

The Economic Impact of Great Parks of Hamilton County

May 24, 2021

Final Report



Table of Contents

List of Tables	1
Executive Summary	2
Introduction	4
Methodology	4
Economic Impact of Operations Expenditures	6
Economic Impact of Capital Expenditures	6
Economic Impact of New Money	7
Fiscal Impacts	8
Conclusion	9

List of Tables

Table 1: Total Economic Impact of Great Parks Expenditures, 2020.....	2
Table 2: Total Economic Impact of Great Parks Expenditures and New Money, 2020.....	3
Table 3: Economic Impact of Great Parks' Operations Expenditures, 2020.....	6
Table 4: Economic Impact of Great Parks' Capital Expenditures, 2020.....	7
Table 5: Economic Impact of New Money Attributed to Great Parks, 2020.....	7
Table 6: Fiscal Impact of Great Parks of Hamilton County, 2020.....	9

Executive Summary

Great Parks of Hamilton County (Great Parks) works to preserve and protect natural resources while providing outdoor recreation and environmental education for Hamilton County citizens and other visitors. As a result, it is a contributor to the region's quality of life, making Hamilton County an attractive place to live, work, and play. In addition, Great Parks creates economic benefits for numerous households and businesses in Hamilton County through its employment and business activity.

This report illustrates the economic impact that Great Parks of Hamilton County provided to Hamilton County in 2020 by detailing its annual economic and fiscal impacts. Further, this report estimates the impact of new money, or money that would not have entered the Hamilton County economy without the presence of Great Parks.

Table 1 displays the total economic impact of Great Parks of Hamilton County's operations and capital expenditures. In 2020, Great Parks made \$36.2 million in direct operations and capital expenditures, employing 1,004 individuals with earnings of \$22.4 million. The total impact of these expenditures was \$66.6 million in economic output, supporting 3,104 individuals with earnings of \$59.3 million.

Table 1: Total Economic Impact of Great Parks Expenditures, 2020

Impact Type	Output	Employment	Earnings
Direct	\$36,202,738	1,004	\$22,409,317
Indirect	\$30,430,072	2,100	\$36,896,861
Total	\$66,632,810	3,104	\$59,306,178

Source: Economics Center analysis using data from Great Parks of Hamilton County and Emsi.

In addition to the impacts of its expenditures, Great Parks also contributes to the Hamilton County economy by attracting out-of-county visitors. Out-of-county visitor spending within Hamilton County in concert with their visitation to Great Parks can be understood as new money, or money that would not have entered the Hamilton County economy without the presence of Great Parks. In 2020, out-of-county visitors supported:

- \$40.6 million in total economic output
- 429 total jobs, and
- \$15.0 million in total earnings.

Table 2 presents the total economic impact of expenditures made by Great Parks and new money attracted into Hamilton County by Great Parks. As seen in Table 2, these combined impacts amount to a total \$107.2 million in economic output, supporting 3,533 individuals with earnings of \$74.3 million.

Table 2: Total Economic Impact of Great Parks Expenditures and New Money, 2020

Impact Type	Output	Employment	Earnings
Direct	\$58,461,735	1,321	\$30,448,228
Indirect	\$48,781,153	2,212	\$43,884,958
Total	\$107,242,888	3,533	\$74,333,186

Source: Economics Center analysis using data from Great Parks of Hamilton County, Emsi, and the Virginia State Parks Economic Impact Report.¹

In 2020, Great Parks received \$18,951,994 in revenue from the current tax levy in place with Hamilton County. Understood in concert with the \$107.2 million annual economic impact from Great Parks’ expenditures and new money entering the region due to Great Parks, every dollar of tax funding stimulated \$4.66 in new economic activity, or \$5.66 in total economic activity.

Moreover, Great Parks’ expenditures generate significant tax revenues for Hamilton County, its municipalities, and the State of Ohio. In 2020, Great Parks of Hamilton County generated:

- \$832,644 in income tax revenue to municipalities within Hamilton County
- \$357,460 in sales tax revenue to Hamilton County
- \$47,317 in income tax revenue to the State of Ohio
- \$694,119 in sales tax revenue to the State of Ohio, and
- \$273,157 in property tax revenue to Hamilton County.²

In total, the fiscal impact of Great Parks represented more than \$2.2 million in income, sales, and property tax revenue in 2020.

¹ Magnini, V. P. (2019). *Virginia State Parks Economic Impact Report*.

² Property taxes are collected by Hamilton County, though they are distributed to a variety of entities including school districts and the City of Cincinnati.

Introduction

Great Parks of Hamilton County has operated as a park district in the Hamilton County and Cincinnati region since 1930. Today, its park system encompasses 21 parks and preserves, protecting 17,742 acres within Hamilton County. In addition to its physical offerings of its parks and preserves, Great Parks offers a variety of recreational activities to visitors, including camping, golf, and paddling. Its mission is to preserve and protect natural resources and to provide outdoor recreation and education in order to enhance the quality of life for present and future generations. Last year, Great Parks welcomed more than 5.1 million visitors, both local and non-local, to its park system and generated more than \$34.4 million in revenue.

Great Parks of Hamilton County has engaged the Economics Center to perform an economic impact analysis estimating its total economic impact on Hamilton County's local economy in 2020. This report illustrates the impact that Great Parks of Hamilton County provides to the local community by analyzing the economic impact of Great Parks' operations and capital expenditures. The Economics Center further estimated the impact of new money, or money that would not have entered the Hamilton County economy without the presence of Great Parks. Finally, this report details the total fiscal impact of Great Parks through its generation of income, sales, and property tax revenue.

Methodology

The Economics Center calculated the economic impact on the Hamilton County economy that was generated by Great Parks of Hamilton County's business operations. Impacts were based on expenditure data provided by Great Parks for the 2020 calendar year. It is important to note therefore that expenditures analyzed occurred during the COVID-19 pandemic.

The economic impact of Great Parks of Hamilton County was calculated using an input-output model. This model describes the impact of the circular economy, which estimates both the direct and indirect effects of businesses. Direct effects include the operations and capital expenditures, or output, made by businesses, in addition to employees hired by businesses and earnings received by employees. These direct effects also create spinoff effects, both for regional suppliers who meet businesses' needs and for employees who businesses salary. Indirect effects, therefore, measure the impacts of these expenditures as they circulate through the local economy until all the original money has leaked from the economy into outside economies and savings. The sum of businesses' direct jobs, earnings, and expenditures in Hamilton County and the indirect jobs, earnings, and expenditures created by the money flowing through the Hamilton County economy constitute their total economic impacts on the Hamilton County economy.

Economic impacts were estimated using economic data and multipliers supplied by Emsi, a third-party economic and labor force provider. Multipliers are figures expressed in input-output models that represent economic relationships between industries and between households and industries. For every dollar spent by a given organization in a particular industry, multipliers reflect how many more dollars will be spent in a local economy by other businesses and households, thereby determining the total economic impact of a

project or investment. Multipliers also measure the number of jobs and amount of earnings that will be generated in an economy for a given level of expenditure. Emsi multipliers reflect three sets of economic impacts: direct output, indirect output, and total output. The latter represents the sum of the direct and indirect output. In this analysis, direct output is the operating and capital expenditures by Great Parks of Hamilton County, as well as the jobs directly supported by Great Parks within Hamilton County through its operations and capital expenditures. The indirect impacts are the expenditures and employment created in the Hamilton County economy, to the extent that households and industries are supported by and respond to the new demands of the directly impacted industries.

Industries' multipliers vary by geography, reflecting regions' unique inter-industry economic relationships. In this report, multipliers reflect these relationships specifically within the Hamilton County economy. Applying the relevant Hamilton County multipliers for each spending category allowed the Economics Center to quantify the total economic impact of Great Parks' operations in Hamilton County.

To calculate new money impacts, the Economics Center estimated out-of-county visitor attendance using the total park attendance in 2020 and the rate of reservations made with Great Parks of Hamilton County by out-of-county visitors. Visitor spending was estimated using an average park visitor spending profile from a 2019 economic impact report on Virginia state parks.³ The profiles were then CPI-adjusted to 2020 dollars. Average visitor spending within the park system, based on revenue data from Great Parks, was subtracted from the average visitor spending profile. Each spending category of the spending profile was matched to an industry in order to apply the appropriate Emsi industry multipliers for Hamilton County. Separate impacts were estimated for day and overnight visitors due to their differing spending profiles. Their cumulative impact is presented in this report.

For the fiscal impact calculations, the Economics Center gathered income and sales tax rate data from the appropriate state and local tax departments. Tax rates were applied to employee earnings and taxable purchases to calculate tax revenues accruing to Hamilton County, its municipalities, and the State of Ohio. For direct employee earnings, the Economics Center used wage data provided by Great Parks and applied the appropriate municipal and state income tax rate. A weighted local tax rate, based upon local tax rates and distribution of employment, was applied to calculate local income tax revenues for indirect employee earnings as well as total earnings of employees supported by new money. To calculate sales tax revenues from supported employees, earnings were first adjusted downwards to account for percent of income spent towards expenditures, spending subject to sales tax, and spending occurring within the local economy before being applied to the Hamilton County sales tax rate. Hamilton County sales tax revenues are also based on revenue within Great Parks subject to sales tax.⁴ Finally, property value tax revenues are included based on actual Great Park expenditures in 2020.

³ Magnini, V. P. (2019). *Virginia State Parks Economic Impact Report*.

⁴ Hamilton County's sales tax rate increased by 0.8 percent effective 10/01/20. A weighted rate was therefore applied to calculations.

Economic Impact of Operations Expenditures

The Economics Center determined the economic impact of Great Parks on the Hamilton County economy using operations and capital expenditure data provided by Great Parks for the 2020 calendar year. Notably, the expenditures made by Great Parks coincided with the COVID-19 pandemic. This report presents all monetary values in 2020 dollars. The Economics Center adjusted direct operating and capital expenditure data for economic leakage prior to applying output, earnings, and employment multipliers. Economic leakage refers to the portion of spending by a particular industry in an economy that is met by imports from companies and organizations outside the economy. Presented as percentages, economic leakage figures for the industries comprising capital and operating expenditures by Great Parks of Hamilton County's operations were obtained from Emsi.⁵ The post-leakage direct expenditure figures represent estimated expenditures by Great Parks on goods and services sourced from firms located in Hamilton County.

Operations expenditures constituted the majority (86.3 percent) of expenditures made by Great Parks in 2020, and thus constituted the majority of economic impact resulting from its expenditures. Of the total operations expenditures made, approximately half (55.4 percent) went towards employee salaries and benefits.

As seen in Table 3, Great Parks made more than \$31.2 million in 2020 operations expenditures in Hamilton County, employing 979 individuals with earnings of \$20.2 million. As these operations expenditures circulated throughout the Hamilton County economy, Great Parks' direct impacts resulted in a total impact of approximately \$58.8 million in economic output, supporting 3,063 individuals with earnings of \$56.1 million.

Table 3: Economic Impact of Great Parks' Operations Expenditures, 2020

Impact Type	Output	Employment	Earnings
Direct	\$31,226,762	979	\$20,229,702
Indirect	\$27,533,665	2,084	\$35,892,362
Total	\$58,760,427	3,063	\$56,122,064

Source: Economics Center analysis using data from Great Parks of Hamilton County and Emsi.

Economic Impact of Capital Expenditures

In addition to its operations expenditures, Great Parks made significant capital expenditures in 2020 to invest in its park system. Capital expenditures include capital maintenance and upkeep of Great Parks' facilities as well as any related planning and land purchases. The majority of its capital expenditures (48.6 percent) were made for grounds and facility improvement purposes.

As displayed in Table 4, Great Parks made approximately \$5.0 million in capital expenditures in 2020, employing 25 individuals with earnings of \$2.2 million. As these

⁵ Emsi utilizes labor market data and other publicly available sources in a proprietary methodology to allow for tailored economic analyses in a specified geographic area.

expenditures circulated throughout the Hamilton County economy, Great Parks' direct impacts resulted in a total impact of \$7.9 million in economic output, supporting 41 employees with earnings of \$3.2 million.

Table 4: Economic Impact of Great Parks' Capital Expenditures, 2020

Impact Type	Output	Employment	Earnings
Direct	\$4,975,976	25	\$2,179,615
Indirect	\$2,896,407	16	\$1,004,499
Total	\$7,872,383	41	\$3,184,114

Source: Economics Center analysis using data from Great Parks of Hamilton County and Emsi.

Economic Impact of New Money

Great Parks of Hamilton County welcomes Hamilton County residents as well as out-of-county visitors to its park system. When visitors travel to Hamilton County to visit Great Parks, their economic impact does not end with spending within the park system, as many spend money on additional goods and services such as food or hotels within Hamilton County. Out-of-county visitor spending within Hamilton County in concert with their visitation to Great Parks can thus be understood as new money, or money that would not have entered the Hamilton County economy without the presence of Great Parks.

The estimated economic impact represents dollars spent in Hamilton County by out-of-county visitors outside of Great Parks of Hamilton County. As seen in Table 5, out-of-county visitors collectively made approximately \$22.3 million in expenditures in Hamilton County in 2020, supporting 318 jobs with earnings of \$8.0 million. These expenditures had a total impact of \$40.6 million in economic output, supporting 429 jobs with earnings of more than \$15.0 million.

Table 5: Economic Impact of New Money Attributed to Great Parks, 2020

Impact Type	Output	Employment	Earnings
Direct	\$22,258,996	318	\$8,038,912
Indirect	\$18,351,082	111	\$6,988,096
Total	\$40,610,078	429	\$15,027,008

Source: Economics Center analysis using data from Great Parks of Hamilton County, Emsi, and the Virginia State Parks Economic Impact Report.

Together, the total economic impact resulting from operations expenditures, capital expenditures, and out-of-county visitors represents \$107,242,888 in economic output within Hamilton County. As Great Parks received \$18,951,994 in revenue from the current tax levy in 2020, this means that every dollar of tax funding stimulated \$4.66 in new economic activity.

Fiscal Impacts

In addition to the economic impact of the organization, Great Parks also yields revenue to local and state jurisdictions as employees supported by Great Parks are taxed on their income as well as on purchases. Further, the employees supported through indirect effects of Great Parks' capital and operations expenditures and new money impacts also contribute to local and state income and sales tax collections. Tax revenue is additionally generated from sales occurring within Great Parks in the form of sales tax revenue and from Great Parks land in the form of property tax revenue.

The Economics Center calculated state and local earnings tax revenues generated by Great Parks employees located in Hamilton County based on wage data provided by Great Parks. Income tax revenue for the State of Ohio was calculated using the state rate, however due to the seasonality of many Great Parks employees, the average wage of Great Parks' individuals did not meet the state threshold requiring income tax payment. Income tax revenue for the State of Ohio therefore represents earnings supported by capital expenditures and new money entering the region.⁶ To estimate local earnings tax revenues, the appropriate municipal income tax rate was applied to direct employee wages of Great Parks, while a weighted local tax rate, based upon tax rates and distribution of employment, was applied to calculate local income tax revenues for indirect employee earnings as well as total earnings of employees supported by new money.

To calculate sales tax revenues for supported employee earnings, earnings were first adjusted to account for percent of income spent on purchases subject to sales tax, and spending occurring within the local economy. Following this adjustment, purchases were applied to the state sales tax rate and a weighted local sales tax rate to calculate revenues. These revenues reflect tax collections from employees supported by operations and capital expenditures as well as from employees supported by new money impacts. Sales tax revenues for Hamilton County also include tax collections from spending occurring within Great Parks subject to sales tax.⁷ Finally, property value tax revenues are included and based on actual Great Park expenditures in 2020.⁸

Table 6 describes both the direct and indirect fiscal impacts of Great Parks of Hamilton County in 2020. In total, Great Parks generated \$630,618 for Hamilton County in sales and property tax revenue, \$832,644 for municipalities within Hamilton County in income tax revenue, and \$741,435 to the State of Ohio in income and sales tax revenue, for a total fiscal impact of more than \$2.2 million.

⁶ The State of Ohio assesses income tax based on a taxpayer's earnings bracket. Taxpayers in higher-earning brackets pay a higher rate. Individual income tax rates are provided by the Ohio Department of Taxation:

https://www.tax.ohio.gov/ohio_individual/individual/annual_tax_rates.aspx.

⁷ Hamilton County's sales tax rate increased by 0.8 percent effective 10/01/20. A weighted rate was therefore applied to calculations.

⁸ Property taxes are collected by Hamilton County, though they are distributed to a variety of entities including school districts and the City of Cincinnati.

Table 6: Fiscal Impact of Great Parks of Hamilton County, 2020

Government Entity	Income Tax Revenue	Sales Tax Revenue	Property Tax Revenue	Total Tax Revenue
Hamilton County	-	\$357,460	\$273,158	\$630,618
Municipalities within Hamilton County	\$832,644	-	-	\$832,644
State of Ohio	\$47,316	\$694,119	-	\$741,435
Total	\$879,960	\$1,051,579	\$273,158	\$2,204,697

Source: Economics Center analysis using data from Great Parks of Hamilton County, Emsi, and the Virginia State Parks Economic Impact Report.

Conclusion

Great Parks of Hamilton County contributed significantly to the Hamilton County economy in 2020. Through operations and capital expenditures, Great Parks had a direct impact of \$36.2 million in economic output, employing 1,004 individuals with earnings of \$22.4 million. The total combined impact of these expenditures is \$66.6 million in economic output, supporting 3,104 individuals with earnings of \$59.3 million.

Further, through attracting out-of-county visitors who may not have otherwise visited Hamilton County, Great Parks attracted significant new money to the region. In 2020, out-of-county visitors collectively made approximately \$22.3 million in expenditures in Hamilton County in 2020, supporting 318 employees with earnings of \$8.0 million. These expenditures had a total impact of \$40.6 million in economic output, supporting 429 employees with earnings of more than \$15.0 million.

The cumulative economic impact of operations expenditures, capital expenditures, and out-of-county spending amounted to a total \$107.2 million in economic output, supporting 3,533 individuals with earnings of \$74.3 million in 2020. When comparing the total economic output to the tax funding that helps to support Great Parks, every tax dollar returned \$4.66 in increased economic activity in 2020.

Finally, Great Parks of Hamilton County generates significant tax revenue for Hamilton County, its municipalities, and the State of Ohio. In 2020, Great Parks generated \$630,618 for Hamilton County in sales and property tax revenue, \$832,644 for municipalities within Hamilton County in income tax revenue, and \$741,435 to the State of Ohio in income and sales tax revenue, for a total fiscal impact of more than \$2.2 million.