

The Economic Significance and Impact of Pennsylvania State Parks:

An Updated Assessment of 2010 Park Visitor Spending on the State and Local Economy



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TABLE OF CONTENTS

Acknowledgements.....	ii
List of Figures and Tables.....	iii
Executive Summary	iv
Introduction.....	1
Methods	2
Results.....	8
Section One: Statewide Analyses	8
Section Two: Regional Analyses	10
Section Three: Park Specific Analyses	14
Conclusion	19
References.....	21

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LIST OF FIGURES AND TABLES

Figure 1. A Classification of Pennsylvania State Park Visitors: Nine Distinct Segments	3
Table 1. Average Visitor Spending Profiles by Segment	4
Table 2. Hickory Run & Lehigh Gorge State Park Spending by Segment	5
Table 3. Multipliers for Pennsylvania Tourism Regions; Hotel and Restaurant Sectors Only	6
Table 4. Adjusted Statewide Visitation Statistics by Segment	8
Table 5. Statewide Economic Significance of Visitor Spending	9
Table 6. Statewide Economic Impact of Visitor Spending (Out-of-State Visitors Only).....	10
Table 7. Party Visits by Segment and State Park Region	11
Table 8. Total Visitor Spending by Park Region	11
Table 9. Total Visitor Spending by Segment and State Park Region	12
Table 10. Regional Economic Significance.....	13
Table 11. Regional Economic Impact.....	13
Table 12. Region 1 Spending Totals by Park and Segment.....	15
Table 13. Region 2 Spending Totals by Park and Segment.....	16
Table 14. Region 3 Spending Totals by Park and Segment.....	17
Table 15. Region 4 Spending Totals by Park and Segment.....	18
Table 16. A Comparison of PA State Parks Economic Impact vs. Other Park Systems	20

EXECUTIVE SUMMARY

Pennsylvania's vast network of state parks annually draws millions of visitors who contribute to the economic vitality of the Commonwealth. Recognition of these economic benefits is bolstered with sound data documenting the extent of these economic impacts. Prior economic studies indicate that visitor spending contributed significantly to state and local economies. However, current economic conditions and increased park visitation warrant a re-analysis of the economic significance and impact of Pennsylvania State Parks.

Pennsylvania's Department of Conservation and Natural Resources commissioned the Department of Recreation, Park and Tourism Management at Penn State to conduct an updated economic impact analysis of State Parks based on 2010 data. Like the prior study, this updated analysis estimates park visitor spending/ impacts using the Money Generation Model (MGM2). The economic significance and impact reported in this study is based upon local and non-local spending associated with state park visits. Pennsylvania State Park visitation statistics, state/local multipliers, and estimated visitor expenditures from 2010 were used to generate economic impact data based on visitor spending at a state, region, and park level. Key findings from this study indicated that:

- In 2010, Pennsylvania State Parks (PSP) hosted 37.9 million visitors who spent \$859 million on their trips (\$648 million for resident visitors; \$201 million for non-resident or out-of-state visitors, and \$9.5 million in extra spending associated with marinas, whitewater, and ski areas).
- Direct contribution of visitor spending to the state economy was \$628.7 million in sales, 9,435 jobs, \$227.2 million in labor income, and \$360.5 million in value added effects.
- Including secondary effects, the total contribution of visitor spending to the state economy was \$1.145 billion in sales, 12,630 jobs, 397.8 million in labor income, and \$649 million in value added effects.
- The statewide sales impact of out-of-state visitors was \$274.2 million. Out-of-state visitor spending contributed to 2,976 jobs, \$94.6 million in labor income, and \$154.5 million in value added effects.
- Comparing the income return (value added) with reported General Fund expenditures of \$52,276,000 revealed a favorable return on investment for the Commonwealth. For every dollar invested in PSP in 2010, \$12.41 of income (value added) is returned to Pennsylvania. This value added ratio is higher than previous estimates primarily because of increased visitation.

- Restaurants/bars and gas/oil represented the largest percentage of visitor spending, followed by groceries and take out food/drinks. The smallest percentage of visitor spending was associated with marinas and camping fees.
- Visitor expenditures by PSP Region depend on visitation levels and spending opportunities provided near parks within each region. Combined, Regions 2 and 4 accounted for 73% of the total visitor spending. Specifically, visitor expenditures were approximately \$345 million for Region 2, \$285 million for Region 4, \$166 million for Region 3, and 72 million for Region 1.

- Visits to the various PSP regions generated the following impacts...

Region 1 - \$64.2 million in sales, 1,012 jobs created, and \$36.8 million value added

Region 2 - \$389.3 million in sales, 5,029 jobs created, and \$219.4 million value added

Region 3 – \$165 million in sales, 2,372 jobs created, and \$96.2 million value added

Region 4 – \$353.2 million in sales, 3,960 jobs created, and \$203.4 million value added

- Economic significance and impacts were also estimated for individual parks...

For example, Presque Isle State Park hosted 4,030,294 visitors, spending \$76.9 million. The total contribution to the local economy was \$72.2 million in sales, 1,089 jobs, \$25.3 in labor income, and \$40.2 million in value added effects. Omitting spending by local visitors, the impact of visitors from outside the local region was \$45.4 million in sales, 679 jobs, \$15.8 million in labor income, and \$25.1 million in value added effects. Economic impact projections at Presque Isle State Park will be re-analyzed as new survey data comes available in 2013.

Parks that were associated with the highest estimated visitor spending were Pymatuning, Presque Isle, Prince Gallitzin, and Ohiopyle State Parks at \$83.8, \$76.9, \$48.6, and \$34.9 million, respectively Parks associated with the highest value added impact were Pymatuning, Presque Isle, Ohiopyle, Prince Gallitzin, and Hickory Run/Lehigh Gorge State Parks at \$27.2, \$25.1, \$20.6, \$16.6 and \$15.4 million, respectively.

INTRODUCTION

Parks and outdoor recreation facilities provide a wide variety of individual, community, environmental, and societal benefits for Americans. In particular, parks can generate substantial economic benefits for local businesses and for national, state, and local government. Pennsylvania's vast network of state parks annually draws millions of visitors who contribute to the economic vitality of the Commonwealth. For example, a 1987 study reported that the economic impact of state park recreation in Pennsylvania amounted to \$562 million in total sales and 10,000 jobs (Strauss & Lord, 1990). A more recent analysis of 2008 State Parks visitation found that the total contribution of visitor spending to the state economy was \$818.3 million in sales, 10,551 jobs, 291.4 million in labor income, and \$464.7 million in value added effects (Mowen, Stynes, Graefe, Kerstetter, & Trauntvein, 2010).

Current economic conditions and increased visitation at State Parks warranted an updated analysis of the economic significance and impact of Pennsylvania State Parks at a statewide and regional level.

To address this need, Pennsylvania's Department of Conservation and Natural Resources' Bureau of State Parks commissioned the Department of Recreation, Park and Tourism Management at Penn State to conduct an economic impact analysis of the State Park System based upon 2010 visitation data. The analysis was completed by estimating park visitor spending and impacts using the National Park Service's Money Generation Model (MGM2). The MGM2 model was developed by the National Park Service to estimate spending of park visitors and the associated impacts on local economies. The model has been applied in recreation and tourism applications ranging from art exhibits and cultural tourism to snowmobiling and state park use. Dr. Daniel Stynes (Professor Emeritus at Michigan State) co-developed MGM2 and worked with Penn State in gathering, analyzing, and interpreting the data. The economic significance and impact reported in this study is based upon local and non-local spending associated with state park visits.

This report is divided into several key sections. First, the data, assumptions, and procedures used for generating economic impact estimates are discussed. This section also includes a summary of key visitation statistics, estimated visitor spending averages, and a review of the regional multipliers used in the impact analysis. Key terminology such as the distinction between significance and impact, and the definitions for sales, jobs, income, and value added are also included. Second, results are presented starting with statewide data, followed by park region data, and concluding with summary park-specific data. Detailed economic impact data for each individual state park is also provided in a separate summary report. Finally, this report concludes by comparing PA State Park economic impact results with those of comparable state park systems.

METHODS

This section includes the key data, assumptions, and procedures used to generate economic impact estimates for Pennsylvania State Parks (PSP). Several types of data were used in order to generate economic impact estimates, including different park user types, park visitation by user type, visitor expenditures by user type, and multipliers at the regional and state level. Given the scope and size of the State Park system, it was difficult to generate precise estimates for all of this data. Thus, data from prior PSP surveys and from other comparable state park systems were used to estimate park visitor segments and expenditures and multipliers were extracted from input-output models estimated with IMPLAN. As part of this updated analysis, efforts were made to gather expenditure data and day user segment composition at two state parks, Lehigh Gorge and Hickory Run State Parks. This new data is reflected in the study results. Moreover, on-going state park visitor surveys from the Pennsylvania Visitor Use Monitoring study will gather additional expenditure data at 30 additional State Parks over the next 5 years.

Separating Day Use and Overnight Visitors

The PSP attendance counts (Pennsylvania State Parks, 2011), Infospherix reservation data (Infospherix, 2010), and recent park surveys were used to identify and categorize park visitors into different segments. For example, attendance counts were used to assess both day and overnight visitation at the State Parks. These counts are estimated by the Bureau based on traffic counter data and other visitation adjustments made on a park-to-park basis. From this data, Total Visitor Days (TVD) is generated for each park and these counts separate visitation by activity type (e.g., camping, bicycling, fishing, swimming). However, there is the potential for overnight visitors (campers) to be double counted in the other activities. Thus, it was necessary to factor out overnight visitors from the TVD data in order to estimate the number of day users at each park. The Infospherix reservation system compiles overnight visitation data for each park. The number of nights visitors stayed in cabins, cottages, yurts, and at campsites was then subtracted from the TVD count for each State Park to estimate day use visitation.

The original TVD traffic counts estimated party size (typically 2.5 people per vehicle), but they did not account for park re-entries. While re-entry is not likely to occur for day users, overnight users may leave the park and re-enter several times per visit. To address this double-counting issue, the original TVD counts were reduced by assuming that overnight visitors left the park and returned at least once per day. Addressing these issues resulted in adjusted TVD counts that are less than the TVD counts originally reported by PSP at parks with overnight facilities, but are a more realistic indicator of actual park visitation.

State Park Visitor Segments and Spending Averages

The MGM2 model estimates visitor spending within a set of distinct visitor segments. Prior visitor expenditure studies (e.g., National Park Service) have found that non-local visitors and some overnight visitors have different spending profiles and, thus, different economic impact. For this study, a total of nine state park visitor segments were identified (Figure 1). Park visitor segments were differentiated based upon their use status (day use vs. overnight) and locality (locals, non-locals, non-residents). For the purpose of estimating spending averages per

day/night, the travel party was treated as the spending unit. The TVD counting procedure was also used to estimate average party sizes for day users while the reservation data was used to estimate average party sizes for overnight users on a park to park basis.

Spending associated with visitor parties can be estimated by multiplying the volume of visits of each segment by the average daily spending per party. PSP has limited data on park visitor expenditures; thus, spending averages from comparable state park systems were used for all but two state parks. For this updated analysis, actual spending data was assessed at Hickory Run and Lehigh Gorge State Parks through visitor surveys. For these two parks, actual spending expenditures (rather than general spending averages from other comparable state park systems) were used to generate impact at these two locations. Future studies (PA-VUM) will continue to gather actual spending data in order to improve future economic impact estimates. Nevertheless, state park visitor spending averages have been reasonably consistent across several studies from multiple states (Stynes, 2005). Therefore, average estimates from prior studies are a reasonable substitute for typical state park trip expenditures in Pennsylvania, until better data becomes available.

<i>Day User Segments</i>	
L-Day User	Pennsylvania Resident, Local Day Users (living within 50 miles of the park)
NL- Day User	Pennsylvania Resident, Non-Local Day Users (living more than 50 miles from the park)
NR- Day User	Non-Resident, Non-Local Day Users (living more than 50 miles from the park and residing out of state)
<i>Overnight User Segments</i>	
Cabin R	Pennsylvania Resident, Overnight Cabin Users
Yurt R	Pennsylvania Resident, Yurt/Cottage Users
Camp R	Pennsylvania Resident, Campsite Users
Cabin NR	Non-Resident, Overnight Cabin Users
Yurt NR	Non-Resident, Yurt/Cottage Users
Camp NR	Non-Resident, Campsite Users

Figure 1. A Classification of Pennsylvania State Park Visitors: Nine Distinct Segments

The statewide averages for parks were also adjusted for individual parks based on nearby spending opportunities. For example, spending profiles for high expenditure parks were set at 25% above the state averages and spending profiles for low expenditure parks were set at 75% of the state average. By way of example, Ohiopyle State Park was assigned high spending, Bald Eagle State Park was assigned the average spending, and Penn Roosevelt State Park was assigned low spending.

A classification of parks by high, average, and low spending is listed in column 2 of Table 10. Park visitation data was unavailable for 8 parks. As a result, economic impact data provided in this report was based on 109 parks, rather than the entire 117 parks within the PSP system. A summary of spending averages for the nine state park visitor segments is provided in Table 1. This table provides a detailed breakdown of spending across nine expenditure categories for each visitor segment. In general, a portion of NL and NR Day Users were assumed to incur lodging expenses outside of state parks (5% of NL Day Users and 10% of NR Day Users).

In terms of average spending patterns, local day users spend the least amount of money (\$36.78) and resident and non-resident cabin users spend the most money (\$172.60 and \$192.60, respectively). From these average spending totals (see bottom of Table 1), high and low adjustments were made depending on the park. Low spending parks were assigned 75% of average expenditures while high spending parks were assigned 125% of average expenditures. For example, for local day users at high spending parks, the average expenditure was adjusted up 25% from \$36.78 to \$45.98. Adjustments for overnight visitors were based on all categories except for overnight accommodations (motel, hotel, cabin, B&B, and camping fees) because these expenditures did not vary by the spending opportunities surrounding the park.

Survey data at Hickory Run and Lehigh Gorge State Parks indicated slightly different spending profiles by segment, but these averages were not drastically different from prior high estimates used at these parks in the prior economic impact study. However, their segment composition was slightly different with a higher percentage of non-local day users and non-resident day users and a lower percentage of local day users. A summary of spending profiles for these two state parks is provided in Table 2.

Table 1. 2010 Average Visitor Spending Profiles by Segment (\$ per party per day/night)

CATEGORY	Day Users			Overnight Users					
	L-Day User	NL-Day User	NR-Day User	Cabin R	Yurt R	Camp R	Cabin NR	Yurt NR	Camp NR
Motel, hotel cabin or B&B	0.00	2.99	5.98	99.00	44.00	0.00	119.00	51.00	0.00
Camping fees	0.00	0.19	0.37	0.00	0.00	20.00	0.00	0.00	37.00
Restaurants & bars	10.94	21.88	21.88	21.88	21.88	10.94	21.88	21.88	10.94
Groceries, take-out food/drinks	6.44	10.73	10.73	16.09	16.09	18.23	16.09	16.09	18.23
Gas & oil	9.02	20.05	20.05	20.05	20.05	20.05	20.05	20.05	20.05
Admissions & fees	2.13	4.25	4.25	3.19	3.19	3.19	3.19	3.19	3.19
Clothing	2.01	4.02	4.02	3.01	3.06	4.02	3.01	3.06	4.02
Sporting goods	2.04	3.06	3.06	3.06	3.06	5.10	3.06	3.06	5.10
Souvenirs and other expenses	4.21	6.31	6.31	6.31	6.31	6.31	6.31	6.31	6.31
Average Spending Total	36.78	73.48	76.66	172.60	117.60	87.84	192.60	124.60	104.84
High Spending	45.98	91.85	95.82	190.99	135.99	104.80	210.99	142.99	121.80
Low Spending	27.59	55.11	57.49	154.20	99.20	70.88	174.20	106.20	87.88

* Marina, ski, golf, and whitewater data included on a park-to-park basis

Table 2. 2010 Hickory Run & Lehigh Gorge SP Spending by Segment (\$ per party per day/night)

State Park Avg. Spending	Day Users			Overnight Users*			
	L-Day User	NL-Day User	NR-Day User	Yurt R	Camp R	Yurt NR	Camp NR
Lehigh Gorge	27.74	142.84	82.10	N/A	N/A	N/A	N/A
Hickory Run*	48.50	131.09	155.20	135.99	104.80	142.99	121.80

* Overnight spending based upon generic high spending category estimates; Day use spending based upon 2011 survey data

** Yurt/Cottage Users represent the same spending category.

Economic Multipliers

Most economic impact studies assess the direct effects of visitor spending. Direct effects capture the impact of businesses selling goods and services directly to visitors. In addition to these direct effects, numerous studies also report secondary effects from visitor spending through multipliers. The concept of a multiplier is that an initial amount of spending (in this case by state park visitors) leads to added spending and results in an economic contribution greater than the initial amount. These secondary effects assess the impacts on backward linked industries that sell goods or services to tourism-related businesses (indirect effects) and the impacts from household spending of income earned from visitor spending (induced effects). Direct effects occur primarily in the lodging, restaurants, amusements, retail stores, and transportation sectors, while secondary effects are scattered across a broader set of industries including utilities, banking, business services, and retail trade.

For studies that assess secondary effects, the most commonly cited multiplier is the Type II sales multiplier, which indicates the degree of interdependence of sectors within the economy. For example, the statewide multiplier for the hotel sector in Pennsylvania is 1.86, indicating that \$0.86 in secondary sales results from every dollar of direct hotel sales. In this study, input-output models were estimated for the Commonwealth of Pennsylvania and for local regions around each park using the IMPLAN system. IMPLAN is a widely used regional economic modeling system originally developed by the USDA Forest Service. Multipliers for key tourism related sectors were extracted from the IMPLAN models and entered into the MGM2 spreadsheet model.

The statewide multiplier (1.82) based on IMPLAN data was used to assess statewide impacts of the entire PSP system. For parks within each of the four PSP regions, multipliers were used based on data from the 7 tourism regions recognized within the Commonwealth. Each park was assigned multipliers for the tourism region in which it was located. Tourism region multipliers were estimated using 2008 county data and then adjusting this data to 2010 based on changes in national ratios and CPI's from 2008-2009. Regional multipliers used for the regional and park-specific analyses were smaller than the statewide multiplier. As a result, the reported additive economic impact of the four state park regions is less than the total impact reported for the overall state park system. Since the vast majority of goods bought by visitors are not manufactured in Pennsylvania, only the retail margins on purchases of groceries, fuel, and other retail purchases are included in the impact calculations. This omits a small number of jobs in

petroleum refining and other manufacturing sectors. Table 2 summarizes the multipliers used for each of the seven tourism regions of the state and the statewide multiplier using the hotel and restaurant sectors to illustrate.

Economic ratios and multipliers for key tourism-related sectors were used to convert spending into associated jobs and income in the region and to estimate secondary effects. Economic impacts can be estimated for local regions around the parks or statewide. In this study, impacts were estimated for the system as a whole, the four different park regions, and for each state park.

Table 3. 2010 Multipliers for PA Tourism Regions; Hotel and Restaurant Sectors Only

Region	Hotels and motels			Food services and drinking places		
	Sales I	Sales II	Direct Jobs/ Million	Sales I	Sales II	Direct Jobs/ Million Sales
Commonwealth of Pennsylvania	1.4	1.86	11.45	1.43	1.88	18.43
Pennsylvania's Great Lakes	1.25	1.49	16.53	1.23	1.45	21.06
Pittsburgh & Its Countryside	1.4	1.86	11.51	1.41	1.86	18.98
Pennsylvania Wilds	1.2	1.4	16.53	1.14	1.36	21.35
The Alleghenies & Her Valleys	1.25	1.49	14.09	1.24	1.46	20.71
Dutch Country Roads	1.33	1.65	12.57	1.35	1.67	19.13
Northeast Mountains	1.29	1.61	12.74	1.27	1.56	19.58
Philadelphia & the Countryside	1.41	1.87	9.44	1.42	1.88	16.93

Basic equations for estimating impacts at a Park, Region, and System level are:

Economic impacts for each individual State Park (e.g., Bald Eagle, Lackawanna, Ohiopyle) =

Party nights/days * Spending per night/day * Multiplier of its tourism region

Economic impacts for each PSP Region (e.g. Regions 1, 2, 3, and 4) =

Sum of spending across all parks within each PSP Region.

Economic impacts for the entire State Park system =

Sum of spending across all parks within the PSP system, applied to the statewide multipliers.

Economic Significance vs. Economic Impact

There are several ways to assess the economic contribution of park visitors. These depend on which visitors and what types of spending are included in the analysis as well as the regional scope of those impacts. Some studies include all spending of all visitors on their trips, including spending at home, en/route, and at the destination, while others restrict the analysis to spending near the park. Some economic impact studies exclude spending of visitors who live in the local

area because they are not contributing “new dollars” to the economy, while other studies limit the spending attributed to park visits to trips where the park visit was the primary purpose. A true “impact” analysis attempts to identify spending that would be lost to the state or local region in the absence of the parks. Such a “with versus without” analysis requires considerable knowledge of trip purposes and potential substitution behaviors to assess which spending would be lost. Economic studies may stop at measures of visitor spending, report just the direct economic effects of this spending, or also include secondary/multiplier effects.

In the present study, the direct and secondary effects of spending for two alternative impact scenarios are presented. These estimates are based upon existing data (e.g., visitor counts, average expenditures, multipliers) from Pennsylvania and other comparable state park systems.

- **Statewide and Regional Significance:** The statewide economic significance covers the contribution of all visitor trip spending to the state economy. It measures all economic activity in the state associated with park visitor spending. The regional economic significance restricts all visitor spending away from home in the local area (a 50 mile radius). When estimating secondary effects, however, this spending is allowed to circulate within the larger tourism region in which the park was located.

- **Statewide and Regional Impact:** Local impacts measure the likely loss in economic activity within the local region in the absence of the park. This analysis excludes spending by local residents and focuses on “new” money coming into the state/region from the outside by excluding the spending of local residents. For individual parks, spending of visitors from the immediate vicinity of the park (50 miles) was excluded. For the statewide impact, only the spending of out-of-state visitors was included.

For each of these scenarios, total visitor spending is reported as well as the direct and total (direct + secondary) economic effects of spending in terms of sales, jobs, income, and value added at a statewide and state park region level.

- **Sales** represent the sales of businesses in the region with the exception that sales in the retail trade sector are only the retail margins on retail sales and therefore exclude the cost of goods sold. Wholesale margins that accrue to Pennsylvania firms are included at the state level, but are excluded when estimating impacts on local regions.

- **Jobs** are not full time equivalents but include full and part time jobs, consistent with employment estimates of the Bureau of Labor Statistics.

- **Income** is measured as labor income which includes wages and salaries, payroll benefits, and income of sole proprietors.

- **Value added** includes labor income as well as profits and rents and indirect business taxes. Value added is the preferred measure of the contribution of an activity or industry to gross state product as it measures the value added by that activity/industry net of the costs of all non-labor inputs to production.

RESULTS

Section One: Statewide Analyses

Impacts of visitor spending are estimated first, followed by the state and local economic contributions. Visitor spending impacts are estimated with the MGM2 model. Estimates of the three primary inputs to the MGM2 model (visits, spending averages and multipliers) are discussed first, followed by estimates of spending and results for the various impact scenarios.

Park Visitation, Visitor Segments, and Spending

The number of park visitors in 2010 was estimated from vehicle counts at state parks (Pennsylvania State Parks, 2011) and from overnight reservation data (Infospherix, 2010). After adjustments were made for park re-entries, there were 37,871,925 individual visitors representing 14,766,652 parties (vehicles) in 2010 (Table 4). Across the PSP system (the 109 parks for which data were available), 98% of the visitors were classified as day users (vs. users who stayed overnight in the park). To apportion day users into three segments (L-Day Users, NL-Day Users, NR-Day Users), prior visitor surveys were reviewed to estimate percentages. The reader is cautioned that these estimates and assumptions were derived from a limited survey of six state parks and it is likely that this distribution could vary significantly from park to park. Among day users, locals accounted for 56% and non-locals accounted for 28% of the usage. Furthermore, Pennsylvania non-residents made up 16% of day users. Of the 492,507 overnight visitors, the largest percent (66% of residents and 18% of non-residents) were staying at a campsite (Table 4). Two percent or less of non-residents stayed overnight in cabins or yurts. Similarly, only 2.7% of residents stayed overnight in yurts (Table 4).

Table4. 2010 Adjusted Statewide Visitation Statistics by Segment

Segment	Total Visitors	%	Total Spending (\$000)	%
		% Day Users		
L-Day User	20,932,474	56%	307,605	38%
NL-Day User	10,466,237	28%	310,766	38%
NR-Day User	5,980,707	16%	190,245	24%
Day User Subtotal	37,379,418		808,616	
		% Overnight Users		
Cabin R	52,237	11%	8,122	20%
Yurt R	13,414	2.7%	287	1%
Camp R	325,632	66%	23,392	57%
Cabin NR	8,380	2%	2,136	5%
Yurt NR	3,052	0.6%	40	< 1%
Camp NR	89,792	18%	7,245	18%
Overnight User Subtotal	492,507		41,222	
Grand Totals	37,871,925		849,838*	

* Includes \$9.5 million extra in additional visitor spending associated with marinas, golf, whitewater, ski.

In addition to providing visitation totals by segment, Table 4 lists segment-specific and total visitor spending. Total spending of all park visitors (including extra spending on marinas, whitewater, and golf) was \$849.8 million (Table 4). Day users spent \$808.6 million and overnight users spent \$41.2 million during their visits (Table 4). Future surveys at 30 Pennsylvania State Parks will continue to validate and adjust the representation of these visitor segments, whether the state park visit was the primary trip purpose, the type of accommodation used (both in state parks and locally), and actual visitor trip expenditures across a wider variety of parks within each region.

Statewide Economic Significance

The overall contribution of visitor trip spending to the Pennsylvania economy was:

- **\$1.145 billion in sales**
- **12,630 jobs**
- **\$397.7 million in wage and salary income**
- **\$649 million in value added effects**

Direct effects are \$227.2 million in wage/salary income and 9,435 jobs. The \$628.6 million in direct sales generates another \$517 million in secondary sales for a total sales impact of \$1.145 billion. An additional 3,195 jobs and \$170.6 million in wages/salaries are supported through secondary effects as the visitor spending circulates within Pennsylvania's economy (Table 5).

Table 5. 2010 Statewide Economic Significance of Visitor Spending

Sector/Spending category			Labor Income	Value Added
Direct Effects	Sales \$000's	Jobs	\$000's	\$000's
Motel, hotel cabin or B&B	33,547	345	10,434	18,601
Camping fees	9,238	107	4,561	4,849
Restaurants & bars	243,441	4,366	88,435	124,585
Amusements	54,775	999	21,538	32,947
Marina	2,294	30	1,272	1,535
Grocery stores	33,649	624	17,368	28,167
Gas stations	48,641	780	24,736	40,500
Other retail	72,443	1,528	37,361	60,818
Wholesale trade	50,126	550	15,171	34,595
Local Production	80,508	104	6,301	13,966
Total Direct Effects	628,661	9,435	227,177	360,562
Secondary effects	517,059	3,195	170,586	288,428
Total Effects	1,145,721	12,630	397,763	648,991

Statewide Economic Impact

When spending by all Pennsylvanians (both local and non-local visitors) is omitted, it is possible to determine the impact of out-of-state visitors to Pennsylvania's economy. For the purpose of this analysis, survey and reservation data were used to determine the portion of out-of-state visitors for each state park. Using these estimates, sales, jobs, labor income, and value added from out-of-state visitor spending are provided in Table 6. Here, the sales impact was \$274.2 million, total jobs created were 2,976, labor income was \$94.6 million, and value added contributions were \$154.5 million (Table 6).

Table 6. 2010 Statewide Economic Impact of Visitor Spending (Out-of-State Visitors Only)

Sector/Spending category				
Direct Effects	Sales \$000's	Jobs	Labor Income \$000's	Value Added \$000's
Motel, hotel cabin or B&B	15,863	163	4,934	8,796
Camping fees	3,353	39	1,656	1,760
Restaurants & bars	55,283	991	20,083	28,292
Amusements	12,458	227	4,899	7,494
Marina	528	7	292	353
Grocery stores	7,099	132	3,664	5,942
Gas stations	11,456	184	5,826	9,539
Other retail	15,099	318	7,788	12,677
Wholesale trade	10,973	120	3,321	7,573
Local Production	18,257	22	1,327	3,036
Total Direct Effects	150,368	2,203	53,789	85,461
Secondary effects	123,783	773	40,834	69,044
Total Effects	274,152	2,976	94,623	154,506

Section Two: Regional Analyses

Park Visits by Visitor Segment and Region

A comparison of park visitation by Region indicates that Region 2 received the most visitors at 5,568,595 followed closely by Region 4 at 4,913,545 (Table 7). Day use was highest in Region 2 and Region 4 attracted the highest number of overnight users who stayed at the park (Table 7). Of these segments, day use, non-resident visitors typically spend the most during their trip because they tend to stay overnight in local accommodations. Again, the reader is reminded that the figures provided in Table 7 are based upon adjusted PSP visitation statistics, which correct for park re-entries.

Table 7. 2010 Party Visits by Segment and State Park Region

Party Days/Nights		State Park Regions			
Segment	Region 1	Region 2	Region 3	Region 4	Total
L-Day Users	756,863	3,068,159	1,540,356	2,615,919	7,981,297
NL-Day User	378,432	1,534,080	770,178	1,353,580	4,036,269
NR-Day User	216,247	876,617	440,102	835,480	2,368,445
Total Day Users	1,351,542	5,478,855	2,750,635	4,804,980	14,386,012
R - Overnight	65,980	66,407	86,768	84,714	303,869
NR - Overnight	10,176	23,332	19,412	23,851	76,772
Total Overnight	76,156	89,740	106,180	108,565	380,641
Grand Total	1,427,697	5,568,595	2,856,815	4,913,545	14,766,652

Total Visitor Expenditures by Park Region

Table 8 illustrates total visitor expenditures for the 4 Pennsylvania State Park Regions. Across the entire Pennsylvania State Park system, park visitors spent \$849.8 million on trips in 2010. These expenditures were largely a function of the visitation levels and spending opportunities provided near the parks in each Region. Combined, Regions 2 and 4 accounted for 73% of the total visitor spending. Visitor expenditures were approximately \$345 million for Region 2, \$286 million for Region 4, \$166 million for Region 3, and \$72 million for Region 1 (Table 8). Visitor spending by category was also calculated. Restaurants & bars and gas & oil represented the largest percentage of visitor spending, followed by groceries and take out food/drinks. The smallest percentage of visitor spending was associated with marinas and camping fees.

Table 8. 2010 Total Visitor Spending by Park Region

Total Spending in (\$000's)		State Park Regions			
By Category	Region 1	Region 2	Region 3	Region 4	Total
Motel, hotel cabin or B&B	3,351	13,330	6,133	17,060	39,874
Camping fees	1,551	2,348	2,540	3,879	10,318
Restaurants & bars	19,817	98,617	46,141	81,239	245,814
Groceries, take-out food/drinks	11,195	53,153	25,712	44,192	134,252
Gas & oil	18,028	87,677	41,726	69,620	217,051
Marina	215	1,178	783	118	2,294
Amusements ^a	4,340	22,326	11,128	17,400	55,195
Clothing	3,735	18,235	8,667	13,943	44,581
Sporting goods	3,310	15,832	7,635	12,607	39,384
Souvenirs and other expenses	<u>6,595</u>	<u>32,316</u>	<u>15,305</u>	<u>25,700</u>	<u>79,916</u>
Total Spending	72,137	345,014	165,769	285,760	868,679
Percent	8%	40%	19%	33%	100%

^a includes extra expenses for skiing & whitewater trips

Visitor Segment Spending by State Park Region

Table 9 illustrates spending by the nine visitor segments across the 4 State Park Regions. Day user segments spent the most with combined expenditures of \$818.8 million. Overnight visitors within the State Parks spent a combined \$40.4 million. Of those visitors who stayed overnight within the State Parks, resident campers spent the most at \$22.9 million. PA resident cabin users spent \$8.1 million and campsite visitors who were non-residents spent \$6.96 million (Table 9).

Table 9. 2010 Total Visitor Spending by Segment and State Park Region

Total Spending (\$000's)		State Park Regions			
By Segment	Region 1	Region 2	Region 3	Region 4	Total
L-Day User	24,810	127,177	58,524	99,080	309,591
NL-Day User	24,781	127,032	58,457	105,596	315,867
NR-Day User	14,774	75,730	34,850	67,941	193,295
Sub-Total Day User Spending	64,365	329,939	151,831	272,617	818,753
Cabin R	1,574	2,722	1,508	2,323	8,127
Yurt R	194	39	42	13	287
Camp R	4,254	4,871	7,302	6,468	22,895
Cabin NR	229	1,129	289	480	2,127
Yurt NR	18	16	6	0	40
Camp NR	843	2,006	1,941	2,175	6,964
Sub-Total Overnight User Spending	7,112	10,783	11,088	11,459	40,440
Total – All Segments	71,477	340,722	162,919	284,075	859,193
Extra Spending*	660	4,291	2,851	1,685	9,487
Total w/ Extra Spending	72,137	345,014	165,769	285,760	868,679

* Extra spending includes marinas, ski areas, and whitewater activities that were not included in the general profiles but were added in the totals to each park and added up for each region.

Economic Significance of Individual State Park Regions

Tables 10 and 11 illustrate the economic significance and impact of the 4 State Park Regions in terms of sales, jobs, labor income, and value added. Given their higher visitation rates, it is not surprising that Regions 2 and 4 had higher sales, jobs, labor income, and value added estimates than Regions 1 and 3. For example, in terms of economic significance, Region 2 visits resulted in more than \$389.3 million in sales and 5,029 jobs created (Table 10). However, the economic significance of \$64.2 million in total sales and 1,012 jobs derived from park visits to Region 1 was still sizable. Thus, along with parks in Regions 2 and 4, parks within Regions 1 and 3 should be considered economic assets to local community attractions and businesses. Please note that the aggregated total sales, jobs, labor income, and value added reported in Tables 10 and 11 are based upon the aggregated park data. Since this data was estimated from regional tourism multipliers (rather than the larger state multiplier used for the state level analysis), totals do not directly correspond with the totals presented in Tables 5 and 6 of this report.

Table 10. 2010 Regional Economic Significance

Spending Impacts – All Visitors					
	State Park Regions				
Direct Effects	Region 1	Region 2	Region 3	Region 4	Total
Sales (\$000's)	45,285	237,042	106,317	206,294	594,938
Jobs	856	3,974	1,931	3,049	9,810
Labor Income (\$000's)	17,215	85,343	41,070	75,794	219,423
Value Added (\$000's)	26,631	134,796	63,928	120,345	345,700
Total Effects					
Sales (\$000's)	64,182	389,289	165,019	353,192	971,683
Jobs	1,012	5,029	2,372	3,960	12,372
Labor Income (\$000's)	23,360	135,069	60,440	124,918	343,786
Value Added (\$000's)	36,791	219,421	96,186	203,420	555,818

Table 11. 2010 Regional Economic Impact

Spending Impacts – Non-Local Residents					
	State Park Regions				
Direct Effects	Region 1	Region 2	Region 3	Region 4	Total
Sales (\$000's)	30,345	152,538	70,065	137,381	390,329
Jobs	564	2,523	1,253	2,002	6,343
Labor Income (\$000's)	11,437	54,445	26,907	50,082	142,870
Value Added (\$000's)	17,639	85,921	41,748	79,383	224,691
Total Effects					
Sales (\$000's)	43,056	250,953	108,851	234,356	637,216
Jobs	670	3,210	1,547	2,615	8,042
Labor Income (\$000's)	15,568	86,568	39,698	82,449	224,282
Value Added (\$000's)	24,473	140,621	63,067	134,136	362,297

Section Three: Park Specific Analyses

Visitor Segment Spending by Individual Park

In addition to regional comparisons, economic significance and impact is also reported for each individual State Park. Economic significance and impact are influenced heavily by overall visitation, spending opportunities at individual parks and in their surrounding communities, and the percent of park users who visit from outside each park's home range (e.g., those who travel more than 50 miles to visit the park and who stay overnight in the local area). Tables 12 through 15 provide summaries of individual park visitation by user segment, the assigned spending category level (low, average, high), and visitors' total park spending at each park within each of the four PSP regions. Parks that were associated with the highest estimated visitor spending were Pymatuning, Presque Isle, Prince Gallitzin, and Ohiopyle State Parks at \$83.8, \$76.9, \$48.6, and \$34.9 million, respectively (Tables 13 and 14). Detailed visitor spending by industry sector, spending by different user segments, and direct/total effects for economic significance and impact (non-local spending) are provided in these park-specific tables. Further economic data for each individual State Park are also provided in a separate file available on the DCNR Bureau of State Parks website.



Table 12. 2010 Region 1 Spending Totals by Park and Segment (Spending in \$000)

Park	Tourism Region	State Park Region	Total party days/nights	Spending Category	Day Users Spending	ON Users Spending	Total Park Spending	Signif. of Sales	Signif. of Jobs	Impact of Sales	Impact of Jobs
BALD EAGLE	Alleghenies	1	192,193	Average	9722	954	10676	9913	152	6614	100
BENDIGO	Wilds	1	20,963	Low	840	0	840	705	12	440	7
BLACK MOSHANNON	Alleghenies	1	118,016	Average	5912	936	6848	6379	97	4373	65
CHAPMAN	Wilds	1	44,378	Low	1657	228	1885	1602	26	1080	17
CHERRY SPRINGS	Wilds	1	25,935	Low	1015	47	1062	895	15	575	9
COLTON POINT	Wilds	1	31,039	Average	1638	36	1674	1405	23	889	14
DENTON HILL	Wilds	1	51,271	Average	2740	0	2740	2913	48	2049	34
ELK	Wilds	1	9,762	Low	391	0	391	335	6	212	3
HILLS CREEK	Wilds	1	44,359	Average	2002	818	2821	2501	40	1870	29
HYNER RUN	Wilds	1	20,211	Low	755	121	876	754	12	516	8
HYNER VIEW	Wilds	1	21,776	Low	873	0	873	732	12	457	7
KETTLE CREEK	Wilds	1	42,085	Low	1535	272	1807	1535	25	1052	17
KINZUA BRIDGE	Wilds	1	25,592	Low	1026	0	1026	860	14	537	9
LEONARD HARRISON	Wilds	1	73,477	Average	3822	182	4004	3366	55	2162	35
LITTLE PINE	Wilds	1	39,121	Average	1761	552	2312	1952	32	1397	22
LYMAN RUN	Wilds	1	37,690	Low	1445	121	1566	1327	22	872	14
MCCALL'S DAM	Alleghenies	1	3,105	Low	124	0	124	112	2	70	1
MILTON	Alleghenies	1	72,159	Average	3856	0	3856	3480	54	2171	33
MT. PISGAH	NE Mtns.	1	28,460	Low	1141	0	1141	1120	16	699	10
OLE BULL	Wilds	1	32,807	Low	1122	374	1496	1294	21	940	15
PARKER DAM	Wilds	1	58,378	Low	1881	1147	3027	2778	43	2186	34
PATTERSON	Wilds	1	8,196	Low	327	2	330	277	5	173	3
POE PADDY	Alleghenies	1	4,022	Low	64	176	240	231	3	209	3
POE VALLEY	Alleghenies	1	20,944	Low	706	252	959	892	13	652	10
R.B. WINTER	Alleghenies	1	63,365	Low	2298	471	2769	2554	39	1774	27
RAVENSBURG	Wilds	1	11,390	Low	456	0	456	383	6	239	4
REEDS GAP	Alleghenies	1	13,540	Average	700	40	740	670	10	432	7
S.B. ELLIOT	Wilds	1	27,692	Low	1068	147	1214	1064	17	727	12
SAND BRIDGE	Alleghenies	1	7,940	Low	318	0	318	287	4	179	3
SHIKELLAMY	Alleghenies	1	161,688	Average	8640	0	8640	7850	122	4918	75
SINNEMAHONING	Wilds	1	84,246	Low	3293	156	3450	2909	48	1871	30
SIZERVILLE	Wilds	1	30,964	Low	1199	79	1278	1078	18	700	11
U. PINE BOTTOM	Wilds	1	932	Low	37	0	37	31	1	20	0
REGION 1 TOTAL	-	1	1,427,696	-	64,365	7,112	71,477	64,182	1,012	43,056	670

Table 13. 2010 Region 2 Spending Totals by Park and Segment (Spending in \$000)

Park	Tourism Region	State Park Region	Total party days/nights	Spending Category	Day Users Spending	ON Users Spending	Total Park Spending	Signif. of Sales	Signif. of Jobs	Impact of Sales	Impact of Jobs
CLEAR CREEK	Wilds	2	47,600	Average	2088	1097	3185	2886	45	2228	34
COOK FOREST	Wilds	2	207,571	Average	10325	1561	11886	10161	165	6908	111
JENNINGS EE	Pittsburgh	2	29,036	Low	1164	0	1164	1569	17	977	11
KEYSTONE	Pittsburgh	2	161,811	Average	8278	778	9056	12316	135	8105	88
KOOSER	Pittsburgh	2	36,043	Low	1375	222	1597	2213	24	1513	16
LAUREL HILL	Pittsburgh	2	124,133	Average	6193	765	6958	9418	104	6268	68
LAUREL MOUNTAIN	Pittsburgh	2	38,235	Average	2043	0	2043	2755	31	1715	19
LAUREL RIDGE	Alleghenies	2	51,731	Low	2073	0	2073	1871	29	1168	18
LAUREL SUMMIT	Pittsburgh	2	10,036	Low	402	0	402	542	6	338	4
LINN RUN	Pittsburgh	2	74,898	Low	2919	325	3244	4475	49	2990	32
M. K. GODDARD	Great Lakes	2	128,538	Average	6869	0	6869	6485	98	4092	61
MCCONNELL'S MILL	Pittsburgh	2	287,258	Average	15350	0	15350	20697	230	12888	142
MORaine	Pittsburgh	2	573,941	Average	30511	567	31078	42740	473	27218	298
OHIO PYLE	Pittsburgh	2	513,395	High	33454	1426	34880	53427	604	36408	411
OIL CREEK	Great Lakes	2	56,485	Low	2264	0	2264	2106	32	1317	20
POINT	Pittsburgh	2	523,552	Average	27977	0	27977	37722	419	23489	258
PRESQUE ISLE	Great Lakes	2	1,151,513	High	76917	0	76917	72232	1089	45438	679
PYMATUNING	Great Lakes	2	1,231,926	High	80792	2817	83608	78352	1178	50208	748
RACCOON CREEK	Pittsburgh	2	204,329	High	13047	1145	14192	19234	212	12597	137
RYERSON STATION	Pittsburgh	2	21,658	Low	828	81	909	1236	14	815	9
YELLOW CREEK	Pittsburgh	2	94,904	Average	5071	0	5071	6852	76	4272	47
REGION 2 TOTAL	-	2	5,568,593	-	329,940	10,783	340,722	389,289	5,029	250,953	3,210

Table 14. 2010 Region 3 Spending Totals by Park and Segment (Spending in \$000)

Park	Tourism Region	State Park Region	Total party days/nights	Spending Category	Day Users Spending	ON Users Spending	Total Park Spending	Signif. of Sales	Signif. of Jobs	Impact of Sales	Impact of Jobs
BLUE KNOB	Alleghenies	3	203,464	Low	8075	189	8264	10118	157	7378	114
BOYD BIG TREE	Dutch	3	15,608	Low	626	0	626	674	9	419	6
BUCHANAN'S B'PL	Dutch	3	19,045	Low	763	0	763	823	11	511	7
CALEDONIA	Dutch	3	119,096	Average	5931	794	6726	7888	105	5466	72
CANOE CREEK	Alleghenies	3	95,937	Low	3783	245	4027	3727	57	2444	37
CODORUS	Dutch	3	441,243	Average	22951	1094	24046	26762	355	17391	228
COLONEL DENNING	Dutch	3	26,898	Low	992	157	1148	1252	17	847	11
COWANS GAP	Alleghenies	3	207,630	Average	10410	1327	11737	10740	165	7208	109
FOWLER'S HOLLOW	Dutch	3	7,569	Average	359	77	435	472	6	325	4
GIFFORD PINCHOT	Dutch	3	262,570	High	16291	2232	18523	20159	266	13508	176
GREENWOOD FURN.	Alleghenies	3	96,357	Low	3694	302	3996	3629	56	2375	36
JOSEPH E. IBBERSON C.	Dutch	3	3,950	Low	158	0	158	171	2	106	1
KINGS GAP EE	Dutch	3	29,152	Low	1168	0	1168	1259	17	782	10
LITTLE BUFFALO	Dutch	3	108,309	Average	5655	250	5904	6395	85	4086	54
MONT ALTO	Dutch	3	10,162	Low	407	0	407	439	6	273	4
PENN ROOSEVELT	Alleghenies	3	10,261	Low	395	30	425	386	6	252	4
PINE GROVE FURN.	Dutch	3	201,669	Average	10419	632	11052	11969	159	7715	102
PRINCE GALLITZIN	Alleghenies	3	710,484	High	45783	2866	48649	44387	685	28853	440
SAMUEL LEWIS	Dutch	3	44,661	Low	1790	0	1790	1929	26	1198	16
SHAWNEE	Alleghenies	3	121,583	Average	6094	705	6799	6180	95	4112	62
SUSQUEHANNOCK	Wilds	3	24,957	Average	1334	0	1334	1118	18	698	11
TROUGH CREEK	Alleghenies	3	31,639	Average	1589	186	1775	1617	25	1078	16
WARRIORS PATH	NE Mtns.	3	21,365	Low	856	0	856	840	12	524	7
WHIPPLE DAM	Alleghenies	3	43,207	Average	2309	0	2309	2084	32	1301	20
REGION 3 TOTAL	-	3	2,856,816	-	151,831	11,087	162,918	165,019	2,372	108,851	1,547

Table 15. 2010 Region 4 Spending Totals by Park and Segment (Spending in \$000)

Park	Tourism Region	Region	Total party days/nights	Spending Category	Day Users Spending	ON Users Spending	Total Spending	Signif. of Sales	Signif. of Jobs	Impact of Sales	Impact of Jobs
ARCHBALD POTHOLE	NE Mtns.	4	14,465	Low	580	0	580	569	8	355	5
BELTZVILLE	NE Mtns.	4	223,047	Average	11919	0	11919	11701	166	7300	102
BIG POCONO	NE Mtns.	4	58,848	Average	3145	0	3145	3389	48	2228	31
DELAWARE CANAL	Philadelphia	4	252,780	Low	10131	0	10131	13703	136	8528	84
EVANSBURG	Philadelphia	4	194,389	High	12984	0	12984	19734	200	13102	132
FORT WASHINGTON	Philadelphia	4	215,249	Average	11502	0	11502	15559	154	9683	95
FRANCES SLOCUM	NE Mtns.	4	228,529	High	14935	533	15468	15193	215	9679	135
FRENCH CREEK	Philadelphia	4	334,185	High	21221	1992	23214	31523	310	20683	200
GOULDSBORO	NE Mtns.	4	62,163	Average	3322	0	3322	3262	46	2035	29
HICKORY RUN	NE Mtns.	4	115,278	High	10482	1355	11838	14842	177	13333	157
JACOBSBURG EE	Philadelphia	4	75,934	Average	4058	0	4058	5489	54	3416	33
LACKAWANNA	NE Mtns.	4	124,887	Average	6442	406	6847	6754	95	4376	61
LEHIGH GORGE	NE Mtns.	4	147,977	High	11515	0	11515	15465	206	14519	192
LOCUST LAKE	Alleghenies	4	57,246	Average	2301	1275	3576	3269	49	2488	37
MARSH CREEK	Philadelphia	4	340,771	Average	18210	0	18210	24672	245	15370	151
MEMORIAL LAKE	Dutch	4	52,242	Average	2792	0	2792	3015	40	1875	25
NESCOPECK	NE Mtns.	4	37,434	Average	2000	0	2000	1963	28	1225	17
NESHAMINY	Philadelphia	4	334,050	Average	17851	0	17851	24146	240	15027	147
NOCKAMIXON	Philadelphia	4	379,433	Average	20167	361	20528	27939	276	17637	172
NOLDE EE	Philadelphia	4	41,966	Low	1682	0	1682	2275	23	1416	14
PROMISED LAND	NE Mtns.	4	248,004	Average	12368	1780	14148	14173	197	9607	131
PROMPTON	NE Mtns.	4	10,252	Low	411	0	411	403	6	252	4
RALPH STOVER	Philadelphia	4	79,673	Average	4257	0	4257	5759	57	3584	35
RICKETTS GLEN	NE Mtns.	4	127,921	High	7448	2047	9495	9523	131	6773	92
RIDLEY CREEK	Philadelphia	4	371,542	Average	19854	0	19854	26856	267	16714	164
SALT SPRINGS	NE Mtns.	4	12,539	Low	503	0	503	493	7	308	4
SWATARA	Dutch	4	26,870	Average	1436	0	1436	1548	21	961	13
TOBYHANNA	NE Mtns.	4	116,548	Average	6025	354	6379	6287	89	4062	56
TUSCARORA	Alleghenies	4	61,653	Average	3295	0	3295	2979	46	1861	29
TYLER	Philadelphia	4	465,560	Average	24878	0	24878	33651	334	20943	205
WHITE CLAY CREEK	Philadelphia	4	30,374	Average	1623	0	1623	2195	22	1366	13
WORLDS END	NE Mtns.	4	71,737	Average	3281	1355	4636	4863	65	3652	48
REGION 4 TOTAL	-	4	4,913,546	-	272,616	11,458	284,075	353,192	3,960	234,356	2,615

CONCLUSION

Results of this economic impact analysis illustrate the importance of state park visitor spending to the economy of the Commonwealth and its local regions/communities. At a statewide level, park users spent over \$859 million dollars during their visits, resulting in \$1.145 billion in sales, \$397.8 million in wage/salary income, 12,630 jobs, and \$649 million in value added effects.

Findings from the present study were compared with other recent state park economic impact studies as well as the 1987 PSP economic impact study (Table 14). While the various studies used different methodologies and expenditure categories, and prices change over time, this comparison demonstrates that Pennsylvania's State Park system contributes a considerable amount of economic benefit. The current results show an increase of \$583 million over the \$562 million in total sales reported in the 1987 Pennsylvania State Park economic impact study. The estimate of 12,630 jobs created through state park visitor spending is also higher than estimates from the 1987 and 2008 studies.

By way of comparison with recent economic reports from neighboring states, Pennsylvania's economic significance of \$1.145 billion in sales is more than double that for New Jersey and is on par with the range of New York's State Park system (New York's study reported a range of \$946 million to \$1.9 billion based on low and high estimates of visitor expenditures).

Some previous studies have compared the economic impact or significance of state park systems with the amounts spent to operate them (i.e. money appropriated in state budgets). For example, the previous study of the impact of state parks on Pennsylvania's economy (Strauss & Lord, 1990) stated that, "During 1987, the \$36 million identified with park operations contributed to the fifteen-fold increase in total economic activity realized throughout the state."

The recent study of New York's state park system concluded that the benefits (of the State Park System) exceed the direct costs of maintaining the state parks many times over. The benefit-to-cost ratio was more than 5 to 1 (\$341 million in state government expenditures versus \$1.9 billion in direct output and sales).

For every dollar spent on California State Parks, a 2002 study conservatively estimated that \$2.35 was returned to the California State's General Fund from spending in the local communities. California's operating budget of \$227 million for State Park operations translated to \$6.7 billion in total output and sales, a return of 30:1 on California State Parks expenditures.

All of these comparisons depict a very favorable return on investment for State Park systems. In this study, comparing the income return (value added) from visitor expenditures with reported 2010 calendar year General Fund expenditures of \$52,276,000 demonstrated a favorable return on investment. For every dollar invested in PSP, \$12.41 of income (value added) was returned to Pennsylvania. This return on investment is higher than earlier reported estimates (\$1 to \$7.62 in 2008 and \$1 to \$9.63 in 2009). Maintaining this level of economic impact will require sustaining visitation levels and ensuring that there are spending opportunities within the parks and in the local communities surrounding each park. Future assessments of the PSPs economic

contributions will be improved when new data on park visitor expenditures, travel patterns, and trip purposes become available across a wide variety of parks.

Table 16. Comparison of PA State Parks Economic Data vs. Other Park Systems

Pennsylvania (2010)	▪ \$1.145 billion in total sales (\$628.7 million direct plus \$517.1 million secondary), 12,630 jobs, \$398 million in labor income, \$649 million in value added)
Pennsylvania (2008)	▪ \$818 million in total sales (\$463.7 million direct plus \$354.6 million secondary), 10,551 jobs, \$291 million in labor income, \$465 million in value added)
Pennsylvania (1987)	▪ \$562 million in total sales (\$263 million direct plus \$299 million secondary), 10,000 jobs plus 880 jobs within the Bureau
New Jersey (2004)	▪ 304 million in recreation value from 14.2 million visits ▪ \$347 million in total sales (economic significance) ▪ 7,000 jobs ▪ Estimated value of \$498 million for ecosystem services (healthy forests, air and water quality, etc.), including qualitative assessment of property value enhancement, consumption goods (timber, fish and game, etc.), and non-use values (existence, option, bequest) - no quantitative estimates provided
New York (2009)	▪ Range of \$946 million to \$1.9 billion based on low (\$17) and high (\$35) per person expenditures of 55.7 million state park visitors during 2007/2008 ▪ 20,000 jobs ▪ Also described other benefits attributable to the agency (like New Jersey report)
Minnesota (2002)	▪ \$218 million in visitor trip spending ▪ \$37 million in operations spending ▪ \$3 million in capital expenditures
Arizona (2002)	▪ \$126.4 million (26 state parks)
Michigan (1997)	▪ \$456.4 million in total state park trip spending
Missouri (2002)	▪ \$410 million total spending by state park visitors
North Carolina (2008)	▪ \$80 million (conservative estimate, includes only expenditures of non-local, primary purpose visitors)
Texas (2005)	▪ \$793 million in total sales ▪ 12,000 jobs
California (2002)	▪ \$6.65 billion in total output and new sales resulting from visitor spending ▪ \$2.6 billion visitor spending in local communities (85.2 million visitors) ▪ 100,625 jobs ▪ \$99,607,313 in gross sales and rentals for independently run concessions
Washington (2002)	▪ \$1.2 billion in total direct impact ▪ \$580 million in state park travel spending ▪ 8,000 jobs

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