



## **Special Topic Report: Workforce Demographics**

ABSTRACT - The workforce in Saskatchewan is aging, with the proportion of employees 55+ increasing across all industries. While the Agriculture industry has the highest average employment age (47.4 years), there is a declining trend in total employment in the industry. The Accommodation and Food Services industry has the lowest average employment age (34.6 years).

It is a generally accepted truism that the work force in most developed countries is aging. Saskatchewan is no exception. This document examines some of the demographic data available for employees across industries in Saskatchewan from 1978 to 2018. Canada's Labour Force Survey (LFS) provides estimates of employment and unemployment. With the release of the survey results only 10 days after the completion of data collection, the LFS estimates are the first of the major monthly economic data series to be released. LFS data are used to produce the well-known unemployment rate as well as other standard labour market indicators such as the employment rate and the participation rate. Estimates are produced for Canada, the provinces, the territories, and a large number of sub-provincial regions. The LFS also provides employment estimates by industry¹, occupation, public and private sector, hours worked and others, all cross-classifiable by a variety of demographic characteristics.

Statistics Canada's Table: 14-10-0023-01 (formerly CANSIM 282-0008) provides estimates of the employed labour force by age group: 15 to 24 years, 25 to 54 years, and 55 years and over. Although seemingly large age cohorts, an estimate of average ages of employees can be derived by assuming the mid-point of each cohort is the age of all employees in the cohort, multiplying by the number of employees in each cohort, adding this calculation for each cohort together, and dividing by the total number of employees in the industry.

Another metric of interest that can be derived directly from the data, as it stands, is the percent of the employed labour force by industry aged 55 plus.

<sup>&</sup>lt;sup>1</sup> Industry descriptions are available in Appendix A.



#### **Observations**

- Aside from the obvious aging of the employed labour force, the decline of the absolute number of employees in the Agriculture industry is also clearly observable. Total employment dropped from 96,600 in 1976 to 37,200 in 2018.
- Agriculture also has the highest average age of employees among the industries available at 47.4 years as well as the highest percent of employees 55+ at 48%.
- Industries with both a high average age and a significant % of employees aged 55+ include Transportation and Warehousing, Real Estate, Rental and Leasing, and Business, Building and Other Support Services.
- Public Administration demographics appear slightly counter-intuitive with an average age just above the provincial average, but a relatively low percent of employees 55+ (20.6%). One probable explanation would be a clustering of employees just below the 55-year-old threshold.
- All industries saw a steady rise in the percent of employees 55+ over the study period, with the
  exception of Health Care and Social Assistance, Accommodation and Food Services, and Other
  Services which saw modest declines between 2013 and 2018.
- Manufacturing, Business, Building and Other Support Services, Education, Health Care and Social Services, and Public Administration all experienced a drop in the percent of employees 55+ in 1993 and 1998. One possible explanation was that employers, when bouncing back from the 1992 recession, largely hired younger workers.
- Retail Trade and Accommodation and Food Services remain the purvey of younger workers, with an average age of 38.6 and 34.6 years, respectively, followed closely by Information, Cultural, and Recreation Industries at 38.7 years. However, the more than doubling of the percent of employees 55+ in the Retail Trade industry from 9.6% to 20.6% between 1988 and 2018 may indicate that this may not necessarily be the case in the long term.
- With a percent of employees 55+ slightly above the provincial average in Professional, Scientific and Technical Services and Educational Services, these industries may experience some stress in replacing retiring workers over the coming decades.
- Areas of future research include analysis of more detailed age cohorts to break down the 25 to 54 age group and a deeper dive into the 1993 to 1998 experience.



#### **Data Tables**

Table 1 – Average Age of Employees by Industry (1978, 1988, 1998, 2008, 2018) – Saskatchewan

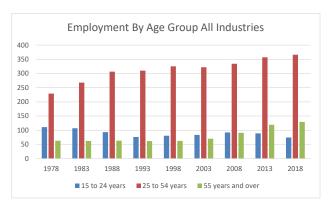
Industry	Average Age of Employees 1978	Average Age of Employees 1988	Average Age of Employees 1998	Average Age of Employees 2008	Average Age of Employees 2018
Agriculture	41.1	43.8	44.6	47.2	47.6
Mining, Quarrying, and Oil and Gas Extraction	n/a	36.4	38.4	38.4	41.1
Utilities	36.9	n/a	n/a	40.7	43.0
Construction	35.0	37.6	38.9	37.8	41.5
Manufacturing	35.2	37.0	37.1	39.2	41.4
Wholesale Trade	n/a	37.9	37.4	38.6	42.6
Retail Trade	n/a	34.7	35.1	35.4	38.6
Transportation and Warehousing	36.5	39.2	39.3	41.2	44.4
Finance and Insurance	n/a	37.4	39.7	40.5	42.5
Real Estate and Rental and Leasing	n/a	39.9	40.7	43.0	44.8
Professional, Scientific and Technical Services	35.9	36.6	38.2	40.2	43.0
Business, Building and Other Support Services	37.1	37.4	38.1	41.5	42.6
<b>Educational Services</b>	39.3	39.0	40.0	41.4	43.1
Health Care and Social Assistance	37.3	39.0	39.9	41.7	41.6
Information, Culture and Recreation	33.6	36.2	36.5	36.8	38.7
Accommodation and Food Services	31.5	30.3	31.0	31.8	34.6
Other services (except public administration)	37.8	36.6	39.0	39.3	41.3
Public Administration	37.1	38.8	39.5	41.7	42.5
All	37.2	38.3	38.8	39.5	41.5



Table 2 – Percent of Employees Over the Age of 55 by Industry (1978, 1988, 1998, 2008, 2018) – Saskatchewan

Industry	% 55+ 1978	% 55+ 1988	% 55+ 1998	% 55+ 2008	% 55+ 2018
Agriculture	26.5%	32.0%	34.8%	43.8%	48.4%
Mining, Quarrying, and Oil and Gas Extraction	n/a	4.6%	8.6%	9.1%	15.5%
Utilities	13.2%	n/a	n/a	13.7%	20.0%
Construction	8.6%	8.3%	11.5%	15.7%	22.0%
Manufacturing	9.0%	8.7%	6.7%	12.1%	18.1%
Wholesale Trade	n/a	9.7%	9.3%	13.1%	20.4%
Retail Trade	n/a	9.6%	9.7%	13.7%	20.6%
Transportation and Warehousing	13.4%	11.7%	8.9%	17.6%	29.6%
Finance and Insurance	n/a	6.7%	8.0%	12.0%	19.3%
Real Estate and Rental and Leasing	n/a	18.3%	19.7%	25.8%	34.1%
Professional, Scientific and Technical Services	8.2%	6.5%	8.6%	17.1%	23.3%
<b>Business, Building and Other Support Services</b>	17.5%	18.8%	13.3%	26.1%	27.3%
<b>Educational Services</b>	14.1%	7.3%	9.1%	16.8%	24.2%
Health Care and Social Assistance	14.8%	12.1%	11.3%	19.8%	19.9%
Information, Culture and Recreation	9.7%	6.6%	8.0%	10.5%	17.3%
<b>Accommodation and Food Services</b>	9.4%	6.4%	6.3%	10.3%	11.0%
Other services (except public administration)	18.5%	12.2%	15.3%	18.6%	24.3%
Public Administration	14.1%	9.3%	8.2%	15.7%	20.6%
All	15.6%	13.7%	13.4%	17.5%	22.7%

# **Graphs**

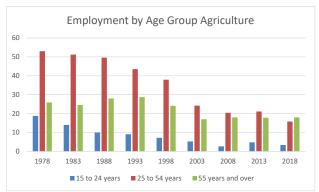


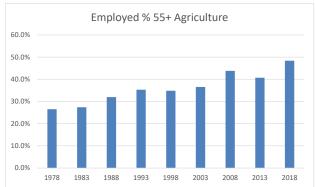


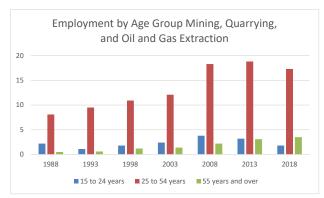
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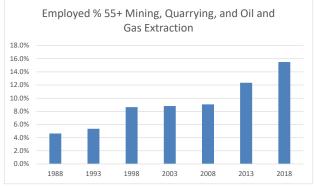
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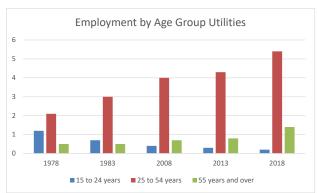


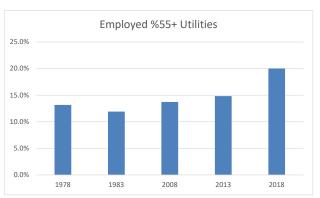


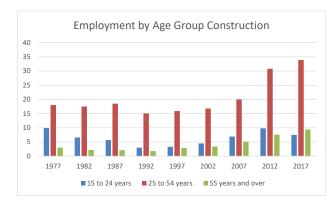






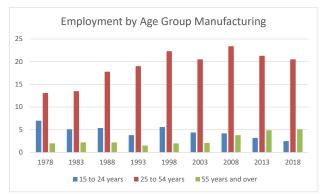




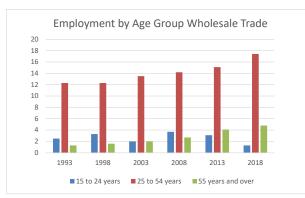








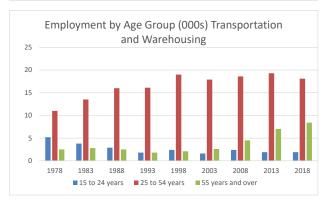






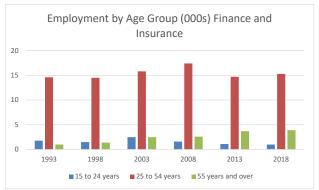


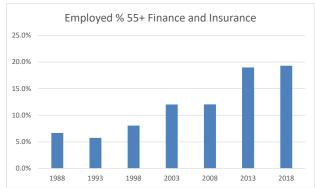


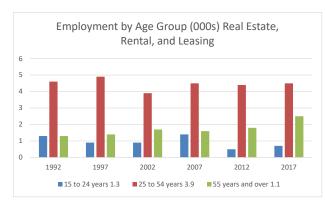


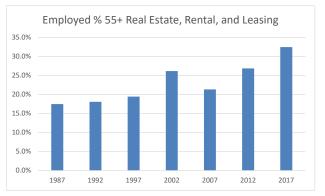


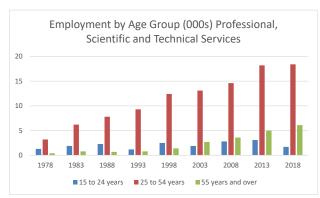


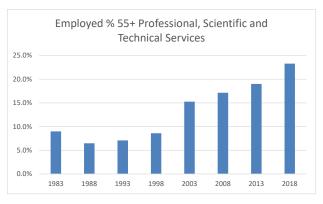


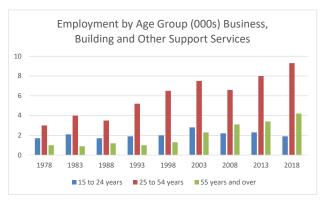


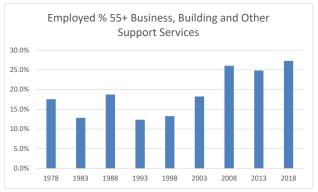








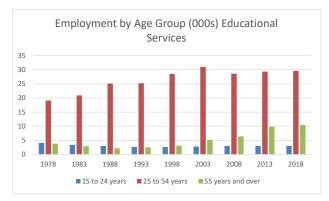


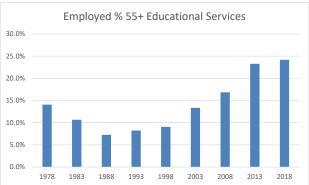


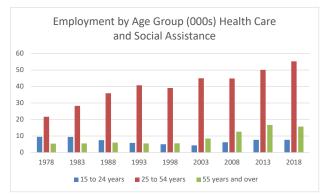
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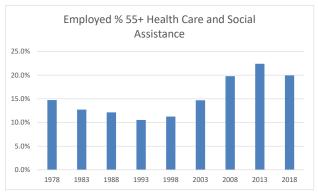
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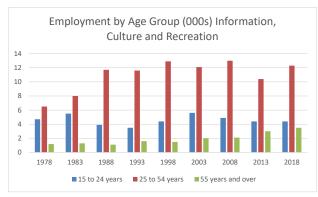


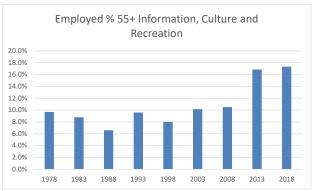








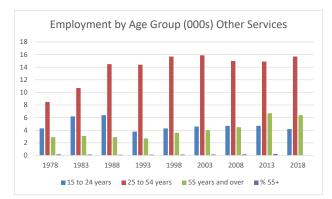


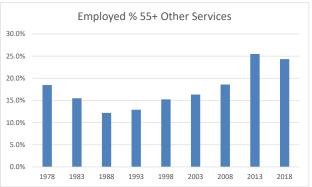


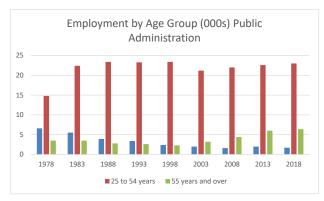


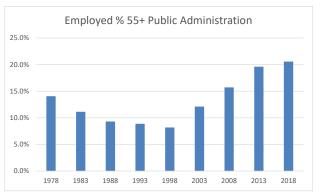














### **Appendix A: Industry Definitions**

**Agriculture**: establishments primarily engaged in growing crops and raising animals, **Mining, Quarrying, and Oil and Gas Extraction**: establishments primarily engaged in extracting naturally occurring minerals. The term mining is used in the broad sense to include quarrying, well operations, milling (for example, crushing, screening, washing, or flotation) and other preparation customarily done at the mine site, or as a part of mining activity. Establishments engaged in exploration for minerals, development of mineral properties and mining operations are included in this sector.

**Utilities**: establishments primarily engaged in operating electric, gas and water utilities. These establishments generate, transmit, control and distribute electric power; distribute natural gas; treat and distribute water; operate sewer systems and sewage treatment facilities; and provide related services, generally through a permanent infrastructure of lines, pipes and treatment and processing facilities.

**Construction**: establishments primarily engaged in constructing, repairing and renovating buildings and engineering works, and in subdividing and developing land.

**Manufacturing**: establishments primarily engaged in the chemical, mechanical or physical transformation of materials or substances into new products.

**Wholesale Trade**: establishments primarily engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise.

**Retail Trade:** establishments primarily engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise.

**Transportation and Warehousing:** establishments primarily engaged in transporting passengers and goods, warehousing and storing goods, and providing services to these establishments. The modes of transportation are road (trucking, transit and ground passenger), rail, water, air and pipeline. National post office and courier establishments, which also transport goods, are included in this sector.

**Finance and Insurance:** establishments primarily engaged in financial transactions (that is, transactions involving the creation, liquidation, or change in ownership of financial assets) or in facilitating financial transactions. Included are establishments that are primarily engaged in financial intermediation.

**Real Estate and Rental and Leasing**: establishments primarily engaged in renting, leasing or otherwise allowing the use of tangible or intangible assets. Establishments primarily engaged in managing real estate for others; selling, renting and/or buying of real estate for others; and appraising real estate, are also included.

**Professional, Scientific and Technical Services:** establishments primarily engaged in activities in which human capital is the major input. The main components of this sector are legal services; accounting, tax preparation, bookkeeping and payroll services; architectural, engineering and related services; specialized design services; computer systems design and related services; management, scientific and technical consulting services; scientific research and development services; and advertising, public relations, and related services.



**Business, Building and Other Support Services:** establishments of two different types: those primarily engaged in activities that support the day-to-day operations of other organizations; and those primarily engaged in waste management activities. The first type of establishment is engaged in activities such as administration, hiring and placing personnel, preparing documents, taking orders from clients, collecting payments for claims, arranging travel, providing security and surveillance, cleaning buildings, and packaging and labelling products. Waste management establishments are engaged in the collection, treatment and disposal of waste material, the operation of material recovery facilities, the remediation of polluted sites and the cleaning of septic tanks.

**Educational Services:** establishments primarily engaged in providing instruction and training in a wide variety of subjects. This instruction and training is provided by specialized establishments, such as schools, colleges, universities and training centres. These establishments may be privately owned and operated, either for profit or not, or they may be publicly owned and operated.

Health Care and Social Assistance: establishments primarily engaged in providing health care by diagnosis and treatment, providing residential care for medical and social reasons, and providing social assistance, such as counselling, welfare, child protection, community housing and food services, vocational rehabilitation and child care, to those requiring such assistance. Information, Culture and Recreation: Establishments primarily engaged in producing and distributing (except by wholesale and retail methods) information and cultural products. The main components of this sector are the publishing industries, the motion picture and sound recording industries, the broadcasting industries, the telecommunications industries, and the data processing and hosting services industries. Also included are establishments that produce, promote or participate in live performances, events or exhibits intended for public viewing; provide the artistic, creative and technical skills necessary for the production of artistic products and live performances; preserve and exhibit objects and sites of historical, cultural or educational interest; and operate facilities or provide services that enable patrons to participate in sports or recreational activities or pursue amusement, hobbies and leisure-time interests.

Accommodation and Food Services: establishments primarily engaged in providing short-term lodging and complementary services to travelers, vacationers and others, in facilities such as hotels, motor hotels, resorts, motels, casino hotels, bed and breakfast accommodations, housekeeping cottages and cabins, recreational vehicle parks and campgrounds, hunting and fishing camps, and various types of recreational and adventure camps. This sector also comprises establishments primarily engaged in preparing meals, snacks and beverages, to customer orders, for immediate consumption on and off the premises.

Other services (except public administration): establishments, not classified to any other sector, primarily engaged in repairing, or performing general or routine maintenance, on motor vehicles, machinery, equipment and other products to ensure that they work efficiently; providing personal care services, funeral services, laundry services and other services to individuals, such as pet care services and photo finishing services; organizing and promoting religious activities; supporting various causes through grant-making, advocating (promoting)



various social and political causes, and promoting and defending the interests of their members.

**Public Administration:** establishments primarily engaged in activities of a governmental nature, that is, the enactment and judicial interpretation of laws and their pursuant regulations, and the administration of programs based on them. Legislative activities, taxation, national defense, public order and safety, immigration services, foreign affairs and international assistance, and the administration of government programs are activities that are purely governmental in nature. Ownership is not a criterion for classification. Government owned establishments engaged in activities that are not governmental in nature are classified to the same industry as privately owned establishments engaged in similar activities.

Source: Statistics Canada North American Industry Classification System (NAICS) Canada 2017 Version 1.0