

EG-GILERO

- Medical and drug delivery device design + manufacturing
- Purchased 158 Credle Street in Pittsboro in fall 2018
- Property has been vacant for about six years

EG-GILERO

- Proposed investment: \$3.9 million (over five years)
- Proposed new jobs: 60
- Proposed average annual salary: \$40,167



Economic Impact Study: Medical Device Manufacturer

Study Area: Chatham County

Prepared by:



Methodology & Assumptions

- Input/Output Modeling Software:
 - Economic Modeling Specialists International (EMSI) -- Region: Chatham County, NC
- Data provided by Chatham County EDC on expected investments, employees, and salaries was used to determine the initial economic impacts for the modeling software.
- To determine the expected annual sales of each project, the region's average sales per employee value from each relevant industry was pulled from the EMSI input/output model.
- It was assumed that 100% of employees would live in Chatham County.
- Employees and operations were split 50/50 between the company's two operations electromedical apparatus manufacturing and surgical and medical instrument manufacturing.
- We modeled the expected economic impact of these projects in two parts, the **construction impacts** and **operational impacts**. The construction impacts (construction and machinery purchases) are one-time impacts to the economy. It is also assumed that only a portion of capital, land, and construction investments will be spent locally in the region. This portion was determined by model estimations of local demand. This amounted to 12% of construction costs and 28% of capital costs would be spent benefiting firms in the county.

Multipliers Explained

Multipliers estimate the ripple effects of investment in a regional economy.

Four Types of multiplying effects:

- 1. Initial this represents the jobs, sales, and earnings directly related to the project's construction or operations.
- 2. Direct these impacts are the first round of impacts to the industry's supply chain due to new input purchases required by the project.
- *3. Indirect* these impacts reflect the second round of activity when the supply chains stimulate sales within their supply chains.
- *4. Induced* these impacts are the result of increased earnings and therefore further spending throughout the economy.

Multipliers for Electromedical Apparatus Manufacturing

As an example, below are the various multipliers for the electromedical and electrotherapeutic apparatus manufacturing industry in Chatham County. This industry accounts for 50% of the activity at the proposed plant. A job multiplier of 1.73 means creating 2 jobs in the industry creates another job elsewhere in the region's economy.

Type of Investment	Initial	Direct	Indirect	Induced	Total Effect
Sales	1.00	0.03	0.01	0.10	1.14
Earnings	1.00	0.04	0.01	0.15	1.20
Jobs	1.00	0.16	0.03	0.54	1.73

Source: EMSI 2018.4

Model Timeline

- Construction and equipment spending was estimated to take place in the first five years of the model. Yearly breakdowns of expected spending were provided by the client. In Year 6 and beyond, the impacts modeled are only operational.
- Hiring and operations were modeled to begin in Year 1 with 2 employees. Based on estimations provided by the client employment in Year 5, full operation, would employ 60 workers.
- Additional impacts were modeled from Year 6 as the manufacturer continues to operate. Sales and earnings were expected to grow at a rate of about 4% each year based on historical state industry-based increases, while employment remained unchanged.
- Fiscal impacts are modeled as taxes on production and imports. Taxes are broken down by EMSI's input/output model into state and local tax revenue. This estimate includes expected tax revenue from property taxes, licenses, sales, and excise taxes.

Project Timetable



Initial Impacts of Medical Device Manufacturer in Chatham County

Year Scenario	Sales	Earnings	Jobs
Year 1	\$1,076,000	\$291,000	5
Year 2	\$7,647,000	\$970,000	20
Year 3	\$12,651,000	\$1,396,000	33
Year 4	\$18,538,000	\$1,964,000	47
Year 5	\$23,637,000	\$2,424,000	60
Year 6	\$24,698,000	\$2,521,000	60
Year 7	\$25,850,000	\$2,638,000	60
Year 8	\$27,056,000	\$2,760,000	60
Year 9	\$28,318,000	\$2,887,000	60
Year 10	\$29,640,000	\$3,020,000	60
Year 11	\$31,023,000	\$3,160,000	60
Year 12	\$32,471,000	\$3,306,000	60
Year 13	\$33,986,000	\$3,459,000	60
Year 14	\$35,572,000	\$3,619,000	60
Year 15	\$37,233,000	\$3,786,000	60
Raw Sum	\$369 398 000	\$38 200 000	
NPV (7%)	\$198,331,000	\$20,700,000	

Total Impacts of Medical Device Manufacturer to Chatham County

Year Scenario	Sales	Earnings	Jobs	State Tax	Local Tax
Year 1	\$1,236,000	\$340,000	7	\$8,000	\$9,000
Year 2	\$8,742,000	\$1,144,000	33	\$51,000	\$65,000
Year 3	\$14,443,000	\$1,642,000	53	\$75,000	\$95,000
Year 4	\$21,163,000	\$2,310,000	77	\$109,000	\$139,000
Year 5	\$26,981,000	\$2,850,000	98	\$138,000	\$175,000
Year 6	\$28,189,000	\$2,964,000	98	\$142,000	\$181,000
Year 7	\$29,503,000	\$3,101,000	98	\$149,000	\$190,000
Year 8	\$30,879,000	\$3,244,000	98	\$156,000	\$199,000
Year 9	\$32,320,000	\$3,394,000	98	\$163,000	\$208,000
Year 10	\$33,827,000	\$3,551,000	98	\$171,000	\$218,000
Year 11	\$35,406,000	\$3,715,000	98	\$179,000	\$228,000
Year 12	\$37,058,000	\$3,887,000	98	\$188,000	\$239,000
Year 13	\$38,787,000	\$4,067,000	98	\$196,000	\$250,000
Year 14	\$40,597,000	\$4,255,000	98	\$206,000	\$262,000
Year 15	\$42,492,000	\$4,452,000	98	\$215,000	\$274,000
Raw Sum	\$421,623,000	\$44,917,000		\$2,146,000	\$2,734,000
NPV (7%)	\$226,383,000	\$24,340,000		\$1,156,000	\$1,473,000

Source: EL estimates based on EMSI 2018.4

Impacts of Medical Device Manufacturer in Chatham County



Source: EL estimates based on EMSI 2018.4

Questions?