

THEIR SUPPORT OF THIS PROJECT:



PREPARED BY:



Acknowledgements

Friends of Westchester County Parks, Inc.

Joseph V. Apicella Girish Menon

Cappelli Enterprises FUJIFILM Holding America Corp.

Howard Arden, Treasurer Sandra Miller Armonk Con Edison

Nanette Bourne Michelle McNally

AKRF Hudson Valley Scarsdale

Elizabeth Bracken-Thompson, Chairperson Carolyn Moriarty

Thompson and Bender Bronxville

Linda J. Carrington Timothy O'Connell
Hudson Valley Bank Danziger & Markhoff LLP

Christopher L. Cawley, Vice-Chairperson Glenn Pacchiana

Buyer's Edge Realty, Inc.

Thalle Industries

Sobeida Cruz Shirley Phillips
NY Power Authority Mt Vernon

Joanne Fernandez Thomas F. Secunda Entergy Bloomberg LP

Herman Geist, Esq., Life Trustee Talbert B. Spence

Westcheshter County Board of Legislators Westchester Community College

John Kirkpatrick, Esq., Secretary Betsy Stern
Oxman Tulis Kirkpatrick Whyatt & Geiger Scarsdale

Ellen Koelsch Andy Tung

Club Fit Divney, Tung, Schwalbe, LLP

Seth Mandelbaum Sally Veltidi McCullough, Goldberger and Staudt, LLP Scarsdale

Judy MatsonLarry WilsonMount KiscoYonkers

Joseph A. Stout, CPRP, Executive Director Friends of Westchester County Parks

EX-OFFICIO (non-voting)

Kathleen O'Connor, Commissioner

Westchester County Parks, Recreation & Conservation





Department of Parks, Recreation and Conservation Liaison

Alex Massimi

Participation By and Special Thanks To

Westchester County Office of Economic Development, Westchester County Department of Finance, Business Council of Westchester, the Westchester County Association









Mission of Friends of Westchester County Parks

Friends of Westchester County Parks is the only organization dedicated exclusively to promoting and supporting Westchester County parks. Friends of Westchester County Parks, which is governed by a Board of Trustees, secures and administers private funds that support the mission of the Westchester County Department of Parks, Recreation and Conservation. Funds raised through membership fees and donations are used for the sole benefit of Westchester's parks. All donations are tax deductible.

About PROS Consulting, LLC

PROS Consulting, LLC, established in 1995, is a small firm with a big presence in the field of management consulting for public entities and non-profit organizations with specialized experience in parks and recreation, tourism, economic development, sports strategy, and open space planning. PROS is among only a small handful of firms that have tremendous experience in the field as practitioners and have become nationally recognized for helping to shape and further transform the industry of parks and recreation as economic and financial consultants. PROS has worked with over 900 parks and recreation agencies across the United States and internationally in developing economic impact plans, financial plans, business plans, strategic plans, and operational efficiency studies.

Leon Younger, President of PROS Consulting, led the Economic and Fiscal Impact Analysis with assistance by members of the PROS Consulting team. Leon has more than 35 years in parks, recreation, and leisure services, and is a recognized leader in applying innovative approaches to managing public organizations. He has held positions as Director of Parks and Recreation in Indianapolis, Indiana; Executive Director of Lake Metroparks in Lake County, Ohio (Cleveland vicinity); and Director of Parks and Recreation in Jackson County, Missouri (Kansas City). He received the 1994 National Park and Recreation Association's Distinguished Professional Award for his progressive and innovative thinking in management of public parks and recreation entities. Leon is routinely invited to present his management and development philosophies at conferences, workshops, and training across the United States, as well as internationally.

Table of Contents

CHAPTER ONE - EXECUTIVE SUMMARY	1
1.1 INTRODUCTION	
CHAPTER TWO - ECONOMIC ANALYSIS	5
2.1 ECONOMIC ANALYSIS OF SPECIAL EVENTS, CONCESSIONS, AND USER GROUPS 2.2 ECONOMIC IMPACT ANALYSIS OF 2011 POLISH FESTIVAL	6
SYMPHONY ORCHESTRA	12 15 18
CHAPTER THREE - ECONOMIC ANALYSIS OF DEPARTMENT EXPENDITURES	
3.1 ECONOMIC ANALYSIS OF CAPITAL EXPENDITURES	24
CHAPTER FOUR - OTHER ECONOMIC STUDIES	27
4.1 COUNTY CENTER ECONOMIC IMPACT STUDY	
CHAPTER FIVE - ECONOMIC ANALYSIS OF BUSINESS RELOCATIONS	28
CHAPTER SIX - ECONOMIC IMPACT OF PARK FACILITIES ON LAND VALUES	29
6.1 PROPERTY VALUES NEAR PARKS AND TRAIL HEADS	
CHAPTER SEVEN - PARK AND RECREATION DEPARTMENT AND WESTCHESTER COUNTY HEALTH	32
7.1 PARTICIPATION IN PHYSICAL ACTIVITY	33 34 35
7.7 HEALTH SUMMARY	
CHAPTER FIGHT - FINAL COMMENTS	40



CHAPTER ONE - EXECUTIVE SUMMARY

1.1 INTRODUCTION

Westchester County has an award winning Park system that reaches over 75% of County residents who say they use those facilities and programs at least once a year. The cost is minimal at 10 cents per capita per day, and that includes operations, debt services and employee benefits. Clearly, this is an enormous return on the County's investment - but it's not just taxes versus costs. Of course parks provide quality of life, recreation, aesthetic and environmental benefits.

Parks also however provide positive economic benefits: they enhance property values, attract corporations, bring in buyers, increase County tax revenues and draw tourists. Bottom line: Parks are good for business!



Westchester County Parks, Recreation and Conservation (PRC) has created the following:

- \$183 million annual economic impact on Westchester's economy from PRC related facilities and services.
- Approximately 1,000 full time private job equivalents are created through the PRC system. This includes separate economic analysis completed by AECOM for Playland Amusement Park and the Westchester County Center.
- \$350 million asset value of the County Park and Recreation system not counting land values.
- For every dollar invested in Westchester County parks and recreation facilities and operations, another \$4.95 is spent in economic activity in the County.
- Increased property values nearer to County parks and trail heads.
- Lower general health care costs (approximately \$250 million less than state and national averages).
- Tourism spending in parks exceeds \$20 million annually.
- Concession services to the public in county parks exceed \$18 million annually with \$4 million and 88 full time job equivalents related to out-of county visitor spending.

Impact on Land Values

Direct Economic Impact

 The County parks help create an environment that is attractive for young people to grow their careers and personal lives, as well as deter "young professional flight" through the creation of amenities and events that are free or attractively priced.





Friends of Westchester County Parks, Inc. engaged PROS Consulting to provide an economic and fiscal impact study of the economic value of the park system. With more than 18,000 acres of parkland, 6 nature centers, 6 golf courses, 4 pools, 4 campgrounds, 200 plus miles of trails and boulevards, the Westchester County Center, an interpretive farm, a themed amusement park, and a myriad of other recreational amenities and programs, Westchester County's Nationally Accredited park system is a significant reason to live, work, visit and have a business in the County.

When the County park system was originally conceived it was thought of partly as an economic development tool. Today we can now recognize, and for the first time, define, just how these parks have provided the County with measurable economic value.

Although not part of the calculated economic impact outlined above and in the body of this report, there are intrinsic and fiscal values in improved personal health factors cost prevention, environmental and fiscal benefits ascribed to the nearly 15,000 acres of open space from cleaner water and cleaner air.

Finally, there are significant positive fiscal impacts from keeping the 15,000 acres of land forever undeveloped, thereby avoiding the cost of infrastructure and municipal services that development of those properties would entail.

Major factors are enumerated in this study, such as tourism, operational and capital expenditures, increased property values and the consolidation of data from previous recent Economic Impact Studies for Playland Amusement Park and the Westchester County Center.

However, as active advocates for the County park system, it is part of the mission of Friends of Parks to encourage continued investment and support for what is clearly a good use of public, private and not for profit resources. How that gets accomplished is a policy matter and not part of this report.

County Parks are a great retention and recruitment tool for businesses here in Westchester County."
-Joanne
Fernandez,
Entergy

"Westchester



1.2 FINAL ECONOMIC IMPACT SUMMARY OF THE SIX STUDY AREAS

The final economic impact from the various economic analyses performed is summarized in the following tables.

	Estimated		Economic		Full-Time Job
Special Events	Visitor Spending		Impact		Equivalents
Polish Festival	\$	396,130	\$	939,996	6
Lasdon Concert	\$	18,000	\$	43,481	-
Hispanic Festival	\$	332,449	\$	790,975	5
Concessions	\$	18,724,370	\$	47,843,264	258
Other Special Events	\$	2,269,161	\$	5,798,010	44
Regular User Groups	\$	3,441,150	\$	8,792,598	65
Total	\$	25,181,259	\$	64,208,323	378
Out-of-County	\$	7,928,049	\$	19,966,966	117

		Local		Economic	
Department Spending	E	Expenditures		Impact	Jobs
Local Purchasing	\$	30,735,186	\$	78,532,500	423
Hourly Payroll	\$	5,672,340	\$	14,493,586	78
Total Operations	\$	36,407,526	\$	93,026,085	502
Capital Expenditures	\$	11,949,342	\$	26,139,800	91
Total	\$	48,356,867	\$	119,165,886	592

		Average	
	Average	Land Value	
	Land Value	Away From	
Park	Near Park	Park	Difference
Tibbetts Brook Park	\$772,615	\$794,709	-2.78%
Saxon Wood Park and Golf Course	\$574,928	\$272,267	111.16%
Mohansic Golf Course	79,922.78	60,746.46	31.57%
Pound Ward Ridge Park	\$104,988	\$104,364	0.60%
Kensico Dam Park	\$369,752	\$367,183	0.70%
Total Average Differ	28.25%		





	Average	Average	
	Land Value	Land Value	
	Near Trail	Away From	
Trail Head	Head	Trail Head	Difference
Elmsford Trail Head	\$277,506	\$259,621	6.89%
North County Trail - Briarcliff Manor Trailhead	\$234,325	\$218,572	7.21%
North County Trail - Yorktown Heights Trailhead	\$102,485	\$93,926	9.11%
Nepperhan Trailhead	\$809,195	\$808,453	0.09%
Average Difference			5.83%

Health Statistics		Ne	ew York State	U.S.	
Weight					
	Overweight	\$	(8,908,375)	\$	(12,190,407)
	Obesity	\$	35,432,287	\$	98,654,602
	Net	\$	26,523,912	\$	86,464,194
Diabetes		\$	162,229,987	\$	152,090,613
Asthma		\$	54,028,258	\$	22,331,680
Coronary Heart Disea	se	\$	1,118,506	\$	726,048
Mental Health		\$	8,225,280	\$	27,417,601
Westchester County (Cost Less Than				
New York State		\$	252,125,942		
Westchester County (Cost Less Than				
U.S.				\$	289,030,135

Figure 1 – Economic Impact Summary

CHAPTER TWO - ECONOMIC ANALYSIS

A park system is integral to the overall equation of the economics of a county, but research on the topic has largely been absent even though the economic impact of stadiums, convention centers and museums have been promoted widely for years. Great cities and counties that have great park systems can demonstrate the value of public space, trails and programs that bring a community together and Westchester County provides that to the residents of the County. The following information describes in detail how the economic impact was determined in each source evaluated.

PROS Consulting performed economic analyses for selected events and transactions of Westchester County parks. The following section summarizes the findings.

2.1 ECONOMIC ANALYSIS OF SPECIAL EVENTS, CONCESSIONS, AND USER GROUPS

Special events of Westchester County Parks make a significant economic impact to the local community through special event productions, concessions, and user groups.

PROS Consulting assessed the economic impact of three special events produced by the Westchester County Parks based on event visitor intercept surveys. The economic analysis for the other special events is based on sampling attendance information and spending estimates developed by PROS Consulting. The three major special events where on-site surveys were conducted included:

- Polish Festival
- Lasdon Concert Series
- Hispanic Festival

Forty-four (44) other specials events were analyzed based on attendance data shown in Section 2.5. The Regular User Group analysis is shown in Section 2.6 and the Concessions analysis in Section 2.7.

Figure 2 shows the summary of the economic analysis for the three events. The estimated economic impact from out-of-county visitors is \$19.97 million and the equivalent of 117 full-time jobs.

	Estimated		Economic		Full-Time Job
Special Events	Visitor Spending			Impact	Equivalents
Polish Festival	\$	396,130	\$	939,996	6
Lasdon Concert	\$	18,000	\$	43,481	-
Hispanic Festival	\$	332,449	\$	790,975	5
Concessions	\$	18,724,370	\$	47,843,264	258
Other Special Events	\$	2,269,161	\$	5,798,010	44
Regular User Groups	\$	3,441,150	\$	8,792,598	65
Total	\$	25,181,259	\$	64,208,323	378
Out-of-County	\$	7,928,049	\$	19,966,966	117

Figure 2 – Events, Concessions, and User Group Economic Impact Summary





The data for this analysis is based on visitor surveys collected during each of the special events for fiscal year ending 2011, and economic factors for Westchester County area from the Regional Input-Output Modeling System produced by the U.S. Department of Commerce - Bureau of Economic Analysis. The model, developed in Microsoft Excel, uses local multipliers and presents approximate economic impact on the local economy. The economic impact is expressed in terms of dollars generated in the economy.

2.2 ECONOMIC IMPACT ANALYSIS OF 2011 POLISH FESTIVAL

PROS Consulting performed an economic impact analysis to measure the economic benefit of Westchester County Parks – Polish Festival. The data for this analysis is based on visitor surveys, estimated attendance, and economic factors from the U.S. Department of Commerce - Bureau of Economic Analysis. The model, developed in Microsoft Excel, uses local multipliers and presents estimated economic impacts on major retail sectors such as, lodging and food/beverage sectors.

2.2.1 POLISH FESTIVAL VISITOR ANALYSIS

The Polish Festival total attendance is estimated to be 5,500 visitors. The estimated attendance data was segmented into five distance groups as shown in **Figure 3** based on the event surveys. The total attendance was estimated by the Department.

Distance Tra	eveled To Specia	al Events (Mi	les)			
	Total					
Greater	Less Than or	Visitors	Percent of	Visitors By		
Than	Equal To	Surveyed	Total	Distance		
0	50	289	99.31%	5,462		
50	100	2	0.69%	38		
100	200	-	0.00%	-		
200	500	-	0.00%	-		
500	and over	-	0.00%	-		
		•				
Totals		291	100.00%	5,500		

Figure 3 – Polish Festival Surveys and Estimated Attendance

The average visitor spending per day is based on the visitor surveys. The completed surveys demonstrated that visitors from less than 50 miles spent an average of \$71.83 and visitors from over 50 miles away spent an average of \$100.00 as shown in **Figure 4**.

Polish Festival				
Distance Tra	Distance Traveled To			
	Spending			
Greater	Less Than or	Per		
Than	Equal To	Visitor		
0	50	\$ 71.83		
50	100	\$ 100.00		

Figure 4 – Polish Festival Average Spending Based On Distance Traveled

The economic impact multipliers used in this analysis are from U.S. Department of Commerce - Bureau of Economic Analysis, Regional Economic Analysis Division, Analysis and Special Studies Branch, <u>Regional Input-Output Modeling System</u> (RIMS II) for the Westchester County area. The RIMS II factors are based on 2008 economic information. **Figure 5** shows the factors used in the analysis.

1					
		Final-	Final-	Final-demand	Final-
		demand	demand	Employment	demand
		Output /1/	Earnings /2/	/3/ (number of	Value-added
		(dollars)	(dollars)	jobs)	/4/ (dollars)
	57. Accommodation	1.4411	0.2466	6.1342	0.8143
	58. Food services and drinking places	1.3598	0.2895	12.6374	0.7508
	33. Transit and ground passenger transportation*	1.1778	0.4293	20.2024	0.654
	28. Retail trade	1.2840	0.2758	9.0871	0.8472
	59. Other services*	1.4147	0.3516	8.1421	0.8062

SOURCE: Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis NOTES:

- 1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2006 data, the output delivered to final demand should be in 2006 dollars.
- 4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

Figure 5 - RIMS II Multipliers

The direct spending related to the Polish Festival is shown in Figure 6.

Polish Festival						
Distance Tra	eveled To					
		Total	Spending			
Greater	Less Than or	Visitors By	Per	Estimated Total		
Than	Equal To	Distance	Visitor	Spending		
0	50	5,462	\$ 71.83	\$ 392,349.78		
50	100	38	\$ 100.00	\$ 3,780.07		
Totals		5,500		\$ 396,129.85		

Figure 6 - Polish Festival - Total Visitor Spending



^{*}Includes Government enterprises.



2.2.2 POLISH FESTIVAL ECONOMIC IMPACT

The total direct economic impact of Polish Festival is shown in **Figure 7**. The economic impact is \$939,996.

		Final Demand			
	Total			Employment	Final-demand
	Rev/Sales	Output	Earnings	/ \$M Sales	Value-added
Economic Impact of the Medium Spending	Captured by	(Dollars)	(Dollars)	(Jobs)	(Dollars)
Profile by Category	Local Region	<1>	<2>	<3>	<4>
Accommodation	-	-	-	-	-
Food services and drinking places	165,000	224,367	64,954	3	392,822
Transit and ground passenger transportation	-	-	-	-	-
Retail trade	230,065	295,403	81,472	3	545,668
Other Services	1,065	1,506	530	-	1,506
Total Annual Spending	\$ 396,130	\$ 521,276	\$ 146,956	6	\$ 939,996

<1> Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

Figure 7 - Polish Festival - Economic Impact

Figure 7 illustrates the total final economic impact of Polish Festival. Column 1 shows the output in terms of dollars. Columns 2 and 3 are estimates of the final effect earnings and employment (jobs), on the Westchester County area. The Final-demand Value-added in dollars is shown in Column 4. The Final-demand Value-added factors include direct, indirect, and induced economic impacts. This economic benefit is estimated to be \$939,996.

"Parks and Recreation is a wise economic investment. It provides a sense of beauty and place for our county residents and businesses. It helps to create pride in living and working in Westchester County."

-Marsha Gordon, Business Council of Westchester President/CEO

<2> Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

<3> Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output

<4> Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

2.3 ECONOMIC IMPACT ANALYSIS OF 2011 LASDON CONCERT SERIES – RIDGEFIELD SYMPHONY ORCHESTRA

PROS Consulting performed an economic impact analysis to measure the economic benefit of Westchester County Parks – Lasdon Concert Series – Ridgefield Symphony Orchestra on July 23, 2011. The data for this analysis is based on visitor surveys, estimated attendance, and economic factors from the U.S. Department of Commerce - Bureau of Economic Analysis. The model developed in Microsoft Excel uses local multipliers and presents estimated economic impacts on major retail sectors; such as, lodging and food/beverage sectors.

2.3.1 LASDON CONCERT SERIES - VISITOR ANALYSIS

The Lasdon Concert Series – Ridgefield Symphony Orchestra total attendance is estimated to be 200 visitors. The estimated attendance data was segmented into five distance groups as shown in **Figure 8** based on the event surveys. The total attendance was estimated by the Department.

Lasdon Concert Distance Traveled To Special Events (Miles) **Estimated Total** Total **Visitors Visitors By** Greater **Less Than** Percent of or Equal To Total Distance Than Surveyed 0 50 39 95.12% 190 50 100 2 4.88% 10 100.00% 200 Totals 41

Figure 8 – Lasdon Concert Series – Ridgefield Symphony Orchestra

Surveys and Estimated Attendance

The average visitor spending is based on the visitor surveys. The completed surveys demonstrated that visitors spent an average of \$90.00.

The economic impact multipliers used in this analysis are from U.S. Department of Commerce - Bureau of Economic Analysis, Regional Economic Analysis Division, Analysis and Special Studies Branch, <u>Regional Input-Output Modeling System</u> (RIMS II) for the Westchester County area. The RIMS II factors are based on 2009 economic information. **Figure 9** shows the factors used in the analysis.





	Final-	Final-	Final-demand	Final-
	demand	demand	Employment	demand
	Output /1/	Earnings /2/	/3/ (number of	Value-added
	(dollars)	(dollars)	jobs)	/4/ (dollars)
57. Accommodation	1.4411	0.2466	6.1342	0.8143
58. Food services and drinking places	1.3598	0.2895	12.6374	0.7508
33. Transit and ground passenger transportation*	1.1778	0.4293	20.2024	0.654
28. Retail trade	1.2840	0.2758	9.0871	0.8472
59. Other services*	1.4147	0.3516	8.1421	0.8062

SOURCE: Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis NOTES:

- 1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2006 data, the output delivered to final demand should be in 2006 dollars.
- 4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

Figure 9 - RIMS II Multipliers

The direct spending related to the Lasdon Concert is shown in Figure 10.

Lasdon Concert

Distance Tr	aveled To					
Special Eve	nts (Miles)					
		Estimated		Total		
		Total	Sp	ending		
Greater	Less Than	Visitors By		Per	Estimated Tota	
Than	or Equal To	Distance	V	/isitor		Spending
0	50	190	ç	90.00	\$	17,121.95
U	30	190	Ş	30.00	Y	17,121.33
50		190	۶ \$	90.00	\$	878.05

Figure 10 - Lasdon Concert - Total Visitor Spending

^{*}Includes Government enterprises.

2.3.2 LASDON CONCERT SERIES ECONOMIC IMPACT

The total direct economic impact of Lasdon Concert is shown in **Figure 11**. The economic impact is \$43,481.

		(Impact of Estimated Tourism)			
	Total			Employment	Final-demand
	Rev/Sales	Output	Earnings	/ \$M Sales	Value-added
Economic Impact of the Medium Spending Profile	Captured by	(Dollars)	(Dollars)	(Jobs)	(Dollars)
by Category	Local Region	<1>	<2>	<3>	<4>
Accommodation	-	-	-	-	-
Food services and drinking places	6,000	8,159	2,362	-	14,285
Transit and ground passenger transportation*	-	-	-	-	-
Retail trade	8,000	10,272	2,833	-	18,974
Other services*	4,000	5,659	1,990	-	10,221
Total Annual Spending	\$ 18,000	\$ 24,090	\$ 7,185	-	\$ 43,481

<1> Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

Figure 11 - Lasdon Concert - Economic Impact

Figure 11 illustrates the total final economic impact of Lasdon Concert. Column 1 shows the output in terms of dollars. Columns 2 and 3 are estimates of the final effect earnings and employment (jobs), on the Westchester County area. The Final-demand Value-added in dollars is shown in Column 4. The Final-demand Value-added factors include direct, indirect, and induced economic impacts. This economic benefit is estimated to be \$43,481.





<2> Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

<3> Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output

<4> Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.



2.4 ECONOMIC IMPACT ANALYSIS OF 2011 HISPANIC FESTIVAL

PROS Consulting performed an economic impact analysis to measure the economic benefit of Westchester County Parks — Hispanic Festival. The data for this analysis is based on visitor surveys, estimated attendance, and economic factors from the U.S. Department of Commerce - Bureau of Economic Analysis. The model developed in Microsoft Excel uses local multipliers and presents estimated economic impacts on major retail sectors; such as, lodging and food/beverage sectors.

2.4.1 HISPANIC FESTIVAL VISITOR ANALYSIS

The Hispanic Festival total attendance is estimated to be 5,500 visitors. The estimated attendance data was segmented into five distance groups as shown in **Figure 12** based on the event surveys. The total attendance was estimated by the Department.

Hisp	anic	Festiv	/al

Thispathic restivati							
Distance Traveled To Special Events (Miles)							
				Estimated			
		Total		Total			
Greater	Less Than	Visitors	Percent of	Visitors By			
Than	or Equal To	Surveyed	Total	Distance			
0	50	142	98.61%	5,424			
50	100	-	0.00%	-			
100	200	1	0.69%	38			
200	500	-	0.00%	-			
500	and over	1	0.69%	38			
Total Visitor	·s	144	100.00%	5,500			

Figure 12 – Hispanic Festival Surveys and Estimated Attendance

The average visitor spending per day is based on the visitor surveys. The completed surveys demonstrated that visitors from less than 200 miles spent an average of \$58.77 and visitors from over 500 miles away spent an average of \$300.00 as shown in **Figure 13**.

Distance Traveled To Special Events (Miles)						
			Total			
		S	pending			
Greater	Less Than		Per			
Than	or Equal To	,	Visitor			
0	50	\$	58.77			
50	100	\$	58.77			
100	200	\$	-			
200	500	\$	-			
500	and over	Ś	300.00			

Figure 13 - Hispanic Festival Average Spending Based On Distance Traveled

The economic impact multipliers used in this analysis are from U.S. Department of Commerce - Bureau of Economic Analysis, Regional Economic Analysis Division, Analysis and Special Studies Branch, Regional Input-Output Modeling System (RIMS II) for the Westchester County area. The RIMS II factors are based on 2009 economic information. Figure 14 shows the factors used in the analysis.

	Final- demand Output /1/ (dollars)	Final- demand Earnings /2/ (dollars)	Final-demand Employment /3/ (number of jobs)	Final- demand Value-added /4/ (dollars)
57. Accommodation	1.4411	0.2466	6.1342	0.8143
58. Food services and drinking places	1.3598	0.2895	12.6374	0.7508
33. Transit and ground passenger transportation*	1.1778	0.4293	20.2024	0.654
28. Retail trade	1.2840	0.2758	9.0871	0.8472
59. Other services*	1.4147	0.3516	8.1421	0.8062

SOURCE: Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis NOTES:

*Includes Government enterprises.

- Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2006 data, the output delivered to final demand should be in 2006 dollars.
- 4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

Figure 14 – RIMS II Multipliers





The direct spending related to the Hispanic Festival is shown in **Figure 15**.

Hispanic Festival

Distance Tra						
Special Ever	its (Miles)	Estimated Total		Total ending		
Greater	Less Than	Visitors By	Per Visitor		Est	timated Total
Than	or Equal To	Distance				Spending
0	50	5,424	\$	58.77	\$	318,745.63
50	100	-	\$	-	\$	-
100	200	38	\$	58.77	\$	2,244.69
200	500	-	\$	-	\$	-
500	and over	38	\$ 300.00		\$	11,458.33
				•		
Totals		5,500			\$	332,448.65

Figure 15 - Hispanic Festival - Total Visitor Spending

2.4.2 HISPANIC FESTIVAL ECONOMIC IMPACT

The total direct economic impact of Hispanic Festival is shown in **Figure 16**. The economic impact is \$790,975.

		(Impact of Estimated Tourism)			
	Total			Employment	Final-demand
	Rev/Sales	Output	Earnings	/ \$M Sales	Value-added
Economic Impact of the Medium Spending Profile	Captured by	(Dollars)	(Dollars)	(Jobs)	(Dollars)
by Category	Local Region	<1>	<2>	<3>	<4>
Accommodation	3,819	5,504	1,357	-	9,986
Food services and drinking places	110,000	149,578	43,303	2	261,881
Transit and ground passenger transportation*	-	-	-	-	-
Retail trade	215,574	276,797	76,341	3	511,299
Other services*	3,056	4,323	1,520	-	7,808
Total Annual Spending	\$ 332,449	\$ 436,202	\$ 122,521	5	\$ 790,975

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

Figure 16 – Hispanic Festival – Economic Impact

Figure 16 illustrates the total final economic impact of Hispanic Festival. Column 1 shows the output in terms of dollars. Columns 2 and 3 are estimates of the final effect earnings and employment (jobs), on the Westchester County area. The Final-demand Value-added in dollars is shown in Column 4. The Final-demand Value-added factors include direct, indirect, and induced economic impacts. This economic benefit is estimated to be \$790,975.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output

^{4.} Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

2.5 ECONOMIC IMPACT ANALYSIS OF OTHER 2011 SPECIAL EVENTS

PROS Consulting performed an economic impact analysis on other special events in Westchester County Parks. The data for this analysis is based on County estimated attendance, PROS estimated participant spending, PROS estimated out-of-county visitors, and economic factors from the U.S. Department of Commerce - Bureau of Economic Analysis. The model developed in Microsoft Excel uses local multipliers and presents estimated economic impacts on major retail sectors; such as, lodging and food/beverage sectors.

2.5.1 SPECIAL EVENT VISITOR ANALYSIS

The special events and attendance data are as shown in Figure 17.

				Analysis
Event Da		Event	Location	Attendance
2011 January	22	Battle of the Bands	County Center	443
2011 January	25	Sweetheart Social Dance for	County Center	650
2011 January	26-27	Volleyball Tournament	County Center	650
2011 January	28	Farmers Market	County Center	800
2011 February	13	Farmers Market	County Center	1,200
2011 March	14-30	PRC Basketball Tournament	County Center	4,038
2011 March	19	3 on 3 Adult Hockey Tournament	County Center	12
2011 March	20	Farmers Market	County Center	700
2011 March	28	Senior Bowling Tournament	AMF White Plains Lanes	126
2011 April	4-5	Volleyball Tournament	County Center	200
2011 April	16	Kids Fair	County Center	5,200
2011 April	17	Earth Day	County Center	1,000
2011 May	1	Leatherman's Loop 10K	County Center	2,000
2011 May	4	Salute to Seniors	County Center	1,800
2011 May	10	Spring Dance for people with	County Center	825
2011 May	30	Cord Show at Lasdon Park	County Center	1,050
2011 June	18-19	40th Annual Clearwater Festival	Croton Point Park	18,000
2011 June	22	Senior Pool Party & Barbeque	Saxon Woods Pool	1,100
2011 June	26	Albanian Festival	Kensico Dam Plaza	5,000
2011 July	3	Music Fest	Kensico Dam Plaza	8,000
2011 July 2011 July	5-29	Open Gym	County Center	1,200
2011 July 2011 July	7	Outdoor Screening	Kensico Dam Plaza	3,200
2011 July 2011 July		Lasdon Concerts	Lasdon Park and	n/a
2011 July 2011 July	10	Italian Festival	Kensico Dam Plaza	10,000
2011 July 2011 July	10	Irish Festival	Ridge Road Park	n/a
2011 July	12	Pool Movie	Willson's Woods Pool	374
2011 July 2011 July	13	Disabled Picnic	Ridge Road Park	523
2011 July 2011 July	19	Pool Movie	Tibbetts Brook Park	n/a
2011 July	22	Battle of the Bands	Playland Park	300
2011 July	27-29	Slam Dunk Basketball Camp	County Center	350
2011 July	31	Yiddish Festival	Kensico Dam Plaza	n/a
2011 June 27-	August 5	Summer Music Camp	County Center	198
2011 June 27	1-5, 8-12	Volleyball Camp	County Center	189
2011 August 2011 August	1-5, 6-12	Soccer Camp	n/a	n/a
2011 August 2011 August	2-4	86th Annual Swimming	Playland Pool	150
2011 August 2011 August	2	Pool Movie	Saxon Woods Pool	n/a
2011 August	6	Whiffleball Tournament	VE Macy Park	1,935
2011 August 2011 August	7	Indian Festival	Kensico Dam Plaza	7,500
2011 August 2011 August	14	Ecuadorian Festival	Croton Point Park	1,500
2011 Septemb	(5	Cord Show	Lasdon Park	1,350
		Kids Triathlon	Croton Point Park	437
2011 Septemb				437 875
2011 Septemb 2011 Septemb		Iron Man Competition Bicycle Sundays	Croton Point Park Bronx River Parkway	8/5 n/a
2011 Septemb		9/11 Memorial Event	Kensico Dam Plaza	1.000
•		•	Kensico Dam Plaza	250
2011 Septemb	t 25	Gold Star Mother's Day	Kensico Dam Piaza	250

Figure 17 - Other Special Events and Estimated Attendance





The average participant spending per day, estimated total spending, and estimated out-of-county visitor spending are shown in **Figure 18**.

		Total Event		Percent	Out of
	Analysis	Per Person	Total Event	Out of	County
Event	Attendance	Spending	Spending	County	Spending
Battle of the Bands	443	\$25.00	\$11,075.00	20%	\$2,215.00
Sweetheart Social Dance for	650	\$0.00	\$0.00	0%	\$0.00
Volleyball Tournament	650	\$15.00	\$9,750.00	20%	\$1,950.00
Farmers Market	800	\$10.00	\$8,000.00	10%	\$800.00
Farmers Market	1,200	\$10.00	\$12,000.00	10%	\$1,200.00
PRC Basketball Tournament	4,038	\$15.00	\$60,570.00	20%	\$12,114.00
3 on 3 Adult Hockey Tournament	12	\$80.00	\$960.00	20%	\$192.00
Farmers Market	700	\$10.00	\$7,000.00	10%	\$700.00
Senior Bowling Tournament	126	\$21.00	\$2,646.00	10%	\$264.60
Volleyball Tournament	200	\$15.00	\$3,000.00	20%	\$600.00
Kids Fair	5,200	\$17.00	\$88,400.00	10%	\$8,840.00
Earth Day	1,000	\$10.00	\$10,000.00	20%	\$2,000.00
Leatherman's Loop 10K	2,000	\$20.00	\$40,000.00	10%	\$4,000.00
Salute to Seniors	1,800	\$5.00	\$9,000.00	0%	\$0.00
Spring Dance for people with	825	\$0.00	\$0.00	0%	\$0.00
Cord Show at Lasdon Park	1,050	\$25.00	\$26,250.00	10%	\$2,625.00
40th Annual Clearwater Festival	18,000	\$70.00	\$1,260,000.00	20%	\$252,000.00
Senior Pool Party & Barbeque	1,100	\$5.00	\$5,500.00	0%	\$0.00
Albanian Festival	5,000	\$10.00	\$50,000.00	20%	\$10,000.00
Music Fest	8,000	\$5.00	\$40,000.00	20%	\$8,000.00
Open Gym	1,200	\$0.00	\$0.00	0%	\$8,000.00
Outdoor Screening	3,200	\$10.00	\$32,000.00	10%	\$3,200.00
Lasdon Concerts	5,200 n/a	910.00 n/a	332,000.00 n/a	n/a	33,200.00 n/a
Italian Festival	10,000	\$15.00	\$150,000.00	20%	\$30,000.00
Irish Festival	n/a	n/a	n/a	n/a	n/a
Pool Movie	374	\$10.00	\$3,740.00	10%	\$374.00
Disabled Picnic	523	\$0.00	\$0.00	0%	\$0.00
Pool Movie	n/a	n/a	n/a	n/a	n/a
Battle of the Bands	300	\$25.00	\$7,500.00	20%	\$1,500.00
Slam Dunk Basketball Camp	350	\$200.00	\$70,000.00	10%	\$7,000.00
Yiddish Festival	n/a	n/a	n/a	n/a	n/a
		A	A :		40 0
Summer Music Camp	198	\$600.00	\$118,800.00	20%	\$23,760.00
Volleyball Camp	189	\$150.00	\$28,350.00	10%	\$2,835.00
Soccer Camp	n/a	n/a	n/a	n/a	n/a
86th Annual Swimming	150	\$12.00	\$1,800.00	20%	\$360.00
Pool Movie	n/a	n/a	n/a	n/a	n/a
Whiffleball Tournament	1,935	\$11.00	\$21,285.00	20%	\$4,257.00
Indian Festival	7,500	\$10.00	\$75,000.00	20%	\$15,000.00
Ecuadorian Festival	1,500	\$10.00	\$15,000.00	20%	\$3,000.00
Cord Show	1,350	\$25.00	\$33,750.00	20%	\$6,750.00
Kids Triathlon	437	\$55.00	\$24,035.00	20%	\$4,807.00
Iron Man Competition	875	\$50.00	\$43,750.00	25%	\$10,937.50
Bicycle Sundays	n/a	n/a	n/a	n/a	n/a
9/11 Memorial Event	1,000	\$0.00	\$0.00	0%	\$0.00
Gold Star Mother's Day	250	\$0.00	\$0.00	0%	\$0.00
Total Spending			\$2,269,161.00		\$421,281.10

Figure 18 – Other Special Event Spending

The economic impact multipliers used in this analysis are from U.S. Department of Commerce - Bureau of Economic Analysis, Regional Economic Analysis Division, Analysis and Special Studies Branch, <u>Regional Input-Output Modeling System</u> (RIMS II) for the Westchester County area. The RIMS II factors are based on 2009 economic information. **Figure 19** shows the factors used in the analysis.

			Final [Direct Effiect			
		Final-demand					Direct-effect
	Total Rev/Sales	Output	Earnings	Employment /	Value-added	Direct-effect	Employment
Economic Impact of the Medium	Captured by	(Dollars)	(Dollars)	\$M Sales (Jobs)	(Dollars)	Earnings /5/	/6/ (number of
Spending Profile by Category	Local Region	<1>	<2>	<3>	<4>	(dollars)	jobs)
Performing arts, spectator sports,		1.3867	0.3890	11.3669	0.8426	1.2724	1.2119
museums, zoos, and parks							
Total Spending	\$ 2,269,161	3,146,646	1,224,045	36	5,798,010	1,557,475	44
Estimated Out-of-County Spending	\$ 421,281	584,191	227,250	7	1,076,430	289,153	8

Figure 19 – RIMS II Multipliers and Economic Impact Analysis

SOURCE: Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis NOTES:

*Includes Government enterprises.

- 1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2006 data, the output delivered to final demand should be in 2006 dollars.
- 4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

2.5.2 OTHER SPECIAL EVENTS ECONOMIC IMPACT

The total direct economic impact of Other Special Events is shown in **Figure 19**. The total spending economic impact is \$5,798,010. **The estimated out-of-county economic impact is \$1,076,430 with the 8 equivalent full-time jobs.**







2.6 ECONOMIC IMPACT ANALYSIS OF REGULAR USER GROUPS

PROS Consulting performed an economic impact analysis on regular user group in Westchester County Parks. The data for this analysis is based on County estimated attendance, PROS estimated participant spending, PROS estimated out-of-county visitors, and economic factors from the U.S. Department of Commerce - Bureau of Economic Analysis. The model developed in Microsoft Excel uses local multipliers and presents estimated economic impacts on major retail sectors; such as, lodging and food/beverage sectors.

2.6.1 REGULAR USER GROUPS ANALYSIS

The regular user groups are as listed in Figure 20.

Regular Use Groups
Manhattanville College
Fordham University
Westchester Mariners
Rye Rangers
New Rochelle Lightning
Scarsdale Youth Hockey
Sound Shore Warriors
Skyliners Synchronized Skating
Greenwich Winter Club
Hockey North America
Clair Hockey
Fordham Preparatory School
Rye High School
Rye Town Titans(Blind Brook and Harrison HS)
Rye Figure Skating Club

Figure 20 - Regular User Groups

The estimated spending per participant and estimated out-of-county visitor spending are shown in **Figure 21**.

		Total		Percent	Out of
	Analysis	Per Person	Total Event	Out of	County
	Attendance	Spending	Spending	County	Spending
Regular Use Groups	137,646	\$25.00	\$3,441,150.00	25%	\$860,287.50

Figure 21 – Other Special Event Spending

The economic impact multipliers used in this analysis are from U.S. Department of Commerce - Bureau of Economic Analysis, Regional Economic Analysis Division, Analysis and Special Studies Branch, <u>Regional Input-Output Modeling System</u> (RIMS II) for the

Westchester County area. The RIMS II factors are based on 2009 economic information. **Figure 21** shows the factors used in the analysis.

			Final [Direct Effiect		
		Final-demand					Direct-effect
	Total Rev/Sales	Output	Earnings	Employment /	Value-added	Direct-effect	Employment
Economic Impact of the Medium	Captured by	(Dollars)	(Dollars)	\$M Sales (Jobs)	(Dollars)	Earnings /5/	/6/ (number of
Spending Profile by Category	Local Region	<1>	<2>	<3>	<4>	(dollars)	jobs)
Performing arts, spectator sports,		1.3867	0.3890	11.3669	0.8426	1.2724	1.2119
museums, zoos, and parks							
Total Spending	\$ 3,441,150	4,771,843	1,856,247	54	8,792,598	2,361,889	65
Estimated Out-of-County Spending	\$ 860,288	1,192,961	464,062	14	2,198,150	590,472	17

Figure 22 - RIMS II Multipliers and Economic Impact Analysis

SOURCE: Regional Input-Output Modeling System (RIMS II), Regional Economic Analysis Division, Bureau of Economic Analysis NOTES:

*Includes Government enterprises.

- 1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 2. Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2006 data, the output delivered to final demand should be in 2006 dollars.
- 4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

2.6.2 REGULAR USER GROUPS ECONOMIC IMPACT

The total direct economic impact of Regular User Groups is shown in **Figure 22**. The total spending economic impact is \$8,792,598. **The estimated out-of-county economic impact is \$2,198,150 with the 17 equivalent full-time jobs.**







2.7 ECONOMIC ANALYSIS OF CONCESSION OPERATIONS

Financial information for the Department's fiscal year ending 2010 is used as the basis for the analysis. The impact of concession operations was analyzed using the parks industry impact economic multipliers from the U.S. Department of Commerce, Bureau of Economic Analysis, and Regional Input-Output Modeling System (RIMS). Each RIMS industry category has a value multiplier and a jobs multiplier. The estimated local operating expenditures were multiplied by the related multipliers to calculate the economic impacts in terms of economic value and jobs.

The economic impact multipliers used in this analysis from U.S. Department of Commerce – Bureau of Economic Analysis, Regional Economic Analysis Division, Analysis and Special Studies Branch, Regional Input-Output Modeling System (RIMS II) for the Westchester County area. The RIMS II factors are based on 2009 economic data for the region as shown in **Figure 23**.

		Final-			
	Final-	demand			Direct-effect
Final-demand	demand	Employment	Final-demand	Direct-effect	Employment
Output /1/	Earnings /2/	/3/ (number	Value-added	Earnings /5/	/6/ (number
(dollars)	(dollars)	of jobs)	/4/ (dollars)	(dollars)	of jobs)
1.3867	0.389	11.3669	0.8426	1.2724	1.2119
	Output /1/ (dollars)	Final-demand demand Output /1/ Earnings /2/ (dollars) (dollars)	Final- demand Final-demand demand Employment Output /1/ Earnings /2/ /3/ (number (dollars) (dollars) of jobs)	Final- demand Final-demand demand Employment Final-demand Output /1/ Earnings /2/ /3/ (number Value-added (dollars) (dollars) of jobs) /4/ (dollars)	Final- demand birect-effect Output /1/ Earnings /2/ /3/ (number Value-added (dollars) of jobs) /4/ (dollars) (dollars)

^{1.} Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

Figure 23 - Concession Operations - Recreation Industry Multipliers

Concession revenues for fiscal year ending 2010 are \$18,724,369.99. The Department estimates that 50% of the \$9,049,871 revenues from Continental Hosts, LTD are from out-of-county visitors. For the remaining concession revenues, the out-of-county revenues are estimated at 20%.

^{2.} Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.

^{3.} Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output 4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry. delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2006 data, the output delivered to final demand should be in 2006 dollars.

^{5.} Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
6. Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

Figure 24 illustrates the total final economic impact of the Concession Operations. This economic benefit is estimated to be \$16,505,741 and representing 88.99 full-time job equivalents.

					Final-			
				Final-	demand			Direct-effect
		F	inal-demand	demand	Employment	Final-demand	Direct-effect	Employment
			Output /1/	Earnings /2/	/3/ (number	Value-added	Earnings /5/	/6/ (number
			(dollars)	(dollars)	of jobs)	/4/ (dollars)	(dollars)	of jobs)
Performing arts, spectator sports,			1.3867	0.389	11.3669	0.8426	1.2724	1.2119
museums, zoos, and parks								
Concessions Revenues	\$ 6,459,835	\$	8,957,854	\$2,512,876	73	\$16,505,741	\$3,197,383	88.99

Figure 24 – Economic Impact 2011 of Concessions

Column 1 of **Figure 24** shows the output in terms of dollars. Columns 2 and 3 are estimates of the Final Effect Earnings and employment (jobs), on the Westchester County area. The Final-Demand Value-added in dollars is shown in Column 4. The Final-demand Value-added factors include direct, indirect, and induced economic impacts. The Direct-Effect Earnings is the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to household in Column 5. Column 6 represents the total change in number of jobs in all industries for each additional job in recreation industry shown in Column 3.

2.7.1 CONCESSION OPERATONS CONCLUSION

Final economic impact of concession operations is estimated to be \$16,505,741 with a local job equivalent of 88.99.







CHAPTER THREE - ECONOMIC ANALYSIS OF DEPARTMENT EXPENDITURES

Westchester County Parks make a significant economic impact to the local community through local purchasing.

PROS assessed the economic impact of three types of transactions by the Westchester County Parks. The transactions analyzed are:

- Capital Expenditures
- Operating Expenditures
- Hourly Payroll

Figure 25 shows the summary of the economic analysis for the three transactions. The total economic impact is \$119.2 million from local expenditures of \$48.4 million in 2011. The economic analysis shows the economic impact equal 592 full-time job equivalents.

Description	Loca	Local Expenditures		onomic Impact	Jobs
Local Purchasing	\$	30,735,186	\$	78,532,500	423
Hourly Payroll	\$	5,672,340	\$	14,493,586	78
Total Operations	\$	36,407,526	\$	93,026,085	502
Capital Expenditures	\$	11,949,342	\$	26,139,800	91
Total	\$	48,356,867	\$	119,165,886	592

Figure 25 - Economic Impact Summary

The data for this analysis is based expenditures from fiscal year ending 2011, and economic factors for Westchester County area from the Regional Input-Output Modeling System produced by the U.S. Department of Commerce - Bureau of Economic Analysis. The model developed in Microsoft Excel uses local multipliers and presents approximate economic impact on the local economy. The economic impact is expressed in terms of dollars generated in the economy. The detail analysis for each expenditure type is shown in the sections that follow.



3.1 ECONOMIC ANALYSIS OF CAPITAL EXPENDITURES

Capital investment is traditionally a strong economic impact factor. The capital investment by the Department of \$11,949,342 results in an economic impact of \$26,139,800 with an employment impact of 91 full-time jobs.

The Department's capital projects for fiscal year ending 2011 are used as the basis for the analysis. The impact of capital expenditures with local vendors was analyzed using the construction impact economic multipliers from the U.S. Department of Commerce, Bureau of Economic Analysis, and Regional Input-Output Modeling System (RIMS). Each RIMS industry category has a value multiplier and a jobs multiplier. The estimated local capital expenditures were multiplied by the related multipliers to calculate the economic impacts in terms of economic value and jobs.

The economic impact multipliers used in this analysis from U.S. Department of Commerce – Bureau of Economic Analysis, Regional Economic Analysis Division, Analysis and Special Studies Branch, Regional Input-Output Modeling System (RIMS II) for the Westchester County area. The RIMS II factors are based on 2009 economic data for the region as shown in **Figure 26**.

Westchester County, NY			Final-demand			Direct-effect
	Final-demand	Final-demand	Employment	Final-demand	Direct-effect	Employment
	Output /1/	Earnings /2/	/3/ (number	Value-added	Earnings /5/	/6/ (number
	(dollars)	(dollars)	of jobs)	/4/ (dollars)	(dollars)	of jobs)
Construction	1.3032	0.2989	6.0689	0.6786	1.253	1.254

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Region Definition: Westchester, NY

- 1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to
- Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2008 data, the output delivered to final demand should be in 2008 dollars.
- 4. Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
- Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

Figure 26 – Capital Expenditures – Construction Multipliers

The Department estimates that 70% of the \$17,070,488 capital expenditures during the fiscal year ending 2011 are through local vendors. The estimated in-county capital expenditures of the Department for fiscal year ending 2011 are \$11,949,342. Figure 27 illustrates the total final economic impact of the in-county capital expenditures of the Department. Column 1 shows the output in terms of dollars. Columns 2 and 3 are estimates of the final effect earnings and employment (jobs), on the Westchester County area. The Final-demand Value-added in dollars is shown in Column 4. The Final-demand Value-added factors include direct, indirect, and induced economic impacts.



^{*}Includes Government enterprises.



		Final-demand	Final-demand	Final-demand	Final-demand	Direct-effect	Direct-effect
		Output /1/	Earnings /2/	Employment /3/	Value-added /4/	Earnings /5/	Employment /6/
Capital Expenditures		(dollars)	(dollars)	(number of jobs)	(dollars)	(dollars)	(number of jobs)
	Factors	1.3032	0.2989	6.0689	0.6786	1.253	1.254
\$ 11,949,342	Results	\$ 15,572,382	\$ 3,571,658	73	\$ 26,139,800	\$ 4,475,288	90.94

Figure 27 - Economic Impact 2011 Capital Expenditures from In-County Vendors

3.1.1 CAPITAL EXPENDITURES CONCLUSION

Final economic impact of local capital expenditures is estimated to be \$26,139,800 with a local job equivalent of 91 full-time jobs.

3.2 ECONOMIC ANALYSIS OF OPERATING EXPENDITURES

The Department's operating budget for fiscal year ending 2011 is used as the basis for the analysis. The impact of operating expenditures with local vendors was analyzed using the parks industry impact economic multipliers from the U.S. Department of Commerce, Bureau of Economic Analysis, and Regional Input-Output Modeling System (RIMS). Each RIMS industry category has a value multiplier and a jobs multiplier. The estimated local operating expenditures were multiplied by the related multipliers to calculate the economic impacts in terms of economic value and jobs.

The economic impact multipliers used in this analysis from U.S. Department of Commerce – Bureau of Economic Analysis, Regional Economic Analysis Division, Analysis and Special Studies Branch, Regional Input-Output Modeling System (RIMS II) for the Westchester County area. The RIMS II factors are based on 2009 economic data for the region as shown in **Figure 28**.

		Final-demand	Final-demand	Final-demand	Direct-effect	Direct-effect
	Final-demand	Earnings /2/	Employment /3/	Value-added /4/	Earnings /5/	Employment /6/
	Output /1/ (dollars)	(dollars)	(number of jobs)	(dollars)	(dollars)	(number of jobs)
Parks	1.3867	0.389	11.3669	0.8426	1.2724	1.2119

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.
Region Definition: Westchester, NY

*Includes Government enterprises.

- 1, Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to
- Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2008 data, the output delivered to final demand should be in 2008 dollars.
- Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output
 delivered to final demand by the industry corresponding to the entry.
- 5. Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
- Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

Figure 28 - Operating Expenditures - Recreation Industry Multipliers

The County Finance Department estimates that 80% of the \$45,509,407 operating expenditures during the fiscal year ending 2011 is through local vendors. The estimated incounty operating expenditures of the Department for fiscal year ending 2011 are \$36,407,526. Figure 29 illustrates the total final economic impact of the in-county operating expenditures of the Department. Column 1 shows the output in terms of dollars. Columns 2 and 3 are estimates of the final effect earnings and employment (jobs), on the Westchester County area. The Final-demand Value-added in dollars is shown in Column 4. The Final-demand Value-added factors include direct, indirect, and induced economic impacts.

			Fii	nal-demand	Final-demand	Final-demand	E	Direct-effect	Direct-effect
		Final-demand	Ε	arnings /2/	Employment /3/	Value-added /4/	E	Earnings /5/	Employment /6/
Local Purchasing FYE 2011		Output /1/ (dollars)		(dollars)	(number of jobs)	(dollars)		(dollars)	(number of jobs)
	Factors	1.3867		0.389	11.3669	0.8426		1.2724	1.2119
\$ 36.407.526	Results	\$ 50.486.316	\$	14.162.527	414	\$ 93.026.085	\$	18.020.400	501.53

Figure 29 - Economic Impact 2011 Operating Expenditures-from In-County Vendors

3.2.1 OPERATING EXPENDITURES CONCLUSION

Final economic impact of local operating expenditures is estimated to be \$93,026,085 with a local job equivalent of 501.53.

3.3 ECONOMIC ANALYSIS OF HOURLY PAYROLL

The Department's operating budget for fiscal year ending 2011 is used as the basis for the analysis. The impact of operating expenditures with local vendors was analyzed using the parks industry impact economic multipliers from the U.S. Department of Commerce, Bureau of Economic Analysis, and Regional Input-Output Modeling System (RIMS). Each RIMS industry category has a value multiplier and a jobs multiplier. The estimated local operating expenditures were multiplied by the related multipliers to calculate the economic impacts in terms of economic value and jobs.

The economic impact multipliers used in this analysis from U.S. Department of Commerce – Bureau of Economic Analysis, Regional Economic Analysis Division, Analysis and Special Studies Branch, Regional Input-Output Modeling System (RIMS II) for the Westchester County area. The RIMS II factors are based on 2009 economic data for the region as shown in **Figure 30**.



Friends of Westchester County Parks

		Final-demand	Final-demand	Final-demand	Direct-effect	Direct-effect
	Final-demand	Earnings /2/	Employment /3/	Value-added /4/	Earnings /5/	Employment /6/
	Output /1/ (dollars)	(dollars)	(number of jobs)	(dollars)	(dollars)	(number of jobs)
Parks	1.3867	0.389	11.3669	0.8426	1.2724	1.2119

Figure 30 -Recreation Industry Multipliers

SOURCE.--Regional Input-Output Modeling System (RIMS II), Regional Product Division, Bureau of Economic Analysis.

Region Definition: Westchester, NY

*Includes Government enterprises.

- 1. Each entry in column 1 represents the total dollar change in output that occurs in all industries for each additional dollar of output delivered to
- Each entry in column 2 represents the total dollar change in earnings of households employed by all industries for each additional dollar of output delivered to final demand by the industry corresponding to the entry.
- 3. Each entry in column 3 represents the total change in number of jobs that occurs in all industries for each additional 1 million dollars of output delivered to final demand by the industry corresponding to the entry. Because the employment multipliers are based on 2008 data, the output delivered to final demand should be in 2008 dollars.
- Each entry in column 4 represents the total dollar change in value added that occurs in all industries for each additional dollar of output
 delivered to final demand by the industry corresponding to the entry.
- Each entry in column 5 represents the total dollar change in earnings of households employed by all industries for each additional dollar of earnings paid directly to households employed by the industry corresponding to the entry.
- Each entry in column 6 represents the total change in number of jobs in all industries for each additional job in the industry corresponding to the entry.

The Department estimates that 90% of the \$6,302,600 in hourly payroll during the fiscal year ending 2011 is to local residents. The estimated in-county hourly payroll of the Department for fiscal year ending 2011 is \$5,672,340. **Figure 31** illustrates the total final economic impact of the in-county hourly payroll of the Department. Column 1 shows the output in terms of dollars. Columns 2 and 3 are estimates of the final effect earnings and employment (jobs), on the Westchester County area. The Final-demand Value-added in dollars is shown in Column 4. The Final-demand Value-added factors include direct, indirect, and induced economic impacts.

					Final-			
				Final-	demand			Direct-effect
		Final-den	nand	demand	Employment	Final-demand	Direct-effect	Employment
		Output /	1/	Earnings /2/	/3/ (number	Value-added	Earnings /5/	/6/ (number
Hourly Payroll FYE 2011		(dollars	s)	(dollars)	of jobs)	/4/ (dollars)	(dollars)	of jobs)
	Factors		1.3867	0.389	11.3669	0.8426	1.2724	1.2119
\$ 5,672,340	Results	\$ 7,86	5,834	\$2,206,540	64	\$14,493,586	\$2,807,602	78.14

Figure 31 – Economic Impact 2011 Hourly Payroll to In-County Residents

3.3.1 OPERATING EXPENDITURES CONCLUSION

Final economic impact of local operating expenditures is estimated to be \$14,493,586 with the final employment impact of 78 full-time job equivalents.

CHAPTER FOUR - OTHER ECONOMIC STUDIES

Other economic impact studies have been performed that demonstrate the economic impact of Westchester Parks to the local economy. This was completed for the Westchester County Center and Rye Playland.

4.1 COUNTY CENTER ECONOMIC IMPACT STUDY

In 2009, AECOM access the economic impact of the Westchester County Center. The study concluded that the combined capital investment and annual spending resulted in \$34.6 million in economic impact on the local economy.

4.2 COUNTY CENTER ECONOMIC IMPACT STUDY

In 2009, Economics Research Associates accesses the economic impact of the Rye Playland. The study concluded that the combined annual spending and tourism resulted in an annual economic impact of \$27.7 million.







CHAPTER FIVE - ECONOMIC ANALYSIS OF BUSINESS RELOCATIONS

The Department's facilities and programs are an important part of the local culture of Westchester County. A 1998 survey by KPMG of 1,200 high tech workers found that quality of life in a community increases the job attractiveness by 33 percent.

The recent 2011 report published by The Business Council of Westchester County indicates through a survey that 36% of New Yorkers under the age of 30 said they plan to leave New York State in the next five years because of the financial squeeze on the home front. The report recognizes that to hold young people under the age of 30 to grow their careers and their personal lives, a community must provide places and events that they find attractive and the Westchester County Parks and Recreation system is a place where this can be provided if they are allowed to provide this service.

The project team working through the County's Office of Economic Development contacted a sample of businesses that relocated to the Westchester County in the past ten years, as well as conducted a business focus group meeting.

The survey of relocated business indicates that primary reason for major business relocations is financial incentives from state and local agencies.

From the business focus group meetings conducted by the project team, the business leaders indicated that quality of life was an important element in attracting and keeping businesses and employees in Westchester County. Business leaders explained that employers are seeking for balanced employees that can balance work and play as they are more productive and healthier mentally and physically. Other attributes

"Parks and Recreation facilities are excellent here in Westchester County and it is important to our residents. I can't image what Westchester County would look like without a great park system. It helps us tremendously in promoting the benefits of living and working here."

-Joanne Deyo, Business Council of Westchester Board Member



expressed by business leaders to attract new businesses include lower health care costs, lower levels of traffic congestion and the many cultural opportunities available in Westchester County all of which the parks play some role in providing at relatively low cost experiences for participants.

Young professionals moving to the County seek low cost recreation and social experiences that Westchester County provides in biking trails, both hard and soft surface, edge sport activities that include canoeing, kayaking, bouldering, mountain biking, and camping in the parks. Also, Westchester County provides many competitive sports leagues, golf courses, and recreation competitions for young people to participate in that are used as a selling point to employers when considering relocation to Westchester County.

CHAPTER SIX - ECONOMIC IMPACT OF PARK FACILITIES ON LAND VALUES

The PROS Consulting team also performed an analysis of the economic benefits created by parks and trails in Westchester County. This analysis is based on available data information from the County. The model considers the general impact of parks and trails on land values. A map showing amenity locations is shown in **Figure 33** on the following page.

6.1 PROPERTY VALUES NEAR PARKS AND TRAIL HEADS

An analysis of real property values was performed to document the influence of trails on land values. For our analysis, we use compared properties at the trail heads to document the influences at trail access. Properties in the Westchester County were compared based on the proximity to four trail heads. The selected trail heads are:

- Elmsford Trail Head Area
- North County Trail Briarcliff Manor Trail Head Area
- North County Trail Yorktown Heights Trail Head Area
- Nepperhan Trail Head Area

For each trail head, our analysis is based on a survey of 10 properties near or adjacent to the trail head. The near properties were compared to 10 properties away from the trail head. The land values were compared in each case.

Our analysis showed that land values near or adjacent to trail heads were more than 5.83% higher than similar properties between one-half miles and one mile away. The land value differences ranged from 0.1% to 9.11%. A summary of the analysis is shown in **Figure 32**.

	Average	Average	
	Land Value	Land Value	
	Near Trail	Away From	
Trail Head	Head	Trail Head	Difference
Elmsford Trail Head	\$277,506	\$259,621	6.89%
North County Trail - Briarcliff Manor Trailhead	\$234,325	\$218,572	7.21%
North County Trail - Yorktown Heights Trailhead	\$102,485	\$93,926	9.11%
Nepperhan Trailhead	\$809,195	\$808,453	0.09%
Average Difference			5.83%

Figure 32 - Summary Trail Head Land Value Analysis





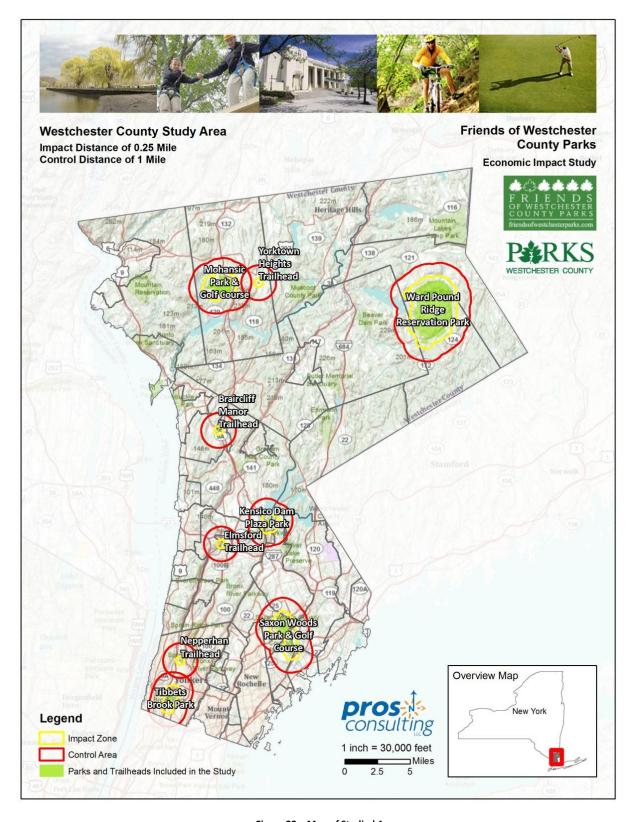


Figure 33 – Map of Studied Areas

6.2 INFLUENCE OF PARKS ON PROPERTY VALUES

An analysis of real property values was performed to document the influence of parks on land values. Properties in the Westchester County were compared based on the proximity to four parks. The selected parks are:

- Tibbetts Brook Park
- Saxon Wood Park and Golf Course
- Mohansic Golf
- Ward Pound Ridge Park
- Kensico Park

For each park, our analysis is based on a survey of 15 properties near or adjacent to the trail head. The near properties were compared to 15 properties away from the trail head. The land values were compared in each case.

The average influence of parks and golf courses on land value is averaged 28.25% higher than property one-half to one mile away. A summary of the analysis is shown in **Figure 34**.

		Average	
	Average Land Value		
	Land Value	Away From	
Park	Near Park	Park	Difference
Tibbetts Brook Park	\$772,615	\$794,709	-2.78%
Saxon Wood Park and Golf Course	\$574,928	\$272,267	111.16%
Mohansic Golf Course	79,922.78	60,746.46	31.57%
Pound Ward Ridge Park	\$104,988	\$104,364	0.60%
Kensico Dam Park	\$369,752	\$367,183	0.70%
Total Average Difference			28.25%

Figure 34 - Summary Parks Land Value Analysis

Land values near Tibbetts Brook Park are also subject to the negative influences of the thoroughfares surrounding the park parameters. The land nearer the park is also nearer the major thoroughfares and freeways.





CHAPTER SEVEN - PARK AND RECREATION DEPARTMENT AND WESTCHESTER COUNTY HEALTH

The availability of park and recreation facilities encourages active participation for those nearer the facilities. Research has documented higher participation in recreation activities to lower numbers of major health events. There is limited economic documentation that spending on park facilities improves participation. In the October, 2007, issue of Contemporary Economic Policy, Brad R. Humphreys and Jane E. Ruseski of the University of Alberta reported:

However, increased spending does not affect the decision to participate in individual sports but marginally increases the time spent playing individual sports. Increased spending had a small positive effect on the time spent participating in individual sports. ¹

While park and recreation spending to health costs cannot be directly linked, comparisons of Westchester County health statistics can be compared to the State of New York and the United States to measure the differences in health costs. A direct link between park and recreation is made in this analysis. The following analysis is comparing the health statistics of Westchester County to the State of New York and the United States. The health costs differences are based on document research of national health costs of major health category.

PROS compared the differences in reported participation in physical activity and five major health costs. The health statistics include:

- Overweight and Obesity
- Diabetes
- Asthma
- Coronary Heart Disease
- Mental Health

7.1 PARTICIPATION IN PHYSICAL ACTIVITY

Westchester County residents reported significantly higher participate in physical activity than the State of New York and the rest of the country. Westchester County residents reported 14.8% higher activity than the rest of the country reported for those participating in physical activity 5-days per week and 3.7% greater than those reporting 3-days per week.

¹ Brad Humphreys and Jane E. Ruseki, "Participation in Physical Activity and Government Spending on Parks and Recreation", Contemporary Economic Policy, Volume 25, October, 2007, pages 538-552

Health Statistics	Westchester County ²	New York State ³	U.S. ³
Physical Activity			
5-days per wee	k 47.2%	43.6%	43.5%
3-days per wee	k 35.8%	20.3%	21.0%
Differences			
5-days per wee	k	3.6%	3.7%
3-days per wee	k	15.5%	14.8%

Figure 35 - Comparison of Participation in Physical Activity

7.2 OVERWEIGHT AND OBESITY

2

5

Based on available data, Westchester County has a higher percent of overweight population than the State of New York by 4% and the U.S. by 5%. The County has a lower percent of obesity than the State by 5% and the U.S. by 14%

Health	Westchester	New York	
Statistics	County ⁴	State ⁵	U.S. ⁶
Overweight	39.0%	35.2%	33.8%
Obese	20.0%	25.1%	34.2%
Difference			
Overweight		-4%	-5%
Obese		5%	14%

Figure 36 - Comparison of Overweight & Obese Population

⁶ Cynthia L. Ogden, Ph.D., and Margaret D. Carroll, M.S.P.H., <u>Prevalence of Overweight, Obesity, and Extreme Obesity Among Adults: United States, Trends 1960-1962 Through 2007-2008</u>, (National Center for Health Statistics: 2010), p. 5.



² Joshua Lipsman, M.D., <u>Community Health Assessment 2010-2013</u>, (New Rochelle, NY: County of Westchester, 2010), p. 75.

³ Centers for Disease Control and Prevention. <u>State Indicator Report on Physical Activity, 2010.</u> Atlanta, GA: U.S. Department of Health and Human Services, 2010. p. 12

⁴ .Idem, <u>Community Health Assessment 2010-2013</u>, (New Rochelle, NY: County of Westchester, 2010), p. 10.

⁵ State of New York, Department of Health, <u>BRFSS Brief Number 0904, Overweight and Obesity New York State Adults 2008</u>, p. 1



Research related to additional health cost related to overweight and obesity was documented in 2003 by a team from Project HOPE. The additional health cost was estimated at \$247 for overweight individuals and \$732 for obese individuals.⁷ The differences in overweight and obese individuals in Westchester County results in avoided health costs of \$26,523,912 when compared to the State statistics and \$86,464, 194 when compared to the U.S. statistics.

	New York	
Overweight	State	U.S.
Difference in Westchester County	-4%	-5%
Westchester County Population		
Included	(36,066.29)	(49,353.88)
	\$ 247.00 \$	247.00
Avoided Costs	\$ (8,908,375) \$	(12,190,407)
	New York	
Obese	State	U.S.
Difference in Westchester County	5%	14%
Westchester County Population		
Included	48,404.76	134,774
	\$ 732.00 \$	732.00
Avoided Costs	\$ 35,432,287 \$	98,654,602
Total Avoided Costs	\$ 26,523,912 \$	86,464,194

Figure 37 - Avoided Cost of Overweight & Obese Population Differences

7.3 DIABETES

8

Westchester County has a lower percent of overweight population than the State of New York by 1.6% and the U.S. by 1.5%.

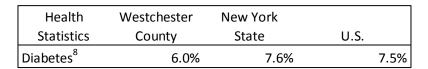


Figure 38 – Percent of Population with Diabetes

In June, 2008, the U.S. Department of Health and Human Services reported that 10% of all health care expenses in the United States are spent on diabetes. The difference in annual health cost for individual with diabetes is estimated at \$10,683 over individual without

⁷ Eric A. Finkelstein, Ian C. Fiebelkorn, and Guijing Wang, "National Medical Spending Attributable To Overweight And Obesity: How Much, And Who's Paying?", <u>Health Affairs</u>, 27 July, 2009, p. 822-831

⁸ Idem, <u>Community Health Assessment 2010-2013</u>, (New Rochelle, NY: County of Westchester, 2010), p. 198.

diabetes.⁹ The differences in diabetes costs in Westchester County results in avoided health costs of \$162,229,987 when compared to the State statistics and \$152,090,613 when compared to the U.S. statistics.

	New York				
Diabetes	State	U.S.			
Difference in Westchester County	1.6%	1.5%			
Westchester County Population					
Included	15,185.81	14,236.70			
Additional Health Cost	\$ 10,683.00 \$	10,683.00			
Total Avoided Costs	\$162,229,987 \$	152,090,613			

Figure 39 - Avoided Cost of Diabetes

7.4 ASTHMA

Westchester County has a lower percent of population with asthma than the State of New York by 7.5% and the U.S. by 3.1%.

10

Health	Westchester	New York	
Statistics	County	State	U.S.
Asthma ¹⁰	13.5%	21.0%	16.6%

Figure 40 - Percent of Population with Asthma

In 2010, the Asthma and Allergy Foundation reports that the annual cost of asthma is estimated at \$18 billion. A 1998 study that asthma related expenditures were \$10.7 million annually with 14.15 million persons with asthma. The difference in asthma costs in Westchester County results in avoided health costs of \$54,028,258 when compared to the State statistics and \$22,331,680 when compared to the U.S. statistics.

¹² Kevin B. Weiss, M.D., Sean D. Sullivan, Ph.D. and Christopher S. Lyttle, M.A., "Trends in the costs of asthma in the United States, 1985-1994," <u>Journal of Allergy and Clinical Immunology</u>. Vol. 106. Chicago: Rush Primary Care Institute, September, 2000. p. 493-499



⁹ Indian Health Services Division of Diabetes Treatment and Prevention, <u>Special Diabetes Program for Indians: Cost-Effective Diabetes Treatment and Prevention</u>. Atlanta, GA: U.S. Department of Health and Human Services, 2008. p. 1

¹⁰ Idem, <u>Community Health Assessment 2010-2013</u>, (New Rochelle, NY: County of Westchester, 2010), p. 198.

¹¹ "The Costs of Asthma," Asthma and Allergy Foundation 1992 and 1998 Study, 2000 Update



	New York				
Asthma	State	U.S.			
Difference in Westchester County	7.5%	3.1%			
Westchester County Population					
Included	71,183.48	29,422.50			
Additional Health Cost	\$ 759.00 \$	759.00			
Total Avoided Costs	\$ 54,028,258 \$	22,331,680			

Figure 41 – Avoided Cost of Asthma

7.5 CORONARY HEART DISEASE

Westchester County has a lower percent of population with coronary heart disease than the State of New York by 5.7% and the U.S. by 21.8%.

	Westchester			13
Health Statistics	County ¹³	New York State ¹³	U.S. ¹⁴	
Coronary Heart Disease				
Hospitalizations Per				
10,000	55.5	61.2	59.2	14

Figure 42 – Percent of Population with Coronary Heart Disease

<u>Journal of the American Heart Association</u> reported in 2009 that 80 million individuals suffer from coronary heart disease. The same article states that coronary heart disease cost \$165.4 billion per year.¹⁵

	1	New York	
Coronary Heart Disease		State	U.S.
Difference in Westchester County per			
10,000 population		5.7	3.7
Westchester County Population Included		540.99	351.17
Additional Health Cost	\$	2,067.50	\$ 2,067.50
Total Avoided Costs	\$	1,118,506	\$ 726,048

Figure 43 – Avoided Cost of Coronary Heart Disease

¹³ Idem, <u>Community Health Assessment 2010-2013</u>, (New Rochelle, NY: County of Westchester, 2010), p. 198.

¹⁴ "Heart Disease and Stroke Statistics--2009 Update: A Report From the American Heart Association Statistics Committee and Stroke Statistics Subcommittee", <u>Journal of the American Heart Association</u> (Dallas: Circulation. 2009;119:e21-e181.)

¹⁵ Idem, "Heart Disease and Stroke Statistics--2009 Update : A Report From the American Heart Association Statistics Committee and Stroke Statistics Subcommittee", page 172-175

The difference in costs associated with coronary heart disease in Westchester County results in avoided health costs of \$1,118,506 when compared to the State statistics and \$726,048 when compared to the U.S. statistics.

7.6 MENTAL HEALTH

Westchester `County has a lower percent of population with coronary heart disease than the State of New York by 0.3% and the U.S. by 1.0%. ¹⁶

	Westchester	New York	
Health Statistics	County	State	U.S.
Mental Health			
Percentage of adults reporting			
14 or more days with poor			
mental health in last month	10.1%	10.4%	11.1%

Figure 44 - Percent of Population Reporting Mental Health Problems

In 1999, the U.S. Surgeon General reported that_the annual direct cost of mental health treatment at \$99 billion annually. The difference in costs associated with mental health in Westchester County results in avoided health costs of \$1,118,506 when compared to the State statistics and \$726,048 when compared to the U.S. statistics.

	New York				
Mental Health		State		U.S.	
Difference in Westchester County					
Percentage of adults reporting					
14 or more days with poor					
mental health in last month	0.3%		1.0%		
Westchester County Population					
Included		2,847.34		9,491.13	
Additional Health Cost	\$	2,888.76	\$	2,888.76	
Total Avoided Costs	\$	8,225,280	\$	27,417,601	

Figure 45 - Avoided Cost of Mental Health Treatment



¹⁶ Idem, <u>Community Health Assessment 2010-2013</u>, (New Rochelle, NY: County of Westchester, 2010), p. 199.

¹⁷ U.S. Department of Health and Human Services. Mental Health: A Report of the Surgeon General—Executive Summary. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.



7.7 HEALTH SUMMARY

The summary of avoided health costs shows a saving of costs to Westchester County. The totals are illustrative purposes only as there may be significant overlap among categories.

Health Statistics		Ne	New York State		U.S.	
Weight						
	Overweight	\$	(8,908,375)	\$	(12,190,407)	
	Obesity	\$	35,432,287	\$	98,654,602	
	Net	\$	26,523,912	\$	86,464,194	
Diabetes		\$	162,229,987	\$	152,090,613	
Asthma		\$	54,028,258	\$	22,331,680	
Coronary	Heart Disease	\$	1,118,506	\$	726,048	
Mental He	ealth	\$	8,225,280	\$	27,417,601	
Westchester County Cost						
Less Than New York State		\$	252,125,942			
Westches Less Than	ter County Cost U.S.			\$	289,030,135	

Figure 46 - Summary Avoided of Health Cost

Research has documented higher participation in recreation activities to lower numbers of major health events. Recent research advocates that parks might be a protective factor in cardiovascular disease risk. In a December 2005 *Environmental Health Perspectives* article, it was suggested that an absence of safe parks may be part of why poverty leads to poorer health outcomes. Also, Amy Auchincloss and her colleagues reported in a 2009 *Archives of Internal Medicine* piece that residential areas which support physical activity, by having things like ample park space, were associated with a lower incidence of Type 2 diabetes. 49

Westchester County Parks is an important element of the healthy lifestyles of County residents. The analysis indicates that the County residents have a lifestyle that is healthier

¹⁸ Amy J. Schulz, <u>Social and Physical Environments and Disparities in Risk for Cardiovascular Disease:</u>
<u>The Healthy Environments Partnership Conceptual Model.</u> <u>Environmental Health Perspectives</u>
(Volume 113 – Number 12 – December 2005).

¹⁹ Amy H. Auchincloss, PHD, MPH, <u>Neighborhood Resources for Physical Activity and Healthy Foods and Incidence of Type 2 Diabetes Millitus: The Multi-Ethnic Study of Atherosclerosis</u>. *Arch Inter Med.* 2009; 169 (18): 1698-1704

than the average State of New York resident and better than the average U.S. citizen. Westchester County Parks is an important element of the healthy lifestyles of the County residents. The availability of recreational facilities and amenities contribute to the health of the residents and encourage healthy lifestyles.

The analysis shows that health care cost are \$252,125,942 less than the State of New York average health care costs for the same population as Westchester County. The Westchester County population is \$289,030,135 when compared to the U.S.







CHAPTER EIGHT - FINAL COMMENTS

Westchester County residents have made a significant investment in their County parks and recreation system over the last 100 years. The parks, trails and open spaces create a powerful image of the County as a valued place to live, work and play.

The Economic and Fiscal Impact Analysis report demonstrates the influence that the parks and recreation system has in providing revenues to not only the County's General Fund, but the higher property values also positively impact local municipal and school district tax revenues. The park system benefits local business income in purchasing products and services and retail vendors who generate income from sales at Park-sponsored facilities and events. Also, housing values are higher along trails and parks which support overall property taxes to sustain Westchester County as a great place to live.

In addition, the County Parks system is a significant provider of jobs for full-time employees and part-time employees, which include young people and seniors. The Parks and Recreation Department is not a "spend department," but is a <u>job creator and income producer</u> for the County.

Great cities and counties have great parks. These systems create pride for residents, visitors, young people and seniors to stay in a community for the opportunities to find employment and to raise a family. Westchester County parks are welcoming and the recreation facilities are safe, attractive and accessible. The abundance of programs and events create memorable experiences for everyone to enjoy. For Westchester County to continue its success, it must understand the impact a great park system provides. Many economic elements are clearly measurable and some are not, but in the end what would this County be without its great park system? Investing in parks, recreation facilities and programs is good business!

"Parks and recreation are part of the quality of life businesses look for when relocating. Parks support economic vitality for the region with the many recreation experiences that Westchester County provides. We hear all the time that recreation opportunities provided by Westchester County are good for attracting people and younger families to live and work here."

-William Mooney, Jr., President of Westchester County Association

