary income in the main nine communities in Blackstone Valley/Rhode Island.
- The \$99.2 million in domestic travel spending generated \$5.8 million in tax revenue for the state government of Rhode Island and \$2.3 million in tax revenue for the local governments.

Table 1: Summary of Travel and Tourism in Main Nine Communities in Blackstone Valley/RI and Blackstone Valley/RI&MA, 2004

	Main nine communities in Blackstone Valley/RI (1)	Blackstone Valley/RI&MA (2)	% (1)/(2)
Travel Expenditures (\$ Millions)	\$99.2	\$474.4	21%
Travel-Generated Employment	1,240	6,400	19%
Travel-Generated Payroll (\$Millions)	\$24.4	\$124.6	20%
Travel-Generated tax Revenue for State Governments (\$ Millions)	\$5.8	\$26.5	22%
Travel-Generated tax Revenue for Local Governments (\$ Millions)	\$2.3	\$13.0	18%

Source: TIA

# Travel Impact on the U.S. Economy, 2004

The U.S. economy turned in its best performance in five years in 2004, with real GDP increasing 4.2 percent. Real disposable income and real personal consumption expenditures both rose significantly, 3.4 percent and 3.9 percent, respectively. The U.S. job market also improved during 2004 as annual average total nonfarm employment increased nearly 1.5 million from 2003 to 131.5 million. This reduced the national unemployment rate to 5.5 percent, one-half point lower than in 2003. The travel industry itself added 72 thousands jobs in 2004 as compared to 2003. The Consumer Price Index (CPI), an indicator of the level of price inflation, remained relatively moderate—up 2.7 percent in 2004, while TIA's Travel Price Index increased 4.5 percent during the same period, primarily due to a significant increase in the price of gasoline. The total U.S. current account deficit rose to a record high of \$666 billion in 2004. The U.S. travel industry, however, generated a \$5.8 billion trade surplus for the country in 2004.

Stimulated by the strong economy, domestic travel volume (total person-trips) increased 2.1 percent in 2004 and domestic travel expenditures rose even more at 6.8 percent. After three consecutive years of declines, international travel to the U.S. began to recover, reflecting appreciating currencies in many of the United States' key origin markets. International traveler spending jumped nearly 16 percent from 2003, largely due to a sharp increase of international arrivals.

### U.S. Travel Volume in 2004

In 2004, total U.S. domestic person-trips were up 2.1 percent over 2003, according to TIA's TravelScope® survey. Leisure person-trips grew at a slower pace than in the past few years, rising 1.4 percent. Business/convention travel, however, began its long-awaited recovery, increasing 5.0 percent, the first increase posted since 1998. International visitors to the U.S. increased 11.8 percent in 2004 to 46.1 million. International travel to the U.S., however, remained 10.1 percent lower than its historical record set in 2000.

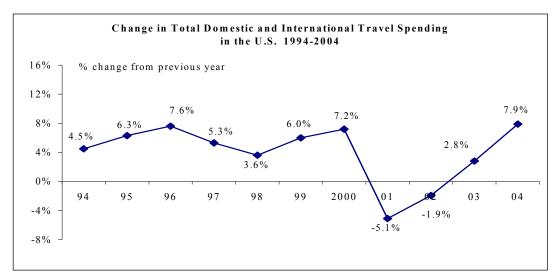
### **Travel Expenditures in 2004**

Domestic travelers spent more than \$524.4 billion in the U.S. during 2004, an increase of 6.8 percent over 2003. International traveler expenditures in the U.S., excluding spending on international airfares purchased outside the U.S., increased more than twice as much, up 15.9 percent to total \$74.8 billion in 2004.

Combined domestic and international travel expenditures in the U.S. totaled \$599.2 billion, 7.9 percent more than in 2003. In fact, 2004 travel expenditures were 8.8 percent higher than in 2001, the most challenging year ever in U.S. travel industry history. And, for the first time since 9/11, total U.S. travel expenditures exceeded the historical record of \$580.8 billion set in 2000.

Total domestic leisure travel spending reached \$355.4 billion, up 5.3 percent over 2003. Spending by domestic business/convention travelers increased dramatically, up 10.1 percent to

\$169 billion. Domestic business travelers' spending accounted for about one-third of total domestic travel spending in 2004.



Sources: TIA, OTTI

Table 2: U.S. Domestic Travel Expenditures by Primary Purpose of Trip, 2003-2004					
Expenditures	2004	2003	2004/2003		
	Travel Spending	Travel Spending			
	in the U.S.	in the U.S.	Percent Change		
	(\$ Billions)	(\$ Billions)	(%)		
Leisure Travelers	\$355.4	\$337.4	5.3%		
Business Travelers	169.0	153.5	10.1%		
Total	\$524.4	\$490.9	6.8%		

Sources: TIA, OTTI

Domestic travel spending on auto transportation jumped 12.4 percent over 2003, to \$92.6 billion, reflecting the dramatic increase in gasoline prices during 2004. Total domestic air passenger enplanements were up 4.8 percent from 2003 and international air passenger enplanements jumped 13.9 percent in 2004, according to the Air Transport Association (ATA). In 2004, Amtrak reported a 2.6 percent increase in ridership. This growth in demand contributed to the 4.9 percent increase in public transportation expenditures in 2004.

Domestic travel spending on lodging increased 7.0 percent over 2003. Hotel room demand (hotel room-nights sold) grew 5.4 percent, according to Smith Travel Research.

Table 3: Travel Expenditures in the U.S. 2003-2004					
Expenditures	2004	2003	2004/2003		
	Travel Spending	Travel Spending			
	in the U.S.	in the U.S.	Percent Change		
	(\$ Billions)	(\$ Billions)	(%)		
Public Transportation	\$100.8	\$96.1	4.9%		
Auto Transportation	92.6	82.4	12.4%		
Lodging	93.9	87.8	7.0%		
Foodservice	130.6	123.6	5.6%		
Entertainment/Recreation	63.5	59.9	6.0%		
General Retail	43	41	4.8%		
Domestic Travelers	\$524.4	\$490.9	6.8%		
International Travelers*	\$74.8	\$64.5	15.9%		
Total	\$599.2	\$555.4	7.9%		

Source: TIA

### **Travel Employment in 2004**

Nearly 1.5 million jobs were added to the non-farm sector of the strengthening U.S. economy in 2004, a 1.1 percent increase from 2003, according to the U.S. Bureau of Labor Statistics (BLS). This reduced the national unemployment rate to 5.5 percent from 6.0 percent in 2003. Employment generated by domestic and international traveler spending in the U.S. increased 1.0 percent during 2004.

Examining just employment related to domestic travel expenditures, the greatest gain occurred in the entertainment/recreation sector, with employment up 1.1 percent. Employment related to auto transportation and lodging increased 0.8 percent each in 2004. Employment generated by domestic travel in the travel planning sector (i.e., the travel agent and travel arrangement industry), however, declined 4.1 percent in 2004, the most severe decline among all travel industry sectors. Employment in the public transportation sector (composed primarily of the airline industry) continued to decline as well, down 2.3 percent from 2003.

<sup>\*</sup> Total international traveler spending does not include international passenger fare payments, international traveler spending in the U.S. territories, and Canadian traveler spending not allocated to states.

Employment	2004	2003	2004/2003
	Travel-Generated	Travel-Generated	
	<b>Employment</b>	<b>Employment</b>	Percent Change
	(Thousands)	(Thousands)	(%)
Public Transportation	947	969	-2.3%
Auto Transportation	257	255	0.8%
Lodging	1,211	1,202	0.8%
Foodservice	2,446	2,434	0.5%
Entertainment/Recreation	1,082	1,070	1.1%
General Retail	333	336	-1.0%
Travel Planning	171	178	-4.1%
Domestic Travelers	6,447	6,445	0.0%
International Travelers	884	815	8.5%

Sources: TIA, BLS

Table 5: Overall U.S. Economic Developments, 2002-2004				
	2002	2003	2004	
Nominal gross domestic product (\$ Billions)	\$10,469.6	\$10,971.2	\$11,734.3	
Real gross domestic product (\$ Billions)*	\$10,048.8	\$10,320.6	\$10,755.7	
Total retail sales (\$ Billions)	\$3,141.5	\$3,275.4	\$3,521.7	
Real disposable personal income (\$ Billions)*	\$7,562.2	\$7,741.8	\$8,004.3	
Real personal consumption expenditures (\$ Billions)*	\$7,099.3	\$7,306.6	\$7,588.6	
Consumer price index**	179.9	184.0	188.9	
Travel price index**	196.3	201.1	210.2	
Non-farm payroll employment (Millions)	130.3	130.0	131.5	
Unemployment rate (%)	5.8	6.0	5.5	
Percentage change from previous year				
Nominal gross domestic product	3.4%	4.8%	7.0%	
Real gross domestic product	1.6%	2.7%	4.2%	
Total retail sales	2.3%	4.3%	7.5%	
Real disposable personal income	3.1%	2.4%	3.7%	
Real personal consumption expenditures	2.7%	2.9%	3.9%	
Consumer price index	1.6%	2.3%	2.7%	
Travel price index	-0.3%	2.4%	4.5%	
Non-farm payroll employment	-1.1%	-0.3%	1.1%	

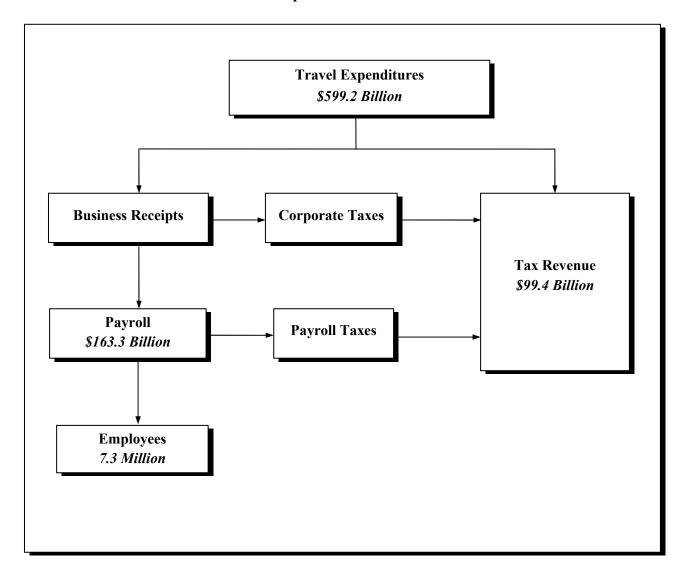
Sources: U.S. Dept. of Commerce, U.S. Dept. of Labor, U.S. Census Bureau, TIA \* Chained 2000 dollars
\*\* Base period: 1982-84=100

Table 6: Travel	Table 6: Travel Trends, 2000-2004						
	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>		
Total U.S. resident person-trips (Millions)	1,100.8	1,123.1	1,127.0	1,140.0	1,163.9		
Total international visitors (Millions)	51.2	46.9	43.6	41.2	46.1		
U.S. travel expenditures (\$ Billions)	\$498.4	\$479.0	\$473.6	\$490.9	\$524.4		
International travel expenditures in the U.S. * (\$ Billions)	\$82.4	\$71.9	\$66.7	\$64.5	\$74.8		
Travel price index	194.8	196.9	196.3	201.1	210.2		
Travel-generated employment** (Thousands)	7,701	7,596	7,366	7,260	7,332		
Percentage change from previous year							
Total U.S. resident person-trips	1.0%	2.0%	0.4%	1.2%	2.1%		
Total international visitors	5.6%	-8.4%	-7.1%	-5.4%	11.8%		
U.S. travel expenditures	6.7%	-3.9%	-1.1%	3.7%	6.8%		
International travel expenditures in the U.S. *	10.2%	-12.8%	-7.2%	-3.3%	15.9%		
Travel price index	6.1%	1.1%	-0.3%	2.4%	4.5%		
Travel-generated employment**	2.9%	-1.4%	-3.0%	-1.4%	1.0%		

Sources: TIA, Office of Travel and Tourism Industries (OTTI)/International Trade Administration Note: \* Includes international traveler spending within the U.S. only.

\*\* Includes employment generated by both domestic and international traveler expenditures.

# **Direct Travel Impact in the United States in 2004**



# Blackstone Valley Rhode Island/Massachusetts Region – An Overview

The main nine communities in Blackstone Valley at Rhode Island discussed in this study are: Central Falls, Pawtucket, Woonsocket, Cumberland, Lincoln, North Smithfield, Smithfield, Burrillville and Glocester. For comparison, the related information on the total Blackstone Valley region, which includes part of Rhode Island and part of Massachusetts are also provided. The Blackstone Valley Rhode Island/Massachusetts region discussed in this study covers 11 communities located within Providence County in northern Rhode Island and 14 communities within Worcester County in central Massachusetts. Based on the data from the U.S. Census Bureau, the estimated total population in the Blackstone Valley Region was over 600 thousand in 2004. The population in the Rhode Island side was 315 thousand, which comprises 29.1 percent of Rhode Island's total. The population in the Massachusetts side was nearly 288 thousand, 4.5 percent of Massachusetts' total. Total people in the labor force was nearly 301 thousand, almost half (49.9%) of the total population in the region during 2004.

The Blackstone Valley of Rhode Island and Massachusetts is the "Birthplace of the American Industrial Revolution," the place where America made the transformation from farm to factory. In 1986, the Blackstone Valley was recognized as a special place and designated as a National Heritage Corridor by the U.S. Congress. The Blackstone River Valley National Heritage Corridor covers nearly 400,000 acres of land and contains over 10,000 historic buildings and sites. America's first cotton mill opened in 1790 in Pawtucket, Rhode Island, sparking the historical phenomenon of the Industrial Revolution.

The Blackstone Valley is not only rich in history, but also in recreational and many other activities, such as railway tours, motorcoach tours, walking tours, riverboat cruises, vineyard, farm and orchard tours, parades, concerts, arts festivals, bicycling, boat racing, camping, hiking, hunting, kayaking, wildlife viewing, dining out, and shopping at factory outlets and antique and gift stores.

The continued efforts of the Blackstone Valley Tourism Council have been instrumental in fostering collaboration among the region's communities and organizations to help enhance its economy, preserve its environment, and expand its recreational opportunities. Success is demonstrated through these efforts each year as the Blackstone Valley region welcomes tens of thousands of visitors, making tourism a very important contributor to the overall economy. Today, travel generates more jobs for the local residents and more tax revenue for local and state governments. It is no doubt that the travel industry will continue to contribute more to the region's economy in the future making the Blackstone Valley even stronger and more prosperous a destination to be treasured by residents and visitors alike.

# **Economic Impact of Domestic Travel**

Domestic travelers in the main nine communities in Blackstone Valley at Rhode Island directly spent \$99.2 million during 2004 on transportation, lodging, food, entertainment and recreation, and incidentals. These traveler expenditures generated more than 1,200 jobs and \$24.4 million in payroll for the region's residents. These expenditures also contributed \$5.8 million and \$2.3 million in tax revenue to the Rhode Island state government and local governments, respectively.

Table 7 summarizes total travel expenditures, employment and payroll generated by these expenditures, as well as state and local tax revenue generated by these expenditures.

Table 7: Economic Impact of Domestic Travel on the Main Nine Communities in Blackstone Valley/RI, 2004			
\$99.2			
1,240			
\$24.4			
\$5.8			
\$2.3			

Source: TIA

## **Domestic Travel Expenditures**

Travel expenditures are assumed to take place whenever one traveler exchanges money for an activity considered part of his/her trip. Travel expenditures can be separated into 16 categories representing traveler purchases of goods and services at the retail level. Expenditures estimated in this study represent spending that occurred in the main nine communities in Blackstone Valley at Rhode Island.

For purposes of this study, direct domestic travel expenditures are grouped into six categories – public transportation, auto transportation, lodging, foodservice, entertainment/recreation and general retail trade. Spending estimates reflect travelers, not local consumers. Travelers include persons who travel at least 50 miles or more, one way, away from home or take trips including one or more nights stay. Travel commuting to and from work; travel by those operating an airplane, bus, truck, train or other form of common carrier transportation; military travel on active duty; and travel by students away at school, are all excluded from this study.

During 2004, domestic travelers directly spent \$99.2 million in the main nine communities in Blackstone Valley at Rhode Island.

Public transportation expenditures in main nine communities in Blackstone Valley at Rhode Island include traveler spending on bus and boat/ship transportation, as well as taxicab or limousine services. Air travel cost is not included in this study. Domestic travelers spent \$13.6 million on this category in 2004, 13.7 percent of the total spending.

Automobile transportation expenditures include gasoline consumption during leisure and business trips, cost of renting automobiles or other motor vehicles, and a prorated share of the fixed costs of owning an automobile, truck, or other recreational vehicle, such as insurance, licenses, fees, tax, repair and depreciation costs. Spending on auto transportation totaled \$29.7 million in 2004, the largest sector among the six categories investigated in this report and accounting for 29.9 percent of the total expenditures.

Lodging expenditures include traveler spending on hotels and motels, bed and breakfasts, campgrounds and trailer parks, rental of vacation homes and other types of lodging. During 2004, travelers in the main nine communities spent \$8.5 million on lodging. This represents 24.8 percent of total travel expenditures.

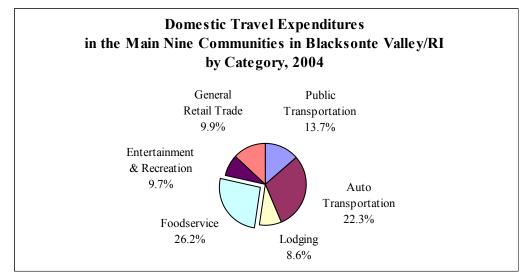
The spending on the foodservice category include traveler spending in commercial eating and drinking facilities and grocery stores or carry-outs, as well as on food purchased for off-premise consumption. In 2004, travelers spent \$25.9 million on this category, the second largest spending sector, representing 26.2 percent of the total travel expenditures in the main nine communities.

Entertainment and recreation expenditures include traveler spending on recreation facility user fees, admissions at historical places, museums and attractions, attendance at movies, sports events and other forms of entertainment and recreation while traveling. Domestic travelers spent \$8.6 million on this category during 2004 in the region.

Traveler spending on general retail trade purchases includes gifts for others, medicine, cosmetics, clothing, personal services, souvenirs, and other items of this nature. Travelers spent \$12.9 million on general retail trade shopping, accounting for 13 percent of total travel expenditures.

Table 8: Domestic Travel Expenditures in the Main Nine Communities in Blackstone Valley/RI by Category, 2004				
2004 Expenditures	Domestic Total (\$ Millions)	% of Total		
Public Transportation	\$13.6	13.7%		
Auto Transportation	29.7	29.9%		
Lodging	8.5	8.6%		
Foodservice	25.9	26.2%		
Entertainment & Recreation	8.6	8.6%		
General Retail Trade	12.9	13.0%		
Total	\$99.2	100.0%		

Source: TIA



Source: TIA

### **Domestic Travel-Generated Employment and Payroll**

The most impressive contribution that travel and tourism makes to the main nine communities in Blackstone Valley/Rhode Island's economy is the number of businesses and jobs it supports. Due to the diversity of the travel industry in the area, a wide variety of multi-level jobs are supported. These jobs include various executive and managerial positions, as well as a large number of service-oriented occupations.

Travel-generated payroll is the wage and salary income paid to employees directly serving the traveler within the industry sectors from which travelers purchase goods and services. One dollar of travel spending generates different amounts of payroll income within the various travel industry sectors depending on the labor content and the wage structure of each sector.

During 2004, domestic traveler spending in the main nine communities in Blackstone Valley at Rhode Island generated 1,240 jobs, including full-time and seasonal/part-time positions in the region. The total wage and salary earned by these 1,240 employees totaled \$24.4 million.

On average, every dollar spent by domestic travelers produced 24.6 cents in wage and salary income for the residents of the main nine communities. In the area, average annual wage and salary income in the travel industry was around \$19,710 during 2004.

The foodservice sector provided more jobs than any other industry sector through travel spending in the main nine communities in Blackstone Valley at Rhode Island during 2004, generating more than 500 jobs, 41 percent of the area total. The labor-intensiveness of these businesses and the large proportion of travel expenditures spent on food service contribute to the high level of travel employment in this sector. This sector also posted the largest payroll generated by domestic travel spending in 2004 at \$7.8 million, 32 percent of the area total.

The entertainment and recreation sector ranked second in domestic travel-generated employment in the main nine communities in Blackstone Valley at Rhode Island with more than 200 jobs. This sector generated \$4.1 million payroll income for the area.

Travel-generated employment in the travel planning sector includes travel agents, tour operators, and other travel service staff who arrange passenger transportation, lodging, tours and other related services. The travel planning sector was the third largest job generator and the second largest payroll generator for the travel industry in the area during 2004. Around 180 people worked in this sector as full time, part time or seasonal employees in 2004, 14.5 percent of the area total. Payroll generated in this sector totaled \$4.7 million, 19.4 percent of the area total.

Table 9: Domestic Travel-Generated Employment in the Main Nine Communities in Blackstone Valley/RI by Category, 2004				
2004 Employment	Domestic Total	% of Total		
Public Transportation	80	6.5%		
Auto Transportation	80	6.5%		
Lodging	90	7.3%		
Foodservice	510	41.1%		
Entertainment & Recreation	220	17.7%		
General Retail Trade	80	6.5%		
Travel Planning	180	14.5%		
Total	1,240	100.0%		

Source: TIA

Table 10: Domestic Travel-Generated Payroll in the Main Nine Communities in Blackstone Valley/RI by Category, 2004				
Domestic Total (\$ Millions)	% of Total			
\$1.9	7.7%			
2.0	8.1%			
2.1	8.6%			
7.8	32.0%			
4.1	16.9%			
1.8	7.3%			
4.7	19.4%			
\$24.4	100.0%			
	Domestic Total (\$ Millions)   \$1.9   2.0   2.1   7.8   4.1   1.8   4.7			

Source: TIA

# **Domestic Travel-Generated Tax Revenue by Level of Government**

Travel tax receipts are tax revenues attributable to travel spending in the main nine communities in Blackstone Valley/Rhode Island. Travel-generated tax revenue is a significant economic benefit, as governments use these funds to support the travel infrastructure as well as a variety of public programs.

In 2004, total tax revenue, including state and local, generated by domestic traveler spending in the main nine communities in Blackstone Valley at Rhode Island amounted to \$8.1 million.

Travel-generated tax revenue for state government include corporate taxes, individual income taxes, sales and gross receipts taxes, and excise taxes. Domestic travel spending in the main nine communities in Blackstone Valley at Rhode Island generated \$5.8 million in tax revenue in 2004 for Rhode Island state treasury. On average, each travel dollar produced 5.9 cents in state tax receipts. The state sales tax was the largest source of state travel-related revenue.

Travel-generated tax revenue for local governments includes county and city receipts from individual and corporate income taxes, sales, excise and gross receipts taxes, and property taxes. During 2004, domestic traveler spending generated \$2.3 million for local governments. Each domestic travel dollar produced 2.3 cents for local tax coffers.

Table 11: Domestic Travel-Generated Tax Revenue in the Main Nine Communities in Blackstone Valley/RI by Level of Government, 2004				
2004 Tax Revenue	Domestic (\$ Millions)	% of Total		
State Government Local Government	\$5.8 2.3	71.9% 28.1%		
Total	\$8.1	100.0%		

Source: TIA

# **APPENDICES**

# **Appendix A: Travel Economic Impact Model**

### Introduction

The Travel Economic Impact Model (TEIM) was developed by the research department at TIA (formerly known as the U.S. Travel Data Center) to provide annual estimates of the impact of the travel activity of U.S. residents on national, state and county economies in this country. It is a disaggregated model comprised of 16 travel categories. The TEIM estimates travel expenditures and the resulting business receipts, employment, personal income, and tax receipts generated by these expenditures.

The TEIM has the capability of estimating the economic impact of various types of travel, such as business and vacation, by transport mode and type of accommodations used, and other trip and traveler characteristics. The County Impact Component of the TEIM allows estimates of the economic impact of travel at the county and city level.

### **Definition of Terms**

There is no commonly accepted definition of travel in use at this time. For the purposes of the estimates herein, *travel* is defined as activities associated with all overnight and day trips to places 50 miles away or more, one way, from the traveler's origin and any overnight trips away from home in paid accommodations.

The word *tourism* is avoided in this report because of its vague meaning. Some define tourism as all travel away from home while others use the dictionary definition that limits tourism to personal or pleasure travel.

The *travel industry*, as used herein, refers to the collection of 16 types of businesses that provide goods and services to the traveler or potential traveler at the retail level (see Glossary of Terms). With the exception of Amtrak and second home ownership and rental, these business types are defined by the Office of Management and Budget in the 1997 North American Industry Classification System (NAICS) and well as in its predecessor, the 1987 Standard Industrial Classification System (SIC). In each case, the relevant NAICS and SIC codes are included.

Travel *expenditure* is assumed to take place whenever traveler exchanges money for an activity considered part of his/her trip. Total travel expenditures are separated into 16 categories representing traveler purchases of goods and services at the retail level. One category, travel agents, receives no travel expenditures as these purchases are allocated to the category (i.e. air transportation) actually providing the final good or service to the traveler. Travel expenditures are allocated among states by simulating where the exchange of money for goods or service actually took place. By their nature, some travel expenditures are assumed to occur at the traveler's origin, some at his/her destination, and some enroute.

Economic impact is represented by measures of spending, employment, payroll, business receipts and tax revenues generated by traveler spending. *Payroll* includes all forms of compensation, such as salaries, wages, commissions, bonuses, vacation allowances, sick leave pay and the value of payments in kind paid during the year to all employees. Payroll is reported before deductions for social security, income tax insurance, union dues, etc. This definition follows that used by the U.S. Census Bureau in the quinquennial Census of Service Industries.

*Employment* represents the number of jobs generated by traveler spending, both full and part-time. As such, it is consistent with the U.S. Department of Labor series on nonagricultural payroll employment. *Tax revenues* include corporate income, individual income, sales and gross receipts, and excise taxes by level of government. *Business receipts* reflect travel expenditures less the sales and excise taxes imposed on those expenditures.

# **Description of the Model**

### Estimates of Travel Expenditures

Total travel expenditures includes spending by travelers on goods and services during their trips, such as lodging, transportation, meals, entertainment, retail shopping. Sixteen (16) categories of activities are covered in the TEIM. Generally, the TEIM combines the activity levels for trips to places within the United States with the appropriate average costs of each unit of travel activity, (e.g., cost per mile by mode of transport, cost per night by type of accommodation), to produce estimates of the total amount spent on each of 16 categories of travel-related goods and services by state. For example, the number of nights spent by travel parties in hotels in Vermont is multiplied by the average cost per night per travel party of staying in a hotel in the state to obtain the estimate of traveler expenditures for hotel accommodations.

The data on domestic travel activity levels (e.g., number of miles traveled by mode of transportation, the number of nights spent away from home by type of accommodation) are based on national travel surveys conducted by TIA, The Bureau of Labor Statistics' Survey of Consumer Expenditures, Smith Travel Research's Hotel and Motel Survey, etc. Average cost data are purchased and collected from different organizations and government agencies. Total sales and revenue and other data collected from state, local and federal government and other organizations are employed to compare, adjust and update the spending database of TEIM, as well as linking spending to other impact components.

The international travel expenditure estimates are based on Tourism Industries' (OTTI) In-Flight Survey and data provided to OTTI from Canada and Mexico. Other estimates of the economic impact of international visitors to the U.S. are generated by TEIM by incorporating the estimated international traveler expenditures with the data series utilized to produce the domestic estimates.

# Estimates of Business Receipts, Payroll and Employment

The Economic Impact Component of the TEIM estimates travel generated business receipts, employment, and payroll. Basically, the 16 travel categories are associated with a type of travel-related business. For example, traveler spending on commercial lodging in a state is

related to the business receipts, employment and payroll of hotels, motels and motor hotels (SIC 701; NAICS 7211) in the state. It is assumed that travel spending in each category, less sales and excise taxes, equals business receipts for the related business type as defined by the U.S. Census Bureau.

It is assumed that each job in a specific type of business in a state is supported by some amount of business receipts and that each dollar of wages and salaries is similarly supported by some dollar volume of business receipts. The ratios of employment to business receipts are computed for each industry in each state. These ratios are then multiplied by the total amount of business receipts generated by traveler spending in a particular type of business to obtain the measures of travel generated employment and payroll of each type of business in each state. For example, the ratio of employees to business receipts in the state commercial lodging establishments is multiplied by travel generated business receipts of these establishments to obtain traveler generated employment in commercial lodging. A similar process is used for the payroll estimates.

The total sales, payroll and employment data of each travel related industry (by SIC and NAICS) are provided by and collected from state, local and federal government, such as the Bureau of Labor Statistics, the Bureau of Economic Analysis, Census Bureau and The Bureau of Transportation Statistics.

# Estimates of Tax Revenues

The Fiscal Impact Component of the TEIM is used to estimate traveler generated tax revenues of federal, state and local governments. The yield of each type of tax is related to the best measure of the relevant tax base available for each state consistent with the output of the Economic Impact Component. The ratios of yield to base for each type of tax in each state are then applied to the appropriate primary level output to obtain estimates of tax receipts generated by travel. For example, the ratio of Massachusetts State personal income tax collections to payroll in the state is applied to total travel generated payroll to obtain the estimate of state personal income tax receipts attributable to traveler spending in Massachusetts.

### Estimates for Counties and Local Areas

Local area travel impact estimates is derived by distributing the state estimates to the area using proper proportions of each related category in the area. The proportions of a local area are calculated based on a set of data collected from federal, state and local governments and private organizations. The data can be gathered at the zip code level.

Data from the U.S. Bureau of the Census, Smith Travel Research, Enos Foundation, Runzheimer International, Cruise Lines International Association, Prentice-Hall, U.S. Department of Labor's Consumer Expenditure Survey and ES-202, American Society of Travel Agents, the Federal Aviation Administration, the Department of Transportation, Amtrak, the Federal Highway Administration, state revenue departments, TIA's travel surveys and other sources are used in building and updating the model. These data indicate the change in travel spending for each of

the expenditure categories for each state over the previous year, as well as changes in the relationship of travel spending to employment, payroll and tax revenue.

# **Limitations of the Study**

This study is designed to indicate the impact of U.S. traveler expenditures on employment, payroll, business receipts and tax revenue in each of the states. These impact estimates reflect the limitations inherent in the definition of travel expenditures. Two important classes of travel-related expenses have not been estimated due to various reasons. Consumers purchase certain goods and services in anticipation of a trip away from home. These include sports equipment (tennis racquet, skis, scuba gear, etc.), travel books and guides, and services such as language lessons and lessons for participatory sports (tennis, skiing, underwater diving, etc.). The magnitude of these purchases in preparation for a trip cannot be quantified due to lack of sound, relevant data.

The second type of spending not covered due to lack of sufficient data is the purchase of major consumer durables generally related to outdoor recreation on trips. Further research is required in this area to determine to what extent pre-trip spending on consumer durable products can justifiably be included within a travel economic impact study.

# **Appendix B: Travel-Related Industry Measurement**

### **SIC-NAICS Transition**

As described in Appendix A, the 16 types of travel categories used in TEIM are associated with types of travel-related businesses. For many years, TIA selected these business types using 1987 U.S. Standard Industrial Classification (SIC) system codes.

The SIC system has been used for decades with tremendous success to classify all businesses in the U.S. by the types of products or services they make available. To its credit, the SIC system has facilitated the collection, tabulation and analysis of data. It has also promoted "apples-to-apples" comparability in statistical analyses. At the industry group level, SIC Codes report industry groups as 2 or 3 digit categories to 4 digits at their most specific.

However, as a direct consequence of rapid and widespread structural changes throughout the American economy in recent years, the SIC system has become largely outdated. Therefore, its business classification capabilities have become increasingly less than optimal.

In 1998, the United States Office of Management and Budget published a new industry classification system – the 1997 North American Industry Classification System (NAICS) to replace the SIC system. In contrast, the 2- to 6-digit NAICS industry classification system includes more useful and detailed economic data and provides a more comprehensive statistical representation of our industry. NAICS offers four major advantages over the SIC system:

Relevance: NAICS identifies hundreds of new, emerging, and advanced technology industries. Perhaps most important in terms of quantification of travel-related activity, NAICS reorganizes industries into more meaningful sectors, especially in the service-producing segments of the economy. A few examples of travel-related industries that are separately recognized for the first time:

- -Convenience stores
- -Gas stations with convenience stores
- -Casino hotels
- -Casinos
- -Other gambling industries
- -Bed and breakfast inns
- -Limited service restaurants

**International Comparability**: NAICS was developed by the U.S. Office of Management and Budget (OMB) in cooperation with Statistics Canada and Mexico's Instituto Nacional de Estadística, Geografía e Informática (INEGI). NAICS provides for comparable statistics among the three NAFTA trading partners.

**Consistency**: NAICS defines industries according to a consistent principle -- businesses that use similar processes are grouped together.

**Adaptability**: NAICS will be reviewed every five years, so classifications and information keep up with our changing economy.

## **TEIM: SIC/NAICS Industry Categories**

With the transition to NAICS, TIA has adjusted its selections of the travel-related business types using the new NAICS codes and brought its travel economic research into conformity with NAICS. For measurement purposes, TIA's Travel Economic Impact Model, tracks business activity in seven (7) major travel-related industry groups. These, in turn, are comprised of sixteen (16) business subcategories.

The industry groups and subcategories used in the model are outlined below, followed by a detailed table of SIC and NAICS Codes.

- 1. Automobile Transportation Industry: Gasoline service stations, motor vehicle/parts dealers and passenger car rental.
- 2. Entertainment/Recreation Industry: Entertainment, art and recreation industry.
- 3. Foodservice Industry: Eating & drinking places, and grocery stores.
- 4. General Retail Trade Industry: General merchandise group stores and miscellaneous retail stores, including gift and souvenir shops.

Incidental Purchases Industry: See above, General Retail Trade Industry.

- 5. Lodging Industry: This industry includes hotels, motels, and motor hotels, camps and trailer parks.
- 6. Public Transportation Industry: Air transportation, taxicab companies, interurban & rural bus transportation, railroad passenger transportation (Amtrak) and water passenger transportation. Also is the "dummy" industry of "other transportation."
- 7. Travel Arrangement Industry: This includes travel agencies, tour operators, and other travel arrangement & reservation services.

# **Appendix C: Glossary of Terms – TEIM**

<u>Automobile Transportation Expenditure</u>. This category includes a prorated share of the fixed costs of owning an automobile, truck, camper, or other recreational vehicle, such as insurance, license fees, tax, and depreciation costs. Also included are the variable costs of operating an automobile, truck, camper, or other recreational vehicle on a trip, such as gasoline, oil, tires, and repairs. The costs of renting an automobile or other motor vehicle are included in this category as well.

<u>Entertainment/Recreation Expenditure</u>. Traveler spending on recreation facility user fees, admissions at amusement parks and attractions, attendance at nightclubs, movies, legitimate shows, sports events, and other forms of entertainment and recreation while traveling.

<u>Food Expenditure</u>. Traveler spending in commercial eating facilities and grocery stores or carry-outs, as well as on food purchased for off-premise consumption.

<u>Incidental Purchase Expenditure</u>. Traveler spending on retail trade purchases including gifts for others, medicine, cosmetics, clothing, personal services, souvenirs, and other items of this nature.

<u>Lodging Expenditure</u>. Traveler spending on hotels and motels, B&Bs, campgrounds and trailer parks, rental of vacation homes and other types of lodging.

<u>Public Transportation Expenditures.</u> This includes traveler spending on air, bus, rail and boat/ship transportation, and taxicab or limousine service between airports and central cities. Also included are expenditures on "other transportation" as indicated in the TravelScope.

<u>Travel-generated Tax Receipts</u>. Those federal, state and local tax revenues attributable to travel in an area. For a given state locality, all or some of the taxes may apply. "Local" includes county, city or municipality, and township units of government actually collecting the receipts and not the level that may end up receiving it through intergovernmental transfers.

<u>Federal</u>. These receipts include corporate income taxes, individual income taxes, employment taxes, gasoline excise taxes, and airline ticket taxes.

<u>State</u>. These receipts include corporate income taxes, individual income taxes, sales and gross receipts taxes, and excise taxes.

<u>Local</u>. These include county and city receipts from individual and corporate income taxes, sales, excise and gross receipts taxes, and property taxes.

# **Appendix D: Sources of Data**

This appendix presents the sources of data used in this report.

### Sources

Air Transport Association American Automobile Association Amtrak American Society of Travel Agents Blackstone Valley Tourism Council on Behalf of the Blackstone Valley National Heritage Corridor Communities Bureau of the Census, U.S. Department of Commerce Bureau of Economic Analysis, U.S. Department of Commerce Bureau of Labor Statistics, U.S. Department of Labor Federal Aviation Administration, U.S. Department of Transportation Federal Highway Administration, U.S. Department of Transportation Massachusetts Department of Revenue National Park Service Rhode Island Department of Revenue Smith Travel Research Travel Industry Association of America