



An Economic Impact Analysis of Keep Florida Beautiful (KFB) – Final Report

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Keep Florida Beautiful
Keep America Beautiful
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April, 2023

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KEEP FLORIDA
Beautiful
KEEP AMERICA BEAUTIFUL AFFILIATE



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Executive Summary

In late 2022, the Keep Florida Beautiful (KFB) non-profit organization commissioned the Florida State University Center for Economic Forecasting and Analysis (FSU CEFA) to conduct an economic impact analysis study. This request for an economic study follows after KFB did not have their state grant funding renewed for the 2021-2022 fiscal year. In previous years, the state grant funding provided support on an annual basis to as many as 43 local KFB affiliates as well as funding full-time positions for the state affiliate among other necessary expenses. The economic research analysis, based primarily on the 2022 expense report provided by KFB, focuses on the state affiliate, along with budgeting expenses provided by 35 respondent local affiliates. The economic impact results are presented in terms of direct, indirect, and induced impacts on Florida for both groups. These impacts include those on employment, income, and output, as well as fiscal impacts on state and local taxes as well as federal taxes.

According to the economic impact results, the annual economic impacts of KFB, in 2023 dollars, are estimated to be a total of:

- 79 Jobs;
- \$4.7 Million in Income;
- \$15.5 Million in Total Economic Output, and;
- \$230 Thousand in State and Local Taxes

Overall, the results of the impact analysis reveal that the Florida economy is positively impacted by Keep Florida Beautiful for the year 2022.

Introduction

Keep Florida Beautiful¹ (KFB) contracted with the Florida State University Center for Economic Forecasting and Analysis² (FSU CEFA) to conduct an economic research analysis study of the impact of KFB on the state of Florida. The economic research study is based on KFB's main office total income and operating expenses for the 2021 and 2022 calendar years, along with KFB affiliate data for the 2021-2022 fiscal year.

Keep Florida Beautiful Background

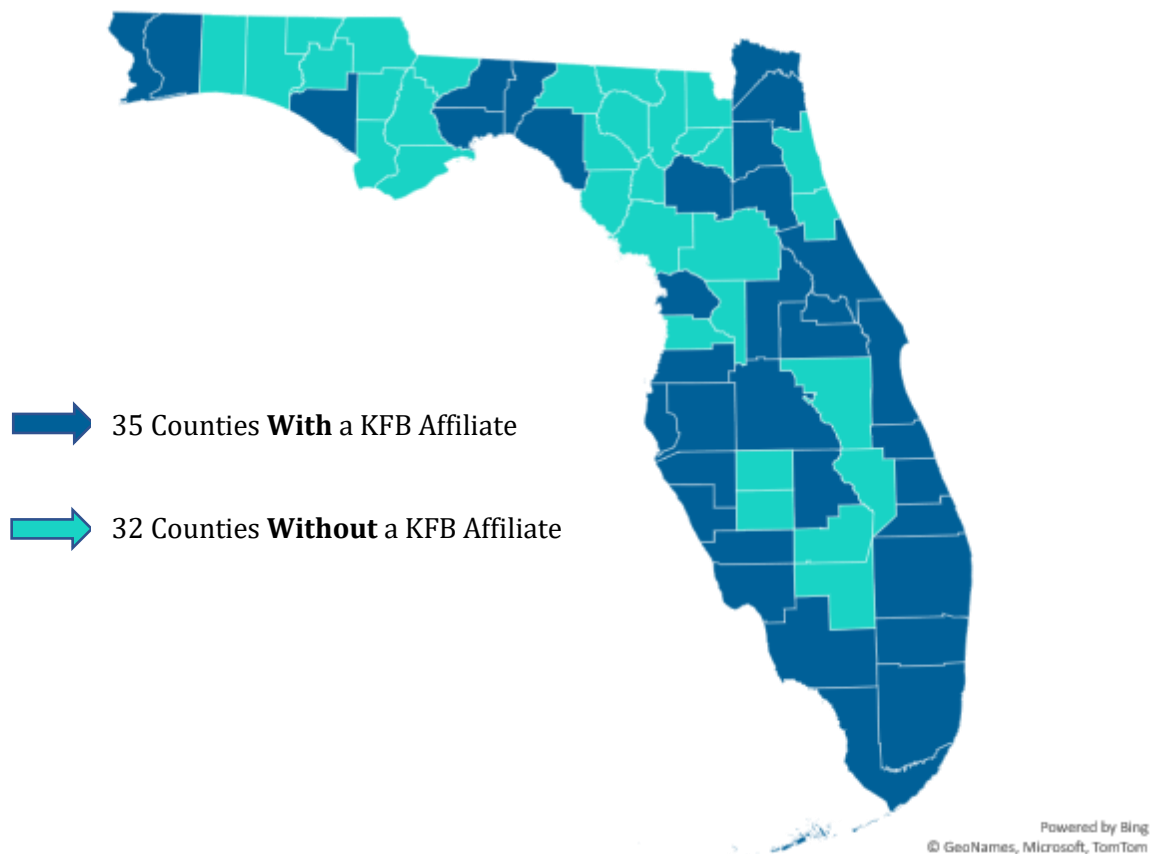


Figure 1. Keep Florida Beautiful Affiliate Counties as of 2023

¹ Keep Florida Beautiful; Keep America Beautiful Affiliate (KFB), see <https://keepfloridabeautiful.org/>

² The FSU Center for Economic Forecasting and Analysis (FSU CEFA), see: <http://www.cefa.fsu.edu>

KFB is a non-profit organization and state affiliate of Keep America Beautiful committed to organizing volunteer cleanup events and improving environmental education outreach. As an affiliate of KFB, their actionable initiatives prioritize proper recycling habits and solid waste reduction, while their environmental education primarily informs the public on litter prevention. This necessary education program component responds to the waste currently produced throughout the state and country. The average American generates over 4 pounds of trash in a single day, equating to approximately 1.5 tons of solid waste in a year.³ KFB seeks to reduce that number by promoting waste reduction and proper disposal and recycling habits.

Additionally, the organization holds various annual cleanup events with the assistance of over 40 of its Floridian affiliates.⁴ These events include participating in the national Great American Cleanup or beachside cleanup days, removing millions of pounds of trash and litter from roadways in local affiliate events, and cleaning up plastics found along the extensive Florida shorelines. Their statewide impact statistics for the year of 2021⁵ are below.

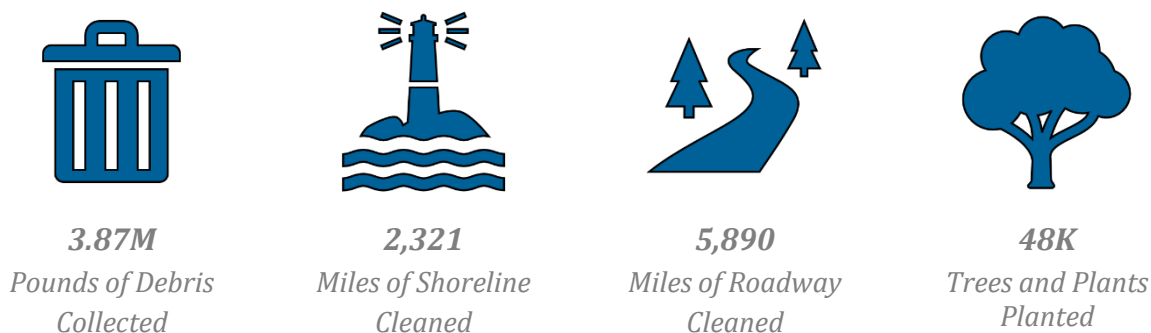


Figure 2. 2021 Statewide Impact Statistics for KFB

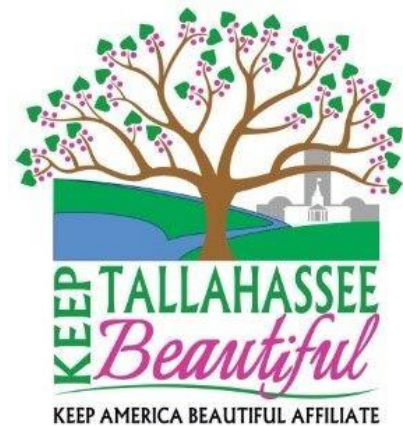
³ KFB, see: <https://keepfloridabeautiful.org/our-initiatives/solid-waste-reduction/>

⁴ KFB, see: <https://keepfloridabeautiful.org/affiliates/> . At the time of the data request for this study, 43 were affiliates, however, only 35 responded to the survey data request.

⁵ KFB, see: <https://keepfloridabeautiful.org/>

Representative Affiliate

While KFB promotes its own initiatives, it relies on the individual work of its affiliates to promote community involvement. One affiliate that represents the typical actions of the other affiliates is that of Keep Tallahassee Beautiful. Keep Tallahassee Beautiful (KTB) is not only a non-profit affiliate of KFB, but also an award-winning affiliate of Keep America Beautiful.⁶ In the 30 years since its establishment, it has helped to reduce littering by 40 percent in the city of Tallahassee and Leon County area. Furthermore, the affiliate had twice the number of volunteer hours and total volunteers as the state average with nearly 13,500 recorded volunteer hours and over 5,300 total volunteers for the 2021-2022 fiscal year. This affiliate is used as a representative of the other affiliates for KFB because the operating budget and donations are close to the average of all affiliates of KFB.



Economic Impact

With a brief overview of KFB, this analysis will report on the economic impact of the organization. In past years, KFB received state funding to assist its affiliates and cover salary expenses. However, the organization did not receive this funding after 2021, and therefore, has been operating on its limited reserves and other income.

The following section presents an overview of prior literature done covering the economic impact of conservation and preservation of the environment across the state of Florida, and across America as a whole. In the following sections, this report will describe the data used in the economic analysis, as well as the economic impact analysis methodology. Finally, the economic impact analysis results will be discussed in the results and conclusions sections.

⁶ See: http://www.keeptallahasseeleoncountybeautiful.com/?page_id=4

Literature Review

The following literature review outlines the previous research into KFB initiatives that have economic ramifications to the state of Florida. This literature review includes context into the parent organization of Keep America Beautiful, economic analysis of littering and recycling, and other economic impact analyses of environmental education in Florida. With these topics in mind, the following examples provide ample contextual background into the significance of an impact analysis of KFB and why such an organization can be considered beneficial.

Economic Impact Analyses of Keep America Beautiful



KEEP AMERICA
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The economic benefits of KFB can be put into context through examination of their origin organization, Keep America Beautiful. As a non-profit organization managed by the help of volunteers and supportive partnerships, Keep America Beautiful (KAB) has encouraged and implemented environmental initiatives since its formation 70 years ago. KAB has grown substantially during that time and is currently the largest known community improvement organization in the United States. As of 2020, the non-profit has been able to reach and support nearly 700 communities out of the 19,000+ communities spread across America, accomplishing this task through the assistance of volunteers, donors, and government funding [KAB, 2023]. In the process of restoring clean and green communities and supporting affiliate resilience, KAB generated \$41.5 million in economic value in 2020, despite operating on a budget of \$6.1M [KAB, 2020]. This equates to about a seven-fold Return on Investment (ROI) for partners and financial supporters of KAB. Likewise, KAB has been able to provide substantial economic benefits to its communities. In 2018, the efforts

of KAB were able to provide up to \$386 million in economic benefits to Americans [KAB, 2019]. Furthermore, KAB has generated more than \$1 billion in economic value in the past decade, with an annual average of \$62 million in measurable benefits to its participating communities [KAB, 2023]. With the help of donors and volunteers, KAB has been able to economically keep America beautiful and clean.

This organization coordinates Litter Prevention Programs, Earth Day cleanups, many other environmental projects, in addition to educational programs. According to the 2020 annual report, KAB was able to reach almost 70,000 students in 609 schools with the message of keeping their community clean [KAB, 2020]. As for events, their largest community restoration is the national Great American Cleanup event⁷, through which they have been able to annually keep parks and public lands cleaned, litter and recycling properly disposed of, and waterways throughout America unobstructed by waste. In 2008, this event saw over 3 million volunteers⁸ helping to collect 86 million pounds of trash and litter, and cleaning 144,000 miles of roadways [KAB, 2009]. For a more recent summation of the event, the results of the 2020 Great American Cleanup event⁹ outline this impact.

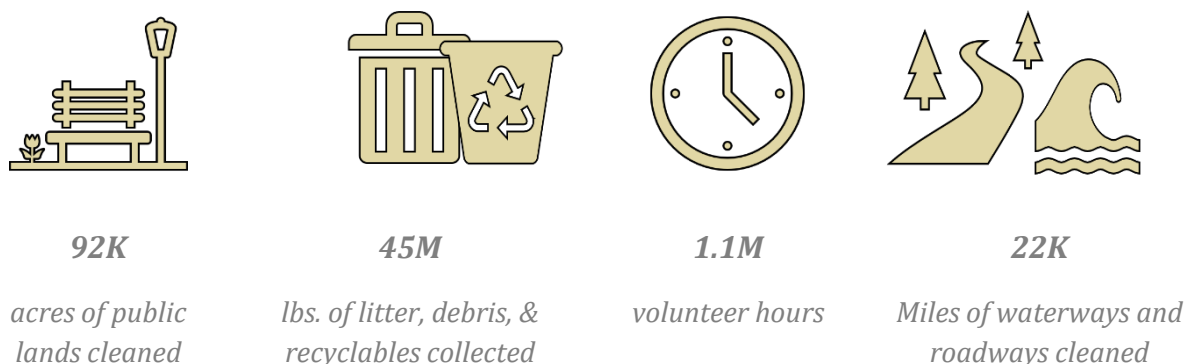


Figure 3. 2020 Impact Statistics for Keep America Beautiful

⁷ KAB, see: <https://kab.org/programs/great-american-cleanup/>

⁸ Note: Statistic based on reports from 66% of organizations, therefore total does not reflect a 100% response rate

⁹ Keep America Beautiful 2020 annual report, see: <https://kab.org/about/approach/annual-reports/2020-annual-report/>

Economic Impact Analyses of Littering

Littering in America

One of the prime initiatives led by KFB is statewide litter prevention. For clarity of terminology, littering is that act where waste is thrown into the environment either on roadways, public lands, or beaches, and interferes with the natural cycle of the surrounding ecosystem. Besides the ecological impact on the surrounding environment, littering



generates large economic costs, where government or other organizations must pay for retroactive cleanup of accumulated litter. Reported by KAB, as much as \$11.5 billion is spent annually on litter cleanup activities in the United States as of 2009 [KAB, 2010]. Businesses bear a large front of this expense, paying approximately 80 percent of the total annual direct cost.

Fortunately, litter prevention methods have been able to reduce the total amount of litter found on roadways and shorelines. The 2020 reports show that littering is down 54 percent since 2009 [KAB, 2021]. However, there are still approximately 23.7 billion pieces along U.S. roads that require attention.

The most littered item worldwide are cigarette butts. Despite decades of research and innovation, bans and fines have been generally ineffective in reducing recklessly discarded cigarette butts. According to the 2020 publication concerning cigarette litter [Castaldi & Cecere & Zoli, 2020], roughly 4.5 to 6 trillion cigarettes smoked across the world every year end up discarded into the ecosystem. For example, Ocean Conservancy collected more than 5,716,000 cigarette filters in their 2018 cleanup alone. While litter prevention is encouraged worldwide, cigarette butt littering has proved to be prevalent and not easily preventative. A leading cause of this litter, however, is the lack of proper disposal means to smokers, who find it much more costly to find a way of disposal rather than throwing it on the ground. Reducing the private costs of proper disposal leads to a reduction of 10-12 percent of cigarette butts left in the sand at beaches. Cigarette litter is not biodegradable and can end up as harmful marine debris ingested by marine life. Providing public disposal methods and

organizing cleanup events has proven to be the only effective combatant to the cigarette filter littering issue.

Unfortunately, tobacco products are not the only source of litter. The total litter tally for 2020 saw nearly 39 percent of litter originating from plastics, fast food packaging, beverage containers, and other miscellaneous plastic waste [KAB, 2021]. While 85 percent of this littering is pinpointed in individual behavior, 15 percent is affected by the presence of existing litter; people who see litter are more inclined to litter [KAB, 2015]. However, as seen in the cigarette filter studies, the presence of a proper means of disposal decreases the likelihood of littering. Observed littering rates decreased by 12 percent when people were within 10 feet of a proper trash or recycling receptacle [KAB, 2015]. Distance from a receptacle and the observed littering rate seem to have a positive relationship, as can be seen below, but providing proper receptacles has still not put a complete halt to littering.

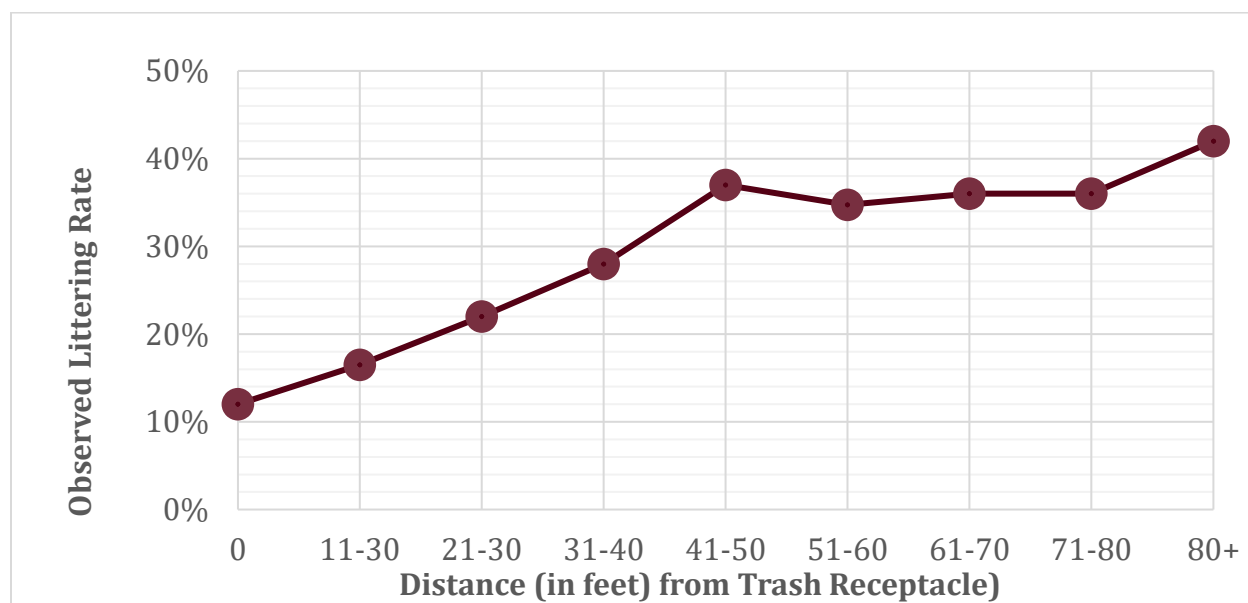


Figure 4. 2009 Observed Littering Rate by Distance to Receptacle¹⁰

¹⁰ KAB; Being A Good Neighbor, see: <https://kab.org/research/>

Referring to economic costs, the \$11.5 billion cost of litter pickup can be broken down into further detail at the public level. According to a 2015 study in America [Wagner and Broadbuss, 2016], the average annual cost to an average sized city for cleaning up litter can range from \$55,931 up to \$258,396. While there are still indirect costs, volunteer work can the state residents but indirectly cost them the beauty of clean roadways and public lands. be useful in keeping this expense down. The estimated cost of litter cleanup per individual piece of litter can range anywhere from \$0.17 to \$0.79, but volunteer work brings this litter cost to sit on the lower end of that spectrum. For instance, the cost of a public employee cleaning up the litter in their community can equate up to as much as \$1,667 per road mile, or approximately \$0.21 per item. However, a volunteer doing the same job as the previously mentioned public employee can significantly reduce this cost. A volunteer's cost to the community for cleaning up the same per road mile is only \$365.92, and about \$0.047 per item. Currently, litter cleanup activities cost billions of dollars to Americans, but the payment of public employees in such cleanup activities has cost up to 4.5 times more than accepting volunteer work. Therefore, volunteer activities in clearing American litter, such as the events and volunteers provided by KFB affiliates, evidently provides economic benefits.

Examples of States' Littering

In addition to the national cost of littering, several states throughout the U.S. have provided their own evidence of expenses spent on littering cleanup. For instance, Iowa found that in 2001, their state was spending \$13.5 million in total annual litter related costs, costs which included prevention acts, cleanups, and disposal [Keep Iowa Beautiful, 2002]. Much of these funds were spent on consequential cleanup instead of distributing appropriate fines for the act of littering. To be more specific relating to these costs, less than \$200,000 was spent on litter enforcement while 98.2 percent of litter-related tax dollars were spent on litter collection. This was not only fiscally expensive to More than 190 million pieces of litter were found along the 114,000 miles of roadway in the state, detrimental to the ecosystem of the area and an unattractive sight for any passersby. Furthermore, environmental education could have helped as a preventative measure of this problem in Iowa, as only ¼ of students

in the state were taught about litter prevention. Proper environmental education and littering fine distribution could have reduced the state's annual litter costs.

Iowa is not the only state to suffer the consequences of reckless littering. As of 2015, Delaware reported spending an annual amount of \$2 million in both disposing of roadside litter and removing illegal dumping [Karimi and Faghri, 2015]. Despite being the second smallest state in the United States, the Delaware Department of Transportation (DelDOT) removes 35,000 bags of trash every year. The state has made progress, however, to put a damper on littering issues for citizens and tourists in the past couple of decades, following the incident of the Mont Blanc Tunnel fire in 1999. In this incident, a cigarette butt was discarded, causing a fire which resulted in 39 deaths and a \$1 million in economic losses. This incident simply illustrates the large negative impact of a small act of littering, both environmentally and economically. Funds currently dedicated to waste disposal could be more efficiently allocated or conserved if littering were more diligently prevented.

Economic Impact Analyses of Recycling and Plastics

Recycling Costs

In addition to encouraging litter prevention and organizing cleanup events, a primary goal of KFB and Florida affiliates is environmental education specially geared towards reducing waste and proper recycling. Improving information and enforcement of proper recycling habits have been suggested by groups across the globe, many of whom emphasize the economic cost of unrecycled plastics.



A form of economical recycling is that of a circular plastic economy, as is researched and implemented by the MacArthur Foundation [MacArthur Foundation, 2017]. This institute reported that on a global scale, only 14 percent of produced plastic is properly recycled, while 30 percent of plastic packaging will never be recycled at all. As single-use plastics are discarded, new plastics must then be produced from scratch to fill consumer demands. Consequently, \$80-\$120 billion is lost annually in developing new single-use plastics that will not be recycled into new, more cost-efficient plastics. Creating plastics from virgin stock

is generally not as cost efficient as investing in a circular economy of plastics, as development must be made from scratch in comparison to starting with plastic materials already available. Replacing just 20 percent of the currently used single-use plastics with reusable alternatives could be worth at least \$10 billion globally.

Support of this circular economy, however, requires the use of recycling recovery facilities. While investing in the construction of proper recycling facilities is an expensive feat and not the ultimate solution to the plastic waste problem, proper recycling still has its benefits. The American Chemistry Council has illustrated the benefits of recycling plastics, where the use now of recovery facilities could provide 38,500 new jobs and significantly increase annual payrolls [American Chemistry Council, 2019]. Looking at American production alone, this movement could increase U.S. economic output by \$9.9 billion. However, a large hindrance to this recycling benefit are the upfront costs of constructing recyclable recovery facilities.

Recycling and Plastic Waste in Florida

Continuing in the direction of recycling and plastic waste costs, Florida has conducted its own research on these topics. Much of Florida's total revenue is generated by out of state tourism to the beaches and natural waters throughout the state. Therefore, it would be important that these amenities are kept in pristine condition to continuously attract this tourism, without travelers being deterred by trash piled up on the shoreline. According to the in-depth research of the costs of single use plastics in the state of Florida by the students and faculty at Florida International University, eliminating garbage left at the beach by tourists and visitors could contribute to the Florida economy increasing by up to \$7 billion annually [Adam et al, 2021]. With the current rate of plastic trash accumulating in Florida, if that plastic trash were to double, Florida could lose upwards of \$27 billion in tourist money if shorelines and beaches are left unchecked. Much of this Floridian trash issue is not the result of the tourist use of single use plastics alone, but also the citizens. The state generates, on average, about 65 lbs. of plastic trash per capita per year, ranking Florida as the third highest generator of plastic waste in America. Approximately 30 percent of the materials collected at curbside of Florida residents is some form of plastic waste that is not recyclable. Eliminating that 30 percent could save Florida up to \$100 million that is spent on recycling

costs annually. Not only is this plastic waste produced, but the majority is not recycled properly, as is testified by the waste left at the beach and shorelines. The Miami-Dade region underscores some of these issues, annually spending \$24.5 million between litter control, recycling, and waste collection and processing.

The progress made thus far in Florida's recycling goal is outlined in their 2021 report. While the state had set a recycling goal of 75 percent by the year 2020, they failed to reach this goal by only reaching a recycling rate of 42 percent¹¹ [FDEP, 2021]. While this is an improvement from the recycling rate of 30 percent in 2011, Florida still has some progress to make. Further, the economic impact of the recycling industry in the state of Florida is \$5 billion and has generated over \$600 million in taxes. The industry provides jobs to Floridians, with \$1.4 billion in wages being spread throughout 27,000 generated jobs. Clearly there is an economic benefit of recycling in Florida, which will continue to climb as it pursues a goal of 75 percent recycling rate.

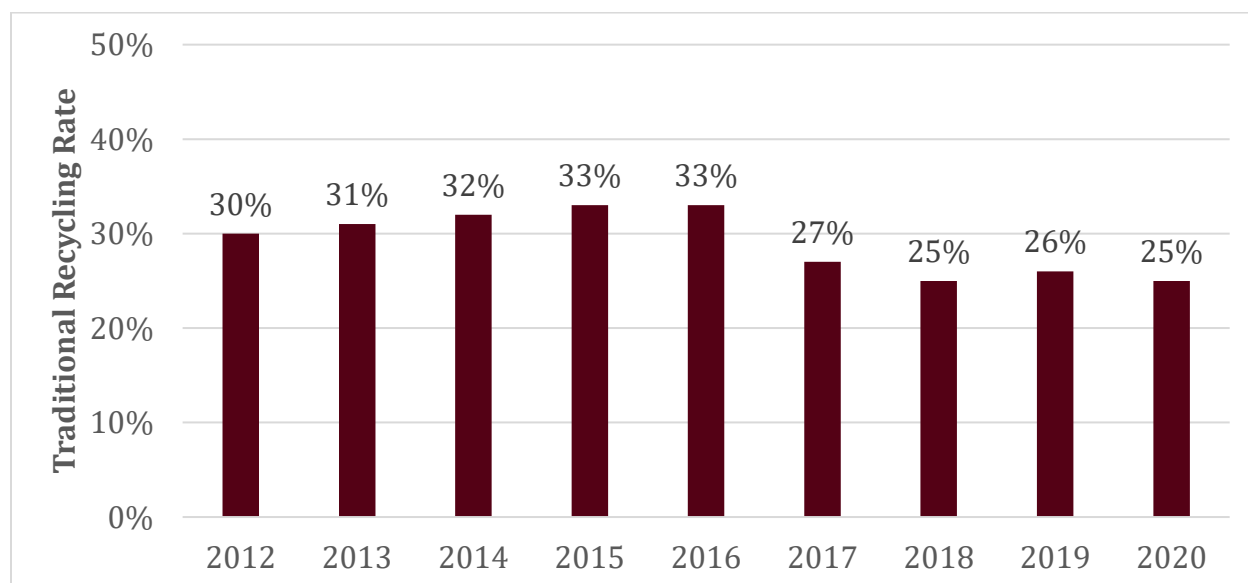


Figure 5. Florida's Traditional Recycling Rate (2012-2020)¹²

¹¹ Note: this recycling rate includes the

¹² Florida Department of Environmental Protection, see:

https://floridadep.gov/sites/default/files/Florida_75_Recycling_Report_17Dec21.pdf

Economic Impact Analyses of Environmental Education

A key obstacle to issues of littering and lack of recycling opportunities is the lack of education on these topics. One of the prime initiatives of KFB is increasing accessibility to webinar guides on proper waste disposal and offering programs to inform citizens on how they can better help their community. KFB implements environmental education on the foundation that information will hinder further waste and create behavior change.

Looking to an international source of the influence of environmental education, Taiwan researched responsible environmental behavior (or REB) of college students. [HSU, 2004]. The study was conducted by observing the changes of REB between college students enrolled in environmental classes with those that were not. The results showed that students with access to those environmental classes made more environmentally conscious consumer choices and reduced their improper waste disposal. A study of student behavior in response to their environmental awareness was conducted similarly in Florida. In Brevard County (FL), environmental education programs were implemented in elementary school systems, using a curriculum known as “Lagoon Quest” [Cheng, 2008]. This course intended to introduce elementary students to their role in the ecosystem through exposure to their local estuary in Brevard County. The consequent survey resulted in 45 percent of teachers using the program to say it “very much” enhanced the students’ sense of environmental responsibility, and 39 percent of teachers saying it “much” enhanced. The survey reinforced the notion that environmental education is necessary for enhancing environmental responsibility.

While awareness for environmental stewardship is growing, Universities in the United States fall short in offering course to students on the importance of environmental protection. According to research performed by the State University of New York (SUNY), less than 9 percent of U.S. universities offer courses that include plastic recycling [Bennett and Alexandridis, 2021]. This percentage includes records of schools with environmental doctoral programs. Many of the current waste disposal and plastic waste issues could be addressed were education implemented and shared. According to SUNY research, 78 percent of the plastic pollution problem in the world could be solved by 2040 just through the

knowledge and technology that we already possess. Considering less than half of all recyclable plastics used in American households are properly recycled, educational tools should be made more readily available to educate proper environmental care.

Economic Data and Methodology

Given the background into the literature highlighting environmental conservation and its positive impact on the economy, the report will next cover the economic data and impact analysis methodology. This section below briefly outlines the data used in the report, as well as the methodology used in the economic impact modeling analysis.

Demographic Data

In addition to the data provided by the client and the initial data cleaning, the research team also researched relevant demographic data for the state of Florida. The economy in counties that have a KFB affiliate and those that do not have a KFB affiliate differ in terms of employment and annual average payroll for the specific industries of grantmaking and giving services, social advocacy organizations, and civic and social organizations.¹³ Through an initial analysis of the average annual payroll, it is apparent that a majority of those participating in this non-profit sector work in counties with a registered KFB affiliate. However, this disparity could be a result of the location of counties with a KFB affiliate. For instance, all major cities in the state, such as Orlando, Miami, Tampa, and Jacksonville, have a participating affiliate in their region. While not all participating KFB affiliates are registered as non-profit industries and many large city affiliates are publicly run, there is notable comparison between the location of KFB affiliates in more metropolitan areas compared to more rural counties. This comparison between KFB counties and the rest of the state of Florida can be seen below:

Table 1. 2020 Payroll in Florida Specific to Grantmaking and Giving, Social Advocacy, and Civic and Social Organizations

Counties	Total Annual Payroll (\$1,000)	Average Annual Payroll	Total Employees
All Counties	\$872,290	\$40,209	21,694
KFB Counties	\$829,602	\$61,316	20,079
Non-KFB Counties	\$42,688	\$26,432	1,615

¹³ NAICS codes: 8132, 8133, 8134

Table 2. 2021 Wages and GDP in Florida Specific to Grantmaking and Giving, Social Advocacy, and Civic and Social Organizations¹⁴

Area	All Industries			Non-Profit		
	Total Wages (in Millions)	Total Employment	GDP (in Millions)	Total Wage (in Millions)	Total Employment	GDP (in Millions)
Florida	\$570,823	9,811,173	\$1,226,298	\$1,243	26,593	\$2,389
KFB Counties	\$498,835	8,680,097	\$1,077,929	\$1,117	24,138	\$2,158
Non-KFB Counties	\$71,987	1,131,075	\$148,369	\$126	2,455	\$231

Data

For this analysis, the research team was provided data by KFB regarding volunteer information, employee information, cleanup events, and operating budgets. The information regarding volunteer data and cleanup events held through the fiscal year of 2021-2022 was provided by the respondent KFB affiliates. This data can be broken up as follows:

Table 3. KFB Affiliate Volunteer and Event Data

Data	Description
Organization Type	Government, non-profit, or hybrid organization
Staff	Total full-time and part-time staff
Events	Total number of events and type of event held
Volunteers	Total number of volunteers and hours volunteered
Work Accomplished	Pounds of material moved, and miles of land cleaned

Additionally, the research team was provided with the budgeting expenses for both the individual affiliates during the 2021-2022 fiscal year and KFB itself for both 2021 and 2022. As mentioned briefly in the introduction, from the fiscal year of 2014 through 2021, KFB received a \$800,000 annual grant from the State of Florida. This grant was distributed among the individual KFB affiliates, with \$570,000 given in \$15,000 grants to each affiliate, and the payroll of two full-time employees, and included any additional KFB expense needs.

¹⁴ Source: Chmura Economics, JobsEQ Database.

However, KFB did not receive this grant for the fiscal year of 21/22 or 22/23. For these “tight” years, KFB operated on other sources of income, such as board dues and sponsorship amounts, and reserves from the previous year. For the purposes of this economic impact analysis, the total budgets for 2022 for these affiliates and KFB organization are used as input data for the economic impact modeling analysis.

Extrapolation Analysis

As mentioned in the introduction, KFB is an umbrella to 43¹⁵ affiliates throughout the state. However, only 35 affiliates responded with their volunteer event information, and only 32 affiliates responded with their budgeting expenses. To estimate the total budget and operating expenses necessary to perform an economic impact modeling analysis, the CEFA research team extrapolated the total expenses using the averages of the responding 32 affiliates. Therefore, the team was able to find an estimated total operating budget and donations for those missing KFB affiliates.

Table 4. Extrapolation Totals and Averages

KFB	Responded Affiliates, Excluding Miami-Dade		All Affiliates, Including Miami-Dade	
	Operating Budget	Donations	Operating Budget	Donations
Average	\$67,380	\$20,215	\$112,696	\$84,671
Total	\$2,088,790	\$626,654	\$4,845,914	\$3,640,871

¹⁵ KFB had 44 Affiliates at the end of 2022, but the 44th affiliate had not organized under KFB until after the survey was conducted.

Miami-Dade County

Of the observed affiliates, one large affiliate not included in the extrapolation analysis is the Keep Miami-Dade County Beautiful organization. This affiliate has been excluded only for this extrapolation due to its large outlier in the operating expenses and donations amount. Of the total respondents, Miami-Dade made up a whopping 49 percent of the total operating expenses of all affiliates, and a further 82 percent of the total affiliate's donations and sponsorships.

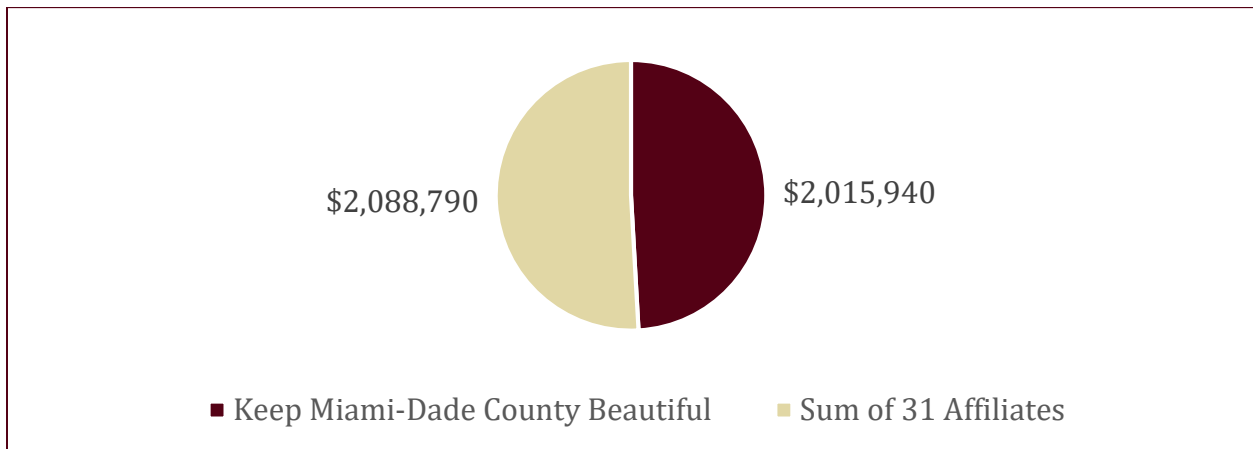


Figure 6. Total Contribution of Operating Expenses

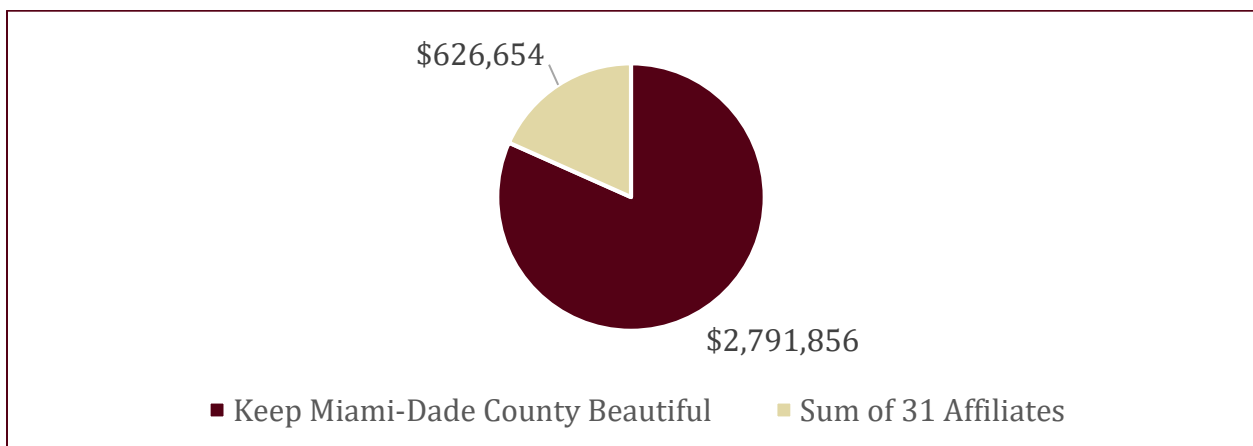


Figure 7. Total Contribution of Donations

The CEFA research team thought that Miami-Dade was not representative of the fellow affiliates, and therefore was not included when calculating the averages of the other affiliates. However, it should be noted that Miami-Dade was included in the summation of costs calculated in the economic analysis of KFB.

Methodology

This report examines two economic impacts of the KFB organization for the year 2022 in the state of Florida. The first concerns the main office of KFB, which is comprised of two full-time employees and provides detailed sources of income and operating expenses. The second impact is for the affiliates of KFB, of which there is not employment data, but they provided fees for contracts, total operating expenses, and donations.

Assumptions

The model created for the impact analysis includes a few assumptions regarding the data provided. First, total employment for KFB is not a known factor, instead only some of the employment is reported. The two full-time employees along with their annual salaries for the main office of KFB was provided, but full-time employment as well as salaries was not submitted to the CEFA research team for the individual KFB affiliates¹⁶ throughout the state. Therefore, the model accounts for the impact of the umbrella organization and its two employees. A second assumption concerns the total expenses report.¹⁷ The expenses were broken down into individual line-item expenses, but the affiliate operating expenses were given as a whole number without details regarding the use of their expenditure and didn't include any salary data.

For both analyses, the CEFA research team used IMPLAN to estimate the economic impacts. These economic impacts were divided into three separate categories: direct, indirect, and induced effects.

¹⁶ Although the affiliates submitted the numbers of full-time and part-time employees, there was no associated salary information. It's assumed each affiliate's salaries are supported through their primary funders (e.g., county, municipal governments, etc.).

¹⁷ KFB-related expenses data was provided to the CEFA research team in January 2023.

- Direct Impacts. Relate to a) the short-term business activity associated with any KFB-related construction, etc., and b) the ongoing economic activity associated with KFB-related businesses or firms. For this study, direct impacts refer to the direct expenditures generated by KFB, including operating and other expenses.
- Indirect Impacts. Result when local firms directly impacted by KFB, in turn purchase materials, supplies or services from other firms.
- Induced Impacts. Relate to the consumption and spending of employees of firms that are directly or indirectly affected by KFB's activities. These would include all of the goods and services normally associated with household consumption (i.e., housing, retail purchases, local services, etc.).

The economic impact results include output (or sales/revenues), employment (jobs), income (wages), and federal, state and local taxes.

Economic Impact Analysis

Economic Impact Analysis (IMPLAN)

Following is the next step in the process, the economic impact analysis. For this report, FSU CEFA used the analytical tool Impact Analysis for Planning, or IMPLAN®, model. This specific framework uses an input-output (or I/O) multiplier, as was noted in the methodology, and is a well-established tool utilized by state and local government agencies to measure economic impacts across both public and private sectors. There are several advantages to using IMPLAN for this analysis, such as the large amount of county level specific data for Florida, the strong theoretical foundation, and methodology that has been extensively researched and exemplified using the IMPLAN data across the U.S.

The model used for this specific economic impact analysis included an overview of the statewide impact on Florida with the most recent data provided by IMPLAN, 2021.¹⁸ For a detailed analysis, the direct, indirect, and induced effects are given for both the main office of KFB as well as the affiliates. This study evaluates these impacts on employment, output, income, and taxes.

Results of the Economic Impact Analysis (IMPLAN)

The economic impact findings of KFB for its main office and corresponding affiliates are shown in Table 5. The results of the economic impacts on the state of Florida are estimated to be a total of **79 jobs**, approximately **\$4.7 million in income**, and approximately **\$15.5 million in economic output**.

¹⁸ Florida 2021 data was released in December 2022 and used for the purpose of this study.

Table 5. Economic Impact Analysis Results for Keep Florida Beautiful

Keep Florida Beautiful Project Economic Measure	Economic Output (Sales/Revenues)	Employment or Jobs	Income or Wages
Affiliates	\$14,600,880	75	\$4,458,571
Main Office w/ Assoc. Expenses	\$916,219	4	\$261,721
Grand Total	\$15,517,099	79	\$4,720,292

In addition to the total economic impact of the organization, IMPLAN provides the economic activity of each result in total direct, indirect, and induced impacts. Table 6 depicts these impacts relating to employment, output, and income.

Table 6. Economic Impact Results for Keep Florida Beautiful and Its Affiliates

Employment	Direct	Indirect	Induced	Total
Affiliates	15	12	48	75
Main Office w/ Assoc. Expenses	2	1	1	4
Grand Total	17	13	49	79

Output	Direct	Indirect	Induced	Total
Affiliates	\$2,332,425	\$2,199,970	\$10,068,485	\$14,600,880
Main Office w/ Assoc. Expenses	\$548,935	\$195,024	\$172,260	\$916,218
Grand Total	\$2,881,360	\$2,394,994	\$10,240,745	\$15,517,099

Income	Direct	Indirect	Induced	Total
Affiliates	\$883,433	\$681,827	\$2,893,311	\$4,458,571
Main Office w/ Assoc. Expenses	\$133,317	\$75,527	\$52,878	\$261,721
Grand Total	\$1,016,750	\$757,354	\$2,946,189	\$4,720,292

Finally, the fiscal impacts include federal, as well as state and local, taxes collected in Florida due to the operations of KFB. These taxes can be comprised of tax paid by KFB employees, insurance taxes, corporate tax, property tax, and sales tax as well as other taxes. According to Table 7, which outlines the federal, state and local tax impacts, the total tax generated by economic activity is estimated to be over **\$1 million in total taxes**.

Table 7. Estimated State and Local, and Federal Taxes for Keep Florida Beautiful

Keep Florida Beautiful Project Economic Measure	Affiliates	Main Office w/ Assoc. Expenses	Total
State & Local Taxes	\$210,497	\$18,532	\$229,029
Federal Taxes	\$727,936	\$66,639	\$794,575
Grand Total	\$938,433	\$85,171	\$1,023,604

Conclusions

In late 2022, the Keep Florida Beautiful (KFB) non-profit organization commissioned the Florida State University Center for Economic Forecasting and Analysis (FSU CEFA) to conduct an economic impact analysis study. The economic impact analysis is based primarily on the 2022 expense report provided by KFB and focuses on the main office of KFB and the KFB affiliates. The economic impact results are presented in terms of direct, indirect, and induced impacts on Florida for both aforementioned groups. These impacts include employment, income, and output, as well as fiscal impacts on state and local taxes as well as federal taxes.

Summary of Findings

According to the economic impact results, the annual economic impacts of KFB, in 2023 dollars, are estimated to be a total of:

- 79 Jobs;
- \$4.7 Million in income;
- \$15.5 Million in Total Economic Output, and;
- \$230 Thousand in State and Local Taxes

Overall, the results of the impact analysis reveal that the Florida economy is positively impacted by KFB.

Appendix A

Florida Statute concerning funding of KFB¹⁹

403.709 Solid Waste Management Trust Fund; use of waste tire fees.—There is created the Solid Waste Management Trust Fund, to be administered by the department.

(1) From the annual revenues deposited in the trust fund, unless otherwise specified in the General Appropriations Act:

(a) Up to 40 percent shall be used for funding solid waste activities of the department and other state agencies, such as providing technical assistance to local governments and the private sector, performing solid waste regulatory and enforcement functions, preparing solid waste documents, and implementing solid waste education programs.

(b) Up to 4.5 percent shall be used for funding research and training programs relating to solid waste management through the Center for Solid and Hazardous Waste Management and other organizations that can reasonably demonstrate the capability to carry out such projects.

(c) Up to 14 percent shall be used for funding to supplement any other funds provided to the Department of Agriculture and Consumer Services for mosquito control. This distribution shall be annually transferred to the General Inspection Trust Fund in the Department of Agriculture and Consumer Services to be used for mosquito control, especially control of West Nile Virus.

(d) Up to 4.5 percent shall be used for funding to the Department of Transportation for litter prevention and control programs through a certified Keep America Beautiful Affiliate at the local level.

(e) Up to 37 percent shall be used for funding a solid waste management grant program pursuant to s. [403.7095](#) for activities relating to recycling and waste reduction, including waste tires requiring final disposal.

¹⁹ See highlighted area for statute language specific to the KFB.

Appendix B

KFB Main Office Expense Report 2022

Expenses	2022 Budget	2022 Expenses
Accounting	\$ 612.00	\$ 612.00
Affiliate Assistance	\$ -	\$ -
Affiliate Support/Training	\$ 5,000.00	\$ -
Insurance	\$ 1,240.00	\$ 4,026.37
KFB Annual Conference & Awards Ceremony	\$ 5,000.00	\$ 739.20
KFB Apparel/Goods	\$ -	\$ -
License/Fees	\$ 400.00	\$ 578.54
Marketing	\$ 2,500.00	\$ 1,630.00
Meals/Entertainment	\$ 300.00	\$ 188.66
Meetings/Conferences/Events	\$ 131.00	\$ 130.10
Office Expense	\$ 1,000.00	\$ 1,314.28
Payroll: Two Employees	\$ 127,000.00	\$ 124,696.00
Payroll Taxes	\$ 10,000.00	\$ 8,854.81
Postage/Shipping	\$ 150.00	\$ 193.79
Printing	\$ 350.00	\$ 255.90
Staff Uniform	\$ -	\$ -
Telephone	\$ 1,000.00	\$ 795.36
Travel	\$ 6,000.00	\$ 6,287.37
Website	\$ 700.00	\$ 1,139.09
Youth Council	\$ 5,000.00	\$ 4,012.77
Sponsored Projects	\$ -	\$ 15,350.00
KAB Sponsored Travel	\$ -	\$ 1,357.56
Misc	\$ -	\$ 180.82
Total:	\$ 166,383.00	\$ 172,342.62

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