

North Brevard Economic Development Zone

Sanitary Sewer Economic Impact Analysis



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ABOUT THE NORTH BREVARD ECONOMIC DEVELOPMENT ZONE

The North Brevard Economic Development Zone (NBEDZ) is a Special Dependent District created by the Brevard County Board of County Commissioners in the aftermath of the end of NASA's Space Shuttle program. The objective of the NBEDZ is to facilitate job growth and economic development within North Brevard county by accomplishing the following efforts:

- Market and fully maximize state incentive programs where available and appropriate
- Identify and participate in the development of infrastructure projects that are directly attributable to job creation and economic development
- Analyze opportunities to utilize state incentives not currently accessible
- Establish, promote, and market Brownfield areas within the North Brevard Area
- Improve communications infrastructure
- Workforce development

ABOUT THE EAST CENTRAL FLORIDA REGIONAL PLANNING COUNCIL

The East Central Florida Regional Planning Council (ECFRPC) was established in 1962 as an area-wide association of local governments. It is one of Florida's ten regional planning councils and serves governments and organizations located within Brevard, Lake, Marion, Orange, Osceola, Seminole, Sumter and Volusia counties. Since 2003, The ECFRPC has been using the Regional Economic Models, Inc. Policy Insight (REMI PI+) model to calculate the economic effects of a variety of policies and investments. More detailed information about the model can be found at www.remi.com.

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 **North Brevard**
Economic Development Zone

INTRODUCTION

Located in the northern part of the county, the geographic boundaries of the NBDEZ are contiguous with the County Commission's District One, excluding those areas south of State Road 528 and the boundaries of the City of Cocoa. In its role as an economic development district, the NBDEZ works to identify and participate in the development of infrastructure projects that could spur job creation and economic development. One of the current areas of interest is along US 1 between Cheney and S.R. 405 in the southern part of the NBDEZ. There are currently five new projects proposed for this area including two hotels, one apartment complex, a proposed mixed-use project, and the expansion of the Kennedy Point Marina. However, for this new investment to occur, there will need to be improvements to the capacity of the area's sewage system. The developers are seeking \$2.5 million in financial assistance from the NBDEZ to build a three-mile sanitary sewer line and lift station to support the new development. This infrastructure investment could also help spur more investment along this corridor in the near future.

The NBDEZ partnered with the ECFRPC to use the REMI Pl+ model to develop two economic impact analysis scenarios. The first scenario estimates the economic effect of the proposed five projects over a ten year period. The ECFRPC also developed a second simulation that uses a land use capacity analysis to estimate the long-term economic opportunities that could be generated by the new infrastructure investment. The following pages discuss in more detail the variables and assumptions used to develop both economic impact scenarios.



FIRST ECONOMIC IMPACT SCENARIO

The first simulation scenario estimates the economic impact of five projects that are currently being considered within the NBDEZ. More information about these projects is provided below:

- **Hilton Garden Inn:** This proposed development project would involve the construction of a 150-room hotel and the construction of approximately 15,000 sq. ft. meeting room space in a separate conference center facility, along with a parking deck for hotel and conference center guests. According to the materials submitted by NBDEZ staff, the project will generate 250 construction jobs and 175 permanent positions. The total capital expenditures for this project are estimated to be about \$30 million.
- **Kennedy Point Marina and Clubhouse Expansion:** Adjoining the Hilton property, this marina was originally developed in the 1970s and features approximately 50 boat slips. It suffered substantial damage during Hurricane Irma in 2017. The developer has recently finished the necessary improvements to reopen a portion of the boat slips. The expansion is expected to cost about \$4 million and generate 20 construction jobs and 10 permanent positions.
- **Riverwalk Grand Apartments:** This will be a new 210-unit residential development. This new project is expected to generate 157 construction jobs and \$25 million in capital investments.
- **Hotel:** This \$14 million investment is expected to generate 200 construction jobs. Once open, the facility is expected to employ between 50 to 75 people.
- **Mixed-Use Commercial Development:** Located in the former "Wonderland" theme park site, this \$35 million investment will create approximately 300 new construction positions and 100 permanent jobs.



Simulation Methodology and Assumptions

To develop this simulation, the ECFRPC relied on three variables: proposed new employment, construction investment, and government spending. Based on the information provided by the NBEDZ staff, the ECFRPC divided the prospective temporary and permanent jobs into five different industry categories. These were Construction (920), Accommodations (238), Amusement, Gambling, and Recreation Industries (10), Retail (50), and Professional and Technical Services (50). For the purpose of the simulation, the employment numbers were entered in two year intervals starting with the construction employment and following up with the permanent jobs in other industries. The ECFRPC started entering the numbers in 2022 until 2033.

The second variable used to develop this simulation scenario was construction spending. The current plan is to install a new sanitary sewer line south of the existing line, and to replace an existing lift station on the west side of U.S. Highway 1, which was built in the 1960s. The cost of making these sewer system improvements is estimated to be \$2.5 million. The ECFRPC entered this number as new construction investment in 2021. This new construction activity is expected to generate additional demand for inputs and services within Brevard County and the region.

Currently, a set of property owners along the corridor have proposed building the sewer line, and then deeding it to the City of Titusville to maintain. These property owners are seeking financial assistance from the NBEDZ to reimburse the development team for the costs incurred in installing the new line. These monies will be mainly coming from the city's Tax Increment Financing district, which is funded with local property taxes. Because of this, the ECFRPC also entered the \$2.5 million as Local Government Spending.

Based on these three variables, the ECFRPC developed a model scenario that compares the cost of spending on new infrastructure against the

Variable 1. Prospective New Employment

Name of Project	Construction	Hotel/Motel	Amusement, Gambling, and Recreation	Retail	Professional and Technical Services
Hilton Garden Inn/Convention Center	250	175	0	0	0
Kennedy Point Marina Expansion	20	0	10	0	0
River Walk Apartment	150	0	0	0	0
Other Hotel	200	63	0	0	0
Mixed-Use Project	300	0	0	50	50
Total	920	238	10	50	50

Source: North Brevard Economic Development Zone, ECFRPC Calculations



Source: NBDEZ, 2020

Summary of Economic Results

The ECFRPC entered these three variables into the REMI PI+ model to estimate the economic impact of the proposed projects. The results concentrate on four economic impact indicators: total employment, output/sales, personal income, and gross domestic product (GDP). The reported numbers are the average annual increases of economic activity based on the current REMI forecast.

According to REMI, the construction and operation of these new project will, on average, generate 600 jobs, \$81 million in output/sales, and \$44.5 million in personal income in Brevard County annually. They will also contribute \$48.1 million to the county's Gross Domestic Product every year.

The employment estimate includes full-time, part-time, and temporary positions, which the model gives equal weight. According to REMI, most of the employment generated by these new investments will be in the following industries: Accommodations and Food Services, Construction, Retail Trade, Professional and Technical Services, and State and Local Government. The accompanying table depicts the average distribution of jobs by industry sector through the 13-year modeling period (2021-2033). About 83 percent of the new jobs would be indirect or induced positions.

Often referred to as total sales volume, output measures the gross level of business revenue which includes both the costs of labor and materials (intermediate inputs) and value added activities (compensation and profits). Since business output is the broadest measure of economic activity, it tends to generate the largest numbers. The industries expected to generate the most sales during this period include Accommodations, Construction, Real Estate, Professional, Scientific, and Technical Services, and Retail Trade. The table on the next page shows the average distribution of sales by industry.

Short-Term Economic Scenario Results

Economic Indicator	Average
Total Employment	600
Output	\$81,076,923
Personal Income	\$44,538,462
Gross Domestic Product	\$48,153,846

Source: REMI PI+ East Central Florida v2.4.1

Average Distribution of Jobs by Industry Sector

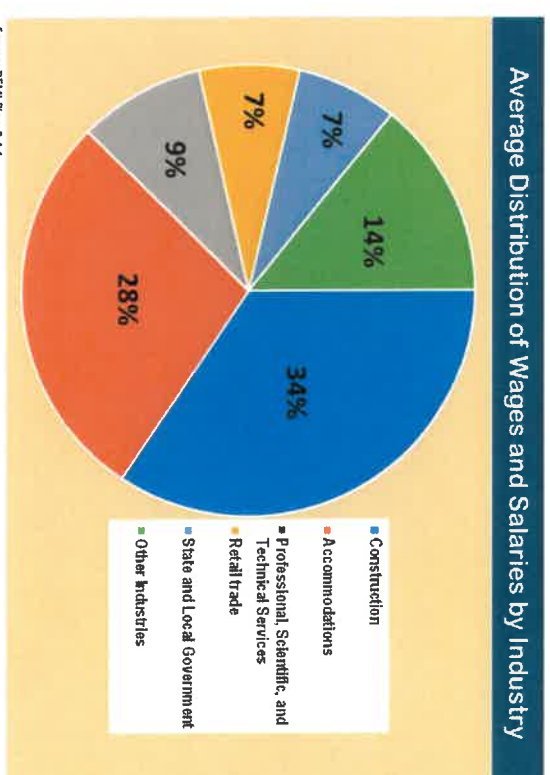
Industry	Direct	Indirect and Induced	Total
Accommodation and Food Services	24	174	198
Construction	71	126	197
Retail Trade	4	43	47
Professional, Scientific, and Technical Services	4	31	35
State and Local Government	0	29	29
Other Industries	0	94	94
Total	103	497	600

Source: REMI PI+ East Central Florida v2.4.1

Personal income refers to total earnings from employee compensation, wage supplements, rents, transfer payments, and other business ventures. According to the REMI model, on average, the new investments are expected to generate \$45 million in personal income annually. Over 75 percent of this income will be in the form of wages and salaries. The industries that will get most of these salaries are Construction (\$10.3 million), Accommodations (\$8.3 million), Retail Trade (\$2.1 million) and State and Local Government (\$2.1 million).

Finally, another important economic indicator is gross regional product. Sometimes referred to as gross domestic product (GDP), this figure represents the market value of all goods and services produced by labor and property, regardless of nationality. According to REMI, the these new projects will, on average, contribute \$48 million to Brevard's GDP annually.

Based on the results of this economic impact simulation, the economic activity that would be generated by the new developments overwhelmingly surpass the cost of the new pipeline. On average, these projects would generate 600 jobs, \$81 million in sales, and \$44.5 million in personal income annually within the next 13 years. Moreover, they could contribute \$48 million to Brevard's GDP every year. These economic effects are not only the result of the developer investments, but also include the indirect and induced effects in the community. Moreover, the ECFRPC expects that increasing sewage capacity within the study area could lead to additional investments not included here. Because of this reason, the ECFRPC prepared a long-term economic impact scenario for the NBEDZ, which will be discussed in the following pages.



Source: NBEDZ, 2020

LONG-TERM SCENARIO

The purpose of this second scenario is to estimate the long term economic gains that could occur because of development of the new sewage line. To develop this simulation scenario, the ECFRPC added the number of direct jobs and investment that could be created within the study based on the amount of developable acres along the corridor to the short-term scenario numbers. The ECFRPC used the new information to develop a 25-year simulation that estimates the economic activity that could be generated because of the originally proposed projects and the potential new investment. The simulation results are reported as the average of additional economic activity based on the current REMI forecast.

Vacant Land Use Parcels

The first step of this analysis was to estimate amount of vacant developable industrial acreage found within the NBDEZ using Geographic Information Systems (GIS) software. The ECFRPC selected all properties located within 100 feet of US-1. The thought here is that these properties will have a higher probability of developing within the next 25 years because of their proximity to the proposed developments. This sorting process yielded a total of 15 properties comprising about 472 acres.

The ECFRPC decided to eliminate the five residential properties because their development will not lead to permanent jobs. After doing some research, staff also decided to eliminate the two largest parcels, which comprise over 445 acres. While these properties have a mixed-use designation, the current owner specializes in developing high-end residential communities with amenities. Staff is assuming here that the non-residential component of any future developments would be minimal. Therefore, this left a final count of eight properties comprising about 27 acres.



The study area's gross commercial acreage was adjusted several times to create a more realistic estimate of net developable acres. First, the ECFRPC identified all parcels with a high probability of having wetlands based on the United States Geological Survey's National Wetlands Inventory. Staff then used the GIS clip tool to identify and subtract the number of acres with wetlands from the gross acreage figures. This left a little over 24 developable acres. This number was further adjusted by 30 percent to account for land that will be used to build infrastructure such as roads/driveways, utilities, and other services. This left a total of 17 vacant commercial acres. The net developable acreage was converted into square feet to estimate the potential new jobs that could be created within the study area.

Estimating Potential Jobs

Based on the previous methodology, the ECFRPC found that there are 737,000 square feet of developable commercial land within the corridor. The ECFRPC used a job/square foot multiplier to derive the maximum number of jobs that could be housed within these commercial properties. After evaluating several data sources, the ECFRPC decided to use a one job per 670 square foot multiplier. This yielded a total of 1,100 jobs. This would be the maximum capacity of jobs that could be housed within the study area's vacant commercial acreage.

Not all these new jobs will develop during the study period. According to the REMI forecast, Brevard County is expected to add 28,472 commercial jobs between 2030 and 2045. This is an average of 1,898 positions each year. This represents less than one percent of the total commercial jobs within Brevard County. Therefore, the ECFRPC decided to add only nine new jobs every year for a total of 135 new positions. This represents about 12 percent of the total vacant area's total job capacity. Staff divided these positions between three main commercial categories: retail trade, administrative services, and professional, scientific, and technical services (three positions each).

The addition of these 135 positions will also spur the construction of additional commercial space along the corridor. Using the 670 square foot multiplier, the ECFRPC calculated that the new positions will generate 90,450 square feet of new development between 2030 and 2045. The ECFRPC used the buildingjournal.com construction estimator to estimate the amount of investment that this new construction will generate. The ECFRPC split square footage between Retail Store and Office 1-3 story categories for the Melbourne area. According to this tool, this represents almost \$8.2 million in new construction investment. For modeling purposes, the ECFRPC entered this new investment as construction sales office/commercial structures. Staff chose to divide the total amount equally among the 15-year period which yielded about \$546,400 annually.

Net Developable Acres and Estimated Jobs for Commercial Parcels within Study Area

Property Name	Net Developable Acres	Square Foot Conversion	Jobs Estimate
Kirk Family	8.5	370,472	553
Griffin	0.7	30,104	45
Sharpe	0.7	31,509	47
Grimes	0.7	31,628	47
Hargill Land	1.4	60,909	91
Camco Automotive	3.0	130,291	194
River Edge	0.3	11,362	17
Nohr	1.6	70,583	105
Total	16.9	736,857	1,100

Source: Brevard County Property Appraiser, ECFRPC Calculations

Summary of Economic Simulation Results

The addition of the new jobs and investment will reverberate positively on Brevard County's economy. According to REMI, this economic activity will on average generate 800 positions above the current forecast. This is two hundred jobs in addition to the ones created by the proposed projects. The distribution of these jobs is pretty much the same as the one discussed in the short term scenario. Brevard County will also benefit from the addition of \$115.9 million in Sales, \$86.8 million in Personal Income, and \$69.8 million to the County's GDP. Just as in the previous simulation, most of the new economic activity will be generated by Accommodation and Food Services, Construction, and Retail Trade.

CONCLUSIONS

Based on these simulation results, the construction of the new pipeline will generate more than enough economic activity to justify this investment. Based on the project activity information provided by NBEDZ staff, the proposed projects are expected to generate 600 jobs, \$81 million in sales, and \$44 million in personal income for Brevard County residents. These developments will also add \$48 million to Brevard County's GDP. The ECFRPC assumed that this new development will be occurring between 2021 and 2033. In addition to these projects, the construction of the new sewage line could also spur development in other parts of the corridor. Based on a land use capacity analysis, the ECFRPC estimates that there are 16.9 acres of vacant commercial land available for new development. The completion of the proposed projects will most likely spark interest in developing some of these parcels. The ECFRPC estimated that some of these new development will start around 2030. The new activity will increase the number of jobs to 802. It will also increase the average sales to \$115.8 million and personal income to \$86.8 million. Brevard County's GDP will add \$69.8 million. It is important to note that the numbers for both simulation scenarios are reported as annual averages.

Long-Term Economic Scenario Results		
Economic Indicator	Average	
Total Employment	802	
Output	\$115,880,000	
Personal Income	\$86,840,000	
Gross Domestic Product	\$69,840,000	

Source: REMI PI+ East Central Florida v2.4.1

Study Area Development Scenarios Comparison			
Economic Indicator	Short Term (2021-2033)		Long-Term (2021-2045)
Total Employment	600		802
Output	\$81,076,923		\$115,880,000
Personal Income	\$44,538,462		\$86,840,000
Gross Domestic Product	\$48,153,846		\$69,840,000

Source: REMI PI+ East Central Florida v2.4.1