

THE ECONOMIC AND FISCAL IMPACTS OF VIRGINIA'S STATE PARKS: 2025

Prepared by,
Vincent P. Magnini, Ph.D.
College of Business and Economics
Longwood University

Delivered: February 11, 2026



TABLE OF CONTENTS

Executive Summary	5
Introduction	6
Research Methods	8
Direct Impact Measurement	8
Secondary Impact Measurement	9
Visitation Measurement	10
Measuring Economic Activity vs. Impact	10
Results	12
Visitor Spending	13
Economic Activity and Impact	15
Jobs	17
Employment, Labor Income, Value-Added, and Tax Revenues	19
Economic Impacts of Capital Improvement Spending	30
Economic Impacts of Operational Spending	37
Discussion	39
Investigator Bio	42
Related References and Sources	43
Appendices	46
Appendix A: Map of Virginia State Parks	47
Appendix B: Glossary of Terms	48

COVER PHOTO:

Kiptopeke State Park

Source of image: <https://www.dcr.virginia.gov/state-parks/kiptopeke>

LIST OF TABLES AND FIGURES

TABLE 1: AVERAGE VISITOR SPENDING: PROFILES BY SEGMENT

TABLE 2: VISITOR SPENDING

TABLE 3: ECONOMIC ACTIVITY AND IMPACT OF VIRGINIA STATE PARKS

TABLE 4: JOBS ATTRIBUTED TO VIRGINIA STATE PARKS

TABLE 5: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 1

TABLE 6: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 2

TABLE 7: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 3

TABLE 8: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 4

TABLE 9: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 5

TABLE 10: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 6

TABLE 11: ECONOMIC IMPACTS OF CAPITAL IMPROVEMENTS

TABLE 12: ECONOMIC IMPACTS OF NON-VISITOR SUPPORTED PARK OPERATIONAL SPENDING

FIGURE 1: ECONOMIC RIPPLE EFFECTS

ACKNOWLEDGEMENTS

This study could not have been conducted without the park visitors who completed surveys. Agency management was also very helpful in providing requested information.

CITING THIS REPORT

Magnini, V. (2026). The Economic and Fiscal Impacts of Virginia's State Parks: 2025. Longwood University, College of Business and Economics. Farmville, VA.

Visitors attracted annually to Virginia's State Parks stimulate a significant amount of economic activity throughout the state. This Executive Summary highlights the key findings of the 2025 Virginia State Parks economic impact analyses:

- In 2025, visitors to Virginia's State Parks spent an estimated \$389.59M in the Commonwealth. Approximately 37.6% [\$146.49M] of this spending was by out-of-state visitors.
- The total economic activity stimulated by Virginia State Parks during 2025 was approximately \$611.25M.
- The total economic impact of Virginia State Parks during 2025 was an estimated \$438.60M. Economic impact is a measure of "fresh money" infused into the state's economy that likely would not have been generated in the absence of the park system.
- At the individual park level, economic impacts ranged from \$1.01M to \$54.20M (not including parks under development).
- In 2025, for every \$1 of general tax revenue provided to state parks, \$17.07, on average, was generated in fresh money that likely would not have been produced without the operation of Virginia State Parks.
- Regarding employment, the economic activity stimulated by visitation to Virginia State Parks supported approximately 4,608 jobs in the state during 2025.
- In terms of wages and income, the economic activity spawned by Virginia State Parks was responsible for roughly \$207.53M in wage and salary income in 2025.
- Economic activity created by Virginia State Parks was associated with approximately \$360.17M in value-added effects which is a measure of the park system's contribution to the gross domestic product of the Commonwealth. These effects are especially important at the park-by-park level where most of the impact is retained in the local area.
- Economic activity stimulated by Virginia State Parks generated approximately \$44.86M in state and local tax revenues during 2025. As such, roughly \$1.25 in state and local taxes were generated for every dollar of tax money spent on the park system.

This study estimates the economic activity and impacts that Virginia State Parks create in the Commonwealth's economy. Specific objectives include:

- Assessing the direct and secondary economic activity and impacts of Virginia State Parks on a state-wide level;
- Estimating the direct and secondary economic activity and impacts of each specific park;
- Identifying economic benefits derived from non-residents of Virginia;
- Estimating spending derived from both day-user and overnight-user groups; and
- Modeling the economic benefits derived from park operational spending and capital improvement projects.

Achieving the above objectives, this study details the distribution of travel and recreational impacts of Virginia State Parks among the six park districts. The secondary economic impact items referred to above include indirect effects such as job creation and revenues brought into travel-related businesses. Secondary effects also include induced outcomes such as the increased spending power of those working in tourism, recreation, and supporting industries. In addition, a value-added effect is also calculated which models Virginia State Parks' contribution to the gross domestic product of the Commonwealth.

To fulfill the above objectives, the next section of this report describes the research procedures employed in this study. Subsequently, the study results are presented. Like any research, this economic modeling is subject to limitations which are also described herein. The report ends with a brief discussion section that summarizes key findings and also addresses some societal benefits provided by Virginia State Parks that cannot be included in econometric input-output modeling but are worthy of discussion.

This research is made possible through a memorandum of understanding (MOU) between Longwood University and the Virginia Department of Conservation and Recreation in which Longwood's College of Business and Economics produces annual economic activity reports for Virginia State Parks. As will be explained later in this report, this agreement calls for the

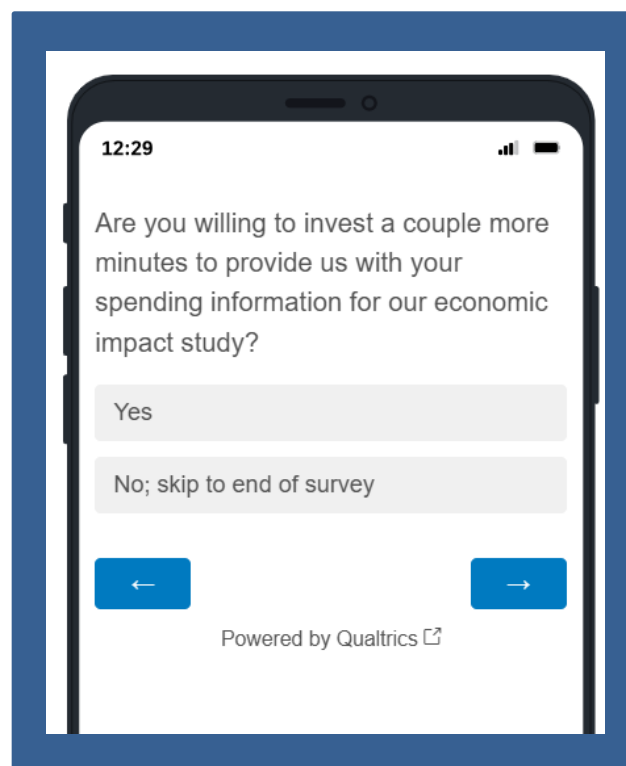
continuous refinement of each economic modeling variable: administering a visitor spending survey to better understand spending patterns by visitor segment; and, incorporation of the most recent IMPLAN multipliers to model how money produces secondary economic effects in Virginia.

While every effort was taken to make this report clear and understandable to a non-economist audience, readers are advised that there is a glossary of terms contained in Appendix B.

{Research methods section begins on next page}

DIRECT IMPACT MEASUREMENT

Economic activity of the state park system is created primarily from three sources: park visitor spending, the parks' operational expenditures (to the degree that they are not derived from visitor revenues, i.e. the tax derived portion of the park budget), and capital investment (again, to the degree that it is not derived from visitor revenues). In terms of visitor spending profiles, customized spending profiles were developed for Virginia State Parks by collecting 3,802 completed spending surveys from park visitors during 2016. Moreover, as displayed in the sidebar on this page, the spending survey was added as a supplemental section on the agency's *Your Comments Count* satisfaction survey throughout the 2024 calendar year. During this timeframe, 4,170 visiting parties provided their spending data which was used to calibrate the economic impact modeling employed in the current study.



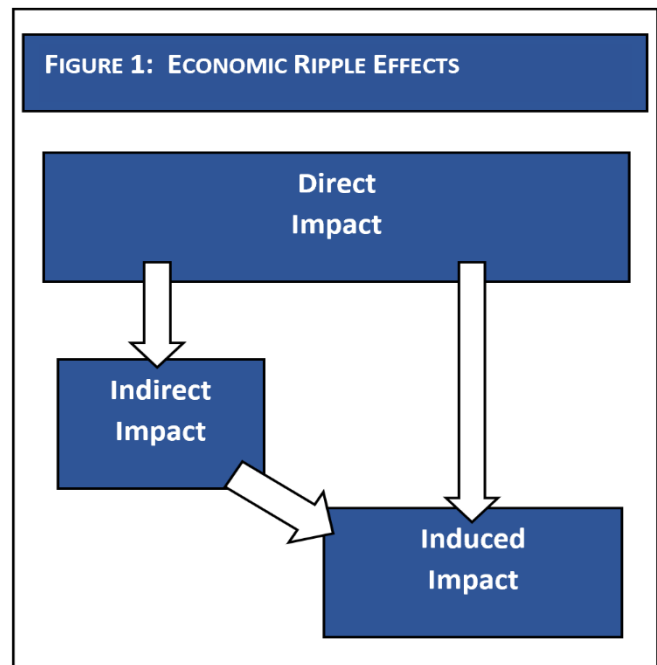
The spending profiles that resulted from the analysis of the survey data and removal of data outliers are listed in Table 1. These profiles represent spending both inside and outside of the park, but within the state. Other than visitors' spending, park operational and capital expenditure amounts were provided by the Virginia Department of Conservation and Recreation (DCR).

{Table 1 is presented on next page}

TABLE 1: AVERAGE VISITOR SPENDING: PROFILES BY SEGMENT (PER PARK DAY) ^a							
DAY VISITORS				OVERNIGHT GUESTS			
SPENDING CATEGORY	LOCAL DAY VISITOR	NON-LOCAL DAY VISITOR	NON-RESIDENT DAY VISITOR	RESIDENT CABIN GUEST	RESIDENT CAMPING GUEST	NON-RESIDENT CABIN GUEST	NON-RESIDENT CAMPING GUEST
OVERALL PER VISITOR:	\$22.77	\$66.01	\$80.80	\$91.58	\$47.18	\$96.87	\$55.70
^a This Table does not include park operational or capital improvement spending.							

SECONDARY IMPACT MEASUREMENT

In addition to assessing the direct impacts of the park system's economic activity, this study also models secondary or ripple effects which comprise economic activity from subsequent rounds of re-spending of money. As shown in Figure 1, there are two types of ripple effects: indirect and induced. Indirect effects entail the changes in sales, income, and jobs of suppliers to entities included in direct impact (Stynes et al., 2000). Induced effects encapsulate the changes in economic activity in the region stimulated by household spending of income earned through direct and indirect effects.



Indirect and induced effects are estimated using economic multipliers. Multipliers reflect the extent of interdependency between sectors in a region's economy and can vary significantly between regions and sectors (Stynes et al., 2000). Here is a simple example of how a multiplier can be interpreted: if the multiplier for the restaurant sector in a given region is 1.37 then it can be estimated that every dollar spent at a restaurant results in 37 cents of secondary economic activity in the region.

The economic multipliers, as well as calculations of job supported, tax revenues generated, and value-added effects were facilitated through the use of IMPLAN software. Specifically, economic multipliers for the Commonwealth of Virginia are commercially available in an economic impact estimation software titled IMPLAN commercialized by MIG, Inc. Therefore, the most recent IMPLAN multipliers were employed in this study to guide the estimation of indirect and induced economic impacts.

VISITATION MEASUREMENT

Park attendance counts were provided to the researcher by the Virginia Department of Conservation and Recreation. The attendance counting practices used in Virginia are in concert with accepted guidelines in the U.S. recreational park industry (see for example: *America's Byways Resource Center 2010*; Bezies, et al., 2011). For instance, automated vehicle counting technology is utilized at many unstaffed park entry points by multiplying vehicle counts by standard occupancy multipliers, with adjustments made for service vehicle traffic and park re-entry traffic. Overnight visitor calculations are made by multiplying site occupancies by standard multipliers, as well as employing information from the centralized reservations system.

The 2016 and 2017 data collection efforts described earlier in this report's Research Methods section proved useful in calibrating attendance multipliers. As such, to tabulate the modeling attendance for this study, per party multipliers of 3.4, 3.2, and 4.2 for day use, camping, and cabins (respectively) were used as model inputs.

MEASURING ECONOMIC ACTIVITY VS. ECONOMIC IMPACT

Economic impact in this study is calculated using the "fresh money" flowing into an area as opposed to including spending by the local residents of the area. Therefore, this current study offers results compartmentalized according to the following categories:

Economic activity – economic output modeling that includes all visitor spending and consequent multiplier effects by both locals and non-locals as well as any money spent by parks that was not supported by visitor spending. Consequently, economic activity figures represent all of the economic activity stimulated by a park location within the state.

- Unadjusted economic activity: economic activity output figures computed using statewide IMPLAN multipliers.

- Adjusted economic activity: calibrated economic activity output figures based upon whether a given park's county(ies) has economic activity above or below the state average.

Economic impact – economic output modeling that includes all visitor spending and consequent multiplier effects by 1) in-state residents traveling 50 miles or more (one-way) to visit the park; and 2) all out-of-state visitors. Economic impact modeling also includes any money spent by parks (operational and capital improvements) that was not supported by visitor spending. Although operational and capital improvement spending derive (in part) from tax monies, they demonstrate economic impact when infused into local areas where parks exist.

Thus, economic impact figures reflect all of the “fresh money” entering an economy as a result of a given state park.

- Unadjusted economic impact: economic impact output figures computed using statewide IMPLAN multipliers. Also, unadjusted figures do not deduct spending by visitors who report that the park was not their primary destination.
- Adjusted economic impact: calibrated economic impact output figures based upon whether a given park's county(ies) has economic activity above or below the state average. Adjusted economic impact figures are also reduced by 12% (Magnini and Uysal, 2015a) to account for spending by park visitors who likely would have traveled and spent money in the state regardless of whether the park existed.

{Results section begins on next page}

RESULTS

This section of the report contains the results of the economic modeling. First, visitor spending findings are presented (see Table 2). This visitor spending is portioned according to day use versus overnight and by Virginia resident versus non-resident. Second, economic activity and economic impact are reported (see Table 3). Third, job-related results are detailed (see Table 4). In the jobs outputs, both estimated total jobs and full-time equivalent (FTE) jobs are reported. FTE jobs represent total hours worked divided by the average annual hours worked in full-time jobs.

Fourth, park-by-park findings are listed in Tables 5-10 (see Appendix A for a map of park locations). The park-by-park results include estimated state and local tax revenues generated by each park's economic activity. In Virginia, for this type of tourism-related spending, the split between state and local tax revenues can be estimated at approximately 60-40 (state-local) for this type of tourism-related spending (<https://www.vatc.org/research/economicimpact/>).

Next in this results section, outcomes of capital investments are displayed (see Table 11). Lastly, the effects of park operational spending are reported (see Table 12). To reiterate, these capital improvement and operational components are already included in each park's modeling presented in Tables 5-10 but are partitioned as stand-alone modeling components in Tables 11 and 12 to tease-out the economic contributions of these elements. On a separate note, it is important to point out that the system-wide economic results (for example, those listed in the Executive Summary) are slightly different than the individual district results summed together because the overall system-wide IMPLAN modeling accounts for different indirect and induced effects than simply summing the individual district results. The glossary contained in Appendix B offers definitions of key terms used in this results section.

{Table 2 is presented on next page}

TABLE 2: VISITOR SPENDING*

PARK	DAY VISITOR SPENDING	OVERNIGHT GUEST SPENDING	RESIDENT SPENDING	NON-RESIDENT SPENDING	TOTAL VISITOR SPENDING
DISTRICT 1					
Belle Isle	\$993K	\$1.63M	\$1.66M	\$964K	\$2.62M
Chippokes Plantation	\$2.18M	\$3.25M	\$3.48M	\$1.96M	\$5.44M
False Cape	\$1.11M	\$657K	\$1.10M	\$676K	\$1.77M
First Landing	\$45.17M	\$10.52M	\$33.46M	\$22.22M	\$55.69M
Kiptopeke	\$7.41M	\$8.18M	\$9.93M	\$5.66M	\$15.59M
Machicomoco	\$2.96M	\$1.22M	\$2.55M	\$1.63M	\$4.18M
York River	\$5.16M	\$0	\$3.04M	\$2.12M	\$5.16M
TOTAL D1	\$64.99M	\$25.46M	\$55.22M	\$35.24M	\$90.45M
DISTRICT 2					
Caledon	\$3.08M	\$150K	\$1.91M	\$1.32M	\$3.23M
Lake Anna	\$6.12M	\$5.34M	\$7.44M	\$4.01M	\$11.46M
Leesylvania	\$19.85M	\$37K	\$11.73M	\$8.16M	\$19.89M
Mason Neck	\$6.31M	\$4K	\$3.73M	\$2.59M	\$6.32M
Sweet Run	\$410K	\$0	\$242K	\$168K	\$410K
Westmoreland	\$2.94M	\$3.7M	\$4.11M	\$2.53M	\$6.64M
Widewater	\$2.07M	\$11K	\$1.23M	\$854K	\$2.08M
TOTAL D2	\$40.79M	\$9.24M	\$30.40M	\$19.63M	\$50.03M
DISTRICT 3					
Douthat	\$1.24M	\$8.95M	\$7.07M	\$3.12M	\$10.19M
James River	\$613K	\$5.10M	\$3.94M	\$1.78M	\$5.72M
Natural Bridge	\$9.45M	\$465K	\$5.87M	\$4.04M	\$9.92M
Seven Bends	\$3.77M	\$0	\$2.23M	\$1.55M	\$3.77M
Shenandoah River	\$5.69M	\$6.34M	\$7.74M	\$4.29M	\$12.03M
Sky Meadows	\$5.74M	\$848K	\$3.93M	\$2.66M	\$6.58M
TOTAL D3	\$26.50M	\$21.71M	\$30.78M	\$17.43M	\$48.21M
DISTRICT 4					
Bear Creek Lake	\$2.14M	\$1.66M	\$2.54M	\$1.26M	\$3.81M
High Bridge Trail	\$14.16M	\$0	\$8.35M	\$5.81M	\$14.16M
Holliday Lake	\$2.62M	\$1.11M	\$2.27M	\$1.46M	\$3.73M
Pocahontas	\$43.30M	\$10.04M	\$32.21M	\$21.13M	\$53.33M
Powhatan	\$4.98M	\$2.11M	\$4.31M	\$2.77M	\$7.09M
Sailor's Creek Battlefield	\$1.07M	\$0	\$631K	\$439K	\$1.07M
Staunton River Battlefield	\$1.21M	\$0	\$712K	\$495K	\$1.21M
Twin Lakes	\$1.36M	\$2.49M	\$2.52M	\$1.34M	\$3.85M
TOTAL D4	\$70.84M	\$17.41M	\$53.55M	\$34.70M	\$88.25M
Continued on next page					

PARK	DAY VISITOR SPENDING	OVERNIGHT GUEST SPENDING	RESIDENT SPENDING	NON-RESIDENT SPENDING	TOTAL VISITOR SPENDING
DISTRICT 5					
Claytor Lake	\$7.99M	\$6.42M	\$9.16M	\$5.25M	\$14.40M
Fairy Stone	\$3.10M	\$3.13M	\$4.23M	\$2.00M	\$6.23M
Occoneechee	\$4.19M	\$4.55M	\$5.70M	\$3.04M	\$8.74M
Smith Mountain Lake	\$18.09M	\$4.81M	\$14.06M	\$8.84M	\$22.90M
Staunton River	\$2.28M	\$2.59M	\$3.15M	\$1.73M	\$4.87M
TOTAL D5	\$35.64M	\$21.51M	\$36.30M	\$20.86M	\$57.15M
DISTRICT 6					
PARK	DAY VISITOR SPENDING	OVERNIGHT GUEST SPENDING	RESIDENT SPENDING	NON-RESIDENT SPENDING	TOTAL VISITOR SPENDING
Clinch River	\$316K	\$6K	\$190K	\$131K	\$321K
Grayson Highlands	\$4.77M	\$581K	\$3.19M	\$2.16M	\$5.35M
Hungry Mother	\$8.10M	\$10.51M	\$12.12M	\$6.49M	\$18.62M
Natural Tunnel	\$2.57M	\$3.28M	\$3.78M	\$2.06M	\$5.85M
New River Trail	\$32.84M	\$1.18M	\$20.18M	\$13.84M	\$34.02M
Southwest VA Museum	\$685K	\$61K	\$451K	\$295K	\$746K
Wilderness Road	\$2.63M	\$2K	\$1.55M	\$1.08M	\$2.63M
TOTAL D6	\$51.91M	\$15.63M	\$41.47M	\$26.07M	\$67.54M
NOTES:					
* Slight differences in sums of addition are due to rounding of the figures.					

{Economic activity section begins on next page}

TABLE 3: ECONOMIC ACTIVITY AND IMPACT OF VIRGINIA STATE PARKS

PARK	ECONOMIC ACTIVITY (UNADJUSTED)	ECONOMIC ACTIVITY (ADJUSTED)	ECONOMIC ACTIVITY (AVERAGE)	ECONOMIC IMPACT (UNADJUSTED)	ECONOMIC IMPACT (ADJUSTED)	ECONOMIC IMPACT (AVERAGE)
DISTRICT 1						
Belle Isle	\$4.57M	\$4.38M	\$4.48M	\$3.66M	\$3.09M	\$3.38M
Chippokes Plantation	\$8.61M	\$8.27M	\$8.44M	\$6.76M	\$5.71M	\$6.24M
False Cape	\$3.41M	\$3.41M	\$3.41M	\$2.77M	\$2.44M	\$2.60M
First Landing	\$78.86M	\$78.86M	\$78.86M	\$57.66M	\$50.74M	\$54.20M
Kiptopeke	\$26.66M	\$24.53M	\$25.60M	\$20.45M	\$16.56M	\$18.51M
Machicomoco	\$6.63M	\$6.36M	\$6.50M	\$5.08M	\$4.29M	\$4.68M
York River	\$8.40M	\$8.06M	\$8.23M	\$6.36M	\$5.37M	\$5.87M
TOTAL D1	\$137.14M	\$133.88M	\$135.51M	\$102.74M	\$88.20M	\$95.47M
DISTRICT 2						
Caledon	\$5.54M	\$5.54M	\$5.54M	\$4.28M	\$3.76M	\$4.02M
Lake Anna	\$16.83M	\$17.51M	\$17.17M	\$12.96M	\$11.87M	\$12.41M
Leesylvania	\$28.99M	\$30.15M	\$29.57M	\$21.15M	\$19.36M	\$20.26M
Mason Neck	\$9.74M	\$10.13M	\$9.94M	\$7.25M	\$6.64M	\$6.94M
Sweet Run	\$1.68M	\$1.75M	\$1.71M	\$1.52M	\$1.39M	\$1.45M
Westmoreland	\$11.74M	\$11.2M	\$11.51M	\$9.37M	\$7.92M	\$8.65M
Widewater	\$4.35M	\$4.52M	\$4.44M	\$3.53M	\$3.23M	\$3.38M
TOTAL D2	\$78.88M	\$80.88M	\$79.88M	\$60.06M	\$54.16M	\$57.11M
DISTRICT 3						
Douthat	\$17.93M	\$17.22M	\$17.57M	\$14.94M	\$12.62M	\$13.78M
James River	\$9.00M	\$8.64M	\$8.82M	\$7.30M	\$6.17M	\$6.73M
Natural Bridge	\$14.01M	\$13.45M	\$13.73M	\$10.13M	\$8.56M	\$9.35M
Seven Bends	\$6.32M	\$6.32M	\$6.32M	\$4.23M	\$4.25M	\$4.54M
Shenandoah River	\$17.89M	\$17.89M	\$17.89M	\$13.80M	\$12.15M	\$12.97M
Sky Meadows	\$9.92M	\$10.31M	\$10.12M	\$7.38M	\$6.75M	\$7.07M
TOTAL D3	\$75.07M	\$73.82M	\$74.45M	\$58.38M	\$50.49M	\$54.44M
DISTRICT 4						
Bear Creek Lake	\$8.62M	\$8.27M	\$8.45M	\$7.38M	\$6.24M	\$6.81M
High Bridge Trail	\$21.52M	\$20.66M	\$21.09M	\$15.93M	\$13.46M	\$14.70M
Holliday Lake	\$5.61M	\$5.38M	\$5.49M	\$4.22M	\$3.57M	\$3.89M
Pocahontas	\$75.15M	\$75.15M	\$75.15M	\$54.95M	\$48.36M	\$51.65M
Powhatan	\$10.69M	\$10.69M	\$10.69M	\$8.06M	\$7.09M	\$7.57M
Sailor's Creek Battlefield	\$2.22M	\$2.13M	\$2.17M	\$1.80M	\$1.52M	\$1.66M
Staunton River Battlefield	\$2.17M	\$1.99M	\$2.08M	\$1.69M	\$1.37M	\$1.53M

Continued on next page

Twin Lakes	\$6.66M	\$6.13M	\$6.40M	\$5.39M	\$4.37M	\$4.88M
TOTAL D4	\$132.64M	\$130.41M	\$131.52M	\$99.43M	\$85.97M	\$92.70M
DISTRICT 5						
Claytor Lake	\$22.55M	\$21.65M	\$22.10M	\$17.53M	\$14.81M	\$16.17M
Fairy Stone	\$11.58M	\$10.66M	\$11.12M	\$9.61M	\$7.78M	\$8.70M
Occoneechee	\$12.85M	\$11.82M	\$12.34M	\$9.93M	\$8.04M	\$8.99M
Smith Mountain Lake	\$32.90M	\$32.90M	\$32.90M	\$24.41M	\$21.48M	\$22.95M
Staunton River	\$6.92M	\$6.36M	\$6.64M	\$5.27M	\$4.26M	\$4.77M
TOTAL D5	\$86.80M	\$83.39M	\$85.09M	\$66.76M	\$56.38M	\$61.57M
DISTRICT 6						
PARK	ECONOMIC ACTIVITY (UNADJUSTED)	ECONOMIC ACTIVITY (ADJUSTED)	ECONOMIC ACTIVITY (AVERAGE)	ECONOMIC IMPACT (UNADJUSTED)	ECONOMIC IMPACT (ADJUSTED)	ECONOMIC IMPACT (AVERAGE)
Clinch River	\$1.24M	\$1.14M	\$1.19M	\$1.11M	\$902K	\$1.01M
Grayson Highlands	\$9.83M	\$9.05M	\$9.44M	\$7.76M	\$6.28M	\$7.02M
Hungry Mother	\$28.42M	\$26.15M	\$27.29M	\$22.22M	\$17.99M	\$20.10M
Natural Tunnel	\$10.34M	\$9.51M	\$9.92M	\$8.37M	\$6.78M	\$7.57M
New River Trail	\$53.83M	\$45.76M	\$49.80M	\$43.75M	\$32.73M	\$38.24M
SW VA Museum	\$2.15M	\$1.98M	\$2.06M	\$1.86M	\$1.51M	\$1.69M
Wilderness Road	\$5.15M	\$4.74M	\$4.94M	\$4.11M	\$3.33M	\$3.72M
TOTAL D6	\$110.97M	\$98.32M	\$104.64M	\$89.19M	\$69.51M	\$79.35M

{Jobs section begins on next page}

TABLE 4: JOBS ATTRIBUTED TO VIRGINIA STATE PARKS

PARK	DIRECT JOBS	INDIRECT JOBS	INDUCED JOBS	TOTAL JOBS	FTE JOBS ^a
DISTRICT 1					
Belle Isle	24.47	3.98	4.72	33.17	30.52
Chippokes Plantation	46.72	7.98	8.54	63.25	58.19
False Cape	19.53	2.74	4.00	26.27	24.17
First Landing	461.11	87.03	73.98	622.12	572.35
Kiptopeke	135.19	26.38	22.81	184.38	169.63
Machicomoco	36.50	6.33	6.48	49.30	45.36
York River	46.77	7.90	8.34	63.01	57.97
TOTAL D1	770.29	142.34	128.87	1041.5	958.19
DISTRICT 2					
Caledon	31.55	5.27	5.82	42.64	39.23
Lake Anna	99.89	19.21	17.18	136.27	120.55
Leesylvania	183.73	34.02	29.92	247.66	219.09
Mason Neck	61.82	10.75	10.61	83.18	73.58
Sweet Run	10.24	0.74	2.71	13.68	12.10
Westmoreland	60.36	10.97	11.39	82.71	76.10
Widewater	26.66	3.69	5.57	35.92	31.78
TOTAL D2	474.25	84.65	83.2	642.06	572.43
DISTRICT 3					
Douthat	85.86	16.23	17.15	119.25	109.71
James River	45.89	8.33	8.65	62.87	57.84
Natural Bridge	78.88	15.01	12.50	106.39	97.88
Seven Bends	36.78	5.97	6.72	49.47	45.51
Shenandoah River	99.22	18.66	17.18	135.05	124.25
Sky Meadows	62.86	11.13	10.64	84.64	74.87
TOTAL D3	409.49	75.33	72.84	557.67	510.06
DISTRICT 4					
Bear Creek Lake	38.99	7.12	8.64	54.76	50.37
High Bridge Trail	120.25	21.64	20.28	162.16	149.19
Holliday Lake	31.26	5.55	5.35	42.15	38.78
Pocahontas	437.73	83.27	70.03	591.03	543.75
Powhatan	62.19	10.99	10.66	83.85	77.14
Sailor's Creek Battlefield	12.36	1.61	2.58	16.56	15.23
Staunton River Battlefield	11.63	1.75	2.24	15.61	14.36
Twin Lakes	33.47	5.56	6.53	45.56	41.91
TOTAL D4	747.88	137.49	126.31	1011.68	930.73
Continued on next page					

DISTRICT 5					
Claytor Lake	117.10	22.49	20.66	160.26	147.44
Fairy Stone	53.04	9.79	10.80	73.63	67.74
Occoneechee	64.74	12.46	11.17	88.36	81.29
Smith Mountain Lake	188.00	35.89	30.78	254.67	234.30
Staunton River	35.45	6.88	5.92	48.24	44.38
TOTAL D5	458.33	87.51	79.33	625.16	575.15
DISTRICT 6					
PARK	DIRECT JOBS	INDIRECT JOBS	INDUCED JOBS	TOTAL JOBS	FTE JOBS ^a
Clinch River	6.50	0.46	1.70	8.67	7.97
Grayson Highlands	47.91	8.88	9.03	65.82	60.55
Hungry Mother	144.78	26.26	25.88	196.91	181.16
Natural Tunnel	52.82	8.31	10.45	71.57	65.84
New River Trail	257.99	45.81	48.12	351.93	323.77
Southwest VA Museum	11.25	1.08	2.72	15.05	13.85
Wilderness Road	27.53	3.81	5.58	36.91	33.96
TOTAL D6	548.78	94.61	103.48	746.86	687.1
^a Full-time equivalent (FTE) jobs: total hours worked divided by avg. annual hours worked in full-time jobs.					

{Employment, labor income, value-added and tax revenue section begins on next page}

EMPLOYMENT, LABOR INCOME, VALUE-ADDED, AND TAX REVENUES

Tables 5-10 add further detail to previously presented results by partitioning the direct, indirect, and induced effects of labor income and value-added figures for each park, as well as tax revenues generated.

TABLE 5: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 1				
PARK	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED
DISTRICT 1				
Belle Isle	Direct Effect	24.47	\$1.06M	\$1.64M
	Indirect Effect	3.98	\$300K	\$510K
	Induced Effect	4.72	\$298K	\$605K
	Total Effect	33.17	\$1.66M	\$2.76M
Total state and local taxes	\$337K			
Chippokes Plantation	Direct Effect	46.72	\$1.86M	\$3.00M
	Indirect Effect	7.98	\$601K	\$1.02M
	Induced Effect	8.54	\$540K	\$1.10M
	Total Effect	63.25	\$3.00M	\$5.11M
Total state and local taxes	\$587K			
False Cape	Direct Effect	19.53	\$948K	\$1.39M
	Indirect Effect	2.74	\$206K	\$349K
	Induced Effect	4.00	\$253K	\$513K
	Total Effect	26.27	\$1.41M	\$2.25M
Total state and local taxes	\$229K			
Continued on next page				

First Landing	Direct Effect	461.11	\$14.70M	\$25.30M
	Indirect Effect	87.03	\$6.53M	\$11.10M
	Induced Effect	73.98	\$4.67M	\$9.49M
	Total Effect	622.12	\$25.91M	\$45.89M
Total state and local taxes	\$6.01M			
Kiptopeke	Direct Effect	135.19	\$4.56M	\$8.13M
	Indirect Effect	26.38	\$1.99M	\$3.38M
	Induced Effect	22.81	\$1.44M	\$2.92M
	Total Effect	184.38	\$7.99M	\$14.43M
Total state and local taxes	\$1.96M			
PARK	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED
Machicomoco	Direct Effect	36.50	\$1.39M	\$2.23M
	Indirect Effect	6.33	\$475K	\$808K
	Induced Effect	6.48	\$410K	\$832K
	Total Effect	49.30	\$2.27M	\$3.87M
Total state and local taxes	\$463K			
York River	Direct Effect	46.77	\$1.81M	\$2.85M
	Indirect Effect	7.90	\$593K	\$1.01M
	Induced Effect	8.34	\$527K	\$1.07M
	Total Effect	63.01	\$2.93M	\$4.93M
Total state and local taxes	\$573K			

{District 2 presented on next page}

TABLE 6: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 2

PARK	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED
DISTRICT 2				
Caledon	Direct Effect	31.55	\$1.28M	\$1.99M
	Indirect Effect	5.27	\$397K	\$678K
	Induced Effect	5.82	\$368K	\$746K
	Total Effect	42.64	\$2.04M	\$3.41M
Total state and local taxes	\$385K			
Lake Anna	Direct Effect	96.04	\$3.35M	\$5.89M
	Indirect Effect	18.47	\$1.40M	\$2.37M
	Induced Effect	16.52	\$1.04M	\$2.12M
	Total Effect	131.03	\$5.79M	\$10.38M
Total state and local taxes	\$1.39M			
Leesylvania	Direct Effect	176.66	\$5.81M	\$9.79M
	Indirect Effect	32.71	\$2.46M	\$4.18M
	Induced Effect	28.77	\$1.82M	\$3.69M
	Total Effect	238.14	\$10.07M	\$17.66M
Total state and local taxes	\$2.25M			
Mason Neck	Direct Effect	59.45	\$2.16M	\$3.48M
	Indirect Effect	10.34	\$776K	\$1.32M
	Induced Effect	10.20	\$645K	\$1.31M
	Total Effect	79.98	\$3.58M	\$6.11M
Total state and local taxes	\$737K			
Continued on next page				

Sweet Run	Direct Effect	9.85	\$702K	\$903K
	Indirect Effect	0.71	\$53K	\$91K
	Induced Effect	2.61	\$165K	\$335K
	Total Effect	13.16	\$920K	\$1.33M
Total state and local taxes	\$90K			
Westmoreland	Direct Effect	60.36	\$2.45M	\$3.89M
	Indirect Effect	10.97	\$827K	\$1.43M
	Induced Effect	11.39	\$719K	\$1.46M
	Total Effect	82.71	\$3.99M	\$6.77M
Total state and local taxes	\$781K			
Widewater	Direct Effect	25.64	\$1.28M	\$1.84M
	Indirect Effect	3.55	\$267K	\$457K
	Induced Effect	5.36	\$338K	\$687K
	Total Effect	34.54	\$1.88M	\$2.98M
Total state and local taxes	\$289K			

{District 3 presented on next page}

TABLE 7: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 3

PARK	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED
DISTRICT 3				
Douthat	Direct Effect	85.86	\$3.71M	\$6.19M
	Indirect Effect	16.23	\$1.23M	\$2.12M
	Induced Effect	17.15	\$1.08M	\$2.20M
	Total Effect	119.25	\$6.03M	\$10.51M
Total state and local taxes	\$1.38M			
James River	Direct Effect	45.89	\$1.86M	\$3.15M
	Indirect Effect	8.33	\$631K	\$1.07M
	Induced Effect	8.65	\$546K	\$1.11M
	Total Effect	62.87	\$3.04M	\$5.32M
Total state and local taxes	\$683K			
Natural Bridge	Direct Effect	78.88	\$2.46M	\$4.25M
	Indirect Effect	15.01	\$1.13M	\$1.92M
	Induced Effect	12.50	\$790K	\$1.60M
	Total Effect	106.39	\$4.38M	\$7.77M
Total state and local taxes	\$1.02M			
Seven Bends	Direct Effect	36.78	\$1.49M	\$2.30M
	Indirect Effect	5.97	\$449K	\$764K
	Induced Effect	6.72	\$425K	\$862K
	Total Effect	49.47	\$2.36M	\$3,.92M
Total state and local taxes	\$443K			
Continued on next page				

Shenandoah River	Direct Effect	99.22	\$3.53M	\$6.07M
	Indirect Effect	18.66	\$1.41M	\$2.39M
	Induced Effect	17.18	\$1.09M	\$2.20M
	Total Effect	135.05	\$6.02M	\$10.66M
Total state and local taxes	\$1.39M			
Sky Meadows	Direct Effect	60.44	\$2.14M	\$3.50M
	Indirect Effect	10.70	\$803K	\$1.37M
	Induced Effect	10.23	\$647K	\$1.31M
	Total Effect	81.38	\$3.59M	\$6.18M
Total state and local taxes	\$760K			

TABLE 8: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 4				
PARK	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED
DISTRICT 4				
Bear Creek Lake	Direct Effect	38.99	\$1.95M	\$3.03M
	Indirect Effect	7.12	\$543K	\$953K
	Induced Effect	8.64	\$546K	\$1.11M
	Total Effect	54.76	\$3.04M	\$5.10M
Total state and local taxes	\$556K			
High Bridge Trail	Direct Effect	120.25	\$4.20M	\$6.90M
	Indirect Effect	21.64	\$1.63M	\$2.77M
	Induced Effect	20.28	\$1.28M	\$2.60M
	Total Effect	162.16	\$7.11M	\$12.27M
Total state and local taxes	\$1.49M			

Continued from previous page				
Holliday Lake	Direct Effect	31.26	\$1.12M	\$1.84M
	Indirect Effect	5.55	\$417K	\$708K
	Induced Effect	5.35	\$338K	\$686K
	Total Effect	42.15	\$1.87M	\$3.24M
Total state and local taxes	\$401K			
Pocahontas	Direct Effect	437.73	\$13.85M	\$24.03M
	Indirect Effect	83.27	\$6.25M	\$10.63M
	Induced Effect	70.03	\$4.42M	\$8.98M
	Total Effect	591.03	\$24.53M	\$43.64M
Total state and local taxes	\$5.77M			
Powhatan	Direct Effect	62.19	\$2.24M	\$3.67M
	Indirect Effect	10.99	\$825K	\$1.40M
	Induced Effect	10.66	\$674K	\$1.37M
	Total Effect	83.85	\$3.74M	\$6.44M
Total state and local taxes	\$794K			
Sailor's Creek Battlefield	Direct Effect	12.36	\$625K	\$890K
	Indirect Effect	1.61	\$121K	\$206K
	Induced Effect	2.58	\$163K	\$332K
	Total Effect	16.56	\$910K	\$1.43M
Total state and local taxes	\$136K			
Continued on next page				

PARK	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED
Twin Lakes	Direct Effect	33.47	\$1.46M	\$2.32M
	Indirect Effect	5.56	\$420K	\$714K
	Induced Effect	6.53	\$412K	\$837K
	Total Effect	45.56	\$2.29M	\$3.86M
Total state and local taxes	\$447K			
Staunton River Battlefield	Direct Effect	11.63	\$513K	\$767K
	Indirect Effect	1.75	\$131K	\$223K
	Induced Effect	2.24	\$141K	\$287K
	Total Effect	15.61	\$786K	\$1.28M
Total state and local taxes	\$136K			

TABLE 9: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 5

PARK	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED
DISTRICT 5				
Claytor Lake	Direct Effect	117.10	\$4.24M	\$7.22M
	Indirect Effect	22.49	\$1.70M	\$2.90M
	Induced Effect	20.66	\$1.31M	\$2.65M
	Total Effect	160.26	\$7.25M	\$12.78M
Total state and local taxes	\$1.49M			
Continued on next page				

Fairy Stone	Direct Effect	53.04	\$2.37M	\$3.88M
	Indirect Effect	9.79	\$745K	\$1.28M
	Induced Effect	10.80	\$682K	\$1.39M
	Total Effect	73.63	\$3.80M	\$6.55M
Total state and local taxes	\$785K			
Occoneechee	Direct Effect	64.74	\$2.27M	\$3.98M
	Indirect Effect	12.46	\$941K	\$1.60M
	Induced Effect	11.17	\$705K	\$1.43M
	Total Effect	88.36	\$3.91M	\$7.01M
Total state and local taxes	\$ 938K			
Smith Mountain Lake	Direct Effect	188.00	\$6.14M	\$10.67M
	Indirect Effect	35.89	\$2.70M	\$4.59M
	Induced Effect	30.78	\$1.94M	\$3.95M
	Total Effect	254.67	\$10.78M	\$19.21M
Total state and local taxes	\$2.54M			
Staunton River	Direct Effect	35.45	\$1.18M	\$2.10M
	Indirect Effect	6.88	\$519K	\$880K
	Induced Effect	5.92	\$374K	\$759K
	Total Effect	48.24	\$2.07M	\$3.74M
Total state and local taxes	\$508K			

TABLE 10: EMPLOYMENT, LABOR INCOME, VALUE-ADDED, TAX REVENUES: DISTRICT 6				
PARK	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED
DISTRICT 6				
Clinch River	Direct Effect	6.50	\$458K	\$590K
	Indirect Effect	0.46	\$34.89M	\$59K
	Induced Effect	1.70	\$107K	\$218K
	Total Effect	8.67	\$600K	\$868K
Total state and local taxes	\$60K			
Grayson Highlands	Direct Effect	47.91	\$1.93M	\$3.05M
	Indirect Effect	8.88	\$670K	\$1.16M
	Induced Effect	9.03	\$570K	\$1.16M
	Total Effect	65.82	\$3.17M	\$5.37M
Total state and local taxes	\$613K			
Hungry Mother	Direct Effect	144.78	\$5.46M	\$9.21M
	Indirect Effect	26.26	\$1.98M	\$3.36M
	Induced Effect	25.88	\$1.64M	\$3.32M
	Total Effect	196.91	\$9,.08M	\$15.88M
Total state and local taxes	\$2.03M			
Natural Tunnel	Direct Effect	52.82	\$2.39M	\$3.69M
	Indirect Effect	8.31	\$626K	\$1.06M
	Induced Effect	10.45	\$660K	\$1.34M
	Total Effect	71.57	\$3.67M	\$6.09M
Total state and local taxes	\$683K			
Continued on next page				

New River Trail	Direct Effect	257.99	\$10.38M	\$16.57M
	Indirect Effect	45.81	\$3.48M	\$5.96M
	Induced Effect	48.12	\$3.04M	\$6.17M
	Total Effect	351.93	\$16.89M	\$28.70M
Total state and local taxes	\$3.16M			
Southwest VA Museum	Direct Effect	11.25	\$707K	\$946K
	Indirect Effect	1.08	\$81K	\$138K
	Induced Effect	2.72	\$172K	\$350K
	Total Effect	15.05	\$960K	\$1.43M
Total state and local taxes	\$114K			
PARK	IMPACT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED
Wilderness Road	Direct Effect	27.53	\$1.32M	\$1.92M
	Indirect Effect	3.81	\$286K	\$487K
	Induced Effect	5.58	\$352K	\$716K
	Total Effect	36.91	\$1.96M	\$3.12M
Total state and local taxes	\$311K			

ECONOMIC IMPACTS OF CAPITAL IMPROVEMENT SPENDING*

This section details the effects of capital improvement spending throughout the year. These capital improvement expenditures were already included in the economic activity and economic impact models presented earlier in this report but are also teased-out separately in this section to demonstrate how such expenditures infuse money into the economies of parks' host communities.

EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	4.81	\$422K	\$589K	
Indirect Effect	1.48	\$116K	\$227K	
Induced Effect	1.85	\$117K	\$237K	
Total Effect	8.14	\$655K	\$1.05M	\$1.91M

State and local taxes from capital improvements: \$78K

TABLE 11B: CAPITAL IMPROVEMENTS: BELLE ISLE [SPENT: \$108K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.45	\$40K	\$55K	
Indirect Effect	0.14	\$11K	\$21K	
Induced Effect	0.17	\$11K	\$22K	
Total Effect	0.77	\$62K	\$99K	\$180K

State and local taxes from capital improvements: \$7K

TABLE 11C: CAPITAL IMPROVEMENTS: CALEDON [SPENT: \$149K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.65	\$57K	\$79K	
Indirect Effect	0.20	\$16K	\$31K	
Induced Effect	0.25	\$15K	\$32K	
Total Effect	1.10	\$88K	\$142K	\$258K

State and local taxes from capital improvements: \$11K

*In this report, a monetary amount without a "K" or "M" is smaller than \$1,000 and is represented in actual value.

TABLE 11D: CAPITAL IMPROVEMENTS: CLAYTOR LAKE [SPENT: \$917K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	3.84	\$337K	\$470K	
Indirect Effect	1.18	\$92K	\$181K	
Induced Effect	1.48	\$93K	\$190K	
Total Effect	6.51	\$523K	\$841K	\$1.53M

State and local taxes from capital improvements: \$62K

TABLE 11E: CAPITAL IMPROVEMENTS: DOUTHAT [SPENT: \$1.12M]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	4.68	\$411K	\$573K	
Indirect Effect	1.44	\$112K	\$221K	
Induced Effect	1.80	\$114K	\$231K	
Total Effect	7.92	\$637K	\$1.02M	\$1.86M

State and local taxes from capital improvements: \$76K

TABLE 11F: CAPITAL IMPROVEMENTS: FAIRY STONE [SPENT: \$773K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	3.10	\$272K	\$380K	
Indirect Effect	0.96	\$75K	\$146K	
Induced Effect	1.20	\$75K	\$153K	
Total Effect	5.25	\$422K	\$679K	\$1.23M

State and local taxes from capital improvements: \$50K

TABLE 11G: CAPITAL IMPROVEMENTS: FIRST LANDING [SPENT: \$175K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.77	\$67K	\$94K	
Indirect Effect	0.24	\$18K	\$36K	
Induced Effect	0.29	\$19K	\$38K	
Total Effect	1.30	\$104K	\$167K	\$304K

State and local taxes from capital improvements: \$12K

TABLE 11H: CAPITAL IMPROVEMENTS: GRAYSON HIGHLANDS [SPENT: \$951K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	3.83	\$335K	\$468K	
Indirect Effect	1.18	\$92K	\$180K	
Induced Effect	1.47	\$93K	\$189K	
Total Effect	6.47	\$520K	\$836K	\$1.52M

State and local taxes from capital improvements: \$62K

TABLE 11I: CAPITAL IMPROVEMENTS: HIGH BRIDGE TRAIL [SPENT: \$201K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.84	\$74K	\$103K	
Indirect Effect	0.26	\$20K	\$40K	
Induced Effect	0.33	\$21K	\$42K	
Total Effect	1.43	\$115K	\$185K	\$335K

State and local taxes from capital improvements: \$14K

TABLE 11J: CAPITAL IMPROVEMENTS: JAMES RIVER [SPENT: \$39K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.16	\$14K	\$20K	
Indirect Effect	0.05	\$4K	\$8K	
Induced Effect	0.06	\$4K	\$8K	
Total Effect	0.27	\$22K	\$35K	\$64K

State and local taxes from capital improvements: \$3K

TABLE 11K: CAPITAL IMPROVEMENTS: KIPTOPEKE [SPENT: \$101K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.40	\$35K	\$50K	
Indirect Effect	0.13	\$10K	\$19K	
Induced Effect	0.16	\$10K	\$20K	
Total Effect	0.69	\$55K	\$89K	\$161K

State and local taxes from capital improvements: \$7K

TABLE 11L: CAPITAL IMPROVEMENTS: LAKE ANNA [SPENT: \$78K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.35	\$31K	\$43K	
Indirect Effect	0.10	\$9K	\$17K	
Induced Effect	0.14	\$8K	\$17K	
Total Effect	0.60	\$48K	\$78K	\$141K

State and local taxes from capital improvements: \$6K

TABLE 11M: CAPITAL IMPROVEMENTS: LEESYLVANIA [SPENT: \$127K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.58	\$51K	\$71K	
Indirect Effect	0.18	\$14K	\$27K	
Induced Effect	0.22	\$14K	\$29K	
Total Effect	0.98	\$79K	\$127K	\$230K

State and local taxes from capital improvements: \$9K

TABLE 11N: CAPITAL IMPROVEMENTS: MACHICOMOCO [SPENT: \$74K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.31	\$27K	\$38K	
Indirect Effect	0.10	\$7K	\$15K	
Induced Effect	0.12	\$7K	\$15K	
Total Effect	0.52	\$41K	\$68K	\$123K

State and local taxes from capital improvements: \$5K

TABLE 11O: CAPITAL IMPROVEMENTS: NATURAL BRIDGE [SPENT: \$57K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.24	\$21K	\$29K	
Indirect Effect	0.08	\$6K	\$11K	
Induced Effect	0.10	\$6K	\$12K	
Total Effect	0.41	\$33K	\$52K	\$95K

State and local taxes from capital improvements: \$4K

TABLE 11P: CAPITAL IMPROVEMENTS: NATURAL TUNNEL [SPENT: \$45K]

EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.18	\$16K	\$22K	
Indirect Effect	0.06	\$4K	\$9K	
Induced Effect	0.07	\$4K	\$9K	
Total Effect	0.31	\$24K	\$40K	\$72K

State and local taxes from capital improvements: \$3K

TABLE 11Q: CAPITAL IMPROVEMENTS: NEW RIVER TRAIL [SPENT: \$2.26M]

EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	8.41	\$737K	\$1.02M	
Indirect Effect	2.58	\$202K	\$396K	
Induced Effect	3.24	\$204K	\$415K	
Total Effect	14.23	\$1.14M	\$1.84M	\$3.34M

State and local taxes from capital improvements: \$137K

TABLE 11R: CAPITAL IMPROVEMENTS: OCCONEECHEE [SPENT: \$80K]

EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.32	\$28K	\$40K	
Indirect Effect	0.10	\$8K	\$15K	
Induced Effect	0.13	\$8K	\$16K	
Total Effect	0.55	\$44K	\$71K	\$128K

State and local taxes from capital improvements: \$5K

TABLE 11S: CAPITAL IMPROVEMENTS: POCAHONTAS [SPENT: \$96K]

EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.42	\$37K	\$51K	
Indirect Effect	0.13	\$10K	\$20K	
Induced Effect	0.16	\$10K	\$21K	
Total Effect	0.71	\$57K	\$92K	\$167K

State and local taxes from capital improvements: \$7K

TABLE 11T: CAPITAL IMPROVEMENTS: SEVEN BENDS [SPENT: \$27K]

EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.12	\$10K	\$15K	
Indirect Effect	0.04	\$3K	\$6K	
Induced Effect	0.05	\$3K	\$6K	
Total Effect	0.20	\$16K	\$26K	\$48K

State and local taxes from capital improvements: \$2K

TABLE 11U: CAPITAL IMPROVEMENTS: SHENANDOAH RIVER [SPENT: \$146K]

EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.64	\$56K	\$78K	
Indirect Effect	0.20	\$15K	\$30K	
Induced Effect	0.25	\$16K	\$32K	
Total Effect	1.08	\$87K	\$140K	\$254K

State and local taxes from capital improvements: \$10K

TABLE 11V: CAPITAL IMPROVEMENTS: SMITH MOUNTAIN LAKE [SPENT: \$158K]

EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.69	\$61K	\$85K	
Indirect Effect	0.21	\$17K	\$33K	
Induced Effect	0.27	\$16K	\$34K	
Total Effect	1.17	\$94K	\$151K	\$275K

State and local taxes from capital improvements: \$11K

TABLE 11W: CAPITAL IMPROVEMENTS: SWEET RUN [SPENT: \$22K]

EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.10	\$9K	\$13K	
Indirect Effect	0.03	\$2K	\$5K	
Induced Effect	0.04	\$3K	\$5K	
Total Effect	0.18	\$14K	\$23K	

State and local taxes from capital improvements: \$2K

TABLE 11X: CAPITAL IMPROVEMENTS: TWIN LAKES [SPENT: \$120K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.49	\$42K	\$59K	
Indirect Effect	0.15	\$12K	\$23K	
Induced Effect	0.18	\$12K	\$24K	
Total Effect	0.82	\$66K	\$106K	\$192K

State and local taxes from capital improvements: \$8K

TABLE 11Y: CAPITAL IMPROVEMENTS: WESTMORELAND [SPENT: \$943K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	3.96	\$347K	\$484K	
Indirect Effect	1.22	\$95K	\$186K	
Induced Effect	1.52	\$96K	\$195K	
Total Effect	6.69	\$538K	\$865K	\$1.57M

State and local taxes from capital improvements: \$64K

TABLE 11Z: CAPITAL IMPROVEMENTS: WIDewater [SPENT: \$104K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.48	\$42K	\$58K	
Indirect Effect	0.15	\$11K	\$22K	
Induced Effect	0.19	\$12K	\$23K	
Total Effect	0.80	\$65K	\$104K	\$188K

State and local taxes from capital improvements: \$8K

TABLE 11AA: CAPITAL IMPROVEMENTS: YORK RIVER [SPENT: \$79K]				
EFFECT TYPE	EMPLOYMENT	LABOR INCOME	TOTAL VALUE-ADDED	OUTPUT
Direct Effect	0.34	\$29K	\$41K	
Indirect Effect	0.11	\$8K	\$16K	
Induced Effect	0.12	\$8K	\$16K	
Total Effect	0.56	\$45K	\$73K	\$132K

State and local taxes from capital improvements: \$5K

ECONOMIC IMPACTS OF OPERATIONAL SPENDING

This section details the effects of operational spending not supported by visitor revenues. This operational spending was already included in the economic activity and economic impact models discussed earlier in this report but is also teased-out separately in this section to demonstrate how such operational spending infuses money into the economies of parks' host communities. Because the majority of parks are located in areas of the Commonwealth in which economic activity is recorded below statewide metrics, such operational-related spending can be a boon to these economies.

TABLE 12: ECONOMIC IMPACTS OF NON-VISITOR SUPPORTED PARK OPERATIONAL SPENDING

(PORTION OF PARK BUDGET DERIVED FROM VISITOR REVENUE REMOVED TO AVOID DOUBLE COUNTING)

PARK	TOTAL VISITOR REVENUE	PARK OPERATIONAL EXPENDITURE	NET EXPENDITURE FROM NON-VISITOR SOURCES *	ECONOMIC IMPACT FROM OPERATIONAL SPENDING
DISTRICT 1				
Belle Isle	\$342K	\$793K	\$452K	\$754K
Chippokes Plantation	\$626K	\$1.24M	\$610K	\$1.02M
False Cape	\$113K	\$688K	\$574K	\$959K
First Landing	\$2.83M	\$3.25M	\$426K	\$711K
Kiptopeke	\$1.63M	\$1.34M	N/A	Captured in park
Machicomoco	\$224K	\$627K	\$403K	\$673K
Middle Peninsula	N/A	\$51	\$51	\$85
York River	\$143K	\$760K	\$617K	\$1.03M
DISTRICT 2				
Caledon	\$55K	\$514K	\$459K	\$795K
Culpeper Battlefield	N/A	\$122K	\$122K	\$211K
Lake Anna	\$1.14M	\$1.32M	\$176K	\$305K
Leesylvania	\$615K	\$1.12M	\$509K	\$881K
Mason Neck	\$191K	\$723K	\$531K	\$919K
Sweet Run	\$40K	\$697K	\$656K	\$1.14M
Westmoreland	\$636K	\$1.22M	\$582K	\$1.01M
Widewater	\$74K	\$839K	\$765K	\$1.32M
Continued on next page				

PARK (CONTINUED)	TOTAL VISITOR REVENUE	PARK OPERATIONAL EXPENDITURE	EXPENDITURES FROM NON-VISITOR SOURCES	ECONOMIC IMPACT FROM OPERATIONAL SPENDING
DISTRICT 3				
Douthat	\$1.75M	\$2.54M	\$787K	\$1.28M
Hayfields	\$4K	\$983K	\$979K	\$1.59M
James River	\$859K	\$1.30M	\$446K	\$722K
Natural Bridge	\$2.77M	\$2.19M	N/A	Captured in park
Seven Bends	\$43K	\$637K	\$594K	\$962K
Shenandoah River	\$1.18M	\$1.55M	\$369K	\$597K
Sky Meadows	\$396K	\$830K	\$434K	\$702K
DISTRICT 4				
Bear Creek Lake	\$465K	\$1.12M	\$656K	\$1.06M
High Bridge Trail	\$151K	\$933K	\$782K	\$1.27M
Holliday Lake	\$262K	\$505K	\$244K	\$395K
Pocahontas	\$2.68M	\$2.79M	\$111K	\$180K
Powhatan	\$344K	\$835K	\$492K	\$796K
Sailor's Creek Battle.	\$26K	\$466K	\$441K	\$714K
Staunton River Battle.	\$8K	\$299K	\$291K	\$471K
Twin Lakes	\$505K	\$1.12M	\$617K	\$1.00M
DISTRICT 5				
Claytor Lake	\$1.65M	\$2.00M	\$349K	\$565K
Fairy Stone	\$879K	\$1.55M	\$674K	\$1.09M
Mayo River	N/A	\$1K	\$1K	\$2K
Occoneetchee	\$999K	\$1.14M	\$136K	\$220K
Smith Mountain Lake	\$1.29M	\$1.43M	\$152K	\$246K
Staunton River	\$915K	\$883K	N/A	Captured in park
DISTRICT 6				
Clinch River	\$7K	\$493K	\$485K	\$767K
Grayson Highlands	\$799K	\$1.22M	\$424K	\$669K
Hungry Mother	\$1.62M	\$2.82M	\$1.19M	\$1.89M
Natural Tunnel	\$716K	\$1.93M	\$1.21M	\$1.92M
New River-Combined	\$426K	\$3.68M	\$3.26M	\$5.15M
Southwest Virginia	\$33K	\$706K	\$673K	\$1.06M
Wilderness Road	\$57K	\$948K	\$891K	\$1.41M
*In the net expenditure column, an entry of zero represents a situation in which operating revenues exceeded operating expenses.				

The findings of this 2025 economic impact study highlight many of the contributions of the state park system to the economy of Virginia. The economic activity supported by Virginia's State Parks contributed approximately \$611.25M to the Commonwealth's economy; whereas, the economic impact was estimated at \$438.60M. The difference between the economic activity amount (includes spending by local residents) and the economic impact amount (does not include spending by local residents) illustrates that Virginia's State Parks not only attract fresh-money from outside of the area but also serve to limit the economic leakage of money from within Virginia. In other words, the parks help entice locals to spend their money inside the Commonwealth as opposed to pursuing such recreational outings in other localities.

In terms of employment, the economic activity surrounding visitation to Virginia's State Parks supported an estimated 4,608 jobs. The wages and salaries associated with these jobs are estimated at \$207.53M in wage and salary income. Moreover, economic activity stimulated by Virginia State Parks generated approximately \$44.86M in state and local taxes and contributed roughly \$360.17M to the GDP of Virginia through value-added effects. Using these modeling estimations, roughly \$1.25 in state and local taxes were generated for every dollar of tax money spent on the park system.

Capital improvement spending, when combined with visitor expenditures, generates meaningful economic outputs for the park system. High visitation levels naturally place pressure on park infrastructure, making periodic major maintenance and repair essential. These capital investments produce two types of economic impacts: short-term effects associated with construction activity and long-term gains derived from improved facilities that attract and retain visitors. In 2025, for example, approximately \$2.26 million was invested at New River Trail State Park and \$1.15 million at Bear Creek Lake State Park.

The continued expansion of Virginia's state park system is also linked to increasing economic contributions. Over the past decade, the system has grown by roughly 25 percent. The sidebar on the following page highlights Hayfields State Park, which will generate additional visitor-driven impacts as it comes online. Other recently added or developing sites—such as Culpeper Battlefield, Falkland Farms, Mayo River, and Middle Peninsula—are likewise positioned to enhance statewide economic returns in the years ahead.

Economic modeling for state parks relies on inputs that are inherently dynamic. Crompton (1993) notes that the validity and reliability of economic impact studies depend on three

factors: (1) accurate estimates of visitor spending, (2) proper application of multiplier coefficients, and (3) reasonable attendance estimates. This study reflects those principles. First, visitor spending profiles were updated using survey data from more than 4,000 visiting parties. Second, the most current IMPLAN multipliers were applied. Third, the agency maintains robust procedures for tracking attendance at each state park.

Virginia's 44th state park opens in Highland County

By Starr Anderson

Posted October 22, 2025



Hayfields State Park ribbon cutting on Oct. 20, 2025

As demonstrated during two major economic disruptions—the Great Recession and the COVID-19 pandemic—state parks help stabilize Virginia’s tourism economy. When economic conditions are strong, people visit state parks; when conditions weaken, people continue to visit. This steady, recession-resistant flow of visitors supports numerous tourism-related businesses such as convenience stores and gas stations. Many state parks also serve as economic engines in communities that fall below statewide averages on indicators such as median income. The developing blueway park along the Clinch River illustrates how new parks can inject fresh spending into economically distressed areas.

It is also important to recognize that parks generate value even for those who do not visit them. Research shows that non-visitors still value the existence and preservation of parks (Greenley, Walsh, and Young, 1981; Institute for Service Research, 2018). Parks therefore possess both existence value and bequest value—people appreciate that they exist today and want them protected for future generations. Additional evidence of these values is found in studies showing that residential property values tend to be higher when adjacent to passive-use parks (see Crompton, 2005, for a meta-analysis).

While this study quantifies many economic impacts—such as jobs, labor income, value-added, and tax revenues—other important benefits fall outside the scope of input-output modeling. For instance, visitation to nature-based venues increased during the COVID-19 pandemic in part because outdoor recreation supports physical, mental, and cognitive health (Quendler, Magnini, and Driouech, 2020). These health-related benefits, though significant, are difficult to measure using traditional economic modeling techniques.

Similarly, input-output models do not capture the value of protecting cultural, historic, and natural resources. Examples include the preservation of historically significant lands at sites such as Sky Meadows State Park and Wilderness Road State Park, as well as the unique ecological assets found at sites such as False Cape State Park and Grayson Highlands State Park. The benefits associated with safeguarding these resources, while substantial, are not reflected in the economic outputs presented in this report.

{End of narrative}

Dr. Vincent Magnini was ranked as one of the top 35 most prolific hospitality researchers worldwide in the most recently published global ranking study. Furthermore, he is a U.S. Fulbright Scholar and has been named on the Stanford/Elsevier list of the top 2% of scientists in the world 3 out of the last 5 years. He has published seven books covering various aspects of service management. Dr. Magnini has also been featured on National Public Radio's (NPR) *All Things Considered*, *With Good Reason*, *Pulse on the Planet* and cited in the *New York Times* and *Washington Post*.

Dr. Magnini regularly consults for a number of constituencies in the hospitality, tourism and outdoor recreation sectors. The consulting activities include projects such as strategic master plans, economic impact analyses, feasibility studies, and executive education seminars. He has conducted research projects and /or delivered workshops to the state park systems of Florida, Kentucky, North Carolina, South Carolina, Virginia, and West Virginia.

Examples of economic impact studies completed by Dr. Magnini include:

- The Economic and Fiscal Impacts of the 2025 Waterfowl Festival held in Easton, MD
- The Economic and Fiscal Impacts of the 2025 Iron Blossom Music Festival
- The Economic and Fiscal Impacts of the 2025 Jeep Fest held in Virginia Beach, VA
- The Economic and Fiscal Impacts of the 2025 Point Break Music Festival
- The Economic and Fiscal Impacts of the 2024 Coastal Virginia Auto Show
- The Economic and Fiscal Impacts of the 2024 Stratusphere Gin Virginia Beach Cup
- The Economic and Fiscal Impacts of the 2024 Virginia Beach Columbus Day Soccer Tournament
- The Economic and Fiscal Impacts of the 2024 Iron Blossom Music Festival
- The Economic and Fiscal Impacts of the 2024 WaterJAM Conference
- The 2023 Economic Significance and Impacts of West Virginia's State Parks and Forests
- The Economic and Fiscal Impacts of the 2023 Something in the Water Music Festival held in Virginia Beach, VA
- The Economic Impacts of the 2023 Beach It County Music Festival held in Virginia Beach, VA
- The Economic and Fiscal Impacts of the 2023 Virginia beach Jackalope Festival
- The Economic and Fiscal Impacts of the 2023 Bulls and Barrels Beach Rodeo held in Virginia Beach, VA
- The Economic and Fiscal Impacts of the Audacy Oceanfront Concert Series held in conjunction with the 60th Annual East Coast Surfing Championships
- The Economic Impacts of Virginia's Civil Rights in Education Heritage Trail (with Chuck Wyatt)
- The Economic and Fiscal Impacts of Doe Mountain Recreational Area (with Chuck Wyatt)
- The Economic Impacts of the Virginia Capital Trail (with Lauren Pilkington and Chuck Wyatt)
- The Economic Impacts of Agritourism in Loudoun County, VA
- The Economic Impacts of Michigan's Ports and Harbors (with Dr. John Crotts)

- Potential Economic Impacts of a Shooting and Archery Range Complex in the SRRA Area (with Chuck Wyatt)
- Virginia State Parks Economic Impact Report (conducted annually)
- The Economic Impacts of the Southern Virginia Higher Education Center
- The Economic Impacts of Southside Virginia Community College
- Potential Economic Impacts and Factors Contributing to the Success of Rail-to-Trail Conversions (with Chuck Wyatt)
- The Economic Impacts of Spearhead Trails (with Chuck Wyatt)
- The Fiscal and Economic Impacts of Virginia's Agritourism Industry (with Esra Calvert and Dr. Martha Walker)
- The Economic Significance and Impacts of West Virginia's State Parks and Forests (with Dr. Muzzo Uysal)

RELATED REFERENCES AND SOURCES

Anderson, S. (2025). Virginia's 44th state park opens in Highland County: <https://www.dcr.virginia.gov/insights/virginias-44th-state-park-opens-in-highland-county> (accessed February 11, 2026).

Altmann, I., and Wohlwill, J.F. (eds). Behavior and the Natural Environment. Human Behavior and Environment, vol. 6. New York, London, 1983.

America's Byways Resource Center (2010). *An Economic Impact Tool for National Scenic Byways and All-American Roads: A Technical Manual*. Published in conjunction with Federal Highway Administration. America's Byways Resource Center, Duluth, MN.

Atchley, R. A., Strayer, D. L., and Atchley, P. (2012). Creativity in the wild: Improving creativity reasoning through immersion in natural settings. *PLoS ONE*, 7, 1-3.

Bezies, N., Calvetti, B., and Poppa, M. (2011). *Improved methods of visitor attendance collection at Massachusetts state parks* (WORCESTER POLYTECHNIC INSTITUTE).

Crompton, J. L. (2005). The impact of parks on property values: empirical evidence from the past two decades in the United States. *Managing Leisure*, 10(4), 203-218.

Crompton, J. L. (1993). Economic impact analysis: Myths and misapplication. *Trends*, 30(4), 9-14.

Dougherty, R. (2011). *2010 Maryland State Parks Economic Impact and Visitor Study*. Maryland Office of Tourism Development: Department of Business and Economic Development; in collaboration with the Maryland Department of Natural Resources; Cecil County Tourism, Office of Economic Development; Maryland Association of Destination Marketing Organizations; Governor's State Park Advisory Commission.

Greenley, D. A., Walsh, R. G., and Young, R. A. (1981). Option value: empirical evidence from a case study of recreation and water quality. *The Quarterly Journal of Economics*, 96(4), 657-673.

Grizzle, W. (2019). Clinch River State Park One Step Closer to Realization (August 7, 2019): <https://www.leedaily.com/2019/08/12/clinch-river-state-park-one-step-closer-to-realization/>

Harshfield, A., Manville, C., Elmore, N., Smith, P., Rodriguez Rincon, D., Hood, C., and Gehrt, D. (2019). A scoping study on the link between exposure to or interaction with the natural environment and mental health outcomes. RAND Corporation, Santa Monica, Calif., and Cambridge, UK, https://www.rand.org/pubs/research_reports/RR3122.html

Hartig, T. (2004). Restorative environments. In: Spielberger C (ed) *Encyclopedia of applied psychology*, vol 3. Academic Press, San Diego, CA, 273-279.

<https://www.nrpa.org/uploadedFiles/nrpa.org/Advocacy/Resources/Parks-Recreation-Essential-Public-Services-January-2010.pdf> (accessed February 7, 2023).

Institute for Service Research (2018). 5-Year Strategic Marketing Plan for Florida State Parks.

Magnini, V.P. and Uysal, M. (2015a). *Economic Significance and Impacts of West Virginia State Parks and Forests*. Report prepared for the Department of West Virginia State Parks and Forests by the Institute for Service Research December 2015).

Magnini, V.P. and Uysal, M. (2015b). *West Virginia State Parks Marketing Research Study*. Report prepared for the Department of West Virginia State Parks and Forests by the Institute for Service Research (November 2015).

Mowen, A., Graefe, A., Trauntvein, N., and Styne, D. (2012). *The Economic Significance and Impact of Pennsylvania State Parks: An Updated Assessment of 2010 Park Visitor Spending on the State and Local Economy*. Penn State University, Department of Recreation, Park and Tourism Management, State College, Pennsylvania.

Ohnesorge, L. (2018). "Amazon will split HQ2 between two cities, report says." Triangle Business Journal (Nov 5, 2018).

Quendler, E., Magnini, V. P., and Driouech, N. (2020). Strategic Positioning of the Farm Holiday's Post-Pandemic Competitive Advantages: Fresh Air and Sunlight. *Zeitschrift für Tourismuswissenschaft*, 13(1), 22-51.

Sandifer, P. A., Sutton-Grier, A. E., and Ward, B. P. (2015). Exploring connections among nature, biodiversity, ecosystem services, and human health and well-being: Opportunities to enhance health and biodiversity conversation. *Ecosystem Services*, 12, 1-15.

Stenfors, C. U. D., van Hedger, S. C., Schwertz, K. E., Meyer, F. A., Smith, K.E.L., Norman, G. L., Bourrier, S. C., Enns, J. T., Kardan, O., Jonides, J., and Berman, M. G. (2019). Positive Effects of Nature on Cognitive Performance Across Multiple Experiments: Test Order but Not Affect Modulates the Cognitive Effects. *Frontiers in Psychology*, 10 (Article 1413), 1-21.

Styer, N. (2023). State Leaders Celebrate the Opening of Sweet Run Park: https://www.loudounnow.com/news/state-leaders-celebrate-the-opening-of-sweet-run-park/article_9136ed24-6486-11ee-9af0-d3314b7b0ef2.html (Accessed February 15, 2025).

Stynes, D. J., Propst, D. B., Chang, W., and Sun, Y. (2000). Estimating national park visitor spending and economic impacts: The MGM2 model. *Report to the National Park Service. East Lansing, MI: Department of Park, Recreation and Tourism Resources, Michigan State University.*

Stynes, D. (2012). *Economic Contribution of the Chesapeake Bay Gateways and Watertrails Network to Local Economies*. Retrieved from: http://www.baygateways.net/pubs/CBGN_Econ_Study_Tech_Report_FINAL_January_2012.pdf

Taylor, A. F., Kuo, F. E., and Sullivan, W. C. (2001). Coping with ADD: The surprising connection to green play settings. *Environment and Behavior*, 33, 54-77.

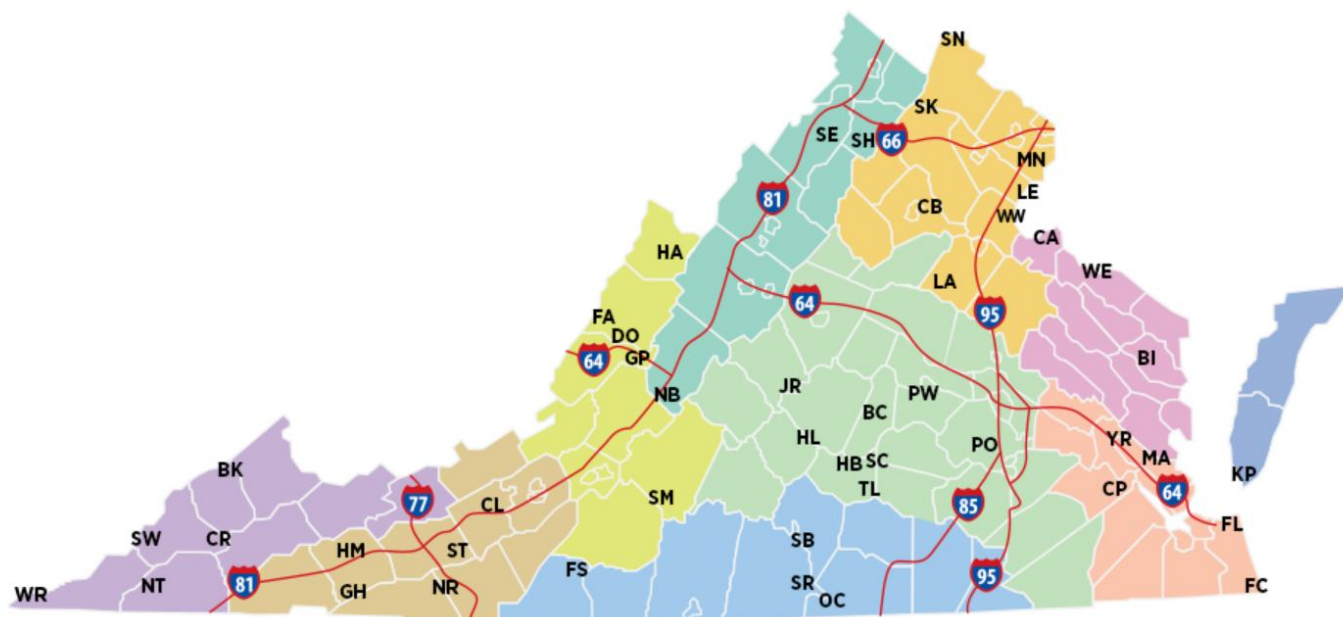
Ulrich, R. S., Simons, R. F., Losito, B. D., Fiorito, E., Miles, M. A., and Zelson, M. (1991). Stress recovery during exposure to natural and urban environments. *Journal of Environmental Psychology*, 11, 201-230, [https://doi.10.1016/s0272-4944\(05\)80184-7](https://doi.10.1016/s0272-4944(05)80184-7)

WordNet Search (n.d.). "mental health". <http://wordnetweb.princeton.edu/perl/webwn?s=mental+health&sub=Search+WordNet>

www.vatc.org/research/economicimpact/: Virginia Tourism Corporation (accessed 1/22/20).

APPENDICES

APPENDIX A: MAP OF VIRGINIA STATE PARKS



Bear Creek Lake (BC)	First Landing (FL)	Natural Bridge (NB)	Smith Mountain Lake (SM)
Belle Isle (BI)	Grayson Highlands (GH)	Natural Tunnel (NT)	Southwest Virginia
Breaks Interstate (BK) *	Green Pastures Recreation	New River Trail (NR)	Museum
Caledon (CA)	Area (GP)	Occoneechee (OC)	Historical (SW)
Chippokes(CP)	Hayfields (HA)	Pocahontas (PO)	Staunton River (SR)
Claytor Lake (CL)	High Bridge Trail (HB)	Powhatan (PW)	Staunton River Battlefield
Clinch River (CR) **	Holliday Lake (HL)	Sailor's Creek Battlefield	(SB)
Culpeper Battlefields (CB)	Hungry Mother (HM)	Historic (SC)	Sweet Run (SN)
**	James River (JR)	Seven Bends (SE)	Twin Lakes (TL)
Douthat (DO)	Kiptopeke (KP)	Shenandoah River (SH)	Westmoreland (WE)
Fairy Stone (FS)	Lake Anna (LA)	Shot Tower (ST)	Widewater (WW)
Falling Springs Falls (FA)	Leesylvania (LE)	Sky Meadows (SK)	Wilderness Road (WR)
False Cape (FC)	Machicomoco (MA)		York River (YR)
	Mason Neck (MN)		

Source of map: www.dcr.virginia.gov/state-parks/find-a-park

{Many of the definitions in this glossary are paraphrased directly from
Stynes et al. (2000) MGM2 users' manual}

Direct effects – the changes in sales, income, and jobs in an area as a result of first-round visitor spending.

Economic activity – economic output modeling that includes all visitor spending and consequent multiplier effects by both locals and non-locals as well as any money spent by parks that was not supported by visitor spending. Consequently, economic activity figures represent all of the economic activity stimulated by a park location within the state.

- **Unadjusted economic activity** - economic activity output figures computed using statewide IMPLAN multipliers.
- **Adjusted economic activity** – calibrated economic activity output figures based upon whether a given park's county(ies) has economic activity above or below the state average.

Economic impact – economic output modeling that includes all visitor spending and consequent multiplier effects by 1) in-state residents traveling 50 miles or more (one-way) to visit the park; and 2) all out-of-state visitors. In addition, economic impact models include capital improvements and operational expenditures not derived from visitor spending. Thus, economic impact figures reflect all of the “fresh money” entering an area's economy as a result of a given state park.

- **Unadjusted economic impact** - economic impact output figures computed using statewide IMPLAN multipliers.
- **Adjusted economic impact** – calibrated economic impact output figures based upon whether a given park's county(ies) has economic activity above or below the state average. Adjusted economic impact figures are also reduced by 12% (Magnini and Uysal, 2015a) to account for spending by park visitors who likely would have traveled and spent money in the state regardless of whether the park existed.

Indirect effects – the changes in sales, income and jobs to businesses that supply goods and services to the park location.

Induced effects – the changes in economic activity in the region stimulated by household spending of income earned through direct and indirect effects of visitor spending.

IMPLAN – a computer-based input / output economic modeling system. With IMPLAN one can estimate more than 500 sector input / output models for any region consisting of one or more counties. IMPLAN includes procedures for generating multipliers and estimating impacts by applying final demand changes to the model.

Multipliers – these estimates express the magnitude of the secondary effects in a given geographic area and are often in the form of a ratio of the total change in economic activity relative to the direct change. Multipliers reflect the degree of interdependency between sectors in a region's economy and can vary substantially across regions and sectors.

Non-local visitors - Virginia residents who drive 50 miles or more (one-way) to visit the park.

Secondary effects – the changes in economic activity from subsequent rounds of re-spending of dollars. There are two types of secondary effects: indirect and induced (see previously listed definitions).

Value-added (also termed 'gross regional product') – the sum of total income and indirect business taxes. Value-added is a commonly used measure of the contribution of a region to the state/national economy because it avoids the double counting of intermediate sales and incorporates only the 'value-added' by the region to final products.

{END OF REPORT}