F. Economic Impact Analysis

Broward County has an extensive network of parks and recreational facilities. The overall system consists of approximately 57 separate parks that generally have been divided into four separate categories – Local Parks, Regional Parks, Natural Areas, and Nature Centers. In total, these parks cover approximately 6,471 acres, of which approximately 3,513 acres consist of parks dominated by or comprised solely of natural lands under natural resource management by the Environmental Section.

When a local economy sees spending by residents, it is difficult to estimate an economic impact for that expenditure. Arguably, the dollar would have been spent in the local economy in any case, so that sole potential economic benefit is the incremental additional value obtained by the spending versus other spending. Therefore, this chapter will not examine the economic benefit of spending by residents, and will instead focus on spending by visitors.

When a local economy experiences an increase in spending by visitors, residents of that economy benefit by more than just the dollar spent. This is because when the dollar enters the economy it is spent by the first recipient on further goods and services. For example, a restaurant receives a dollar spent on dining. That restaurant in turn increases its spending on food suppliers, staff, cooking equipment, and other things it uses in the course of serving customers. Those suppliers, in turn will increase their spending on their suppliers. The initial spending is typically referred to as the direct effect, and the subsequent spending is referred to as indirect and induced effects. Collectively, they represent the estimated economic impact of spending by visitors on the economy.

Visitor Estimates

Drawing from visitor data collected by Broward County, Willdan estimates that approximately 31 percent of visitors to the County Parks System are from out of the county. ***Table 6*** details the results of this analysis, which is based on an examination of the reported zip codes of visitors. According to the County, the parks system has a total of approximately 5 million visitors annually. In order to estimate the proportion of this total that are non-resident visitors, Willdan has allocated the percentage calculated in the zip code survey, discounted by 50 percent to reflect that fact that not all are unique visitors (due to likely double counting, as visitors go to more than one facility, and the fact that many visitors are not visiting solely for the park facilities).

Table 6: Origin of Park and Recreation Visitor Households

Origin	Survey Number	%	Total Visitors	Allocation	Adjustment
Broward County	**26,691**	**69%**	5,000,000	3,455,951	**3,069,939**
Outside Broward County	**11,925**	**31%**	5,000,000	1,544,049	**386,012**
US	11,393	30%			
Overseas	532	1%			
Total	**38,616**				

Source: Willdan Financial

Expenditure Estimates

Willdan has identified two primary economic benefits to the County from these visitors. First, visitors pay admission and contribute revenue directly to the County government through expenditures with the Park and Recreation Division itself. ***Table 7*** below details the more recent full year of revenue, for the fiscal year 2010-2011. Willdan has allocated this revenue between residents and non-residents according to the survey proportions calculated in ***Table 6***. As shown in ***Table 7***, the County receives a total of approximately $2.6 million in annual revenue from non-resident visitors.

Table 7: Park and Recreation Revenues

Category	Regional Parks	Community Parks	Total Revenue	County Residents	Non-County Residents
Entrance Fees					
TOTAL	$2,391,685	$0	$2,391,685	$1,653,109	$738,576
Park Activity Fees					
TOTAL	$528,292	$20,830	$549,122	$379,548	$169,574
Park Facility Rentals - Bldg/Shelters/Fields					
TOTAL	$1,583,333	$62,213	$1,645,546	$1,137,385	$508,161
Camping Fees					
TOTAL	$1,391,981	$0	$1,391,981	$962,124	$429,858
Aquatic Fees					
TOTAL	$1,926,294	$0	$1,926,294	$1,331,435	$594,858
Food Concession Fees					
TOTAL	$107,264	$3,353	$110,618	$76,458	$34,160
Gift Shop					
TOTAL	$218	$0	$218	$151	$67
Other					
TOTAL	$288,574	$3,667	$292,241	$201,994	$90,247
Public/Private Partnerships					
TOTAL	$129,871	$0	$129,871	$129,871	$0
Total Revenue	**$8,347,512**	**$90,064**	**$8,437,576**	**$5,872,075**	**$2,565,501**

Source: Broward County Park and Recreation Division

In addition, visitors to the County Parks and other facilities spend money on goods and services during their stay, which also provides an economic benefit. Although a visitor survey is outside of the scope of this study, in 2001 the National Oceanic and Atmospheric Administration commissioned a study of visitors to Broward County to calculate their economic benefit.[2] As shown in ***Table 8***, the study calculated average tourist expenditures per trip for visitors to Broward County. Willdan has updated the number to 2012 by applying the Consumer Price Index for the Miami-Fort Lauderdale-Pompano Beach Metropolitan Statistical Area. As shown in ***Table 8***, the average tourist expenditures cover a number of categories and are estimated to total $569 per trip in 2012.

[2] Leeworth, Victor R. and Peter C. Wiley, Profiles and Economic Contribution: General Visitors to Broward County, Florida 2000-2001. Special Projects Division, Office of Management and Budget, National Ocean Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

Table 8 also calculates the total expenditures per trip for non-resident park visitors. Willdan estimates that non-resident park visitors spend approximately $220 million annually in the Broward County economy.[3]

Table 8: General Tourist Expenditures per Trip

Item	Per Trip		Total
	2001	2012	2012
Lodging	$124	$167	$64,583,646
Food and Beverages in a Bar/Restaurant	$110	$149	$57,393,802
Food and Beverages from a Grocery/Conv Store	$26	$35	$13,359,261
Sport Activity Fees	$19	$26	$9,881,480
Admission to Events and Attractions	$13	$18	$6,861,850
Evening Entertainment	$11	$15	$5,659,204
Rental Car/Taxi/Bus Fare	$40	$53	$20,606,374
Shopping	$70	$94	$36,428,196
Other	$9	$12	$4,753,315
Total	**$422**	**$569**	**$219,527,127**
Total Non-Resident Park Visitors		386,012	

Sources: Broward County; Profiles and Economic Contribution: General Visitors to Broward County, Florida, 2000-2001, Special Projects Division, Office of Management and Budget, National Ocean Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce

Economic Impact Methodology

The economic impact analysis conducted for this report utilizes IMPLAN (Impact Analysis for Planning), an Input-Output (I/O) model developed by the Minnesota IMPLAN Group. Based upon certain inputs and assumptions, and utilizing appropriate local data sets, the IMPLAN model calculates the relationships among industries, consumers, government suppliers, and other economic actors, and synthesizes data from a variety of sources, including the Bureau of Economic Analysis, the Bureau of Labor Statistics, and the Census Bureau. The IMPLAN model divides the US economy into 440 sectors and can be tailored down to individual zip codes depending upon specific project parameters and drawing from data and relationships for that defined area.

For each analytical task, the model is tailored to a particular region or geography. In this case, the model estimates impacts for Broward County only. The IMPLAN model is regularly used all over the country to measure the impacts of development and many other activities that affect employment or expenditures in the economy.

[3] To account for the likelihood that many non-resident visitors to the Parks are not in the county solely or primarily for that purpose, we have applied a seventy-five percent discount to the total expenditures to calculate expenditures attributable to the parks and recreation system.

Models such as IMPLAN are particularly useful for measuring the total economic effects of a particular project or program, and yield estimates of the number and types of jobs created, the amount of wages associated with those jobs, and the total economic output or "final sales" generated within particular industries. I/O models like IMPLAN rely upon economic "multipliers" that mathematically represent the relationship between the initial change in one sector of the economy and the corresponding effect of that change on other interdependent industry sectors, as well as the effect of that subsequent change on further sectors. These effects are commonly described as "direct," "indirect," and "induced" and are generally defined as follows:

- The "direct" effect is the initial change in economic activity from local payroll and construction expenditures in a specific industry or sector. For this analysis, the direct effects to Broward County are the wages and other expenditures in the County at businesses frequented by the visitors.
- The "indirect" effect results from industry-to-industry transactions required to support the direct activity. This effect is a measure of the change in the output of suppliers linked to the industry being evaluated. In this case, for example, the visitor expenditures will result in an increase in purchases of supplies and labor of the businesses the visitors frequent in Broward County.
- The "induced" effect consists of employee spending in Broward County by employees, created by direct and indirect impacts, spending their earnings on local goods and services, such as food, clothing, real estate, education, health services, etc.

The total economic impact of the project is the sum of the direct, indirect, and induced impacts, offset by any economic loss related to the change in the use of the land. The IMPLAN model is designed to identify the types and magnitudes of impacts within a specified geographic area, and can be tailored by station, county, zip code and other parameters. For this analysis the IMPLAN model has been set up to measure impacts within the economy of Broward County.

Within each type of economic impact, the IMPLAN model estimates several subcategories or components. "Earnings" consists of actual compensation, including benefits, paid to employees. "Value Added," which is not detailed in this report, is the total revenue generated less the cost of the inputs used to generate that revenue. For example, the Value Added for a retail store would be the total sales of the store after subtracting the cost of labor (Earnings), rent, payments to wholesalers, etc. In rough terms, the "value added" is the profit of a business. "Economic Output" is the sum of Earnings and Value Added.

Several points are important to make as caveats to the IMPLAN estimates. First, the IMPLAN model calculates economic relationships based on 2009 data (the latest available for this purpose); and therefore, the analysis assumes that no fundamental changes have occurred in the economic relationships within the County since then, and that those relationships are a reasonable basis to predict future relationships. Willdan is not aware of any fundamental changes in the Broward County economy that would invalidate the results of analysis based on 2009 economic relationships.

Second, I/O modeling generally assumes that demand for goods and services by industries or households increases in relation to an increase in income, and that an increase in demand results in a proportional increase in local supply and employment. This implies that local suppliers satisfy this initial demand by escalating their output and hiring additional workers rather than shifting their goods or services from one set of consumers to another. This assumption may not hold in areas with tight labor or capital markets since suppliers may find it difficult to obtain these labor or material inputs or other resources necessary to expand production. Considering the scale of the proposed project and the size of the economic study area (Broward County), this is not likely to be a factor.

As shown in ***Table 9***, Willdan estimates that non-resident park visitor expenditures generates a total of $110 million in labor income, 3,500 jobs, and an increase of $307 million in economic output in the Broward County economy.

Table 9: Economic Impact of Non Resident Expenditures

	Employment	Income	Output
Direct	2,366	63,648,979	175,529,656.2
Indirect	462	20,563,944	56,864,619.5
Induced	644	25,645,958	74,328,318.4
Total	**3,472**	**109,858,881**	**306,722,594**

Sources: IMPLAN, Willdan Financial Services

Cricket Stadium

Willdan notes that the County has constructed a world-class cricket stadium at the Central Broward Regional Park and Stadium. As of this writing, the stadium is hosting the Digicel 2012 West Indies vs. New Zealand Cricket Services, and is estimated to draw 16,000 spectators, many of whom will travel from overseas to attend. Willdan has prepared a rough assessment of the value of this tournament, held annually. Willdan estimates that the tournament will generate approximately $2.8 million in income in the County and generate 90 jobs, and generate a total additional economic output of $7.9 million. For this analysis, Willdan used assumptions identical to those in the economic analysis above, and assumed that 10,000 of the 16,000 attendees will come from outside the County.

Table 10: Economic Impact of Cricket Tournament Visitor Expenditures

	Employment	Income	Output
Direct	61	1,648,885	4,547,256
Indirect	12	532,728	1,473,130
Induced	17	664,382	1,925,543
Total	**90**	**2,845,994**	**7,945,929**

Sources: IMPLAN, Willdan Financial Services

As the only cricket facility in the United States certified by the International Cricket Council, it seems likely that significant demand exists for its use, especially from South Asian communities.

Other Benefits/Value

In addition to the economic impacts calculated above, local park systems have a number of other benefits that are more difficult to quantify (and are outside the scope of this study) but are nevertheless significant.

1. Property Value

It is fairly well established that the proximity of parks and open space adds value to property.[4] The effect has been estimated at from 10 to over 20 percent, and can reach as much as half a mile from the park or amenity in question. An estimate of this effect in Broward County is outside the scope of this study, but such increased value would benefit not only to citizens but also to the County's property tax revenue.

2. Direct Use Value

County residents who use park and recreation facilities gain a benefit through the cost they forgo by not having to use private facilities (which, as a rule, would be more expensive). The funds they save in this way are available to expend on other goods and services in the County.

3. Health Value

The availability of open space and recreation provides a health benefit to the citizens of the County. An exact measurement of this effect is beyond the scope of this study, but has been well established in other areas.[5]

4. Reducing the Cost of Managing Storm Water

Parks and open space in the County serve a vital role in absorbing storm water and filtering it as it penetrates the ground. This reduces the necessity of a storm water collection and treatment system in the County and saves County resources for other purposes. In Seattle, the Trust for Public Land estimated that the City's park system saved the City $2.3 million annually.[6]