The Economic Impact of Travel on Massachusetts Counties 2009

A Study Prepared for the
Massachusetts Office of Travel and Tourism
by the
Research Department of the
U.S. Travel Association
Washington, D.C.
November 2010

PREFACE

This study was conducted by the Research Department of the U.S. Travel Association for the Massachusetts Office of Travel and Tourism. The study presents estimates of travel economic impact on Massachusetts in 2009 at the state and county levels. Estimates include travel expenditures, travel-generated employment and payroll income, as well as tax revenues for state and local government. Direct domestic travel impacts are provided for the state and the 14 counties while the international travelers' impact and the multiplier impact on Massachusetts are provided at the state level only. For the purpose of comparison, historical impact data are displayed in this report.

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INTRODUCTION

The study presents estimates of travel economic impact on Massachusetts in 2009 at the state and county levels. Estimates include travel expenditures, travel-generated employment and payroll income, as well as tax revenues for state and local government. Direct domestic travel impacts are provided for the state and the 14 counties. Additionally, the international travelers' impact and the multiplier impact on Massachusetts are provided at the state level only. For the purpose of comparison, historical impact data are displayed in this report.

All estimates of the economic impact of travel contained in this report are the product of the U.S. Travel Association's Travel Economic Impact Model (TEIM), a proprietary economic model developed expressly to indicate the expenditures, employment, payroll, and tax revenue generated by travel away from home in the United States.

The Travel Economic Impact Model (TEIM) was initially developed for the U.S. Department of the Interior to indicate the economic value of travel and tourism to states and counties. The original TEIM has been revised substantially based upon more accurate and targeted input data available from governments and the private sector.

The domestic component of TEIM is based on national surveys conducted by the U.S. Travel Association and other travel-related data developed by the U.S. Travel Association, various government agencies and well-known travel organizations each year. A summary of the methodology is provided in Appendix A.

The international travel expenditure estimates are based on the Office of Travel and 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 the TEIM by incorporating the estimated international travelers' expenditures with the data series utilized to produce the domestic estimates.

U.S. residents traveling in Massachusetts includes both state residents and out-of-state visitors traveling away from home overnight in paid accommodations, or on day or overnight trips to places 50 miles or more away from home. 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 the model. In addition, the payroll and employment estimates represent impact generated in the private sector and exclude public-supported payroll and employment.

Since additional data relating to travel and its economic impact in 2009 will become available subsequent to this study, U.S. Travel Association reserves the right to revise these estimates in the future.

EXECUTIVE SUMMARY

Total Impact of Travel

- In 2009, total domestic and international traveler spending in Massachusetts, including direct and indirect spending, amounted $22.9 billion, down 7.1 percent from 2008.

- Total payroll income generated by travel spending was nearly $6.5 billion in 2009, down 6.9 percent from 2008.

- Domestic and international traveler expenditures generated a total of 199,100 jobs in Massachusetts during 2009, a 6.4 percent decrease from 2008.

Direct Impact of Travel

- Domestic and international travelers directly spent nearly $14.4 billion in Massachusetts during 2009, down 7.9 percent from 2008. Domestic traveler spending decreased 8.3 percent, while international traveler spending declined 5.1 percent.

- Payroll income generated by direct traveler spending in Massachusetts totaled $3.4 billion during 2009, down 6.6 percent from 2008.

- Travel expenditures directly generated 121,500 jobs within Massachusetts in 2009, down 5.6 percent from 2008. Travel-generated jobs in Massachusetts comprised 3.8 percent of the total non-farm employment in the state during 2009.

- On average, every $118,112 spent in Massachusetts by domestic and international travelers generated one job in 2009.

- Traveler spending in Massachusetts directly generated $2.2 billion in tax revenue for federal, state and local governments in 2009, down 6.9 percent from 2008.

- Suffolk County, which includes the city of Boston, received nearly $5.8 billion in domestic travel expenditures to lead all Massachusetts counties during 2009.

TRAVEL IMPACT ON THE U.S. ECONOMY IN 2009

The United States economy in 2009 reached its most precarious condition since the Great Depression of the 1930's, real GDP in chained 2005 dollars dropped 2.6 percent over 2008, the lowest annual rate of GDP growth since 2000, and nominal GDP decreased 1.7 percent over 2008. The U.S. economy shrank in the first half of the year in 2009; however the economy began to show signs of improvement in the second half. The GDP in chained 2005 dollars increased 1.6 percent in the third quarter and 5.0 percent in the fourth quarter. The travel industry in the U.S. was dramatically hit by the recession during 2009. Measured in current dollars, total direct travel expenditures in the U.S. decreased 8.8 percent to $704.4 billion. This sharp decline was largely driven by the decreased travel volume and falling travel related prices.

The national unemployment rate rose to 9.3 percent in 2009, the highest level since 2000. Total U.S. nonfarm employment decreased 4.3 percent from 2008 to 103.1 million. Compared with 2008, travel industry employment was down 4.2 percent.

The Consumer Price Index (CPI), an indicator of the level of price inflation, was down 0.4 percent in 2009, while the U.S. Travel Association's Travel Price Index (TPI) decreased 6.3 percent during the same period. The falling prices of motor fuel, airline fare, and lodging away from home were the major factors causing a dramatic decrease in the Travel Price Index.

Most economists forecast that real GDP will increase from 3.0 to 3.5 percent in 2010. Many research organizations believe that the unemployment rate will remain above 9 percent during the whole year of 2010. The U.S. Travel Association expects the Consumer Price Index and Travel Price Index to increase 1.6 percent and 4.2 percent, respectively, in 2010. With the anticipated recovery of travel demand, domestic traveler spending is expected to increase 7.2 percent in 2010. Meanwhile nominal GDP is projected to rise about 4.0 percent.

U.S. Travel Volume in 2009

Compared with 2008, U.S. domestic travel, including leisure, business, convention and other travel declined 3.4 percent to total 1.9 billion person-trips during 2009. A person-trip is defined as one person on a trip away from home overnight in paid accommodations, or on a day or overnight trip to places 50 miles or more, one-way, away from home. With expected improvement of the economy, total domestic person-trips are expected to increase 3.1 percent in 2010.

Domestic leisure travel, which includes visits to friends and relatives as well as trips taken for outdoor recreation and entertainment purposes, declined 2.4 percent in 2009 as compared to 2008, totaling close to 1.5 billion person-trips. Leisure travel accounted for 77.3 percent of all U.S. domestic travel in 2009.

Domestic leisure travel is projected to rise 2.8 percent in 2010. Domestic business travel was dramatically affected by the weak economy and other business challenges in 2009. An estimated

431.1 million business person-trips were taken in 2009, a 6.5 percent decline from 2008. Business travel is forecasted to increase 4.2 percent in 2010.
International inbound travelers, including visitors from overseas, Canada and Mexico, made 54.9 million visits to the United States in 2009, down 5.3 percent from 2008. Much deeper declines were seen during the first three quarters of the year (down 14.3%, 6.5% and 3.8%, respectively). International inbound travel to the U.S., however, posted a 2.3 percent increase in the fourth quarter of 2009 and a 10.0 percent increase in the first eight months of 2010. Total international arrivals for 2010 are forecasted to increase 8.0 percent to 59.3 million.

Travel Expenditures in 2009

Total direct traveler expenditures, including the spending by domestic and international visitors, decreased 8.8 percent to $704.4 billion (in current or nominal dollars) in 2009. During 2009, leisure traveler spending decreased 7.3 percent, while business traveler spending fell 12.2 percent. Business travel, including travel for meetings/conventions and other business purposes, was much more negatively affected than was leisure travel in 2009. Declining business revenue, higher rates of unemployment, changes in corporate travel policies, technological advances that offer alternatives to travel, and political concerns all combined to make business travel – and especially meeting/events-related travel - the most vulnerable sector in the U.S. travel industry in 2009. Spending by meetings/convention travelers declined 14.8 percent in 2009.

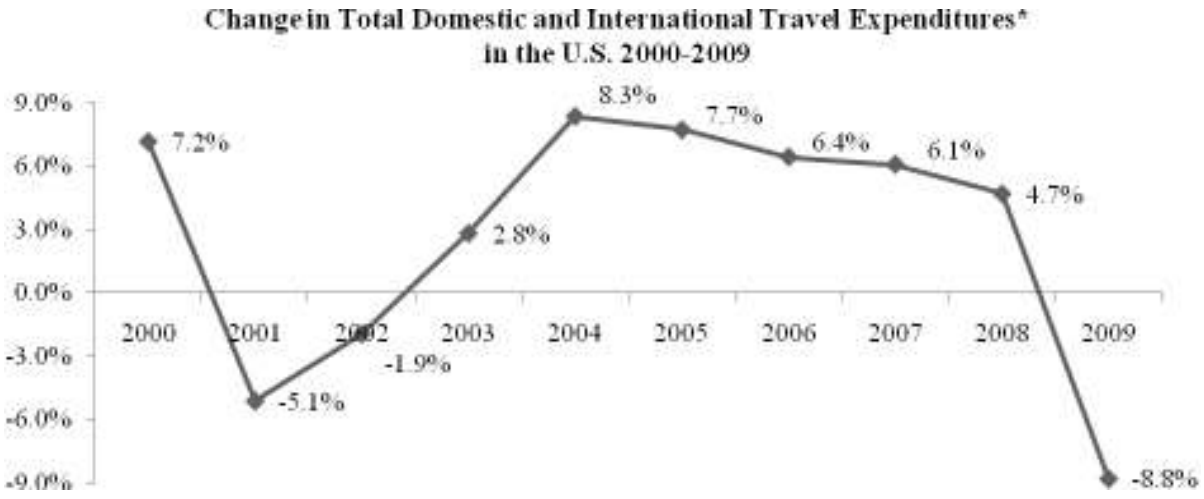
Domestic travel expenditures in 2009 (current dollars) dropped for the first time since 2002 to a total of $610.2 billion, a 7.9 percent decline from 2008. This decrease reflects deflation in travel prices, especially in the cost of gasoline as well as the declines in travel volume and changes in the trips that were taken (e.g., traveling closer to home, spending less at the destination). Domestic travel expenditures are forecasted to rise 7.2 percent in 2010 from 2009 totaling $654.0 billion.

In 2009, discouraged by the economic recession, spending by international traveler while in the U.S. dropped 14.4 percent from 2008, totaling $94.2 billion. Despite the decline, the travel industry generated a $20.7 billion trade surplus for the U.S. in 2009.

Table 1: Travel Expenditures in the U.S., 2008 and 2009

Industry Sector	2008 Travel Spending in The U.S. ($ Billions)	2009p Travel Spending in The U.S. ($ Billions)	% 2009p/2008 Travel Spending in The U.S. (Percent Change)
Public Transportation	$143.9	$124.6	-13.4%
Auto Transportation	137.5	113.2	-17.7%
Lodging	145.7	126.6	-13.1%
Foodservice	182.1	179.4	-1.5%
Entertainment/Recreation	84.4	82.9	-1.8%
General Retail	78.9	77.7	-1.5%
Total	$772.5	$704.4	-8.8%
International*	$110.1	$94.2	-14.4%
Domestic	$662.4	$610.2	-7.9%

*Source: U.S. Travel Association. P: preliminary. * Excludes international passenger fare payments.*



*Source: U.S. Travel Association. P: preliminary. * Excludes international passenger fare payments.*

Travel Employment in 2009

Domestic and international traveler expenditures in the U.S. directly generated nearly 7.4 million jobs in 2009, down 4.2 percent from 2008. It accounted for 5.6 percent of total non-farm employment in the U.S.

Affected by the economic recession, the employment situation in the U.S. has been deteriorating. The nation's unemployment rate hit 9.3 percent in 2009 and is expected to remain at a similar level in 2010. Employment in the travel industry, however, is expected to increase 1.2 percent in 2010, after losing nearly 326,000 jobs in 2009, based on the U.S. Travel Association's forecast.

Table 2: Travel-Generated Employment in the U.S., 2008 and 2009

Industry Sector	2008 Travel-Generated Employment (Thousands)	2009p Travel-Generated Employment (Thousands)	% 2009p/2008 Travel-Generated Employment (Percent Change)
Public Transportation	1,003.0	949.1	-5.4%
Auto Transportation	263.0	253.0	-3.8%
Lodging	1,497.6	1,402.4	-6.4%
Foodservice	2,996.2	2,892.2	-3.5%
Entertainment/Recreation	1,298.8	1,265.8	-2.5%
General Retail	485.7	467.3	-3.8%
Travel Planning	175.1	163.8	-6.5%
Total	7,719.4	7,393.6	-4.2%
International*	1,010.2	893.6	-11.5%
Domestic	6,709.2	6,500.0	-3.1%

Sources: U.S. Travel Association, BLS
P: preliminary
** Excludes jobs generated by international passenger fare payments.*

Table 3: Overall U.S. Economic Developments, 2007-2009

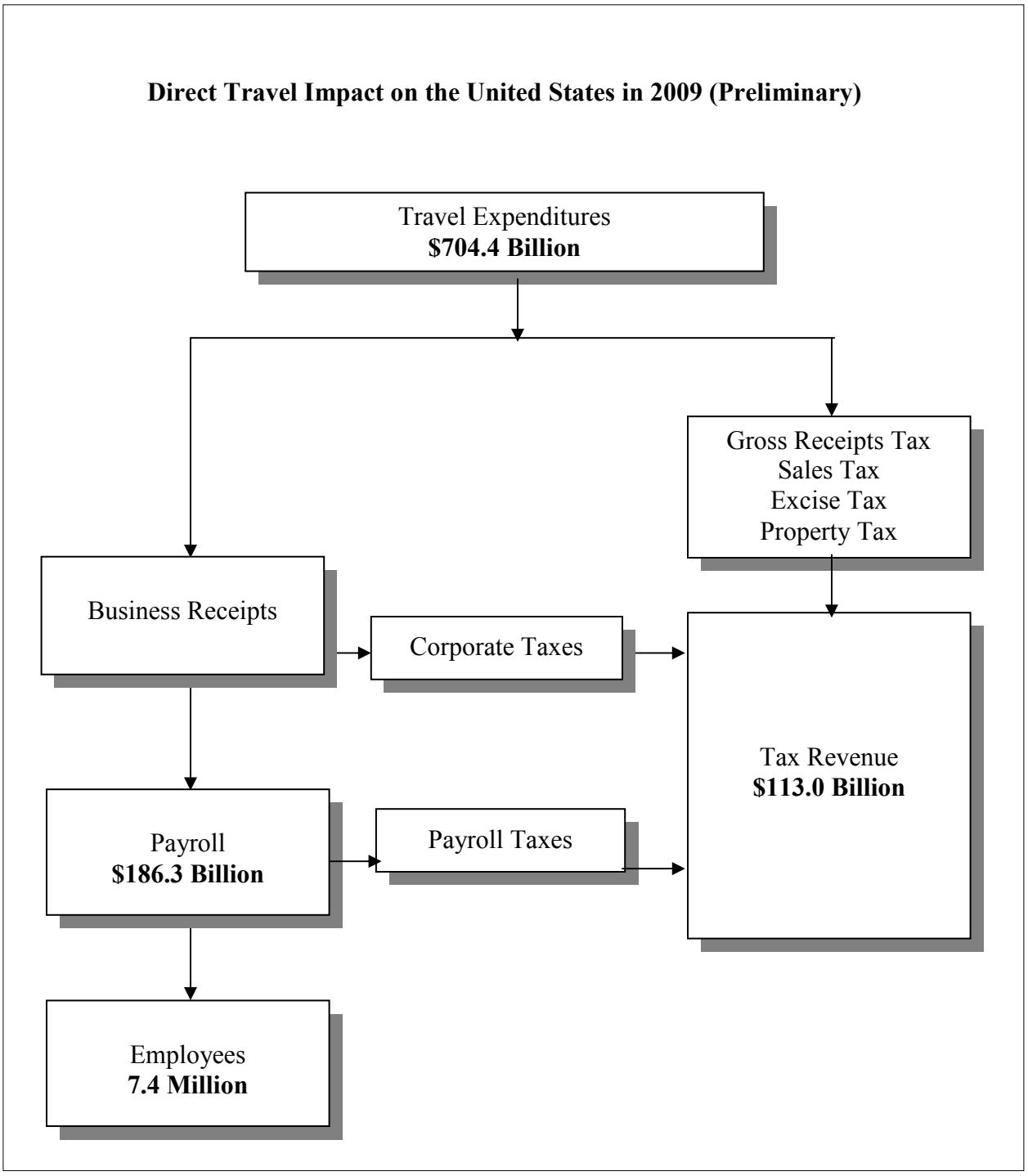
Sector	2007	2008	2009
Nominal gross domestic product ($ Billions)	$14,061.8	$14,369.1	$14,119.0
Real gross domestic product ($ Billions)*	$13,228.9	$13,228.8	$12,880.6
Real disposable personal income ($Billions)*	$9,874.2	$10,042.9	$10,099.8
Real personal consumption expenditures ($ Billions)*	$9,289.5	$9,265.0	$9,153.9
Consumer price index**	207.3	215.3	214.5
Travel Price Index**	244.0	257.7	241.5
Non-farm payroll employment (Millions)	137.6	136.8	130.9
Unemployment rate (%)	4.6	5.8	9.3
Percentage change from previous year			
Nominal gross domestic product	4.9%	2.2%	-1.7%
Real gross domestic product	1.9%	0.0%	-2.6%
Real disposable personal income	2.3%	1.7%	0.6%
Real personal consumption expenditures	2.4%	-0.3%	-1.2%
Consumer price index	2.8%	3.9%	-0.4%
Travel Price Index	4.5%	5.6%	-6.3%
Non-farm payroll employment	1.1%	-0.6%	-4.3%

Sources: U.S. Dept. of Commerce, U.S. Dept. of Labor, U.S. Census Bureau, U.S. Travel Association
P: preliminary
** Chained 2005 dollars*
*** Base period: 1982-84=100*

Table 4: U.S. Travel Trends, 2005-2009

Category	2005	2006	2007	2008	2009
Total travel expenditures ($ billions)	$653.7	$695.7	$738.0	$772.5	$704.4
U.S. travelers' expenditures ($ billions)	$572.0	$610.0	$641.3	$662.4	$610.2
International travelers' expenditures In the U.S. ($ billions)*	$81.7	$85.7	$96.7	$110.1	$94.2
Travel price index**	222.6	233.5	244.0	215.3	214.5
Travel-generated employment*** (thousands)	7,508.8	7,550.5	7,699.9	7,719.4	7,393.6
Percentage change from previous year					
Total travel expenditures	7.7%	6.4%	6.1%	4.7%	-8.8%
U.S. travelers' expenditures	7.5%	6.6%	5.1%	3.3%	-7.9%
International travelers' expenditures in the U.S.	9.6%	4.9%	12.9%	13.8%	-14.4%
Travel price index	17.8%	4.9%	4.5%	-11.8%	-0.4%
Travel-generated employment	0.8%	0.6%	2.0%	0.3%	-4.2%

Sources: U.S. Travel Association, U.S. Bureau of Economic Analysis (BEA), U.S. Bureau of Labor Statistics (BLS)
P: Preliminary
** International traveler spending does not include international passenger fares.*
*** Base period: 1982-84=100.*
**** Includes employment generated by both domestic and international traveler expenditures.*



Source: U.S. Travel Association, U.S. Bureau of Economic Analysis (BEA), U.S. Bureau of Labor Statistics (BLS)
**Does not include international passenger fare payments and other economic impact generated by these payments.*

TRAVEL IMPACT ON MASSACHUSETTS - 2009

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Travel Expenditures

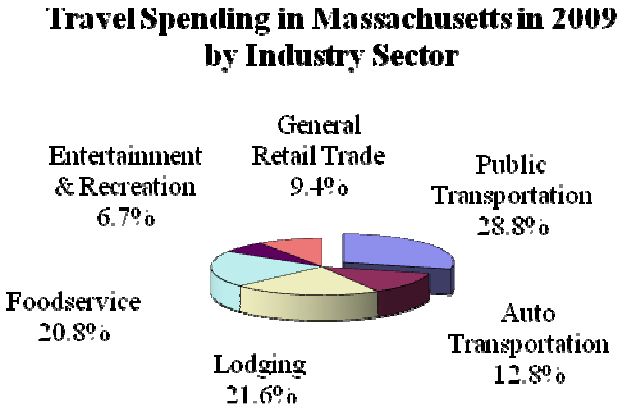
- Domestic and international travelers in Massachusetts directly spent nearly $14.4 billion on transportation, lodging, food, entertainment and recreation and incidentals during 2009, representing a decrease of 7.9 percent from 2008. Domestic travelers spent more than $12.4 billion while international travelers spent over $1.9 billion, down 8.3 percent and 5.1 percent, respectively, from 2008.

- In 2009, domestic and international travelers spent more than $4.1 billion on public transportation, down 11.8 percent from 2008.

- Domestic and international travelers spent nearly $3.1 billion on lodging during 2009, a decrease of 13.1 percent from 2008. According to Smith Travel Research, hotel room demand fell by 5.6 percent in 2009 while the average daily room rate decreased 8.7 percent.

- Spending on foodservice by domestic and international travelers totaled almost $3.0 billion, little changed compared with 2008.

- Domestic and international travel spending on auto transportation decreased by 10.1 percent in 2009 to more than $1.8 billion, largely driven by decreased gasoline prices.



1. Auto transportation sector includes privately-owned vehicles that are used for trips (e.g., automobiles, trucks, campers or other recreational vehicles), gasoline service stations, and automotive rental.
2. Foodservice sector includes restaurants, grocery stores and other eating and drinking establishments.
3. Public transportation sector comprises air, intercity bus, rail, boat or ship, and taxicab or limousine service.
4. Lodging sector consists of hotels and motels, campgrounds, and ownership or rental of vacation or second homes.
5. General retail trade sector includes gifts, clothes, souvenirs and other incidental retail purchases.

6. Entertainment and recreation sector includes amusement parks and attractions, attendance at nightclubs, movies, legitimate shows, sports events, and other forms of entertainment and recreation while traveling.

Table 5: Direct Travel Expenditures in Massachusetts by Industry Sector, 2008-2009

2009 Expenditures	Domestic ($ Millions)	International ($ Millions)	Total ($ Millions)	% of Total
Public Transportation	$3,893.3	$237.8	$4,131.1	28.8%
Auto Transportation	1,811.9	26.6	1,838.4	12.8%
Lodging	2,467.5	628.0	3,095.5	21.6%
Foodservice	2,601.6	379.3	2,980.9	20.8%
Entertainment & Recreation	791.2	164.0	955.2	6.7%
General Retail Trade	853.7	497.8	1,351.5	9.4%
Total	$12,419.2	$1,933.5	$14,352.6	100.0%
2008 Expenditures				
Public Transportation	$4,419.0	$265.3	$4,684.3	30.1%
Auto Transportation	2,016.5	29.2	2,045.8	13.1%
Lodging	2,851.4	712.6	3,564.0	22.9%
Foodservice	2,605.4	375.9	2,981.3	19.1%
Entertainment & Recreation	790.2	165.7	955.9	6.1%
General Retail Trade	857.0	488.5	1,345.5	8.6%
Total	$13,539.5	$2,037.3	$15,576.8	100.0%

Percentage change 2009 over 2008	Domestic (%)	International (%)	Total (%)
Public Transportation	-11.9%	-10.4%	-11.8%
Auto Transportation	-10.1%	-9.1%	-10.1%
Lodging	-13.5%	-11.9%	-13.1%
Foodservice	-0.1%	0.9%	0.0%
Entertainment & Recreation	0.1%	-1.0%	-0.1%
General Retail Trade	-0.4%	1.9%	0.4%
Total	-8.3%	-5.1%	-7.9%

Source: U.S. Travel Association

Table 6: Travel Expenditures in Massachusetts by Industry Sector, 2005-2009

(Expenditures in millions of dollars)

	2005	2005	2005	2006	2006	2006	2007	2007	2007	2008	2008	2008	2009	2009	2009
Expenditures	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Public Transportation	3,861.3	187.3	4,048.6	4,168.6	216.4	4,385.0	4,392.9	231.9	4,624.8	4,419.0	265.3	4,684.3	3,893.3	237.8	4,131.1
Auto Transportation	1,681.6	18.2	1,699.8	1,802.0	22.1	1,824.1	1,908.7	24.6	1,933.3	2,016.5	29.2	2,045.8	1,811.9	26.6	1,838.4
Lodging	2,397.7	476.8	2,874.6	2,644.0	571.8	3,215.8	2,856.6	641.9	3,498.5	2,851.4	712.6	3,564.0	2,467.5	628.0	3,095.5
Foodservice	2,271.0	257.3	2,528.3	2,403.8	296.8	2,700.6	2,548.3	327.7	2,876.0	2,605.4	375.9	2,981.3	2,601.6	379.3	2,980.9
Entertainment & Rec.	685.0	120.2	805.2	733.2	135.7	868.9	769.4	148.6	918.0	790.2	165.7	955.9	791.2	164.0	955.2
General Retail Trade	794.9	328.6	1,123.5	840.6	376.2	1,216.8	870.5	423.4	1,293.9	857.0	488.5	1,345.5	853.7	497.8	1,351.5
Total	11,691.7	1,388.3	13,080.0	12,592.2	1,619.1	14,211.3	13,346.5	1,798.1	15,144.6	13,539.5	2,037.3	15,576.8	12,419.2	1,933.5	14,352.6
% Change*	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Public Transportation	7.2%	-1.5%	6.7%	8.0%	15.6%	8.3%	5.4%	7.2%	5.5%	0.6%	14.4%	1.3%	-11.9%	-10.4%	-11.8%
Auto Transportation	9.8%	-0.4%	9.6%	7.2%	21.7%	7.3%	5.9%	11.2%	6.0%	5.6%	18.9%	5.8%	-10.1%	-9.1%	-10.1%
Lodging	6.6%	-2.3%	5.0%	10.3%	19.9%	11.9%	8.0%	12.2%	8.8%	-0.2%	11.0%	1.9%	-13.5%	-11.9%	-13.1%
Foodservice	4.6%	-3.9%	3.7%	5.8%	15.4%	6.8%	6.0%	10.4%	6.5%	2.2%	14.7%	3.7%	-0.1%	0.9%	0.0%
Entertainment & Rec.	4.5%	-3.6%	3.2%	7.0%	12.9%	7.9%	4.9%	9.5%	5.7%	2.7%	11.5%	4.1%	0.1%	-1.0%	-0.1%
General Retail Trade	3.7%	-4.3%	1.3%	5.8%	14.5%	8.3%	3.6%	12.5%	6.3%	-1.5%	15.4%	4.0%	-0.4%	1.9%	0.4%
Total	6.5%	-3.1%	5.4%	7.7%	16.6%	8.6%	6.0%	11.1%	6.6%	1.4%	13.3%	2.9%	-8.3%	-5.1%	-7.9%
% of Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Public Transportation	33.0%	13.5%	31.0%	33.1%	13.4%	30.9%	32.9%	12.9%	30.5%	32.6%	13.0%	30.1%	31.3%	12.3%	28.8%
Auto Transportation	14.4%	1.3%	13.0%	14.3%	1.4%	12.8%	14.3%	1.4%	12.8%	14.9%	1.4%	13.1%	14.6%	1.4%	12.8%
Lodging	20.5%	34.3%	22.0%	21.0%	35.3%	22.6%	21.4%	35.7%	23.1%	21.1%	35.0%	22.9%	19.9%	32.5%	21.6%
Foodservice	19.4%	18.5%	19.3%	19.1%	18.3%	19.0%	19.1%	18.2%	19.0%	19.2%	18.5%	19.1%	20.9%	19.6%	20.8%
Entertainment & Rec.	5.9%	8.7%	6.2%	5.8%	8.4%	6.1%	5.8%	8.3%	6.1%	5.8%	8.1%	6.1%	6.4%	8.5%	6.7%
General Retail Trade	6.8%	23.7%	8.6%	6.7%	23.2%	8.6%	6.5%	23.5%	8.5%	6.3%	24.0%	8.6%	6.9%	25.7%	9.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: U.S. Travel Association

** Compared with previous year.*

TRAVEL IMPACT ON MASSACHUSETTS – 2009

Travel-Generated Payroll

Travel-generated payroll is the wage and salary income paid to employees directly serving travelers 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.

- Payroll income paid by Massachusetts travel-related firms and directly attributable to domestic and international travel decreased 6.6 percent from 2008, totaling $3.4 billion in 2009.

- In 2009, payroll directly attributable to domestic traveler spending totaled $2.9 billion, a 7.0 percent decline from 2008. International traveler expenditures generated $478 million in payroll income for Massachusetts' residents, down 4.3 percent from 2008.

- On average, every dollar spent by domestic and international travelers produced $0.24 in payroll income for Massachusetts' residents during 2009.

- Compared with 2008, travel-generated payroll for travel planning sector showed the deepest decline among seven sectors investigated, down 19.0 percent. Payroll for the lodging sector decrease 9.6 percent from 2008.

- The average payroll income generated by travel in Massachusetts stood at $28,042 in 2009, a decrease of 1.1 percent from 2008. The reduction was mostly driven by payroll declines in the lodging and travel planning sectors.

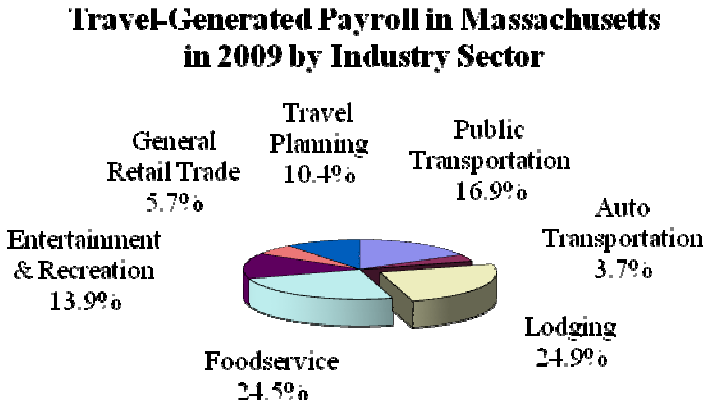


Table 7: Travel-Generated Payroll in Massachusetts by Industry Sector, 2008-2009

2009 Payroll	Domestic ($ Millions)	International ($ Millions)	Total ($ Millions)	% of Total
Public Transportation	$544.7	$30.3	$575.0	16.9%
Auto Transportation	124.2	2.1	126.3	3.7%
Lodging	676.6	171.7	848.3	24.9%
Foodservice	724.4	109.5	833.9	24.5%
Entertainment & Recreation	389.4	84.0	473.4	13.9%
General Retail Trade	114.4	80.4	194.8	5.7%
Travel Planning *	355.9	0.0	355.9	10.4%
Total	$2,929.5	$478.0	$3,407.5	100.0%
2008 Payroll				
Public Transportation	$567.4	$31.0	$598.5	16.4%
Auto Transportation	125.9	2.1	128.0	3.5%
Lodging	751.1	187.2	938.3	25.7%
Foodservice	744.9	111.4	856.3	23.5%
Entertainment & Recreation	407.5	88.9	496.3	13.6%
General Retail Trade	114.8	78.8	193.6	5.3%
Travel Planning *	439.1	0.0	439.1	12.0%
Total	$3,150.6	$499.5	$3,650.1	100.0%
Percentage change 2009 over 2008	Domestic (%)	International (%)	Total (%)	
Public Transportation	-4.0%	-2.4%	-3.9%	
Auto Transportation	-1.4%	-0.3%	-1.4%	
Lodging	-9.9%	-8.3%	-9.6%	
Foodservice	-2.8%	-1.7%	-2.6%	
Entertainment & Recreation	-4.4%	-5.5%	-4.6%	
General Retail Trade	-0.3%	1.9%	0.6%	
Travel Planning *	-19.0%	_	-19.0%	
Total	-7.0%	-4.3%	-6.6%	

Source: U.S. Travel Association

**Refers to payroll income that goes to travel agents, tour operators, and other travel service employees who arrange passenger transportation, lodging, tours and other related services.*

Table 8: Direct Travel Payroll in Massachusetts by Industry Sector, 2005-2009

(Payroll in millions of dollars)

	2005	2005	2005	2006	2006	2006	2007	2007	2007	2008	2008	2008	2009	2009	2009
Payroll	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Public Trans.	551.3	25.2	576.5	548.5	26.0	574.5	593.1	28.5	621.6	567.4	31.0	598.5	544.7	30.3	575.0
Auto Trans.	124.4	1.7	126.1	126.0	1.8	127.8	127.7	1.9	129.6	125.9	2.1	128.0	124.2	2.1	126.3
Lodging	675.5	139.6	815.1	701.3	151.3	852.5	744.0	166.7	910.7	751.1	187.2	938.3	676.6	171.7	848.3
Foodservice	674.8	82.7	757.5	702.0	89.9	791.9	734.8	98.0	832.7	744.9	111.4	856.3	724.4	109.5	833.9
Entertainment & Rec.	364.5	68.3	432.8	380.3	73.2	453.6	398.2	80.0	478.2	407.5	88.9	496.3	389.4	84.0	473.4
General Retail Trade	125.8	65.2	191.0	117.8	63.6	181.4	120.5	70.7	191.2	114.8	78.8	193.6	114.4	80.4	194.8
Travel Planning	367.0	_	367.0	400.0	_	400.0	418.7	_	418.7	439.1	_	439.1	355.9	_	355.9
Total	2,883.3	382.6	3,265.9	2,976.0	405.7	3,381.6	3,137.0	445.8	3,582.8	3,150.6	499.5	3,650.1	2,929.5	478.0	3,407.5
% Change*	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Public Trans.	-5.5%	-12.2%	-5.8%	-0.5%	3.0%	-0.3%	8.1%	9.9%	8.2%	-4.3%	8.8%	-3.7%	-4.0%	-2.4%	-3.9%
Auto Trans.	3.0%	-6.1%	2.9%	1.3%	8.2%	1.4%	1.4%	6.4%	1.4%	-1.4%	10.9%	-1.2%	-1.4%	-0.3%	-1.4%
Lodging	3.9%	-2.7%	2.7%	3.8%	8.4%	4.6%	6.1%	10.2%	6.8%	1.0%	12.3%	3.0%	-9.9%	-8.3%	-9.6%
Foodservice	2.1%	-3.6%	1.4%	4.0%	8.7%	4.5%	4.7%	9.0%	5.2%	1.4%	13.7%	2.8%	-2.8%	-1.7%	-2.6%
Entertainment & Rec.	1.4%	-4.2%	0.5%	4.4%	7.2%	4.8%	4.7%	9.3%	5.4%	2.3%	11.1%	3.8%	-4.4%	-5.5%	-4.6%
General Retail Trade	0.8%	-4.4%	-1.0%	-6.3%	-2.5%	-5.0%	2.3%	11.2%	5.4%	-4.8%	11.6%	1.3%	-0.3%	1.9%	0.6%
Travel Planning	6.1%	_	6.1%	9.0%	_	9.0%	4.7%	_	4.7%	4.9%	_	4.9%	-19.0%	_	-19.0%
Total	1.3%	-4.1%	0.6%	3.2%	6.0%	3.5%	5.4%	9.9%	5.9%	0.4%	12.0%	1.9%	-7.0%	-4.3%	-6.6%
% of Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Public Trans.	19.1%	6.6%	17.7%	18.4%	6.4%	17.0%	18.9%	6.4%	17.3%	18.0%	6.2%	16.4%	18.6%	6.3%	16.9%
Auto Trans.	4.3%	0.4%	3.9%	4.2%	0.4%	3.8%	4.1%	0.4%	3.6%	4.0%	0.4%	3.5%	4.2%	0.4%	3.7%
Lodging	23.4%	36.5%	25.0%	23.6%	37.3%	25.2%	23.7%	37.4%	25.4%	23.8%	37.5%	25.7%	23.1%	35.9%	24.9%
Foodservice	23.4%	21.6%	23.2%	23.6%	22.2%	23.4%	23.4%	22.0%	23.2%	23.6%	22.3%	23.5%	24.7%	22.9%	24.5%
Entertainment & Rec.	12.6%	17.8%	13.3%	12.8%	18.0%	13.4%	12.7%	17.9%	13.3%	12.9%	17.8%	13.6%	13.3%	17.6%	13.9%
General Retail Sales	4.4%	17.0%	5.8%	4.0%	15.7%	5.4%	3.8%	15.8%	5.3%	3.6%	15.8%	5.3%	3.9%	16.8%	5.7%
Travel Planning	12.7%	_	11.2%	13.4%	_	11.8%	13.3%	_	11.7%	13.9%	_	12.0%	12.1%	_	10.4%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: U.S. Travel Association

** Compared with previous year.*

TRAVEL IMPACT ON MASSACHUSETTS - 2009

Travel-Generated Employment

The most impressive contribution that travel and tourism make to the Massachusetts economy is the number of businesses and jobs it supports. These jobs include a large number of executive and managerial positions, as well as service-oriented occupations.

- During 2009, domestic and international traveler spending in Massachusetts generated approximately 121,500 jobs, including full-time and seasonal/part-time positions in the state, down 5.6 percent from 2008. Employment generated by domestic traveler spending decreased by 5.9 percent while employment generated by international traveler spending was down 3.9 percent.

- On average, every $118,112 spent by domestic and international travelers in Massachusetts directly supported one job in 2009.

- It is important to note that these travel-related jobs comprised 3.8 percent of total non-agricultural employment in Massachusetts during 2009. Without these jobs generated by travel, Massachusetts's 2009 unemployment rate of 8.4 percent would have been 3.5 percentage points higher.

- Domestic and international traveler spending on foodservice, including restaurants and other eating and drinking places, provided more jobs than any other industry sector, down 2.7 percent from 2008 to 46,000. The labor-intensiveness of these businesses contributes to the high level of travel employment in this sector.

Travel-Generated Employment in Massachusetts in 2009 by Industry Sector

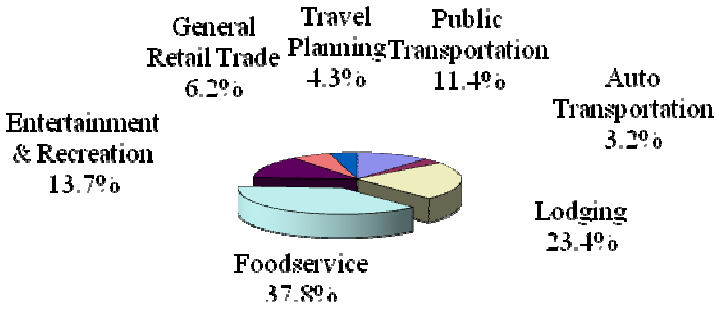


Table 9: Travel-Generated Employment in Massachusetts by Industry Sector, 2008-2009

2009 Employment	Domestic (Thousands)	International (Thousands)	Total (Thousands)	% of Total
Public Transportation	13.1	0.8	13.8	11.4%
Auto Transportation	3.8	0.1	3.9	3.2%
Lodging	23.3	5.2	28.4	23.4%
Foodservice	40.5	5.5	46.0	37.8%
Entertainment & Recreation	13.9	2.8	16.6	13.7%
General Retail Trade	4.6	2.9	7.5	6.2%
Travel Planning *	5.3	0.0	5.3	4.3%
Total	104.4	17.2	121.5	100.0%
2008 Employment				
Public Transportation	14.0	0.8	14.8	11.5%
Auto Transportation	4.0	0.1	4.0	3.1%
Lodging	25.3	5.5	30.9	24.0%
Foodservice	41.7	5.6	47.3	36.7%
Entertainment & Recreation	14.4	2.9	17.3	13.4%
General Retail Trade	4.7	2.9	7.7	6.0%
Travel Planning *	6.8	0.0	6.8	5.3%
Total	110.9	17.9	128.8	100.0%

Percentage change 2009 over 2008	Domestic (%)	International (%)	Total (%)
Public Transportation	-7.0%	-5.5%	-7.0%
Auto Transportation	-2.6%	-1.5%	-2.6%
Lodging	-8.1%	-6.4%	-7.8%
Foodservice	-2.8%	-1.8%	-2.7%
Entertainment & Recreation	-3.9%	-5.0%	-4.1%
General Retail Trade	-3.4%	-1.2%	-2.6%
Travel Planning *	-22.4%	_	-22.6%
Total	-5.9%	-3.9%	-5.6%

Source: U.S. Travel Association

** Refers to jobs created in travel arrangement firms such as travel agencies, wholesale and retail tour companies, and other travel-related service businesses.*

Table 10: Direct Travel Employment in Massachusetts by Industry Sector, 2005-2009

(Employment in thousands)

	2005	2005	2005	2006	2006	2006	2007	2007	2007	2008	2008	2008	2009	2009	2009
Employment	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Public Trans.	14.1	0.7	14.8	13.8	0.7	14.5	14.2	0.7	14.9	14.0	0.8	14.8	13.1	0.8	13.8
Auto Trans.	4.1	0.1	4.2	4.2	0.1	4.2	4.1	0.1	4.1	4.0	0.1	4.0	3.8	0.1	3.9
Lodging	25.1	4.6	29.7	25.0	4.7	29.8	25.3	5.0	30.3	25.3	5.5	30.9	23.3	5.2	28.4
Foodservice	40.9	4.5	45.4	41.4	4.8	46.1	42.1	5.0	47.1	41.7	5.6	47.3	40.5	5.5	46.0
Entertainment & Rec.	14.1	2.4	16.5	14.3	2.5	16.8	14.4	2.7	17.0	14.4	2.9	17.3	13.9	2.8	16.6
General Retail Trade	5.2	2.4	7.6	5.1	2.5	7.6	5.0	2.7	7.7	4.7	2.9	7.7	4.6	2.9	7.5
Travel Planning	6.9	_	6.9	6.7	_	6.7	6.6	_	6.6	6.8	_	6.8	5.3	_	5.3
Total	110.5	14.7	125.2	110.5	15.3	125.8	111.7	16.1	127.8	110.9	17.8	128.8	104.4	17.2	121.5
% Change*	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Public Trans.	-4.8%	-7.6%	-4.9%	-2.0%	1.4%	-1.9%	2.6%	4.4%	2.7%	-1.1%	12.4%	-0.5%	-7.0%	-5.5%	-7.0%
Auto Trans.	0.9%	-2.9%	0.9%	0.5%	7.3%	0.6%	-2.3%	2.6%	-2.2%	-3.0%	9.1%	-2.8%	-2.6%	-1.5%	-2.6%
Lodging	1.7%	-0.5%	1.4%	-0.3%	4.1%	0.4%	1.1%	5.1%	1.8%	0.0%	10.9%	1.8%	-8.1%	-6.4%	-7.8%
Foodservice	0.5%	-0.8%	0.3%	1.1%	5.7%	1.6%	1.6%	5.9%	2.1%	-0.9%	11.2%	0.4%	-2.8%	-1.8%	-2.7%
Entertainment & Rec.	-0.1%	-1.3%	-0.3%	1.3%	4.1%	1.7%	0.7%	5.1%	1.4%	0.3%	8.8%	1.6%	-3.9%	-5.0%	-4.1%
General Retail Trade	-0.6%	-1.4%	-0.8%	-1.6%	2.5%	-0.3%	-1.7%	6.8%	1.0%	-5.8%	10.4%	-0.2%	-3.4%	-1.2%	-2.6%
Travel Planning	1.8%	_	1.8%	-2.7%	_	-2.7%	-1.1%	_	-1.1%	2.1%	_	2.1%	-22.4%	_	-22.4%
Total	0.0%	-1.3%	-0.1%	0.0%	4.2%	0.5%	1.1%	5.6%	1.6%	-0.7%	10.6%	0.7%	-5.9%	-3.8%	-5.6%
% of Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Public Trans.	12.8%	4.6%	11.8%	12.5%	4.4%	11.5%	12.7%	4.4%	11.7%	12.7%	4.5%	11.5%	12.5%	4.4%	11.4%
Auto Trans.	3.8%	0.4%	3.4%	3.8%	0.4%	3.4%	3.6%	0.4%	3.2%	3.6%	0.4%	3.1%	3.7%	0.4%	3.2%
Lodging	22.7%	31.1%	23.7%	22.7%	31.1%	23.7%	22.7%	30.9%	23.7%	22.8%	31.0%	24.0%	22.3%	30.2%	23.4%
Foodservice	37.0%	30.7%	36.3%	37.4%	31.1%	36.7%	37.7%	31.2%	36.8%	37.6%	31.4%	36.7%	38.8%	32.0%	37.8%
Entertainment & Rec.	12.8%	16.6%	13.2%	12.9%	16.6%	13.4%	12.9%	16.5%	13.3%	13.0%	16.2%	13.4%	13.3%	16.0%	13.7%
General Retail Sales	4.7%	16.6%	6.1%	4.6%	16.3%	6.1%	4.5%	16.5%	6.0%	4.3%	16.5%	6.0%	4.4%	16.9%	6.2%
Travel Planning	6.2%	_	5.5%	6.1%	_	5.3%	5.9%	_	5.2%	6.1%	_	5.3%	5.0%	_	4.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: U.S. Travel Association

** Compared with previous year.*

TRAVEL IMPACT ON MASSACHUSETTS - 2009

Travel-Generated Tax Revenue

Travel tax receipts are the federal, state and local tax revenues attributable to travel spending in Massachusetts. Travel-generated tax revenue is a significant economic benefit, as governments use these funds to support the travel infrastructure and help support a variety of public programs.

- In 2009, domestic and international traveler spending in Massachusetts generated $2.2 billion tax revenue for federal, state and local governments, down 6.9 percent from 2008. Domestic traveler spending generated nearly $1.9 billion while international traveler spending generated more than $314 million, down 7.3 percent and 4.2 percent, respectively, from 2008.

- Domestic and international traveler spending in Massachusetts generated nearly $1.3 billion for the federal government during 2009, down 8.2 percent from 2008. This represented 58.5 percent of all travel-generated tax collections in the state. Each dollar spent by domestic and international travelers in Massachusetts produced $0.09 for federal tax coffers.

- Domestic and international traveler spending in Massachusetts also generated close to $574 million in tax revenue for the state treasury through state sales and excise taxes, and taxes on personal and corporate income during 2009, down 4.1 percent from 2008. This $574 million comprised 26.0 percent of all travel-generated tax revenue for 2009 collected in the state. On average, each travel dollar produced $0.04 in state tax receipts.

- Local governments in Massachusetts directly benefited from travel as well. During 2009, domestic and international traveler spending generated nearly $342 million in sales and property tax revenue for the localities, down 6.3 percent from 2008. This represents 15.5 percent of total travel-generated tax revenue in the state during 2009. Each domestic travel dollar produced more than $0.02 for local tax coffers.

Travel-Generated Tax Revenue in Massachusetts in 2009 by Level of Government

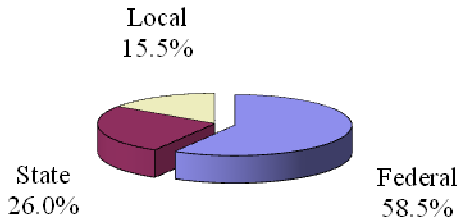


Table 11: Travel-Generated Tax Revenue in Massachusetts by Level of Government, 2008-2009

2009 Tax Revenue	Domestic ($ Millions)	International ($ Millions)	Total ($ Millions)	% of Total
Federal	$1,094.6	$196.0	$1,290.6	58.5%
State	495.2	78.6	573.8	26.0%
Local	301.8	39.7	341.5	15.5%
Total	$1,891.7	$314.3	$2,206.0	100.0%
2008 Tax Revenue				
Federal	$1,198.7	$207.4	$1,406.2	59.4%
State	518.5	79.6	598.1	25.2%
Local	323.5	41.1	364.6	15.4%
Total	$2,040.7	$328.1	$2,368.8	100.0%
Percentage change 2009 over 2008	Domestic (%)	International (%)	Total (%)	
Federal	-8.7%	-5.5%	-8.2%	
State	-4.5%	-1.2%	-4.1%	
Local	-6.7%	-3.5%	-6.3%	
Total	-7.3%	-4.2%	-6.9%	

Source: U.S. Travel Association

Table 12: Direct Travel Tax Revenue in Massachusetts by Industry Sector, 2005-2009
(Tax Revenues in millions of dollars)

	2005	2005	2005	2006	2006	2006	2007	2007	2007	2008	2008	2008	2009	2009	2009
Tax Revenue	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Federal	1,090.9	152.5	1,243.4	1,142.1	168.9	1,311.0	1,199.4	185.8	1,385.2	1,198.7	207.4	1,406.2	1,094.6	196.0	1,290.6
State	466.3	57.8	524.1	489.9	64.3	554.2	516.9	71.0	588.0	518.5	79.6	598.1	495.2	78.6	573.8
Local	280.4	28.8	309.2	300.4	32.6	333.0	319.1	36.3	355.4	323.5	41.1	364.6	301.8	39.7	341.5
Total	1,837.7	239.1	2,076.7	1,932.4	265.8	2,198.1	2,035.4	293.2	2,328.5	2,040.7	328.1	2,368.8	1,891.7	314.3	2,206.0
% Change*	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Federal	3.1%	-3.1%	2.3%	4.7%	10.8%	5.4%	5.0%	10.0%	5.7%	-0.1%	11.6%	1.5%	-8.7%	-5.5%	-8.2%
State	3.3%	-2.1%	2.7%	5.1%	11.1%	5.7%	5.5%	10.6%	6.1%	0.3%	12.0%	1.7%	-4.5%	-1.2%	-4.1%
Local	4.4%	-0.8%	3.9%	7.1%	13.3%	7.7%	6.2%	11.3%	6.7%	1.4%	13.2%	2.6%	-6.7%	-3.5%	-6.3%
Total	3.4%	-2.6%	2.6%	5.2%	11.2%	5.8%	5.3%	10.3%	5.9%	0.3%	11.9%	1.7%	-7.3%	-4.2%	-6.9%
% of Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total	Dom	Int'l	Total
Federal	59.4%	63.8%	59.9%	59.1%	63.6%	59.6%	58.9%	63.4%	59.5%	58.7%	63.2%	59.4%	57.9%	62.4%	58.5%
State	25.4%	24.2%	25.2%	25.4%	24.2%	25.2%	25.4%	24.2%	25.3%	25.4%	24.3%	25.2%	26.2%	25.0%	26.0%
Local	15.3%	12.0%	14.9%	15.5%	12.3%	15.1%	15.7%	12.4%	15.3%	15.9%	12.5%	15.4%	16.0%	12.6%	15.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: U.S. Travel Association
** Compared with previous year.*

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MULTIPLIER IMPACT OF TRAVEL SPENDING IN MASSACHUSETTS

Travelers in the Massachusetts area produce "secondary" impacts over and above that of their original expenditures previously detailed. These secondary outputs (sales) and earnings (wage and salary income) arise from "indirect" and "induced" spending.

Indirect impact occurs as travel industry business operators, such as restaurateurs, purchase goods, such as food and beverages, and services, such as electricity and building maintenance, from local suppliers. These purchases generate additional output or sales indirectly. *Induced* impact occurs as a result of the employees of businesses, and their suppliers, spending part of their earnings in the area. This spending itself generates sales additional to the indirect impact.

The sum of the indirect and induced effects comprises the total secondary impact of traveler expenditures in the area. The ratio of the sum of primary output generated plus secondary output to initial expenditures alone is commonly termed the sales or output "multiplier".

During the secondary impact process, wage and salary income (earnings) is generated additional to that produced by the initial travel expenditures as the suppliers employ labor to produce the additional output. The "earnings multiplier" is the ratio of the total primary and secondary earnings generated by the initial travel spending to that spending. Just as additional earnings are created, employment is also generated during the secondary impact process. The "employment multiplier" represents the number of jobs provided, directly and indirectly, for each one million dollars of output or expenditures generated.

Table 13 summarizes the direct, indirect and induced, and total impacts of travel spending on the Massachusetts economy from 2005 to 2009. Table 14 shows the comparison of expenditure, earning, and employment multipliers for the same period.

In 2009, the $14.4 billion spent directly by domestic and international travelers in Massachusetts generated total output value of $22.9 billion, down 7.1 percent from 2008. The ratio of total output to the initial spending is 1.60, the output multiplier. This indicates that the average travel dollar generated an additional 60 cents in secondary sales.

In addition to the $3.4 billion in payroll income generated by direct travel spending, nearly $3.1 billion in earnings was produced by secondary impact in 2009. The ratio of total earnings generated to the initial spending is 0.45, the earnings multiplier.

Travel spending also produced around 199,100 jobs for Massachusetts' residents, including direct and secondary employment in 2009. The ratio of total employment generated to initial spending is 13.9, the employment multiplier. This means that every one million dollars spent by domestic and international travelers in Massachusetts produced nearly 14 jobs in the state during 2009.

Table 13: Multiplier Impact of Traveler Spending in Massachusetts, 2005-2009

Year	Impact Measure	Direct Impact	Indirect & Induced Impact	Total Impact
2009	Expenditures (millions)	$14,352.6	$8,572.8	$22,925.4
	Earnings (millions)	$3,407.5	$3,074.6	$6,482.1
	Employment (thousands)	121.5	77.6	199.1
2008	Expenditures (millions)	$15,576.8	$9,106.5	$24,683.3
	Earnings (millions)	$3,650.1	$3,314.3	$6,964.5
	Employment (thousands)	128.8	83.9	212.7
2007	Expenditures (millions)	$15,144.6	$8,959.4	$24,103.9
	Earnings (millions)	$3,582.8	$3,264.5	$6,847.3
	Employment (thousands)	127.8	83.5	211.4
2006	Expenditures (millions)	$14,211.3	$8,376.9	$22,588.3
	Earnings (millions)	$3,381.6	$3,074.3	$6,456.0
	Employment (thousands)	125.8	82.0	207.9
2004	Expenditures (millions)	$13,080.0	$7,655.3	$20,735.3
	Earnings (millions)	$3,265.9	$2,972.9	$6,238.8
	Employment (thousands)	125.2	82.2	207.3

Sources: U.S. Department of Commerce, Bureau of Economic Analysis, RIMS II; U.S. Travel Association

Table 14: Multipliers of Travel in Massachusetts, 2005-2009

Multipliers	2005	2006	2007	2008	2009
Output Multiplier	1.59	1.59	1.59	1.58	1.60
Earning Multiplier	0.48	0.45	0.45	0.45	0.45
Employment Multiplier	15.9	14.6	14.0	13.7	13.9

Sources: U.S. Department of Commerce, Bureau of Economic Analysis, RIMS II; U.S. Travel Association

DOMESTIC TRAVEL IMPACT ON MASSACHUSETTS COUNTIES - 2009

During 2009, domestic travelers spent over $12.4 billion while traveling in Massachusetts, down 8.3 percent from 2008. These expenditures directly generated $2.9 billion in payroll income and approximately 104,400 jobs for Massachusetts' residents. Tax revenue generated by this spending amounted to $495.2 million and $301.8 million for the state government and local governments, respectively, during 2009.

Travel expenditures occurred throughout all fourteen counties in Massachusetts. The top five counties in Massachusetts received nearly $9.9 billion in direct domestic traveler expenditures -- 79.4 percent of the state total. Spending by domestic travelers in the top five counties generated over $2.3 billion in payroll income (79.5 percent) and 81,900 jobs (78.4 percent) in 2009. Domestic traveler expenditures in the top five counties generated $365.2 million in tax revenue for the state treasury and $228.2 million tax revenue for local governments in 2009. The top five counties in Massachusetts contributed 74.5 percent of the total tax revenue for the state treasury and local governments.

Domestic Travel Impact on Top 5 Counties

Suffolk County, which includes the city of Boston, led all counties in direct domestic travel expenditures, payroll income and jobs directly generated by visitor spending in 2009. Direct domestic travel expenditures in Suffolk County totaled nearly $5.8 billion, accounting for 46.6 percent of the state total, down 9.9 percent from 2008. These expenditures generated over $1.2 billion in payroll income and 39,800 jobs for the county residents, down 9.0 percent and 8.0 percent, respectively, from 2008.

Middlesex County ranked second with nearly $1.9 billion in domestic travel spending in 2009, down 7.8 percent from 2008. These expenditures represented a 15.0 percent of the state total. Payroll income and jobs directly attributable to domestic travel spending totaled $520.5 million and 19,200 jobs.

Norfolk County received $791.6 million from domestic travelers, 6.4 percent of the state total and down 4.5 percent from 2008. These travel expenditures benefited county residents with $256.7 million in payroll income and 9,100 jobs.

Barnstable County posted $785.2 million in domestic expenditures, 6.3 percent of the state total, placing it fourth. Expenditures generated $212.5 million in payroll as well as 8,500 jobs within the county.

Worcester County ranked fifth with $647.9 million in domestic travel spending in 2009, a 6.0 percent decrease from 2008. Domestic traveler spending in Worcester County generated $133.8 million payroll income and 5,200 jobs during 2009.

Table 15: Domestic Travel Impact in Massachusetts - Top 5 Counties, 2008-2009

2009 Impact

County	Expenditures ($ Millions)	Payroll ($ Millions)	Employment (Thousands)	State Tax Receipts ($ Millions)	Local Tax Receipts ($ Millions)
Suffolk	$5,781.2	$1,207.0	39.8	$152.7	$103.9
Middlesex	1,856.8	520.5	19.2	102.1	47.9
Norfolk	791.6	256.7	9.1	42.5	16.8
Barnstable	785.2	212.5	8.5	33.2	45.5
Worcester	647.9	133.8	5.2	34.8	14.0
Five County Total	$9,862.7	$2,330.4	81.9	$365.2	$228.2
State Totals	$12,419.2	$2,929.5	104.4	$495.2	$301.8
Share of Top 5 Counties	79.4%	79.5%	78.4%	73.8%	75.6%

2008 Impact

Suffolk	$6,419.8	$1,326.6	43.3	$163.9	$113.7
Middlesex	2,013.3	558.6	20.4	107.0	51.2
Barnstable	847.4	227.0	9.0	34.6	48.4
Norfolk	828.6	265.9	9.3	43.0	17.3
Worcester	688.9	140.8	5.4	35.8	14.7
Five County Total	$10,798.1	$2,519.0	87.4	$384.2	$245.4
State Total	$13,539.5	$3,150.6	110.9	$518.5	$323.5
Share of Top 5 Counties	79.8%	80.0%	78.8%	74.1%	75.9%

Percent Change 2009 over 2008

Suffolk	-9.9%	-9.0%	-8.0%	-6.8%	-8.6%
Middlesex	-7.8%	-6.8%	-5.8%	-4.6%	-6.4%
Norfolk	-4.5%	-3.5%	-2.4%	-1.2%	-3.1%
Barnstable	-7.3%	-6.4%	-5.4%	-4.1%	-6.0%
Worcester	-6.0%	-5.0%	-4.0%	-2.7%	-4.6%
Five County Total	-8.7%	-7.5%	-6.4%	-4.9%	-7.0%
State Total	-8.3%	-7.0%	-5.9%	-4.5%	-6.7%

Source: U.S. Travel Association

COUNTY TABLES

The following tables list the results of the County Economic Impact Component of U.S. Travel Association's Travel Economic Impact Model for Massachusetts 2008 and preliminary 2009 estimates by county. The estimates presented are for direct domestic travel expenditures and related economic impact. Detailed international impact data are not available below the state level.

Table A	Counties listed alphabetically, with 2009 travel expenditures, travel-generated payroll and employment, and state tax revenue and the local tax revenue for each
Table B	Ranks the counties in order of 2009 travel expenditures from highest to lowest
Table C	Percent distribution for each impact measure in 2009
Table D	Percent change in 2009 over 2008 estimates for each of the measures of economic impact.
Table E	Counties listed alphabetically, with 2008 travel expenditures, travel-generated payroll and employment, and state tax revenue and local tax revenue shown for each
Table F	Annual domestic travel expenditures and percentage change over previous year by county from 2005 to 2009
Table G	Domestic travel-generated payroll and percentage change over previous year by county from 2005 to 2009
Table H	Domestic travel-generated employment and percentage change over previous year by county from 2005 to 2009
Table I	Domestic travel-generated tax revenue and percentage change over previous year by county for state government from 2005 to 2009
Table J	Domestic travel-generated tax revenue and percentage change over previous year by county for local government from 2005 to 2009

2009 Domestic Travel Impact on Massachusetts
Table A: Alphabetical by County, Preliminary 2009

County	Expenditures ($ Millions)	Payroll ($ Millions)	Employment (Thousands)	State Tax Receipts ($ Millions)	Local Tax Receipts ($ Millions)
Barnstable	$785.18	$212.46	8.53	$33.20	$45.51
Berkshire	308.96	84.87	3.49	15.50	8.28
Bristol	361.50	79.45	2.92	19.37	6.84
Dukes	104.81	27.78	1.14	4.02	5.94
Essex	634.88	156.99	6.00	34.03	16.08
Franklin	47.26	9.53	0.35	2.69	1.50
Hampden	419.55	92.93	3.17	23.24	8.04
Hampshire	96.16	22.49	0.83	5.22	2.55
Middlesex	1,856.80	520.51	19.21	102.06	47.91
Nantucket	136.85	29.52	0.99	3.99	4.60
Norfolk	791.57	256.65	9.06	42.51	16.81
Plymouth	446.49	95.55	3.61	21.89	19.86
Suffolk	5,781.23	1,206.95	39.83	152.68	103.91
Worcester	647.93	133.81	5.22	34.80	14.01
Statewide	**$12,419.16**	**$2,929.50**	**104.35**	**$495.20**	**$301.84**

2009 Domestic Travel Impact on Massachusetts
Table B: Ranking of Counties by Expenditure Levels, Preliminary 2009

County	Expenditures ($ Millions)	Payroll ($ Millions)	Employment (Thousands)	State Tax Receipts ($ Millions)	Local Tax Receipts ($ Millions)
Suffolk	$5,781.23	$1,206.95	39.83	$152.68	$103.91
Middlesex	1,856.80	520.51	19.21	102.06	47.91
Norfolk	791.57	256.65	9.06	42.51	16.81
Barnstable	785.18	212.46	8.53	33.20	45.51
Worcester	647.93	133.81	5.22	34.80	14.01
Essex	634.88	156.99	6.00	34.03	16.08
Plymouth	446.49	95.55	3.61	21.89	19.86
Hampden	419.55	92.93	3.17	23.24	8.04
Bristol	361.50	79.45	2.92	19.37	6.84
Berkshire	308.96	84.87	3.49	15.50	8.28
Nantucket	136.85	29.52	0.99	3.99	4.60
Dukes	104.81	27.78	1.14	4.02	5.94
Hampshire	96.16	22.49	0.83	5.22	2.55
Franklin	47.26	9.53	0.35	2.69	1.50
Statewide	**$12,419.16**	**$2,929.50**	**104.4**	**$495.20**	**$301.84**

2009 Domestic Travel Impact on Massachusetts
Table C: Percent Distribution by County, Preliminary 2009

County	Expenditures	Payroll	Employment	State Tax	Local Tax
Barnstable	6.32%	7.25%	8.18%	6.70%	15.08%
Berkshire	2.49%	2.90%	3.35%	3.13%	2.74%
Bristol	2.91%	2.71%	2.80%	3.91%	2.26%
Dukes	0.84%	0.95%	1.09%	0.81%	1.97%
Essex	5.11%	5.36%	5.75%	6.87%	5.33%
Franklin	0.38%	0.33%	0.34%	0.54%	0.50%
Hampden	3.38%	3.17%	3.03%	4.69%	2.66%
Hampshire	0.77%	0.77%	0.80%	1.05%	0.84%
Middlesex	14.95%	17.77%	18.41%	20.61%	15.87%
Nantucket	1.10%	1.01%	0.95%	0.81%	1.52%
Norfolk	6.37%	8.76%	8.68%	8.58%	5.57%
Plymouth	3.60%	3.26%	3.46%	4.42%	6.58%
Suffolk	46.55%	41.20%	38.17%	30.83%	34.43%
Worcester	5.22%	4.57%	5.00%	7.03%	4.64%
Statewide	**100.00%**	**100.00%**	**100.00%**	**100.00%**	**100.00%**

2009 Domestic Travel Impact on Massachusetts
Table D: Percent Change over 2008

County	Expenditures	Payroll	Employment	State Tax	Local Tax
Barnstable	-7.34%	-6.39%	-5.37%	-4.13%	-5.98%
Berkshire	-8.37%	-7.42%	-6.42%	-5.19%	-7.02%
Bristol	-6.06%	-5.09%	-4.07%	-2.81%	-4.69%
Dukes	-7.40%	-1.60%	0.16%	-4.19%	-6.04%
Essex	-6.04%	-5.07%	-4.05%	-2.79%	-4.67%
Franklin	-8.17%	-1.43%	-6.22%	-4.99%	-6.82%
Hampden	-3.89%	-2.91%	-1.85%	-0.57%	-2.49%
Hampshire	-6.43%	-5.47%	-4.44%	-3.19%	-5.06%
Middlesex	-7.77%	-6.82%	-5.81%	-4.58%	-6.42%
Nantucket	-15.72%	-8.70%	-6.96%	-12.80%	-14.49%
Norfolk	-4.47%	-3.49%	-2.45%	-1.17%	-3.08%
Plymouth	-6.48%	-5.51%	-4.49%	-3.24%	-5.11%
Suffolk	-9.95%	-9.02%	-8.03%	-6.83%	-8.63%
Worcester	-5.95%	-4.99%	-3.96%	-2.70%	-4.58%
Statewide	**-8.27%**	**-7.02%**	**-5.93%**	**-4.50%**	**-6.69%**

2009 Domestic Travel Impact on Massachusetts
Table E: Alphabetical by County, 2008

County	Expenditures ($ Millions)	Payroll ($ Millions)	Employment (Thousands)	State Tax Receipts ($ Millions)	Local Tax Receipts ($ Millions)
Barnstable	$847.37	$226.95	9.02	$34.63	$48.41
Berkshire	337.17	91.67	3.73	16.35	8.90
Bristol	384.82	83.71	3.04	19.93	7.17
Dukes	113.19	28.23	1.13	4.20	6.32
Essex	675.70	165.38	6.26	35.00	16.87
Franklin	51.47	9.67	0.38	2.83	1.61
Hampden	436.55	95.72	3.23	23.37	8.24
Hampshire	102.76	23.79	0.87	5.39	2.68
Middlesex	2,013.29	558.63	20.40	106.96	51.20
Nantucket	162.37	32.34	1.06	4.57	5.38
Norfolk	828.65	265.94	9.29	43.01	17.34
Plymouth	477.40	101.13	3.78	22.62	20.93
Suffolk	6,419.85	1,326.63	43.31	163.88	113.73
Worcester	688.95	140.83	5.44	35.76	14.68
Statewide	**$13,539.53**	**$3,150.62**	**110.93**	**$518.52**	**$323.47**

Table F: Domestic Travel Expenditures by County, 2005-2009

Expenditures (in $ millions)

County	2005	2006	2007	2008	2009
Barnstable	$768.0	$793.9	$818.1	$847.4	$785.2
Berkshire	302.9	319.0	335.8	337.2	309.0
Bristol	336.2	362.1	373.4	384.8	361.5
Dukes	103.5	109.2	112.9	113.2	104.8
Essex	606.3	635.4	660.2	675.7	634.9
Franklin	44.0	46.4	48.3	51.5	47.3
Hampden	389.2	409.8	426.6	436.6	419.5
Hampshire	90.5	96.0	102.4	102.8	96.2
Middlesex	1,716.1	1,854.2	1,976.7	2,013.3	1,856.8
Nantucket	154.6	158.3	164.8	162.4	136.8
Norfolk	720.3	769.8	820.3	828.6	791.6
Plymouth	418.0	444.6	477.8	477.4	446.5
Suffolk	5,439.5	5,955.3	6,357.2	6,419.8	5,781.2
Worcester	602.7	638.1	671.9	688.9	647.9
State Totals	**$11,691.7**	**$12,592.2**	**$13,346.5**	**$13,539.5**	**$12,419.2**

Percentage Change Over Previous Year

County	2005/2004	2006/2005	2007/2006	2008/2007	2009/2008
Barnstable	3.0%	3.4%	3.0%	3.6%	-7.3%
Berkshire	7.1%	5.3%	5.3%	0.4%	-8.4%
Bristol	7.9%	7.7%	3.1%	3.1%	-6.1%
Dukes	6.8%	5.6%	3.3%	0.3%	-7.4%
Essex	5.0%	4.8%	3.9%	2.4%	-6.0%
Franklin	4.9%	5.5%	4.2%	6.5%	-8.2%
Hampden	4.9%	5.3%	4.1%	2.3%	-3.9%
Hampshire	4.6%	6.1%	6.7%	0.3%	-6.4%
Middlesex	6.1%	8.0%	6.6%	1.8%	-7.8%
Nantucket	3.3%	2.4%	4.1%	-1.5%	-15.7%
Norfolk	6.3%	6.9%	6.6%	1.0%	-4.5%
Plymouth	8.8%	6.4%	7.5%	-0.1%	-6.5%
Suffolk	7.4%	9.5%	6.7%	1.0%	-9.9%
Worcester	6.1%	5.9%	5.3%	2.5%	-6.0%
State Totals	**6.5%**	**7.7%**	**6.0%**	**1.4%**	**-8.3%**

Table G: Domestic Travel-Generated Payroll by County, 2005-2009

Payroll (in $ millions)

County	2005	2006	2007	2008	2009
Barnstable	$209.1	$208.5	$218.1	$227.0	$212.5
Berkshire	84.8	85.9	89.7	91.7	84.9
Bristol	74.7	78.2	81.8	83.7	79.4
Dukes	26.5	26.8	28.0	28.2	27.8
Essex	155.3	157.6	161.8	165.4	157.0
Franklin	8.6	8.7	9.0	9.7	9.5
Hampden	89.5	91.1	95.1	95.7	92.9
Hampshire	21.6	22.2	23.9	23.8	22.5
Middlesex	501.9	515.4	542.7	558.6	520.5
Nantucket	32.6	31.5	33.8	32.3	29.5
Norfolk	244.1	253.5	264.0	265.9	256.7
Plymouth	93.0	96.7	101.8	101.1	95.6
Suffolk	1,210.6	1,266.7	1,349.5	1,326.6	1,207.0
Worcester	131.1	133.3	137.8	140.8	133.8
State Totals	**$2,883.3**	**$2,976.0**	**$3,137.0**	**$3,150.6**	**$2,929.5**

Percentage Change Over Previous Year

County	2005/2004	2006/2005	2007/2006	2008/2007	2009/2008
Barnstable	0.6%	-0.3%	4.6%	4.1%	-6.4%
Berkshire	5.5%	1.4%	4.4%	2.2%	-7.4%
Bristol	3.8%	4.7%	4.6%	2.4%	-5.1%
Dukes	4.2%	1.0%	4.5%	0.9%	-1.6%
Essex	0.7%	1.5%	2.7%	2.2%	-5.1%
Franklin	1.4%	0.6%	4.1%	7.4%	-1.4%
Hampden	0.3%	1.8%	4.4%	0.6%	-2.9%
Hampshire	1.1%	3.1%	7.4%	-0.4%	-5.5%
Middlesex	2.9%	2.7%	5.3%	2.9%	-6.8%
Nantucket	-1.4%	-3.3%	7.3%	-4.4%	-8.7%
Norfolk	2.7%	3.8%	4.1%	0.8%	-3.5%
Plymouth	6.1%	4.0%	5.4%	-0.7%	-5.5%
Suffolk	0.0%	4.6%	6.5%	-1.7%	-9.0%
Worcester	0.9%	1.7%	3.4%	2.2%	-5.0%
State Totals	**1.3%**	**3.2%**	**5.4%**	**0.4%**	**-7.0%**

Table H: Domestic Travel-Generated Employment by County (in thousands), 2005-2009

Employment (in thousands)

County	2005	2006	2007	2008	2009
Barnstable	9.1	8.9	8.9	9.0	8.5
Berkshire	3.8	3.7	3.7	3.7	3.5
Bristol	3.0	3.1	3.1	3.0	2.9
Dukes	1.1	1.1	1.1	1.1	1.1
Essex	6.4	6.3	6.3	6.3	6.0
Franklin	0.4	0.4	0.4	0.4	0.4
Hampden	3.3	3.3	3.3	3.2	3.2
Hampshire	0.9	0.9	0.9	0.9	0.8
Middlesex	20.0	20.2	20.4	20.4	19.2
Nantucket	1.2	1.1	1.1	1.1	1.0
Norfolk	9.4	9.4	9.4	9.3	9.1
Plymouth	3.8	3.8	3.8	3.8	3.6
Suffolk	42.4	42.9	43.7	43.3	39.8
Worcester	5.6	5.5	5.5	5.4	5.2
State Totals	**110.5**	**110.5**	**111.7**	**110.9**	**104.4**

Percentage Change Over Previous Year

County	2005/2004	2006/2005	2007/2006	2008/2007	2009/2008
Barnstable	-1.5%	-2.7%	0.5%	0.9%	-5.4%
Berkshire	3.0%	-1.9%	0.1%	-0.1%	-6.4%
Bristol	1.2%	0.6%	0.2%	-0.7%	-4.1%
Dukes	1.6%	-0.4%	-0.3%	-0.7%	0.2%
Essex	-1.3%	-1.7%	-0.8%	-0.3%	-4.0%
Franklin	0.7%	-2.8%	0.5%	1.9%	-6.2%
Hampden	-1.9%	-2.0%	0.3%	-1.8%	-1.9%
Hampshire	-0.8%	-0.7%	3.0%	-3.2%	-4.4%
Middlesex	0.5%	1.1%	1.3%	-0.3%	-5.8%
Nantucket	-1.5%	-4.8%	1.2%	-4.5%	-7.0%
Norfolk	0.3%	-0.1%	0.1%	-1.5%	-2.4%
Plymouth	3.2%	0.3%	1.2%	-1.1%	-4.5%
Suffolk	0.0%	1.1%	2.0%	-0.9%	-8.0%
Worcester	-1.1%	-1.8%	-0.6%	-1.0%	-4.0%
State Totals	**0.0%**	**0.0%**	**1.1%**	**-0.7%**	**-5.9%**

Table I: Domestic Travel-Generated Tax Revenue for MA State Government by County , 2005-2009

Tax Revenue for State Government (in $ millions)

County	2005	2006	2007	2008	2009
Barnstable	$32.6	$33.0	$33.9	$34.6	$33.2
Berkshire	15.2	15.7	16.5	16.4	15.5
Bristol	18.1	19.1	19.6	19.9	19.4
Dukes	4.0	4.1	4.2	4.2	4.0
Essex	32.6	33.4	34.6	35.0	34.0
Franklin	2.5	2.6	2.7	2.8	2.7
Hampden	21.6	22.3	23.1	23.4	23.2
Hampshire	4.9	5.1	5.4	5.4	5.2
Middlesex	94.6	100.1	106.4	107.0	102.1
Nantucket	4.5	4.5	4.7	4.6	4.0
Norfolk	38.8	40.6	43.1	43.0	42.5
Plymouth	20.5	21.4	22.9	22.6	21.9
Suffolk	144.0	154.4	164.4	163.9	152.7
Worcester	32.5	33.6	35.3	35.8	34.8
State Totals	**$466.3**	**$489.9**	**$516.9**	**$518.5**	**$495.2**

Percentage Change Over Previous Year

County	2005/2004	2006/2005	2007/2006	2008/2007	2009/2008
Barnstable	0.0%	1.2%	2.7%	2.3%	-4.1%
Berkshire	4.0%	3.2%	5.0%	-0.9%	-5.2%
Bristol	4.8%	5.5%	2.8%	1.7%	-2.8%
Dukes	3.7%	3.4%	3.0%	-1.0%	-4.2%
Essex	2.0%	2.6%	3.6%	1.1%	-2.8%
Franklin	1.8%	3.3%	3.9%	5.1%	-5.0%
Hampden	1.9%	3.1%	3.8%	1.0%	-0.6%
Hampshire	1.6%	3.9%	6.4%	-1.0%	-3.2%
Middlesex	3.1%	5.8%	6.3%	0.6%	-4.6%
Nantucket	0.3%	0.3%	3.8%	-2.8%	-12.8%
Norfolk	3.2%	4.7%	6.3%	-0.3%	-1.2%
Plymouth	5.7%	4.2%	7.2%	-1.4%	-3.2%
Suffolk	4.3%	7.2%	6.4%	-0.3%	-6.8%
Worcester	3.0%	3.7%	5.0%	1.2%	-2.7%
State Totals	**3.3%**	**5.1%**	**5.5%**	**0.3%**	**-4.5%**

Table J: Domestic Travel-Generated Tax Revenue for Local Governments in Massachusetts by County (in $ millions), 2005-2009

Tax Revenue for Local Governments (in $ millions)

County	2005	2006	2007	2008	2009
Barnstable	$43.7	$45.2	$46.8	$48.4	$45.5
Berkshire	8.0	8.4	8.9	8.9	8.3
Bristol	6.2	6.7	7.0	7.2	6.8
Dukes	5.8	6.1	6.3	6.3	5.9
Essex	15.1	15.8	16.5	16.9	16.1
Franklin	1.4	1.4	1.5	1.6	1.5
Hampden	7.3	7.7	8.1	8.2	8.0
Hampshire	2.4	2.5	2.7	2.7	2.5
Middlesex	43.5	47.0	50.4	51.2	47.9
Nantucket	5.1	5.2	5.5	5.4	4.6
Norfolk	15.0	16.1	17.2	17.3	16.8
Plymouth	18.3	19.4	21.0	20.9	19.9
Suffolk	96.0	105.2	112.9	113.7	103.9
Worcester	12.8	13.6	14.3	14.7	14.0
State Totals	**$280.4**	**$300.4**	**$319.1**	**$323.5**	**$301.8**

Percentage Change Over Previous Year

County	2005/2004	2006/2005	2007/2006	2008/2007	2009/2008
Barnstable	1.3%	3.5%	3.6%	3.4%	-6.0%
Berkshire	5.4%	5.4%	5.8%	0.2%	-7.0%
Bristol	6.2%	7.8%	3.6%	2.8%	-4.7%
Dukes	5.0%	5.7%	3.9%	0.1%	-6.0%
Essex	3.3%	4.9%	4.4%	2.1%	-4.7%
Franklin	3.2%	5.6%	4.7%	6.3%	-6.8%
Hampden	3.2%	5.4%	4.6%	2.1%	-2.5%
Hampshire	2.9%	6.2%	7.2%	0.1%	-5.1%
Middlesex	4.4%	8.2%	7.2%	1.6%	-6.4%
Nantucket	1.6%	2.5%	4.7%	-1.7%	-14.5%
Norfolk	4.5%	7.0%	7.1%	0.8%	-3.1%
Plymouth	7.0%	6.5%	8.0%	-0.3%	-5.1%
Suffolk	5.7%	9.6%	7.3%	0.8%	-8.6%
Worcester	4.4%	6.0%	5.8%	2.3%	-4.6%
State Totals	**4.4%**	**7.1%**	**6.2%**	**1.4%**	**-6.7%**

APPENDICES

Appendix A: Travel Economic Impact Model

Introduction

The Travel Economic Impact Model (TEIM) was developed by the research department at U.S. Travel Association (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 U.S. Travel Association, 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 (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 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.

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: Glossary of Terms – TEIM

Automobile Transportation Expenditure. 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.

Entertainment/Recreation Expenditure. 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.

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

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

Lodging Expenditures. Traveler spending on hotels and motels, campgrounds and trailer parks, rental of vacation homes and other types of lodging.

Public Transportation Expenditures. This includes traveler spending on air, bus, rail and boat/ship transportation, and taxicab or limousine service between airports and central cities.

Tourism. Generally avoided in this study, this can be used to refer to pleasure or personal travel, a subset of travel.

Travel. The act of taking a "trip".

Traveler. Person taking a "trip".

Travel Expenditure. The exchange of money or the promise of money for goods or service while traveling, including any advance purchase of public transportation tickets, lodging or other items normally considered incidental to travel, but which may be purchased in advance of the trip. In addition, certain of the "fixed" or capital costs of owning a motor vehicle (including campers, motor homes, etc.) or a vacation or second home are included as associated with taking a trip.

Generally, expenditures are assumed to take place at the point where the good or service is bought while traveling. The two exceptions to this rule are that the fixed costs of operating a motor vehicle while on a trip are allocated to the traveler's area of residence, and the "imputed rent" of spending nights in the traveler's own vacation home is allocated to the area visited.

Travel-generated Employment. The number of jobs attributable to travel expenditures in an area. These estimates of employment follow the "establishment payroll survey definition" rather than the "household survey definition." Consequently, the TEIM estimates are more closely related to the number of jobs than to the number of employees. For a detailed description of the household and establishment survey differences, please refer to http://www.bls.gov/lau/lauhvse.htm.

Travel-generated Payroll. This is the payroll, or wage and salary income, attributable to travel expenditures in an area. Payroll includes all forms of compensation, such as salaries, wages,

commissions, bonuses, vacation allowances, sick leave pay, and the value of payments in kind (such as free meals and lodgings) paid during the year to all employees. Trips and gratuities received by employees from patrons and reported to employers are included. For corporations, it includes amounts paid to officers and executives; for unincorporated businesses, it does not include profit nor other compensation of proprietors or partners. Payroll is reported before deductions for social security, income tax, insurance, union dues, etc.

Travel-generated Tax Receipts. These federal, state and local tax revenues are 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.

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

State. These receipts include corporate income taxes, individual income taxes, sales and gross receipts taxes, and excise taxes.

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

Travel-generated Wage and Salary Income. The same as "travel-generated payroll."

Trip. A trip occurs, for the purpose of the model, every time one or more persons goes to a place 50 miles or more, each way, from home in one day or overnight, or is out of town one or more nights in paid accommodations, and returns to his/her origin. Specifically excluded from this definition are: (1) travel as part of an operating crew on a train, plane, bus, truck or ship; (2) commuting to a place of work; (3) student trips to school or those taken while in school.

Appendix C: Travel-Related Industry Measurement

TEIM: Industry Categories

With the transition to NAICS, U.S. Travel Association 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, U.S. Travel Association's Travel Economic Impact Model, tracks business activity in seven (7) major travel-related industry groups. The industry groups and subcategories used in the model are outlined below, followed by a detailed table of 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.

Travel and Tourism Industry Definition by North American Industrial Classification System

Accommodations	
7211	Traveler Accommodations
7212	Recreational Vehicle Parks & Campgrounds
Auto Transportation	
532111	Passenger Car Rental
447110	Gasoline Stations with Convenience Stores
447190	Other Gasoline Stations
4411	Automobile Dealers
4412	Other Motor Vehicle Dealers
4413	Automotive Parts, Accessories and Tire Stores
Entertainment And Recreation	
711	Performing Arts, Spectator Sports & Related Industries
712	Museums, Historical Sites & Similar Institutions
713	Amusement, Gambling & Recreation Industries
Foodservices	
7221	Full service Restaurants
7222	Limited Service Eating Places
7224	Drinking Places
445	Food and Beverage stores
Public Transportation	
481	Passenger Air Transportation
4881	Airport Support Activities
4821	Rail Transportation
4852	Interurban and Rural Bus Transportation
4853	Taxi & Limousine Services
485510	Charter Bus
483112	Deep Sea Passenger Transportation
483114	Coastal and Great Lakes Passenger Transportation
483212	Inland Water Passenger Transportation
487	Scenic & Sightseeing Transportation
Retail	
452	General Merchandise Stores
453	Miscellaneous Store Retailers
44611	Pharmaceutical and Drug Stores
4483	Jewelry, Luggage, and Leather Good Stores
4511	Sporting Goods Stores
4512	Hobby, Toy, and Game Stores
45121	Book Stores and News Dealers
Travel Arrangement	
5615	Travel Arrangement & Reservation Services (includes travel agencies and tour operators)

Appendix D: Sources of Data

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

Organizations

Air Transport Association
American Automobile Association
Amtrak
American Society of Travel Agents
Bureau of Census, U.S. Department of Commerce
Bureau of Economic Analysis, U.S. Department of Commerce
Bureau of Labor Statistics, U.S. Department of Labor
Bureau of Transportation Statistics, U.S. Department of Commerce
Federal Aviation Administration, U.S. Department of Transportation
Federal Highway Administration, U.S. Department of Transportation
National Park Service
Massachusetts Office of Travel and Tourism
Massachusetts Department of Revenue
Smith Travel Research
OTTI/International Trade Administration, U.S. Department of Commerce
U.S. Travel Association

Appendix E: RIMS II

REGIONAL INPUT-OUTPUT MODELING SYSTEM

A BRIEF DESCRIPTION

Regional Economic Analysis Division
Bureau of Economic Analysis
U.S. Department of Commerce
Washington, D.C. 20230
(202) 523-0594

RIMS II

Many types of public sector and private sector decisions require an evaluation of probable regional effects. For example, Federal requirements for environmental impact statements and the urban impact of Federal policies necessitate regional impact analyses. A growing concern, therefore, about the effects of public and private decisions has created a demand for regional economic models.

As a result of this demand, economic impact models have been developed for many States and regions. These models vary considerably in terms of structure, reliability, sectoral and geographical detail, flexibility in application, and cost of development and use. In general, the models that provide the most reliable and industrially-detailed secondary impact estimates are the most expensive to construct, while the less costly models that can be used in numerous small-area studies often provide less accurate estimates.

In response to the growing need for improved techniques for regional impact analysis, the Regional Economic Analysis Division of the Bureau of Economic Analysis (BEA) developed the Regional Industrial Multiplier System (RIMS) in the mid-1970's. RIMS was designed to estimate input-output type multipliers for use in estimating the secondary regional impacts of public and private economic development policies. RIMS was capable of estimating multipliers for any region composed of one or more contiguous counties and for any of the 478 industrial sectors in the 1967 BEA national input-output (I-O) table. A significant improvement over the more summary measures often used in regional impact analysis, RIMS was capable of providing reliable multiplier estimates without the high cost of gathering survey data.

The Regional Input-Output Modeling System (RIMS II) is a major revision of RIMS. The basic differences between RIMS II and RIMS are the use of more recent national I-O tables (1987), the use of more detailed and more current data for regionalizing the national I-O tables, and greater flexibility in the derivation of regional impact estimates through the use of a matrix inversion technique that provides industrially-disaggregated impacts. RIMS II developmental research is focused currently on estimating regional transaction tables, and comparing RIMS II estimates of state-specific imports and exports with survey-based estimates from the Census Bureau's Commodity Transportation Survey. RIMS II is also being adapted to analyze the regional and industrial impacts of defense procurement.

RIMS II METHODOLOGY

In order to estimate impacts such as those presented above, RIMS II uses the BEA national I-O tables that show the input and output structure of 500 industries. Since firms in all national industries are not found in each region, some direct requirements that are not produced in a study region are identified, using Bureau of Economic Analysis (BEA) 4-digit Standard Industrial Classification (SIC) county earnings data. The earnings data are used as proxies for the industry-specific input and output data which are seldom available at the small-area level. Using the same earning data, the resulting regional I-O table then can be aggregated to the level of industrial detail appropriate for the impact study. More specifically, the RIMS II approach can be viewed as three-step process. In the first step, the national I-O matrix is made region-specific by using corresponding 4-digit SIC location quotients (LQ's). The LQ's are used to estimate the extent to which requirements are supplied by firms within the region. For this purpose, RIMS II employs LQ's based on two types of data. According to this mixed- LQ Approch, BEA county personal income data, by place of residence, are used for the calculation of LQ's in the service sectors, while BEA earnings data, by place of work, are used for he LQ's in the nonservice sectors.

The second step involves estimations of the household row and the household column of the matrix. The household-row coefficients are estimated based on value- added gross-output ratios from the national I-O table and introduced into each industry's coefficient column. A household column is constructed, based on national consumption and savings rate data and national and regional tax rate data.

The last step in the RIMS II estimating procedure is to calculate the multipliers. Since it is most often necessary to trace the impact of changes in final demand on numerous individual directly-and indirectly-affected industries, RIMS II applications employ the Leontief inversion approach for obtaining multipliers. This inversion process produces output and earnings multipliers for all additionally affected industries.

ACCURACY OF RIMS II

Empirical test of the accuracy of RIMS II multipliers indicates that RIMS II yields estimates that are not substantially different from those generated by regional I-O models based on the costly gathering of survey data. For example, a comparison of 224 industry-specific multipliers from survey based tables for Illinois, Washington, and West Virginia indicate that the RIMS II average multipliers overestimate the average multipliers from the survey based tables by approximately 5 percent, and, for the majority of individual industry-specific multipliers is less than 10 percent. In addition, RIMS II and survey multipliers show a statistically-similar distribution of affected industries.

ADVANTAGES OF RIMS II

There are numerous advantages to RIMS II. First, it is possible to provide estimates of economic impact without building a complete survey I-O model for each region under study, since RIMS II produces multipliers that are derived from secondary data sources. Second, the RIMS II multipliers are derived from a limited number of secondary data sources, thus eliminating the costs associated with the compilation of data from a wide variety of these sources. Third, because of the disaggregated sectoring plan employed by RIMS II, analysis may be performed at a detailed industrial level, thereby avoiding aggregation errors that often occur when different industries are combined. Fourth, the RIMS II multipliers are based on a consistent set of procedures across areas, thus making comparisons among areas more meaningful than would be the case if the results were obtained from incompatible impact models designed only for an individual area. Fifth, the multipliers can be updated to reflect the most recent local area earning and personal income data.

The industrial output and personal earnings impacts estimated by RIMS II can be crucial for estimating effects not directly specified by RIMS II itself. For example, the estimation of regional, fiscal, labor migration and environmental effects often depends on the estimation of the regional output and earnings impact of the initial stimulus. Since many of these important effects are often best analyzed on a case-by-case basis, one of the major advantages of using RIMS II is that valuable research resources can be spent on the analysis of these effects, rather than on the construction of an impact model. Therefore, when using RIMS II, a cost-effective impact study might devote most of its research budget to specifying initial impacts in industry specific detail, and analyzing the implications for other important aspects of regional economic activity of the RIMS II estimates impacts.

This overview briefly describes RIMS II multiplier, the multiplier-estimation procedures, and some of the advantages and uses for RIMS II. For additional information, see Regional Multipliers, A User Handbook for the Regional Input-Output Modeling System (RIMS II), third edition. This handbook is produced by the U.S. Department of Commerce and available from the U.S. Government Printing Office.