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## **Economic Impact Study: Kent County Parks**

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# ECONOMIC IMPACT STUDY: KENT COUNTY PARKS

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SEIDMAN RESEARCH OFFICE OF GRAND VALLEY STATE UNIVERSITY SEPTEMBER 2019

## **Report Highlights**

- Kent County Parks spur \$33 million in annual economic activity
- Of the \$33 million in economic activity, \$14.7 million is generated by nonlocal visitors
- Approximately 1.4 million visitors, annually
- 317 jobs are created through the economic activity caused by Kent County Parks

## Background

With an annual operating budget of \$6 million in 2019, **Kent County Parks** (KCP) seeks to provide residents with traditional park amenities as well as recreational opportunities not typically found in local city and township parks. To this end, the Department emphasizes large regional parks offering diverse natural areas to explore. Of the total 7,300 acres under management, 80% is concentrated in fourteen parks of 200 acres or more. These parks often are characterized by extensive trail systems; spacious forests and fields; scenic streams, rivers and lakes; and a sense of seclusion from the bustle of life.

To compliment this emphasis on natural areas, Kent County Parks also provides an array of more developed park and trail facilities throughout the County. Examples include 22 picnic shelters; more than 60 picnic areas; seven enclosed shelters; 31 playgrounds; a highly-rated 18-hole golf course; four public beaches; a campground; three disc-golf courses; numerous boat launches and fishing access sites; two boat rental sites; multiple sports fields, courts and ball diamonds; and much more. More than 50 miles of natural and paved trails explore the reaches of County parks, catering to hikers, runners, mountain bikers, nature observers and equestrians. In addition, Kent County Parks manages 40 miles of regional multi-use trails that link communities, parks and other attractions.

In 2018, KCP commissioned a needs assessment survey of randomly sampled households within Kent County to better understand the priorities of residents regarding parks and trails. More than 500 households responded, resulting in a precision of +/- 4.4% at the 95% confidence level. The survey found nine out of ten respondents had visited a Kent County park or trail within the past year. The survey also found the overall level of satisfaction with Kent County Parks was 20 percentage points higher than the national average.

To further understand its role in the community, Kent County Parks also engaged the Seidman Research Office of Grand Valley State University in 2018 to conduct the following economic impact study of county parks and trails. In developing the report, GVSU's team combined insights from the prior needs assessment survey with new field research, known data, and comparable studies from other park systems.

## **Purpose of study**

This study will focus on the economic impact of Kent County Parks from three perspectives:

- 1. Spending resulting from park visitors
- 2. Revenue generated by Kaufman Golf Course and Millennium Park beach
- 3. Spending by Kent County Parks

### Economic impact study approach

In calculating the economic impact of Kent County Parks, the Seidman Research Office collected data to determine visitor count, the frequency of visits, and how much each visitor spent. To collect data, two intercept surveys were used: a visit survey and a spending survey (See Appendix A). The surveys were administered at random times throughout the week from July 2018 to August 2018. There were approximately 70 surveying hours over a two-month sampling period. KCP does not charge admission to most parks, making an accurate visitor count difficult to attain. The survey team used systematic sampling at random entry/exit locations for a select number of parks (Appendix B) to estimate park attendance.

The spending data were collected from Millennium Park trails and are used to determine direct spending for Kent County trail systems. To supplement these data, the transfer benefit method is used to estimate direct spending for all Kent County parks. The transfer benefit method estimates economic value by transferring information from a completed study in another comparable location (Huron River, Glupker 2016). For example, values for recreational fishing in one state may be estimated by applying measures of recreational fishing values from a study conducted in another state. The basic goal of benefit transfer is to estimate benefits for one context by adapting an estimate of benefits from a similar context. Benefit transfer is often used when an original valuation study is not feasible yet some measure of benefit is needed. It is important to note that benefit transfer can only be as accurate as the initial study. Results also rely on accuracy of locally-generated data and assumptions.

To complement the visitor survey data, KCP provided their own spending associated with maintaining and enhancing the parks. Finally, KCP provided the revenue figures collected from all revenue sources (Kaufman Golf Course, Millennium Park beach, etc.).

The Regional-Input-Output Modeling System (RIMSII) is used to estimate the economic effect of this direct spending on the local economy. The RIMS method measures economic impact at the county level, as the focus of this economic impact report is Kent County.

## Determining who is a 'visitor'

The economic impact of KCP is based on spending that occurred by visitors to the parks. To accomplish this, survey respondents are categorized into two groups:<sup>1</sup>

**Non-Local Visitors:** A non-local visitor is one whose primary residence is outside the defined economic region (Kent County). Spending by non-local visitors is the key driver in economic impact studies.

**Local Visitors:** Local visitors are residents of Kent County. Spending by local visitors is not included when measuring economic impact because the spending would have occurred regardless of the parks.

All survey forms ask for zip codes. As shown in Figure 1, 75% of all visitors were local.

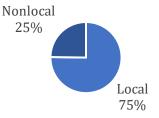


Figure 1: Type of visitor – all respondents

## Estimating the number of visitors

Kent County Parks provided visitor counts for Seidman Park, Luton Park, and Millennium Park beach (Table 1a). The Seidman Park and Luton Park data was collected using trail 'click' counters. Trail counters do have inherent inaccuracies as a deer walking by can trigger the counter and two people side by side usually only show once.

The Millennium Park data are based on actual admissions to the beach area.

Table 1a:	Actual	visitor	counts	provided	by KCP
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Seidman Park	27,559
Luton Park	31,957
Millennium Park Beach Admission	89,995

<sup>&</sup>lt;sup>1</sup> Crompton, J. L., Lee, S., & Shuster, T. J. (2001). A Guide for Undertaking Economic Impact Studies: The Springfest Example. *Journal of Travel Research*, 40(1), 79-87. doi:10.1177/004728750104000110

Using the hard data from Table 1a, visitor counts for all parks and trails can be estimated. Data from the Kent County Community Interest and Opinion Survey (2018) published by the ETC Institute provided the percentage of households that visited each park and trail. Using this information and the data collected from the intercept survey, we estimate total visitors of 1,393,767 (+/- 83,626), with 200,331 of those coming from outside Kent County. This figure represents summer park/trail usage.

During the sampling period, there were 252 interview requests with 224 surveys completed, an 89% response rate. The result is a 95% confidence level.

Visitor counts for each location are presented in Table 1b with detailed information available in Appendix C.

	Visitors
Millennium Park Beach Admission	89,995
Kaufman Golf Course	41,685
5 Kent County Trail Systems	343,592
35 Kent County Parks	918,495
Total Visitors:	1,393,767

## Table 1b: Total visitor count

## **Economic impact**

As noted earlier, the economic impact is based on the economic activity caused by KCP. Survey respondents were asked how much they expected to spend on meals, shopping, transportation, equipment, and other during their visit to Kent County trails. Because spending data collected during the survey period was limited to trail locations, and not collected at parks, the transfer benefit method will supplement the data.

The spending data collected estimates total spending at all Kent County trail systems. Spending at the parks will rely on the benefit transfer method, drawing from data reported in *Economic Impact of the Huron River* (2016). The transfer benefit method estimates economic value by transferring information from a completed study in another comparable location. This study was chosen due to its similar trail characteristics.

As shown in the table below, people who used Kent County trails spent on average \$28.30. Those who used Kent County parks spent on average \$8.74.

Table 2a: Average spending per person by amenity

Trail visitor	\$28.30
Park visitor	\$8.74

The economic impact focuses on new money spent in Kent County and differentiates between spending by locals and nonlocals. As shown in Table 2b, local visitors to Kent County trails spent on average \$21.11 per person and nonlocal visitors spent \$37.69 per person.

	Local visitor	Nonlocal visitor	
Meals	\$5.82	\$9.23	
Shopping	\$1.91	\$3.27	
Transportation	\$9.91	\$19.23	
Other	\$3.47	\$5.96	
Total	\$21.11	\$37.69	

Table 2b: Average spending per person, Kent County trail users

Transfer benefit spending figures taken from the Huron River study were used to estimate per person spending for Kent County park visitors. This spending data does not distinguish between local and nonlocal visitors. The transfer benefit spending figures are presented in table 2c.

Table 2c: Average spending per person, Kent County park users

	All visitors
Meals	\$5.07
Shopping	\$1.73
Transportation	\$1.32
Other	\$.62
Total	\$8.74

Initial spending by visitors is referred to as direct spending. The direct spending is calculated as the product of the visitor spending (Table 2b and 2c) and total visitors (Table 1b). KCP provided direct spending (revenue) for Kaufman Golf Course and Millennium Park beach. Our reporting focuses on five county trails and 35 parks (excluding Millennium Park beach and Kaufman Golf Course).

It should be noted that the 'shopping' and 'other' categories include retail pricing and are adjusted for retail margins. That is, retail prices include the cost of manufacturing, the majority of which is assumed to occur outside the defined economic region. The estimated economic impact of visitor spending should not include these costs which have been removed from our calculations. We assume a 50% retail margin when calculating these two categories. Table 2d shows direct spending based on origin of the visitor.

	Local visitors	Nonlocal visitors
Meals	\$5,600,000	\$1,243,000
Shopping	\$944,000	\$215,000
Transportation	\$3,884,000	\$1,241,000
Other	\$741,000	\$208,000

\$11,170,000

\$2,907.000

Table 2d: Direct spending, users of Kent County trails and parks (excluding Millennium Park beachand Kaufman Golf Course)

Direct spending by both local and nonlocal visitors is estimated at \$14.1M, with approximately 21% of that coming from people outside of Kent County (new money). This direct spending by visitors leads to indirect and induced spending. For example, a visitor to Kent County purchases from local retail stores (direct spending). These retail stores must then purchase more supplies from local distributors (indirect spending). Retail store owners and employees receive more income from the spending of visitors and they spend some of that greater income in the local area (induced spending). The dollar amount and effect on employment of indirect and induced spending can be estimated using the Regional-Input-Output Modeling System (RIMS II) multipliers developed by the U.S. Department of Commerce Bureau of Economic Analysis.<sup>1</sup> The RIMS II multipliers measure total economic activity in three ways<sup>2</sup>:

**Gross Output:** The sum of intermediate inputs and the value they add to the final good or service. The intermediate inputs are the resources used in the production of final goods and services.

**Earnings:** The increase in wages, salaries, and proprietors' income as a result of the initial change in demand (direct spending).

**Employment:** The increase in jobs (full-time and part-time) for every \$1 million change in demand (direct spending). This measurement does not distinguish between full-time and part-time employees.

Using this RIMS II model, the total impact of local and nonlocal visitors to Kent County parks and trails (excluding Millennium Park beach) can be calculated (Table 3e).

Totals

<sup>&</sup>lt;sup>1</sup> Please note that the BEA does not endorse any estimates or conclusions concerning the study presented here.

<sup>&</sup>lt;sup>2</sup> Bess, Rebecca. "Input-Output Models for Impact Analysis: Suggestions for..." Bureau of Economic Analysis. N.p., 23 Mar. 2011 Web.

Table 3e: Total economic impact of visitors to Kent County parks and trails (excluding MillenniumPark beach and Kaufman Golf Course)

	Local visitors	Nonlocal visitors	All visitors
Direct Spending	\$11.2M	\$2.9M	\$14.1M
Indirect and Induced Spending	\$7.1M	\$1.8M	\$9M
Total Output	\$18.3M	\$4.7M	\$23M
Total Earnings	\$4.8M	\$1.2M	\$6M
Total Employment	161	40	201

Visitors to KCP and trails generate \$23M in economic activity, with \$4.7M in 'new' economic activity generated from nonlocal visitors.

## Economic impact of Millennium Park Beach and Kaufman Golf Course

The total economic impact of \$23M does not include revenue generated by Millennium Park beach or Kaufman Golf Course. In 2017, Millennium Park beach had 89,995 visitors and Kaufman Golf Course had 41,685 visitors. Combined, they generated \$1.3M in total revenue, which generated an additional \$2.2M in economic activity, supporting 26 jobs (Table 4a). To avoid double counting, concession revenue (\$71,607) was removed from Millennium Park beach total revenue. The rationale is that this spending was captured by the intercept survey (meals). The size of Millennium Park and diversity of users made it difficult to distinguish between spending at the beach versus spending at the trail. Future studies should further investigate these spending figures.

Table 4a: Total economic impact of Millennium Park beach and Kaufman Golf Course

Direct Spending	\$1,337,000
Indirect and Induced Spending	\$890,000
Total Output	\$2,223,000
Total Earnings	\$587,000
Total Employment	26

## Economic impact of park rentals and campgrounds

**Total Earnings** 

**Total Employment** 

It should be noted that revenue generated from picnic areas, shelters, enclosures, and campgrounds (Wabasis Lake) were not included in the economic impact. These were omitted because the spending could be included in visitor spending (table 2b and 2c), which would result in double counting. Anecdotal evidence suggests future studies should further explore the rentals, campgrounds, and special events held at the parks. For discussion purposes and to show the value to the community, these revenue figures and impact figures are displayed in Table 4b.

Campground	
Direct Spending	\$753,000
Indirect and Induced Spending	\$500,000
Total Output	\$1,253,000

\$331,000

15

Table 4b: Total economic impact of all park rentals (shelters, enclosures, etc.) and Wabasis lake Campground

## Economic impact of KCP spending

In addition to visitor spending, KCP generates spending to maintain and enhance the park system. Determining economic impact requires calculating how much of this money was spent with local businesses. This information was not provided, therefore we assumed 20% of the spending occurred with businesses outside Kent County. KCP budgeted \$5.8M in operational spending, which results in an estimated \$4.4M in new spending. This spending generates \$7.8M in economic activity, supporting 90 jobs (Table 5).

## Table 5: Total economic impact of KCP spending

	New spending	Output	Earnings	Jobs
Kent County Parks	\$4.4M	\$7.8M	\$2.0M	90

## Conclusion

Kent County Parks plays an important role in improving the quality of life in Kent County. Per the National Recreation and Park Association (NRPA), parks have three values that make them essential services to their communities:<sup>1</sup>

- 1. Economic value
- 2. Health and Environmental Benefits
- 3. Social Importance

This report presents the economic value, or impact, of Kent County Parks and trails during the summer. The economic impact can be viewed from two perspectives. Excluding local visitors and focusing only on 'new' spending caused by KCP, the total economic impact is \$14.7M, which supports 156 jobs (Table 6a).

	New Spending	Output Generated	Jobs
Nonlocal visitors	\$2.9M	\$4.7M	40
MP and Kaufman	\$1.4M	\$2.2M	26
KCP Spending	\$4.7M	\$7.8M	90
Total	\$9.0M	\$14.7M	156

#### Table 6a: Total economic impact of nonlocal visitors

If the focus is on all visitors to the parks and trails, the total economic impact is \$33M which supports 316 jobs (Table 6b). This figure should be used with caution as it is unknown how much of the money would have been spent regardless of the parks or trails. That is, it is not known how much of this is 'new' money.

## Table 6b: Total economic impact of all visitors

	New Spending	Output Generated	Jobs	
All visitors	\$14.1M	\$23.0M	200	
MP and Kaufman	\$1.4M	\$2.2M	26	
KCP Spending	\$4.7M	\$7.8M	90	
Total	\$20.2M	\$33.0M	316	

<sup>&</sup>lt;sup>1</sup> https://www.nrpa.org/uploadedFiles/nrpa.org/Advocacy/Resources/Parks-Recreation-Essential-Public-Services-January-2010.pdf

It should be noted that these are conservative impact figures. The survey was not designed to capture the impact of special events at Millennium Park or differentiate the spending between Millennium Park beach and Millennium Park trails. In addition, the impact figures above do not include park rentals or campgrounds. Future studies should be designed to further investigate these aspects of the KCP.

This report does not address any long-term economic, health, or social impacts. Nor does it address the economic impact of repeat visitors who return to Kent County because of their positive experience at a park or trail.

The health benefit of parks has been well documented in studies by the CDC. A recent Penn State University study found significant correlation between improvements in health and the length of stay in visits to parks.<sup>1</sup>

Parks also play an important social role in communities. Parks provide a gathering place for families and social groups. In 2017, more than 2,000 groups reserved shelters and picnic areas in Kent County parks to reunite with family members, participate in corporate and community activities, and celebrate life events.

Kent County Parks plays an important role in contributing to the economy of Kent County and the health and social well-being of its residents and visitors.

<sup>&</sup>lt;sup>1</sup> https://www.cdc.gov/pcd/issues/2017/16\_0441.htm

## Appendix A: Intercept survey

Kent County Park Sur	vey – Visit Survey		
Zip Code:	_		
Are you over 18? Ye	s No (Stop Her	e)	
How often do you visi	t THIS PARK/TRAIL 🖡	per month?	
What other Kent Cour	ity parks do you visi	it?	
Age:			
Gender: Male	Female C	Dther	
Kent County Park Sur	vey – Spending Sur	vey	
Zip Code:	-		
Are you over 18? Ye	s No (Stop Her	e)	
How often do you visi	t THIS PARK/TRAIL p	per month?	
What other Kent Cour	ity parks do you visi	it?	
What % of your visits	occur during: Sprin	g: Summer:	Fall: Winter:
How much will you sp	end during this visit	t on the following:	
Meals: Sh	opping:	Transportation (gas, e	tc.):
Equipment (including	bike service):	Other:	
Age:			
Gender: Male	Female C	Dther	

Appendix B: Survey locations



## Appendix C: Household visits to each park and trail system

Detailed information on percentage of households that visit each park and the estimated total visits for the year. The percentage of household visits was taken from the Kent County Community Interest and Opinion Survey (2018) published by the ETC Institute. Visitor counts are based on 236,929 households in Kent County.<sup>1</sup> These estimates also assume that one local household member, on average, visits each park.

There were 126 surveys collected from all parks (except Millennium Park beach), with approximately 15.9% of those survey's coming from nonlocal visitors. This percentage was used to estimate nonlocal visitors. Millennium Park beach was omitted from the calculation due to its amenities compared to other parks.

Park Location	% HH Visited	Household visits	Total local visitors	Total nonlocal visitors	Total Visitors
Fallsburg	28%	66,340	66,340	12,517	76,870
Townsend	21%	49,755	49,755	9,388	57,653
Johnson	20%	47,386	47,386	8,941	54,907
Rogue River	19%	45,017	45,017	8,494	52,162
Pickerel Lake	18%	42,647	42,647	8,047	49,417
Douglas Walker	17%	40,278	40,278	7,600	46,671
Wabasis Lake Park	16%	37,909	37,909	7,153	43,926
Brewer	15%	35,539	35,539	6,706	41,181
Provin Trails	15%	35,539	35,539	6,706	41,181
Myers Lake	14%	33,170	33,170	6,259	38,435
Palmer	14%	33,170	33,170	6,259	38,435
Dwight Lydell	10%	23,693	23,693	4,470	27,454
Long Lake	10%	23,693	23,693	4,470	27,454
Wahlfield	10%	23,693	23,693	4,470	27,454
Caledonia Lakeside	9%	21,324	21,324	4,023	24,708
Creekside	8%	18,954	18,954	3,576	21,963
Thornapple Riverbend	8%	18,954	18,954	3,576	21,963
Dutton Shadyside	7%	16,585	16,585	3,129	19,218
Chief Hazy Cloud	7%	16,585	16,585	3,129	19,218
Wabasis Lake	6%	14,216	14,216	2,682	16,472
Lamoreaux	6%	14,216	14,216	2,682	16,472
Knapp Valley	6%	14,216	14,216	2,682	16,472
White Pine Park	4%	9,477	9,477	1,788	10,981
Paris	4%	9,477	9,477	1,788	10,981
Coldwater River	3%	7,108	7,108	1,341	8,236
Fisk Knob	2%	4,739	4,739	894	5,491
Lepard Preserve	2%	4,739	4,739	894	5,491
Lamoreaux Memorial	1%	2,369	2,369	447	2,745
Cooper Creek	1%	2,369	2,369	447	2,745
Ruehs	1%	2,369	2,369	447	2,745

<sup>1</sup> https://www.census.gov/quickfacts/kentcountymichigan

Gordon	1%	2,369	2,369	447	2,745
Bettes Memorial	1%	2,369	2,369	447	2,745
Spencer Forest	1%	2,369	2,369	447	2,745
Seidman Park (Data provided)					27,559
Luton Park (Data Provided)					31,957
Totals		722,633	722,633	136,346	918,495

Trail Systems:

Trail System	% Visited*	HH Visits	Locals	NonLocal	Total Visitors
Kent Trails	34%	80,556	80,556	15,199	93,343
FM MP Trail Network	32%	75,817	75,817	14,305	87,852
FM M-6 Trail	21%	49,755	49,755	9,388	57,653
PH Thornapple Trail	19%	45,017	45,017	8,494	52,162
FM Pioneer Trail	16%	37,909	37,909	7,153	43,926
	Totals:	289,053	289,053	54,538	343,592