

**The 29th Annual Marine Corps Marathon™**  
**Economic Contribution and**  
**Characteristics of Visitors and Local Spectators**

**Report**

**March 9, 2005**

**International Institute of Tourism Studies**  
**The George Washington University**  
**Washington, DC 20052**  
**All Rights Reserved**



## Executive Summary

- ◆ A series of surveys were conducted of participants, spectators and sponsors of the 29th Annual Marine Corps Marathon™, October 31, 2004. Objectives were to estimate the economic contribution of visitors to the Washington, DC metropolitan area in conjunction with the event, to assess reactions to event exhibitors, and to determine the characteristics of visitors and local spectators.
- ◆ More than 76 thousand people came to the Washington DC metro area to watch or participate in the Marathon on October 31, 2004
- ◆ These visitors spent \$19.6 million while in the D.C. area on food, lodging, entertainment, local transportation and retail purchases.
- ◆ These visitor expenditures generated more than \$1.3 million in tax revenue for the area's state and local governments.
- ◆ Twenty-nine exhibitors at the Marathon Runner's Expo spent an additional \$60 thousand attending the event.
- ◆ More than 67 thousand persons traveled to the Washington, DC area to run in the Marathon or to accompany a runner. These runner visitors spent an average of three nights in the area.
- ◆ Ninety-nine percent of these runner visitor parties spent one or more nights here, with nearly three-quarters of these staying in hotels or motels.
- ◆ Nearly two-thirds of the runner visitor parties stayed in Virginia, with one-quarter in the District of Columbia and the balance in Maryland.
- ◆ Virginia was the dominant recipient of runner visitor party spending, garnering almost two-thirds of the \$17.5 million spent.
- ◆ This study estimated the Marathon was watched by 9 thousand spectators from out of the area who were not part of runner parties; ninety-percent of these were present primarily to watch the Marathon race.
- ◆ Marathon spectator visitor parties spent an average of 2.4 nights in the area, with 89 percent spending one night or more; two-thirds of the overnight spectator visitors stayed in hotels or motels, and more than half of these stayed in Virginia.

- ◆ Marathon spectator visitors spent \$2.3 million while in the area, with one-half of this occurring in Virginia.
- ◆ Total Marathon-related visitor spending in 2004 was 65 percent higher than two years earlier, while the tax revenue generated grew 114 percent.

## Table of Contents

	<u>Page</u>
Executive Summary	i
1. Introduction	1
2. Problem Definition	4
3. Findings	6
4. Conclusions and Recommendations	31
5. Methodology	34
6. Appendix: Data collection instruments	40

## Chapter 1: Introduction

The Marine Corps Marathon™ organization, a nonprofit organization headquartered in Quantico, Virginia, engaged the International Institute of Tourism Studies of The George Washington University to conduct a survey of participants in and spectators of the 29th Marine Corps Marathon™ in order to:

- A. assess the economic contribution of Marathon runners and accompanying friends/families from outside the Area
- B. assess the economic contribution of spectators from outside the Area:
- C. assess the economic contribution of sponsors from outside the Area:
- D. determine the characteristics of visitors and local spectators and their reaction to sponsor advertising and events.

Dr. Douglas C. Frechtling, Professor of Tourism Studies and Dr. Lisa Delpy Neirotti, Associate Professor of Tourism and Sport Management, both of the International Institute of Tourism Studies of The George Washington University, served as Principal Investigators for this study. This report presents the results of these surveys and its methodology. This report follows the previous IITS study, “The 27th Annual Marine Corps Marathon™ Economic Contribution and Characteristics of Visitors and Local Spectators” published in March 2003.

### Definitions

The following terms are defined as used throughout this report.

**Marine Corps Marathon™** – the race held on October 31, 2004 beginning near the Iwo Jima Memorial in Arlington, Virginia, at 8:30 a.m. following a route across Key Bridge, through Georgetown to Union Station, back across the 14th Street Bridge and ending at the Iwo Jima Memorial, a distance of 26 miles and 385 yards.

**Washington, D.C. metropolitan area** – comprises Washington, D.C., Northern Virginia and suburban Maryland counties

**Runner visitor** – person registered to run in the Marathon residing outside the Washington, D.C. metro area

**Runner visitor party** – a runner visitor plus those persons traveling with him/her on this visit.

**Spectator visitor** – person residing outside the Washington, D.C. metro area watching the Marathon race by standing near the race route in Virginia and Washington, D.C.

**Spectator visitor party** – a spectator visitor plus those persons traveling with him/her on this visit.

**Local spectator** – person residing within the Washington, D.C. metro area watching the Marathon race by standing near the race route in Virginia and Washington, D.C.

**Marathon visitor expenditures** – expenditures by runner visitor parties and spectator visitor parties while visiting the Washington, D.C. metro area to watch or participate in this Marathon

**Marathon visitor-generated tax revenue** – state or local tax revenue directly generated by the visitor expenditures; includes general retail sales taxes, gasoline excise taxes, hotel lodging sales taxes, restaurant meal sales taxes and retail grocery sales taxes

**Marathon exhibitor expenditures** – the expenditures of 29th annual Marine Corps Marathon™ out of town exhibitors at the MCM Runner's Expo, Hyatt Regency Hotel, Crystal City, VA, October 28-30, 2004 related to the event.

**Economic contribution of the Marathon** – visitor expenditures plus the expenditures of Marathon sponsors

**IITS** – International Institute of Tourism Studies, the research arm of George Washington University's Department of Tourism and Hospitality Management. Faculty specifically working on this project was limited to Dr. Lisa Delpy Neirotti, Associate Professor of Tourism and Sport Management, and Dr. Douglas C. Frechtling, Professor of Tourism Studies. They were assisted by 30 students enrolled in TSTD264 Sport Marketing course in fall 2004.

### Brief Methodology

The following summarizes the approaches employed to reach the Marine Corps Marathon™ objectives for this study. A more detailed description of the procedures employed is presented in chapter 5.

- A. To assess the economic contribution of Marathon runners and accompanying friends/families from outside the Area, students in the Masters of Tourism Administration (MTA) degree program interviewed a sample of Marathon registrants waiting to register for the event about residence area, party size, length of stay, type of lodging, daily expenditures by categories, and other characteristics.
- B. To assess the economic contribution of spectators from outside the Area, students interviewed a sample of spectators along the race route at the Iwo Jima Memorial (VA), Crystal City (VA), The Mall (DC), 13<sup>th</sup> to 15<sup>th</sup> Streets along Constitution Avenue, N.W. (DC), and the Lincoln Memorial (DC)
- C. To assess the economic contribution of sponsors from outside the Area, ten Marathon sponsors headquartered out of the Area reported expenditures while within the Area for lodging, meals, transportation, advertising, and similar activities related to the Marathon.
- D. To determine the characteristics of visitors and local spectators and their spending, appropriate questions were posed to the samples of spectators.

### Acknowledgements

The IITS is grateful to Mrs. Angela Huff, Business Manager of the Marine Corps Marathon™ for requesting our proposal and for securing its approval. Mrs. Huff also provided information and materials essential to the successful completion of this study.

The IITS also expresses its gratitude to the TSTD265 course students who carefully interviewed runners and spectators, recorded responses on the interview forms, and then keyed in the results in an SPSS database program. We especially appreciate the efforts of Ms. Lara Toscani in preparing the tabulations of the data, and Mr. Rodrigo Soares in assisting her.

### Limitations

Since the results of this study were gathered through probability sampling, they are subject to sampling error. Chapter 5 Methodology presents the 95 percent confidence intervals for the data collected.

Resources only allowed us to survey a limited number of spectators at five locations along the Marathon route. It is possible that a larger number of completed

interviews covering a greater portion of the Marathon route could have produced estimates different from the ones presented here.

## Chapter 2: Problem Definition

The Marine Corps Marathon™ organization is responsible for conducting this marathon race each year, and for the second time has sought objective information about its economic impact, number and characteristics of spectators, and expenditures of out of town exhibitors at the MCM Runner's Expo. The organization believes that this information will facilitate planning, help ensure the quality of the experience for runners and spectators, and provoke additional exhibitor interest in the event.

In discussions with the faculty researchers assigned to this project, the organization and Institute agreed to the following objectives of a set of surveys conducted during Marine Corps Marathon™ events in late October 2004:

### For runners from outside the Washington, DC metropolitan area

- Volume of runners and accompanying persons
- Visitor party size
- Length of stay
- Type of lodging
- Location of lodging
- Expenditures for nine categories of purchases
- Demographic/ socio-economic characteristics: home ZIP code, gender, marital status, age, household income, and racial category.

### For spectators from outside the Washington, DC metropolitan area

- Volume of spectators and accompanying persons
- Visitor party size
- Reason for being in the area
- Length of stay
- Type of lodging
- Location of lodging
- Expenditures for nine categories of purchases
- Unaided awareness of sponsors
- Impression of four major sponsors
- Demographic/ socio-economic characteristics: home ZIP code, gender, marital status, age, household income, and racial category.

For spectators residing within the Washington, DC metropolitan area

- Volume of spectators
- Reason for being in the area
- Awareness of the race
- Spending on Marathon-related merchandise
- Demographic/socio-economic characteristics: home ZIP code, gender, marital status, age, household income, and racial category.

## Chapter 3: Findings

### Marathon Visitors

The completed interviews indicated that more than 76 thousand people visited the Washington, DC metropolitan area to run in the Marathon, to accompany a runner or visited for other reasons but viewed the race. As indicated in Table 3.1, nearly 90 percent of these were runners and their parties. One in eight visitors who viewed the Marathon were spectators from out of town who lined the Marathon route in Washington DC and Arlington and Alexandria, Virginia,

Table 3.1: Volume of Runners and Spectators from Outside Washington, DC Metro Area, 2004 Marine Corps Marathon™

All runners	22,724	
Runners from outside the Washington, DC metro area	18,966	
Runner visitor party size	3.56	
Runner visitors		67,519
Spectator visitor parties	2,784	
Spectator visitor party size	3.23	
Spectator visitors		<u>8,992</u>
Total Marathon visitors		76,511

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

### Visitor Economic Contribution

Collectively, Marathon runners from out of town and their parties spent \$17.5 million while in the Washington, DC area. Spectator visitors spent \$2 million while visiting the area. All told, visitors to the area from out of town who ran in the Marathon, accompanied runners or otherwise watched the event spent nearly \$20 million while in the D.C. metro area, as detailed in Table 3.2.

This incremental economic stimulus supported jobs and generated tax revenue for state and local jurisdictions. The study found that in the process of purchasing lodging, meals, and retail goods, Marathon visitors generated more than \$1.3 million in tax revenue for state and local governments in Washington, DC, Maryland and Virginia.

Table 3.2: 2004 Marine Corps Marathon™ Visitor Economic Contribution to the Washington, DC Metro Area (\$thousands)

<u>Expenditure category</u>	<u>Expenditures</u>	<u>Tax revenue Generated</u>
Lodging	\$5,978	\$615
Restaurant food & beverages	5,726	472
General retail purchases*	4,744	204
Entertainment & amusement	1,436	-
Gasoline & local transportation	1,495	34
Misc. services purchases	<u>149</u>	<u>-</u>
<u>Total visitor expenditures</u>	\$19,591	\$1,325

\*Includes Marathon-related merchandise, grocery and misc. retail purchases

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

### Exhibitor Economic Contribution

Table 3.3 shows the combined expenditures in the Washington, DC area by 29 companies headquartered outside the Washington, DC metropolitan area that exhibited at the Marine Corps Marathon™ Runners Expo. This is new spending injected into the area from outside and generates tax revenue for state and local governments. It is assumed here that all of this spending occurred in Virginia, the venue of the Runner's Expo and the start and finish of the race.

All told, the 29 exhibitors reported spending nearly \$60 thousand in the Washington, DC area in conjunction their Marathon activities. This generated \$3 thousand in additional tax revenue for Virginia State and local governments.

Table 3.3: 2004 Marine Corps Marathon™ Exhibitor Economic Contribution to the Washington, DC Metro Area (\$thousands)

Expenditure category	Expenditures	Tax revenue Generated
Lodging	\$26.6	\$2.3
Food & beverages	10.4	0.9
Advertising	8.5	-
Temporary staff	7.7	-
Local transportation	3.0	-
Other	<u>3.5</u>	<u>-</u>
Total sponsor expenditures	\$59.6	\$3.2

\*Includes M.C. Marathon merchandise, grocery and misc. retail purchases  
 Details may not add to total due to rounding.

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

Combining visitor and exhibitor expenditures in the Washington, DC metropolitan area provides a total direct expenditure contribution to the area economy of \$19.5 million, generating \$1.3 million in tax revenue for area state and local governments.

### Runner Visitor Characteristics and Expenditures

This section reports on the characteristics and expenditures of Marathon runner visitors and their parties.

Most marathon runners from outside the Washington, DC area traveled alone to the race or were accompanied by one other person (Table 3.4). Less than one-quarter of the runners visited the Washington DC area alone. Overall, the mean party size including runners was 3.56 persons.

Table 3.4: Number of People in Runner Visitor Parties,  
2004 Marine Corps Marathon™

Party size	Percent of all runner visitor parties
1 person	22.5%
2	32.9
3	14.9
4	12.0
5 and 6	10.5
7 to 10	5.9
11 or more	<u>1.2</u>
Total	100%

Note: details do not add to total due to rounding  
Source: 2004 Marine Corps Marathon™ Survey,  
George Washington University

Table 3.5 shows the distribution of runner visitor parties by length of stay. Virtually all runner visitors spent one or more nights in the area, while one-half of all parties spent two or three nights in the Washington, DC area. The average length of stay for all runner visitors was 2.92 nights.

Table 3.5: Length of Stay of Runner Visitor Parties, 2004  
Marine Corps Marathon™

Length of Stay	Percent of all runner visitor parties
No nights	0.2%
1 night	12.3
2 nights	27.2
3 nights	32.2
4 nights	15.8
5 nights	7.2
6 nights	1.8
7 nights or more	<u>3.3</u>
Total	100%

Source: 2004 Marine Corps Marathon™ Survey,  
George Washington University

### Lodging While in the Area

Ninety-nine percent of the runner visitor parties stayed overnight. Table 3.6 shows the distribution of the type of lodging these overnight visitors used. Nearly three-quarters of the runner visitor parties spent the night in a hotel or motel, while one-quarter stayed in a private home.

Table 3.6: Distribution of Runner Overnight Visitors by Type of Lodging, 2004 Marine Corps Marathon™

Type of Lodging	Percent of Runner Visitor Parties
Hotel or motel	71.4%
Private home	26.1
Bed & Breakfast establishments	0.6
Own second home	0.4
Campground/RV	0.2
Other	<u>1.5</u>
Total	100.0%

Details do not add to total due to rounding.

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

Table 3.7 shows where overnight runner visitors and their parties stayed. Virginia was chosen by nearly two-thirds of these visitors: not surprising given this state hosted the headquarters and starting/ending point for the Marathon. Runners least favored Maryland. When looking at commercial lodging places only (Bed & Breakfast establishments, Hotels, Motels and Campgrounds), Virginia was even more preferred by runner visitors, while Maryland chosen even less.

Table 3.7: Distribution of Runner Overnight Visitors by Location of Lodging, 2004 Marine Corps Marathon™

Lodging Location	All overnight Runner Visitors	Runner Visitors Staying in Commercial Lodging*
District of Columbia	27.0%	30.4%
Maryland	8.6	2.5
Virginia	<u>64.5</u>	<u>67.1</u>
Total	100.0%	100.0%

\*Bed & breakfast establishments, hotels and motels, and campgrounds.

Note: details may not add to totals due to rounding.

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

### Runner Visitor Party Expenditures

Table 3.8 shows how the runner visitor parties spent their money, and where. Virginia, location for the Marathon headquarters and the start and finish of the race, garnered nearly two-thirds of the \$17.5 million spent by runner visitor parties. The city of Washington, DC attracted nearly than one-third of this spending, while runner party spending in Maryland was only 6 percent of the total.

Spending on lodging was the largest category, with nearly one-third of the total. Runner visitor party spending on food and beverages in restaurants and carry outs was second, accounting for one out of four of the dollars spent by runner visitor parties.

Retail purchases by runner visitor parties have been broken down into two categories: Marathon-related merchandise (available only at the race headquarters venue), and general retail purchases. Virginia was the dominant location for these purchases, garnering \$3.2 million of these combined categories. Miscellaneous services, including purchases of dry cleaning, hairdressing and like consumer services, was by far the smallest category of spending by these visitors.

This study indicates that the average runner visitor party spent \$921 while in the Washington, DC metro area for the Marathon, or \$259 per visitor. Assuming length of

stay in nights equals the number of days in the area, the mean spending per person per day for runner visitor parties was \$89.

Table 3.8: Expenditures by Runner Visitor Parties, by Type and Location, 2004 Marine Corps Marathon™ (\$thousands)

Type of Expenditure	Washington, DC	Virginia	Maryland	Total
Restaurant/carry-out food and beverages	\$1,489	\$2,990	\$314	\$4,793
Lodging	2,042	3,188	178	5,408
Marathon-related merchandise	0	2,115	0	2,115
General retail purchases	667	1,086	237	1,990
Entertainment and amusement	434	725	108	1,267
Local transportation	257	660	72	989
Groceries	82	267	76	425
Gasoline	74	195	54	324
Misc. services	31	100	17	148
<b>Total</b>	<b>\$5,076</b>	<b>\$11,327</b>	<b>\$1,056</b>	<b>\$17,458</b>

Note: details may not add to totals due to rounding

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

### Runner Visitor Characteristics

As opposed to the nearly equal gender split of the U.S. population, visitor runners were more likely to be male, as shown in Table 3.9

Table 3.9: Gender of Runner Visitors Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Gender	Runner Visitors	Overall U.S.
Female	42.6%	51.1%
Male	<u>57.3</u>	<u>48.9</u>
Total	100.0%	100.0%

Note: Details may not add totals due to rounding.

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

Table 3.10 indicates that Marine Corps Marathon™ runner visitors were considerably more likely to be married than the general population, and much less likely to be divorced or widowed.

Table 3.10: Marital Status of Runner Visitors Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Marital Status	Runner Visitors	Overall U.S.*
Single, never married	31.1%	28.6%
Married	62.7	53.5
Divorced, widowed	<u>6.3</u>	<u>17.9</u>
Total	100.0%	100.0%

\*Population 15 years of age and over

Note: Details may not add totals due to rounding.

Source: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

Table 3.11 shows the age distribution of the runner visitors compared to the overall U.S. population. Runner visitors are much more clustered in the middle age

ranges than the total population: 85 percent in the 25 to 54 year old category versus 43 percent for all U.S. residents.

Table 3.11: Age of Runner Visitors Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Age	Runner Visitors	Overall U.S.
17 years and under	0.2%	25.7%
18 to 24 years	9.1	9.6
25 to 34 years	30.5	14.2
35 to 44 years	30.5	16.0
45 to 54 years	22.6	13.4
55 to 64	6.4	8.6
65 years and over	<u>0.9</u>	<u>12.4</u>
Total	100.0%	100.0%

Note: Details may not add totals due to rounding.

Sources: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

As Table 3.12 indicates, runner visitors are much more likely to be white and much less likely to be black/African-American than the overall U.S. population.

Table 3.12: Race of Runner Visitors Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Race	Runner Visitors	Overall U.S.
White	83.3%	76.2%
Black/African-American	7.0	12.1
Asian/Pacific Islander	4.0	4.2
Other	<u>5.6</u>	<u>7.5</u>
Total	100.0%	100.0%

Note: Details may not add totals due to rounding.

Sources: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

Marathon visitor runners are much more affluent than the overall U.S. population, as indicated in Table 3.13. These visitors are more than twice as likely to have household incomes of \$100,000 or more than the average household in the country.

Table 3.13: Household Income of Runner Visitors Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Household Income	Runner Visitors*	Overall U.S.
Under \$25,000	5.0%	28.1%
\$25 to \$49,999	22.0	27.9
\$50,000 to \$99,999	38.0	30.0
\$100,000 and over	<u>35.0</u>	<u>14.0</u>
Total	100.0%	100.0%

\*distribution of those reporting income. 5.4% of runner visitors interviewed did not provide this information.  
Sources: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

Respondents were also asked for their ZIP codes, to indicate their region of residence. Table 3.14 indicates that one-quarter of the runner visitors at the Marathon were from the South of the United States and another one-quarter from the Mid-Atlantic region surrounding Washington, D.C. As expected, the Marine Corps Marathon™ draws runners disproportionately from the east (New England, New York & New Jersey, Mid-Atlantic and South) compared to the population of these regions. On the other hand, few of the runners came from the North Central or West regions compared to the overall population. Four percent of the runner parties interviewed indicated they lived in countries other than the U.S.

Table 3.14: Region of Residence of Runner Visitors Compared to the U.S. Population, 2004 Marine Corps Marathon™

Region of Residence	Runner Visitors	U.S. Population
New England (CT, ME, MA, RI, NH, VT)	9.4%	4.8%
New York & New Jersey	9.2	9.5
Mid-Atlantic (DE, MD, PA, VA, WV)	26.6	9.7
South (AL, AR, GA, FL, KY, LA, NC, MS, SC, TN)	23.3	21.7
North Central (IA, IL, IN, MI, MO, MN, OH, WI)	9.9	20.5
West (all other states)	<u>21.7</u>	<u>33.8</u>
Total	100.0%	100.0%

Note: details may not add to totals due to rounding

Sources: 2004 Marine Corps Marathon™ Survey, George Washington University, U.S. Bureau of the Census

### Spectator Visitor Characteristics and Expenditures

Ninety-one percent of the spectator visitors interviewed indicated they were in the area primarily to watch the Marathon race, while ten percent indicated they were here for another purpose. Table 3.15 presents the sizes of the travel parties these visitors were in. About one-half were here with one other person. The mean travel party size of respondents was 3.23 persons.

Table 3.15: Number of People in Spectator Visitor Parties,  
2004 Marine Corps Marathon™

Party size	Percent of all spectator visitor parties
1	6.8%
2	35.8
3	14.2
4	21.0
5 and 6	19.6
7 to 10	2.0
11 or more	<u>0.7</u>
Total	100%

Note: Details do not add to total due to rounding.

Source: 2004 Marine Corps Marathon™ Survey, George  
Washington University

Table 3.16 shows the distribution of spectator visitor parties by length of stay. One-half of all parties spent two or three nights in the Washington, DC area. Eleven percent were day visitors to the area. The average length of stay for all spectator visitors was 2.38 nights.

Table 3.16: Length of Stay of Spectator Visitor Parties,  
2004 Marine Corps Marathon™

Length of Stay	Percent of all runner parties
No nights	11.0%
1 night	17.1
2	23.9
3	25.3
4	18.4
5	2.7
6	0
7 nights	<u>1.4</u>
Total	100%

Note: details do not add to total due to rounding  
Source: 2004 Marine Corps Marathon™ Survey,  
George Washington University

#### Spectator Lodging while in the Area

More than 84 percent of the spectator visitor parties stayed overnight. Table 3.17 shows that hotels and motels were by far the most popular type of lodging these overnight visitors used.

Table 3.17: Distribution of Spectator Overnight Visitors  
by Type of Lodging, 2004 Marine Corps Marathon™

Type of Lodging	Percent of Spectator Visitor Parties
Hotel or motel	68.2%
Private home	30.2
Bed & Breakfast establishments	0.8
Own second home	0.8
Campground/RV	<u>0</u>
Total	100.0%

Note: Details do not add to total due to rounding.

Source: 2004 Marine Corps Marathon™ Survey, George  
Washington University

Table 3.18 shows the state where overnight spectator visitors and their parties stayed. Focusing on those visitors staying in paid accommodations, Virginia was chosen by nearly one-half of these visitors. Spectator visitors least favored Maryland for their overnight lodging. Those visitors staying in commercial lodging showed even a lower preference for Maryland than all overnight visitors did, and a greater preference for lodging in Washington, DC.

Table 3.18: Distribution of Spectator Overnight Visitors  
by Location of Lodging, 2004 Marine Corps Marathon

Lodging Location	All overnight Spectator Visitors	Spectator Visitors Staying in Commercial Lodging*
District of Columbia	30.5%	35.2%
Maryland	22.1	17.0
Virginia	<u>46.9</u>	<u>47.7</u>
Total	100.0%	100.0%

\*Bed & Breakfast establishments, hotels and motels, and campgrounds.

Note: details may not add to totals due to rounding.

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

Spectator visitors were also asked to indicate the type of transportation they used to arrive at the point where they were watching the Marathon race. Table 3.19 indicates that nearly half arrived by Metrorail subway, while another one-third arrived by personal motor vehicle. Each of the other modes were identified by five percent or less of the sample.

Table 3.19: Distribution of Spectator Visitors by Type of Transportation Used to Reach Viewing Site, 2004 Marine Corps Marathon™

Mode of Transportation	Percent of Spectator Visitor Parties
Metrorail (subway)	47.3%
Auto/SUV/RV/truck	35.1
Taxicab	5.4
Shuttle bus	3.4
Walked	3.4
Metrobus	2.0
Other	<u>3.4</u>
Total	100.0%

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

### Spectator Visitor Party Expenditures

Table 3.20 shows how the spectator visitor parties spent their money, and where. Virginia, location of the Marathon headquarters and of the start and finish of the race, garnered half of the \$2.3 million spent by spectator visitor parties. The city of Washington, DC attracted more than one-third of this spending, while spectator party spending in Maryland was only 15 percent of the total.

Spending on food and beverages in restaurants and carry-outs comprised more than one-third of total spectator visitor spending. Spectator visitor spending on lodging was second, accounting for one-quarter of the dollars spent by these visitor parties.

This study indicates that the average spectator visitor party spent \$817 while in the Washington, DC metro area, nearly 90 percent of what the runner visitor parties indicated. The mean per visitor spending for spectator visitors was \$253, according to the survey, about equal to the runner visitor average. Assuming length of stay in nights equals the number of days in the area, the mean spending per person per day for spectator visitor parties was \$106. This is 20 percent more than the runner visitors indicated they spent per person per day.

Table 3.20: Expenditures by Spectator Visitor Parties, by Type and Location, 2004  
Marine Corps Marathon™ (\$thousands)

Type of Expenditure	Washington, DC	Virginia	Maryland	Total
Restaurant/carry-out food and beverages	\$380	\$389	\$163	\$933
Lodging	244	254	72	570
Marathon-related merchandise	0	142	0	142
General retail purchases	37	113	19	168
Entertainment and amusement	67	65	37	169
Local transportation	0	0	0	0
Groceries	69	92	21	182
Gasoline	12	25	9	46
Misc. services	7	35	21	63
Total	\$816	\$1,116	\$343	\$2,275

Note: details may not add to totals due to rounding

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

### Spectator Visitor Characteristics

In contrast to the nearly equal gender distribution of the U.S. population, Marathon spectator visitors were much more likely to be female, as shown in Table 3.21.

Table 3.21: Gender of Spectator Visitors Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Gender	Spectator Visitors	Overall U.S.
Female	57.1%	51.1%
Male	<u>42.9</u>	<u>48.9</u>
Total	100.0%	100.0%

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

Table 3.22 indicates that Marathon spectator visitors mirrored the general U.S. population in terms of marital status, except that a significantly smaller proportion of the former were divorced or widowed.

Table 3.22: Marital Status of Spectator Visitors Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Marital Status	Spectator Visitors	Overall U.S.*
Single, never married	30.3%	28.6%
Married	62.1	53.5
Divorced, widowed	<u>7.6</u>	<u>17.9</u>
Total	100.0%	100.0%

\*Population 15 years of age and over

Source: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

Table 3.23 shows the age distribution of the spectator visitors 18 years of age or older compared to the overall U.S. population (interviews were limited to those in this age group). Spectator visitors tended to be younger than the overall population. Only 17 percent interviewed responded they were 55 years of age or older, versus 28 percent in the overall population.

Table 3.23: Age of Spectator Visitors Compared to  
Overall U.S. Population, 2004 Marine Corps  
Marathon™

Age	Spectator Visitors*	Overall U.S.*
18 to 24 years	8.5%	13.0%
25 to 34 years	28.4	19.1
35 to 44 years	20.6	21.6
45 to 54 years	25.5	18.0
55 to 64 years	12.8	11.6
65 years and over	<u>4.3</u>	<u>16.7</u>
Total	100.0%	100.0%

\*Includes only those 18 years of age or older

Note: details may not add to totals due to rounding.

Sources: 2004 Marine Corps Marathon™ Survey, George  
Washington University; U.S. Bureau of the Census

As Table 3.24 indicates, the distribution of the race reported by spectator visitors was more predominantly white than the national population.

Table 3.24: Race of Spectator Visitors Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Race	Spectators Visitors	Overall U.S.
White	85.1%	76.2%
Black/African-American	8.8	12.1
Asian/Pacific Islander	2.0	4.2
Other	<u>2.0</u>	<u>7.5</u>
Total	100.0%	100.0%

Note: details may not add to total due to rounding

Sources: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

Spectator visitors at the Marathon were much more affluent than the overall U.S. population, as indicated in Table 3.24. These visitors were nearly twice as likely to have household incomes of \$100,000 or more than the average U.S. household, and one-third as likely to have an income of less than \$25,000.

Table 3.24: Household Income of Spectator Visitors Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Household Income	Spectator Visitors	Overall U.S.
Under \$25,000	9.6%	28.1%
\$25 to \$49,999	20.7	27.9
\$50,000 to \$99,999	44.4	30.0
\$100,000 and over	<u>25.2</u>	<u>14.0</u>
Total	100.0%	100.0%

Sources: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

Spectator respondents from out of town were also asked for their ZIP codes, to determine their region of residence. Table 3.25 indicates that nearly one-third of the spectator visitors at the Marathon were from the Mid-Atlantic region surrounding Washington, D.C. Spectators were also disproportionately from New England and New York/New Jersey, compared to these regions' populations. Few spectators were present from the North Central or West regions compared to these regions' populations. Foreign residents accounted for less than one percent of these respondents.

Table 3.25: Region of Residence of Spectator Visitors  
Compared to the U.S. Population, 2004 Marine Corps  
Marathon™

Region of Residence	Spectator Visitors	U.S. Population
New England (CT, ME, MA, RI, NH, VT)	18.3%	4.8%
New York & New Jersey	19.0	9.5
Mid-Atlantic (DE, MD, PA, VA, WV)	31.7	9.7
South (AL, AR, GA, FL, KY, LA, NC, MS, SC, TN)	14.8	21.7
North Central (IA, IL, IN, MI, MO, MN, OH, WI)	9.2	20.5
West (all other states)	<u>7.0</u>	<u>33.8</u>
Total	100.0%	100.0%

Note: details may not add to totals due to rounding

Sources: 2004 Marine Corps Marathon™ Survey, George  
Washington University, U.S. Bureau of the Census

### Local Spectator Characteristics

The survey team interviewed 135 spectators at the three sites along the Marathon route who were residents of the Washington, DC metropolitan area.

Eighty percent of the sample reported that their primary purpose for being at the interview site was to watch the Marathon race. The sample reported spending a mean of \$35.17 on Marathon merchandise. When asked how for the mode of transportation used to arrive at their viewing spot, more than half identified the Metrorail subway. Table 3.26 shows this distribution. Compared to the distribution for visitor spectators (Table 3.19, above), a somewhat greater percentage of local spectators arrived by Metrorail and a somewhat smaller percentage by personal motor vehicle (automobile/SUV/RV/ truck). No local spectator respondents indicated they arrived by taxicab, Metrobus or shuttle bus. Walking was a far more popular way of reaching their viewing site than for visitor spectators.

Table 3.26: Distribution of Local Spectators by Mode of Transportation Used to Reach Viewing Site, 2004 Marine Corps Marathon™

Mode of Transportation	Percent of Local Spectator Parties
Metrorail (subway)	54.1%
Auto/SUV/RV/truck	31.9
Taxicab	0
Shuttle bus	0
Walked	12.6
Metrobus	0
Other	<u>1.5</u>
Total	100.0%

Note: details do not add to total due to rounding.

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

Local spectators at the Marine Corps Marathon™ nearly matched the gender distribution of the U.S. population, as indicated in Table 3.27.

Table 3.27: Gender of Local Spectators Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Gender	Local Spectators	Overall U.S.
Female	49.6%	51.1%
Male	<u>50.4</u>	<u>48.9</u>
Total	100.0%	100.0%

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

Table 3.28 shows that Marathon local spectators were much more likely to be single than the U.S. population, and less likely to be married or divorced/widowed.

Table 3.28: Marital Status of Local Spectators Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Marital Status	Local Spectators	Overall U.S.*
Single, never married	46.7%	28.6%
Married	46.0	53.5
Divorced, widowed	<u>7.4</u>	<u>17.9</u>
Total	100.0%	100.0%

Details may not add to totals due to rounding

\*population 18 years of age and over

Source: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

Table 3.29 shows the age distribution of the local spectator visitors 18 years of age or older compared to the overall U.S. population. As was true for spectator visitors, local spectators tended to be younger than the overall population. Only twelve percent interviewed responded they were 55 years of age or older, versus 28 percent in the overall

population. Local spectators aged 18 to 34 comprised one-half of this population, twice the proportion for the total U.S. population.

Table 3.29: Age of Local Spectators Compared to Overall U.S. Population, 2004 Marine Corps Marathon™

Age	Local Spectators*	Overall U.S.*
18 to 24 years	14.8%	13.0%
25 to 34 years	36.3	19.1
35 to 44 years	24.4	21.6
45 to 54 years	11.9	18.0
55 to 64 years	10.4	11.6
65 years and over	<u>1.5</u>	<u>16.7</u>
Total	100.0%	100.0%

\*includes only those 18 years of age or older

Note: details may not add to totals due to rounding

Sources: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

As Table 3.30 indicates, the distribution of the race reported by local spectators is very close to the national population, but somewhat more likely to be Asian/Pacific Islander.

Table 3.30 Race of Local Spectators Compared to  
Overall U.S. Population, 2004 Marine Corps  
Marathon™

Race	Local Spectators	Overall U.S.
White	79.6%	76.2%
Black/ African-American	9.9	12.1
Asian/Pacific Islander	9.1	4.2
Other	<u>0.8</u>	<u>7.5</u>
Total	100.0%	100.0%

Note: details may not add to totals due to rounding.

Sources: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

Local spectators at the Marathon were more affluent than the overall U.S. population, as indicated in Table 3.31, even more so than spectator visitors were. Local spectators were more than twice as likely to have household incomes of \$100,000 or more than the average U.S. household, but only one-fifth as likely to have an income of less than \$25,000.

Table 3.31: Household Income of Local Spectators  
Compared to Overall U.S. Population, 2004 Marine  
Corps Marathon™

Household Income	Local Spectators	Overall U.S.
Under \$25,000	5.3%	28.1%
\$25 to \$49,999	22.0	27.9
\$50,000 to \$99,999	41.7	30.0
\$100,000 and over	<u>31.1</u>	<u>14.0</u>
Total	100.0%	100.0%

Note: details may not add to totals due to rounding.

Sources: 2004 Marine Corps Marathon™ Survey, George Washington University; U.S. Bureau of the Census

## Chapter 4: Conclusions and Recommendations

A series of surveys were conducted of participants, spectators and sponsors of the 29th Annual Marine Corps Marathon™, October 31, 2004. Objectives were to estimate the economic contribution of visitors to the Washington, DC metropolitan area in conjunction with the event, including exhibitors at the Marathon Expo, and to determine the characteristics of visitors and local spectators.

### Economic Contribution of the Marine Corps Marathon™

The surveys of Marathon runner parties and spectator parties found that more than 76 thousand visitors to the Washington DC metro area watched or participated in the Marine Corps Marathon™ on October 31, 2004, more than twice as many as had witnessed the event in 2002 as reported by IITS.

These visitors spent \$19.6 million while in the D.C. area on food, lodging, entertainment, local transportation and retail purchases. These expenditures generated more than \$1.3 million in tax revenue for the area's state and local governments. Nearly two-thirds of the visitor spending and more than half of the tax revenue generated occurred in Virginia, as shown in Table 4.1. Marathon visitor spending grew by two-thirds from 2002, while tax revenue generated by the event more than doubled.

Table 4.1: Visitor Economic Contributions by Jurisdiction,  
2004 Marine Corps Marathon™ (\$thousands)

Location	Expenditures	Change from 2002	Tax revenue generated	Change from 2002
Virginia	\$12,300	94%	\$754	165%
Washington, D.C.	5,892	25	506	70
Maryland	1,398	67	71	87
Total	\$19,591	65%	\$1,332	114%

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

Twenty-nine exhibitors at the Marathon Runner's Expo that were located out of the Washington DC metro area spent an additional \$60 thousand, bringing the total direct economic contribution of the event to \$19.7 million.

### Marathon Runner Visitor Characteristics

More than 67 thousand persons traveled to the Washington, DC area to run in the Marathon or to accompany a runner, more than three times the 2002 volume. These runner visitors spent an average of three nights in the area.

Ninety-nine percent of these runner visitor parties spent one or more nights here, with nearly three-quarters staying in hotels or motels. Nearly two-thirds of the runner visitor parties stayed in Virginia, with one-quarter in the District of Columbia and the balance in Maryland. Virginia was the dominant recipient of runner visitor party spending with nearly two-thirds of the \$17.5 million spent.

Runner visitors were primarily male and predominantly married. Nearly two-thirds were 25 to 44 years of age. Black/ African-Americans, Asians and other nonwhite rates accounted for 17 percent of runner visitors.

Runner visitors were considerably wealthier than the overall U.S. population, with over one-third reporting household incomes of \$100,000 or more. One in four runner visitors reside in the states surrounding the Washington, DC metropolitan area, but one-quarter came from each of the South and West regions of the country.

### Spectator Visitor Spending and Characteristics

The results of the surveys indicate that the Marathon was watched along its route by 9 thousand spectators from out of the area who were not part of runner parties. This was a decline of nearly 45 percent from the 2002 results. Ninety percent of these spectators surveyed responded they were here specifically to watch the race.

Marathon spectator visitor parties averaged about three persons and spent an average of 2.4 nights in the area, with 89 percent spending one night or more. Two-thirds of the overnight spectator visitors stayed in hotels or motels, and more than half of these stayed in Virginia.

Marathon spectator visitors spent more than \$3 million while in the area, about the same amount as for the 2002 Marathon. Sixty percent of this spending occurred in Virginia. The average spectator visitor party spent \$766 (up more than one-third from 2002) while in the Washington DC metropolitan area, or about \$100 per person per day.

One-half of this spending was on food, either prepared or unprepared, and one-quarter on general retail purchases, including Marine Corps Marathon™ merchandise.

Fifty-seven percent of all spectator visitors interviewed were women, and more than 60 percent of all were married. Nearly half were 25 to 44 years of age, and more than three-quarters were white. Spectator visitors were also markedly wealthier than the overall U.S. population, with over one-quarter reporting household incomes in excess of \$100,000. Nearly one-third of the spectator visitors interviewed resided in the five states surrounding Washington, D.C., and more than one-third came from northern Atlantic coast states.

### Local Spectator Sponsor Awareness and Characteristics

While local spectators lining the Marathon route did not contribute economic benefits to the Washington DC area, they were interviewed regarding purchase of Marine Corps Marathon™ merchandise and personal characteristics.

Eighty percent of the sample reported their primary purpose for being at the interview site was to watch the race. They reported spending \$63 per party on Marathon -related merchandise, with about 3 persons per party. More than one-half arrived by Metrorail subway, and one-third arrived by automobile or other personal motor vehicle.

Local spectators were one-half male, and nearly one-half reported being single (never married). Nearly two-thirds were 25 to 44 years of age, considerably younger than the visitor spectators. Racial characteristics were about the same as for the spectator visitors. They appeared more wealthy than the spectator visitors, with nearly one-third indicating annual household incomes of \$100,000 or more.

### Recommendations

The future of the U.S. economy is quite uncertain, and threats of terrorism and war has reduced Americans' propensities to travel. These turbulent times are likely to continue, suggesting that this survey should be repeated at least every other year. Indeed, the current survey found the Marathon visitor volume to be more than twice as high as found in the 2002 study, with expenditures two-thirds higher. Such regular studies will ensure that the measures of visitor characteristics and impact reflect current behavior and economic and political conditions at the time the Marathon is held.

Larger sample sizes in future surveys can provide more detail about origins, activities, awareness and expenditures. We also recommend that measures be instituted

to achieve 100 percent reporting by Marine Corps Marathon™ Runner's Expo exhibitor organizations headquartered out of town.

The authors hope that these findings will be distributed widely, to improve residents' knowledge of the Marathon's economic contribution to the localities in which it is held, and improve understanding of the markets that this special event attracts.

## Chapter 5: Methodology

Three interview forms were developed with the approval of the Marine Corps Marathon™ organization specifically for this survey: one for Marathon runners, one for out of town spectators, and one for local spectators.

### Marathon Runners Survey

Eighteen students in George Washington University's Master of Tourism Administration degree program volunteered to interview entrants in the Marine Corps Marathon™ as they waited in line to pick up their race packets at the headquarters for the race, the Hyatt Regency Hotel, Crystal City, Arlington, Virginia. Five interviewers were assigned to interview runners during all of the hours over the three days that runners could obtain their packets:

Thursday, October 28, 4:00 p.m. to 8:00 p.m.

Friday, October 29, 10:00 a.m. to 7:00 p.m.

Saturday, October 30, 8:00 a.m. to 8:00 p.m.

Interviewers were instructed to ask every fifth person in line if she or he was scheduled to run in the Marathon. If the response was no, the interview was concluded and the interviewer counted off five people to begin another interview.

If the response was "yes", then the person was asked if they resided outside the Washington, D.C. metropolitan area. If they responded "no", the interview was concluded, and the interviewer counted off six people to begin another interview. If they responded "yes", the interviewer asked the questions from the interview form, "Survey of Marathon Runners from Outside the Washington, DC Metropolitan Area" (see sample form in chapter 6. Appendix). Such personal interviews helped ensure a high cooperation rate.

In all, 590 runner visitor interviews were successfully completed and the results entered into an SPSS database program by the interviewer on a personal computer. The interview refusal rate was 6 percent.

Mrs. Angela Huff of the Marine Corps Marathon™ organization provided the breakdown of the residences of the Marathon runners as follows:

Table 5.1 Residence Areas of Confirmed Entrants in the  
2004 Marine Corps Marathon™

Residence	Number
Outside the Washington, DC area	18,966
Inside the Washington, DC area	3,758
Total	22,724

Source: Marine Corps Marathon™

### **Marine Corps Marathon™ Spectator Survey**

Twelve students in George Washington University's Master of Tourism Administration degree program volunteered to interview spectators at five points along the route of the Marathon race on October 31, from 8:30 a.m. to 4:00 p.m. Their stations, numbers and completed interviews are shown in Table 5.2

Table 5.2: Interviewers and Completed Interviews for Spectator Survey, Marine Corps Marathon™ 2004

Station	Number of Interviewers	Completed Interviews
Iwo Jima Memorial, Arlington, VA	3	117
Crystal City, Arlington, VA	5	80
The Mall, Washington, DC	2	48
Constitution Ave., N.W. between 13 <sup>th</sup> and 15 <sup>th</sup> Streets Washington, DC	1	39
Lincoln Memorial, Washington, DC	1	28
Total	12	312

Source: International Institute of Tourism Studies

Interviewers were instructed to count five persons watching the race from west to east along the Marathon route and to ask the fifth person if s/he resided in the Washington, DC area. If the respondent said “no”, the interviewer asked the questions from the “Survey of OUT-OF-TOWN Spectators at the Marine Corps Marathon™ 2004” interview form (see Appendix for a sample of this form).

If the respondent said “yes”, s/he did reside in the Washington, DC area, s/he was handed the “Survey of LOCAL Spectators at the Marine Corps Marathon™ 2004” questionnaire on a clipboard with a pen and asked to complete it (see Appendix for a sample of this questionnaire). In each case, the respondent was promised a Marathon commemorative souvenir for completing the survey: a personal computer screen cleaner.

Each interviewer entered the data from the collected questionnaires into an SPSS database program on a personal computer. Tabulations of the results were produced

by Ms. Lara Toscani, Graduate Assistant, aided by Mr. Rodrigo Soares, Graduate Assistant.

Table 5.3 shows the confidence intervals for the percentages shown in the tables of findings in chapter 3. This table indicates the interval within which we can be 95 percent confident the percentage response would fall if we interviewed everyone in the population rather than just our sample.

For example, Table 3.4 above indicates that 33 percent of our sample of runner visitor parties reported that they were two people in size. Looking down column B for runner visitors we see that the interval for 35 percent (the closest percentage shown to 33 percent) is  $\pm 4$  percent. This tells us that, had we interviewed all Marathon runner visitor parties, we would have found that the proportion reporting party sizes of two people to be between 33 percent minus 4 percent and 33 percent plus 4 percent, or between 29 percent and 37 percent. This holds true for all but five percent of the samples we might have drawn, so we can be 95 percent confident that these intervals contain the actual percentage for all runner visitors.

Table 5.3: 95 Percent Confidence Intervals for Percentages Derived from Marine Corps Marathon™ Surveys

A. Percentage Reported			B. Runner visitors	C. Spectator visitors	D. Local spectators
5%	or	95%	$\pm 2\%$	$\pm 3\%$	$\pm 4\%$
10%	or	90%	$\pm 3\%$	$\pm 5\%$	$\pm 5\%$
15%	or	85%	$\pm 3\%$	$\pm 6\%$	$\pm 6\%$
20%	or	80%	$\pm 3\%$	$\pm 6\%$	$\pm 7\%$
25%	or	75%	$\pm 4\%$	$\pm 7\%$	$\pm 7\%$
30%	or	70%	$\pm 4\%$	$\pm 7\%$	$\pm 8\%$
35%	or	65%	$\pm 4\%$	$\pm 8\%$	$\pm 8\%$
40%	or	60%	$\pm 4\%$	$\pm 8\%$	$\pm 8\%$
45%	or	55%	$\pm 4\%$	$\pm 8\%$	$\pm 8\%$
50%			$\pm 4\%$	$\pm 8\%$	$\pm 8\%$

Source: George Washington University

### Visitor Expenditure Estimation

The survey of runner visitors asked respondents to report the type of lodging used if they reported they stayed in the D.C. area overnight (question 5). If they responded with Bed & Breakfast, Hotel or Motel, or Campground/recreational vehicle, respondents were asked how much they would pay per night (question 6). For each of the three jurisdictions respondents reported spending the night (question 7), the mean of the question 6 lodging expenditure replies was multiplied by the number of runner visitor parties supplied by the Marine Corps Marathon™ organization, by the percentage staying in one of the three paid lodging categories, by the percentage reporting staying in that jurisdiction and by the average length of stay of these respondents. This produced runner visitor spending for lodging for each of Washington, DC, Maryland and Virginia. The same procedure was used for the spectator visitor survey.

Runner visitors were also asked how much they would spend on gasoline during their entire visit (question 9). For each of the jurisdictions of lodging (question 9), the mean gasoline expenditure reported for all respondents was multiplied by the number of runner parties spending the night there. This produced runner visitor spending for gasoline in each of D.C., Maryland and Virginia. A similar procedure was used in the spectator visitor survey

Question 10 of the runner visitor survey questionnaire asked for spending per party for each of the following categories for the typical day in the Washington, D.C. metro area:

- Food/beverages in restaurants or carry out
- Groceries
- Local transportation (taxis, Metro, car rental)
- Entertainment and amusement
- Purchases at retail stores
- Other (such as dry-cleaning or other services)

For each of the three jurisdictions, mean expenditure per party was computed for each category, and multiplied by the length of stay reported in question 4 and the number of parties staying in that jurisdiction. That produced total spending estimates for each of D.C., Maryland and Virginia for each expenditure category. The spectator visitor survey results were similarly processed to derive the relevant expenditure estimates.

Finally, the runner visitors sampled were asked to report how much they will spend on marathon-related merchandise (question 8). The mean expenditure reported by all respondents was multiplied by the total number of visitor runner parties and all

attributed to Virginia, where such merchandise was available for sale. This question was not asked of spectator visitor respondents.

Sales and excise tax rates were gathered for each of the expenditure categories for each of the states and localities of the D.C. area. Except for gasoline, the amount of tax revenue generated was computed by the same methodology for each expenditure category in each jurisdiction. The total expenditure for each category, which was assumed to include relevant sales or excise taxes, was multiplied by a tax factor consisting of the tax rate in the numerator divided by one plus the tax rate in the denominator. This ensured that the tax rate was applied to the amount of the sale without the tax.

D.C., Maryland and Virginia excise taxes on gasoline are imposed by gallon sold, not by dollar sales. The number of gallons implicit in the gasoline expenditure for a jurisdiction was derived by dividing the total expenditure for gasoline as computed above by the average cost per gallon as reported by the American Automobile Association for each of the Washington DC metropolitan areas of D.C. , Maryland and Virginia in October,2004. Then the number of gallons purchased in each jurisdiction was multiplied by the tax per gallon to derive gasoline excise tax payments generated by visitors.

No sales or excise taxes were found to apply to local transportation, entertainment and amusement, or "other" expenditures.

The per-party expenditures were derived from surveys of runner visitors and spectator visitors, as described above. The means developed for each of the expenditure categories were used to compute estimates of total expenditures for each category as explained. It is unlikely that these means from one sample would precisely match the means derived from interviewing all runner visitors and all spectator visitors.

However, sampling theory allows us to determine the interval within which we can be 95 percent confident that the actual population mean expenditures would fall. Table 5.4 presents several of these to indicate the reliability of this survey. Gasoline spending was singled out because it is the only category where visitors reported on spending for the entire visit, rather than per day or night.

Table 5.4 tells us, for example, that had we been able to interview all runner visitors about their expenditures per party while in the Washington, DC metro area, this population mean would fall between \$237 minus \$29 and \$237 plus \$29, or between \$208 and \$266. Had the samples been larger, sampling theory tells us that the intervals shown would have been smaller.

Table 5.4: 95 Percent Confidence Intervals for Mean Expenditures per Party Derived from Marine Corps Marathon™ Surveys

Expenditure	Mean	Confidence Interval
Total spending per day/night per runner visitor party	\$237	±\$29.30
Total spending per day/night per spectator party	\$207	±\$19.20
Spending on gasoline per runner visitor party	\$18.40	±\$2.78
Spending on gasoline per spectator visitor party	\$15.40	±\$3.78

Source: 2004 Marine Corps Marathon™ Survey, George Washington University

## **Chapter 6. Appendix**

Following are samples of the interview forms used to gather information from runner visitors, spectator visitors and local spectators. The forms used were printed on legal size paper (8.5 inches by 14 inches), front and back.

Also included is a sample of the questionnaire sent to the Runner's Expo exhibitors headquartered outside the Washington, D.C. metropolitan area by the Marine Corps Marathon™ organization.

## Survey of Marathon Runners from Outside the Washington, DC Metropolitan Area 2004

I am a student at George Washington University helping to conduct a study of the Marine Corps Marathon this year. Could I take three minutes of your time to ask you some questions about your participation in this year's race?

- A. Are you scheduled to run in the Marine Corps Marathon on October 27?
- Yes       No (Thank the respondent and conclude the interview)
- B. Do you reside outside the Washington, D. C. Metro area? (includes Northern Virginia and suburban Maryland counties but not Baltimore)
- Yes       No (Thank the respondent and conclude the interview)
- C. How many people, INCLUDING YOURSELF, traveled with you on this visit?
- \_\_\_\_\_ People
- D. How many nights will you spend in this area on this visit? \_\_\_\_\_ Nights
- No nights (SKIP TO QUESTION 8)
- E. What type of lodging will you use while staying here? (ACCEPT ONLY ONE ANSWER: if more than one type of lodging is reported, ask for the one where the most nights are spent)
- Bed & Breakfast
- Hotel or Motel
- Private home (SKIP TO QUESTION 7)
- Your own second home (condo, cottage, etc.) (SKIP TO QUESTION 7)
- Campground/recreational vehicle
- Other \_\_\_\_\_
- F. How much will you pay for lodging PER NIGHT while here? \$ \_\_\_\_\_
- G. Are you staying in D. C., Maryland or Virginia?
- D. C.       Maryland       Virginia       Don't know
- H. Altogether, how much will you spend on MARATHON-RELATED MERCHANDISE while you are here? (amount during the entire visit)
- \$ \_\_\_\_\_
- I. How much will you spend on GASOLINE while here? (amount for entire visit)
- \$ \_\_\_\_\_

COMPLETE OTHER SIDE

J. Thinking about a typical day here, how much do you think you AND your party will spend PER DAY on --

Food/beverages in restaurants or carry out \$\_\_\_\_\_1

Groceries \$\_\_\_\_\_2

Local transportation (taxi, Metro, car rental ) \$\_\_\_\_\_3

Entertainment and amusement \$\_\_\_\_\_4

Purchases at retail stores \$\_\_\_\_\_5

Other (such as dry cleaning or other services) \$\_\_\_\_\_6

Don't know

NOW, I WOULD APPRECIATE IT IF YOU WOULD RECORD THE FOLLOWING INFORMATION FOR OUR STUDY: YOUR REPLIES ARE ANONYMOUS AND WILL BE KEPT CONFIDENTIAL

K. Your home ZIP code: \_\_\_\_\_ or Foreign Country: \_\_\_\_\_

L. Your gender :  Female  Male

M. Your marital status:

- Single, never married  
 Married (including Separated)  
 Divorced, widowed  
 Other

N. Your current age:

- 17 years or under  
 18 to 24 years  
 25 to 34 years  
 35 to 44 years  
 45 to 54 years  
 55 to 64 years  
 65 years or over

O. Your annual household income

- Under \$25,000  
 \$25,000 to \$49,999  
 \$50,000 to \$99,999  
 \$100,000 or more

P. Your race (please check only one)

- American Indian  
 Asian/Pacific Islander  
 Black or African-American  
 White  
 Other (please specify) \_\_\_\_\_

PLEASE RETURN YOUR COMPLETED QUESTIONNAIRE TO YOUR INTERVIEWER.  
 THANK YOU FOR YOUR HELP!

## Survey of LOCAL Spectators at the Marine Corps Marathon 2004

I am a student at George Washington University helping to conduct a study of today's Marine Corps Marathon. Could I please take three minutes of your time to ask you some questions about your participation in this year's race? I have a gift for you at the end.

2. Do you reside in the Washington DC area? (includes Northern Virginia and suburban Maryland counties but not Baltimore)

Yes, Washington, D.C. area (COMPLETE INTERVIEW BELOW)

3. Is your primary reason for being here now to watch the Marathon race, or some other purpose?

Watch the Marathon race  
 Other purpose

4. How many people, INCLUDING YOURSELF, came with you here today?

\_\_\_\_\_ people

5. What transportation did you use to arrive here today?

Automobile/SUV/RV/truck  
 Metrorail (subway)  
 Metrobus  
 Shuttle bus  
 Taxicab  
 Walked  
 Other

6. How much will you spend on marathon related merchandise?

\$\_\_\_\_\_  Don't know

NOW, I WOULD APPRECIATE IT IF YOU WOULD RECORD THE FOLLOWING INFORMATION FOR OUR STUDY. YOUR REPLIES ARE ANONYMOUS AND WILL BE KEPT CONFIDENTIAL.

7. Your home ZIP code: \_\_\_\_\_

8. Your gender :  Female  Male

9. Your marital status:

Single, never married  
 Married (including Separated)  
 Divorced, widowed  
 Other

10. Your current age:

- 17 years or under
  - 18 to 24 years
    - 25 to 34 years
      - 35 to 44 years
        - 45 to 54 years
          - 55 to 64 years
            - 65 years or over

11. Your annual household income

- Under \$25,000
  - \$25,000 to \$49,999
    - \$50,000 to \$99,999
      - \$100,000 or more

12. Your race (please check only one)

- American Indian
  - Asian/Pacific Islander
    - Black or African-American
      - White
        - Other (please specify) \_\_\_\_\_

PLEASE RETURN YOUR COMPLETED QUESTIONNAIRE TO YOUR INTERVIEWER AND RECEIVE YOUR GIFT.

THANK YOU FOR YOUR HELP!

## Survey of OUT-OF-TOWN Spectators at the Marine Corps Marathon 2004

I am a student at George Washington University helping to conduct a study of today's Marine Corps Marathon. Could I take four minutes of your time to ask you some questions about your participation in this year's race? I have a gift for you at the end.

1. Do you reside in the Washington DC area? (includes Northern Virginia and suburban Maryland counties but not Baltimore)

No (COMPLETE INTERVIEW BELOW)

2. Is your primary reason for being in the Washington DC area today to watch the Marine Corps Marathon runners?

Yes  No

13. Are you accompanying a Marathon runner on this visit?

Yes  No

14. How many people, INCLUDING YOURSELF, traveled with you on this visit? \_\_\_\_\_

15. How many nights will you spend in this area on this visit? \_\_\_\_\_ Nights

No nights (SKIP TO QUESTION 9)

16. In which of the following types of lodging will you stay during this visit? (ACCEPT ONLY ONE ANSWER: if more than one type of lodging is indicated, accept one where most nights were spent)

Bed & Breakfast

Hotel or Motel

Private home (SKIP TO QUESTION 8)

Your own second home (condo, cottage, etc.) (SKIP TO QUESTION 8)

Campground or recreational vehicle

Other \_\_\_\_\_

17. How much will you pay for lodging PER NIGHT while here? \$ \_\_\_\_\_

18. Are you staying in D.C, Maryland or Virginia?

D.C.  Maryland

Virginia

Don't know

19. How much will you spend on Marine Corps Marathon merchandise while here?

\$ \_\_\_\_\_

20. How much will you spend on GASOLINE while here? (amount for entire visit)

\$ \_\_\_\_\_

21. Thinking about a typical day here, how much do you think you and your party will spend PER DAY on --

Food/beverages in restaurants or carry out \$ \_\_\_\_\_ 1  
 Groceries \$ \_\_\_\_\_ 2  
 Local transportation (taxi, Metro, car rental ) \$ \_\_\_\_\_ 3  
 Entertainment and amusement \$ \_\_\_\_\_ 4  
 Purchases at retail stores \$ \_\_\_\_\_ 5  
 Other (such as dry cleaning or other services) \$ \_\_\_\_\_ 6

Don't know (nothing reported)

22. What transportation did you use to arrive here today?

- Automobile/SUV/RV/truck  
 Metrorail (subway)  
 Metrobus  
 Shuttle bus  
 Taxicab  
 Walked  
 Other

NOW, I WOULD APPRECIATE IT IF YOU WOULD RECORD THE FOLLOWING INFORMATION FOR OUR STUDY. YOUR REPLIES ARE ANONYMOUS AND WILL BE KEPT CONFIDENTIAL.

23. Your home ZIP code: \_\_\_\_\_ or FOREIGN COUNTRY: \_\_\_\_\_

24. Your gender :  Female  Male

25. Your marital status:

- Single, never married  
 Married (including Separated)  
 Divorced, widowed  
 Other

26. Your age:

- 17 years or under  
 18 to 24 years  
 25 to 34 years  
 35 to 44 years  
 45 to 54 years  
 55 to 64 years  
 65 years or over

27. Your annual household income

- Under \$25,000  
 \$25,000 to \$49,999  
 \$50,000 to \$99,999  
 \$100,000 or more

28. Your race (please check only one)

- American Indian  
 Asian/Pacific Islander  
 Black or African-American  
 White  
 Other (please specify) \_\_\_\_\_

PLEASE RETURN THIS COMPLETED QUESTIONNAIRE TO YOUR INTERVIEWER AND RECEIVE YOUR  
FREE GIFT.  
THANK YOU FOR YOUR HELP!

### Questionnaire for Exhibitors Outside the Washington DC Area

Thank you for taking the time to complete the questions below. This information will assist The George Washington University in estimating a total economic impact for the Marine Corps Marathon. If you cannot complete now, please fax to Dr. Lisa Delpy Neirotti, Professor of Sports Management at The George Washington University, at 202/994-1630 or email to [delpy@gwu.edu](mailto:delpy@gwu.edu) or mail to 600 21<sup>st</sup> Street NW, Washington, DC 20052. Should you have any questions please contact Dr. Delpy Neirotti at 202/994-6623.

1. Name of Company \_\_\_\_\_
2. City and state of headquarters location: \_\_\_\_\_
3. How many of your employees traveled to Washington, D.C. for the Marine Corps Marathon this year?  

\_\_\_\_\_ Employees
4. Please provide total company expenditures for all employees on this visit:
  - A. Lodging: \$ \_\_\_\_\_
  - B. Food and beverages: \$ \_\_\_\_\_
  - C. Local transportation: \$ \_\_\_\_\_
  - D. Local part-time staff: \$ \_\_\_\_\_
  - E. Gasoline: \$ \_\_\_\_\_
  - F. Other (please Specify: \_\_\_\_\_) \$ \_\_\_\_\_
5. How much did your company spend on advertising in the Washington D.C. area related to the Marathon (do not include any payments to the Marine Corps Marathon organization):

\$ \_\_\_\_\_

# # # # #