



Special Topic Report: Contribution of Small Business to the Provincial Economy

ABSTRACT - Small businesses continue to be the backbone of the economy. The 42,119 small businesses in Saskatchewan, with employees, account for 99% of total businesses. At \$44,583.4M contribution to GDP, small businesses account for 59.2% of provincial GDP. With 381,192 employees, small business account for 66.3% of total employment in the province.

According to Innovation, Science and Economic Development Canada, as of December 2015, the Canadian economy totaled 1.17 million employer businesses. Of these, 97.9 percent (1.14 million) were small businesses (1 to 99 employees), 1.8 percent (21,415) were medium-sized businesses (100 to 499 employees), and 0.3 percent (2,933) were large businesses. Small and medium sized businesses account for 30% of national Gross Domestic Product.

With a high representation of small businesses contributing to Canada's economy, Praxis examines the economic contribution of small businesses to Saskatchewan's economy.

Employment size categories from Statistics Canada's Business Registry for Saskatchewan have been re-grouped into Canadian Industry Statistics below. Business size categories are grouped under the following employment size ranges:

Micro	1-4 employees
Small	5-99 employees
Medium	100-499 employees
Large	500 + employees

For the purpose of this study, small business is defined as a business with less than 100 employees.

Small business spending was extrapolated from 2018 Business Registry location counts and employment ranges for Saskatchewan.

The Business Register is Statistics Canada's continuously maintained central repository of baseline information on businesses and institutions operating in Canada. The Business Register maintains a complete, up-to-date and unduplicated list of all businesses in Canada that have a

corporate income tax account, an employer payroll deduction remittance account, a GST/HST account, a T5013 partnership account, and/or registered charities account. Persons reporting any of the various types of business income on personal tax forms (T1) are also included on the Register (regardless of whether they have GST/HST or PD7 remittances.).

The major sources of information for the Business Register are updates from the Statistics Canada survey program and from Canada Revenue Agency's (CRA) Business Number account files. Included in the Business Register are all Canadian businesses which meet at least one of the following three criteria:

- Have an employee workforce for which they submit payroll remittances to CRA; or
- Have a minimum of \$30,000 in annual revenue; or
- Are incorporated under a federal or provincial Act and have filed a federal corporate income tax form within the past three years.

The data provided in these tables reflects counts of statistical locations by industrial activity (North American Industry Classification System), geography codes, and employment size ranges as of December 31 each year.

Using the number of businesses in each employee range multiplied by the number of businesses in each range, it is possible to estimate employment by industry from Business Register data.

Using estimated employment and estimated gross output by employee from Business Register data, it is possible to derive total annual direct gross output by industry (Table 1).

Table 1 – Total Annual Direct Gross Output by Industry – Saskatchewan – Businesses with less than 100 employees¹

Industry	Number of Business	Estimated Employment	Gross Output (\$M)
Crop and Animal Production	5,161	20487	7540.1
Forestry and Logging²	0	0	2983.2
Fishing, Hunting and Trapping²	0	0	58.0
Support Activities for Agriculture and forestry²	0	0	4118.2
Mining and Oil and Gas Extraction	955	9005	18526.8
Utilities	46	888.5	21960.0
Construction	4,828	39385	18655.6
Manufacturing	996	15134	10411.1

Wholesale Trade	1,944	25129	1382.6
Retail Trade	4,786	59026	1015.1
Transportation and Warehousing	2,146	18187	2251.3
Information and Cultural Industries	660	5664	4300.4
Finance, Insurance, Real Estate and Rental and Leasing	2,866	23419.5	1409.9
Professional, Scientific and Technical Services	2,765	18755.5	1935.4
Administrative and Support, Waste Management and Remediation Services	1,554	15286	339.9
Educational Services	0	0	
Health Care and Social Assistance	0	0	
Arts, Entertainment and Recreation	544	6869	3571.9
Accommodation and Food Services	2,514	43319	1625.2
Other Services (Except Public Administration)	3,669	25315.5	1117.3
Operating, Office, Cafeteria and Laboratory Supplies	0	0	105901.2
Travel, Entertainment, Advertising and Promotion	0	0	0.0
Transportation Margins	0	0	0.0
Non-Profit Institutions Serving Households	0	0	0.0
Government Sector	0	0	0.0
Total	35,434³	325,870	76,815

¹ Businesses with employees only

² Included in crop and animal production

³ Excludes "unclassified"

Praxis' economic model was used to convert gross output to Gross Domestic Product, employment, and labour income. To estimate the benefits to small businesses, the Praxis economic models were employed for Saskatchewan using the latest provincial input-output tables available. An input-output table is a means of presenting a detailed analysis of the process of production, the use of goods and services (products), and the income generated in that production. The Saskatchewan model is rectangular in nature with 35 industries and 66 commodities, is based on Statistics Canada's standardized methodology, and will yield results similar to Statistics Canada's inter-provincial model and the Conference Board of Canada's Sport Tourism Economic Assessment Model (STEAM). Model description and definitions are available in Appendix A.

All impacts are considered incremental to the Base Case, a hypothetical scenario representing no small business economy.

Gross Domestic Product measures net economic activity within a prescribed geographic area. It represents the payments made to final factors of production: labour, unincorporated business profits, and other operating surplus (corporate profits, interest income, inventory valuation adjustments, and capital consumption allowances). Gross Domestic Product excludes the value of intermediate goods and services used in production. Labour income includes wages, salaries, and employer contributions to pensions and benefit packages.

Gross output measures total expenditures on local goods and services as well as payments to labour and business profits. Gross output is the total value of goods and services produced by an industry and includes intermediate inputs that are foreign and domestically-produced goods and services used by an industry in the production of its gross output. Value added is the difference between gross output and intermediate inputs and represents the value of labour and capital used in producing gross output. The sum of value added across all industries is equal to Gross Domestic Product for the economy.

Employment is defined as positions and is a mix of full and part-time jobs. Employment results have been rounded to the nearest whole number, and as such, the summation of columns may not equate to the table total.

Results of this simulation are presented below:

Table 2 – Total Impacts (\$M) of small businesses on the Saskatchewan economy.

Industry	Gross Output Impact	GDP at Basic Prices Impact	Employment Impact (Positions)	Labour Income Impact
Crop and Animal Production	7540.1	2634.2	20,487	277.9
Forestry and Logging	0.0	0.0	-	0.0
Fishing, Hunting and Trapping	0.0	0.0	-	0.0
Support Activities for Agriculture and Forestry	0.0	0.0	-	0.0
Mining and Oil and Gas Extraction	11023.8	7295.2	9,005	1017.6
Utilities	776.5	487.1	889	116.8
Construction	12448.0	4674.1	39,385	2593.8
Manufacturing	8663.4	2308.9	15,134	1038.6
Wholesale Trade	6133.8	4004.2	25,129	1734.0

Retail Trade	4320.0	2796.8	59,026	1927.1
Transportation and Warehousing	4287.6	2279.2	18,187	1053.4
Information and Cultural Industries	1298.7	717.4	5,664	364.2
Finance, Insurance, Real Estate and Rental and Leasing	10964.2	7531.6	23,420	1446.6
Professional, Scientific and Technical Services	2957.3	1906.0	18,756	1059.0
Administrative and Support, Waste Management and Remediation Services	1205.6	738.9	15,286	521.4
Educational Services	0.0	0.0		0.0
Health Care and Social Assistance	0.0	0.0		0.0
Arts, Entertainment and Recreation	566.4	275.4	6,869	191.9
Accommodation and Food Services	2781.0	1356.4	43,319	1003.8
Other Services (Except Public Administration)	1848.7	1194.8	25,316	774.7
Operating, Office, Cafeteria and Laboratory Supplies	0.0	0.0	-	0.0
Travel, Entertainment, Advertising and Promotion	0.0	0.0	-	0.0
Transportation Margins	0.0	0.0	-	0.0
Non-Profit Institutions Serving Households	0.0	0.0	-	0.0
Government Sector	0.0	0.0		0.0
Total	76,815.0	40,200.3	325,870	15,120.9

In summary, the 42,119 small businesses in Saskatchewan (including businesses not classified to a particular industry), with employees, account for 98% of total businesses. At \$40,200.3 million contribution to Gross Domestic Product (GDP), small businesses account for 53.4% of provincial GDP (\$75,261 million GDP at market prices in current dollars for 2016). Finally, with 325, 870 employees, small businesses account for 56.7% of total employment in the province.

Appendix A: Definitions and Model Description

Direct Impact:	total project expenditure, usually construction or operating outlays.
Employment:	measured in positions.
Final Demand:	sum of personal expenditure, government purchases of goods and services, business and government investment, and net exports.
GDP at factor cost:	measure of net economic activity within a prescribed geographic area. It represents the payments made to final factors of production: labour, unincorporated business profits, and other operating surplus (corporate profits, interest income, inventory valuation adjustments, and capital consumption allowances). GDP at factor cost excludes the value of intermediate goods and services used in production.
GDP at market prices:	GDP at factor cost plus indirect taxes less subsidies.
Gross Output:	total expenditures on local goods and services as well as payments to labour and business profits. Gross output includes double counting because it includes the value of inputs used in production rather than net value added alone.
Indirect Impact:	the secondary impact that includes inter-industry transactions, purchases of inputs from supporting industries
Induced impact:	the additional impact from changes in household spending as industries modify labour input requirements in response to altered levels of demand for output.

Industry outputs are calculated as $(I-D(I-\mu-\alpha-\beta)B)-1D((I-\mu-\alpha-\beta)e^*+(I-\mu-\beta)X_d+(I-\mu)X_r)=X$

Where:

I = an identity matrix of industry by industry dimension

D = a matrix of coefficients representing commodity output proportions

B = a matrix of coefficients representing commodity input proportions (technical coefficients) by industry

μ = a diagonal matrix whose elements represent the ratio of imports to use

α = a diagonal matrix whose elements represent the ratio of government production to use

β = a diagonal matrix whose elements represent the ratio of inventory withdrawals to use

e^* = final demand categories of consumption, government purchases of goods and services, business and government investment, and inventory additions.

X_d = final demand category of domestic exports

X_r = final demand category of re-exports.

Employment is calculated as a fixed number of positions per dollar of industry output.