



# A Vital Force in Ohio's Economy





## Economic Impacts

Dear Friends:

Cleveland Clinic is the economic engine of Northeast Ohio. It is the largest employer, a major purchaser of goods and services, and a generator of tax revenues for government at every level. Our economic activity supports families, neighborhoods and community life. It brings opportunity and prosperity to the areas we serve.

The Cleveland Clinic Economic Impact Report details our contribution to state and local economies. Here are the highlights from the 2016 economic study:

- \$17.8 billion – total economic impact in Ohio
- 119,720 – jobs directly or indirectly supported
- \$7.5 billion – labor income
- 87,540 – households supported
- \$5 billion – household spending made possible
- \$987 million – total state and local taxes
- \$2.25 billion – total federal taxes
- \$158 million – visitor spending
- \$1.8 billion – spending on goods and services

Cleveland Clinic continues to be the second largest employer in Ohio. Our jobs attract and retain a well-educated workforce. Our caregivers support businesses and professional services across the state. Taxes generated by Cleveland Clinic enhance public schools, social services and infrastructure improvement.

Economic strength increases our ability to provide charity care. Our community benefit was \$809 million in 2016, including research, education and clinical services.

We appreciate your interest in Cleveland Clinic and its economic impact. More information on our organization, finances and community benefit can be found at [clevelandclinic.org](http://clevelandclinic.org).

Sincerely,

**Tomislav Mihaljevic, MD**  
CEO and President, Cleveland Clinic



**Tomislav Mihaljevic, MD**  
CEO and President



## TOTAL OHIO STATE IMPACTS

- \$17.8 Billion in Total Economic Output
  - 119,720 Jobs
  - \$7.5 Billion of Labor Income
  - 87,540 Households Supported
  - \$5 Billion in Household Spending
  - \$987 Million in Total State and Local Taxes
  - \$2.25 Billion in Federal Taxes
  - \$158 Million in Visitor Spending
  - \$1.8 Billion in Spending on Goods and Services
- 

## TOTAL OHIO REGIONAL IMPACTS

- \$17 Billion in Total Economic Output
- 117,750 Jobs
- \$6.9 Billion of Labor Income
- 81,120 Households Supported
- \$4.6 Billion in Household Spending
- \$950 Million in Total State and Local Taxes
- \$2.2 Billion in Federal Taxes
- \$186 Million in Visitor Spending
- \$1.1 Billion in Spending on Goods and Services





## Ohio — State Impacts

Cleveland Clinic contributes significant economic and fiscal value to the State of Ohio. In 2016, Cleveland Clinic directly and indirectly supported nearly \$17.8 billion of total economic output in the state. This report incorporates the impact of Akron General and the Select Medical joint ventures.

The activities of Cleveland Clinic supported almost 120,000 total Ohio jobs in 2016, and those jobs represented more than \$7.5 billion in total earnings. While most of the operating entities comprising Cleveland Clinic are tax-exempt organizations, total state and local taxes of over \$987 million and total federal taxes of approximately \$2.25 billion can be attributed to the presence of Cleveland Clinic. The organization also purchased almost \$1.8 billion of goods and services from Ohio businesses.

Almost 88,000 households in Ohio were supported by Cleveland Clinic jobs and earnings in 2016, and those households spent more than \$5 billion purchasing goods and services in the state. Additionally, Cleveland Clinic visitors contributed over \$158 million to the state's economy.

Between 2014 and 2016, Cleveland Clinic invested nearly \$808 million in real property improvements, including renovating existing structures, building new facilities and land improvements in Ohio. That investment supported nearly 3,200 construction period jobs per year and exceeded \$164 million in direct and indirect labor income, on average, over the three years. The average fiscal impact of Cleveland Clinic's construction activity during the three-year period was nearly \$24 million in state and local taxes and almost \$35 million in federal taxes per year.

## Ohio — Regional Impacts

Cleveland Clinic's fiscal and economic impacts on Northeast Ohio's economy are substantial. This report incorporates the impact of Akron General and the Select Medical joint ventures.

In the eight-county region, the construction activities and ongoing operations of the organization supported almost 118,000 jobs and over \$6.9 billion of labor income in 2016. Those jobs represent more than 81,000 Northeast Ohio households and close to \$4.6 billion of household spending, which are directly and indirectly supported by Cleveland Clinic activities in the regional economy.

State and local taxes generated by permanent and construction activities in the region totaled close to \$950 million. Cleveland Clinic's ongoing and construction activities generated more than \$2.2 billion of federal taxes and fees. Cleveland Clinic purchased close to \$1.1 billion of goods and services from Northeast Ohio vendors. Visitors to Cleveland Clinic's Northeast Ohio facilities spent more than \$186 million on hotels, food and other expenses.

Cleveland Clinic directly and indirectly supported \$17 billion of economic activity in the regional economy in 2016.

Cleveland Clinic construction activities between 2014 and 2016 supported nearly 3,100 direct and indirect jobs per year and over \$161 million of average annual labor income earned in Northeast Ohio. The average annual fiscal impact of Cleveland Clinic's construction activity was close to \$24 million in state and local taxes and exceeded \$34 million in federal taxes.

**Cleveland Clinic Economic and Fiscal Impact Study — Summary Table (Based on 2016 Data)**

Total Impacts	Northeast Ohio Region			State of Ohio		
	Direct	Indirect	Total	Direct	Indirect	Total
Total Jobs	57,420	60,330	117,750	58,610	61,110	119,720
Total Earnings	\$4.5 billion	\$2.4 billion	\$6.9 billion	\$4.5 billion	\$3.0 billion	\$7.5 billion
Households Supported	39,550	41,570	81,120	42,880	44,660	87,540
Total Household Level Spending	\$2.6 billion	\$2.0 billion	\$4.6 billion	\$2.9 billion	\$2.1 billion	\$5.0 billion
State Income Taxes	\$114 million	\$62 million	\$176 million	\$116 million	\$75 million	\$191 million
Local Income Taxes	\$68 million	\$37 million	\$105 million	\$69 million	\$45 million	\$114 million
Property Taxes (Residential)	\$183 million	\$192 million	\$375 million	\$188 million	\$196 million	\$384 million
Indirect Business Taxes		\$294 million	\$294 million		\$298 million	\$298 million
<b>Total State and Local Taxes</b>	<b>\$365 million</b>	<b>\$585 million</b>	<b>\$950 million</b>	<b>\$373 million</b>	<b>\$614 million</b>	<b>\$987 million</b>
Federal Taxes	\$764 million	\$1,447 million	\$2,211 million	\$776 million	\$1,474 million	\$2,250 million
Total Visitor Spending			\$186 million			\$158 million
<b>Total Output</b>	<b>\$7.7 billion</b>	<b>\$9.3 billion</b>	<b>\$17.0 billion</b>	<b>\$7.9 billion</b>	<b>\$9.9 billion</b>	<b>\$17.8 billion</b>



## Glossary

**Direct Jobs** Those jobs being analyzed for purposes of the study. In this report, direct jobs comprise Cleveland Clinic physicians and employees, joint venture employees, on-campus hotel jobs, on-campus parking jobs and jobs existing at spin-off companies.

**Direct Earnings/Labor Income** The wages and benefits associated with the direct jobs.

**Household Level Spending** Encompasses all of the purchases made by individuals and families for items such as food, clothing, durable and non-durable goods and other retail of any kind. It also includes spending on personal services such as home repair, dry cleaning, restaurants, automotive repair, etc.

**Indirect Jobs** Jobs supported by industries purchasing from industries. For example, Cleveland Clinic purchases supplies from vendors within the region. Those vendors employ workers to meet the demand of Cleveland Clinic (and other customers). This cycle may have many iterations between different industry sectors, and the coefficients associated with each industry are calculated within the IMPLAN model. (See right column for more information about IMPLAN.)

**Indirect Earnings/Labor Income** The earnings associated with the indirect jobs. This amount can include both wages and benefits paid to workers as well as income earned by business owners. Indirect earnings are calculated using the IMPLAN model.

**Induced Jobs** Whereas indirect jobs are those positions that are created by industries purchasing from industries, induced jobs are those positions supported by household level purchasing, or the spending on goods and services by individuals within the study area. In this report, induced jobs are calculated using the IMPLAN model and are included with indirect jobs.

**Induced Earnings/Wages/Labor Income** The earnings associated with the induced jobs. This amount can include both wages and benefits paid to workers as well as income earned by business owners. In this report, induced earnings are calculated using the IMPLAN model and are included with indirect earnings.

**Indirect Business Taxes** Excise taxes, property taxes, fees, licenses and sales taxes paid to government entities. These taxes occur during the normal operation of businesses and are determined primarily within the IMPLAN model.

**Industry Output** Represents the total value of all goods and services produced by all of the industries within the study region. For this study, we used the IMPLAN model, which provides information for more than 500 distinct industry sectors. By aggregating the changes in each sector associated with the direct activity of Cleveland Clinic, we are able to calculate the total impact on the economy.

**Spending on Goods and Services** Included in this value are total payments made to various vendors and individuals for goods and/or services provided to Cleveland Clinic. In this report, this information is specifically limited to actual purchases made by Cleveland Clinic and should not be confused with the definition of Industry Output above. This data was provided by Cleveland Clinic.

## Analysis Methodology

Portions of this analysis were completed using the IMPLAN economic impact model. The IMPLAN model is used by more than 1,000 universities and government agencies to estimate the economic and fiscal impacts of investments and/or changes in industry, to forecast tax revenue and employment generation, and to conduct economic comparison studies of two or more geographic locations.

IMPLAN is an input-output model. Input-output accounting describes commodity flows from producers to intermediate and final consumers. The total industry purchases of commodities, services, employment compensation, value added and imports are equal to the value of the commodities produced.

An IMPLAN impact analysis involves specifying a series of expenditures or other changes and applying them to the region's economic multipliers. The expenditures are identified in terms of the sectoring scheme for the model, in producer prices and in historical dollars with the current year used as a base year. Only the dollars spent within the region are applied to the model.

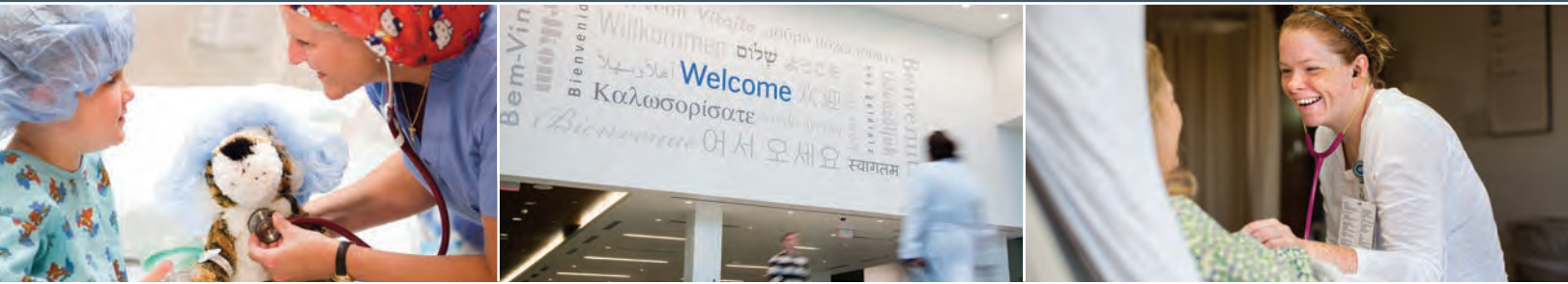
The notion of a multiplier rests upon the difference between the initial effect of a change in final demand and the total effects of that change. Total effects can be calculated either as direct and indirect effects, or as direct, indirect and induced effects. Direct effects are production changes associated with the immediate effects or final demand changes. Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly affected industries (for example, additional purchases to produce additional output). Induced effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects.

Purchases for final use (final demand) drive the model. Industries producing goods and services for final demand purchase goods and services from other producers. These other producers, in turn, purchase goods and services. This buying of goods and services (indirect purchases) continues until leakage from the region (imports and value added) stops the cycle.

These indirect and induced effects (the effects of household spending) can be mathematically derived. The resulting sets of multipliers describe the change of output for each and every regional industry caused by a one-dollar change in final demand for any given industry.

Creating a regional input-output model requires a tremendous amount of data. The costs of surveying industries within each region to derive a list of commodity purchases (production functions) are prohibitive. IMPLAN was developed as a cost-effective means to develop regional input-output models. The IMPLAN accounts closely follow the accounting conventions used in the "Input-Output Study of the U.S. Economy" by the Bureau of Economic Analysis (1980) and the rectangular format recommended by the United Nations.

(Source for much of this description: Olson, Doug and Scott Lindall, "IMPLAN Professional Software, Analysis, and Data Guide"; Minnesota IMPLAN Group, Inc., 1725 Tower Drive West, Suite 140, Stillwater, MN 55082)



Prepared by:



Every life deserves world class care.

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Cleveland Clinic is a nonprofit, multispecialty academic medical center integrating clinical and hospital care with research and education for better patient care. More than 3,500 staff physicians and researchers in 140 medical specialties provide services through 27 clinical and special expertise institutes. Cleveland Clinic comprises a main campus, ten regional hospitals and more than 150 outpatient locations, with 18 family health centers and three health and wellness centers in northern Ohio, as well as medical facilities in Florida, Nevada, Toronto and Abu Dhabi. Cleveland Clinic is currently ranked as the No. 2 hospital in the country by *U.S. News & World Report*.  
[clevelandclinic.org](http://clevelandclinic.org)

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