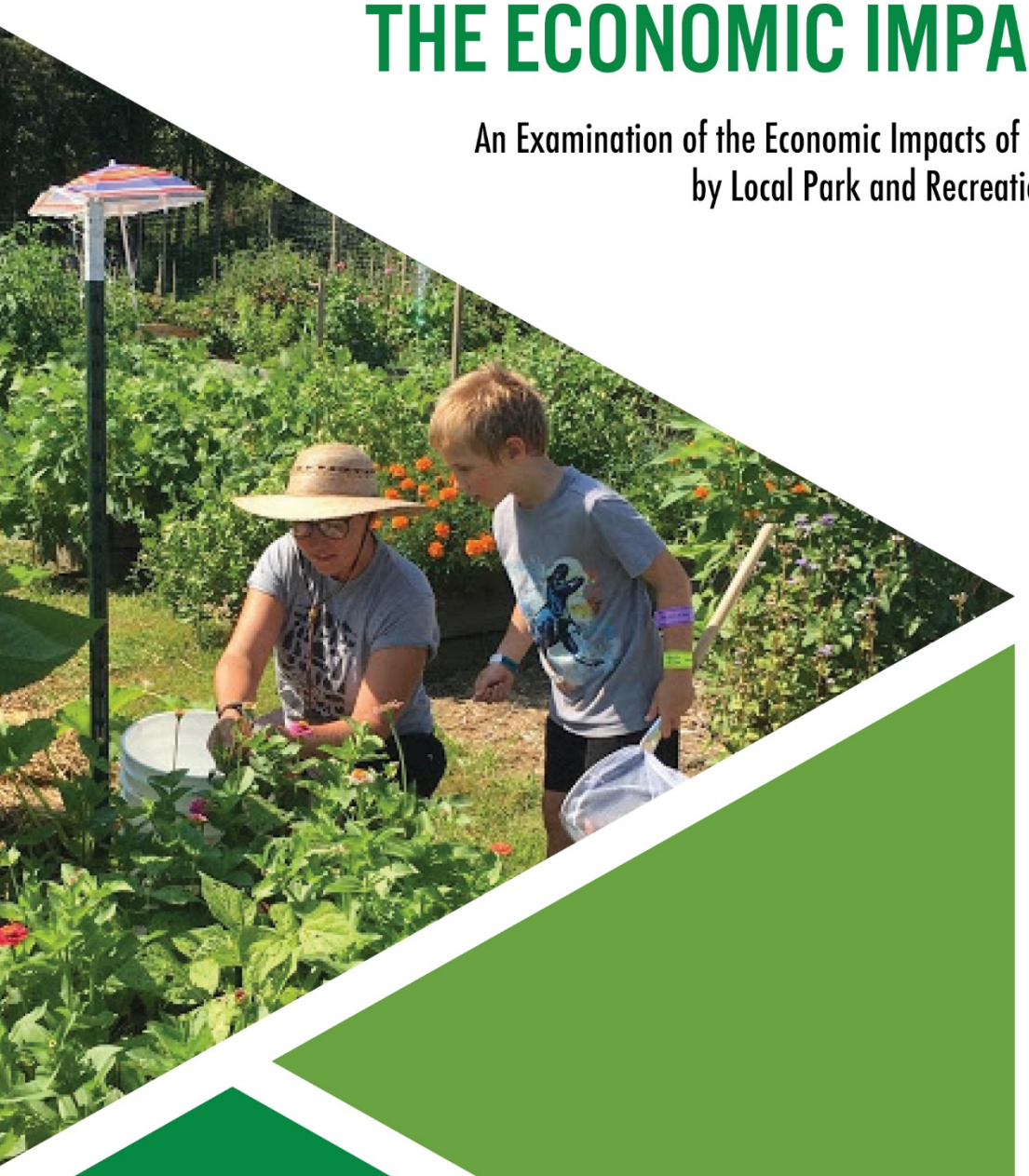
THE ECONOMIC IMPACT OF PARKS

An Examination of the Economic Impacts of Operations and Capital Spending by Local Park and Recreation Agencies on the U.S. Economy



NRPA National Recreation and Park Association

Because everyone deserves a great park

The Economic Impacts of Local Parks

An Examination of the Economic Impacts of Local and Regional Park Agency Spending on the United States Economy

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The National Recreation and Park Association

Prepared by:

Center for Regional Analysis
George Mason University

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Center for Regional Analysis

The Center for Regional Analysis, housed in the School of Policy, Government, and International Affairs at George Mason University, is the premier university-based regional economic research center in the Washington, DC Metropolitan Area. The Center provides regionally relevant, globally informed research for businesses, governments, and non-profit agencies.

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Table of Contents

Table of Tables

EXECUTIVE SUMMARY

The following summarizes the latest findings of the Center for Regional Analysis' research on the economic impact of spending by local and regional public park systems in the United States and the role that local parks play in 21st century local economic development. This research, conducted in direct collaboration with the research staff of the National Recreation and Park Association (NRPA), examines the role that local parks play in 21st century local economic development, and adds to the growing body of evidence demonstrating that the benefits of parks extend well beyond their role as a public amenity and an enhancement to quality of life in their communities. In this research report, we present our analysis of the economic and fiscal impacts of local park and recreation system spending on state and national economies.

Key characteristics of the research include:

- The study focuses on the direct, indirect (business transactions of park agency vendors) and induced (employees spending their earnings) effects local and regional park agencies' spending have on economic activity. The research does *not* measure the effects of park visitor spending nor the benefits local and regional park agencies generate for the environment, health/wellness and property values.
- Data for this analysis are from the U.S. Census Bureau Survey of Local Government Employment, previous research findings and spending data from more than 100 local and regional park agencies accessed from park system budget data posted online.
- Data analysis tasks employed economic input-output multipliers provided by IMPLAN, Inc. The analyses provide estimates of economic activity (value of transactions), value added (equivalent to gross domestic/regional product), labor income (salaries, wages, and benefits) and employment (headcount jobs).
- In line with previous studies, we have separated the economic impacts of recurring operations spending and capital expenditures.

Key Findings from the National Study

Local and regional public park agencies' activities and spending in 2017 generated more than $166 billion in economic activity boosting national GDP by $87 billion and supporting over 1.1 million jobs that paid $50.8 in salaries, wages and benefits.

Economic Impact of Local and Regional Public Parks to the United States Economy—2017

Economic Activity (transactions)	Value Added (GDP)	Labor Income (salaries, wages, benefits)	Employment (jobs)
$ 166,367,719,418	$ 87,034,317,404	$ 50,780,569,320	1,125,640

Sources: U.S. Census Bureau, IMPLAN, Center for Regional Analysis

Introduction

There is an increasing awareness that local park systems are more than mere amenities for local residents. Local park and recreation agencies—as shown in this and previous reports prepared for the National Recreation and Park Association—are major employers. They collectively generate billions of dollars in economic activity in their service areas and increasingly are important components of local and regional economic development planning.

This study builds on previous reports (published in 2015 and 2018) quantifying the economic value of local park operations and capital improvement programs for agencies across the United States. As with our previous research, we include economic impact assessments for the United States and for each state plus the District of Columbia. Our focus is on public park and recreation systems operated by local governments, and this analysis does *not* include the national or state park systems.

Methods

This study, as with our 2018 analysis, uses data reported by the U.S. Census Bureau to estimate operational spending by local park systems. The Survey of Local Government Employment in 2017 offers estimates of agency spending and employment. Capital spending estimates are based on data derived from reports available from the National Recreation and Park Association (NRPA) and a review of budget records for dozens of park and recreation systems selected to reflect a diverse range of localities and park operating characteristics. We use the IMPLAN economic input-output model to estimate the total economic impacts, often called "economic contributions," generated by park and recreation system operating and capital spending. Consistent with the previous two studies prepared for NRPA, we categorize park and recreation system spending as if it were private- sector businesses operating parks, recreation and similar entertainment venues. In our judgment, this approach is more accurate that treating the spending as general local government spending. (Park and recreation system spending patterns will be much more like a privately-run entertainment venue than a local tax office.) However, we do adjust the model inputs to reflect actual employee compensation paid to park system workers, which is often different than what is paid to employees of private sector firms. The IMPLAN model is the most widely used tools for estimating economic impacts. This model is updated frequently to reflect shifts in the structure of the economy; therefore, the impacts reported here are not directly comparable to the findings of previous analyses.

Consistent with previous studies, we do not include economic activity associated with tourism spending generated by local and regional park systems, which can be substantial, but is not captured in a consistent or accessible manner at a national scale. We also do not include impacts such as those parks can have on residential and commercial property values, the value of health

effects of residents using park amenities, and the rising importance of parks in boosting local social capital and contributing to local quality of life.

The IMPLAN model is based on an economic input-output framework and provides estimates of direct, indirect, and induced effects. Direct effects represent spending by the park and recreation systems. Indirect effects capture the value of economic activity at park and recreation system suppliers or vendors, such as providers of equipment and supplies used to maintain the parks. Induced impacts come for park and recreation system employees, and the employees of vendors, spending a portion of their earnings for good and services. The model adjusts for spending that leaves the designated the study area, such as purchasing turf maintenance equipment that is not manufactured locally.

The IMPLAN model provides estimates of the impacts of park and recreation system spending on total output, value added, labor income, and jobs. Output is a measure of the value of transactions expressed in producer prices. Value added is equivalent to gross domestic product or gross regional product. Job count estimates are expressed as headcount jobs and labor income includes salaries, wages, and benefits. The databases used to build the economic input-output model account for full- versus part-time employment in the relevant sectors of the economy.

National Analysis

In total, for 2017 the nation's local and regional public park systems generated $166 billion in economic activity, $87 billion in gross domestic product, and over 1.1 million jobs that boosted labor income by $51 billion.

Table 1
Economic Impacts of Local and Regional Public Parks
to the United States Economy—2017

Economic Activity (transactions)	Value Added (GDP)	Labor Income (salaries, wages, benefits)	Employment (jobs)
$ 166,367,719,418	$ 87,034,317,404	$ 50,780,569,320	1,125,640

Source: U.S. Census Bureau, IMPLAN, Center for Regional Analysis

State-Level Analysis

This component of the research project examines the economic impacts of local and regional parks spending in all 50 states and the District of Columbia. The data sources are the same as those used in the national analysis with one notable exception. State-level capital spending is normalized to our estimate of total national capital spending and is proportionately allocated based on Census data for capital spending.

The findings from the state-level analysis are presented in Table 2. The sum of the state-level impacts does not equal the national level economic impact estimates presented in the previous section because of the adjustments to spending in the IMPLAN model that accounts for leakage. As described in our 2018 report: "If the fertilizer used on sports fields located at an Oklahoma City park was produced by a manufacturer in Arkansas, the value of that product production would not count as an impact on the Oklahoma economy. In addition, since the spending for this fertilizer originated outside of Arkansas, we would not capture this fertilizer sale in the Arkansas state-level impacts. Therefore, the economic activity related to the manufacture of this fertilizer is 'lost' in our state-level analysis. Note that since all of this economic activity occurred within the United States, this 'lost' activity is captured in the national level analysis."

The methodology employed in this analysis replicates, with minor adjustments, the methodology used in our 2018 analysis of the economic impacts of local parks and recreation spending. While this means that the results of this analysis can be compared to the previous study, we caution about over-emphasizing inter-period changes in the total economic impacts of local parks. Reviewing Census data of parks and recreation employment shows that the scale of operations moves, in general and with some time lag, with overall economic cycles. When the local economy is growing, park-related operating expenditures tend to rise; the converse is true in down economic cycles. However, even though our analysis aggregates total park spending at the state-level, we have observed that capital spending seems to exhibit time-scaled clusters in which there can be substantial year-to-year changes in total capital spending among local park agencies. In other words, within a given individual state, local governments move somewhat in tandem when holding referendums on bonds to support park capital projects; that results in a cyclical pattern in total park spending. In the analysis of park spending in 2018 we observed some notable increases and decreases in total economic activity across a few states. In each of these cases, the change is attributable to swings in capital spending while operations spending exhibited a consistent growth trend. Even in those few states where the total economic activity created by local park and recreation system spending declined compared to two years earlier, those systems remain important contributors to overall economic activity in their states and localities.

Table 2
Economic Impacts of Local and Regional Park Spending by State, 2017

State	Employment (Jobs)	Labor Income ($)	Value Added ($)	Output ($)
U.S.	1,125,640	50,780,569,320	87,034,317,404	166,367,719,418
Alabama	12,705	399,005,006	76,037,226	1,503,147,254
Alaska	2,133	98,633,863	156,664,322	303,390,757
Arizona	13,938	501,762,409	915,769,100	1,648,215,426
Arkansas	5,686	168,837,796	324,327,855	682,233,962
California	109,665	5,176,100,922	8,629,824,220	16,036,598,747
Colorado	34,046	1,384,958,813	2,437,503,694	4,358,843,200
Connecticut	5,425	190,825,280	309,453,842	494,556,583
Delaware	887	35,563,676	58,340,947	113,284,101
District of Columbia	3,233	217,026,044	356,821,249	661,978,074
Florida	71,466	2,585,692,228	4,957,099,987	10,082,946,211
Georgia	37,469	1,574,843,900	2,764,203,985	5,448,738,404
Hawaii	8,033	347,537,924	609,754,817	1,015,390,500
Idaho	4,186	128,032,145	231,520,817	465,672,789
Illinois	78,772	3,500,248,927	5,655,505,303	10,044,757,210
Indiana	10,169	331,540,900	540,586,775	1,084,801,753
Iowa	7,364	232,516,251	403,048,873	794,049,585
Kansas	8,877	325,218,500	517,958,595	1,011,252,780
Kentucky	5,735	159,931,685	308,062,084	678,908,245
Louisiana	11,032	335,868,614	550,224,269	1,238,007,175
Maine	2,381	67,449,639	115,080,760	234,820,271
Maryland	17,931	827,208,357	1,333,781,732	2,361,648,085
Massachusetts	8,604	432,230,371	648,328,703	1,025,078,289
Michigan	14,080	469,348,842	925,451,856	1,898,096,633
Minnesota	28,312	1,330,618,132	2,162,533,089	4,074,433,210
Mississippi	4,053	85,410,909	176,311,793	474,375,086
Missouri	18,365	643,225,374	1,021,864,401	2,128,899,915
Montana	2,394	86,448,679	135,739,115	304,183,088
Nebraska	5,536	212,816,750	328,333,520	683,532,116
Nevada	10,784	86,882,201	449,527,309	1,321,280,720
New Hampshire	1,847	80,026,999	119,378,468	205,512,906
New Jersey	15,800	577,659,695	984,570,141	1,641,054,862
New Mexico	6,121	238,594,202	389,044,404	787,081,162
New York	56,479	3,121,526,974	5,121,020,349	9,167,329,779
North Carolina	27,568	951,514,017	1,619,063,934	3,244,130,440

Table 2 continued
Economic Impacts of Local and Regional Park Spending by State
2017

State	Employment (Jobs)	Labor Income ($)	Value Added ($)	Output ($)
North Dakota	6,806	255,756,065	424,245,858	946,766,748
Ohio	34,546	1,580,660,242	2,450,100,679	4,339,345,388
Oklahoma	12,941	556,168,656	903,692,112	1,967,654,589
Oregon	15,617	570,448,263	988,826,314	1,819,950,687
Pennsylvania	14,840	694,941,655	1,146,994,479	2,285,494,182
Rhode Island	1,030	39,691,153	62,827,026	112,139,819
South Carolina	11,064	309,520,294	583,640,590	1,159,358,994
South Dakota	3,378	92,581,322	158,071,039	381,448,042
Tennessee	14,078	552,269,925	896,995,299	1,680,968,640
Texas	62,519	2,854,359,898	4,830,080,030	8,703,708,284
Utah	14,838	355,287,553	674,949,848	1,245,717,307
Vermont	791	23,991,358	47,094,234	94,179,086
Virginia	24,738	853,552,334	1,499,767,229	2,715,585,026
Washington	24,825	1,212,367,004	2,047,376,719	3,769,241,437
West Virginia	2,977	109,881,094	190,054,866	422,994,270
Wisconsin	14,534	573,538,792	1,032,074,336	2,038,922,648
Wyoming	2,926	77,420,654	164,303,636	290,795,912

Sources: U.S. Census Bureau, IMPLAN, Center for Regional Analysis