

The Economic Impacts of the Fairfax County Park Authority

*An Examination of the Economic Impacts of Fairfax County
Park Authority Spending.*

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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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Introduction

Parks make vital contributions to urban communities. They are important contributors to their community's overall quality of life by providing recreational amenities, neighborhood beautification, and improved air and water quality brought by urban tree canopies and better storm-water management. In addition to these benefits, parks also make a number of economic contributions. Proximity to well-maintained parks can raise property values and the overall access to outdoor amenities can help attract and retain talented workers that boost regional economic competitiveness. In addition to these contributions, parks also generate a substantial amount of economic activity due to operational spending required to maintain properties and provide amenities and activities, as well as capital improvement program spending. This report focuses on these last two types of economic activities. Specifically, it examines the economic impacts generated by the Fairfax County Park Authority's capital and operations spending.

Program revenues derived from charges for services and capital grants and contributions account for over half (55.3 percent) of the Fairfax County Park Authority's (FCPA) FY15 revenues.¹ The rest is derived primarily from public funding. This business model leverages public investment into a wide range of park amenities including equestrian facilities, recreational centers, golf courses and other sports venues, neighborhood parks, and urban historical sites. The high quality of these facilities creates a dedicated constituency attracting participation in FCPA's Adopt-A-Field and Adopt-A-Park programs. In addition, the Fairfax County Park Foundation provides on-going financial support by raising private funds, building partnerships, and obtaining grants. These additional sources of revenue and support are vital to the park system's operations and increase its overall impact on the community and the economy.

We begin this assessment by providing a brief overview of the Fairfax County Park Authority and the facilities it is responsible for operating and maintaining. This is followed by a description of the methodology employed in our analysis. We then present the findings of three separate analyses. The first is an assessment of the total impacts of all local and regional park system spending on the national economy, which forms the key component of our broader study for the National Recreation and Park Association. We then examine the overall impact of local and regional parks spending within the Commonwealth of Virginia. Finally, we examine the regional impacts of operations and capital spending specifically by the Fairfax County Park Authority. We close with some brief conclusions.

The Fairfax County Park Authority

Operating since 1950, the Fairfax County Park Authority is responsible for 425 parks that cover 23,310 acres of parkland and open space. The parks provide a diverse array of amenities and recreational opportunities for the residents of Fairfax County and the broader Northern Virginia region. In addition to the many parks that provide basic outdoor recreational opportunities, parks like Burke Lake and Lake Accotink provide opportunities for boating and fishing. Similarly, Frying Pan Farm Park is one of three

¹ <http://www.fairfaxcounty.gov/parks/archives/cafr15.pdf>

equestrian centers and draws visitors from well beyond Fairfax County. The Park Authority also manages numerous dog parks, nature centers, golf courses, historical sites, and maintains hundreds of athletic fields and hiking trails.

Given this large and diverse number of parks and facilities, it should come as no surprise that the Park Authority has many operational and facilities maintenance needs. The Park Authority allocates significant funding to support basic functions like lawn mowing, snow removal and basic repairs. However these funds also support efforts to preserve watersheds, improve water quality, and reduce energy costs at its many facilities. Moreover, FCPA funds enable programming for people of all ages as it offers over 12,000 classes throughout the community and a summer entertainment series. These operational and maintenance needs are a catalyst for significant economic activities that are described below.

Method

To estimate the economic impacts of park system spending, we utilize economic input-output models developed by MIG, Inc. These models include Regional Impact Modeling System (RIMS) multipliers developed by the U.S. Bureau of Economic Analysis and the IMPLAN economic input-output model. These models are the most widely used in academic and professional research. The models provide estimates for direct, indirect and induced effects of new spending in a defined region. For the analysis of FCPA spending, we focused on the Fairfax County economy, since this is where the overwhelming majority of the economic impact is felt.

Direct economic effects capture spending by the park system for personnel, goods and services, utilities, and capital equipment and projects. Indirect effects are the economic impacts that come from the direct interaction of the Park Authority with the business community. For example, the Fairfax County Park authority purchases pool chemicals for its water parks from a local vendor. That vendor, in turn, hires workers, fuels their delivery vans, and pays an accounting firm for bookkeeping. The accounting firm rents office space and hires a janitorial service, and so on. Input-output models account for spending that leaves the region. For example, little of the purchase value of gasoline used in park vehicles stays in the region since the fuel is refined elsewhere. Induced effects capture the value of spending by employees of the park authority, and a portion of spending by employees of the firms receiving indirect impacts, on goods and services in the region. When added together, the direct, indirect, and induced spending effects are greater than park system direct spending, which represents the “multiplier” effect.

The models offer estimates of output (a measure of business transactions), labor income (including salaries, wages, and benefits), and employment (jobs). The employment estimates are headcount jobs that include both full-time and part-time positions.

National Analysis

The National Analysis portion of the broader study uses data from the Survey of Local Government Employment from 2013. The data used are the number of employees of parks and recreation departments

and local and regional entities. This employment number is used by the IMPLAN model to estimate total direct output of the parks systems. The National Recreation and Parks Association's PRORAGIS dataset, augmented with data for more than 400 local and regional parks budget data, was used to estimate capital program expenditures. In all, our national estimates are based on data from 1,169 park systems.

The methodology used in this analysis does not count smaller capital purchases, such as small lawn equipment, that typically are expensed in operating budgets. This implies that capital expenditures shown here are likely underestimated and therefore the presented estimates of total economic impacts are on the conservative side.

The total operational spending in 2013 for all departments of parks and recreation across the United States was roughly \$32.3 billion covering 356,000 direct jobs. These operational expenditures generated \$80 billion in economic activity, boosting gross domestic product by \$38.8 billion and supported a total of 658,478 jobs paying about \$24.2 billion in labor income (See Table 1).

The above numbers only represent operational expenses. The \$22.4 billion in capital expenditures made by local and regional parks in 2013 created \$59.7 billion in economic activity, increased labor income by \$19.6 billion, and supported over 340,000 jobs. Gross domestic product grew by \$29.2 billion from capital spending by local and regional parks. In sum, across the nation local and regional park systems provide almost 1 million jobs, \$140 billion in economic activity, and \$44 billion in labor income.

Table 1
Economic Impacts of Local and Regional Public Parks on the United States Economy
2013

	Operating Impacts	Capital Spending Impacts	Total Impact of Local and Regional Parks' Spending
Economic Activity (transactions)	\$79.97 billion	\$59.66 billion	\$139.63 billion
Value Added (GDP)	\$38.78 billion	\$29.17 billion	\$67.95 billion
Labor Income (salaries, wages, benefits)	\$24.18 billion	\$19.61 billion	\$43.79 billion
Employment (jobs)	658,478 jobs	340,604 jobs	999,082 jobs

Source: Center for Regional Analysis—George Mason University for the National Recreation and Park Association

State-Level Analysis

Taking a similar approach to the national study, we estimated the economic impacts of local and regional parks spending across the Commonwealth of Virginia. This component of the study also utilized employment data from the U.S. Census Bureau for local and regional park systems as a proxy measure for operations spending. Estimates of total economic impacts, including direct, indirect and induced effects come from Regional Impact Modeling System (RIMS-II) multipliers developed by the Bureau of Economic

Analysis and packaged by IMPLAN, Inc. The estimates of capital spending are based on proportional relationships between operating and capital spending observed in the national study.

The findings of the state level analysis are presented in Table 2. Local and Regional parks system spending in Virginia generated over \$3.7 billion in economic activity and supported over 30,700 jobs that paid almost \$1.4 billion in salaries, wages, and benefits in 2013. Nationally and statewide these numbers are significant. We now turn our attention to the case of Fairfax County.

Table 2
Economic Impacts of Local and Regional Park Spending
Commonwealth of Virginia, 2013

Description	Impact
Economic Activity (transactions)	\$ 3,742,040,000
Labor Income (salaries, wages, benefits)	\$ 1,380,791,000
Employment (headcount jobs)	30,737

Sources: U.S. Census Bureau, PRORAGIS, IMPLAN (RIMS), Center for Regional Analysis

Fairfax County Park Authority Analysis

In estimating the economic impacts of operating and capital spending by the Fairfax County Park Authority, we utilized budget data for Fiscal Year 2015. Given this more recent information, the estimates of the Fairfax County Park Authority impacts are not directly comparable to the 2013 state level park spending estimates discussed above. There is one other adjustment in methodology for estimating the specific impacts of the Fairfax Park Authority. Since the Fairfax Park Authority employs many seasonal, part-time workers, we have converted all head-count job estimates provided by the input-output model into Full Time Equivalent (FTE) jobs using national averages for individual industries. This corrects for the relative degree to which industries tend to employ part-time individuals. Park systems typically employ many seasonal part time workers and provide excellent opportunities for young people to learn workplace skills.

In Fiscal Year 2015, the Fairfax County Park Authority budgeted \$73.6 million to support operations.² This spending includes salaries, wages, and benefits paid to park system employees, as well as other operating expenditures. This spending generated over \$130 million in economic activity within the county. It also supported 916 FTE jobs, and increased local labor income by more than \$52.4 million (see Table 3).

In addition, the Fairfax County Park Authority authorized \$34.4 million in capital program spending.³ This capital spending led to an additional \$51 million in economic activity for the county boosting labor income by \$24.5 million, and creating 343 FTE jobs. Combined, the economic impacts of FY2015 spending by the

² Operational spending includes spending from the General Fund and Park Revenue and Operating Fund.

³ Capital spending includes spending from General Construction, Park Bond Construction, and the Park Improvement Fund.

Fairfax County Park Authority totaled \$108 million and combined supported 1,260 FTE jobs that paid \$76.9 million in salaries, wages, and benefits.

Table 3
Economic Impacts of Fairfax County Parks
2015

Description	Impact
Operating Impacts*	
Spending	\$73,605,000
Economic Activity (transactions)	\$130,114,000
Labor Income (salaries, wages, benefits)	\$52,444,000
Employment (FTE jobs)	916
Capital Spending**	
Spending	\$34,428,000
Economic Activity (transactions)	\$51,059,000
Labor Income (salaries, wages, benefits)	\$24,459,000
Employment (FTE jobs)	343
Total Impacts	
Spending	\$108,033,000
Economic Activity (transactions)	\$181,173,000
Labor Income (salaries, wages, benefits)	\$76,903,000
Employment (FTE jobs)	1,260

Sources: IMPLAN (RIMS), Center for Regional Analysis

*Includes spending from 2015 salaries, benefits, general operating equipment and supplies

**Includes spending from Capital Outlay for 2015

It is important to note that many of the capital spending projects being supported by the Fairfax County Park Authority are not all short-term or one year projects, but rather are multiyear projects. Consequently, it is worthwhile considering the impacts of this spending over a period of time. Table 4 shows the impacts of capital spending on Fairfax County parks over the past three years. The Fairfax County Park Authority has budgeted over \$80 million to capital spending between 2013 and 2015. This spending generated over \$123 million additional economic activity in the county, increased labor income (e.g. salaries, wages and benefits) by \$61.5 million, and supported 918 person years of employment over the three year period.

Table 4
Capital Spending Impacts of Fairfax County Parks 2013-2015

Description	Impact
Economic Activity (transactions)	\$ 123,359,000
Labor Income (salaries, wages, benefits)	\$ 61,478,000
Employment (person years of employment)	918

Sources: IMPLAN (RIMS), Center for Regional Analysis

**Includes spending from General Construction, Park Bond Construction, and the Park Improvement Fund*

Conclusions

The Fairfax County Park Authority provides critical amenities that enhance the quality of life and provide a wide range of cultural and recreational amenities for the residents of Fairfax County, and Northern Virginia more broadly. However, this only tells part of the story as the Park Authority’s operating and capital expenditures generate substantial economic activity within the county economy. For FY 2015 spending by the Fairfax County Park Authority boosted the county’s economic activity by \$108 million and created 1,260 full-time-equivalent jobs. The ability of the Fairfax County Park Authority to leverage its relatively modest, but important, public resources into critical social and cultural infrastructures is a major contributor to the county’s overall economy and quality of life.