



MOZINGO LAKE
RECREATION PARK

The Impact of
**MOZINGO LAKE
RECREATION PARK**
on the City of Maryville Economy

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EXECUTIVE SUMMARY

Mozingo Lake Recreation Park (Mozingo) is a city-owned park in Maryville, Missouri. The park spans 3,000 acres, of which approximately one-third are the surface of Mozingo Lake itself. Mozingo Lake serves as the primary water reservoir for the city and surrounding area and provides a central focus for the park space. Mozingo offers many recreational activities including camping, fishing, golf, and hiking. By maintaining the park and attracting visitors to the region, Mozingo creates a significant impact on the regional economy. This report assesses the economic impact of Mozingo and its visitors on the Maryville economy.

During FY 2014-15, Mozingo spent **\$860.1 thousand** on payroll and benefits for 59 full-time and part-time employees. It also spent another **\$1.6 million** on goods and services to carry out day-to-day operations. This initial round of spending creates more spending across other businesses throughout the Maryville economy, resulting in the commonly referred to multiplier effects. In total, Mozingo operations created **\$1.1 million** in added income for the Maryville economy during FY 2014-15. This is equivalent to creating **67** new jobs.

In addition to adding income to the Maryville economy through its operations, Mozingo attracted **266,616** visitors from outside the region between October 2014 and September 2015. These visitors initially attracted to the park also spent money outside of Mozingo in the city of Maryville. This injection of money from the out-of-region visitors created **\$1.1 million** in added income for the Maryville economy.

This analysis shows that in FY 2014-15, Mozingo operations and spending from its visitors generated **\$2.3 million** in added income for the Maryville economy. The additional income of \$2.3 million created by Mozingo is equal to approximately **0.5%** of the total GRP of Maryville, and is equivalent to creating **134** new jobs. For perspective, this impact from the park is slightly smaller than the entire Transportation & Warehousing industry in the region.

The above analyses capture only a part of the benefits Mozingo creates. The park benefits Maryville by providing a location for Maryville residents to be outdoors and to

exercise, therefore improving the overall health and fitness of Maryville residents. Mozingo also increases the property values within Maryville, simply by its presence. Finally, the park not only helps create a positive atmosphere within Maryville, but also supports the unity between Maryville residents. These activities are just a few notable examples of how Mozingo boosts the regional economy and improves the well-being of Maryville residents.

NOTE OF IMPORTANCE

There is an important point to consider when reviewing the impacts estimated in this study. Impacts are reported in the form of income rather than sales. Sales include all the intermediary costs associated with producing goods and services. Income, on the other hand, is a net measure that excludes these intermediary costs and is synonymous with gross regional product. For this reason, it is a more meaningful measure of new economic activity than sales.

Chapter 1.

INTRODUCTION

Mozingo Lake Recreation Park (Mozingo) is a city-owned park in Maryville, Missouri. Spanning 3,000 acres and including as its central attraction a 1,000-acre water reservoir/lake, Mozingo offers a wide array of recreational opportunities. As a result of these activities, the operations of the park and facilities that house them, and the out-of-region visitors whom they attract to the area, Mozingo has a significant economic impact on Maryville, an impact which this study models and quantifies.

TABLE 1.1: Income and sales by major industry sector in region,*

Industry sector	Labor income (millions)	Non-labor income (millions)	Total income (millions)†	% of total income	Sales (millions)
Agriculture, Forestry, Fishing and Hunting	\$6	\$7	\$14	3.0%	\$38
Utilities	\$4	\$12	\$16	3.5%	\$24
Construction	\$6	\$3	\$10	2.2%	\$22
Manufacturing	\$60	\$55	\$115	25.5%	\$393
Wholesale Trade	\$7	\$8	\$14	3.2%	\$24
Retail Trade	\$24	\$12	\$36	8.0%	\$70
Transportation and Warehousing	\$2	\$1	\$3	0.7%	\$8
Information	\$3	\$8	\$10	2.3%	\$22
Finance and Insurance	\$12	\$12	\$24	5.4%	\$45
Real Estate and Rental and Leasing	\$5	\$18	\$24	5.2%	\$36
Professional and Technical Services	\$6	\$1	\$7	1.6%	\$14
Management of Companies and Enterprises	\$1	\$0	\$2	0.4%	\$4
Administrative and Waste Services	\$3	\$1	\$4	0.9%	\$8
Educational Services	\$2	\$0	\$3	0.6%	\$5
Health Care and Social Assistance	\$34	\$4	\$38	8.5%	\$80
Arts, Entertainment, and Recreation	\$1	\$0	\$1	0.2%	\$2
Accommodation and Food Services	\$9	\$4	\$13	2.9%	\$30
Other Services (except Public Administration)	\$7	\$1	\$8	1.7%	\$17
Government, Education and Non-Education	\$70	\$0	\$110	24.4%	\$244
Total	\$261	\$190	\$451	100%	\$1,090

* Data reflect the most recent year for which data are available. Emsi data are updated quarterly.

† Numbers may not add due to rounding.

Source: Emsi.

ABOUT MARYVILLE

Mozingo is located on the outskirts of Maryville, a city of around 12,000 people about 100 miles north of Kansas City, Missouri. Maryville’s most notable attractions include Northwest Missouri State University, a comprehensive university with a 2014 enrollment of over 7,700 students.

Maryville’s population has grown 13% since 2000, while Missouri’s population has only increased by 7%. Besides Mozingo, Maryville has also established a network of 10 major city parks for its residents, including athletic fields, a skate park, and a nature park.

The Maryville economy

This report measures how Mozingo serves the city of Maryville. Since the park was first established, it has been serving Maryville by not only providing jobs for local residents, but by also attracting out-of-region visitors, who then inject new monies into the local economy. Table 1.1 on the previous page summarizes the breakdown of the Maryville economy by major industrial sector, with details on labor and non-labor income. Labor income refers to wages, salaries, and proprietors’ income. Non-labor income refers to profits, rents, and other forms of investment income. Together, labor and non-labor income comprise the region’s total income, which can also be considered as the region’s gross regional product (GRP).

As shown in Table 1.1, the total income, or GRP, of Maryville is approximately \$451.3 million, equal to the sum of labor income (\$261.4 million) and non-labor income (\$189.9 million). In Chapter 2, we use the total added income as the measure of the relative impacts of the park on the regional economy.

Table 1.2 provides the breakdown of jobs by industry in region. Among the region’s non-government industry sectors, the Retail Trade sector is the largest employer, supporting 1,344 jobs or 14.4% of total employment in the region. The second largest employer is the Manufacturing sector, supporting 1,262 jobs or 13.5% of the region’s total employment. Altogether, the region supports 9,338 jobs.¹

ABOUT MOZINGO

Mozingo Lake, the centerpiece of Mozingo, is a recent addition to Maryville’s recreational opportunities. Originally intended as a means of controlling the flooding of Mozingo

¹ Job numbers reflect Emsi’s complete employment data, which includes the following four job classes: 1) employees that are counted in the Bureau of Labor Statistics’ Quarterly Census of Employment and Wages (QCEW), 2) employees that are not covered by the federal or state unemployment insurance (UI) system and are thus excluded from QCEW, 3) self-employed workers, and 4) extended proprietors.

TABLE 1.2: Jobs by major industry sector in region*

Industry sector	Total jobs	% of total
Agriculture, Forestry, Fishing, and Hunting	369	4.0%
Utilities	52	0.6%
Construction	323	3.5%
Manufacturing	1,262	13.5%
Wholesale Trade	186	2.0%
Retail Trade	1,344	14.4%
Transportation and Warehousing	105	1.1%
Information	98	1.0%
Finance and Insurance	334	3.6%
Real Estate and Rental and Leasing	289	3.1%
Professional and Technical Services	259	2.8%
Management of Companies and Enterprises	47	0.5%
Administrative and Waste Services	245	2.6%
Educational Services, Private	130	1.4%
Health Care and Social Assistance	1,090	11.7%
Arts, Entertainment, and Recreation	74	0.8%
Accommodation and Food Services	906	9.7%
Other Services (except Public Administration)	446	4.8%
Government, Education and Non-Education	1,780	19.1%
Total	9,338	100.0%

* Data reflect the most recent year for which data are available. Emsi data are updated quarterly.

Source: Emsi complete employment data.

Creek and to provide a drinking water reservoir for the city and area, the lake began to be planned in the 1980’s, with the intention that it would be designated as a state park. Over the following years, as the plan developed, control of the park shifted to the City of Maryville. By 1994, the dam at the east end of what was to be the lake was completed, and around one year later the lake reached its full volume and began providing water to area residents.

From its beginning, Mozingo Lake was intended to be more than a utility for the Maryville region, with the plan for it to serve as a recreational resource and a source of economic stimulus for the region. Even before the lake was completed, Maryville designed and built a golf course on what are now the shores of the lake. Ranked as one of the best municipal courses in the nation by *Golf Digest*, the golf course attracts outside money to the region in terms of its golfing activities, as well as the added dollars it contributes to the region’s tourism industry. The golf course also offers fundraising opportunities to the many local organizations that host functions there each year. In 2015, for example, the Mozingo golf course hosted 12 different charity benefit

events, of which 11 were annual events. Combined, the 12 tournaments raised approximately \$95,000 for various organizations in the community.

Facilities

Mozingo's facilities include far more than a golf course. In order to provide the widest possible range of options for park users, the park is continually expanding and improving. Currently, its facilities include:

- Fishing on the 1,000-acre lake, which is known as one of the state's best fishing destinations and offers bass and crappie, as well as catfish, bluegill, and walleye.
- Over 100 full-service RV parking spaces and 50 rustic camping sites.
- Miles of hiking and equestrian trails, both paved and unpaved.
- Numerous boat ramps, a swimming beach, playgrounds, and designated hunting areas.
- The Mozingo Outdoor Education Recreation Area, a 320-acre area operated by Northwest Missouri State University that includes a challenge/climbing course, archery grounds, trap shooting, an observatory, boat launch, and outdoor classroom. It provides users with a facility for developing leadership and teamwork skills.

These facilities are regularly improved by new additions. For example, seven fully furnished camping cabins have been added to the park since 2000. Mozingo's current long-term plan includes the addition of new pavilions and lodge facilities, the improvement of the park's trails, the expansion of the park's existing camping facilities, and many other goals intended to improve the park for its users.

The park's facilities provide a venue for many community organizations to train and practice. For example, the local Special Olympics organization, as well as the high school and Northwest Missouri State University golf teams, use the golf course for a practice facility. Other groups use various other facilities in the park.

Because of its origins, Mozingo also offers a uniquely diverse ecosystem for scientific study. As the park develops, formerly agrarian areas along the shore are reverting to their original state as savanna grasslands. Native trees are being planted throughout the park in order to stabilize fragile ecosystems and beautify the lake. And, thanks to the very irregular outline of the lake, it has a very long shore, allowing various microsystems to develop and encouraging diversity among the waterfowl, fish, and other fauna in the park. All of these serve to create a more attractive and enjoyable destination for visitors, as well as a more resilient park environment.

By not only maintaining but improving its natural amenities, Mozingo provides an exceptional resource for Maryville residents while also attracting visitors from across the region and surrounding states. It attracts monies to the region that would not have otherwise entered the local economy through its own operations expenditures, the expenditures of its many visitors for recreational activities and park events, the improved health benefits of Maryville residents, increased Maryville property values, and the growth of Maryville community unity. This analysis will highlight how Mozingo affects the regional economy through these different benefits.

VISITORS TO THE PARK

Visitors are essential to Mozingo; without them, Mozingo would simply not exist. Emsi and the City of Maryville created and distributed a survey between September and November 2015 in order to better understand Mozingo's visitors. This survey consisted of a paper version, distributed on-site, and an electronic version, emailed to past visitors and posted on Mozingo's website.

Between the paper and electronic versions, there were 420 qualified responses. Responses were qualified if the respondents were visiting Mozingo at the time of taking the survey or had visited Mozingo in the past year. Of these respondents, 74 completed the paper survey. The respondents were not required to complete every question.

Based on the survey, 66 of the 420 qualified respondents live outside of Missouri. Of the 84.3% of respondents that live in Missouri, 50.8% are from Maryville. Therefore, we estimate 15.7% of the visitors are from outside the state and 57.1% (including out-of-state visitors) are from outside Maryville. Throughout this analysis, Maryville is defined as the region.

Table 1.3 describes the summary statistics for the three groups of visitors: out-of-state, out-of-region (includes out of state), and in-region. It is no surprise that the local visitors make the most trips to Mozingo. However, when looking at the average days spent per trip, visitors from out-of-state

TABLE 1.3: *Travel summary statistics of visitor survey*

	Out-of-state	Out-of-region	In-region	Total
Origin	15.7%	57.1%	42.9%	100%
Avg. number of trips	8.6	9.8	22.7	16.0
Avg. days visited	12.3	13.9	26.3	19.2
Avg. days per trip	1.4	1.4	1.2	1.2
Avg. party size	7.4	4.5	2.3	3.6

spend slightly more per visit than those in Maryville. Also, as the distance from the park increases, the party size also increases. For the visitor spending impact in Chapter 2, we measure the impact of those out-of-region visitors.

On the survey, we asked respondents to indicate the activities they participate in while visiting Mozingo. Their multiple choice options included: golf, fishing, hunting, horseback riding, cabins/camping, and an “other” category where they could enter text. Table 1.4 outlines the percentage of responses to each category. Keep in mind that the percentages do not sum to 100% because respondents were allowed to select more than one activity.

The most popular activity for visitors not from Maryville is fishing. Almost half of the visitors from outside Maryville enjoy fishing while visiting Mozingo. Only about one-quarter of visitors from Maryville fish on the lake. The second most popular activity for park visitors not from Maryville is cabins/camping. This is not a surprise given that many of the visitors from outside the region travel great distances and want to take advantage of Mozingo’s lodging amenities.

As shown in the table, Maryville residents visit Mozingo for its golf course more than any of the other activities. Around 26% of all respondents checked the “other box”. Of those that wrote in an answer, “boating” was the most popular activity with 10.6% of all out-of-state respondents writing it in. Other activities mentioned included swimming, walking/hiking, walking dogs, and bicycling.

TABLE 1.4: *Activity summary statistics of visitor survey*

	Out-of- state	Out-of- region	In- region	Total
Golf	25.8%	26.7%	40.6%	32.6%
Fishing	47.0%	42.5%	28.3%	36.4%
Hunting	3.0%	2.1%	0.0%	1.2%
Horseback riding	0.0%	2.5%	1.1%	1.9%
Cabins/camping	36.4%	40.8%	25.0%	34.0%
Other “boating”	10.6%	7.5%	7.8%	7.6%

Chapter 2.

SPENDING IMPACTS OF MOZINGO AND ITS VISITORS ON THE MARYVILLE ECONOMY

The Maryville economy is impacted by Mozingo through park and employee expenditures, as well as the spending of out-of-region visitors. The park is an employer and buyer of goods and services for its various recreational activities. Employee payroll and benefits are part of the region's overall income, and the spending by employees for groceries, apparel, and other household spending helps support businesses in the Maryville economy. Furthermore, visitors from outside the region bring new monies with them to spend on food and other expenses in Maryville. All of these expenditures create a ripple effect that generates still more jobs and income throughout the region. In this section, we estimate the economic impact of this spending on the Maryville economy.

Economic impact analyses use different types of impacts to estimate the results. The one we focus on the most in this analysis is the **income impact**, which assesses the change in gross regional product, or GRP. Income may be further broken out into the **labor income impact**, which assesses the change in employee compensation; and the **non-labor income impact**, which assesses the change in income and business profits. Another way to state the income impact is in terms of **jobs**, a measure of the number of full- and part-time jobs that would be required to support the change in income. Finally, a frequently used measure is the **sales impact**, which comprises the change in business sales revenue in the economy as a result of increased economic activity. It is important to bear in mind, however, that much of this sales revenue leaves the regional economy through intermediary transactions and costs.² All of these measures – jobs, income, and sales – are used to estimate the economic impact results presented in this section.

2 See Appendix I for an example of the intermediary costs included in the sales impact but not in the income impact.

The analysis breaks out the impact measures into different components, each based on the economic effect that caused the impact. The following is a list of each type of effect presented in this analysis:

- The **initial effect** is the exogenous shock to the economy caused by the initial spending of money, whether to pay for salaries and wages, purchase goods or services, or cover operating expenses.
- The initial round of spending creates more spending in the economy, resulting in what is commonly known as the **multiplier effect**. The multiplier effect comprises the additional activity that occurs across all industries in the economy and may be further decomposed into the following three types of effects:
 - The **direct effect** refers to the additional economic activity that occurs as the industries affected by the initial effect spend money to purchase goods and services from their supply chain industries.

- The **indirect effect** occurs as the supply chain of the initial industries creates even more activity in the economy through their own inter-industry spending.
- The **induced effect** refers to the economic activity created by the household sector as the businesses affected by the initial, direct, and indirect effects raise salaries or hire more people.

The terminology used to describe the economic effects listed above differs slightly from that of other commonly used input-output models, such as IMPLAN. For example, the initial effect in this study is called the “direct effect” by IMPLAN. Further, the term “indirect effect” as used by IMPLAN refers to the combined direct and indirect effects defined in this study. To avoid confusion, readers are encouraged to interpret the results presented in this section in the context of the terms and definitions listed above. Note that, regardless of the effects used to decompose the results, the total impact measures are analogous.

Multiplier effects in this analysis are derived using Emsi’s Social Accounting Matrix (SAM) input-output model that captures the interconnection of industries, government, and households in the region. The Emsi SAM contains approximately 1,100 industry sectors at the highest level of detail available in the North American Industry Classification System (NAICS) and supplies the industry-specific multipliers required to determine the impacts associated with increased activity within a given economy.³

Emsi	Initial	Direct	Indirect	Induced
IMPLAN	Direct	Indirect		Induced

MOZINGO OPERATIONS SPENDING IMPACT

Data provided by Mozingo include information on employees by place of work and by place of residence. These data appear in Table 2.1. Mozingo employed 9 full-time and 50 part-time employees in Fiscal Year (FY) 2014-15. For the purpose of this report, FY 2014-15 is defined as October 2014 through September 2015. Of these, 100% worked in Maryville and 99% lived in Maryville. These percentages are used to isolate the portion of the employees’ payroll and household expenses that remains in the regional economy.

Table 2.2 shows the park’s annual revenues by funding source – a total of \$2.2 million in FY 2014-15. As indicated,

3 Please contact Emsi for more information on the Emsi SAM.

TABLE 2.1: Employee data, FY 2014-15

Full-time employees	9
Part-time employees	50
Total employees	59
% of employees that work in region	100%
% of employees that live in region	99%

Source: Data supplied by Mozingo.

TABLE 2.2: Revenue by source, FY 2014-15

Expense item	Total	%
Service charges and fees	\$1,094,900	49%
Local government	\$945,420	42%
Federal government	\$181,080	8%
All other revenue	\$20,782	<1%
Total revenue	\$2,242,182	100%

Source: Data supplied by Mozingo.

TABLE 2.3: Expenses by type of cost, FY 2014-15

Expense item	Total	%
PERSONNEL SERVICES	\$860,087	35%
NON-PAY EXPENDITURES		
Contractual services	\$448,400	18%
Commodities	\$409,900	17%
Capital outlay	\$502,265	20%
All other expenditures	\$231,562	9%
Total non-pay expenditures	\$1,592,127	65%
Total expenses	\$2,452,214	100%

Source: Data supplied by Mozingo.

service charges and fees comprised 49% of total revenue, and revenue from the local government comprised another 42%. Revenue from the federal government and all other revenue made up the remaining 9%.

The combined payroll, referred to as personnel services in Table 2.3, at Mozingo amounted to \$860.1 thousand. This was equal to 35% of the park’s total expenses for FY 2014-15. Other expenses, including capital and purchases of supplies and services, made up the remaining \$1.6 million. In total, Mozingo spent \$2.5 million, much of which would not have entered the Maryville economy but for Mozingo’s day-to-day operations and maintenance.

The first step in estimating the impact of the expenses shown in Table 2.3 is to map them to the approximately 1,100 industries of the Emsi SAM model. Assuming that the spending patterns of the park’s personnel approximately

TABLE 2.4: Operations spending impact of Mazingo, FY 2014-15

	Labor income	Non-labor income	Total income	Sales	Jobs
INITIAL EFFECT	\$860,087	\$0	\$860,087	\$2,452,214	59
MULTIPLIER EFFECT					
Direct effect	\$158,186	\$153,588	\$311,774	\$606,981	8
Indirect effect	\$10,309	\$8,665	\$18,973	\$38,620	1
Induced effect	\$68,752	\$113,213	\$181,965	\$321,114	3
Total multiplier effect	\$237,247	\$275,465	\$512,712	\$966,714	12
GROSS IMPACT (INITIAL + MULTIPLIER)	\$1,097,334	\$275,465	\$1,372,799	\$3,418,928	71
Less alternative uses of funds	-\$81,721	-\$145,798	-\$227,519	-\$397,527	-4
NET IMPACT	\$1,015,613	\$129,667	\$1,145,279	\$3,021,401	67

Source: Emsi impact model.

match those of the average consumer, we map salaries, wages, and benefits to spending on industry outputs using national household expenditure coefficients supplied by Emsi’s national SAM. Approximately 99% of the employees at Mazingo live in Maryville (Table 2.1), and therefore we consider 99% of the salaries, wages, and benefits. For the four non-pay expenditure categories, we assume the park’s spending patterns approximately match national averages and apply the national spending coefficients for NAICS⁴ 713910 (Golf Courses and Country Clubs). Capital outlay is mapped to the construction sectors of NAICS 713910.

We now have five expense vectors for Mazingo: one for salaries, wages, and benefits and one for each type of non-pay expenditure listed in Table 2.3. The next step is to estimate the portion of these expenditures that occurs inside the region. Those that occur outside the region are known as leakages. We estimate in-region expenses using regional purchase coefficients (RPCs), a measure of the overall demand for the commodities produced by each industry sector that is satisfied by regional suppliers for each of the approximately 1,100 industries in the SAM model.⁵ The vectors of expenses are multiplied, industry by industry, by the corresponding RPC to arrive at the in-region expenditures associated with the park. Of the \$2.5 million in total spending, we estimate \$1.5 million was initially spent within the Maryville economy and the remaining \$985.1 thousand was spent outside the region. Finally, in-region spending is entered, industry by industry, into the SAM model’s multiplier matrix, which in turn provides an estimate of the associated multiplier effects

on regional labor income, non-labor income, total income, and jobs.

Table 2.4 presents the economic impacts stemming from the park’s operations. The people employed by Mazingo and their salaries, wages, and benefits comprise the initial effect, shown in the top row in terms of labor income, non-labor income, total income, sales, and jobs. The additional impacts created by the initial effect appear in the next four rows under the heading “Multiplier effect.” Summing initial and multiplier effects, the gross impacts are \$1.1 million in labor income and \$275.5 thousand in non-labor income. This comes to a total impact of \$1.4 million in added income, equivalent to the creation of 71 jobs, to support the spending of the park and its employees in the region.

The \$1.4 million in gross impact is often reported by researchers as an impact. We go a step further to arrive at a net impact by applying a counterfactual scenario, i.e., what would have happened if a given event – in this case, the expenditure of in-region funds on Mazingo – had not occurred. Mazingo received an estimated 63.7% of its funding from sources within Maryville. These monies came mostly from sales tax, but admission and fees by Maryville residents also contributed to it. We must account for the opportunity cost of this in-region funding. Had other industries received these monies rather than Mazingo, income impacts would have still been created in the economy. In economic analysis, impacts that occur under counterfactual conditions are used to offset the impacts that actually occur in order to derive the true impact of the event under analysis.

We estimate this counterfactual by simulating a scenario where in-region monies spent on the park are instead spent on consumer goods and savings. In other words, the in-region monies are returned to regional residents and spent by the household sector. Our approach is to establish the total amount spent by in-region residents on Mazingo, map this to the detailed industries of the SAM model using

4 NAICS stands for North American Industry Classification System (<http://www.census.gov/eos/www/naics/>). It is a product of Census and classifies each industry according to its primary activities.

5 For example, if 40% of the demand for NAICS 541211 (Offices of Certified Public Accountants) is satisfied by regional suppliers, the RPC for that industry is 40%. The remaining 60% of the demand for NAICS 541211 is provided by suppliers located outside the region.

national household expenditure coefficients, use the industry RPCs to estimate in-region spending, and run the in-region spending through the SAM model's multiplier matrix to derive multiplier effects. The results of this exercise are shown as negative values in the row labeled less alternative uses of funds in Table 2.4.

The total net impacts of the park's operations are equal to the gross impacts less the impacts of the alternative uses of funds – the opportunity cost of the local money. As shown in the last row of Table 2.4, the total net impact is approximately \$1 million in labor income and \$129.7 thousand in non-labor income. This sums together to \$1.1 million in total added income and is equivalent to 67 jobs. These impacts represent new economic activity created in the Maryville economy that is solely attributable to the operations of Mozingo.

MOZINGO VISITOR SPENDING IMPACT

Thousands of visitors came to Mozingo to participate in various activities, including golf, recreation, fishing, and horseback riding. An estimated 467,747 visitors made a trip to Mozingo in FY 2014-15. This figure was calculated using car counts. A car count strip was used for one week in July 2014 and one week in September 2015. Even though July 2014 is not within the time frame used in this study, we use it as a proxy for the July 2015 car count.

These two initial car counts were increased by 25% to account for visitors entering through the golf course entrance, which was not included in the car counts.⁶ We applied the revised two data points to the average visitor count distribution from October 2014 through September 2015 for five similar national parks.⁷ After calculating the total number of cars visiting Mozingo each month, we applied a person per vehicle (PPV) multiplier of 2.9 for the months of September through May, and a PPV of 3.1 for the months of June through August. These PPV multipliers were calculated by averaging the PPV multipliers used by the Rocky Mountain National Park and Kings Canyon National Park for each month.⁸ Finally, the number of visitors across each month were summed to arrive at 467,747 visitors. Applying the percentage of out-of-region visitors, calculated from the survey (57%), we estimate around 266,616 out-of-region visitors to Mozingo between October 2014 and September 2015.

6 The 25% was determined by the percentage of survey respondents that only visited the park to golf.

7 The national parks used for annual visitor distribution include: Rocky Mountain National Park, Voyageurs National Park, Lake Clark National Park, Glacier Bay National Park, and Kings Canyon National Park (<https://irma.nps.gov/Stats/>).

8 The PPV multipliers were not available for Voyageurs National Park, Lake Clark National Park, and Glacier Bay National Park.

TABLE 2.5: Average visitor spending and sales generated by out-of-region visitors to Mozingo, FY 2014-15

	Total daily spending	In-park daily spending	Out-of-park daily spending
Accommodation	\$26.14	\$17.52	\$8.621
Food	\$18.36	\$6.01	\$12.35
Transportation	\$8.76	\$2.76	\$5.60
Other goods	\$9.75	\$4.15	\$6.00
Total expenses per visitor	\$63.01	\$30.44	\$32.57
Number of out-of-region visitors			266,616
Total off-park sales			\$8,684,065

Source: Sales calculations are estimated by Emsi based on data provided through a survey of Mozingo visitors.

Table 2.5 presents the average daily expenditures reported through the survey per person for accommodation, food, transportation, and other personal expenses (including shopping and entertainment). However, some of this spending includes monies paid to the park for food and accommodation. These have already been accounted for in Mozingo's operations spending impact discussed in Section 2.1 and are thus removed to avoid double-counting. We estimate off-park sales generated by out-of-region visitors totaled \$8.7 million.

Calculating the income added as a result of visitor spending again requires use of the SAM model. The analysis begins by discounting the off-park sales generated by out-of-region visitors to account for leakage in the trade sector, and then bridging the net figures to the detailed sectors of the SAM model. The model runs the net sales figures through the multiplier matrix to arrive at the multiplier effects. As shown in Table 2.6 on the next page, the gross impact of visitor spending in FY 2014-15 comes to \$879 thousand in labor income and \$496 thousand in non-labor income. This totals to \$1.4 million in added income and is equivalent to 82 jobs.

For many visitors, Mozingo was not the sole reason for visiting Maryville. Survey respondents were asked to rate Mozingo on a scale from one to five how much Mozingo attributed to their decision to visit Maryville. The average rating was 4.1 for out-of-region visitors, meaning Mozingo is solely responsible for 81.7% of its visitors coming to Maryville. In other words, 81.7% of the visitors would not have come to Maryville, bringing new monies with them, if not for Mozingo. Therefore, 81.7% of the gross impact is truly attributable to Mozingo. After applying this discount, the net impact of visitor spending comes to \$718 thousand in labor income and \$405.2 thousand in non-labor income. This totals to \$1.1 million in added income to Maryville and is equivalent to supporting 67 jobs.

TABLE 2.6: Impact of the spending of out-of-region visitors to Mozingo, FY 2014-15

	Labor income	Non-labor income	Total income	Sales	Jobs
INITIAL EFFECT	\$0	\$0	\$0	\$8,684,065	0
MULTIPLIER EFFECT					
Direct effect	\$759,912	\$425,023	\$1,184,935	\$2,616,872	71
Indirect effect	\$38,581	\$22,642	\$61,224	\$136,555	4
Induced effect	\$80,481	\$48,382	\$128,863	\$279,665	8
Total multiplier effect	\$878,974	\$496,047	\$1,375,021	\$3,033,091	82
GROSS IMPACT (INITIAL + MULTIPLIER)	\$878,974	\$496,047	\$1,375,021	\$11,717,156	82
Percent of visit attributable to Mozingo	81.7%	81.7%	81.7%	81.7%	81.7%
NET IMPACT	\$717,993	\$405,198	\$1,123,191	\$9,571,205	67

Source: Emsi impact model.

TOTAL IMPACT OF MOZINGO

The total economic impact of Mozingo on Maryville can be generalized into two broad types of impacts. First, by simply maintaining Mozingo, a flow of spending is created that has a significant impact on the Maryville economy. The impact of this spending is captured by the operations spending impact. While not insignificant, this impact does not capture the true purpose of Mozingo. The basic mission of Mozingo is to serve as a primary regional water source, which then provides recreational opportunities for visitors. Every year, visitors flow to Mozingo from around the nation. These visitors not only contribute to the success of Mozingo, but add money to the Maryville economy when they spend money on accommodation, gas, food, and personal expenses.

Table 2.7 displays the total impacts of Mozingo on the Maryville economy in FY 2014-15. The total impacts stemming from operations and visitor spending comes to \$2.3 million in added income. For context, the percentages of Mozingo compared to the total labor income, total non-labor

income, combined total income, sales, and jobs in Maryville, as presented in Table 1.1 and Table 1.2, are included. The total added income of Mozingo is equivalent to 0.5% of the GRP of Maryville. By comparison, this contribution that the park provides on its own is slightly smaller than the entire Transportation & Warehousing industry in the region.

Another way to interpret the results is to calculate an implicit multiplier. An implicit multiplier is the total impact divided by the initial effect. The implicit sales multiplier for Mozingo is the total sales impact of \$12.6 million divided by the park's total expenditures of \$2.5 million, equal to \$5.14. In other words, for every dollar spent by Mozingo, an additional \$4.14 in added spending is generated in Maryville. We can do the same for income and for jobs. The implicit income multiplier is \$2.64, or \$2.3 million in total income impact divided by \$860.1 thousand in payroll spending. For jobs, dividing the 134 total job impact by the 59 city employees operating Mozingo provides an implicit jobs multiplier of 2.27.

TABLE 2.7: Total impact of Mozingo, FY 2014-15

	Labor income	Non-labor income	Total income	Sales	Jobs
Operations spending	\$1,015,613	\$129,667	\$1,145,279	\$3,021,401	67
Visitor spending	\$717,993	\$405,198	\$1,123,191	\$9,571,205	67
Total impact	\$1,733,606	\$534,865	\$2,268,471	\$12,592,607	134
% of the Maryville economy	0.7%	0.3%	0.5%	1.2%	1.4%

Source: Emsi impact model.

Chapter 3.

BROADER BENEFITS OF MOZINGO

Beyond the economic impact Mozingo has on the Maryville economy, its presence in the community positively affects Maryville in a variety of other ways. While this study does not extend to quantifying the exact dollar values of those benefits, this does not make their effect any less real or significant. These broader benefits include the park's positive effect on the health and fitness of Maryville residents, the positive impact the park has on property values in Maryville, and the general benefit the presence of the park has on the health of Maryville as a community.

HEALTH AND FITNESS OF MARYVILLE RESIDENTS

Mozingo benefits Maryville by providing a facility for a multitude of recreational activities. By making it easy for residents to spend time outside engaged in these activities, the park indirectly improves residents' health. This comes about mainly because participation in outdoor activity is directly connected to an increase in fitness and a decrease in obesity, a condition with known negative consequences for individuals and costs for economies. For example, in a 2009 study produced by the Trust For Public Land, Peter Harnik and Ben Welle cite several studies that document the economic burden of inactivity and the corresponding economic benefit of the physical activity the presence of a park produces. They go so far as to suggest a value of \$250 in economic savings for every resident who uses the park for regular exercise.⁹

The increased capacity for outdoor recreation and fitness that Mozingo provides is especially important to the health of Maryville children. Outdoor activity makes children healthier than children who stay indoors. At the present, with increasing numbers of overweight and obese citizens, it is important that communities provide places like Mozingo where children can be outside and active. This will not only avoid health problems later in life, but will help them

9 Harnik, Peter, and Welle, Ben; "Measuring The Economic Value of a City Park System"; The Trust For Public Land, 2009; pg. 7.

develop mental awareness that a lack of outdoor activity tends to diminish.¹⁰

ENVIRONMENTAL BENEFITS AND SAVINGS

Parks like Mozingo also benefit the health of Maryville residents more generally by positively affecting the overall environment. For example, parks (especially large parks like Mozingo) play a significant role in improving air quality because trees and grasses are able to remove pollutants from the atmosphere. Not only does this improve health, it also provides a service which might otherwise have to be paid for. For example, a study in Atlanta found that the city's parks removed pollutants from the air which would have otherwise cost \$47 million to deal with.¹¹ Mozingo also saves Maryville money by protecting its water source and eliminating some or all of the city's water treatment costs. When a watershed is protected by surrounding green space, like Mozingo, it protects the water from harmful runoff which might otherwise pollute it.

10 Godbey, Geoffrey; "Outdoor Recreation, Health, and Wellness: Understanding and Enhancing The Relationship"; The Outdoor Resources Review Group (<http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-09-21.pdf>, accessed 12/8/15), 2009; pg. 8.

11 "Urban Ecosystem Analysis Atlanta Metro Area," American Forests; http://www.americanforests.org/downloads/rea/AF_Atlanta.pdf (accessed 12/8/15).

PROPERTY VALUES AS A RESULT OF MOZINGO

Mozingo benefits Maryville by increasing the value of nearby properties. The positive effect of the presence of parks on nearby properties has been documented for over a century. This is the result of numerous factors. In a briefing paper prepared in 2002, the American Planning Association suggested that this increase was the result of indirect factors such as a park's positive effects on the environment, as well as the direct effect of attracting more affluent people to the area who are able to pay a premium to live near the amenities of a park.¹²

Furthermore, proximity to golf courses like the Mozingo Lake Golf Course has an additional positive impact on property values. One study found that "Golf courses appear to have both the most consistent and most substantial positive impact on surrounding property values of any open space type," going on to cite studies finding that properties within a quarter-mile of a golf course could see premiums of more than 5% on their value. This premium could increase significantly with even greater proximity.¹³

OVERALL COMMUNITY UNITY

Finally, Mozingo benefits Maryville by fostering a generally stronger and more united community. While the positive effect the presence of a park has on community spirit and cohesion is obviously difficult to quantify, it is nonetheless significant. In their report for the Trust for Public Land, Welle and Harnik show a wide body of research on the topic, saying "From playgrounds to sports fields to park benches to chessboards to swimming pools to ice skating rinks to flower gardens, parks offer opportunities for people of all ages to interact, communicate, compete, learn, and grow. [T]he acts of improving, renewing, or even saving a park can build extraordinary levels of social capital."¹⁴ Especially in the case of a large park like Mozingo, this positive impact on community cohesion should not be underestimated. This is even further demonstrated through the amount of fundraising opportunities offered at the park, which serve community organizations.

12 American Planning Association; "How Cities Use Parks For Economic Development"; <https://www.planning.org/cityparks/briefingpapers/pdf/economicdevelopment.pdf> (accessed 12/8/2015).

13 Nicholls, Sarah; "Measuring the Impact of Parks on Property Values"; The Massachusetts Land Trust Coalition; <http://www.massland.org/files/MeasuringImpactParksonPropertyValues.pdf> (accessed 1/14/16), pg.3.

14 Harnik and Welle, 2009, 9.

Chapter 4.

PROPOSED CONSTRUCTION SPENDING IMPACT

Although Mozingo currently generates a significant positive impact on the Maryville economy, the park is always looking to improve its facilities and build new ones to better accommodate its visitors. To accomplish this, Mozingo has proposed the construction of a new Conference Center on the park grounds. The Center will be designed to host personal and professional events. Its facilities will include a restaurant, cart storage, and lockers, as well as banquet rooms and offices.

In this section, we only estimate the impact of building the Conference Center. This estimate does not take into account the long-term impact of added park operations spending due to the Conference Center, or the long-term impact from an increase in visitors and/or visitor spending. The impact we estimate is short-term and only includes construction-related activities.

Mozingo proposes to spend \$3.5 million to construct the Conference Center. Because the new budget for the cost of construction has not yet been approved, we do not include it in the park's operations spending impact in Chapter 2.

However, like the operations spending, the construction spending creates subsequent rounds of spending and multiplier effects that generate still more jobs and higher wages throughout Maryville.

The methodology used here is similar to that used when estimating the impact of capital outlay under the operations spending impact. Assuming Mozingo's proposed construction spending approximately matches national construction spending patterns for projects related to NAICS 713910 (Golf Courses and Country Clubs), we map the park's construction spending to the construction industries of the Emsi

TABLE 4.1: *Impact of Mozingo Conference Center construction spending*

	Labor income	Non-labor income	Total income	Sales	Jobs
INITIAL EFFECT	\$0	\$0	\$0	\$3,536,830	0
MULTIPLIER EFFECT					
Direct effect	\$452,789	\$234,908	\$687,698	\$1,523,281	21
Indirect effect	\$28,779	\$15,065	\$43,845	\$97,719	1
Induced effect	\$48,226	\$24,808	\$73,034	\$160,820	2
Total multiplier effect	\$529,795	\$274,782	\$804,577	\$1,781,820	25
GROSS IMPACT (INITIAL + MULTIPLIER)	\$529,795	\$274,782	\$804,577	\$5,318,650	25
Less alternative uses of funds	-\$128,907	-\$229,983	-\$358,890	-\$627,061	-6
NET IMPACT	\$400,888	\$44,799	\$445,687	\$4,691,589	18

Source: Emsi impact model.

SAM model. Next, we use the regional purchase coefficients (RPCs) to estimate the portion of this spending that occur in-region. Finally, the in-region spending is run through the multiplier matrix to estimate the direct, indirect and induced effects. Because construction is so labor intensive, the non-labor income impact is relatively small.

To account for the opportunity cost of any in-region construction money, we estimate the impacts of a similar alternative uses of funds as found in the operations spending impact. This is done by simulating a scenario where in-region monies spent on construction are instead spent

on consumer goods. These impacts are then subtracted from the gross construction spending impacts.

Table 4.1 on the previous page presents the impact of Mozingo construction spending for the proposed Conference Center. Note the initial effect is purely a sales effect, so there is no initial change in labor or non-labor income. This construction spending creates a net total short-run impact of \$400.9 thousand in labor income and \$44.8 thousand in non-labor income. This is equal to \$445.7 thousand in total added income – the equivalent of creating 18 new jobs – for Maryville.

Chapter 5.

CONCLUSION

*During FY 2014-15, Mozingo spent **\$860.1 thousand** on payroll and benefits for 59 full-time and part-time employees. It also spent another **\$1.6 million** on goods and services to carry out its day-to-day operations. This initial round of spending creates more spending across other businesses throughout the Maryville economy, resulting in the commonly referred to multiplier effects. In total, Mozingo operations created **\$1.1 million** in added income for the Maryville economy during FY 2014-15. This is equivalent to creating **67** new jobs.*

In addition to adding income to the Maryville economy through its operations, Mozingo attracted an estimated **266,616** visitors from outside the region between October 2014 and September 2015. These visitors attracted to the park also spent money outside of Mozingo but within the city of Maryville. This injection of money from the out-of-region visitors created **\$1.1 million** in added income for the Maryville economy.

This analysis shows that in FY 2014-15, Mozingo operations and spending from its visitors generated **\$2.3 million** in added income for the Maryville economy. The additional income of \$2.3 million created by Mozingo is equal to approximately **0.5%** of the total GRP of Maryville, and is equivalent to creating **134** new jobs. For perspective, this impact from the park is slightly smaller than the entire Transportation & Warehousing industry in the region.

These above analyses, however, only capture a narrow portion of the benefits created by Mozingo. The park benefits

Maryville by providing a location for Maryville residents to be outdoors and to exercise, therefore improving the overall health and fitness of local residents. Mozingo also increases the property values within Maryville, merely by proximity. Finally, the park not only helps create a positive atmosphere within Maryville, but also supports the unity between Maryville residents. These activities are just a few notable examples demonstrating how Mozingo boosts the regional economy and improves the well-being of citizens.

This positive impact Mozingo has on the Maryville economy does not take into account the potential impact from the construction of a Conference Center. The City of Maryville has budgeted that it will cost **\$3.5 million** to build the proposed Conference Center. Assuming the building of the Conference Center is passed, the construction alone will add **\$445.7 thousand** in income to the Maryville economy. This is equivalent to creating **18** new jobs.

Appendix 1.

EXAMPLE OF SALES VERSUS INCOME

Emsi's economic impact study differs from many other studies because we prefer to report the impacts in terms of income rather than sales (or output). Income is synonymous with value added or gross regional product. Sales include all the intermediary costs associated with producing goods and services. Income is a net measure that excludes these intermediary costs:

$$\text{Income} = \text{Sales} - \text{Intermediary Costs}$$

For this reason, income is a more meaningful measure of new economic activity than reporting sales. This is evidenced by the use of gross domestic product – a measure of income – by economists when considering the economic growth or size of a country.

To demonstrate the difference between income and sales, let us consider an example of a baker's production of a loaf of

bread. The baker buys the ingredients such as eggs, flour, and yeast for \$2.00. He uses capital such as a mixer to combine the ingredients and an oven to bake the bread and convert it into a final product. Overhead costs for these steps are \$1.00. Total intermediary costs are \$3.00. The baker then sells the loaf of bread for \$5.00.

The sales amount of the loaf of bread is \$5.00. The income from the loaf of bread is equal to the sales amount less the intermediary costs:

$$\text{Income} = \$5.00 - \$3.00 = \$2.00$$

In our analysis, income can be found by summing the labor income and non-labor income. To provide context behind these figures, we also report the number of jobs associated with the income. The impacts are also reported in sales terms for reference.

Appendix 2.

GLOSSARY OF TERMS

Alternative use of funds A measure of how monies that are currently used to fund the college might otherwise have been used if the college did not exist.

Economics Study of the allocation of scarce resources among alternative and competing ends. Economics is not normative (what ought to be done), but positive (describes what is, or how people are likely to behave in response to economic changes).

Gross regional product Measure of the final value of all goods and services produced in a region after netting out the cost of goods used in production. Alternatively, gross regional product (GRP) equals the combined incomes of all factors of production; i.e., labor, land and capital. These include wages, salaries, proprietors' incomes, profits, rents, and other. Gross regional product is also sometimes called value added or income.

Initial effect Income generated by the initial injection of monies into the economy through the payroll of the college and the higher earnings of its students.

Input-output analysis Relationship between a given set of demands for final goods and services and the implied

amounts of manufactured inputs, raw materials, and labor that this requires. In an educational setting, when institutions pay wages and salaries and spend money for supplies in the region, they also generate earnings in all sectors of the economy, thereby increasing the demand for goods and services and jobs. Moreover, as students enter or rejoin the workforce with higher skills, they earn higher salaries and wages. In turn, this generates more consumption and spending in other sectors of the economy.

Labor income Income that is received as a result of labor; i.e., wages.

Multiplier effect Additional income created in the economy as the college and its students spend money in the region. It consists of the income created by the supply chain of the industries initially affected by the spending of the college and its students (i.e., the direct effect), income created by the supply chain of the initial supply chain (i.e., the indirect effect), and the income created by the increased spending of the household sector (i.e., the induced effect).

Non-labor income Income received from investments, such as rent, interest, and dividends.

Appendix 3.

SENSITIVITY ANALYSIS

Sensitivity analysis measures the extent to which a model's outputs are affected by hypothetical changes in the background data and assumptions. This is especially important when those variables are inherently uncertain. This analysis allows us to identify a plausible range of potential results that would occur if the value of any of the variables is in fact different from what was expected. In this chapter we test the sensitivity of the model to the following input factors: 1) alternative uses of funds variable, 2) distribution of visitor origination, 3) daily visitor spending patterns, 4) and reduction for reason for visit.

ALTERNATIVE USES OF FUNDS VARIABLE

The portion of Mozingo's revenues received by local sources (e.g., resident admission and fees and the portion of local tax support) may have been spent in a variety of ways, with different multiplier effects associated with that spending. Table A3.1 varies the base case percentage of revenues received by Mozingo from local sources by positive and negative 10%, 25%, and 50%. In the base case scenario, 63.7% of the park's revenues were derived from local sources. The

larger the percentage, or the more of the total revenues derived from local sources, the lower the park's operations spending impact will be since a larger portion of the park's spending is no longer new money injected into the economy.

DISTRIBUTION OF VISITOR ORIGINATION

The portion of the estimated 467,747 Mozingo visitors that traveled from outside of Maryville was determined from the results of a survey distributed to Mozingo visitors in Fall 2015. We calculated that an average of 57% of the park's visitors originated from outside of Maryville. As with any survey, there is room for error. Therefore, Table A3.2 varies the percentage of visitors that originated from outside the region from 0% to 100%.

The more visitors from outside the region, the greater the visitor spending impact because those out-of-region visitors input new monies into the regional economy. If there were no out-of-region visitors, then no new monies would be added to Maryville, hence eliminating the visitor spending impact.

TABLE A3.1: Sensitivity analysis of alternative uses of funds variable

% variation in local funding	-50%	-25%	-10%	Base Case	10%	25%	50%
% funding from local sources	31.9%	47.8%	57.4%	63.7%	70.1%	79.7%	95.6%
Operations spending impact (thousands)	\$1,259	\$1,202	\$1,168	\$1,145	\$1,123	\$1,088	\$1,032

TABLE A3.2: Sensitivity analysis of percentage of visitors from outside the region

% variation in visitors from outside Maryville	0%	20%	40%	Base Case 57%	80%	90%	100%
# of visitors from outside Maryville	0	93,549	187,099	266,616	374,198	420,973	467,747
Visitor spending impact (thousands)	\$0	\$394	\$788	\$1,123	\$1,576	\$1,773	\$1,971

TABLE A3.3: Sensitivity analysis of the spending patterns of out-of-region visitors

% variation in daily spending	-50%	-25%	-10%	Base Case	10%	25%	50%
Lodging	\$4.31	\$6.47	\$7.76	\$8.62	\$9.49	\$10.78	\$12.93
Food	\$6.18	\$9.26	\$11.12	\$12.35	\$13.59	\$15.44	\$18.53
Transportation	\$3.00	\$4.50	\$5.40	\$6.00	\$6.60	\$7.50	\$9.00
Other goods	\$2.80	\$4.20	\$5.04	\$5.60	\$6.15	\$6.99	\$8.39
Total daily spending per visitors	\$16.29	\$24.43	\$29.31	\$32.57	\$35.83	\$40.71	\$48.86
Visitor spending impact (thousands)	\$562	\$842	\$1,011	\$1,123	\$1,236	\$1,404	\$1,685

TABLE A3.4: Sensitivity analysis of the reason for visit variable

% variation in survey response	1	2	3	4	Base Case	5
% park is responsible for visit	20%	40%	60%	80%	82%	100%
Visitor spending impact (thousands)	\$275	\$550	\$825	\$1,100	\$1,123	\$1,375

DAILY VISITOR SPENDING PATTERNS

We calculated the spending patterns of Mozingo’s out-of-region visitors using the results from the park’s survey. We asked Mozingo visitors how much their party spends on lodging, food, transportation, and other goods while visiting Mozingo. We also asked how much of that spending occurred outside of the park since the spending within Mozingo was already accounted for in the operations spending impact. We then took these spending patterns and divided them by the average party size to calculate the average out-of-park daily spending per visitor.

Table A3.3 varies the base case spending patterns by positive and negative 10%, 25%, and 50%. As shown, the more out-of-region visitors spend outside of Mozingo, the greater the visitor spending impact. These out-of-region visitors add monies to the Maryville economy that would not have entered the economy without the existence of Mozingo. Even when we cut their spending patterns in half, the impact of these out-of-region visitors is still \$561.6 thousand in added income to the Maryville economy.

REDUCTION FOR REASON FOR VISIT

The reduction or reason for visit variable is one way of several ways that we take a conservative approach to this economic impact study. This variable takes into account that many out-of-region visitors may have visited Maryville and injected those monies into the regional economy even without the draw of Mozingo. On the survey, visitors were asked to rank on a scale of one to five the influence Mozingo had on their reason to visit Maryville.¹⁵ For out-of-region visitors, the average rating was 4.1. This means that Mozingo played a significant role in their decision to visit Maryville.

Table A3.4 changes how much the park is responsible for out-of-region visitors’ decision to visit Maryville. If the park is the only reason why out-of-region visitors come to Maryville, then Mozingo can claim the entire visitor spending impact of \$1.4 million. However, if the park is 60% of the visitors’ reason, then only 60% of the visitor spending impact, or \$825 thousand, can be attributable to Mozingo.

15 On the scale, one represented that they would have visited Maryville anyway, and five indicated that Mozingo was their only reason to visit Maryville.