



Stony Plain Labour Market Profile

December 2017

Detailed Labour Market Profile for Town of Stony Plain, Alberta. One of a series of four reports on the Tri-Municipal Region labour market.



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1. Introduction

Labour Market Information emerges as key to helping governments, businesses, non-governmental organizations and individuals respond to the changes that are happening throughout the economy. Understanding labour patterns and trends is essential to remain competitive in an economy and labour market that has changed in terms of demographics, occupation skills required, technological advances and future training demands.

In an age when careers and occupations are changing rapidly, timely and accurate labour market information is essential for informed decision-making by businesses, governments, non-governmental organizations and individuals.

1.1. Purpose of the Study

Labour market information covers the principal elements of the labour market and its operations. The principal elements are the demand for labour and the supply of labour. The purpose of the 2-phase comprehensive study is to provide relevant, timely, and accurate labour market information to stakeholders, including job seekers, employers, industry, post secondary institutions, and government agencies. This study is designed to inform people of employment opportunities, assist in career planning for residents and migrants to the Region, help attract newcomers to existing and emerging opportunities, and respond to current and future labour market realities within the Region.

The purpose of this series of reports in the Phase 1 Labour Market Profile is to provide detailed labour market analysis for:

- ▶ The Tri-Municipal Region;
- ▶ The three participating municipalities that comprise the Tri-Municipal Region: City of Spruce Grove, Town of Stony Plain and Parkland County; and
- ▶ The two indigenous communities within the Tri-Municipal Region: Paul First Nation and Enoch Cree Nation.

The detailed labour market analysis within Phase 1 will inform the development of Phase 2. The Phase 2 Labour Market Survey will provide a more in depth understanding of the Tri-Municipal Region labour force, identify gaps and issues, and deliver methods to potentially address these gaps and issues.

Labour market information needs to be presented in a clear, understandable and useable form and support evidence-based decision-making in both the workplace and career planning.

1.2. Organization of the Phase 1 Analysis

The Phase 1 analysis is organized into four reports, each under separate cover, as follows:

- ▶ **Summary Report:** This report provides an overview of the detailed labour market analysis for the Tri-Municipal Region and includes summary statistics and analysis of how the Tri-Municipal Region compares to the Edmonton Metropolitan Region and Province of Alberta.
- ▶ **Municipal Reports (3):** A municipal report containing detailed labour market information and analysis for each participating municipality: City of Spruce Grove, Town of Stony Plain and Parkland County.

For information about the sources of data used in the Phase 1 analysis, see Appendix B in each report.

2. Labour Market Profile: Stony Plain

The Town of Stony Plain is Alberta’s 3rd largest town, located in the Edmonton Metropolitan Region. The Town is adjacent to the City of Spruce Grove and surrounded by Parkland County. These three municipalities are the Tri-Municipal Region.

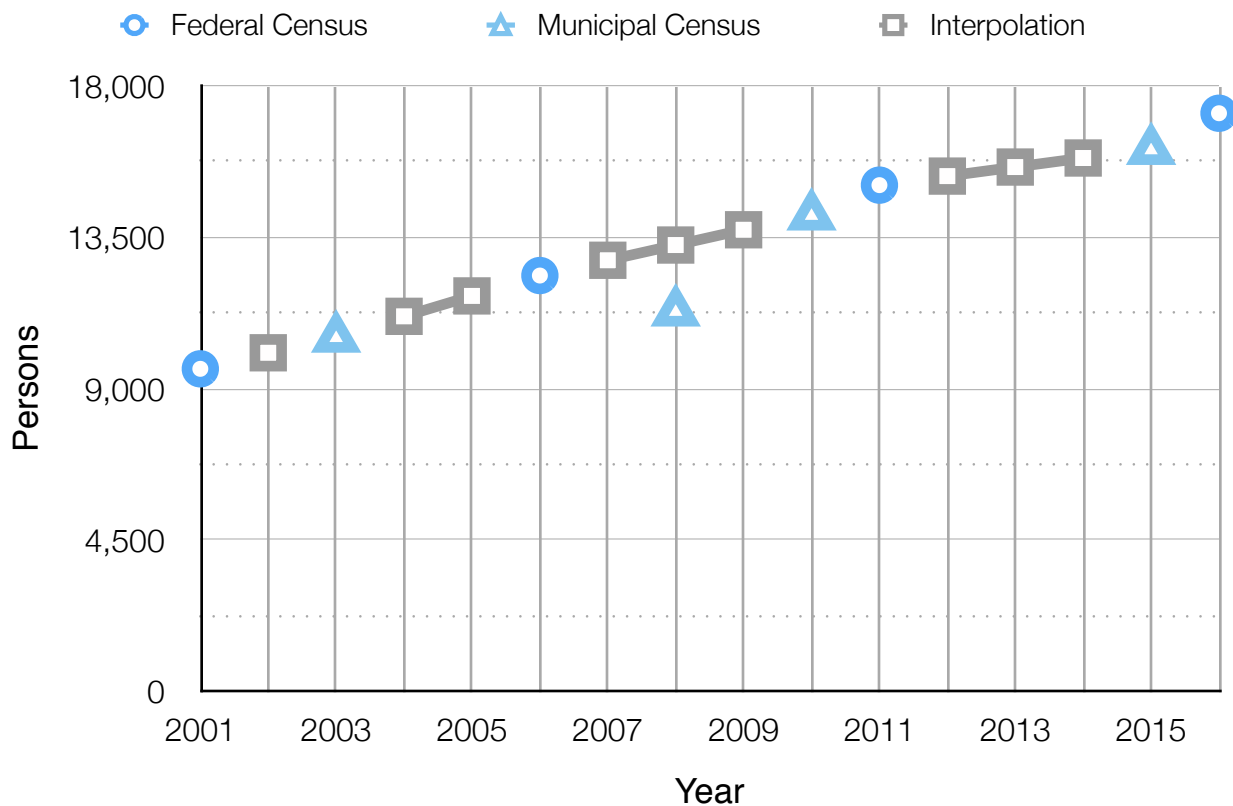
2.1. Population

In 2016, Stony Plain’s population totalled 17,189. The local population is directly related to the local workforce. It also has a direct connection to the number and types of businesses and other employers located in the community and the workforce requirements of those enterprises.

2.1.1. Population Growth

Stony Plain has grown steadily since 2001, from a population of 9,589 to 17,189 in 2016. The average annual rate of growth over this period has been 4.0% which exceeded the rate of growth for the Edmonton Metropolitan Region (2.1%) over the same period.

Population Growth (2001-2016)¹



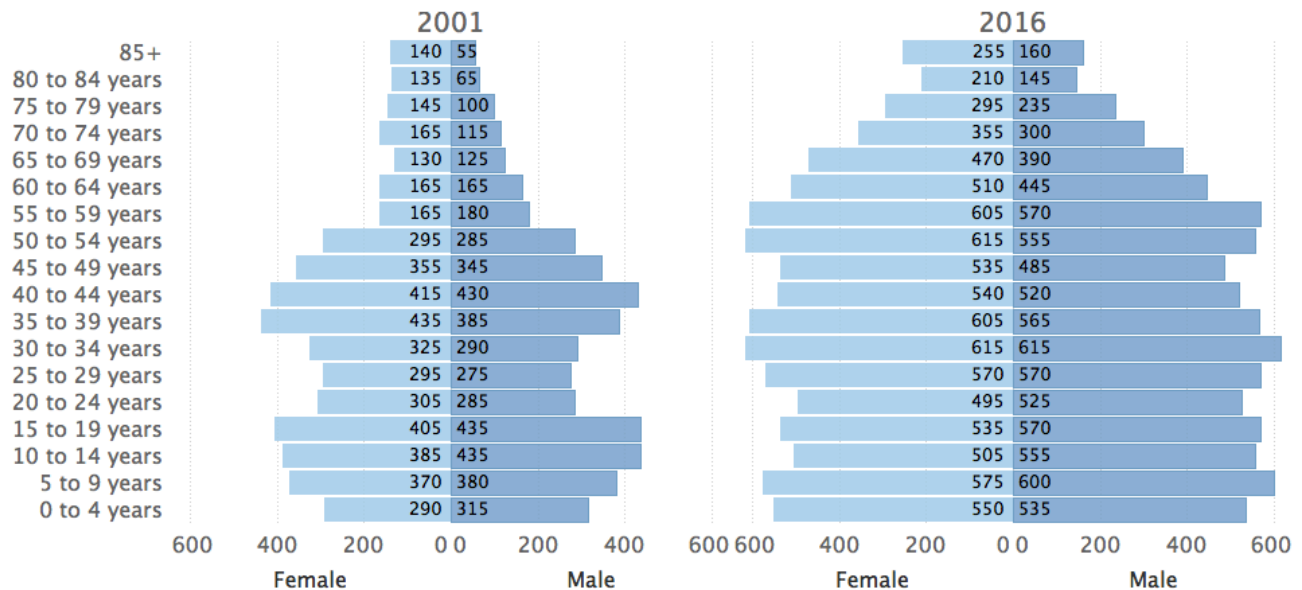
¹ Interpolation is a method of constructing estimated data points within the range of known data points. Data points between Federal and Municipal Census data have been estimated by Applications Management Consulting Ltd. The 2008 Municipal Census was used for demographic reference purposes and not for the Town’s official population.

2.1.2. Population by Age Group

Stony Plain’s population has evolved dramatically over the past 15 years. In 2001, the median age of the population was 35.0 years, with men averaging 33.5 years and women 36.2 years. In 2001 the Town’s population was concentrated in the 5-19 year and 35-49 year age categories.

By 2016 the median age increased to 38.2 years with the median age of men increasing to 36.7 and women to 39.7 years. The increase in median age is reflected in the population pyramids for 2001 and 2016. The proportion of the population in age categories has flattened out significantly in the past 15 years.

Population Distribution by Age (2001-2016)

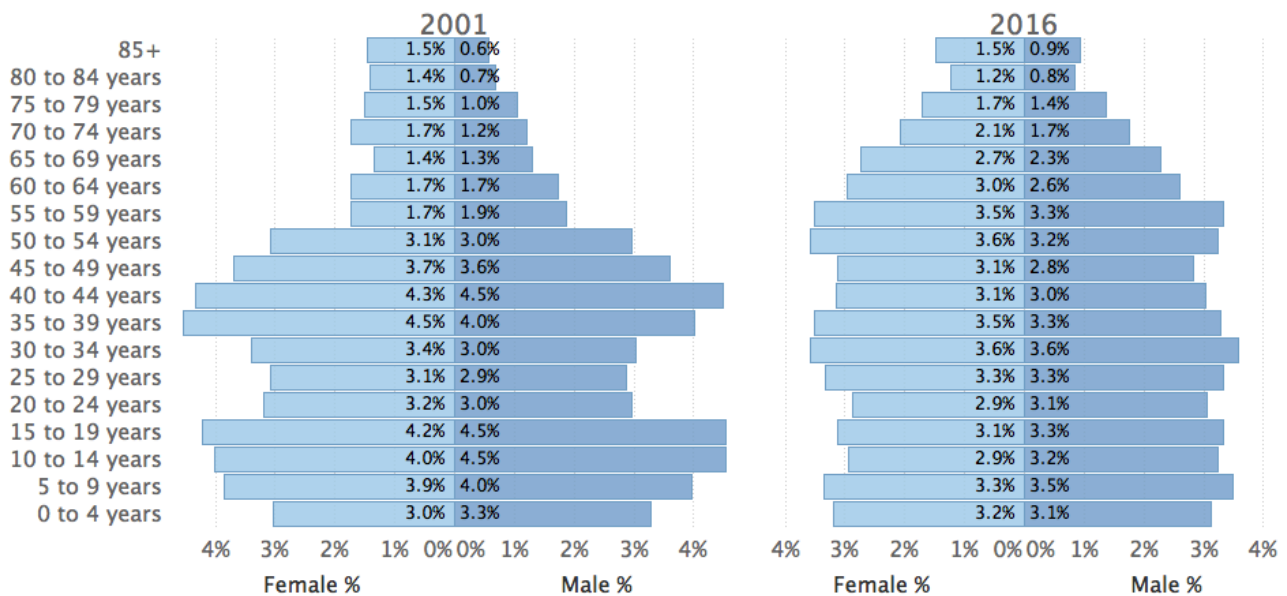


Tri-Municipal Region: Labour Market Profile - Stony Plain Municipal Report

In 2001 the 40-44 year age category was the single largest age cohort in Stony Plain representing 4.3% of women and 4.5% of men. The second largest category was the 15-19 year age cohort representing 4.2% of women and 4.5% of men in Stony Plain.

By 2016 the largest age cohort was 30-34 years followed by the 35-39 year comprising a total of 7.2% of the Town's population. This was followed by three age cohorts - 5-9, 50-54, and 55-59 year age cohorts, each representing 6.8% of the Town's population. Several other age cohort categories have a similar but slightly lower proportion of total population.

Population Distribution by Age - % of Total Population (2001-2016)



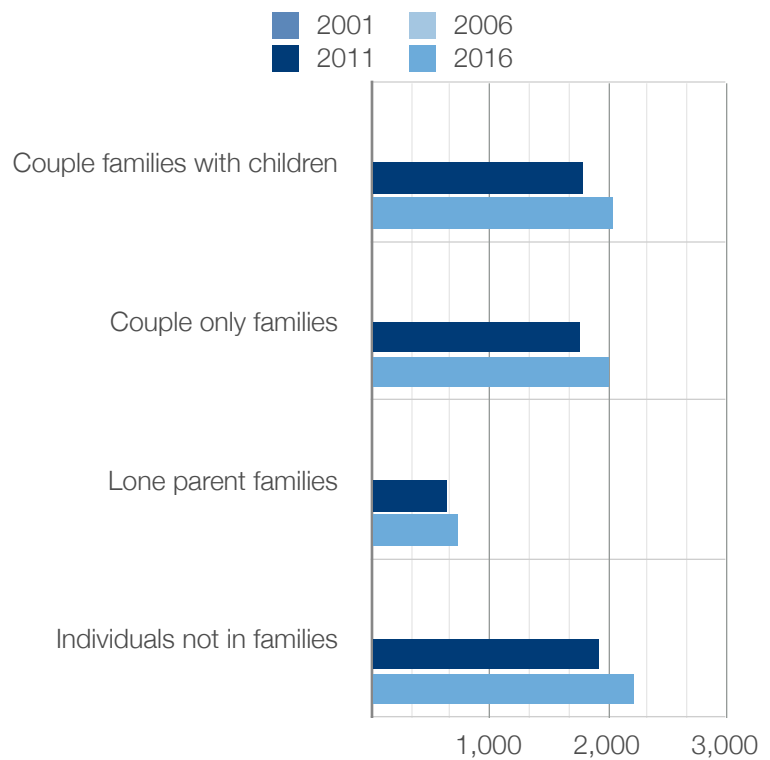
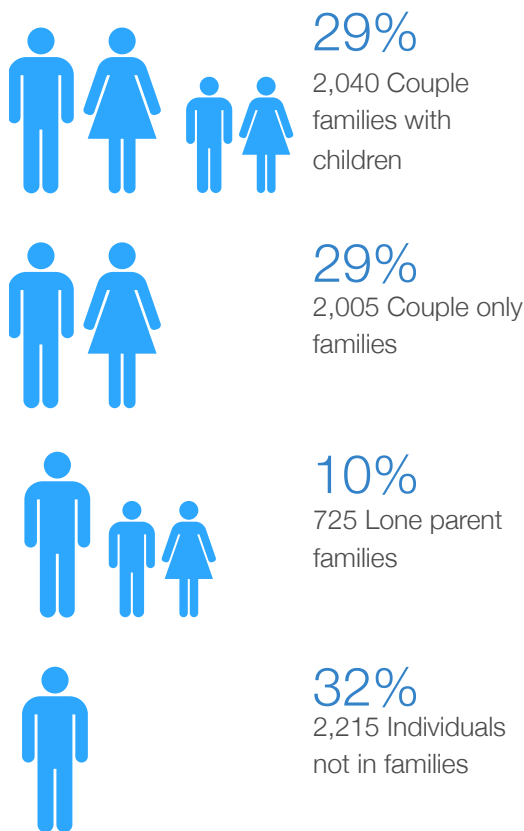
2.1.3. Family Composition

Statistics Canada defines families based on the relationships among the people who live in the household. The Economic Family Structure defines four family types as follows:

Individuals Not In Families (32%) is the largest family category in Stony Plain. Couples Families With Children and Couple Only Families both comprise 29% of all families. Lone Parent Families represent 10% of the Town’s families.

Between 2011 and 2016 Individuals Not In Families family group grew by 300 families, followed by Couple Families With Children and Couple Only Families which each grew by approximately 250 families.

Family Composition (2016)²



² Data for Family Composition is not available in 2001 and 2006.

2.2. Labour Force

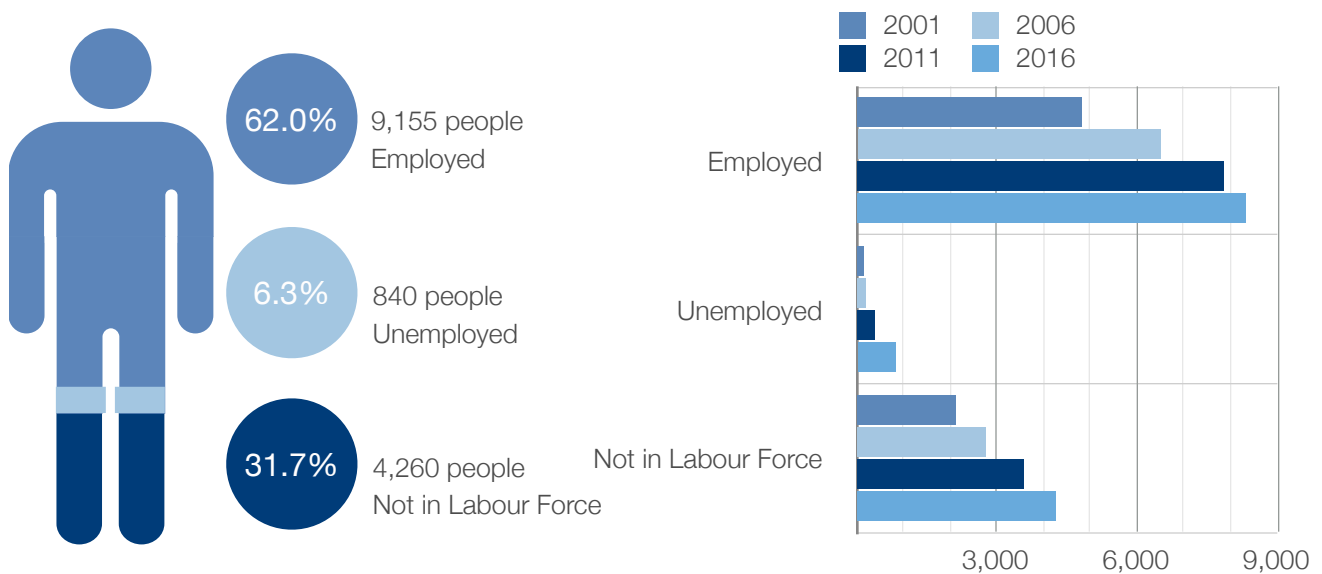
The Working Age Population is defined as those persons aged 15 years and older. The Labour Force is a subset of the Working Age Population, and is defined as persons having a job or business and unemployed persons who are available for work and are actively seeking employment. Those deemed to be Not In The Labour Force represent the rest of the Working Age Population.³

2.2.1. Working Age Population

Stony Plain’s Working Age Population has grown faster than the Town’s population. In 2001 Stony Plain had a Working Age Population of under 7,200, which has grown to over 13,400 in 2016. The average annual rate of growth has been 4.3% over this 15 year period. Over the same time, the Edmonton Metropolitan Region Working Age Population grew by 2.4%.

In 2016, approximately 62% of the Town’s Working Age Population was employed with 6.3% unemployed. The remaining 32% were deemed to be Not In The Labour Force.

Working Age Population (2016)



³ Those Not In The Labour Force were either unwilling or unable to offer or supply labour services under conditions existing in their labour markets.

2.2.2. Labour Force by Gender

In 2016, the Labour Force in Stony Plain was comprised of 54% men and 46% women. These rates have been stable since 2001. This compares to 53% men and 47% women in the Edmonton CMA.

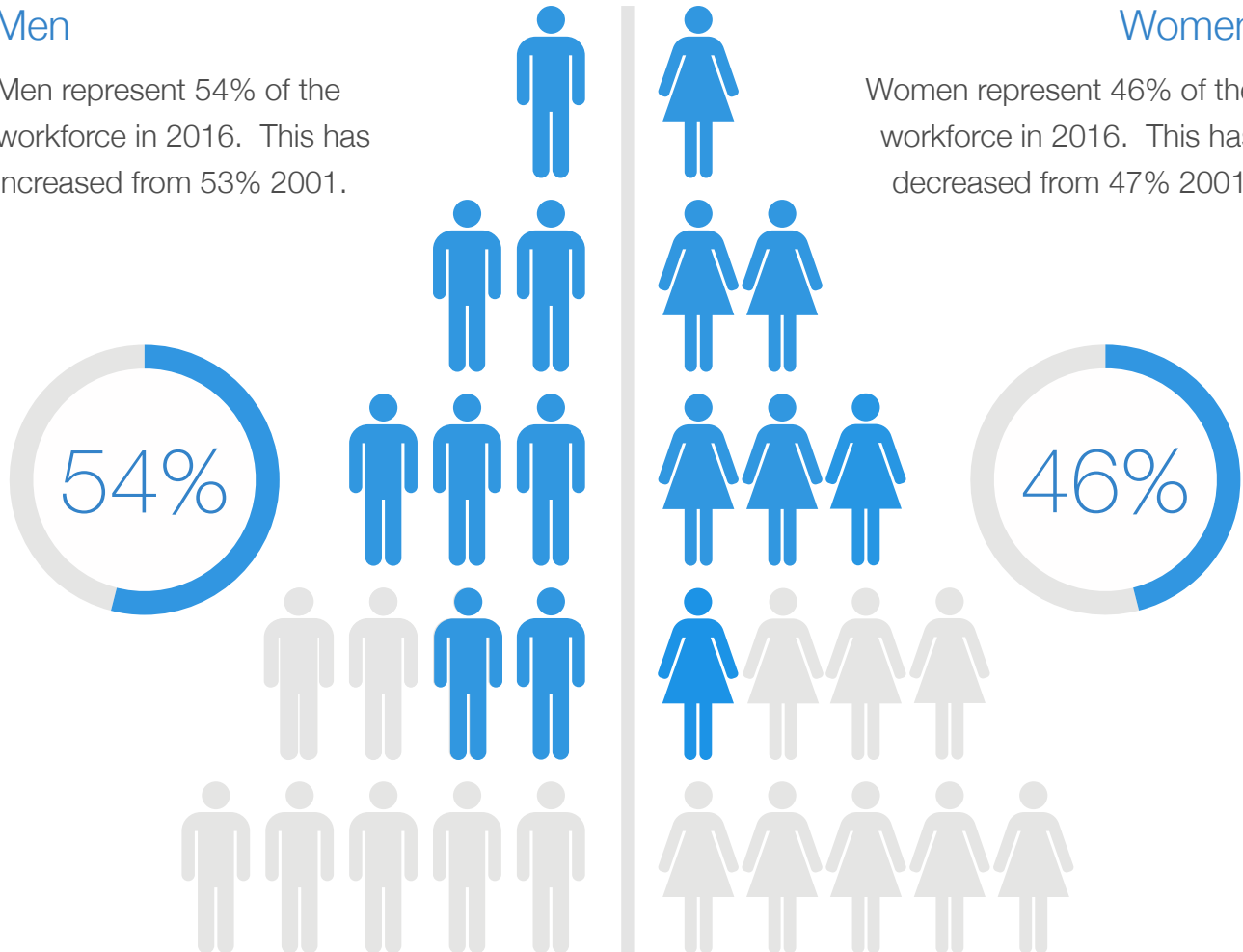
Labour Force by Gender (2016)

Men

Men represent 54% of the workforce in 2016. This has increased from 53% 2001.

Women

Women represent 46% of the workforce in 2016. This has decreased from 47% 2001.



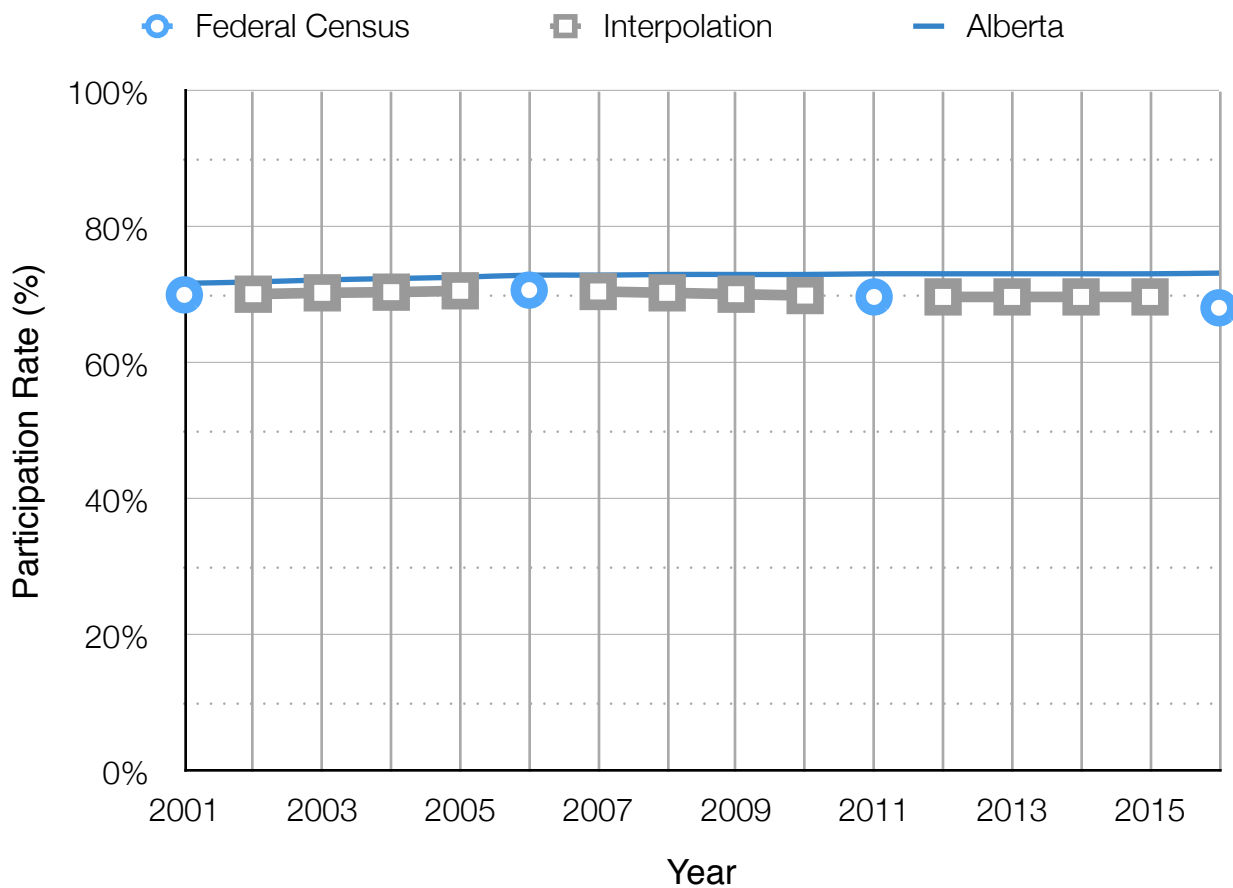
2.2.3. Labour Force Participation Rate

The Participation Rate measures the total Labour Force (comprised of those who are employed and unemployed) relative to the size of the Working Age Population.⁴

The Labour Force Participation Rate in Stony Plain has remained close to the 70% level through most of the period of analysis. This rate is consistently lower than the average for Alberta which has ranged between 72% and 74%.

Stony Plain's Labour Force Participation Rate had decreased to 68% by 2016 as a result of the economic downturn that resulted from the oil price drop beginning in the fall of 2014.

Labour Force Participation Rate (2001-2016)⁵



⁴ Federal Census data is available for 2001, 2006, 2011 and 2016. 2011 data is from the National Household Survey Community Profile data. All other data points have been estimated by Applications Management Consulting based on an analysis of regional labour market trends using Edmonton CMA Labour Force Survey Estimates for the period 2007 to 2016.

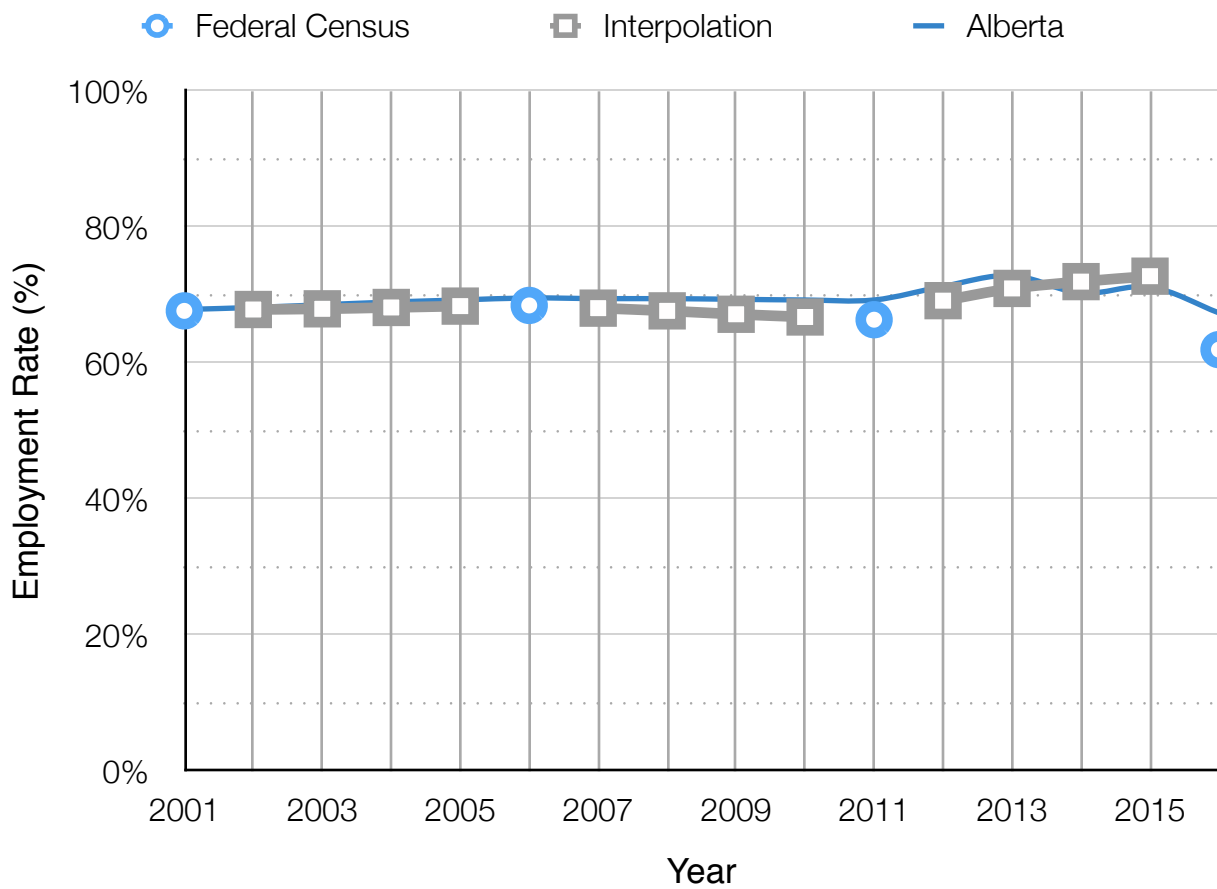
⁵ Data points between the Federal Census data are estimates provided by Applications Management Consulting Ltd.

2.2.4. Employment Rate

The Employment Rate refers to the number of workers employed expressed as a percentage of the total population 15 years of age and over.⁶

Between 2001 and 2011 the Employment Rate for Stony Plain hovered around 68% to 71%. It increased in 2012 and 2013 then fell to 62% in 2016 following the economic downturn. This recent decrease reflects the provincial trend as reported by the Labour Force Survey.

Employment Rate (2001-2016)⁷



⁶ Federal Census data is available for 2001, 2006, 2011 and 2016. 2011 data is from the National Household Survey Community Profile data. All other data points have been estimated by Applications Management Consulting based on an analysis of regional labour market trends using Edmonton CMA Labour Force Survey Estimates for the period 2007 to 2016.

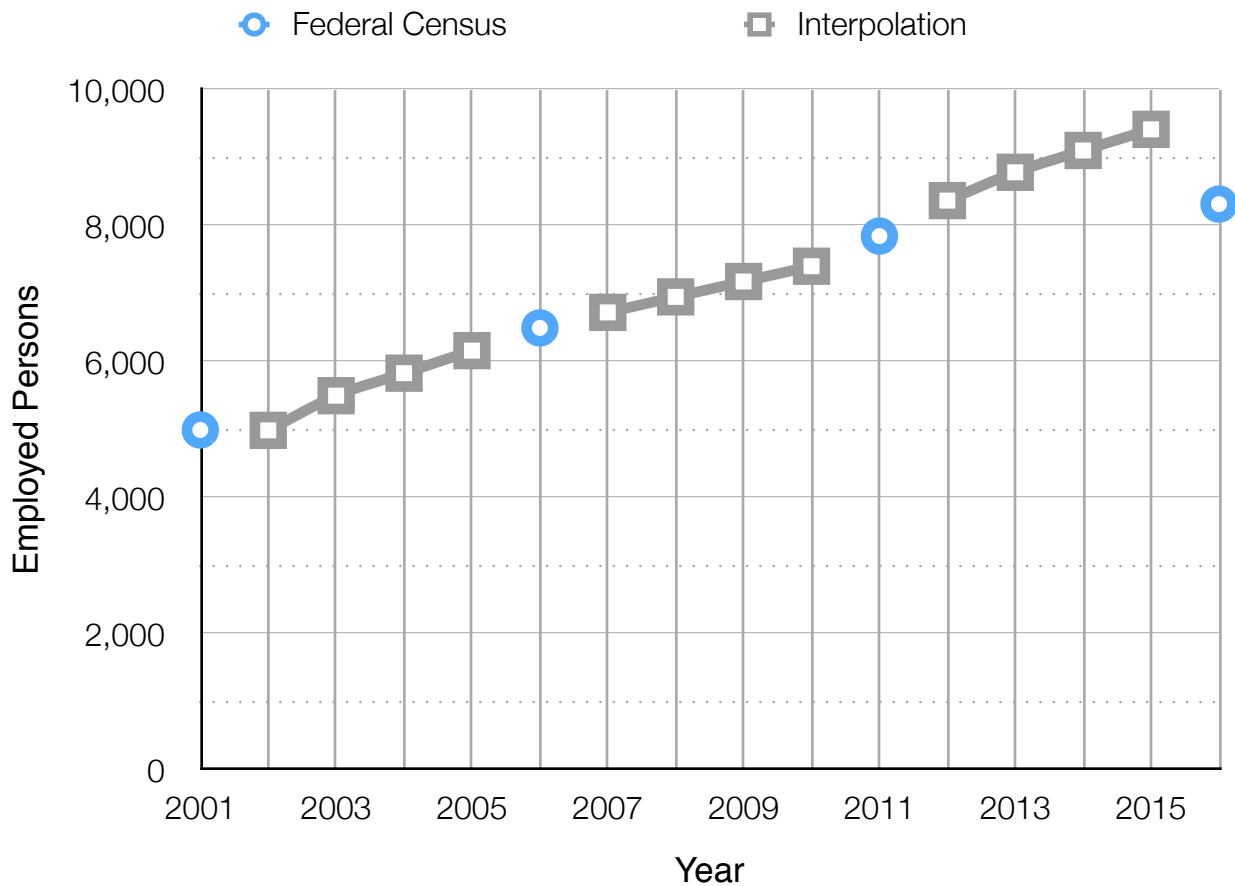
⁷ Data points between the Federal Census data are estimates provided by Applications Management Consulting Ltd.

2.2.5. Employment

Employment includes all persons working either full time or part time.⁸ In 2016, Stony Plain’s employment totalled 8,320.⁹

Stony Plain’s Employment has grown steadily since 2001 until the most recent economic downturn. Employment grew from almost 5,000 in 2001 to over 8,300 in 2016. The average annual rate of growth has been 3.7% over this 15 year period. Over the same time, the Edmonton Metropolitan Region labour force grew by 2.2%.

Employment Growth (2001-2016)¹⁰



⁸ Employment includes all persons doing any work at all at a job or business, that is, paid work in the context of an employer-employee relationship, or self-employment. It also includes unpaid family work, which is defined as unpaid work contributing directly to the operation of a farm, business or professional practice owned and operated by a related member of the same household.

⁹ Federal Census data is available for 2001, 2006, 2011 and 2016. 2011 data is from the National Household Survey Community Profile data. All other data points have been estimated by Applications Management Consulting based on an analysis of regional labour market trends using Edmonton CMA Labour Force Survey Estimates for the period 2007 to 2016.

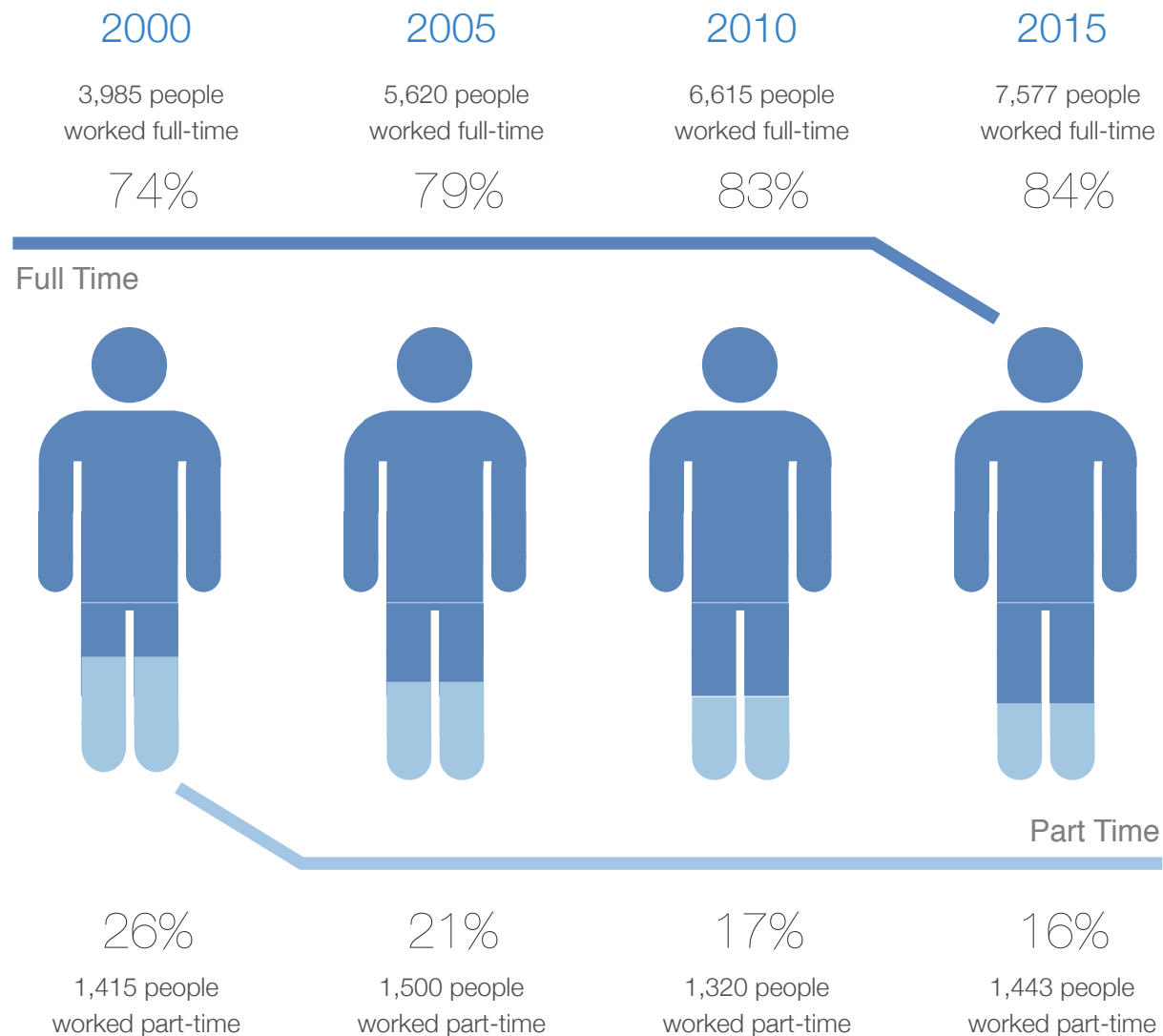
¹⁰ Data points between the Federal Census data are estimates provided by Applications Management Consulting Ltd.

2.2.6. Full Time / Part Time Employment

Full-time employment consists of people who usually work 30 hours or more per week at their main or only job. Part-time employment consists of people who usually work less than 30 hours per week at their main or only job.

The proportion of Stony Plain’s total employment that is Full Time increased from 74% in 2000 to 84% in 2015.

Full Time / Part Time Employment (2000-2015)¹¹



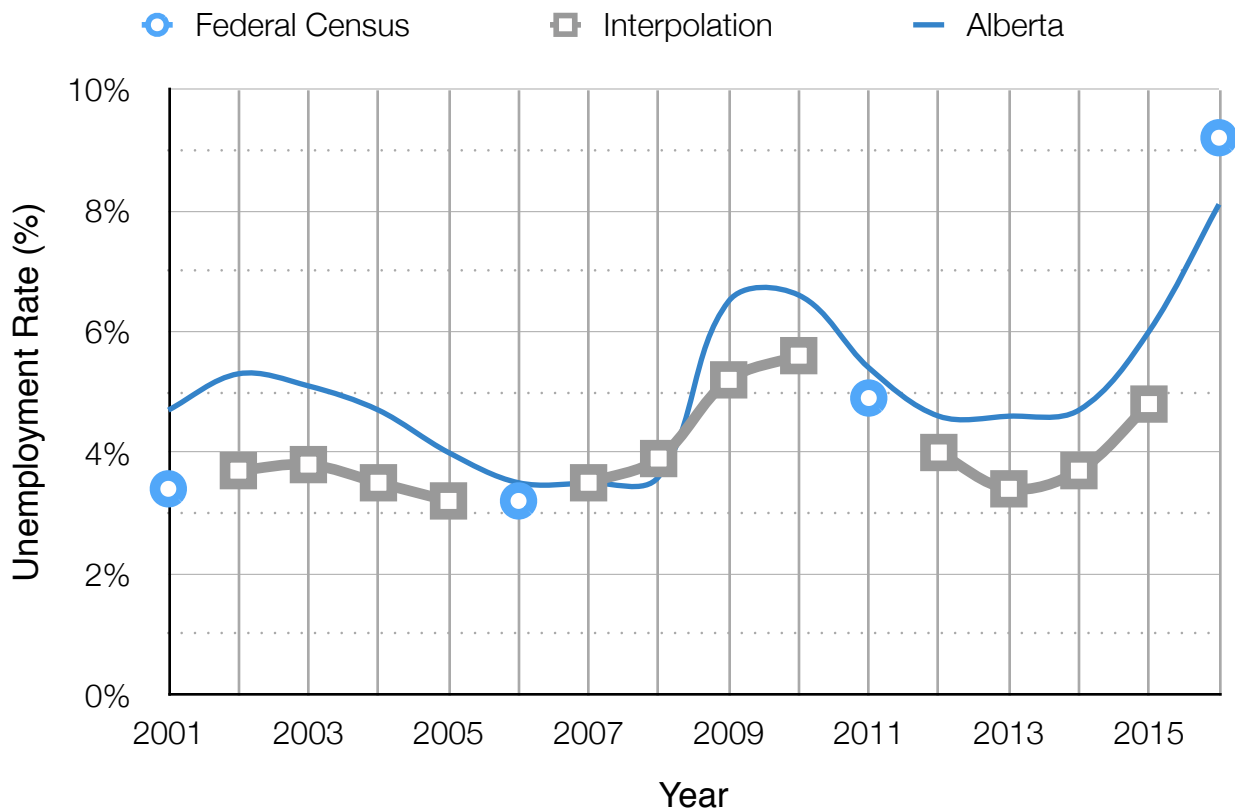
¹¹ Federal Census data is available for 2000, 2005, 2010 and 2015. 2010 data is from the National Household Survey Community Profile data. For the Federal Census, the reference year for full time / part time data is the previous calendar year. Federal Census data for 2015 is currently available for Edmonton CMA and Alberta. Stony Plain data for 2015 has been estimated by Applications Management Consulting Ltd.

2.2.7. Unemployment Rate

The Unemployment Rate refers to the number of workers employed expressed as a percentage of the total population 15 years of age and over. Stony Plain’s unemployment rate was 9.2% in 2016.¹²

The Unemployment Rate for Stony Plain has been estimated to track below the rate for the province over most of the period of analysis. Between 2001 and 2008 unemployment was below 4%. Following the economic downturn brought about by the worldwide financial crisis, the Unemployment Rate in Stony Plain climbed to over 5%. Provincial and regional economic growth resulted in another decline in the unemployment rate to an estimated 3.5% in 2013. Most recently, the economic downturn resulting from a significant decline in energy prices has pushed the local Unemployment Rate above 9% in 2016.

Unemployment Rate (2001-2016)¹³



¹² Federal Census data is available for 2001, 2006, 2011 and 2016. 2011 data is from the National Household Survey Community Profile data. All other data points have been estimated by Applications Management Consulting based on an analysis of regional labour market trends using Edmonton CMA Labour Force Survey Estimates for the period 2007 to 2016.

¹³ Data points between the Federal Census data are estimates provided by Applications Management Consulting Ltd.

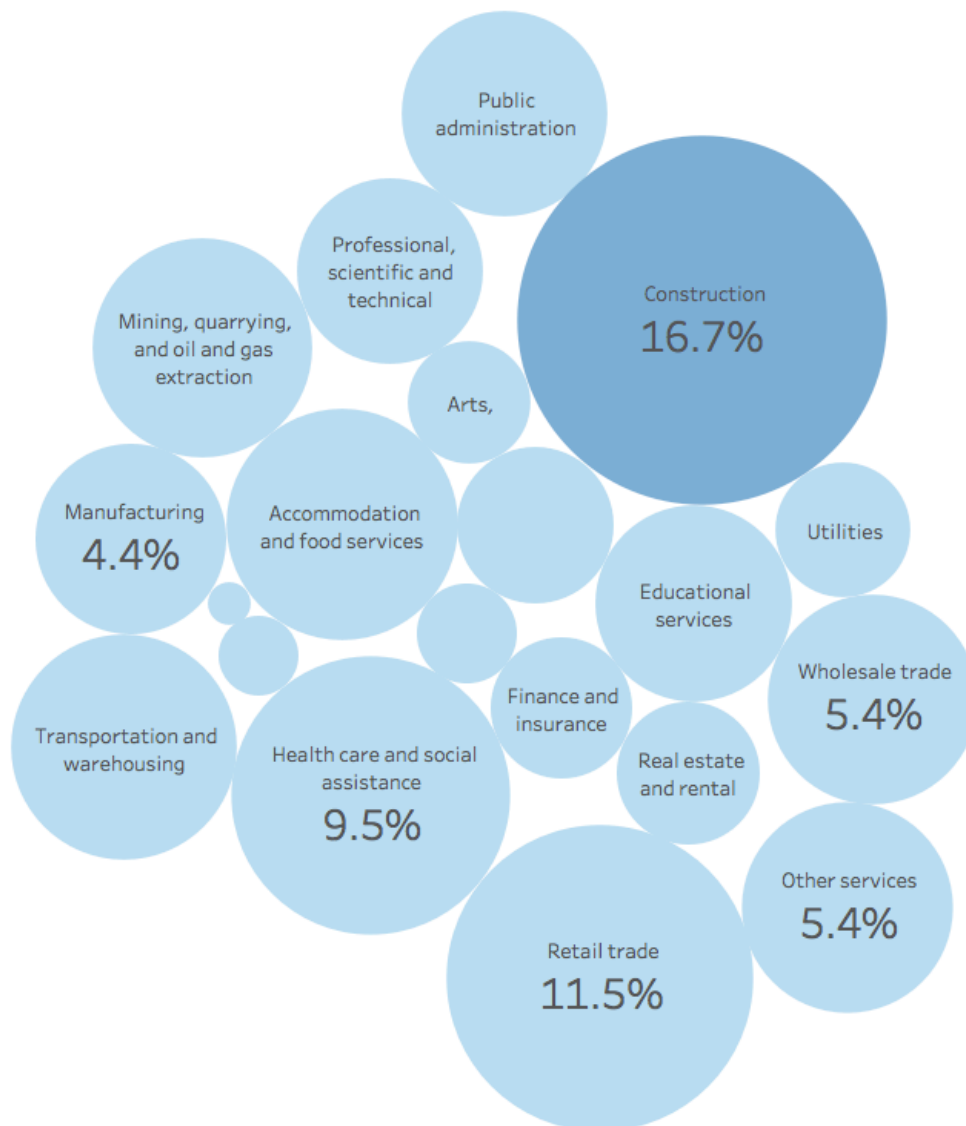
2.3. Employment by Industry

This section defines the industry sectors that Stony Plain residents are employed.

2.3.1. Industry (2 digit NAICS)

More employed Stony Plain residents work in the Construction sector than any other at almost 17% of total employment. This is followed by Retail trade and Health care and social assistance representing 11.5% and 9.5% of total employment respectively.¹⁴

Employment by Industry (2016)



¹⁴ NAICS (North America Industrial Classification System) is a standardized way of classifying employment establishments for the purpose of collecting, analyzing, and publishing statistical data related to the economy and labour force. <http://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=118464>

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The Construction sector exhibited the largest growth in employment among Stony Plain workers since 2001, adding almost 1,000 jobs over the past 15 years. Retail trade added 470 jobs over the same period.

Employment by Industry 2001-2016 (2 digit NAICS)¹⁵

Industry	2001	2006	2011	2016	
	#	#	#	#	%
11 Agriculture, forestry, fishing and hunting	50	59	80	110	1.2%
21 Mining, quarrying, and oil and gas extraction	210	406	550	530	5.9%
22 Utilities	210	200	270	200	2.2%
23 Construction	510	830	1,130	1,505	16.7%
31-33 Manufacturing	320	560	560	400	4.4%
41 Wholesale trade	215	415	500	485	5.4%
44-45 Retail trade	565	740	885	1,035	11.5%
48-49 Transportation and warehousing	350	350	350	560	6.2%
51 Information and cultural industries	85	130	130	70	0.8%
52 Finance and insurance	155	254	330	220	2.4%
53 Real estate and rental and leasing	50	116	150	225	2.5%
54 Professional, scientific and technical services	230	305	305	380	4.2%
55 Management of companies and enterprises	0	0	0	20	0.2%
56 Administrative and support, waste management and remediation services	130	195	195	270	3.0%
61 Educational services	355	360	520	425	4.7%
62 Health care and social assistance	515	625	835	855	9.5%
71 Arts, entertainment and recreation	65	106	125	165	1.8%
72 Accommodation and food services	340	330	390	590	6.6%
81 Other services (except public administration)	335	296	350	490	5.4%
91 Public administration	275	414	490	465	5.2%
Total	4,965	6,691	8,145	9,000	100.0%

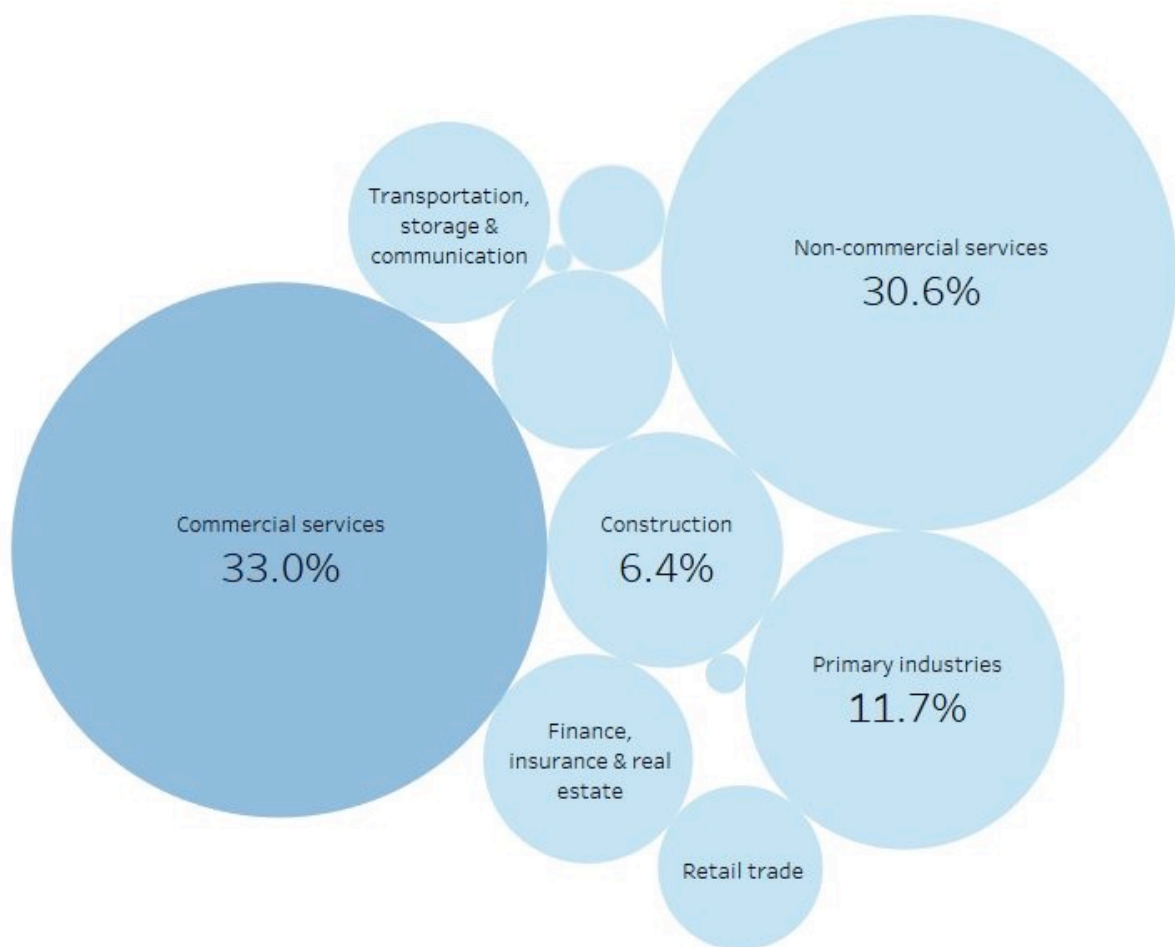
¹⁵ 2006 data estimated by Applications Management Consulting Ltd.

2.3.2. Work at Home by Major Industry

A work from home or work at home arrangement involves working from home and differs from the teleworking/telecommuting arrangement in that it does not require that the employee stay electronically connected to the work location during business hours.

Based on regional population and employment forecasts completed by Applications Management Consulting, the number of Work At Home workers by industry have been estimated. In 2016, it is estimated that Commercial services represented the largest proportion of Work At Home workers at just over 33% of the total. Non-commercial services was the second largest category representing 31% of all Work At Home activity in Stony Plain.

Work At Home (2016)¹⁶



¹⁶ Work At Home data from regional population and employment forecasts completed by Applications Management Consulting Ltd.

Tri-Municipal Region: Labour Market Profile - Stony Plain Municipal Report

The number of Stony Plain residents working at home has increased somewhat since 2006. Most of this growth is in Commercial and Non-commercial services sectors, which together represent over half of all Work At Home activity in Stony Plain.

Work at Home by Major Industry (2001-2016)¹⁷

Industry	2001	2006	2011	2016	
	#	#	#	#	%
Primary industries (Note 1)		13		25	11.6%
Manufacturing (NAICS 31-33)		0		8	3.7%
Construction (NAICS 23)		1		14	6.5%
Utilities (NAICS 22)		0		0	0.0%
Transportation, storage and communication (Note 2)		21		10	4.7%
Wholesale trade (NAICS 42)		16		3	1.4%
Retail trade (NAICS 44-45)		13		7	3.3%
Finance, insurance and real estate (Note 3)		11		11	5.1%
Commercial services (Note 4)		65		71	33.0%
Non-commercial services (Note 5)		38		66	30.7%
Public administration (NAICS 92)		1		0	0.0%
Total	N/A	179	N/A	215	100.0%

Notes:

(1) Includes Agriculture, forestry, fishing and hunting (NAICS 11) and Mining (NAICS 21)

(2) Includes Transportation and warehousing (NAICS 48-49) and Information (NAICS 51)

(3) Includes Finance and insurance (NAICS 53) and Real estate, rental and leasing (NAICS 53)

(4) Includes Professional, scientific and technical services (NAICS 54), Management of companies and enterprises (NAICS 55), Administrative support, waste management and remediation services (NAICS 56), Arts, entertainment and recreation (NAICS 71), Accommodation and food services (NAICS 81), and Other services (NAICS 81)

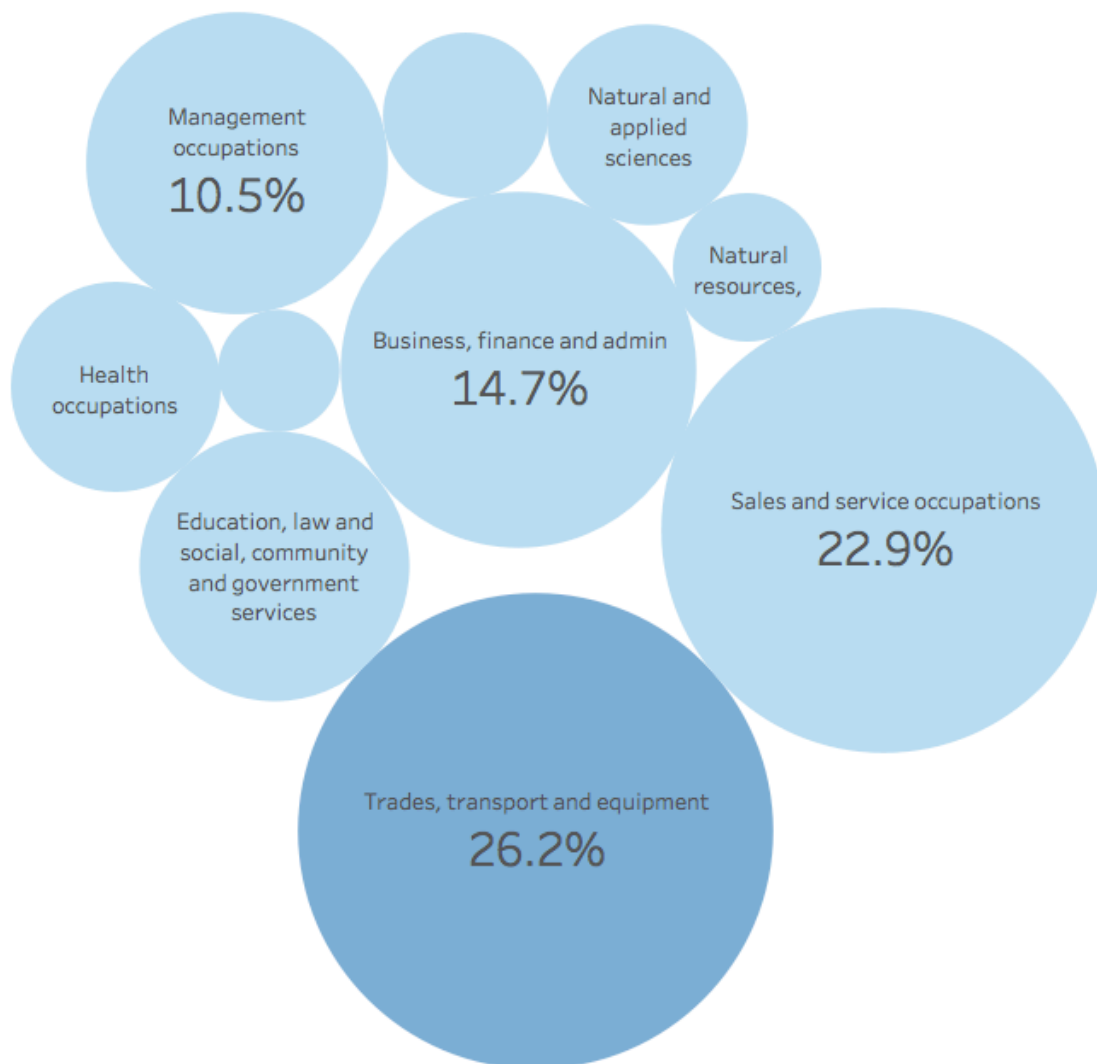
(5) Includes Education services (NAICS 61) and Health care and social assistance (NAICS 62)

¹⁷ Work At Home data is not available for 2001 or 2011.

2.4. Employment by Occupation

The majority of employed Stony Plain residents work in four Major Occupation groups, including Trades, transport and equipment operators (26%); Sales and service (23%); Business, finance and administration (15%) and Management (11%). The remaining Major Occupation categories comprise 25% of the workforce.

Employment by Major Occupation (2016)



2.4.1. Major Occupation (1 digit NOC)¹⁸

Employment among Stony Plain workers has increased significantly between 2001 and 2016 in all Major Occupation groups except for Natural resources, agriculture and related production occupations and Occupations in art, culture, recreation and sport.

Trades, transport and equipment operators and related occupations exhibited the largest growth in employment among Stony Plain workers since 2001, adding over 1,200 jobs over the past 15 years. Sales and service occupations added the second highest job totals in the Town between 2001 and 2016 with almost 900 jobs.

Employment by Major Occupation 2001-2016 (1 digit NOC)

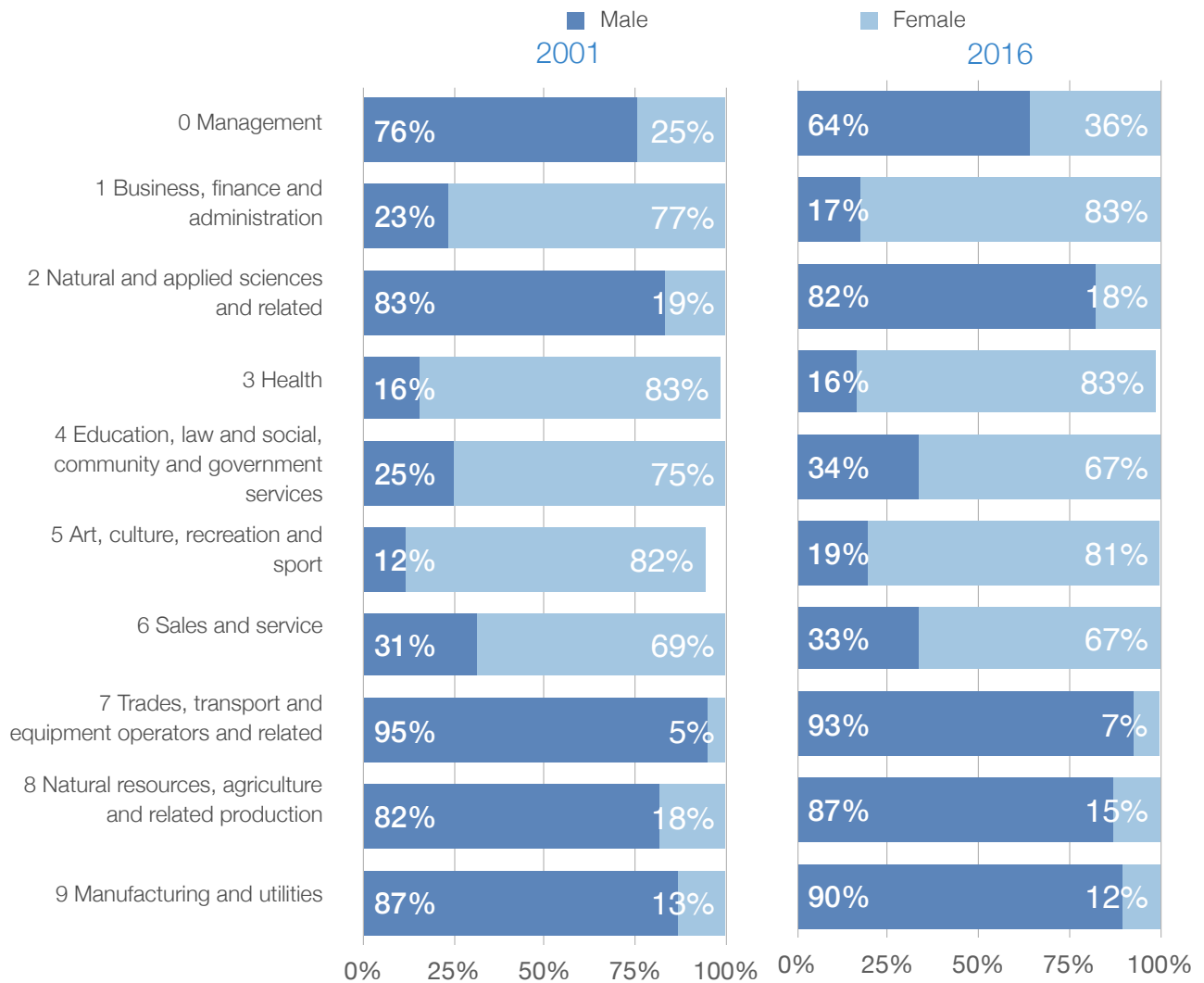
Occupation	2001	2006	2011	2016	
	#	#	#	#	%
0 Management occupations	490	740	780	950	10.5%
1 Business, finance and administration occupations	855	1,190	1,330	1,320	14.7%
2 Natural and applied sciences and related occupations	235	285	295	420	4.7%
3 Health occupations	320	375	515	460	5.1%
4 Occupations in education, law and social, community and government services	320	490	725	760	8.4%
5 Occupations in art, culture, recreation and sport	85	115	155	155	1.7%
6 Sales and service occupations	1,180	1,495	1,655	2,065	22.9%
7 Trades, transport and equipment operators and related occupations	1,150	1,615	2,160	2,360	26.2%
8 Natural resources, agriculture and related production occupations	190	225	170	230	2.6%
9 Occupations in manufacturing and utilities	150	165	380	285	3.2%
Total	4,975	6,695	8,165	9,005	100.0%

¹⁸ National Occupation Classification (NOC) is a system to classify jobs. Classification definitions are available at: <http://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=314243>

2.4.2. Major Occupation by Gender (1 digit NOC)

Gender equality in the workforce in Stony Plain generally has not changed between 2001 and 2016. However, there have been some significant shifts in the proportion of men and women working in some Major Occupation groups. The proportion of women has increased in three Major Occupation groups, including: Management; Business, finance and administration; and Trades, transport and equipment operators. The proportion of men has increased in six Major Occupation groups.

Employment by Major Occupation by Gender 2001-2016 (1 digit NOC)



Employment by Major Occupation by Gender 2001-2016 (1 digit NOC)

Occupation	2001		2016			
	Male	Female	Male		Female	
	#	#	#	%	#	%
0 Management occupations	370	120	610	64%	340	36%
1 Business, finance and administration occupations	200	655	230	17%	1,095	83%
2 Natural and applied sciences and related occupations	195	45	345	82%	75	18%
3 Health occupations	50	265	75	16%	380	84%
4 Occupations in education, law and social, community and government services	80	240	255	33%	510	67%
5 Occupations in art, culture, recreation and sport	10	70	30	19%	125	81%
6 Sales and service occupations	370	815	690	33%	1,380	67%
7 Trades, transport and equipment operators and related occupations	1,090	60	2,185	93%	170	7%
8 Natural resources, agriculture and related production occupations	155	35	200	85%	35	15%
9 Occupations in manufacturing and utilities	130	20	255	88%	35	12%
Total	2,650	2,325	4,875	54%	4,145	46%

2.4.3. Detailed Occupation (4 digit NOC)¹⁹

Employment by occupation has been estimated for workers living in Stony Plain. The top 20 most popular occupations for 2016 are listed in the table below. In addition, the rank of each top 20 2016 occupation and number of Stony Plain residents employed in that occupation has been provided for 2001.

There have been some significant shifts in the top occupations of Stony Plain residents. Most notably, Construction managers (NOC 0711), Carpenters (NOC 7271) and Cooks (NOC 6322) were not in the top 20 occupations in 2001. Retail salespersons (NOC 6421) and Retail and wholesale trade managers (NOC 0621) were the number 1 and 2 occupations in both 2001 and 2016.

¹⁹ Detailed occupation (4 digit NOC) data has been estimated by Applications Management Consulting Ltd. National Occupation Classification (NOC) is a system to classify jobs. Classification definitions are available at: <http://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=314243>

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Three of the occupations that grew the most over their position in 2001 were in the trades: Carpenters (NOC 7271) and Electricians (NOC 7241) each rose 11 positions (from 23 in 2001 to 12 in 2016 and from 19 to 8 respectively); and Construction trades helpers and labourers rose 8 positions (from 15 to 7).

Top 20 Occupations - 2016 Rank (4 digit NOC)

Rank		Occupation	2001	2016	Change
2001	2016				
1	1	6421 Retail salespersons	183	366	183
2	2	0621 Retail and wholesale trade managers	99	196	97
5	3	+2 7511 Transport truck drivers	88	173	85
4	4	6711 Food counter attendants, kitchen helpers and related support occupations	89	172	83
9	5	+4 6611 Cashiers	77	152	75
3	6	-3 3012 Registered nurses and registered psychiatric nurses	97	148	51
15	7	+8 7611 Construction trades helpers and labourers	53	139	86
19	8	+11 7241 Electricians (except industrial and power system)	49	138	89
8	9	-1 1221 Administrative officers	77	133	56
6	10	-4 1241 Administrative assistants	80	132	52
7	11	-4 1411 General office support workers	79	129	50
23	12	+11 7271 Carpenters	45	127	82
14	13	+1 6513 Food and beverage servers	54	108	54
12	14	-2 7237 Welders and related machine operators	59	105	46
13	15	-3 7452 Material handlers	54	100	46
32	16	+16 0711 Construction managers	36	100	64
11	17	-6 1111 Financial auditors and accountants	59	97	38
22	18	+4 6322 Cooks	47	91	44
20	19	+1 6731 Light duty cleaners	49	87	38
18	20	-2 1414 Receptionists	49	84	35

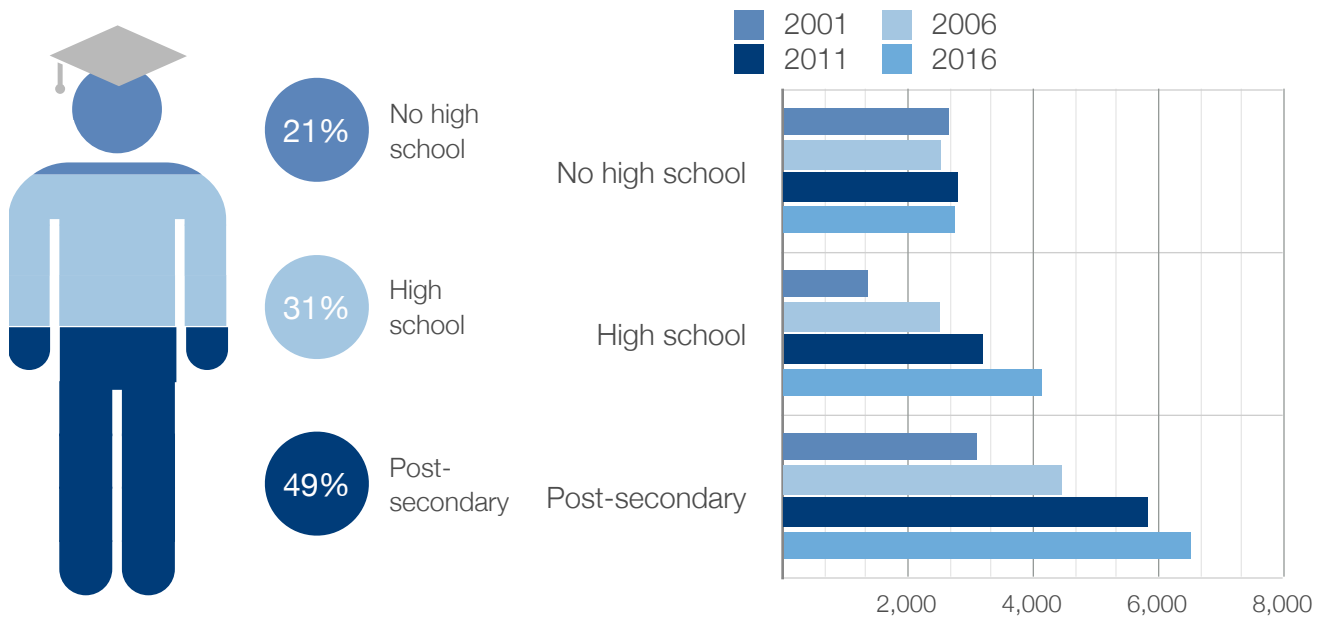
2.5. Labour Supply

The workforce living in Stony Plain has been evaluated across a variety of parameters, including education attainment, skill levels, work to home trips and available workers in traditional underemployed worker categories.

2.5.1. Highest Level of Educational Attainment Overview

The workforce in Stony Plain has seen an increase in the proportion of the workforce having completed High School and Post Secondary education. The most significant increase has been in Post Secondary education attainment, with the total number of workers in this category having more than doubled between 2001 and 2016. The number of workers in Stony Plain who have not completed High School has remained relatively constant between 2001 and 2016, while the local workforce has grown significantly.

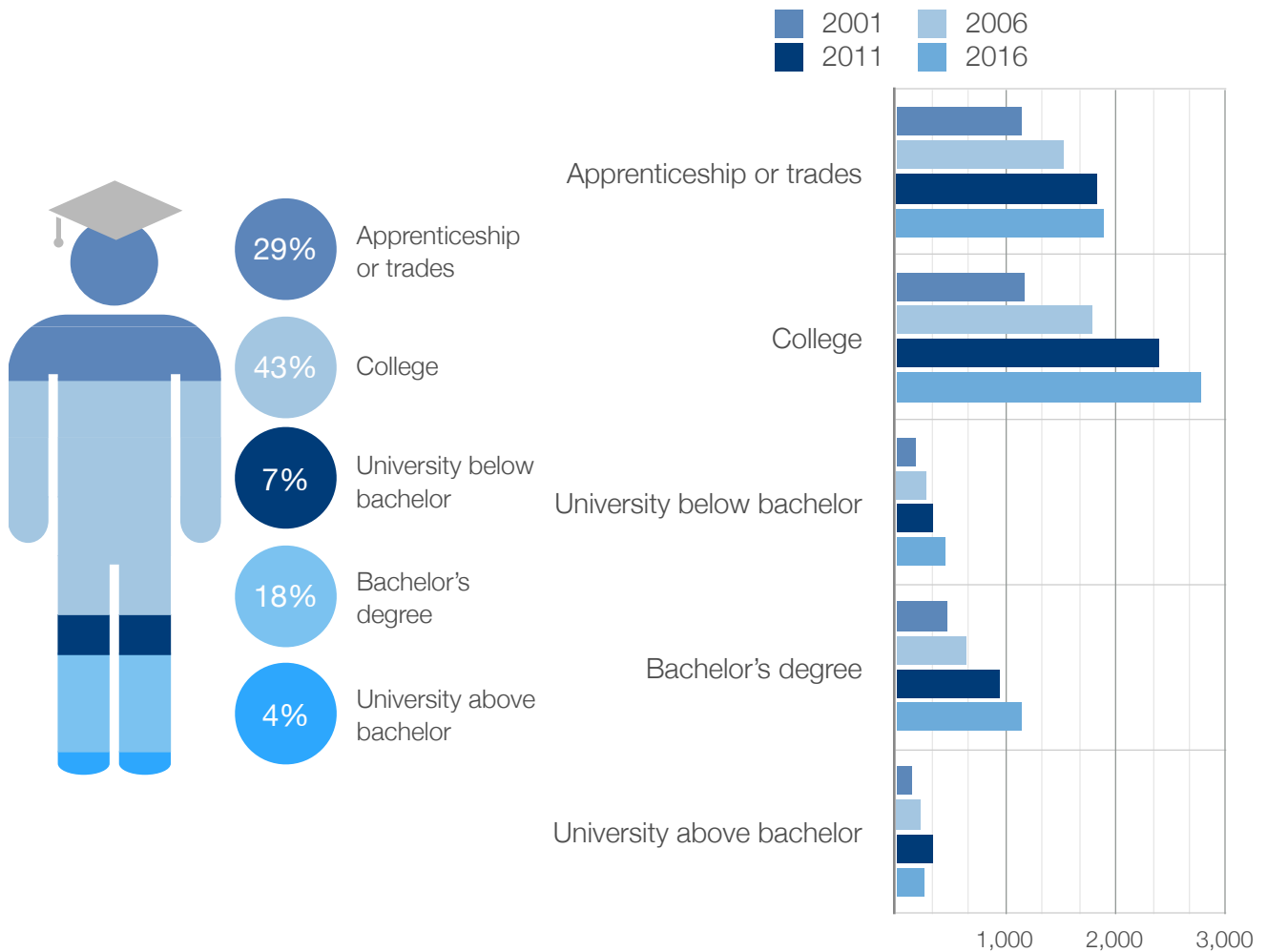
Highest Level of Educational Attainment Overview (2016)



2.5.2. Post Secondary Education

The Highest Level of Education Attainment is greatest for College graduates (43%) and Apprenticeships or trades (29%) for those with some Post Secondary education. All categories of Post Secondary education have increased between 2001 and 2016, with College and Bachelor's degree showing the greatest year over year change.

Post-Secondary Breakdown (2016)



2.5.3. Post Secondary Field of Study

The most common Field of Study is Architecture, engineering and related technologies representing approximately one-third of the total workforce with Post Secondary education living in Stony Plain. Business, management and public administration and Health and related fields are the second and third most popular Field of Study, with approximately 1,000 persons each.

Post Secondary Field of Study (2001-2016)

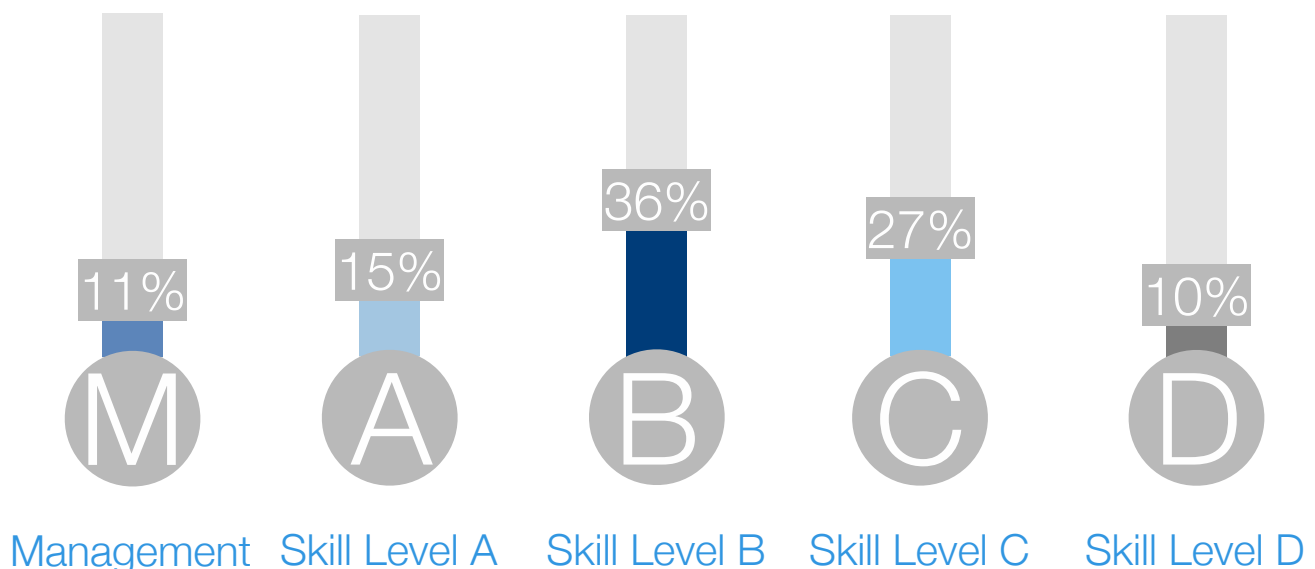
Field of Study	2001	2006	2011	2016
Education		405	550	525
Visual and performing arts; and communications technologies	25	110	160	170
Humanities	55	135	155	145
Social and behavioural sciences and law	75	210	350	420
Business; management and public administration	160	775	1,005	1,180
Physical and life sciences and technologies		85	75	120
Mathematics; computer and information sciences		130	115	120
Architecture; engineering; and related technologies		1,445	1,830	2,155
Agriculture; natural resources and conservation		80	60	110
Health and related fields	65	690	980	1,050
Personal; protective and transportation services		390	550	515
Other fields of study		0	0	0
Uncategorized (Note 1)	1,200			
Total	1,580	4,455	5,830	6,510

(1) 2001 Census data used different Field of Study categories. Where the categories matched subsequent Census data the 2001 data is reported in that category. Where it did not match, the 2001 data has been summed in the uncategorized field.

2.5.4. Skill Levels

Skill levels have been developed jointly by Statistics Canada and Human Resources and Skills Development Canada for each detailed occupation. Skill levels consider the amount and type of education and training required to enter and perform the duties of each occupation. As well, determining skill level considers the experience required to be qualified to undertake the complexity and responsibilities typical of the occupation. The largest component of the Stony Plain workforce is employed in occupations that require some post secondary or college education (Skill Level B: 36%). This is followed by occupations which require high school (Skill Level C: 27%).

Skill Levels (2016)²⁰



Notes:
Management: This skill type category contains legislators, senior management occupations and middle management occupations. While management occupations are defined as a skill type, they are also found throughout all other skill type areas of the classification.
Skill Level A: Requires a university degree (bachelor's, master's or doctorate).
Skill Level B: Requires two to three years of post-secondary education at community college, institute of technology or CÉGEP or two to five years of apprenticeship training or three to four years of secondary school and more than two years of on-the-job training, occupation-specific training courses or specific work experience. Occupations with supervisory responsibilities are also assigned to skill level B. Occupations with significant health and safety responsibilities (e.g., fire fighters, police officers and licensed practical nurses) are assigned to skill level B.
Skill Level C: Requires completion of secondary school and some short-duration courses or training specific to the occupation or some secondary school education, with up to two years of on-the-job training, training courses or specific work experience.
Skill Level D: No formal educational requirements. Involves short work demonstration or on-the-job training.

²⁰ Skill levels data estimated by Applications Management Consulting Ltd.

2.5.5. Work to Home by Municipality Overview

Approximately 71% of the Stony Plain workforce commutes to work in another municipality (2016). This includes 33% of the local workforce commuting to Edmonton. The other main destinations for Stony Plain residents are Spruce Grove and Parkland County.

About two-thirds of the jobs in Stony Plain are held by workers living in other municipalities (66%). Of these workers, most come from Parkland County, Spruce Grove and Edmonton. Approximately 34% of the local jobs in Stony Plain are held by residents of the Town.

Stony Plain Work to Home (2016)



2.5.6. Work to Home by Municipality

The proportion of the Stony Plain workforce working in the Town has declined between 2001 and 2016 from 34% to 29%. The proportion of the local workforce commuting to Edmonton has decreased somewhat from 37% in 2001 to 33% in 2016.

Where Stony Plain Residents Work (2001-2016)

Live in Stony Plain ---> Work in _____	2001	2006	2011	2016
Edmonton	1,335	1,720	2,515	2,010
Stony Plain	1,210	1,285	1,245	1,740
Spruce Grove	565	890	985	1,030
Parkland County	310	405	610	785
Leduc County	100	50	225	115
St. Albert	20	55	85	115
Strathcona County	20	75	40	100
Wood Buffalo	25	80	165	85
Sturgeon County				45
Onoway	25	25	40	30
Redwater				30
Edson				20
Beaumont			50	
Leduc		75	25	
Calmar			20	
Devon			20	
Total	3,610	4,660	6,025	6,105

Tri-Municipal Region: Labour Market Profile - Stony Plain Municipal Report

The proportion of Stony Plain's workforce filling local jobs has remained relatively the same over the period 2001 to 2016, at 34%. Local jobs in Stony Plain are generally being filled by Tri-Municipal workers, where the proportion of workers commuting the Stony Plain to work as a share of total jobs in the Town has declined over the period of analysis, from 81% to 77%. The number of local jobs filled by residents of Edmonton has increased from 11% in 2001 to 13% in 2016.







Where Stony Plain Workers Live (2001-2016)

Work in Stony Plain ---> Live in _____	2001	2006	2011	2016
Stony Plain	1,210	1,285	1,245	1,740
Parkland County	1,110	1,075	1,250	1,155
Spruce Grove	570	530	720	995
Edmonton	405	500	545	670
Lac Ste. Anne County	75	135	75	195
St. Albert	95	45	90	85
Spring Lake	50	35	30	65
Sturgeon County	25		40	40
Strathcona County	20	25		40
Wabamun		20		35
Devon	30	30		20
Fort Saskatchewan				20
Leduc				20
Total	3,590	3,680	3,995	5,080

2.5.7. Work to Home by Mode of Commuting

Mode of Commuting on work to home trips has been essentially constant between 2001 and 2016. Auto drivers is the dominant mode representing 87% of all work to home trips.

Work to Home Mode of Commuting (2001-2016)²¹

	2001*	2006*	2011	2016
DRIVER 	87%	87%	87%	87%
PASSENGER 	7%	8%	7%	5%
WALKING 	4%	4%	3%	4%
TRANSIT 	0%	1%	2%	1%
CYCLING 	0%	0%	0%	1%
OTHER 	2%	1%	1%	2%

²¹ In the Federal Census 2001 and 2006 walking and cycling were combined.

2.5.8. Local Labour Market Gap

Stony Plain has a Labour Market Gap measured as the difference between the number of workers in the local labour force compared to the local jobs. Overall this gap is estimated at approximately 2,200 jobs in 2016. This represents 32% of the local jobs market.

Labour Market Gap (2016)²²

Industry	Jobs	Workers	Gap	%
11 Agriculture, forestry, fishing and hunting	25	110	-85	-340%
21 Mining, quarrying, and oil and gas extraction	203	530	-327	-161%
22 Utilities	114	200	-86	-75%
23 Construction	665	1,505	-840	-126%
31-33 Manufacturing	162	400	-238	-147%
41 Wholesale trade	88	485	-397	-451%
44-45 Retail trade	564	1,035	-471	-84%
48-49 Transportation and warehousing	190	560	-370	-195%
51 Information and cultural industries	164	70	94	57%
52 Finance and insurance	263	220	43	16%
53 Real estate and rental and leasing	144	225	-81	-56%
54 Professional, scientific and technical services	555	380	175	32%
55 Management of companies and enterprises	4	20	-16	-400%
56 Administrative and support, waste management and remediation services	196	270	-74	-38%
61 Educational services	739	425	314	42%
62 Health care and social assistance	1,125	855	270	24%
71 Arts, entertainment and recreation	80	165	-85	-106%
72 Accommodation and food services	370	590	-220	-59%
81 Other services (except public administration)	504	490	14	3%
91 Public administration	672	465	207	31%
Total	6,827	9,000	-2,173	-32%

²² Jobs in Stony Plain by industry (2 digit NAICS) is based on work completed by Applications Management Consulting Ltd.

2.5.9. Underemployed Labour Resources

It is generally acknowledged that some segments of the labour force remain underemployed as compared to the general population of workers.²³

- ▶ **Aboriginal:** Indigenous people living off-reserve have significantly higher rates of unemployment than the general work force. In 2016, the Alberta unemployment rate for Indigenous men was 15.0% compared to the provincial rate for men at 8.9%. Indigenous women had an unemployment rate of 12.5% compared to 7.3% for Alberta women.
- ▶ **Youth:** Young adults (age 15-24 years) in the workforce also had significantly higher unemployment rates than the average for Alberta men and women, 14.2% and 11.8% respectively.
- ▶ **Mature:** Mature workers (age 55-64) had higher unemployment rates, averaging 0.5% higher than the average for the workforce as a whole.
- ▶ **New Immigrants:**²⁴ The unemployment rate for new immigrants was significantly higher than the average for the general workforce in Alberta, almost 5.0% higher than the provincial average.²⁵

Based on the demographic composition of Stony Plain in 2016, the number of underemployed labour resources associated with the noted groups represents approximately 192 workers, or 23% of the number of unemployed persons in the Town in 2016.

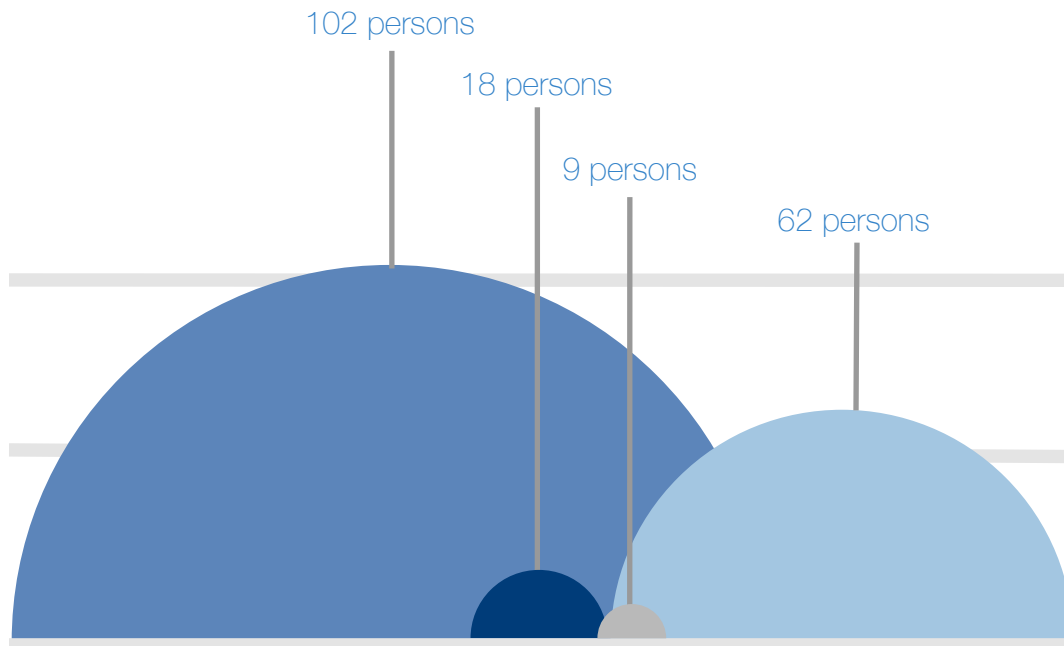
The breakdown of underemployed workforce resources in Stony Plain is provided on the next page.

²³ More information is available at: <https://work.alberta.ca/labour/labour-force-profiles.html>

²⁴ New immigrants are defined as those who have been in Canada for 5 years or less.

²⁵ Immigrants who have been in Canada for more than 5 years tend to have average or below average rates of unemployment when compared to the general workforce.

Underemployed Labour Resources (2016)



● Youth
Age 15-24

● Mature
Age 55-64

● Aboriginal
Indigenous - off reserve

● New Immigrants
In Canada for 5 years or less

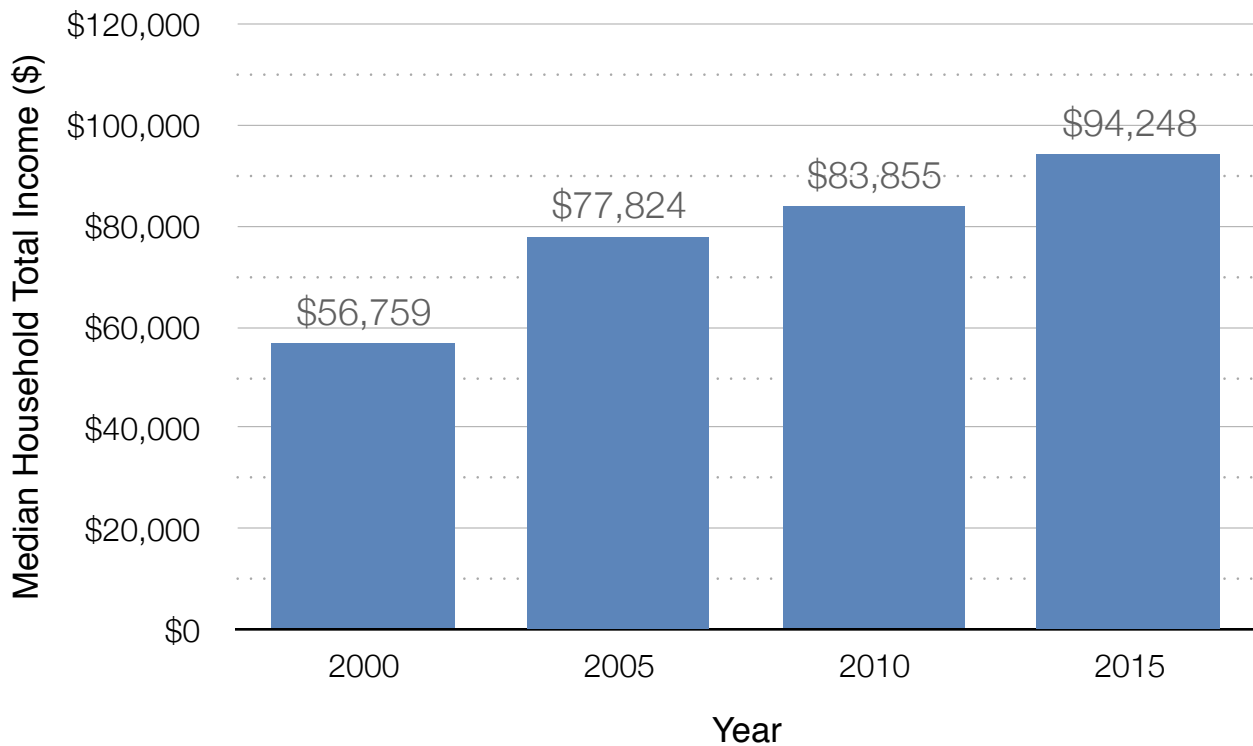
2.6. Income & Affordability

The available supply of workers in the local economy depends on a number of variables, including income and cost of living factors.

2.6.1. Median Household Income²⁶

The Median Household Income of Stony Plain residents has climbed steadily over the period of analysis. Based on 2015 data, Stony Plain residents Median Household Income roughly equal to the Edmonton CMA figure of \$94,500.

Median Household Total Income (2000-2015)²⁷



²⁶ The median income of a specified group is the amount that divides the income distribution of that group into two halves, i.e., the incomes of half of the units in that group are below the median, while those of the other half are above the median. Median incomes of households are calculated for all units, whether or not they had income.

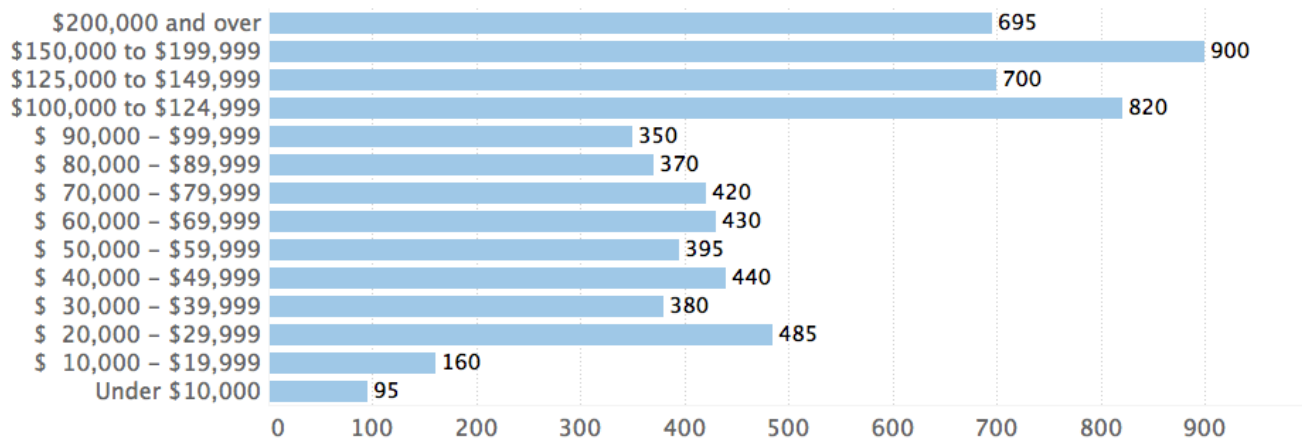
²⁷ For the Federal Census, the reference year for all income data is the previous calendar year.

2.6.2. Household Income Distribution

Total household income refers to receipts from certain sources of all household members, before income taxes and deductions, during a specified reference period.²⁸

Under half (47%) of all households in Stony Plain had a total income greater than \$100,000 in 2015. This is equal to the Edmonton CMA where 47% of all households had a total income of more than \$100,000.

Household Income Distribution by Income Band (2015)²⁹



²⁸ Total household income includes: employment income from wages, salaries, tips, commissions and net income from self-employment (for both unincorporated farm and non-farm activities); income from investment sources, such as dividends and interest on bonds, accounts, guaranteed investment certificates (GICs) and mutual funds; income from employer and personal pension sources, such as private pensions and payments from annuities and registered retirement income funds (RRIFs); other regular cash income, such as child support payments received, spousal support payments (alimony) received and scholarships; income from government sources, such as social assistance, child benefits, Employment Insurance benefits, Old Age Security benefits, Canada Pension Plan and Québec Pension Plan benefits and disability income.

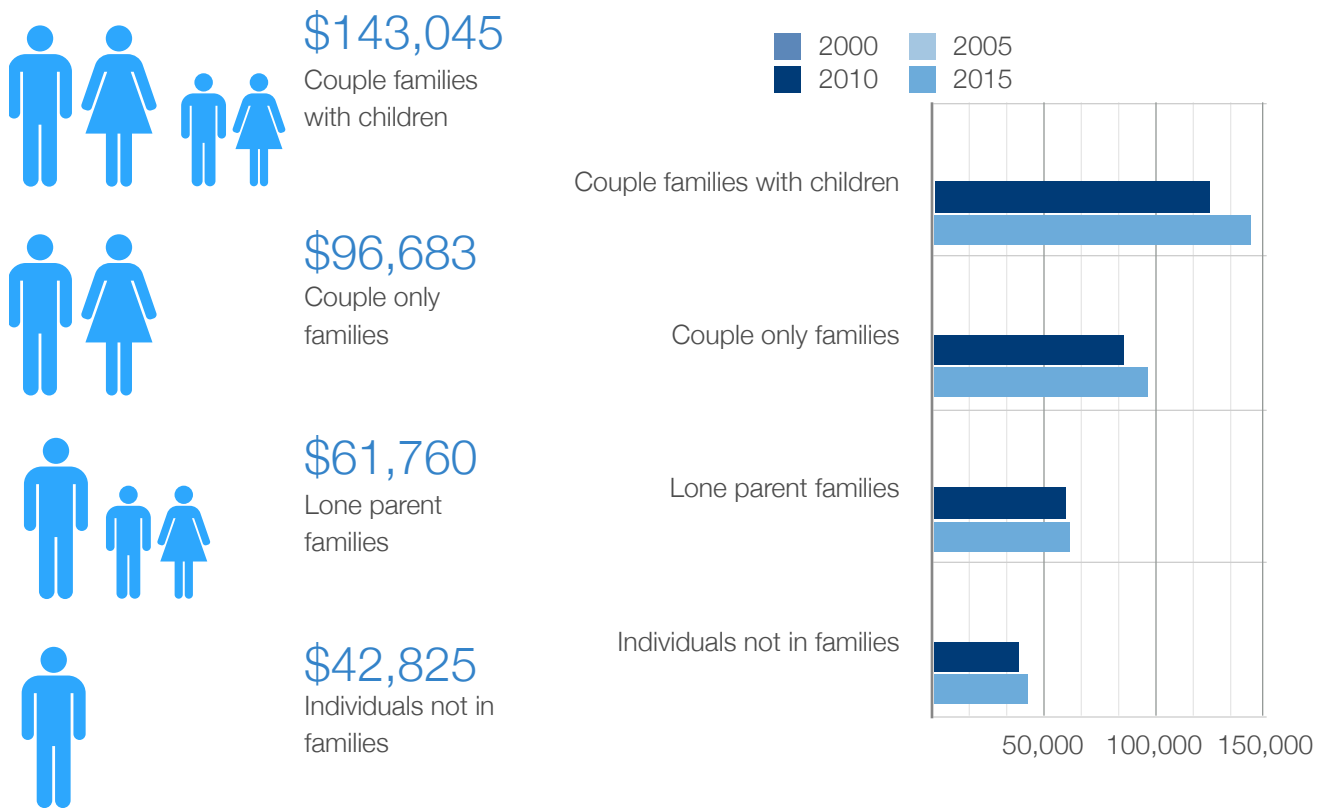
²⁹ For the 2016 Federal Census, the reference year for all income data is the previous calendar year 2015.

2.6.3. Income by Family Composition

The distribution of household income varies significantly depending on family composition. Particularly whether the household has one or two income earners as well as the number of dependents in the household.

Among family types within Stony Plain, Couple Families With Children have the highest Median Total Income. Total income for this group also grew the fastest between 2010 and 2015. Individuals Not In Families (without children) had the lowest Median Total Income at just under \$43,000 in 2015.

Median Total Income by Family Composition (2015)³⁰



³⁰ For the Federal Census, the reference year for all income data is the previous calendar year. Data for Economic Family Income is not available in 2000 and 2005.

2.6.4. Farm Income

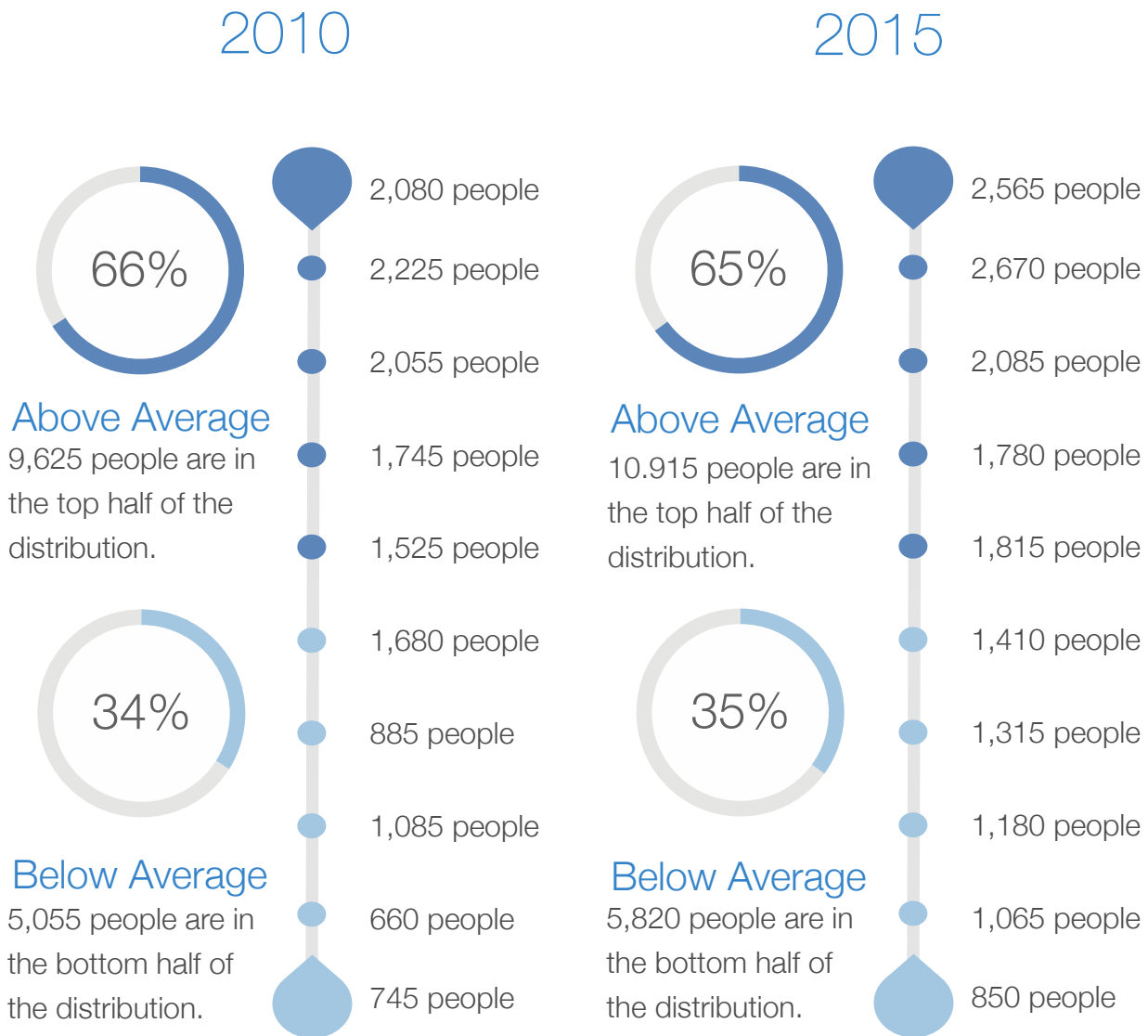
Farm income data is only available for rural municipalities.

2.6.5. Economic Family Income Distribution

Presented below is the relative position of families in Stony Plain based on their relative position to the national distribution of family income. The number of Stony Plain families in each year is presented for each decile ranked by after tax family income.

The proportion of Stony Plain residents with an above average income decreased somewhat from 66% in 2010 to 65% in 2015.

Family Income After Tax by Decile (2010-2015)³¹

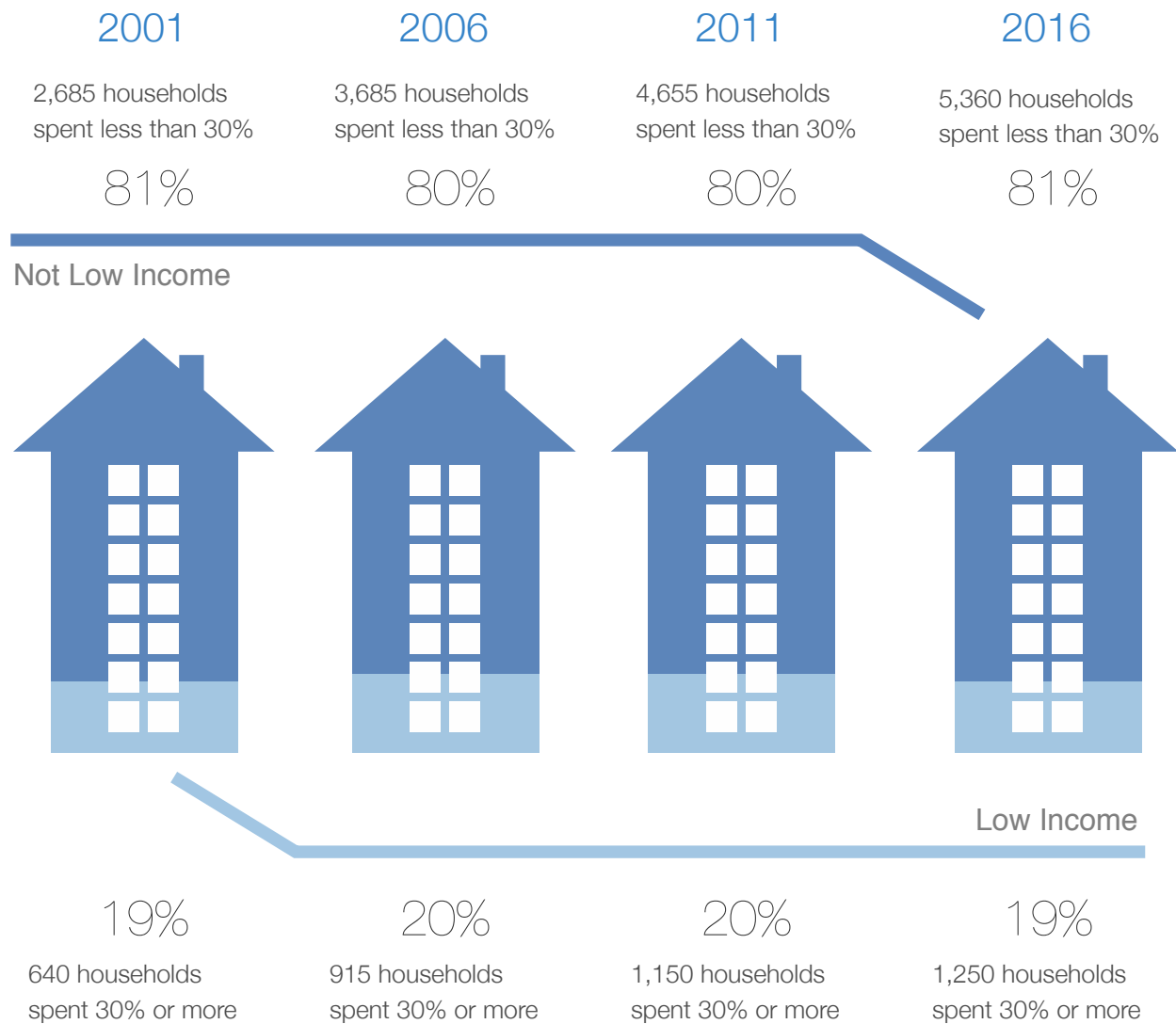


³¹ For the Federal Census, the reference year for all income data is the previous calendar year. Adjusted after-tax income of economic families for all persons in private households.

2.6.6. Housing Affordability

Housing Affordability is measured on the basis of 'shelter-cost-to-income' ratio. Where shelter costs are high relative to income (i.e. in excess of 30%) housing is considered to be 'unaffordable'. The majority of Stony Plain families have a favourable income to housing cost ratio, with only 19% of households spending 30% or more of their income on shelter. This rate has been relatively constant over the analysis timeframe.

Housing Affordability (2001-2016)³²



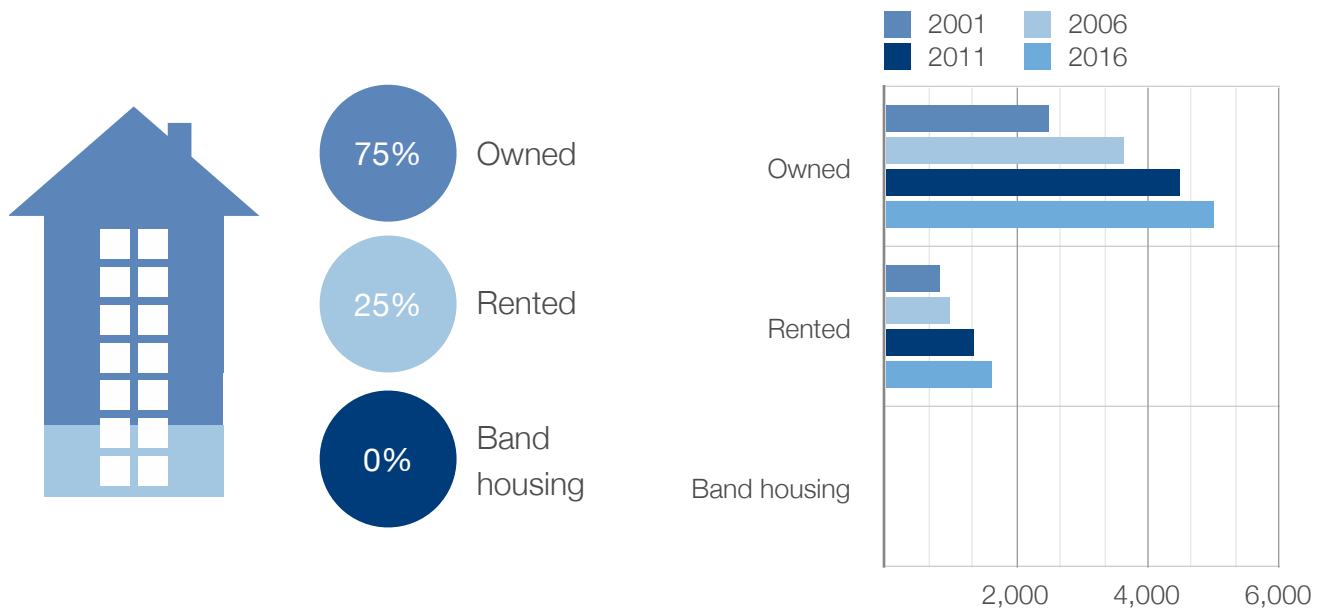
³² For the Federal Census, the reference period for shelter cost data is the census year, while household total income is reported for the previous calendar year.

2.6.7. Housing Tenure

Housing Tenure refers to whether the household owns or rents their private dwelling.³³ In 2016 the majority of Stony Plain families (75%) owned their dwelling unit, with 25% renting. The rate of ownership is somewhat higher in Stony Plain than the Edmonton Metropolitan Region as a whole. There is no Band Housing in Stony Plain.

These proportions of Housing Tenure in Stony Plain have remained relatively stable over the period of analysis.

Number of Households by Housing Tenure (2016)

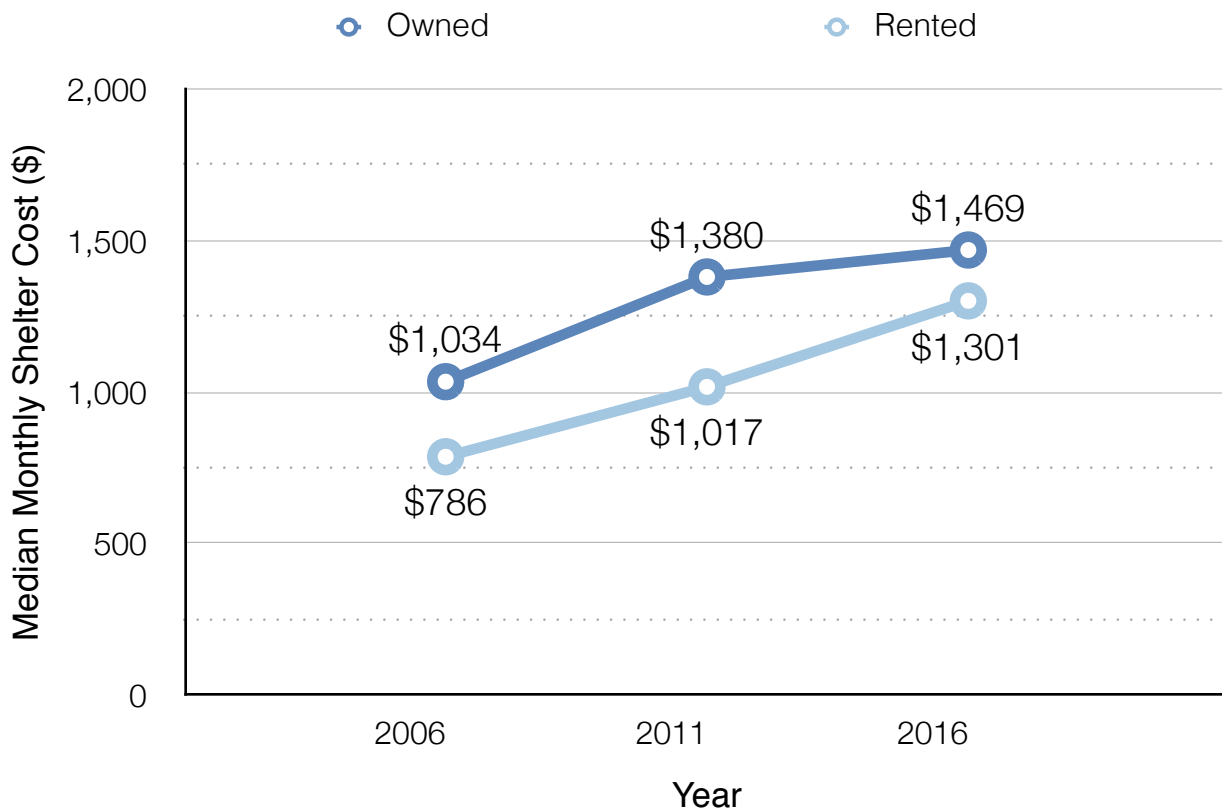


³³ A household is considered to own their dwelling if some member of the household owns the dwelling even if it is not fully paid for, for example if there is a mortgage or some other claim on it. A household is considered to rent their dwelling if no member of the household owns the dwelling. A household is considered to rent that dwelling even if the dwelling is provided without cash rent or at a reduced rent, or if the dwelling is part of a cooperative.

2.6.8. Monthly Shelter Costs

Shelter cost refers to the average monthly total of all shelter expenses paid by households that own or rent their dwelling. In 2016 Stony Plain households paid just under \$1,500 per month if they owned their dwelling unit, and renters paid \$1,300 per month. The Median Monthly Shelter Costs in the Edmonton Metropolitan region were comparable for owners at \$1,500 and somewhat lower for renters at \$1,255 in 2016.

Median Monthly Shelter Costs by Housing Tenure (2006-2016)

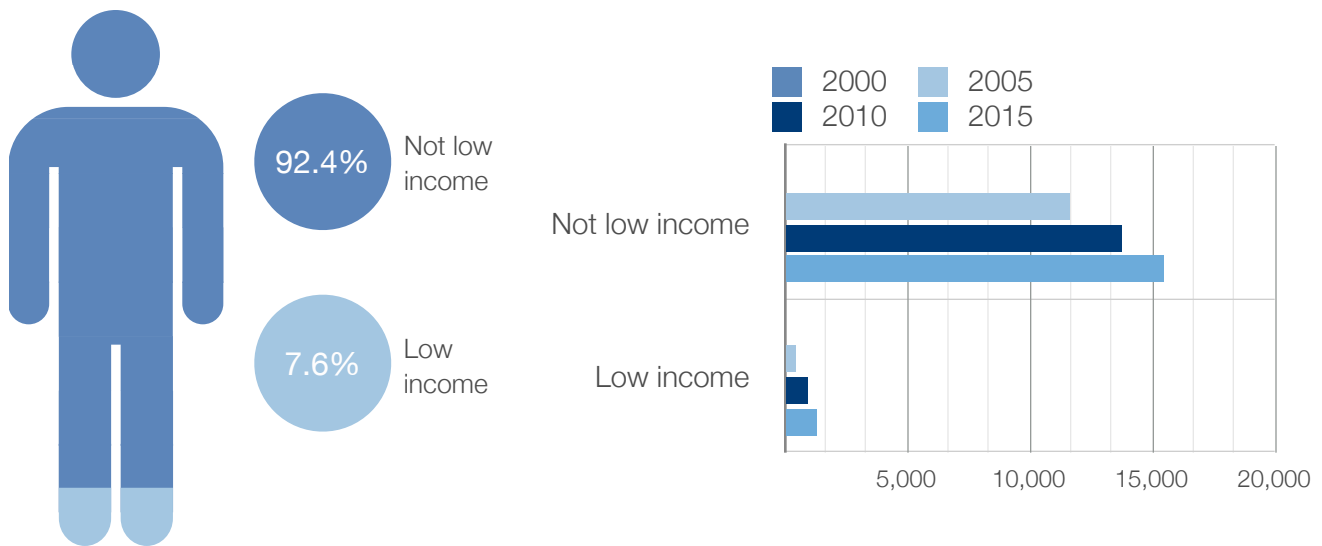


2.6.9. Low Income Measure After Tax

The Low Income Measure, after tax (LIM-AT), refers to a fixed percentage (50%) of median-adjusted after tax income of private households. Adjustment for household sizes reflects the fact that a household's needs increase as the number of members increases.³⁴

In 2015, 7.6% of Stony Plain households were deemed to be 'low income' based on the LIM-AT low income measure. This rate of low income has steadily increased in Stony Plain since 2005. The proportion of Stony Plain families deemed to be low income still compares favourably to the Edmonton Metropolitan Region, where a total of 9.3% of families were 'low income' in 2015.

Prevalence of Low Income Based on the LIM-AT (2015)³⁵



³⁴ For example, a household of five has greater needs than a household of two. This adjustment for different household sizes reflects the fact that a household's needs increase, but at a decreasing rate, as the number of members increases.

³⁵ For the Federal Census, the reference year for all income data is the previous calendar year. Data for Low Income Measure, after tax is not available in 2000.

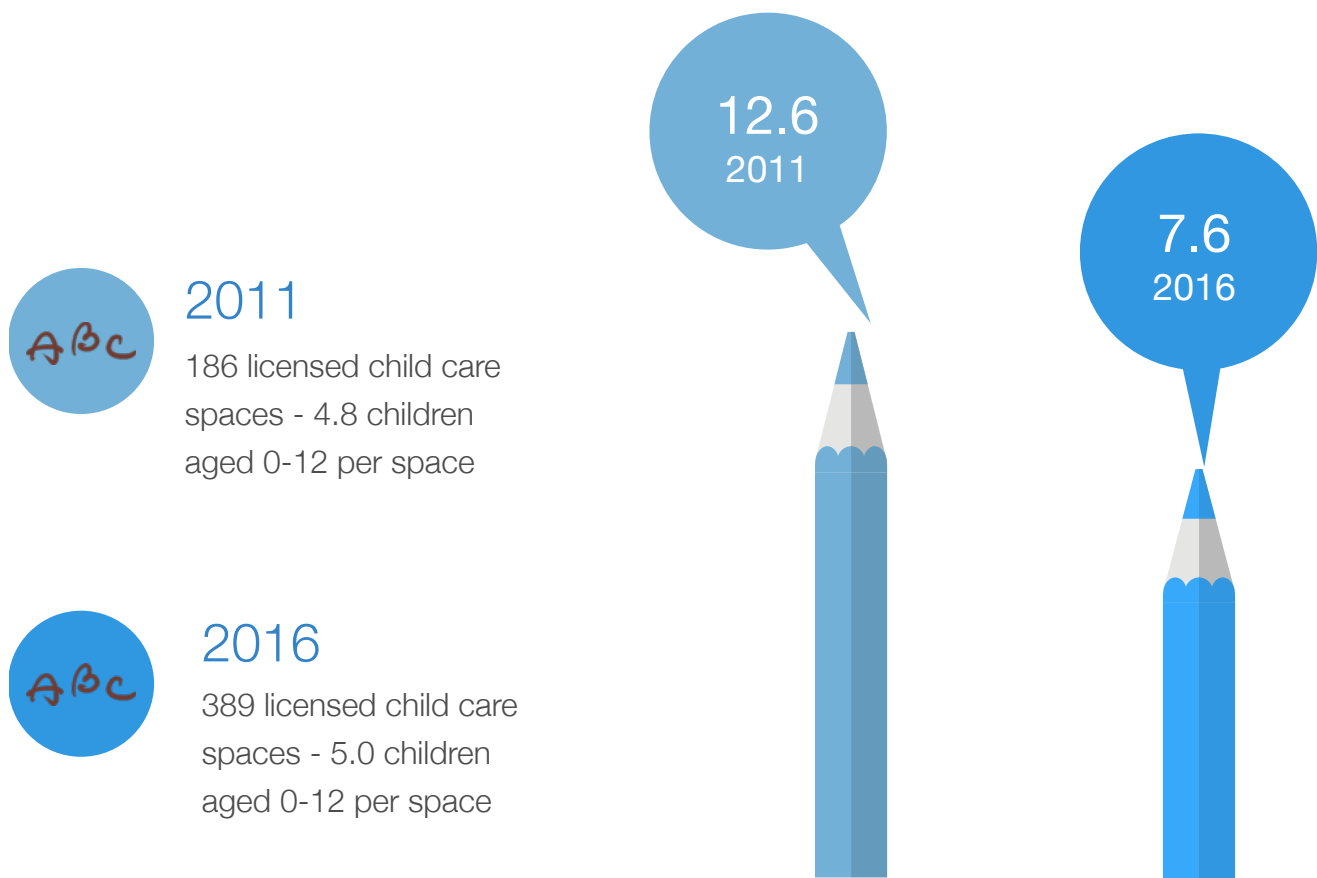
2.6.10. Child Care

The availability of a large segment of the workforce depends on the availability of affordable quality child care. In Stony Plain, 39% of families have children, of which 10% are lone parents.

Licensed child care spaces as approved by the Province represent one, albeit important, segment of formal child care. In 2016 Stony Plain had 389 licenced child care spaces, up almost two times from the 196 available in 2011.³⁶

The number of children aged 0-12 years per licensed space has improved dramatically from 12.6 in 2011 to 7.5 in 2016. These rates are higher than the average for the Edmonton Metropolitan Region which averaged 5.8 and 5.3 children aged 0-12 per licensed space in 2011 and 2016 respectively.³⁷

Children Aged 0-12 Per Licensed Child Care Spaces (2011-2016)



³⁶ Licensed child care spaces include those in the following programs: Daycare Program, Family Day Home Program, Out of School Care and Pre-School Program. More information is available at: <https://open.alberta.ca/opendata/childcareinformation>

³⁷ A lower number of children per licensed space is better as it indicates a greater availability of formal child care.

2.6.11. Employers

The number of businesses in Stony Plain increased by 84% between 2001 and 2016. However, there was a marked decline of 18% in the number of businesses between 2011 and 2016.

The Construction sector exhibited the largest growth in Stony Plain since 2001, adding about 130 businesses over the past 15 years. The Professional, scientific and technical services sector added 52 and Other services sector added 37 businesses respectively over the same period.

Business Entities by Industry 2001-2016 (2 digit NAICS)³⁸

Industry	2001	2006	2011	2016
11 Agriculture, forestry, fishing and hunting	10	31	29	5
21 Mining, quarrying, and oil and gas extraction	5	17	17	6
22 Utilities	1	1	3	1
23 Construction	49	183	202	180
31-33 Manufacturing	12	22	19	17
41 Wholesale trade	12	25	28	23
44-45 Retail trade	47	57	69	60
48-49 Transportation and warehousing	27	62	66	44
51 Information and cultural industries	3	5	6	6
52 Finance and insurance	9	13	20	23
53 Real estate and rental and leasing	17	34	35	31
54 Professional, scientific and technical services	43	104	101	95
55 Management of companies and enterprises	3	5	5	4
56 Administrative and support, waste management and remediation services	17	43	42	33
61 Educational services	6	9	9	5
62 Health care and social assistance	28	45	47	39
71 Arts, entertainment and recreation	6	12	10	11
72 Accommodation and food services	32	25	30	29
81 Other services (except public administration)	47	91	115	84
91 Public administration	5	4	2	1
Total	379	788	855	697

³⁸ More information is available under Business Activity at: <https://regionaldashboard.alberta.ca/#/>.

3. Appendix A: Technical

Applications Management Consulting Ltd has an Employment Demand and Supply Model that projects employment by detailed industry and occupation. This model, in conjunction with our regional population forecasting model have been used to estimate where the data is not available.

This includes the following information contained in this report:

- ▶ Population Growth (page 6): Where census information is not available, Applications has estimated the intervening years using our Population Employment Forecasting Model. This model calibrates historic municipal population and employment data to regional (Census Metropolitan Area - CMA) totals.
- ▶ Labour Force Participation Rates (page 12): Data for non-census years has been estimated from annual Labour Force Data at the regional CMA level and allocated to municipalities within the region.
- ▶ Employment Rates (page 13): Data for non-census years has been estimated from annual Labour Force Data at the regional CMA level and allocated to municipalities within the region.
- ▶ Employment Growth (page 14): Data for non-census years has been estimated from annual Labour Force Data at the regional CMA level and allocated to municipalities within the region.
- ▶ Full Time / Part Time Employment (page 15): Data for 2015 has been estimated from annual Labour Force Data at the regional CMA level and allocated to municipalities within the region.
- ▶ Unemployment Rates (page 16): Data for non-census years has been estimated from annual Labour Force Data at the regional CMA level and allocated to municipalities within the region.
- ▶ Employment by Industry (page 18): 2006 employment by industry data was not available at the same level of industry data as 2011 and 2016. This data was estimated from the available industry categories and disaggregated to 2 digit NAICS using Labour Force Data at the regional CMA level for the affected industries.
- ▶ Work At Home by Industry (page 20): This data was taken from work Applications' completed for Alberta Transportation where regional population and employment estimates were made for over 1,300 Traffic Zones. This data included an estimate of employment associated with 'work at home' by 2 digit NAICS. These 'work at home' estimates are based on a special run of this data from Statistics Canada census and advanced to 2016.
- ▶ Detailed 4 Digit NOC (page 25): Applications' Employment Demand and Supply Model works at a 4 digit NOC level. The industry employment levels for each municipality have been run through this model to estimate the occupational employment by industry and by detailed occupation.
- ▶ Skill Level (page 29): Skill levels are assigned to each 4 digit NOC. Once the detailed NOC analysis was completed, skill levels were assigned to estimate the total number of workers in each skill level group.

- ▶ Labour Market Gap (page 34): Jobs data was taken from work Applications' completed for Alberta Transportation where regional population and employment estimates were made for over 1,300 Traffic Zones. Workers data is from the Federal Census 2016.

4. Appendix B: Sources

Unless otherwise footnoted, data used is from the Federal Census. Federal Census data contained in this report is from 2001, 2006, 2011 and 2016. 2011 data is from the National Household Survey Community Profile data.

Federal Census data includes the following information contained in this report:

- ▶ Population Growth (page 6): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Population by Age Group (pages 7-8): Information used is from the Federal Census 2001 and 2016.
- ▶ Family Composition (page 9): Information used is from the Federal Census 2011 and 2016.
- ▶ Working Age Population (page 10): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Labour Force by Gender (page 11): Information used is from the Federal Census 2001 and 2016.
- ▶ Labour Force Participation Rates (page 12): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Employment Rate (page 13): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Employment Growth (page 14): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Full Time / Part Time Employment (page 15): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Unemployment Rates (page 16): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ 2 Digit NAICS (pages 17-18): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ 1 Digit NOC (pages 21-22): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ 1 Digit NOC by Gender (pages 23-24): Information used is from the Federal Census 2001 and 2016.
- ▶ Highest Level of Educational Attainment Overview (page 26): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Post Secondary Breakdown (page 27): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Post Secondary Field of Study (page 28): Information used is from the Federal Census 2001, 2006, 2011 and 2016.

- ▶ Work to Home by Municipality (pages 30-32): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Work to Home Transportation (page 33): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Median Household Income (page 37): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Household Income Distribution (page 38): Information used is from the Federal Census 2016.
- ▶ Income by Family Composition (page 39): Information used is from the Federal Census 2011 and 2016.
- ▶ Economic Family Income Distribution (page 41): Information used is from the Federal Census 2011 and 2016.
- ▶ Housing Affordability (page 42): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Housing Tenure (page 43): Information used is from the Federal Census 2001, 2006, 2011 and 2016.
- ▶ Monthly Shelter Costs (page 44): Information used is from the Federal Census 2006, 2011 and 2016.
- ▶ Low Income Measure After Tax (page 52): Information used is from the Federal Census 2006, 2011 and 2016.

