



# ECONOMIC IMPACT

OF A NEW 2480-HEAD WEAN-TO-FINISH PIG FARM IN RAMSEY COUNTY



Photo by Patrice Alsteen

A new 2480-head wean-to-finish pig farm located in Ramsey County would generate the following estimated total **construction** and **operations** effects to the local (county) economy<sup>1</sup>.

## TOTAL EFFECTS (OPERATIONS)



TOTAL EFFECTS (CONSTRUCTION)			
<b>Employment</b>	7	<b>Value Added</b>	\$542,205
<b>Labor Income</b>	\$397,385	<b>Output</b>	\$991,247

TOTAL TAXES PAID (AT ALL JURISDICTIONS)			
<b>Construction</b>	\$102,845	<b>Operations</b>	\$68,968

TOTAL EFFECTS				
Impact Type	Employment	Labor Income	Value Added	Output
<b>Direct Effect</b>	13	\$452,950	\$892,737	\$1,378,507
<b>Indirect Effect</b>	1	\$42,908	\$80,230	\$136,755
<b>Induced Effect</b>	2	\$70,260	\$136,570	\$237,830
<b>Total Effect</b>	16	\$566,119	\$1,109,538	\$1,753,091

<sup>1</sup>To arrive at the total effects of a new 2480-head pig farm, we used the following basic assumptions:

1) a pig farm's 2480-head inventory of pigs is turned 2 times per year (6 months to finish); and 2) an average sales price of \$126/head.

**TOP INDUSTRIES IMPACTED:** The following are a few of the industries most impacted in terms of value-added by the economic activity from both construction and operations during the first year:

<b>CONSTRUCTION (VALUE-ADDED)</b>	
<b>Industry</b>	<b>Value-Added</b>
Construction of new commercial structures, including farm structures	\$402,813
Wholesale trade	\$21,770
Owner-occupied dwellings	\$17,156
Real estate	\$12,104
Hospitals	\$4,657
Monetary authorities and depository credit intermediation	\$4,570
Limited-service restaurants	\$4,146
Truck transportation	\$3,618
Retail - Motor vehicle and parts dealers	\$3,357
Commercial and industrial machinery and equipment rental and leasing	\$3,246

<b>OPERATIONS (VALUE-ADDED)</b>	
<b>Industry</b>	<b>Value-Added</b>
Animal production, except cattle and poultry and eggs	\$502,811
Wholesale trade	\$8,636
Owner-occupied dwellings	\$7,412
Real estate	\$4,943
Support activities for agriculture and forestry	\$4,438
Hospitals	\$1,989
Monetary authorities and depository credit intermediation	\$1,947
Limited-service restaurants	\$1,812
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	\$1,600
Truck transportation	\$1,594

**OVERVIEW:** The entry of a new 2480-head wean-to-finish pig farm causes a measurable increase in economic activity within Ramsey County, North Dakota both in terms of construction and annual operations. Common measures of economic activity are: Employment (jobs), Labor Income, Value Added and Output (sales). When a pig farm enters a local economy, it causes a series of new economic activities (impacts) to take place. For this summary, economic impacts are broken into two categories: Construction and Operations. Construction and operations will generate tax revenue through federal taxes as well as state and local taxes. Of the estimated \$171,813 generated in tax revenue about \$53,726 is at the state and local levels and about \$118,087 is at the federal level. The magnitude of these new economic activities is largely related to the presence of industries which supply the needed inputs for a new pig farm. A pig farm in Ramsey County sources roughly 8% of all inputs locally.

The construction of a new pig farm requires purchases such as steel, concrete, and barn equipment; once construction is completed, pig producers purchase feed, veterinary and other professional services, and many other inputs to produce pigs for sale. The direct purchase of supplies and equipment are known as *direct effects*. The suppliers and vendors used by the pig farm then must purchase inputs to supply the pig farm; these are known as *indirect effects*. Those who work in the construction of the farm, for the pig farm once complete, and for the farm's suppliers and vendors then use their additional income to make household purchases; these are known as *household, or induced effects*. Taken together, the sum of direct, indirect and induced effects are known as *total effects* and accounts for the total multiplier effect present from the construction and operations of a new pig farm.

**ADDITIONAL DETAILS** on methodology can be obtained through communication with the study's author, Decision Innovation Solutions ([info@decision-innovation.com](mailto:info@decision-innovation.com))