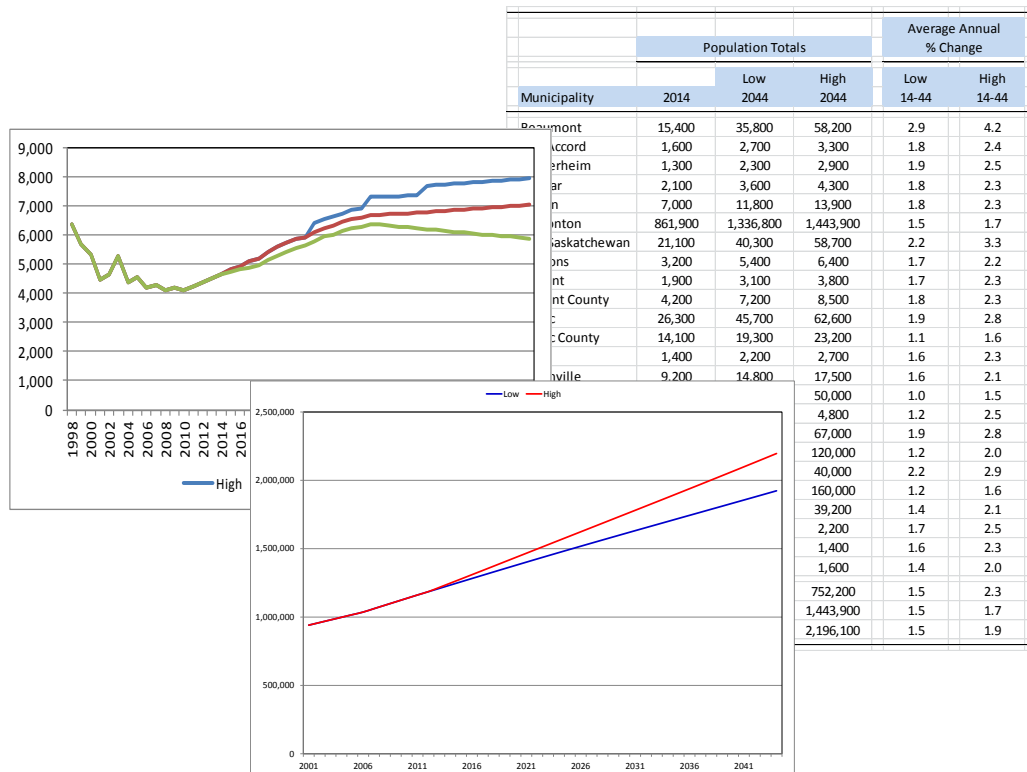


CAPITAL REGION POPULATION AND EMPLOYMENT PROJECTIONS



Prepared for
Capital Region Board

Prepared by
Stokes Economic Consulting
Strategic Projections

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Table of Contents

Section	Page
Executive Summary	S-1
Section 1: Introduction	1
Section 2: The Capital Region Scenarios	2
Scenario Assumptions	2
Migration	2
Agriculture	3
Tourism	4
Oil and Gas	4
Trading Partner Growth	6
Government	6
Scenario Results	6
Population	6
Households	7
Employment	8
Section 3: The Capital Region Scenarios by Municipality	11
Population Projections	11
Employment Projections	15
Section 4: Conclusions	24
Appendix A: Capital Region Municipal Population Charts	

CAPITAL REGION POPULATION AND EMPLOYMENT PROJECTIONS

Executive Summary

The Capital Region Board retained Stokes Economic Consulting Inc. (SECI) and Strategic Projections Inc. (SPI) in June of 2012 to develop updated projections of the population and employment for the Capital Region and its constituent municipalities to the year 2047.

The previous projections for the Region were developed in 2009 in the midst of a significant world-wide economic downturn. Those projections are summarized in the document *The Capital Region Growth Plan Addendum* (December 2009).

Since that time economic growth in the Region has resumed at a brisk pace and population estimates from the Federal Census of 2011 and from various Municipal Censuses in 2012 have become available. The passage of time and the availability of new information necessitated the need for an update to the 2009 projections at this time.

THE CAPITAL REGION SCENARIOS

This document reports on three future population and employment scenarios for the Capital Region as a whole created by Stokes Economic Consulting (SECI). The Region-wide projections are based on recent population projections for Census Division 11 produced by the Alberta Treasury Board and Finance: *Alberta Population Projections by Census Division, 2012-2041* (June 2012).

Scenario Assumptions

The key assumptions made in developing the three Capital Region scenarios were as follows:

- Net in-migration in the Base scenario starts near its average of about 15 thousand over the past 10 years rising to about 21 thousand in 2047. The Low scenario starts at 11 thousand and rises to 15 thousand in 2047. The High scenario starts at 22 thousand and rises to 29 thousand in 2047.
- The agriculture industry is not expected to make a large contribution to overall growth in the Capital Region over the projection period. Real GDP in agriculture increases on average by 0.3 percent per year in the Base scenario and by 0.5 percent in the High scenario and remains at its current level in the Low scenario.
- The Low, Base, and High scenarios assume tourism industry average annual growth rates of 1.0, 1.5, and 2.0 percent, respectively, over the scenario period. These scenarios all assume an improved performance of the sector from its past performance. The growth rates for the tourism sector, particularly for business tourism, reflect the increased economic activity that takes place in the region over the scenario period described below.

- The oil and gas industry – oil refineries are included under the manufacturing industry – and the oil and gas services industry make a significant contribution to the Capital Region economy. While the Region does not produce much conventional oil and gas, the oil and gas service industry is an important provider of services to the conventional oil and gas industry.
- In addition, oil sands upgraders currently and in the future could make a significant contribution to the Region's economy. Moreover, the Region's manufacturing industry – particularly the fabricated metal and machinery industries – has been and will likely continue to be linked closely to the development of the oil sands industry.
- The outlook for oil and gas GDP in the Region is in line with assumptions about the future performance of Alberta's oil and gas industry. The Region's growth reflects both continued growth in the oil and gas services sector as well as the construction of additional oil sands upgraders in the Region.
- The Northwest upgrader is scheduled for construction over the next few years in 3 phases. In the Base scenario all 3 phases are implemented, while in the Low scenario only phase 1 is completed. In the High scenario an additional 3 upgraders, each equaling the size of the Northwest upgrader, are assumed to be added to the Region by 2040.
- The outlook for oil and gas in the area reflects a downward trend in conventional production offset by significant increases in oil sands production. This outlook represents the Base Case outlook. For the High and Low Case scenarios changes in the growth rates for conventional and oil sands developments were assumed to reflect slower and more rapid growth respectively.
- Assumptions made regarding future growth rates for the Region's major trading partners – the rest of Alberta, the rest of Canada and the rest of the world – are described in detail in the main report.
- In the scenarios it is assumed that the government keeps its expenditure growth constant on a per capita and inflation adjusted basis. In the case of education services expenditure growth is driven by the school-age population. For health services, expenditures remain constant on an age group weighted expenditure basis – using weights computed from expenditure information on health expenditures by age published by the Canadian Institute for Health Information. For general government services expenditures are kept constant on a per person basis.

Scenario Results

The key results of the scenarios for selected demographic and economic variables are tabulated in Summary Exhibit 1. The results indicate the following:

Summary Exhibit 1 **Average Annual Growth for Population, Households, and Employment (%)** **Capital Region, 2001-2047**

	2001-2011	2012-2017	2017-2022	2022-2032	2032-2047	2012-2047
Population (% Change)						
High	2.1	2.4	2.2	1.9	1.5	1.9
Base	2.1	2.0	1.8	1.5	1.3	1.5
Low	2.1	1.6	1.4	1.2	0.9	1.2
Household Formation (000s)						
High	11.2	14.0	13.8	13.9	14.4	14.1
Base	11.2	11.6	11.2	10.9	10.6	10.9
Low	11.2	9.8	9.2	8.4	7.5	8.3
Employment (% Change)						
High	2.8	2.4	1.9	1.5	1.2	1.6
Base	2.8	2.0	1.3	1.2	0.9	1.2
Low	2.8	1.6	1.0	0.9	0.6	0.9
Goods-Producing Employment (% Change)						
High	3.8	2.7	1.5	1.2	0.6	1.2
Base	3.8	2.2	0.9	0.7	0.4	0.8
Low	3.8	1.8	0.7	0.4	0.1	0.5
Private Services-Producing Employment (% Change)						
High	2.4	2.4	1.8	1.5	1.3	1.6
Base	2.4	1.9	1.2	1.2	1.0	1.2
Low	2.4	1.5	0.8	0.8	0.6	0.8
Public Services Employment (% Change)						
High	2.8	2.3	2.4	2.1	1.6	1.9
Base	2.8	1.9	2.0	1.7	1.3	1.6
Low	2.8	1.5	1.6	1.4	1.0	1.3

Source: Statistics Canada 1998 to 2011, Stokes Economic Consulting 2012 to 2047

- The population results are determined largely by the migration assumptions in the MOF projections. The population of the Region increases from about 1.2 million at present to 1.8, 2.0, and 2.3 million in the Low, Base, and High scenarios, respectively, in 2047.
- The Region's population grows at a rate averaging 24,400 per year between 2012 and 2047 in the Base Case, 32,600 per year in the High Case and 17,800 per year in the Low Case. Between 2001 and 2011 the Region's population grew at an annual rate of 22,100.
- Employment increases in line with population, but at a slightly slower rate, resulting from the aging of the population which shrinks the working aged share of the total population.
- Job growth is determined by the growth rate in industry GDP and productivity. Employment increases from 0.7 million today to 1.2, 1.1, and 0.9 million, respectively, in the High, Base, and Low scenarios in 2047.
- The growth rate of employment falls over the scenario period in line with slower economic growth. The average annual rates of growth over the period are 1.6, 1.2, and 0.9 percent, respectively, for the High, Base, and Low scenarios.
- Real GDP growth averages 2.9, 2.5, and 2.1 percent, respectively, in the High, Base, and Low scenarios over the scenario period. The corresponding results for labour productivity – real GDP per employee – are 1.1, 1.0, and 0.9 percent, respectively.

THE CAPITAL REGION SCENARIOS BY MUNICIPALITY

This section of the report updates the population and employment projections to 2044 across the CRB's 24 municipalities contained in the document *The Capital Region Growth Plan Addendum* (December 2009).

Two alternatives at the municipal level for total population and total employment (on a place-of-work basis) to 2044 are presented here:

- The High Case of this section is informed by the pace of growth for the region as a whole in the High Case projection of Section 2.
- The Low Case of this section is informed by the pace of growth for the region as a whole in the Base Case projection of Section 2.

Population Projections

The Low Case and High Case population projections by CRB municipality in Summary Exhibit 2 below were informed by the following:

- The population projections by municipality contained in the December 2009 *Growth Plan Addendum*.
- Preliminary projections by municipality prepared by Strategic Projections based on recent trends in regional growth by municipality and on the pressures for growth region-wide revealed by the Base Case and High Case projections described in Section 2.
- Comments on the preliminary projections solicited by the consultants from municipal staff.

The projections take into account municipal census information for 2012 and/or Statistics Canada revisions to the 2011 Census population counts for Bruderheim, Leduc County, Redwater and Thorsby.

Summary Exhibit 2
Capital Region Total Population by Municipality
Low and High Case 2014 to 2044

	Population Totals			Average Annual % Change	
		Low	High	Low	High
Municipality	2014	2044	2044	14-44	14-44
Beaumont	15,400	35,800	58,200	2.9	4.2
Bon Accord	1,600	2,700	3,300	1.8	2.4
Bruderheim	1,300	2,300	2,900	1.9	2.5
Calmar	2,100	3,600	4,300	1.8	2.3
Devon	7,000	11,800	13,900	1.8	2.3
Edmonton	861,900	1,336,800	1,443,900	1.5	1.7
Fort Saskatchewan	21,100	40,300	58,700	2.2	3.3
Gibbons	3,200	5,400	6,400	1.7	2.2
Lamont	1,900	3,100	3,800	1.7	2.3
Lamont County	4,200	7,200	8,500	1.8	2.3
Leduc	26,300	45,700	62,600	1.9	2.8
Leduc County	14,100	19,300	23,200	1.1	1.6
Legal	1,400	2,200	2,700	1.6	2.3
Morinville	9,200	14,800	17,500	1.6	2.1
Parkland County	31,800	42,700	50,000	1.0	1.5
Redwater	2,200	3,100	4,800	1.2	2.5
Spruce Grove	28,400	49,700	67,000	1.9	2.8
St. Albert	64,300	91,600	120,000	1.2	2.0
Stony Plain	16,700	32,200	40,000	2.2	2.9
Strathcona County	96,800	138,000	160,000	1.2	1.6
Sturgeon County	20,600	31,000	39,200	1.4	2.1
Thorsby	1,000	1,700	2,200	1.7	2.5
Wabamun	700	1,100	1,400	1.6	2.3
Warburg	900	1,300	1,600	1.4	2.0
Region	372,200	586,600	752,200	1.5	2.3
Edmonton	861,900	1,336,800	1,443,900	1.5	1.7
CRB Total	1,234,100	1,923,400	2,196,100	1.5	1.9

Source: Strategic Projections and CRB Staff

Employment Projections

For the purposes of this assignment the consultants developed a model of Capital Region employment by industry by place-of-work by municipality (described in detail in the main report).

At the outset it should be noted that employment by place-of-work data from the National Household Survey carried out in conjunction with the 2011 Census – as of the end of August 2013 – has not yet been made available in the format required by Strategic Projections for inclusion in this update to the projections of employment by CRB municipality. This section of the report will be revised once the new data have been made available to us and we have had an opportunity to assess their impact.

At this time therefore the 2006 Census data for employment by place-of-work by industry by municipality is the latest available regarding where jobs are distributed throughout the area.

The model distributes future employment growth by industry to each of the area's 24 municipalities by separately projecting those jobs that primarily produce goods and services exported to other areas and those jobs that primarily serve the needs of the local population:

- The macro model determines the employment by industry growth pressures expected to be felt by the Region as a whole over the projection horizon.
- The municipal employment model allocates the economic base jobs over that span proportionally to those centres already endowed with such jobs.
- The municipal employment model allocates the projected community base jobs to those communities projected to see the greatest population gains following on consideration of the base year per capita availability of such jobs in each municipality.

Summary Exhibit 3 compares the projected 2044 total employment values of each municipality for the Low Case and High Case and the projected average annual percentage growth rate in employment for each municipality for each scenario over the 2014 to 2044 span.

Summary Exhibit 3
Capital Region Total Employment by Municipality
Low and High Case 2014 to 2044

Municipality	Employment Totals			Average Annual % Change	
	2014	Low	High	Low	High
		2044	2044	14-44	14-44
Beaumont	2,400	5,000	8,100	2.5	3.9
Bon Accord	300	400	500	1.3	1.9
Bruderheim	300	400	500	1.3	1.8
Calmar	600	900	1,100	1.2	1.7
Devon	1,800	2,800	3,300	1.4	1.9
Edmonton	486,500	699,100	749,400	1.2	1.4
Fort Saskatchewan	10,600	17,600	24,300	1.7	2.6
Gibbons	700	1,000	1,200	1.3	1.8
Lamont	900	1,400	1,700	1.5	2.1
Lamont County	1,100	1,300	1,600	0.6	1.1
Leduc	12,800	19,400	26,000	1.4	2.2
Leduc County	18,100	21,600	25,300	0.6	1.1
Legal	400	500	600	1.0	1.5
Morinville	3,000	4,200	5,000	1.2	1.7
Parkland County	8,100	9,500	11,000	0.5	1.0
Redwater	1,100	1,500	2,100	0.8	1.9
Spruce Grove	11,200	17,200	22,800	1.4	2.2
St. Albert	19,800	25,900	33,600	0.9	1.7
Stony Plain	5,800	10,300	12,700	1.9	2.5
Strathcona County	37,400	47,600	54,800	0.8	1.2
Sturgeon County	5,900	7,900	10,000	1.0	1.7
Thorsby	600	900	1,100	1.1	1.8
Wabamun	500	600	800	1.0	1.6
Warburg	700	800	1,000	0.7	1.3
Region	144,200	198,900	249,200	1.1	1.7
Edmonton	486,500	699,100	749,400	1.2	1.4
CRB Total	630,700	898,000	998,500	1.2	1.5

Source: Strategic Projections

CONCLUSIONS

The pressures for future growth today are significantly greater than they were in 2009. The Low Case here calls for population and employment growth slightly higher than the only projection put forward in 2009 while the Base and High Cases suggest the potential for growth significantly exceeds that foreseen in 2009.

The increased demands for growth faced by the Region today are likely to impact every municipality in the area. The contribution assumed for each municipality to the future growth of the Region reflects a combination of factors, most importantly recent trends and aspirations.

The municipal projections provided here are intended to reflect the range of future growth pressures faced by each municipality at this time.

Over the course of the next two years Statistics Canada and others will release information updates that by the fall of 2014, depending on the trends revealed, might trigger a refresh of the Capital Region macro projections and projections by municipality contained in this report.

Ernie Stokes of Stokes Economic Consulting Inc. and Tom McCormack of Strategic Projections Inc., the authors of this report, wish to thank the members of the Capital Region Board's Population and Employment Technical Advisory Committee for their invaluable assistance in the preparation of the projections contained in this report.

CAPITAL REGION POPULATION AND EMPLOYMENT PROJECTIONS

Section 1 INTRODUCTION

The Capital Region Board retained Stokes Economic Consulting Inc. (SECI) and Strategic Projections Inc. (SPI) in June of 2012 to develop updated projections of the population and employment for the Capital Region and for each of its constituent municipalities to the year 2047.

The previous projections for the Region were developed in 2009 in the midst of a significant world-wide economic downturn. Those projections are summarized in the document *The Capital Region Growth Plan Addendum* (December 2009).

Since that time economic growth in the Region has resumed at a brisk pace and population estimates from the Federal Census of 2011 and from various Municipal Censuses in 2012 have become available. The passage of time and the availability of new information necessitated the need for an update to the 2009 projections at this time.

This document reports on three future population and employment scenarios for the Capital Region as a whole created by Stokes Economic Consulting (SECI). The Region-wide projections are based on recent population projections for Census Division 11 produced by the Alberta Treasury Board and Finance: *Alberta Population Projections by Census Division, 2012-2041* (June 2012). The assumptions behind and results of the three Region-wide scenarios are described in Section 2 of this document.

The implications of these scenarios for future population and employment growth on a municipal basis within the Region were assessed by Strategic Projections (SPI) and CRB staff. Section 3 of this document presents Low and High population and employment projection alternatives for the CRB by municipality to the year 2044 that are informed by the range of projections for the CRB as a whole described in Section 2.

Section 4 lists a number of key information sets that will be made available between now and the middle of 2014. Depending on the trends these information sets signal the Capital Region Board might consider a refresh of the projections in the fall of 2014.

The scenarios in this report were developed with the guidance of the Capital Region Board's Population and Employment Technical Advisory Committee.

Section 2

THE CAPITAL REGION SCENARIOS

Three scenarios were created regarding the possible future demographic and economic performance of the Capital Region as a whole. The three scenarios provide a range of possibilities for the Region's performance: Low, Base, and High. The Base scenario is often considered to be the most likely scenario.

The scenarios start in the year 2012 and end in 2047. The historical data used in developing the scenarios were obtained from Statistics Canada, Stokes Economic Consulting and Strategic Projections.

Scenario Assumptions

The basis for the three scenarios is a set of population growth alternatives recently created by the Alberta Treasury Board and Finance. In the context of the population growth specified by the Province, different assumptions were made that determine the future industrial structure of the Region. These assumptions refer to the future performance of the agriculture, oil and gas, tourism, and manufacturing sectors in the Region in light of the economic performance of the Region's major trading partners. Additional assumptions were made about the growth of government spending.

A description of the key assumptions behind the three scenarios follows.

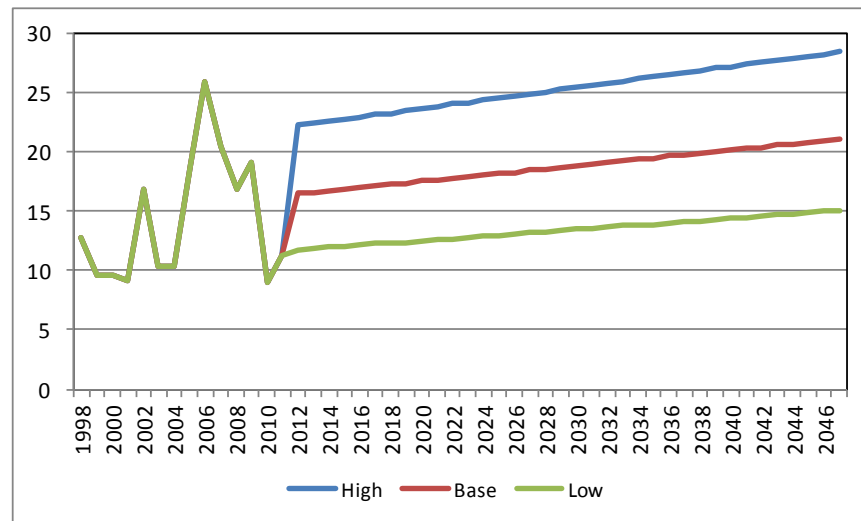
Migration

The migration assumptions are Based on the population projections for Census Division 11 produced by the Alberta Treasury Board and Finance in its latest set of sub-provincial population projections for the province: *Alberta Population Projections by Census Division, 2012-2041* (June 2012).

The Province's migration assumptions determine the possible growth performance of the economy by establishing the rate of overall population growth and, in turn, the rates of growth in employment, the labour force and the economy. In addition, the migration assumptions determine the rate of household formation – the change in the number of households (or occupied dwelling units) – which determines growth in the number of housing units in the Region.

Exhibit 1 shows the three migration assumptions measured in thousands of persons. The assumptions refer to net in-migration to the Region, calculated as migration into the Region minus migration out of the Region. Net in-migration in the Base scenario starts near its average of about 15 thousand over the past 10 years rising to about 21 thousand in 2047. The Low scenario starts near the bottom of the range since 1998 and rises to 15 thousand in 2047. The High scenario assumption starts just below the top of this range and rises to 29 thousand in 2047.

Exhibit 1
Net In-Migration (000s), Capital Region, 1998-2047

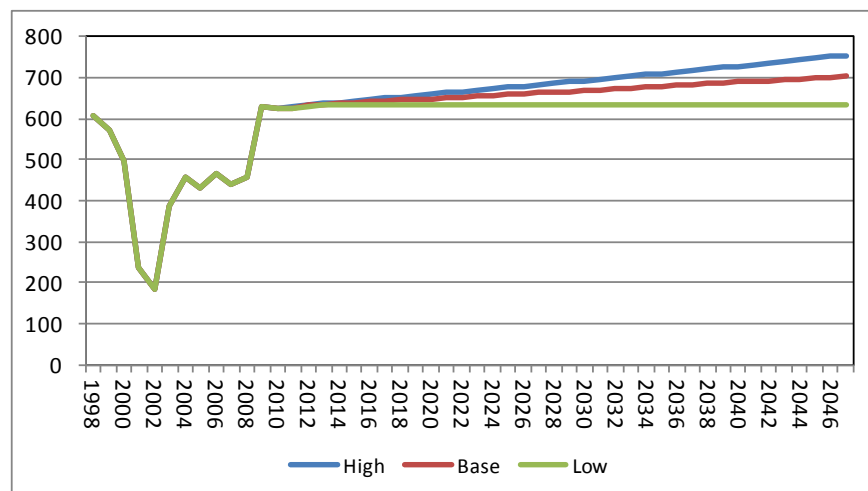


Source: Statistics Canada 1998 to 2011, Stokes Economic Consulting 2012 to 2047

Agriculture

Exhibit 2 shows the outlook for real Gross Domestic Product in agriculture (GDP in agriculture adjusted for inflation measured in millions of 2002 dollars). Exhibit 2 reveals that agriculture production fell sharply starting in 1999 and did not recover to its 1998 level until 2010.

Exhibit 2
Real GDP (\$2002 Millions), Agriculture, Capital Region, 1998-2047



Source: Statistics Canada 1998 to 2011, Stokes Economic Consulting 2012 to 2047

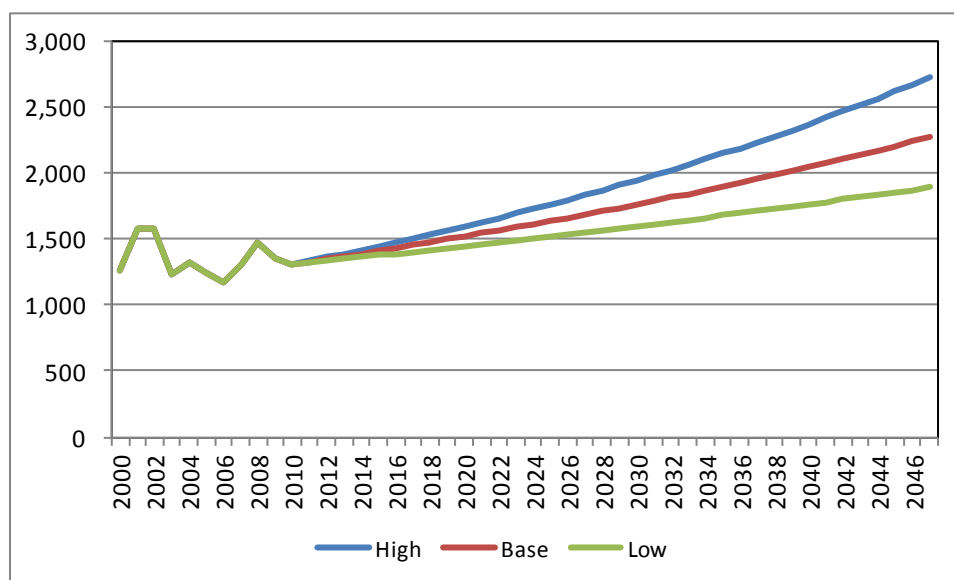
The agriculture industry is not expected to make a large contribution to overall growth in the Capital Region over the projection period. The scenario assumptions show real GDP in agriculture rising on average by 0.3 percent per year in the Base scenario and by 0.5 percent in the High scenario and remaining at its current level in the Low scenario.

Tourism

The tourism sector in the Region includes the wholesale and retail trade, transportation, accommodation and food services, and other private services industries. The latter industry includes the amusement and recreation industry.

Exhibit 3 shows the assumptions for real GDP in the tourism sector in the Region. The sector has exhibited little growth since 2000. The Low, Base, and High scenarios assume average annual growth rates of 1.0, 1.5, and 2.0 percent, respectively, over the scenario period. These scenarios all assume an improved performance of the sector from its past performance. The growth rates for the tourism sector, particularly for business tourism, reflect the increased economic activity that takes place in the region over the scenario period described below.

Exhibit 3
Real GDP (\$2002 Millions), Tourism Sector, Capital Region, 2000-2047



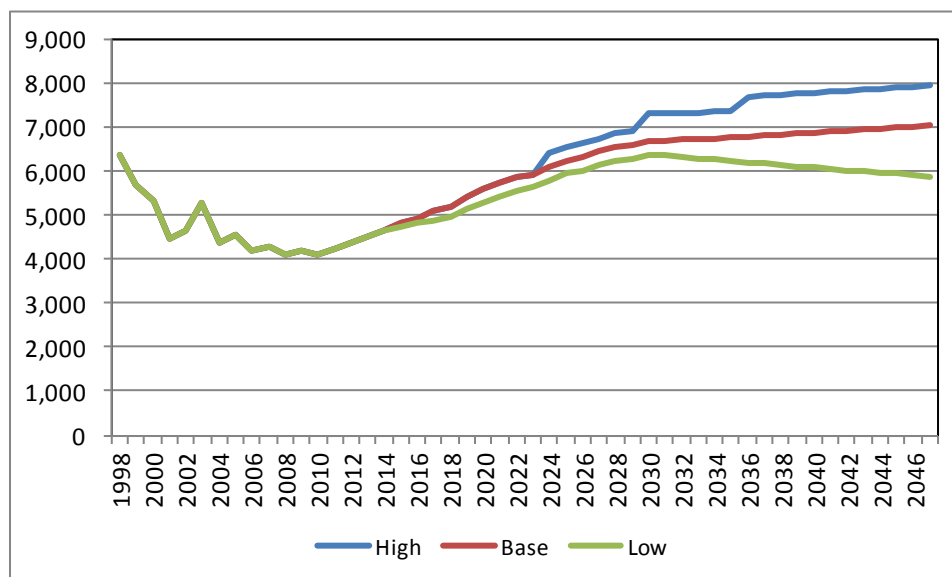
Source: Statistics Canada 2000 to 2011, Stokes Economic Consulting 2012 to 2047

Oil and Gas

The oil and gas industry – oil refineries are included under the manufacturing industry – and oil and gas services industry make a significant contribution to the Capital Region economy. While the Region does not produce much conventional oil and gas, the oil and gas service industry is an important provider of services to the conventional oil and gas industry.

In addition, oil sands upgraders currently and in the future could make a significant contribution to the Region's economy. Moreover, the Region's manufacturing industry – particularly the fabricated metal and machinery industries – has been and will likely continue to be linked closely to the development of the oil sands industry.

Exhibit 4
Real GDP (\$2002 Millions), Oil and Gas
Capital Region, 2000-2047



Source: Statistics Canada 1998 to 2011, Stokes Economic Consulting 2012 to 2047

The outlook for oil and gas GDP is shown in Exhibit 4. A key assumption in the scenarios is that the growth of oil and gas GDP in the Region is in line with the assumptions about the future performance of Alberta's oil and gas industry. The Region's growth reflects both continued growth in the oil and gas services sector as well as the construction of additional oil sands upgraders in the Region. The Northwest upgrader is scheduled for construction over the next few years in 3 phases. In the Base scenario all 3 phases are implemented, while in the Low scenario only phase 1 is completed. In the High scenario an additional 3 upgraders, each equaling the size of the Northwest upgrader, are assumed to be added to the Region by 2040.

The assumptions for Alberta's oil and gas production use the outlooks prepared by the Canadian Association of Petroleum Producers – *June 2012 Crude Oil Forecast, Markets & Pipelines* – Alberta Energy Conservation Board – *ST98-2012 Alberta's Energy Reserves 2011 and Supply/Demand Outlook 2012–2021* – and the Centre for Spatial Economics – *June 2012 Provincial Economic Outlook*. These outlooks show conventional oil and gas production trending downward as Western Sedimentary Basin reserves diminish.

The downward trend in conventional production is offset by significant increases in oil sands production. This outlook represents the Base Case outlook. For the High and Low Case scenarios changes in the growth rates for conventional and oil sands developments were assumed to reflect slower and more rapid growth respectively.

Trading Partner Growth

The outlook for the Region's major trading partners is important to its economic performance through exports. The Region's major trading partners are the rest of Alberta, the rest of Canada and the United States.

To create the scenarios, assumptions are set for GDP growth rates for the Region's major trading partners. The different growth performance impacts the growth of exports of manufacturing and services to the trading partners. The GDP growth rate assumptions are based on those used in the *June 2012 Provincial Economic Outlook* of the Centre for Spatial Economics. These assumptions in turn are derived from the latest 2012 economic outlook publications of the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), the World Bank, and the United States Congressional Budget Office (CBO).

Government

The government plays an important role in the growth performance of the Region through its current and capital expenditures. These expenditures are largely determined by population growth and therefore driven by the Alberta Treasury Board and Finance population projection assumptions. The government, nevertheless, can increase per capita expenditures to achieve its goals.

In the scenarios it is assumed that the government keeps its expenditure growth constant on a per capita and inflation adjusted basis. In the case of education services expenditure growth is driven by the school-age population. For health services, expenditures remain constant on an age group weighted expenditure basis – using weights computed from expenditure information on health expenditures by age published by the Canadian Institute for Health Information. For general government services expenditures are kept constant on a per person basis.

Scenario Results

The results of the scenarios for selected demographic and economic variables are described in the following sub-sections.

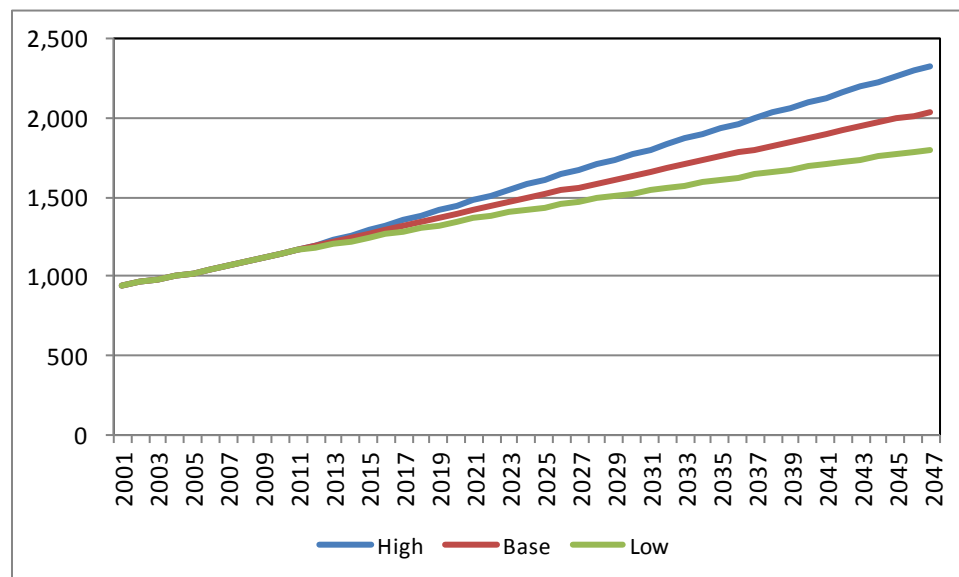
Population

The population for the Capital Region for the three scenarios is shown in Exhibit 5 measured in thousands of persons. As mentioned above, the population results are determined largely by the migration assumptions in the MOF projections. The population of the Region increases from about 1.2 million at present to 1.8, 2.0, and 2.3 million in the Low, Base, and High scenarios, respectively, in 2047.

Population growth in percentage terms slows over the period in all three scenarios. In the Base scenario, population growth falls from an average annual rate of 2.0 percent in the period 2012 to 2017 to 1.3 percent over the 2032 to 2047 span. The average growth rate over the 2012 to 2047 period is 1.5 percent. By way of comparison the Region's population grew at an average annual rate of 2.1 percent between 2001 and 2011. In the High scenario, population growth averages 1.9 percent for the period as a whole. In the Low scenario it averages 1.2 percent. The slowdown in the rate of population growth over the period reflects the aging of the population and lower migration rates in percentage terms.

In absolute terms the Region's population grows at a rate averaging 24,400 per year between 2012 and 2047 in the Base Case, 32,600 per year in the High Case and 17,800 per year in the Low Case. Between 2001 and 2011 the Region's population grew in absolute terms at an average annual rate of 22,100.

Exhibit 5
Population (000s), Capital Region, 2001-2047



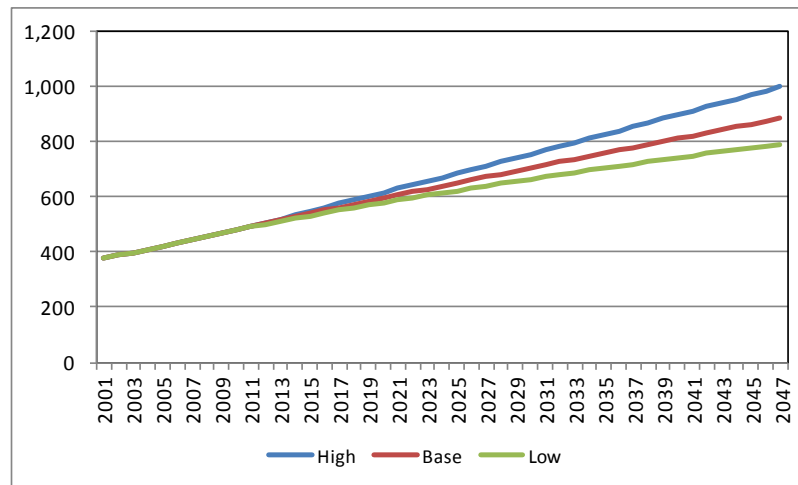
Source: Statistics Canada 2001 to 2011, Stokes Economic Consulting 2012 to 2047

Households

The number of households for the scenarios is shown in Exhibit 6 measured in thousands.

Households rise in line with population, but at a slightly slower rate. They increase from about 0.5 million at present to 1.0, 0.9, and 0.8 million, respectively, in the High, Base, and Low scenarios in 2047.

Exhibit 6 Households (000s), Capital Region, 2001-2047



Source: Statistics Canada 2001 to 2011, Stokes Economic Consulting 2012 to 2047

The annual average change in the number of households slows over the projection period but not as quickly as population slows. The aging of the population leads to a decline in the number of persons per unit over the projection period and thus a faster pace of household growth than population growth. For the scenario period as a whole household formation per year averages 13.6, 11.0 and 8.9 thousand, respectively, in the High, Base, and Low scenarios (see Exhibit 8).

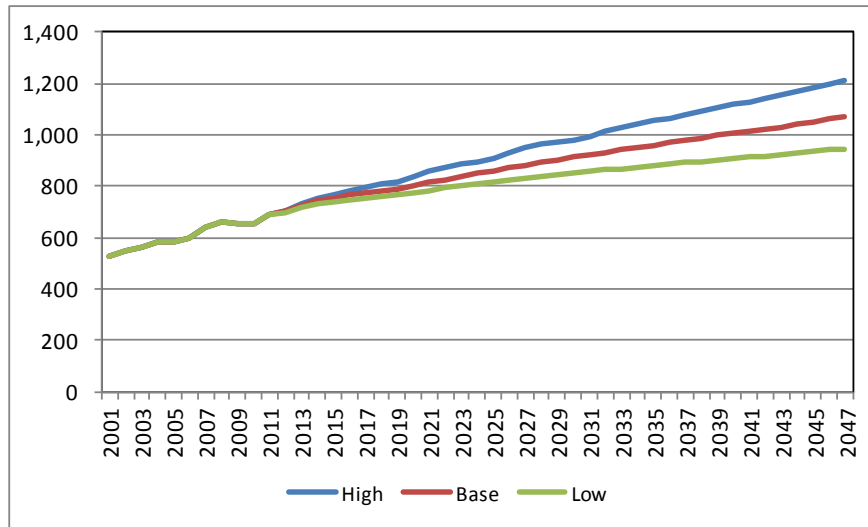
Employment

Employment for the scenarios is shown in Exhibit 7 measured in thousands. Employment increases in line with population, but at a slightly slower rate, also resulting from the aging of the population which shrinks the working aged share of persons (those 20 to 64) within the total population. Job growth is determined by the growth rate in industry GDP and productivity. Employment increases from 0.7 million today to 1.2, 1.1, and 0.9 million, respectively, in the High, Base, and Low scenarios in 2047. The growth rate of employment falls over the scenario period in line with slower economic growth. The average annual rates of growth over the period are 1.6, 1.2, and 0.9 percent, respectively, for the High, Base, and Low scenarios. Public service employment shows the strongest rates of growth reflecting the implications of the aging of the population for growth in health and social services expenditures and weak productivity growth. Employment growth in the goods and service producing industries is similar in the scenarios.

Exhibits 8 tabulates the projection results for the total population, households and employment by major sector while Exhibit 9 tabulates the projection results for real Gross Domestic Product (GDP) and its expenditure components over various time periods across the projection horizon. The performance of employment is in line with average annual growth in real GDP and labour productivity. Real GDP growth averages 2.9, 2.5, and 2.1 percent, respectively, in the High, Base, and Low scenarios over the scenario period. The corresponding results for labour productivity – real GDP per employee – are 1.1, 1.0, and 0.9 percent, respectively.

Exhibit 7

Employment (000s), Capital Region, 2001-2047



Source: Statistics Canada 1998 to 2011, Stokes Economic Consulting 2012 to 2047

Exhibit 8

Average Annual Growth for Population, Households, and Employment (%) Capital Region, 2001-2047

	2001-2011	2012-2017	2017-2022	2022-2032	2032-2047	2012-2047
Population (% Change)						
High	2.1	2.4	2.2	1.9	1.5	1.9
Base	2.1	2.0	1.8	1.5	1.3	1.5
Low	2.1	1.6	1.4	1.2	0.9	1.2
Household Formation (000s)						
High	11.2	14.0	13.8	13.9	14.4	14.1
Base	11.2	11.6	11.2	10.9	10.6	10.9
Low	11.2	9.8	9.2	8.4	7.5	8.3
Employment (% Change)						
High	2.8	2.4	1.9	1.5	1.2	1.6
Base	2.8	2.0	1.3	1.2	0.9	1.2
Low	2.8	1.6	1.0	0.9	0.6	0.9
Goods-Producing Employment (% Change)						
High	3.8	2.7	1.5	1.2	0.6	1.2
Base	3.8	2.2	0.9	0.7	0.4	0.8
Low	3.8	1.8	0.7	0.4	0.1	0.5
Private Services-Producing Employment (% Change)						
High	2.4	2.4	1.8	1.5	1.3	1.6
Base	2.4	1.9	1.2	1.2	1.0	1.2
Low	2.4	1.5	0.8	0.8	0.6	0.8
Public Services Employment (% Change)						
High	2.8	2.3	2.4	2.1	1.6	1.9
Base	2.8	1.9	2.0	1.7	1.3	1.6
Low	2.8	1.5	1.6	1.4	1.0	1.3

Source: Statistics Canada 1998 to 2011, Stokes Economic Consulting 2012 to 2047

Business investment expenditures show the strongest performance over the projection period followed by residential investment and consumer expenditures. The relatively strong business investment expenditures reflect the results for industry production where significant capital expenditures are required to facilitate the production. The investment in the upgraders in the Region is part of these expenditures. The sharp slowdown in growth in the 2017 to 2022 period in the base and low scenarios reflects the completion of construction on the Northwest upgrader.

Residential investment is required to construct the additional housing needed for the population as well as renovation expenditures. The slowdown in growth in 2017 to 2022 reflects a downward adjustment to a significant increase in housing starts from the 2009 recession that occurs over the next few years. The reduction in household formation over the remainder of the period reduces growth in residential investment activity.

The additional employment and other income generated in the scenarios from increased industry production drive the growth in consumer expenditures. The growth in government current and capital expenditures is required to meet the needs of the increasing population in the Region.

Exhibit 9
Average Annual Growth for GDP and Expenditure Components (%)
Capital Region, 2001-2047

	2001-2011	2012-2017	2017-2022	2022-2032	2032-2047	2012-2047
Real GDP (% Change)						
High	2.9	4.2	3.5	3.0	2.3	2.9
Base	2.9	3.6	2.6	2.4	1.9	2.4
Low	2.9	3.1	2.2	1.9	1.4	1.9
Consumer Expenditures (% Change)						
High	4.7	4.0	3.2	2.6	2.0	2.6
Base	4.7	3.5	2.4	2.1	1.6	2.1
Low	4.7	2.9	1.9	1.6	1.0	1.6
Residential Construction Expenditures (% Change)						
High	6.7	7.6	1.2	1.3	1.2	2.2
Base	6.7	5.7	0.7	1.0	0.8	1.5
Low	6.7	3.8	0.2	0.4	0.3	0.8
Business Investment Expenditures (% Change)						
High	4.7	5.3	4.5	3.1	1.4	2.9
Base	4.7	4.9	1.7	2.2	1.6	2.3
Low	4.7	4.4	1.2	1.7	1.1	1.7
Government Current Expenditures (% Change)						
High	3.1	2.4	2.4	2.1	1.6	2.0
Base	3.1	2.0	2.0	1.7	1.3	1.6
Low	3.1	1.6	1.7	1.4	1.1	1.3
Government Capital Expenditures (% Change)						
High	3.9	2.5	2.3	1.9	1.5	1.9
Base	3.9	2.0	1.9	1.5	1.2	1.5
Low	3.9	1.5	1.5	1.2	0.9	1.2

Source: Statistics Canada 1998 to 2011, Stokes Economic Consulting 2012 to 2047

Section 3

THE CAPITAL REGION SCENARIOS BY MUNICIPALITY

This section of the report updates the population and employment projections to 2044 across the CRB's 24 municipalities contained in the document *The Capital Region Growth Plan Addendum* (December 2009).

Two alternatives at the municipal level for total population and total employment (on a place-of-work basis) to 2044 are presented here:

- The High Case of this section is informed by the pace of growth for the region as a whole in the High Case projection of Section 2.
- The Low Case of this section is informed by the pace of growth for the region as a whole in the Base Case projection of Section 2.

Population Projections

The Low Case and High Case population projections by CRB municipality summarized in Exhibits 10, 11 and 12 below were informed by the following:

- The population projections by municipality contained in the December 2009 *Growth Plan Addendum*.
- Preliminary projections by municipality prepared by Strategic Projections based on recent trends in regional growth by municipality and on the pressures for growth region-wide revealed by the Base Case and High Case projections described in Section 2.
- Comments on the preliminary projections solicited by the consultants from municipal staff.

The projections in Exhibits 10, 11 and 12 take into account municipal census information for 2012 and/or Statistics Canada revisions to the 2011 Census population counts for Bruderheim, Leduc County, Redwater and Thorsby.

Exhibit 10
Capital Region Total Population by Municipality
Low Case

Municipality	Population Totals				Average Annual % Change			
	2014	2019	2029	2044	14-19	19-29	29-44	14-44
Beaumont	15,400	19,000	25,800	35,800	4.2	3.1	2.2	2.9
Bon Accord	1,600	1,800	2,200	2,700	2.3	1.9	1.5	1.8
Bruderheim	1,300	1,500	1,800	2,300	2.4	2.0	1.6	1.9
Calmar	2,100	2,400	2,900	3,600	2.3	1.9	1.5	1.8
Devon	7,000	7,800	9,500	11,800	2.3	1.9	1.5	1.8
Edmonton	861,900	944,700	1,104,700	1,336,800	1.9	1.6	1.3	1.5
Fort Saskatchewan	21,100	24,400	30,900	40,300	3.0	2.4	1.8	2.2
Gibbons	3,200	3,600	4,300	5,400	2.2	1.9	1.5	1.7
Lamont	1,900	2,100	2,500	3,100	2.1	1.8	1.4	1.7
Lamont County	4,200	4,700	5,700	7,200	2.4	2.0	1.5	1.8
Leduc	26,300	29,700	36,200	45,700	2.4	2.0	1.6	1.9
Leduc County	14,100	15,000	16,700	19,300	1.2	1.1	1.0	1.1
Legal	1,400	1,500	1,800	2,200	2.1	1.8	1.4	1.6
Morinville	9,200	10,200	12,000	14,800	2.1	1.7	1.4	1.6
Parkland County	31,800	33,700	37,400	42,700	1.2	1.0	0.9	1.0
Redwater	2,200	2,300	2,600	3,100	1.4	1.2	1.1	1.2
Spruce Grove	28,400	32,100	39,300	49,700	2.5	2.0	1.6	1.9
St. Albert	64,300	69,100	78,300	91,600	1.4	1.3	1.1	1.2
Stony Plain	16,700	19,400	24,600	32,200	3.1	2.4	1.8	2.2
Strathcona County	96,800	104,000	117,900	138,000	1.4	1.3	1.1	1.2
Sturgeon County	20,600	22,400	25,900	31,000	1.7	1.5	1.2	1.4
Thorsby	1,000	1,100	1,400	1,700	2.1	1.8	1.5	1.7
Wabamun	700	800	900	1,100	2.0	1.7	1.3	1.6
Warburg	900	900	1,100	1,300	1.7	1.5	1.2	1.4
Region	372,200	409,500	481,700	586,600	1.9	1.6	1.3	1.5
Edmonton	861,900	944,700	1,104,700	1,336,800	1.9	1.6	1.3	1.5
CRB Total	1,234,100	1,354,200	1,586,400	1,923,400	1.9	1.6	1.3	1.5

Source: Strategic Projections and CRB Staff

Exhibit 11
Capital Region Total Population by Municipality
High Case

Municipality	Population Totals				Average Annual % Change			
	2014	2019	2029	2044	14-19	19-29	29-44	14-44
Beaumont	17,000	23,800	37,400	58,200	6.9	4.6	3.0	4.2
Bon Accord	1,600	1,900	2,500	3,300	3.1	2.6	2.0	2.4
Bruderheim	1,400	1,600	2,100	2,900	3.2	2.6	2.1	2.5
Calmar	2,200	2,500	3,200	4,300	3.0	2.5	1.9	2.3
Devon	7,100	8,200	10,500	13,900	3.0	2.4	1.9	2.3
Edmonton	864,800	960,100	1,151,800	1,443,900	2.1	1.8	1.5	1.7
Fort Saskatchewan	22,400	28,400	40,400	58,700	4.9	3.6	2.5	3.3
Gibbons	3,300	3,800	4,800	6,400	2.9	2.4	1.9	2.2
Lamont	1,900	2,200	2,900	3,800	3.0	2.5	1.9	2.3
Lamont County	4,200	4,900	6,400	8,500	3.1	2.5	2.0	2.3
Leduc	27,500	33,300	44,900	62,600	3.9	3.0	2.2	2.8
Leduc County	14,300	15,800	18,600	23,200	1.9	1.7	1.5	1.6
Legal	1,400	1,600	2,000	2,700	3.0	2.4	1.9	2.3
Morinville	9,300	10,700	13,400	17,500	2.7	2.3	1.8	2.1
Parkland County	32,200	35,200	41,000	50,000	1.8	1.6	1.3	1.5
Redwater	2,300	2,700	3,500	4,800	3.3	2.7	2.1	2.5
Spruce Grove	29,600	35,700	48,100	67,000	3.9	3.0	2.2	2.8
St. Albert	66,300	75,200	92,900	120,000	2.5	2.1	1.7	2.0
Stony Plain	17,100	20,900	28,500	40,000	4.1	3.1	2.3	2.9
Strathcona County	98,100	108,300	128,800	160,000	2.0	1.7	1.5	1.6
Sturgeon County	21,200	24,100	30,100	39,200	2.7	2.2	1.8	2.1
Thorsby	1,100	1,200	1,600	2,200	3.3	2.6	2.1	2.5
Wabamun	700	800	1,100	1,400	3.0	2.5	1.9	2.3
Warburg	900	1,000	1,200	1,600	2.6	2.2	1.7	2.0
Region	383,100	443,800	565,900	752,200	3.0	2.5	1.9	2.3
Edmonton	864,800	960,100	1,151,800	1,443,900	2.1	1.8	1.5	1.7
CRB Total	1,247,900	1,403,900	1,717,700	2,196,100	2.4	2.0	1.7	1.9

Source: Strategic Projections and CRB Staff

Exhibit 12
Capital Region Total Population by Municipality
Low and High Case 2014 to 2044

	Population Totals			Average Annual % Change	
	2014	Low 2044	High 2044	Low 14-44	High 14-44
Municipality	2014	Low 2044	High 2044	Low 14-44	High 14-44
Beaumont	15,400	35,800	58,200	2.9	4.2
Bon Accord	1,600	2,700	3,300	1.8	2.4
Bruderheim	1,300	2,300	2,900	1.9	2.5
Calmar	2,100	3,600	4,300	1.8	2.3
Devon	7,000	11,800	13,900	1.8	2.3
Edmonton	861,900	1,336,800	1,443,900	1.5	1.7
Fort Saskatchewan	21,100	40,300	58,700	2.2	3.3
Gibbons	3,200	5,400	6,400	1.7	2.2
Lamont	1,900	3,100	3,800	1.7	2.3
Lamont County	4,200	7,200	8,500	1.8	2.3
Leduc	26,300	45,700	62,600	1.9	2.8
Leduc County	14,100	19,300	23,200	1.1	1.6
Legal	1,400	2,200	2,700	1.6	2.3
Morinville	9,200	14,800	17,500	1.6	2.1
Parkland County	31,800	42,700	50,000	1.0	1.5
Redwater	2,200	3,100	4,800	1.2	2.5
Spruce Grove	28,400	49,700	67,000	1.9	2.8
St. Albert	64,300	91,600	120,000	1.2	2.0
Stony Plain	16,700	32,200	40,000	2.2	2.9
Strathcona County	96,800	138,000	160,000	1.2	1.6
Sturgeon County	20,600	31,000	39,200	1.4	2.1
Thorsby	1,000	1,700	2,200	1.7	2.5
Wabamun	700	1,100	1,400	1.6	2.3
Warburg	900	1,300	1,600	1.4	2.0
Region	372,200	586,600	752,200	1.5	2.3
Edmonton	861,900	1,336,800	1,443,900	1.5	1.7
CRB Total	1,234,100	1,923,400	2,196,100	1.5	1.9

Source: Strategic Projections and CRB Staff

Employment Projections

For the purposes of this assignment Strategic Projections developed a model of Capital Region employment by industry by place-of-work by municipality.

At the outset it should be noted that employment by place-of-work data from the National Household Survey carried out in conjunction with the 2011 Census – as of the end of August 2013 – has not yet been made available in the format required by Strategic Projections for inclusion in this update to the projections of employment by CRB municipality. This section of the report will be revised once the new data have been made available to us and we have had an opportunity to assess their impact.

At this time therefore the 2006 Census data for employment by place-of-work by industry by municipality is the latest available regarding where jobs are distributed throughout the area.

The model distributes future employment growth by industry – as determined by the Region-wide projections by industry described in Section 2 – to each of the area's 24 municipalities by separately projecting those jobs that primarily produce goods and services exported to other areas and those jobs that primarily serve the needs of the local population. We separate employment along these two lines because they are driven by different factors.

These two job types are commonly referred to as export based and community based, or economic base and population serving.

Export Based and Community Based Jobs

Jobs that primarily produce goods and services for export purposes are those found in the goods-producing industries such as agriculture, forestry, fishing, mining and manufacturing.

Jobs that primarily produce services in support of the local community are those found in construction; wholesale trade; retail trade; transportation and warehousing; information and culture; finance and insurance; real estate and leasing; professional and other business services; education; health and social services; arts, entertainment and recreation; other services; and government.

Sometimes some of these service jobs provide services to residents or businesses located in other communities, especially jobs in such industries as business services; education; health and social services; and government.

Exhibit 13 decomposes all of the jobs on a place-of-work basis by industry for the Region as a whole in 2006 into their separate economic base and community base components. Exhibit 13 reveals that:

- In 2006 118,436 jobs were identified as economic base jobs and 393,474 as community base jobs. Thus 23 percent of the 511,910 jobs found in the area in 2006 were providing goods or services to people or businesses located outside of the Capital Region.
- On an industry basis the major contributors to the economic base of the Region include manufacturing (46,255, or 39.1 percent of all the Region's economic base jobs); government (17,023, 14.4 percent); mining, oil and gas (12,265, 10.4 percent); health and social services (8,208, 6.9 percent); wholesale trade (6,678, 5.6 percent); agriculture, forestry, fishing and hunting (6,615, 5.6 percent); and education (5,697, 4.8 percent). Collectively these 7 industries accounted for 81.1 percent of all the economic base jobs in the Region in 2006.
- Exhibit 13 also reveals that most of the jobs in service sectors such as wholesale trade, education, health and social services and government are community base, not economic base, jobs. The jobs in these sectors attributed to the economic base of the Region represent those providing wholesale trade services within the Region above and beyond the needs of the Region per se (reflecting the area's role as a major distribution hub within the province), and those providing within the Region health, education and government services above and beyond the Region's needs (reflecting the Region's role as a provider of higher order health, post-secondary education and provincial administration services to residents elsewhere in the province).

The decomposition of jobs for the Region into their economic base and community base components was achieved by comparing the number of jobs per capita in each industry for the Region in 2006 to the number of such jobs per capita across the rest of Alberta. Where the Region's ratio exceeds that of the rest of the province the excess jobs are attributed to the Region's economic base.

Exhibit 14 shows by municipality within the Region where the total population, total employment and the total economic base and community base jobs were distributed in 2006. Exhibit 14 also provides a number of calculations that help to illustrate the way the model we created allocates future employment growth by municipality throughout the Region.

Exhibit 13
Capital Region Total Employment by Place-of-Work by Industry
Economic Base and Community Base Components in 2006

	Census 2006		
Employed by Place-of-Work by Industry	EB	CB	Total
Total all industries	118,436	393,474	511,910
Agriculture, forestry, fishing, hunting	6,615	0	6,615
Mining, oil and gas	12,265	0	12,265
Utilities	570	4,675	5,245
Construction	2,206	25,804	28,010
Manufacturing	46,255	0	46,255
Wholesale trade	6,678	22,002	28,680
Retail trade	3,465	59,125	62,590
Transportation, warehousing	0	21,255	21,255
Information, culture	1,014	9,656	10,670
Finance, insurance	2,179	17,086	19,265
Real estate, leasing	883	10,212	11,095
Professional, scientific, technical services	0	37,035	37,035
Management services	0	630	630
Administrative support, waste management	2,274	14,391	16,665
Education	5,697	32,848	38,545
Health, social services	8,208	48,367	56,575
Arts, entertainment, recreation	0	9,215	9,215
Accommodation, food	0	35,510	35,510
Other services	3,104	25,696	28,800
Government	17,023	19,967	36,990

Source: Statistics Canada and Strategic Projections

Exhibit 14
Capital Region Total Employment by Place-of-Work by Industry
Economic Base and Community Base Components in 2006 by Municipality

		Employed	Activity	EB	CB	EB	CB
Municipalities	Population	POW	Rate	Jobs	Jobs	Rate	Rate
CRB Total	1,035,878	512,055	494	118,451	393,604	114	380
Edmonton	730,372	398,060	545	92,366	305,694	126	419
Beaumont	8,961	1,380	154	35	1,345	4	150
Bon Accord	1,534	260	169	50	210	33	137
Bruderheim	1,215	235	193	100	135	82	111
Calmar	1,959	560	286	155	405	79	207
Devon	6,261	1,625	260	110	1,515	18	242
Fort Saskatchewan	14,957	7,520	503	2,275	5,245	152	351
Gibbons	2,642	545	206	110	435	42	165
Lamont	1,669	780	467	110	670	66	401
Lamont County	3,905	950	243	590	360	151	92
Leduc	16,967	8,280	488	1,325	6,955	78	410
Leduc County	13,135	15,380	1,171	7,440	7,940	566	604
Legal	1,192	320	268	75	245	63	206
Morinville	6,775	2,180	322	270	1,910	40	282
Parkland County	29,220	6,945	238	2,525	4,420	86	151
Redwater	2,202	1,060	481	235	825	107	375
Spruce Grove	19,541	7,515	385	755	6,760	39	346
St. Albert	57,764	17,085	296	885	16,200	15	280
Stony Plain	12,363	4,225	342	285	3,940	23	319
Strathcona County	82,511	30,150	365	6,600	23,550	80	285
Sturgeon County	18,566	5,550	299	1,760	3,790	95	204
Thorsby	945	565	598	105	460	111	487
Wabamun	601	390	649	110	280	183	466
Warburg	621	495	797	180	315	290	507

Source: Statistics Canada and Strategic Projections

Exhibit 14 reveals the following:

- The first data column shows the population of each municipality while the second shows the number of jobs provided by employers in each. The third column shows the “activity rate” for each municipality where the activity rate is equal to the number of jobs provided in each area per 1,000 residents.
- The activity rate for the Region as a whole was 494 jobs per 1,000 residents. That rate was exceeded by only 6 of the 24 municipalities within the Region. Leduc County had the highest activity rate at 1,171 jobs per 1,000 residents and was the only municipality with more jobs than residents. Warburg’s activity rate at 797, Wabamun’s at 649, Thorsby’s at 598, Edmonton’s at 545 and Fort Saskatchewan’s at 503 all exceeded the Regional average. The rates in Leduc (488), Redwater (481) and Lamont (467) all came close to the Regional average of 494. Thus within the Region job provision exceeded or came close to the Regional average in only 9 of its 24 municipalities.

The fourth and fifth data columns show the number of economic base and community base jobs in each municipality in 2006 revealing where these jobs were concentrated within the Region in 2006 in an absolute sense. The final two data columns show the economic base and community base jobs in each municipality per 1,000 residents in 2006. The final two columns add up to the value of the third data column (the overall activity rate). These rates reveal where the economic base and community base jobs were concentrated in the Region in a relative sense.

The economic base and community base jobs were concentrated in an absolute sense as follows:

- The lion’s share of economic base jobs was accounted for by Edmonton (about 92,366, or 78.0 percent of the Region’s total), Leduc County (7,440, 6.3 percent), Strathcona County (6,600, 5.6 percent), Parkland County (2,525, 2.1 percent), Fort Saskatchewan (2,275, 1.9 percent), Sturgeon County (1,760, 1.5 percent) and Leduc (1,325, 1.1 percent). These 7 collectively accounted for 96.5 percent of the exported goods and service jobs in the Region in 2006. The remaining 3.5 percent were scattered throughout the remaining 17 municipalities of the Region.
- Community base jobs are found throughout the Region, not surprisingly since they exist to serve primarily the needs of people, not businesses. Nevertheless, the number of community base jobs per 1,000 residents exceeded the Regional average of 380 in only 7 municipalities including Leduc County (604), Warburg (507), Thorsby (487), Wabamun (466), Edmonton (419), Leduc (410) and Lamont (401), and it came close to the Regional average in Redwater (375), Fort Saskatchewan (351) and Spruce Grove (346). The community base jobs ratio fell well short of the average in all of the remaining 14 municipalities indicating that the residents of these 14 municipalities travel to nearby centres to obtain many of these community based services.

The model we built to estimate job growth from 2006 to 2012 and to project job growth from 2012 to 2044 allocates that growth to the Region's 24 municipalities as follows:

- Region-wide employment growth in the area's community based industries grows in line with the population growth of each municipality based on the number of such jobs per capita in each in 2006, known and expected growth in such jobs per capita Region-wide to 2011 and to 2044, and the expected population growth of each municipality. Allocating community growth jobs in this way reflects the reality that such jobs are population serving and thus are most likely to grow in the future in tandem with the population of each community. Note that this assumption implies that under-served communities will remain so across the projection horizon. It is possible that some underserved communities will improve on local service levels across that span and, therefore, that the projections here might understate employment growth in those cases.
- Region-wide employment growth in the area's export base industries grows in line with where such jobs were found in the Region in 2006. So, for example, the major export base employer in the Region in 2006 was manufacturing. The macro projections described in Section 2 indicate manufacturing jobs in the Base Case projection will increase by 100 percent between 2006 and 2047, from 46,255 to 92,637. The employment model increases the number of manufacturing jobs in Edmonton (which accounted for 32,880 manufacturing jobs in 2006, or 71.1 percent of the Region's total) by 100 percent, and the number of manufacturing jobs in Strathcona County (3,830 in 2006, 8.3 percent) and in Leduc County (3,440 in 2006, 7.4 percent) also by 100 percent. This assumption reflects the likelihood that future manufacturing job growth will occur where such jobs are already found. These three communities accounted for 86.8 percent of all the manufacturing jobs in the Region in 2006.
- In a similar vein the growth in export based jobs in health and social services (expected to grow by 150 percent) and in government services (up by 47 percent) are assumed to grow in Edmonton where all of the Region's export based jobs in these service industries were located in 2006.

In summary, the macro model in Section 2 determines the employment by industry growth pressures expected to be felt by the Region as a whole over the projection horizon.

The municipal employment model in Section 3 allocates the economic base jobs over that span to those centres already endowed with such jobs in a manner that assumes the region-wide growth pressures by industry will be felt in a relative sense by every community endowed with such jobs in 2006.

The model allocates the projected community base job growth pressures to those communities projected to see the greatest population gains following on consideration of the base year per capita availability of such jobs in each municipality.

Exhibits 15, 16 and 17 summarize the gains in total employment expected in each community from 2012 to 2044 for the Low Case and High Case alternatives

Exhibit 15
Capital Region Total Employment by Municipality
Low Case

Municipality	Employment Totals				Average Annual % Change			
	2014	2019	2029	2044	14-19	19-29	29-44	14-44
Beaumont	2,400	2,800	3,800	5,000	3.7	2.9	1.9	2.5
Bon Accord	300	300	400	400	1.8	1.5	0.9	1.3
Bruderheim	300	300	300	400	1.6	1.5	1.1	1.3
Calmar	600	700	800	900	1.6	1.5	0.9	1.2
Devon	1,800	2,000	2,400	2,800	1.7	1.6	1.2	1.4
Edmonton	486,500	519,800	598,200	699,100	1.3	1.4	1.0	1.2
Fort Saskatchewan	10,600	11,800	14,400	17,600	2.1	2.0	1.4	1.7
Gibbons	700	800	900	1,000	1.7	1.6	1.1	1.3
Lamont	900	1,000	1,200	1,400	1.8	1.7	1.2	1.5
Lamont County	1,100	1,200	1,300	1,300	1.5	0.9	0.0	0.6
Leduc	12,800	14,000	16,400	19,400	1.7	1.6	1.1	1.4
Leduc County	18,100	18,900	20,600	21,600	0.9	0.8	0.3	0.6
Legal	400	400	400	500	1.2	1.2	0.7	1.0
Morinville	3,000	3,200	3,600	4,200	1.4	1.4	1.0	1.2
Parkland County	8,100	8,400	9,100	9,500	0.7	0.8	0.3	0.5
Redwater	1,100	1,200	1,300	1,500	0.9	1.0	0.7	0.8
Spruce Grove	11,200	12,200	14,400	17,200	1.7	1.7	1.2	1.4
St. Albert	19,800	20,700	23,000	25,900	0.9	1.1	0.8	0.9
Stony Plain	5,800	6,600	8,200	10,300	2.5	2.2	1.5	1.9
Strathcona County	37,400	39,000	43,100	47,600	0.9	1.0	0.7	0.8
Sturgeon County	5,900	6,300	7,100	7,900	1.4	1.2	0.7	1.0
Thorsby	600	700	800	900	1.3	1.3	0.9	1.1
Wabamun	500	500	600	600	1.2	1.3	0.7	1.0
Warburg	700	700	800	800	1.1	1.0	0.4	0.7
Region	144,200	153,700	174,800	198,900	1.3	1.3	0.9	1.1
Edmonton	486,500	519,800	598,200	699,100	1.3	1.4	1.0	1.2
CRB Total	630,700	673,500	773,000	898,000	1.3	1.4	1.0	1.2

Source: Strategic Projections

Exhibit 16
Capital Region Total Employment by Municipality
High Case

Municipality	Employment Totals				Average Annual % Change			
	2014	2019	2029	2044	14-19	19-29	29-44	14-44
Beaumont	2,600	3,500	5,500	8,100	6.3	4.5	2.7	3.9
Bon Accord	300	300	400	500	2.5	2.2	1.5	1.9
Bruderheim	300	300	400	500	2.1	2.1	1.5	1.8
Calmar	600	700	900	1,100	2.0	2.0	1.3	1.7
Devon	1,900	2,100	2,600	3,300	2.3	2.2	1.6	1.9
Edmonton	490,600	528,100	623,200	749,400	1.5	1.7	1.2	1.4
Fort Saskatchewan	11,200	13,300	18,000	24,300	3.5	3.1	2.0	2.6
Gibbons	700	800	1,000	1,200	2.2	2.2	1.5	1.8
Lamont	900	1,100	1,300	1,700	2.5	2.4	1.7	2.1
Lamont County	1,100	1,200	1,400	1,600	1.6	1.4	0.6	1.1
Leduc	13,400	15,400	20,000	26,000	2.9	2.6	1.8	2.2
Leduc County	18,400	19,500	22,400	25,300	1.2	1.4	0.8	1.1
Legal	400	400	500	600	1.7	1.9	1.2	1.5
Morinville	3,000	3,300	4,100	5,000	2.0	2.0	1.4	1.7
Parkland County	8,300	8,700	9,900	11,000	1.0	1.3	0.7	1.0
Redwater	1,200	1,300	1,700	2,100	2.3	2.2	1.6	1.9
Spruce Grove	11,700	13,500	17,500	22,800	2.9	2.6	1.8	2.2
St. Albert	20,500	22,400	27,200	33,600	1.8	1.9	1.4	1.7
Stony Plain	6,000	7,100	9,500	12,700	3.3	2.9	2.0	2.5
Strathcona County	38,100	40,500	47,000	54,800	1.2	1.5	1.0	1.2
Sturgeon County	6,100	6,700	8,200	10,000	2.1	1.9	1.3	1.7
Thorsby	600	700	900	1,100	2.1	2.1	1.4	1.8
Wabamun	500	500	600	800	2.0	1.9	1.3	1.6
Warburg	700	700	900	1,000	1.7	1.7	1.0	1.3
Region	148,600	164,400	201,800	249,200	2.0	2.1	1.4	1.7
Edmonton	490,600	528,100	623,200	749,400	1.5	1.7	1.2	1.4
CRB Total	639,200	692,500	825,000	998,500	1.6	1.8	1.3	1.5

Source: Strategic Projections

Exhibit 17
Capital Region Total Employment by Municipality
Low and High Case 2014 to 2044

	Employment Totals			Average Annual % Change	
	2014	Low 2044	High 2044	Low 14-44	High 14-44
Municipality	2014	Low 2044	High 2044	Low 14-44	High 14-44
Beaumont	2,400	5,000	8,100	2.5	3.9
Bon Accord	300	400	500	1.3	1.9
Bruderheim	300	400	500	1.3	1.8
Calmar	600	900	1,100	1.2	1.7
Devon	1,800	2,800	3,300	1.4	1.9
Edmonton	486,500	699,100	749,400	1.2	1.4
Fort Saskatchewan	10,600	17,600	24,300	1.7	2.6
Gibbons	700	1,000	1,200	1.3	1.8
Lamont	900	1,400	1,700	1.5	2.1
Lamont County	1,100	1,300	1,600	0.6	1.1
Leduc	12,800	19,400	26,000	1.4	2.2
Leduc County	18,100	21,600	25,300	0.6	1.1
Legal	400	500	600	1.0	1.5
Morinville	3,000	4,200	5,000	1.2	1.7
Parkland County	8,100	9,500	11,000	0.5	1.0
Redwater	1,100	1,500	2,100	0.8	1.9
Spruce Grove	11,200	17,200	22,800	1.4	2.2
St. Albert	19,800	25,900	33,600	0.9	1.7
Stony Plain	5,800	10,300	12,700	1.9	2.5
Strathcona County	37,400	47,600	54,800	0.8	1.2
Sturgeon County	5,900	7,900	10,000	1.0	1.7
Thorsby	600	900	1,100	1.1	1.8
Wabamun	500	600	800	1.0	1.6
Warburg	700	800	1,000	0.7	1.3
Region	144,200	198,900	249,200	1.1	1.7
Edmonton	486,500	699,100	749,400	1.2	1.4
CRB Total	630,700	898,000	998,500	1.2	1.5

Source: Strategic Projections

Section 4 CONCLUSIONS

Section 2 of this report assesses the macroeconomic environment and provides a range of population and employment projections for the Capital Region as a whole based on the breadth of demands for growth the Region faces. The pressures for growth today are significantly greater than they were in 2009. The Low Case in Section 2 calls for population and employment growth slightly higher than the only projection put forward in 2009 while the Base and High Cases suggest the potential for growth significantly exceeds that foreseen in 2009.

The projections for the Region by municipality developed in Section 3 suggest the increased demands for growth faced by the Region today are likely to impact every municipality in the area. The contribution assumed for each municipality to the future growth of the Region reflects a combination of factors, most importantly recent trends and aspirations. The municipal projections provided here are intended to reflect the range of future growth pressures faced by each municipality at this time.

Over the course of the next two years Statistics Canada will release information updates that by the fall of 2014, depending on the trends revealed, might trigger a refresh of these projections:

- In January of 2014 Statistics Canada will release Labour Force Survey-based annual estimates of employment by industry for the Edmonton CMA for 2013. This data source underpins the macroeconomic projections for employment described in Section 2. The projections in Section 2 are based on annual LFS data available through 2011. Published data for 2012 and 2013 will help to determine by 2014 whether the Region's overall employment growth is on track with the Low, Base or High projections developed here.
- Over the course of the next few weeks Statistics Canada will release 2011 employment by place-of-work by industry data for each of the municipalities drawn from the new National Household Survey undertaken in connection with the 2011 Census. The 2011 and 2012 employment figures by municipality in Section 3 are estimates developed by the consulting team. This new set of data will determine how close the Section 3 estimates came to determining the level of employment in each municipality in 2011.
- In September of 2013 Statistics Canada will release postcensal population estimates for Canada and its provinces for 2011 based on its assessment of the net undercount of the 2011 Census. In February of 2014 StatsCan will release postcensal estimates at the Census Division level for 2011 based on its assessment of the 2011 undercount. The postcensal population estimates for the Capital Region underpinning the macroeconomic projections in Section 2 for this update are based on postcensal estimates that have been adjusted only for the undercount of the Census in 2006. This new data set will provide population estimates for the Region through to 2013 (and possibly to 2014) and thus will help to establish by the fall of 2014 whether the Region's population growth is on track with the Low, Base or High projections developed here.

- Alberta Treasury Board and Finance will release updates to its population projections for the province as a whole and its constituent Census Divisions in June 2013 and June 2014.
- Between now and 2014 new information is likely to become available regarding the population of individual municipalities within the Region as the result of Municipal Censuses.
- Between now and 2014 new information regarding residential construction trends by municipality within the Region will be made available by Canada Mortgage and Housing Corporation. This new information will help to establish where population growth is occurring within the Region by municipality for those municipalities that do not undertake their own Censuses over this period.

All of the above suggest that a refresh of the Capital Region projections by municipality contained in this report might be considered at some point in 2014.

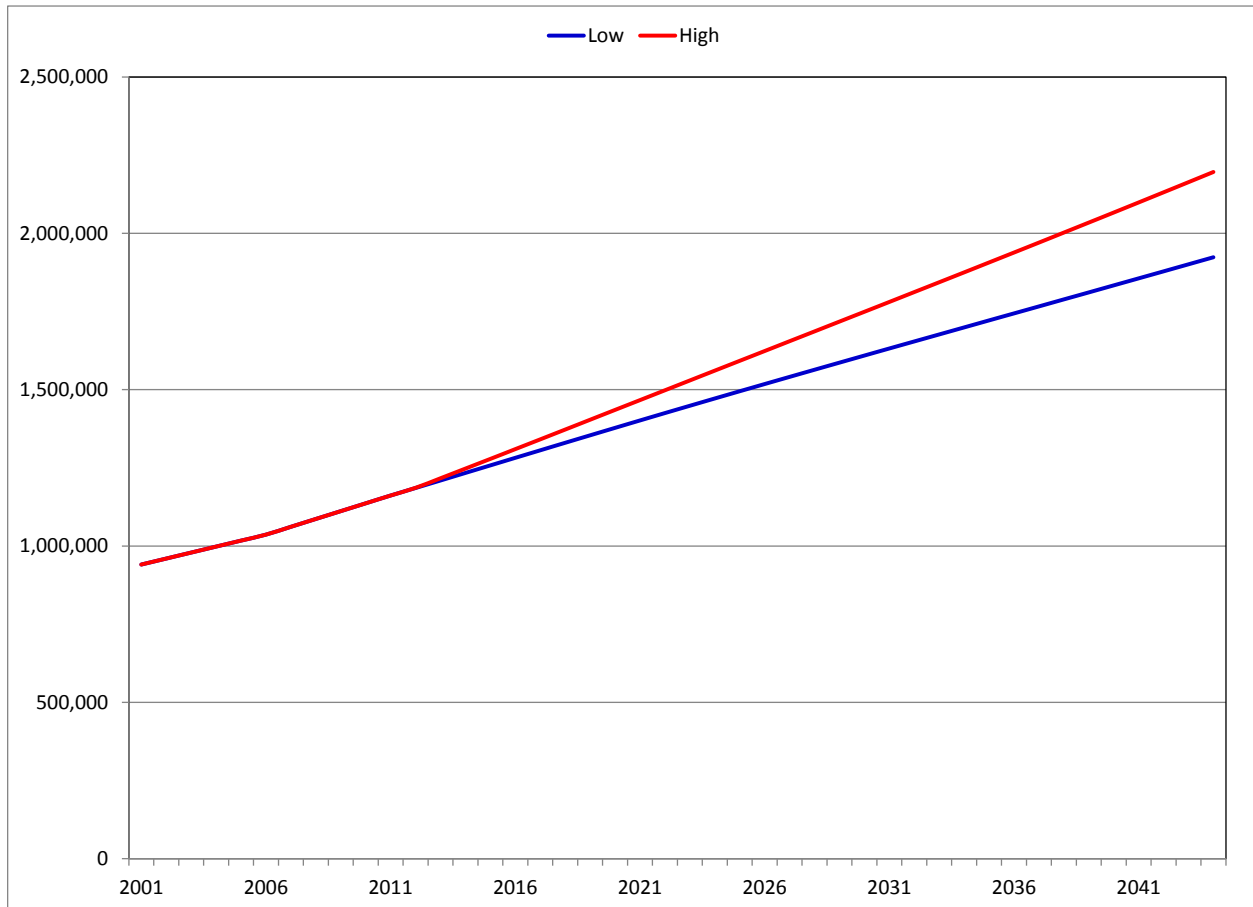
Ernie Stokes of Stokes Economic Consulting Inc. and Tom McCormack of Strategic Projections Inc., the authors of this report, wish to thank the members of the Capital Region Board's Population and Employment Technical Advisory Committee for their invaluable assistance in the preparation of the projections contained in this report.

Appendix A

Capital Region Municipal Population Charts Historical Data 2011 to 2011 Estimated and Projected Data 2012 to 2044

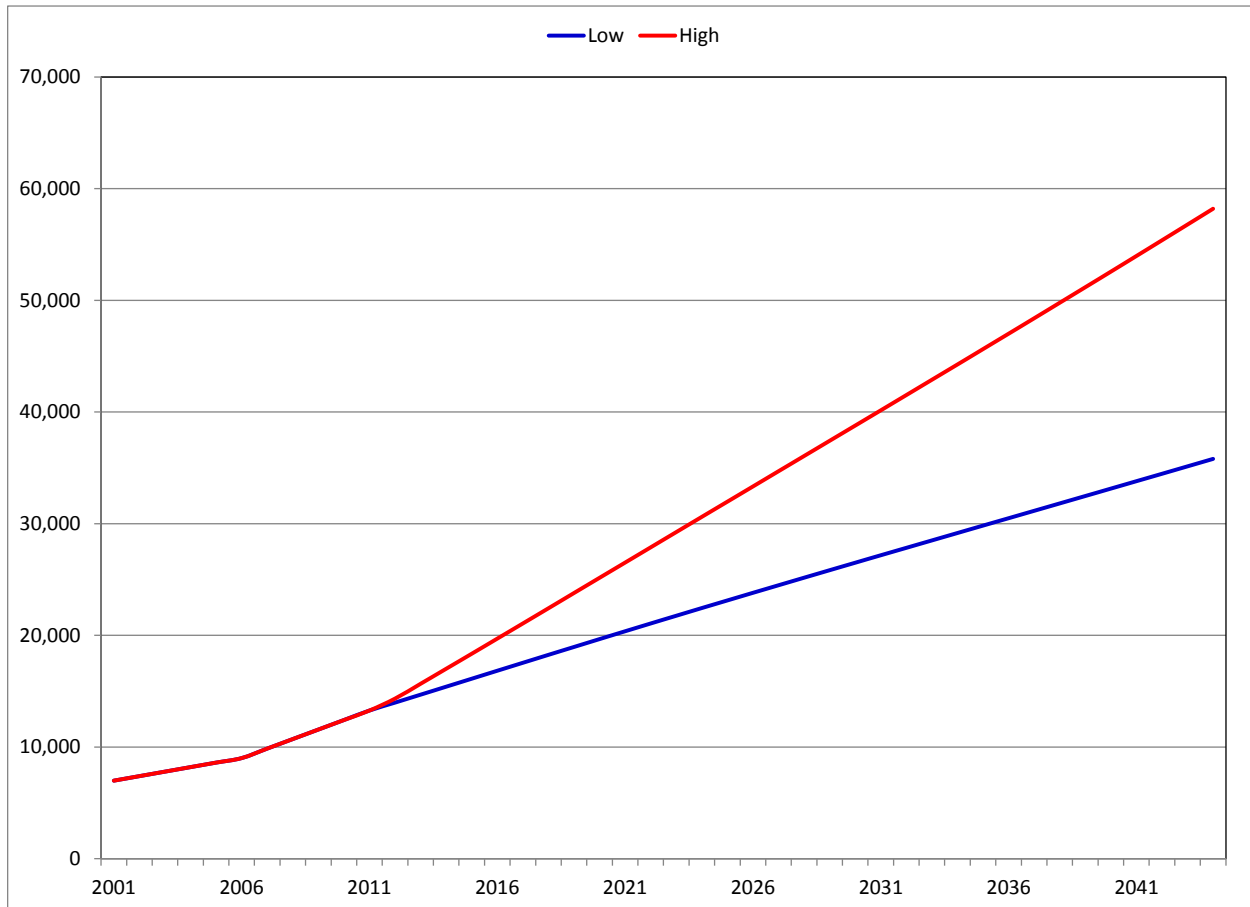
Municipality	Page
All 24 CRB Municipalities	1
Beaumont	2
Bon Accord	3
Bruderheim	4
Calmar	5
Devon	6
Edmonton	7
Fort Saskatchewan	8
Gibbons	9
Lamont	10
Lamont County	11
Leduc	12
Leduc County	13
Legal	14
Morinville	15
Parkland County	16
Redwater	17
Spruce Grove	18
St. Albert	19
Stony Plain	20
Strathcona County	21
Sturgeon County	22
Thorsby	23
Wabamun	24
Warburg	25

Population of All 24 Capital Regional Municipalities 2001 to 2044



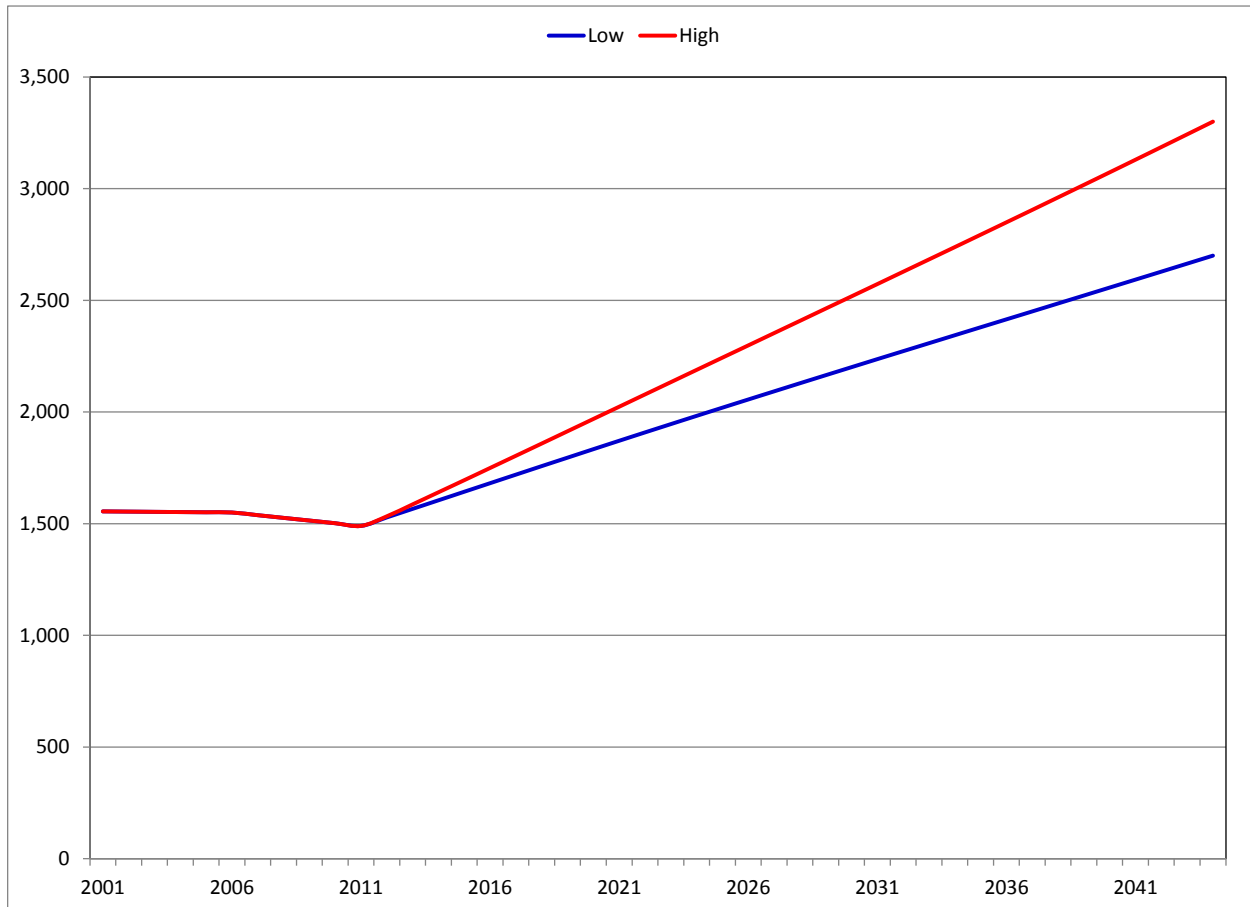
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Population of Beaumont 2001 to 2044



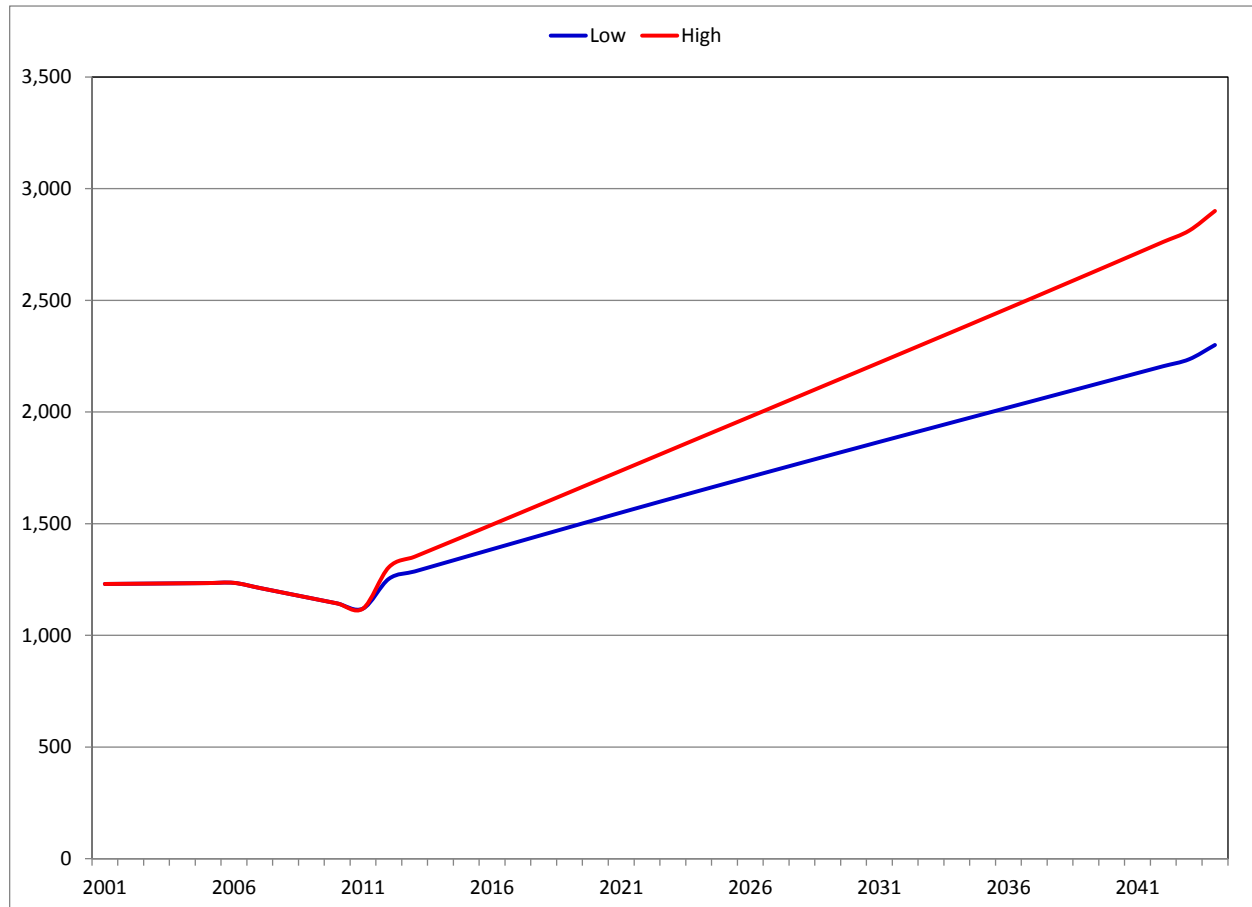
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Strategic Projections 2013 to 2044

Population of Bon Accord 2001 to 2044



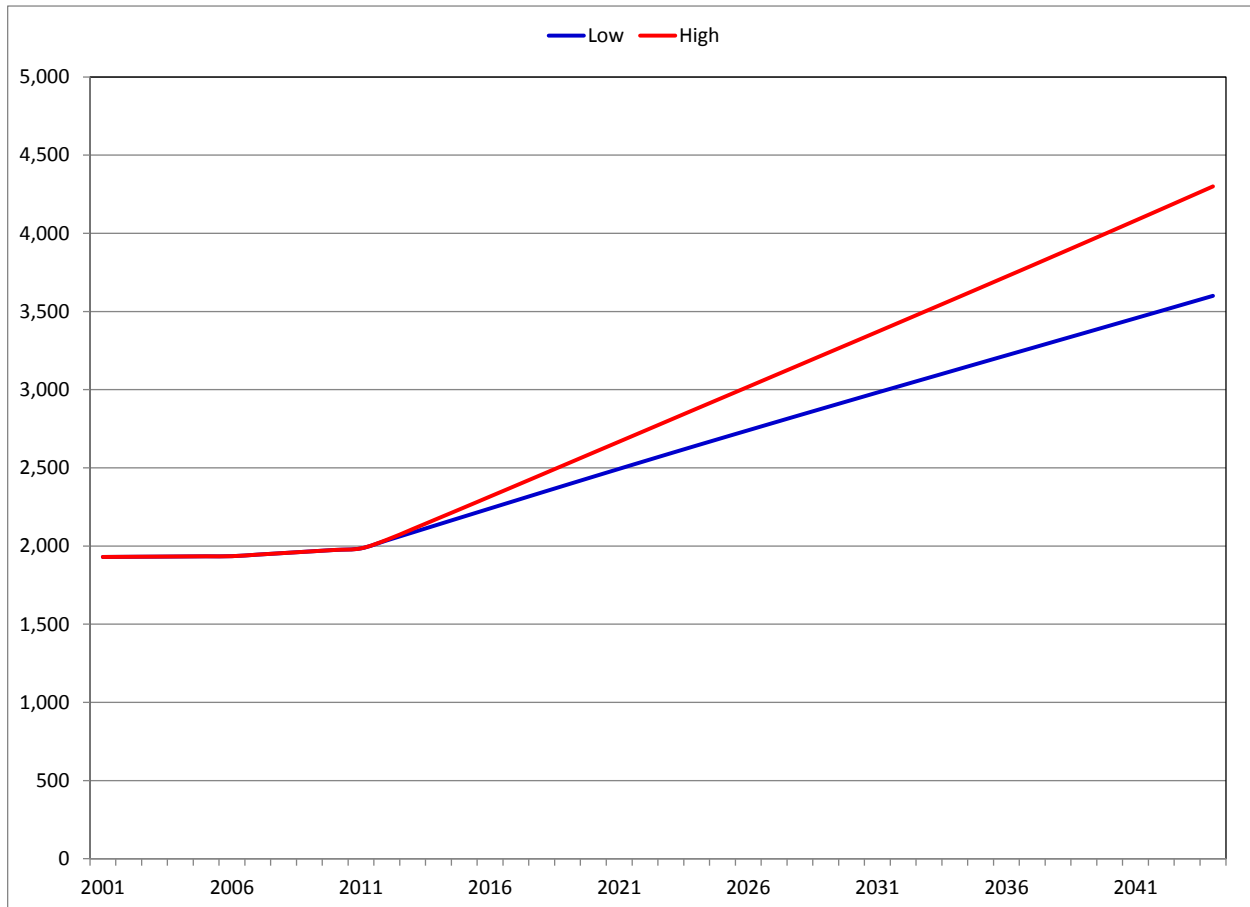
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Population of Bruderheim 2001 to 2044



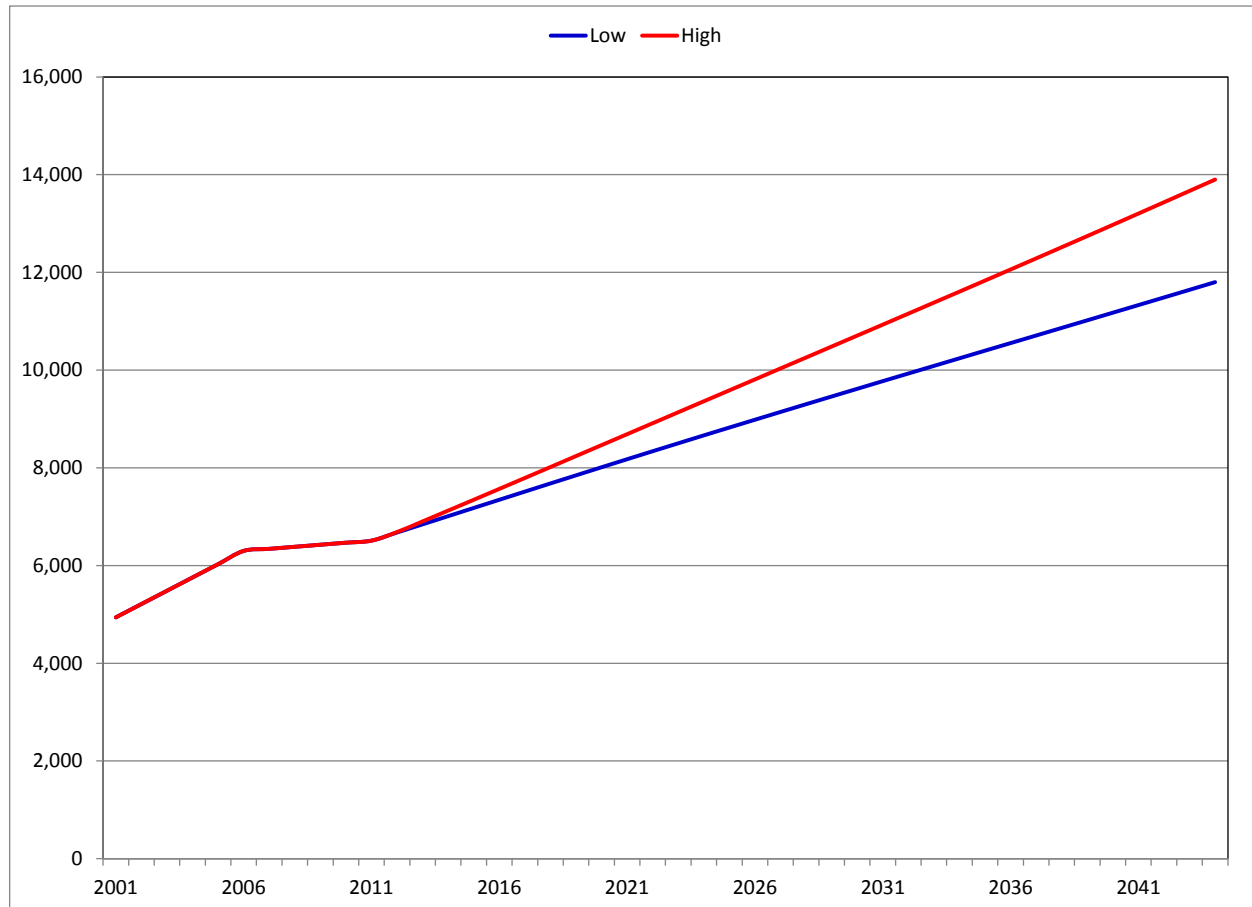
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Population of Calmar 2001 to 2044



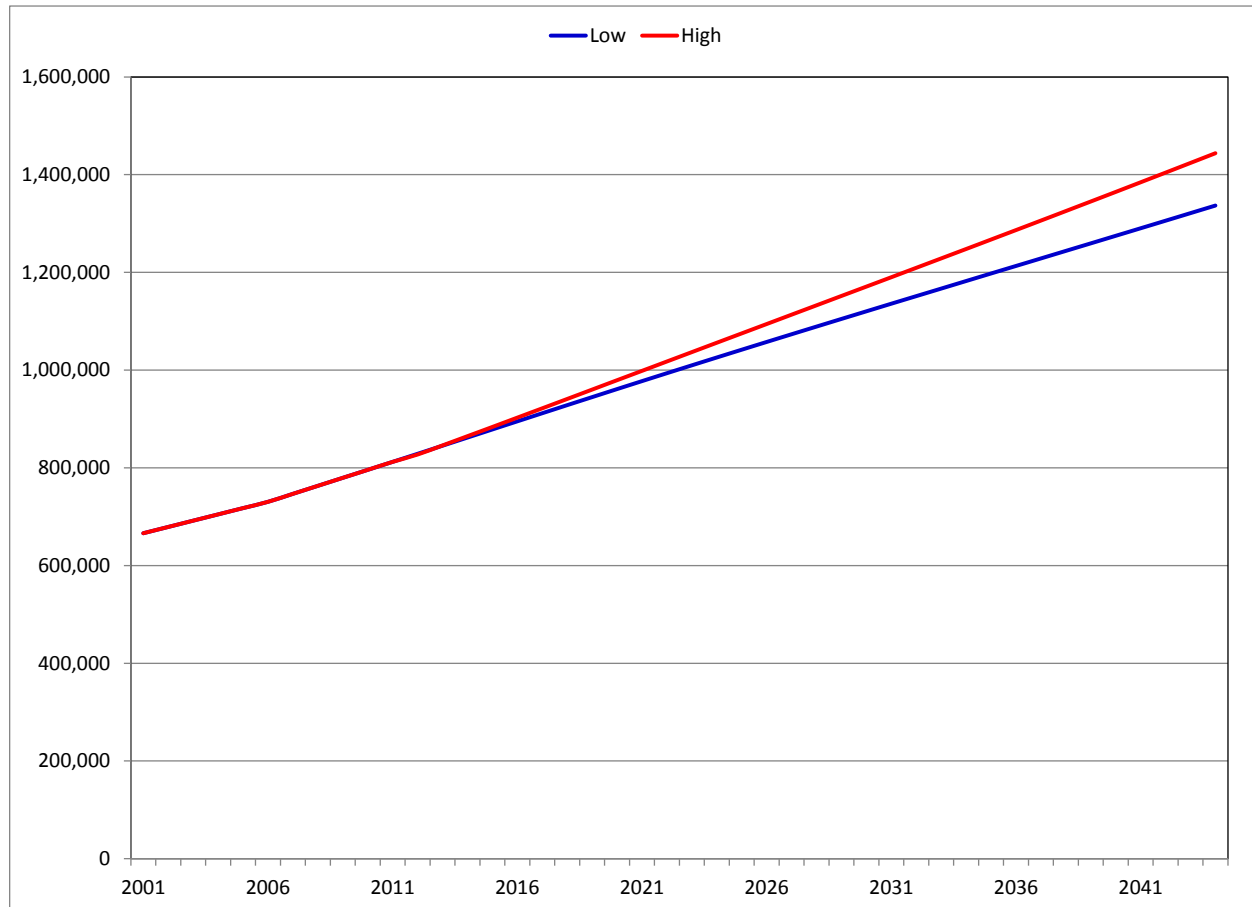
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Population of Devon 2001 to 2044



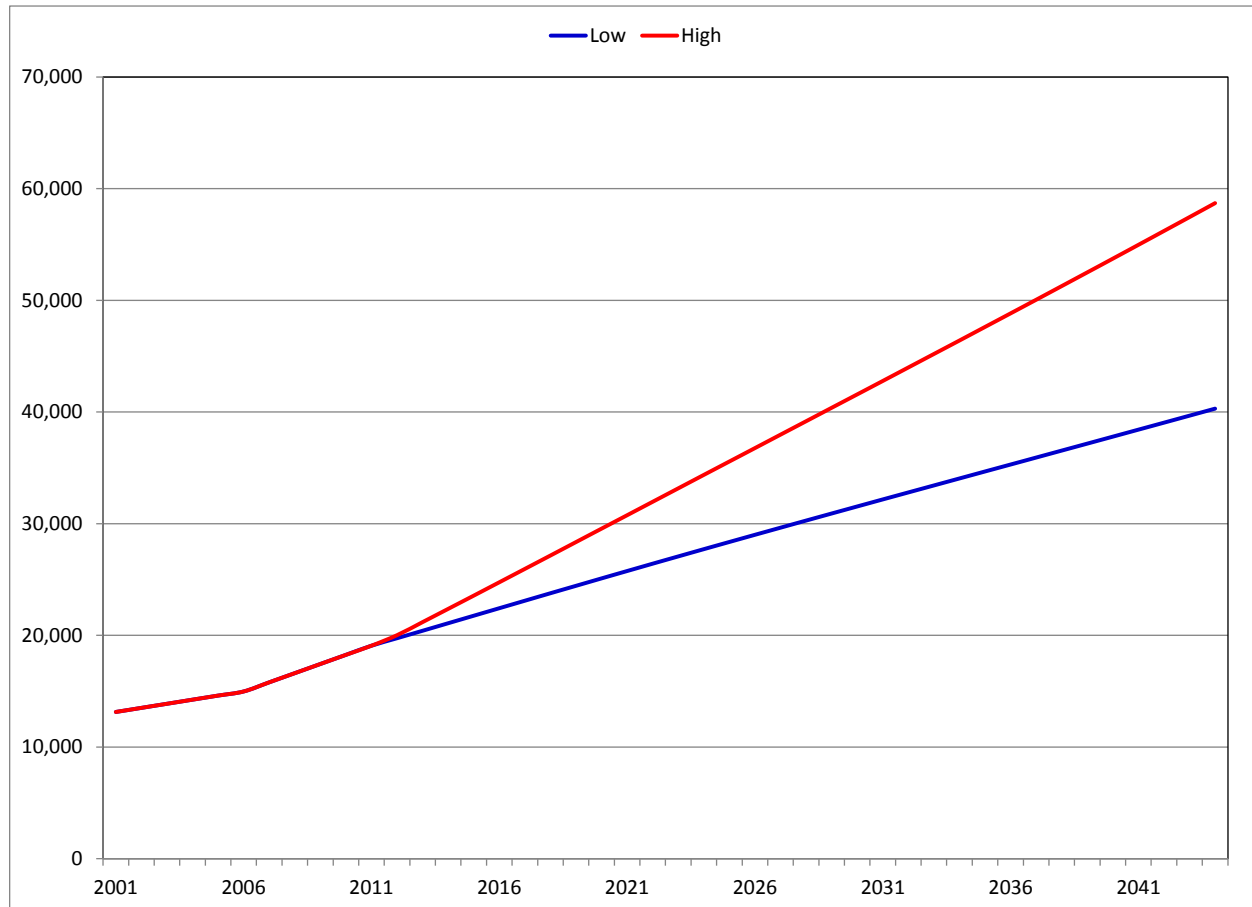
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Population of Edmonton 2001 to 2044



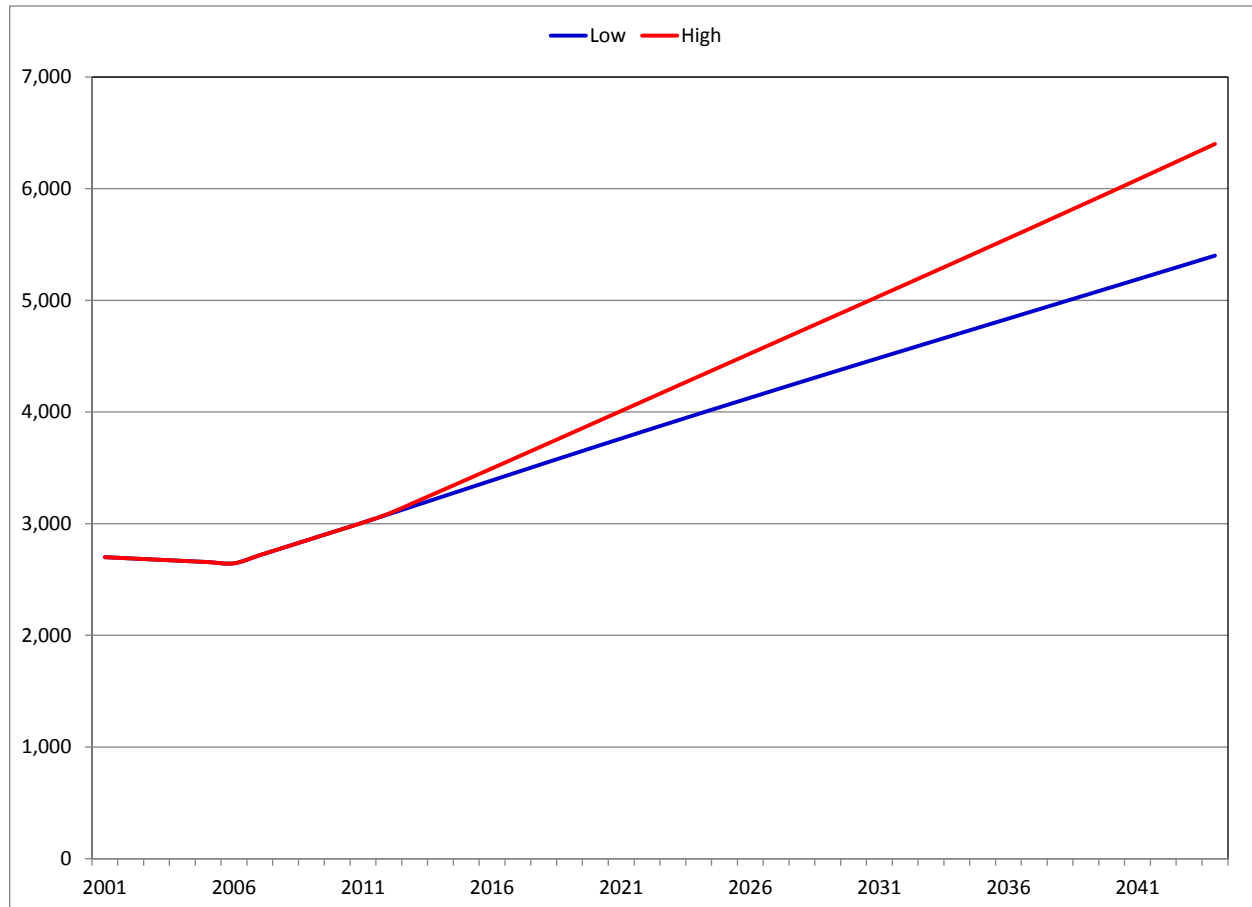
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Population of Fort Saskatchewan 2001 to 2044



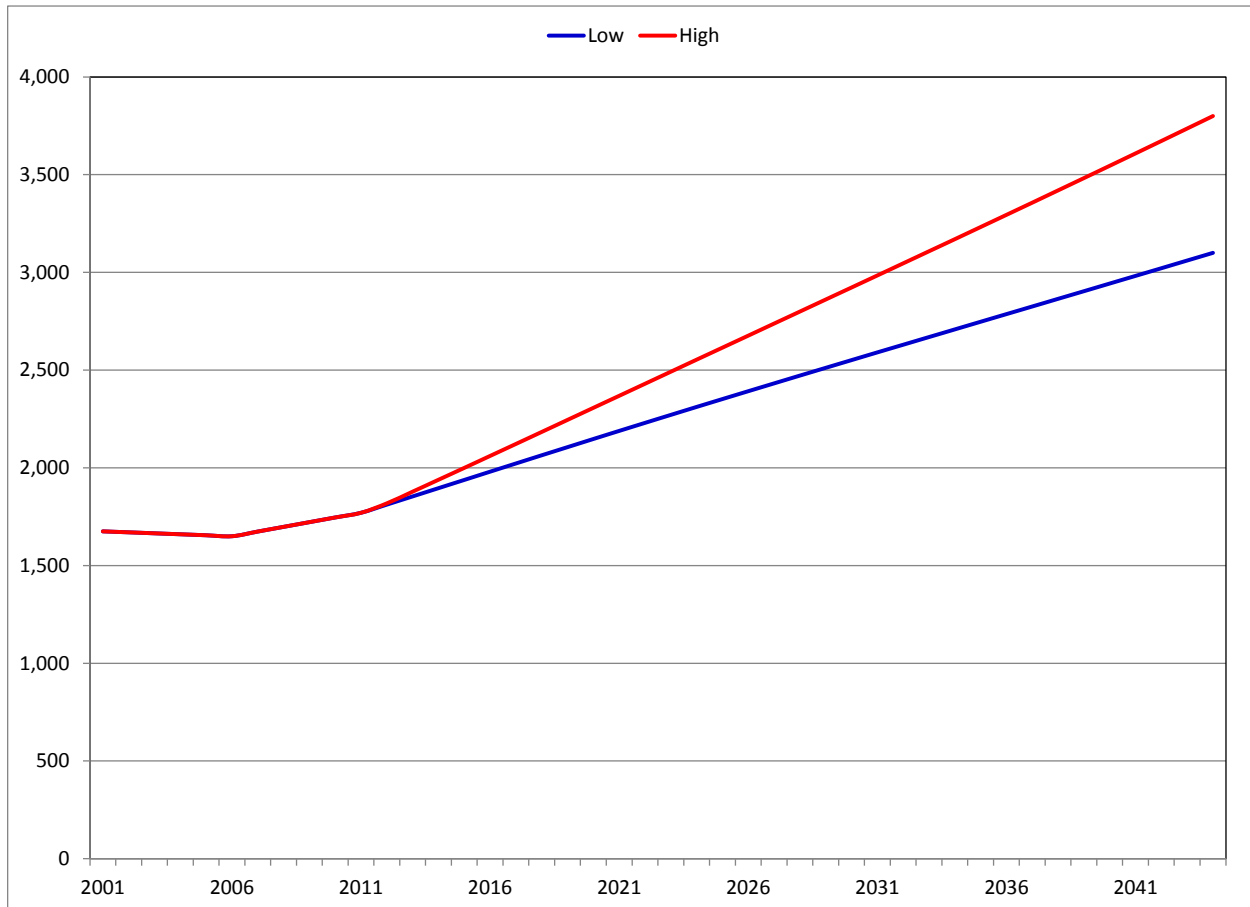
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Population of Gibbons 2001 to 2044



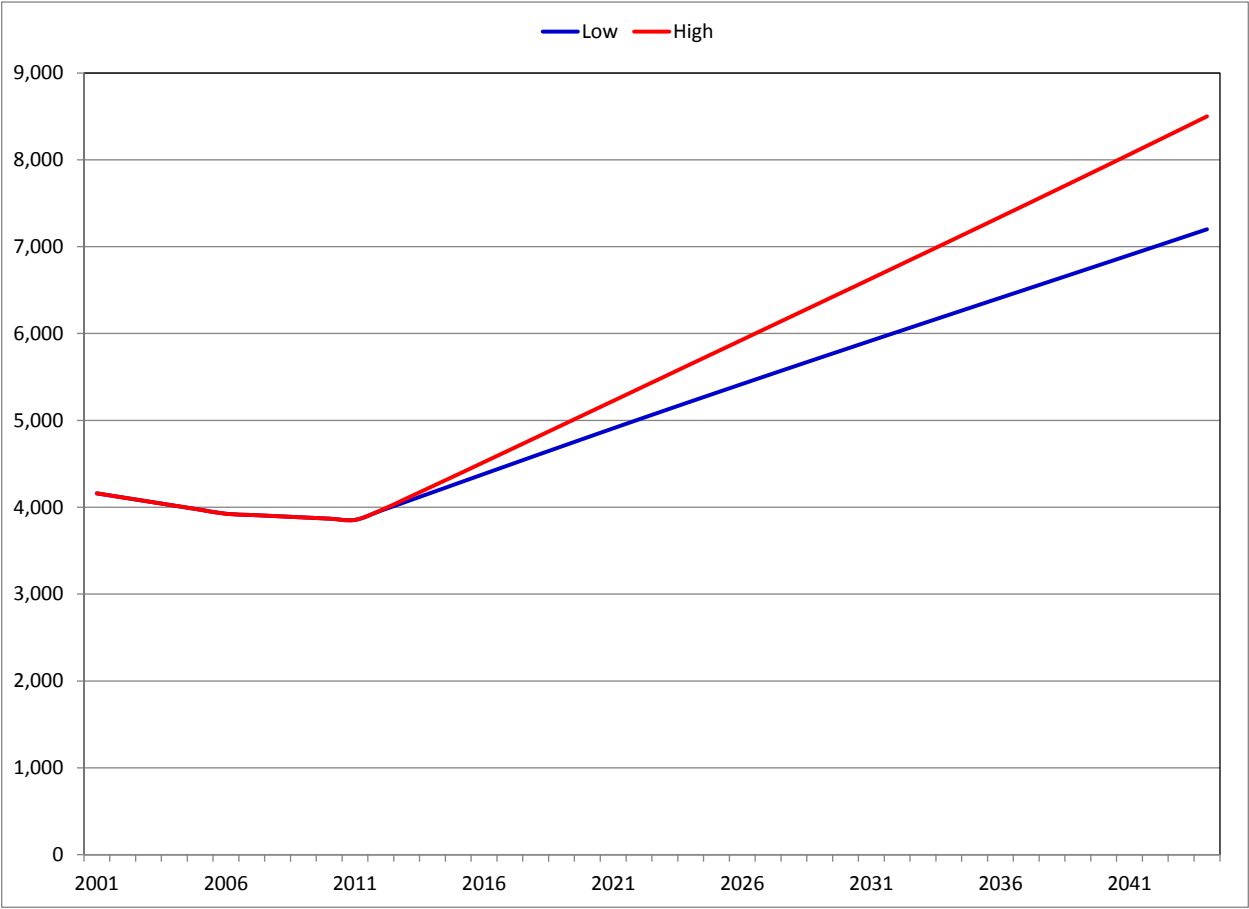
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Population of Lamont 2001 to 2044



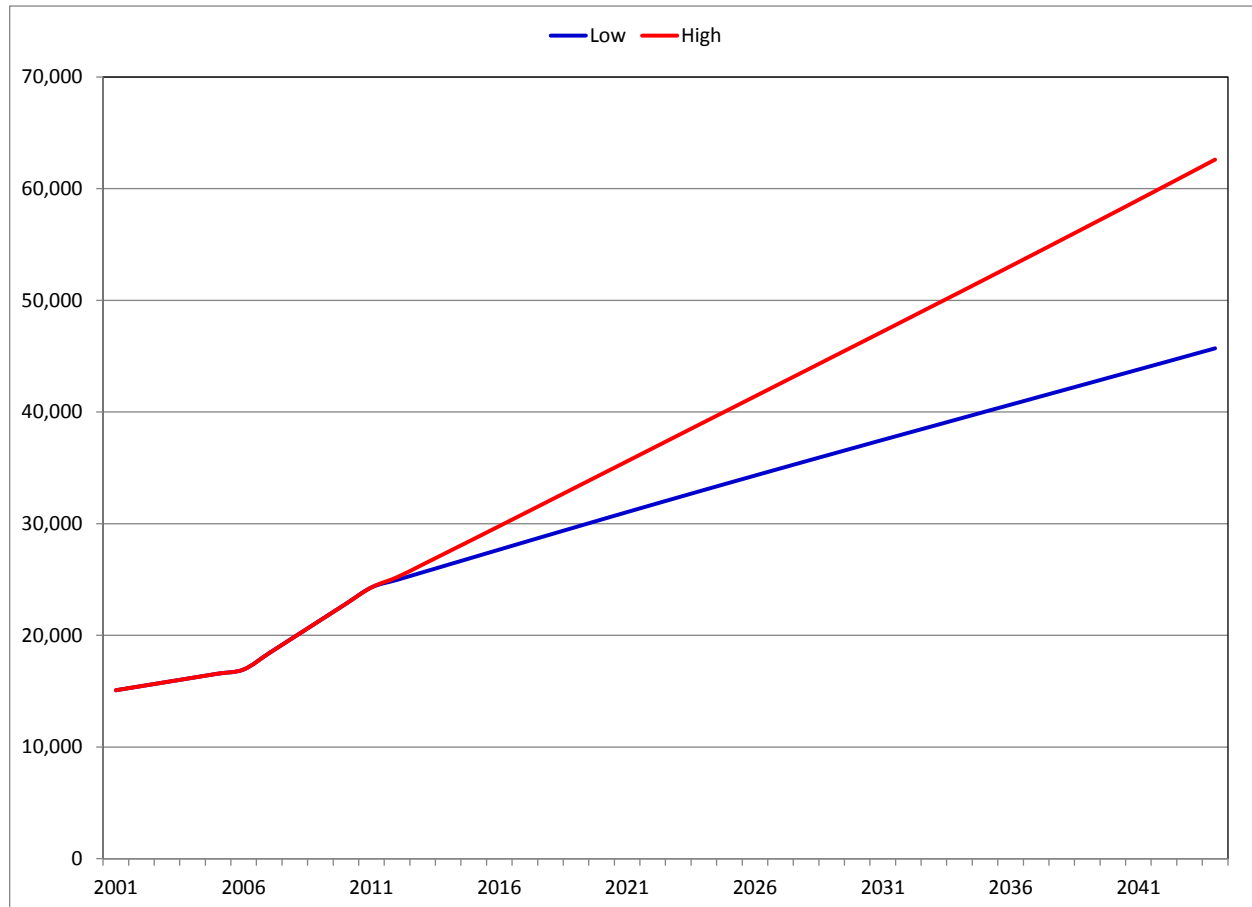
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**Population of Lamont County
2001 to 2044**



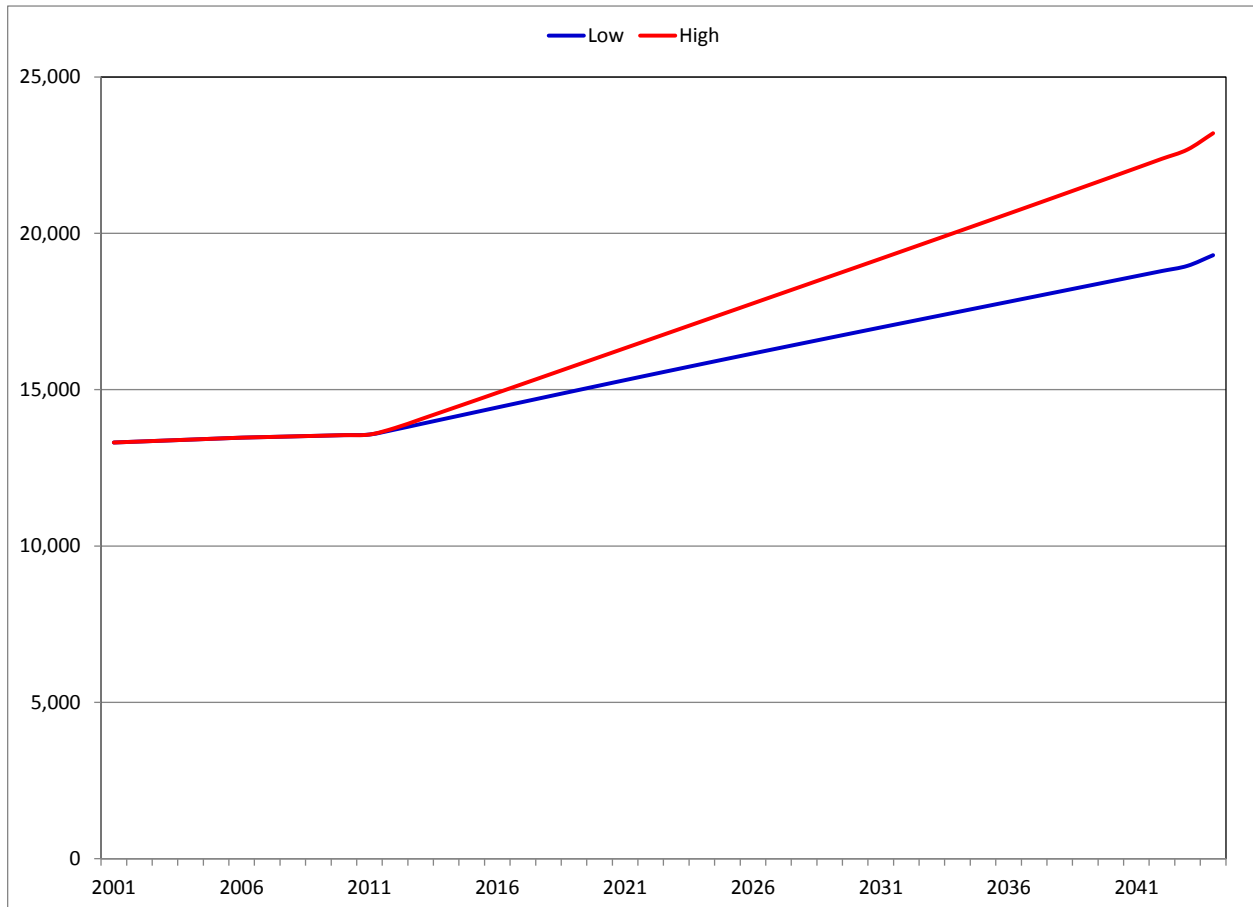
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Population of Leduc 2001 to 2044



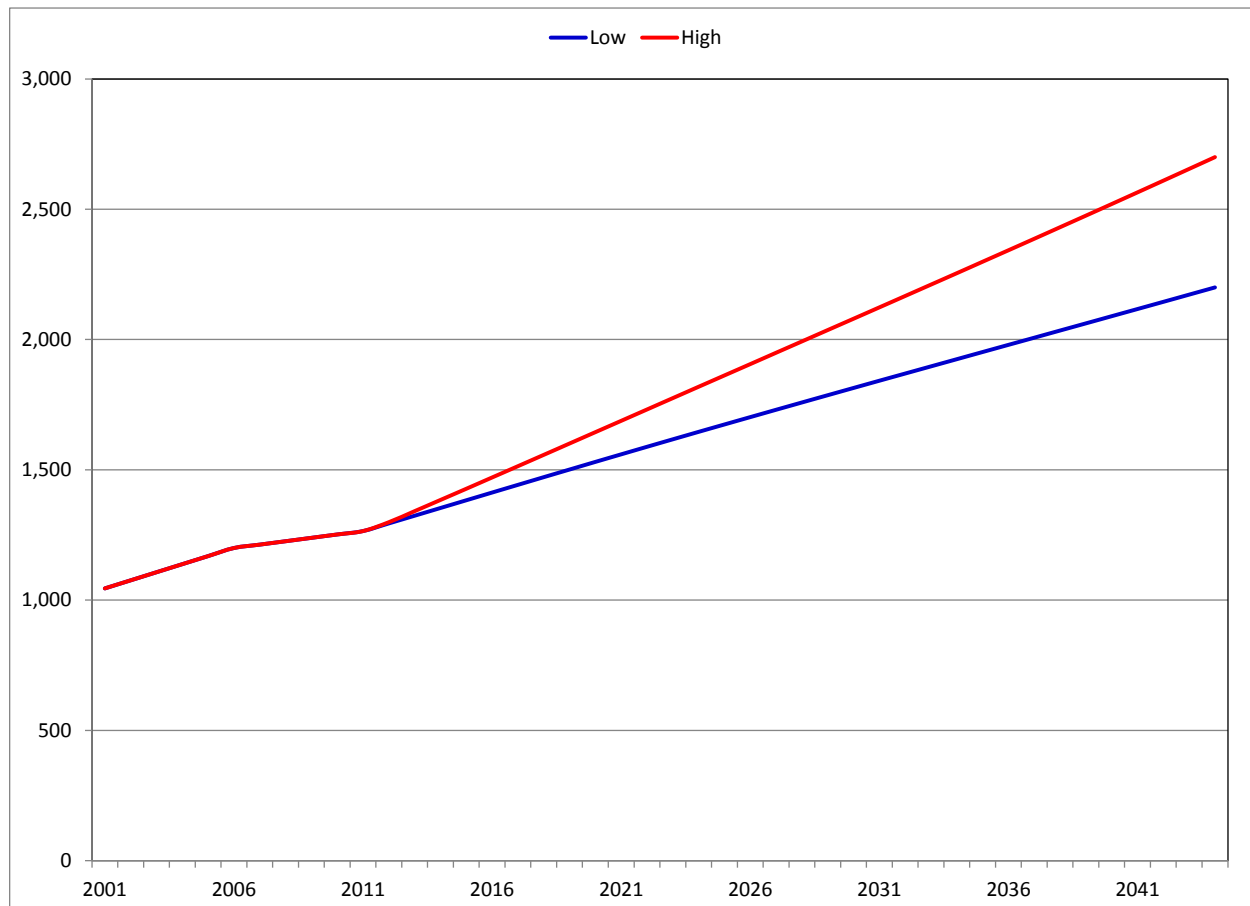
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Population of Leduc County 2001 to 2044



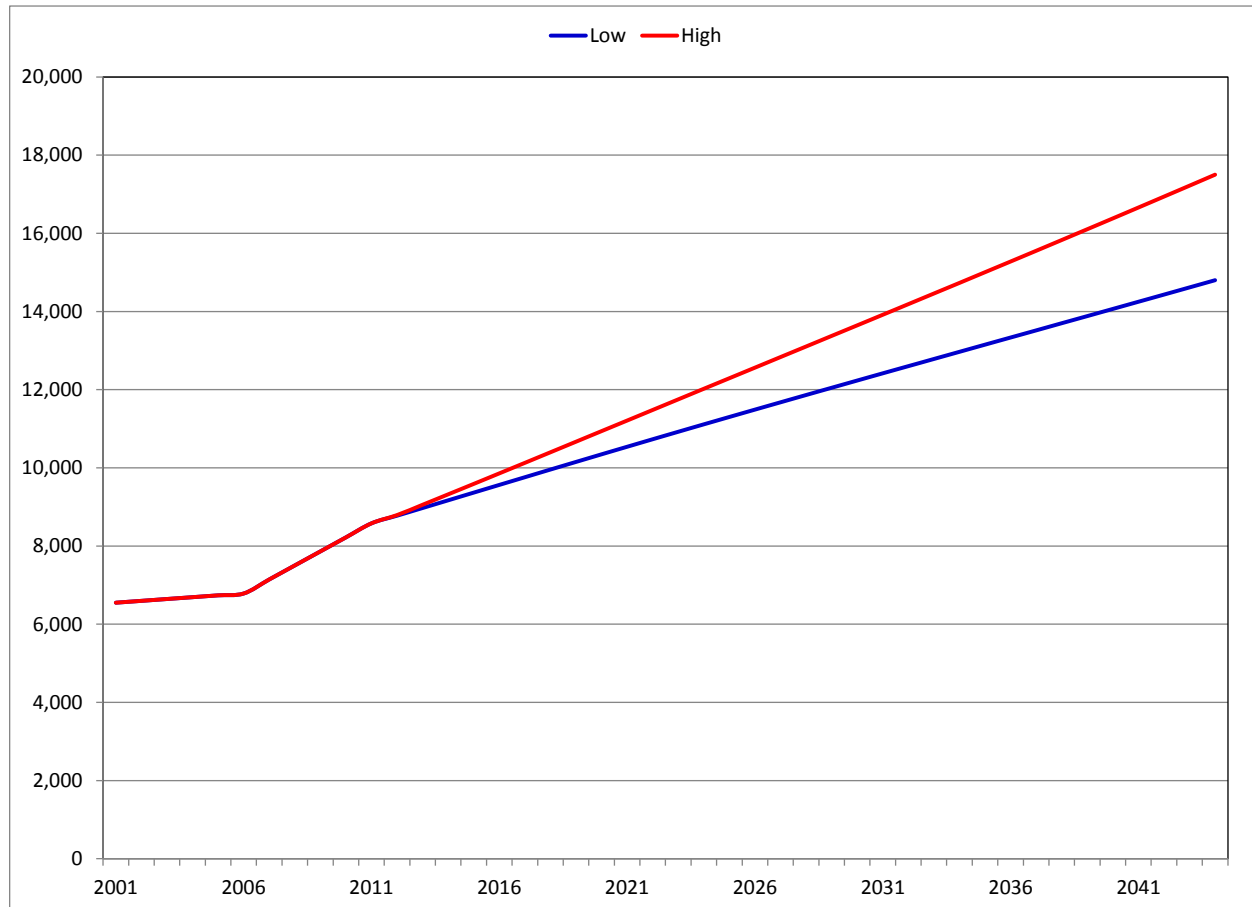
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Population of Legal 2001 to 2044



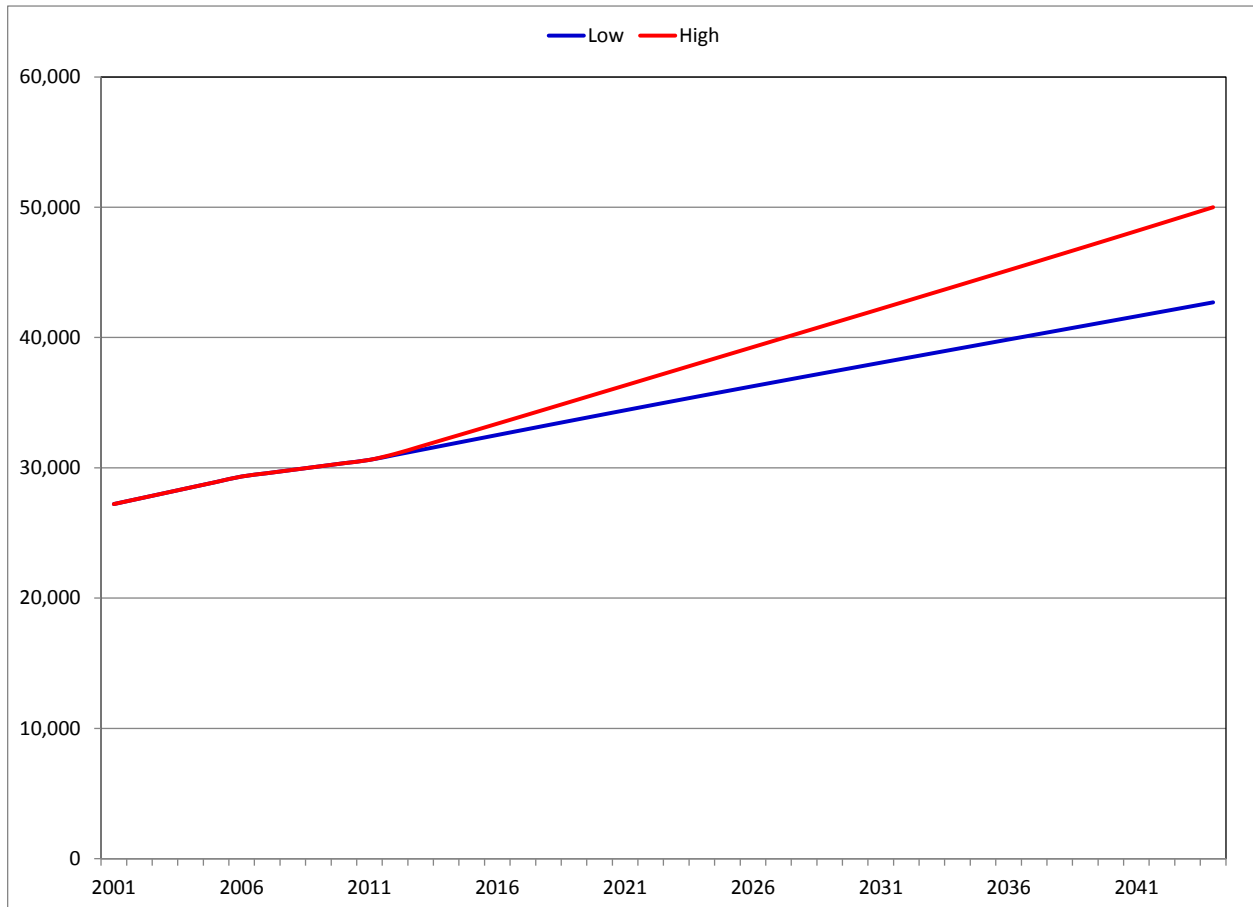
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Population of Morinville 2001 to 2044



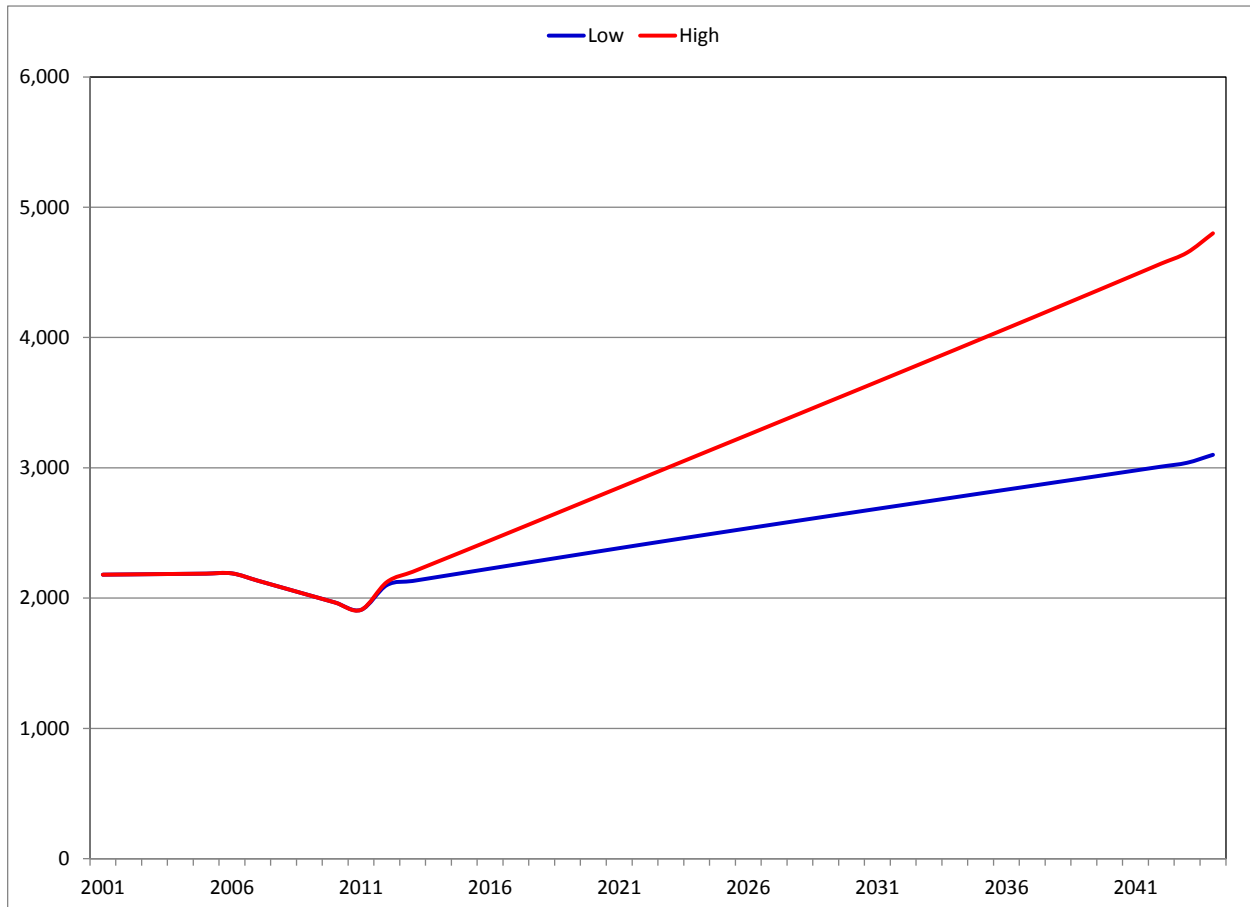
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Population of Parkland County 2001 to 2044



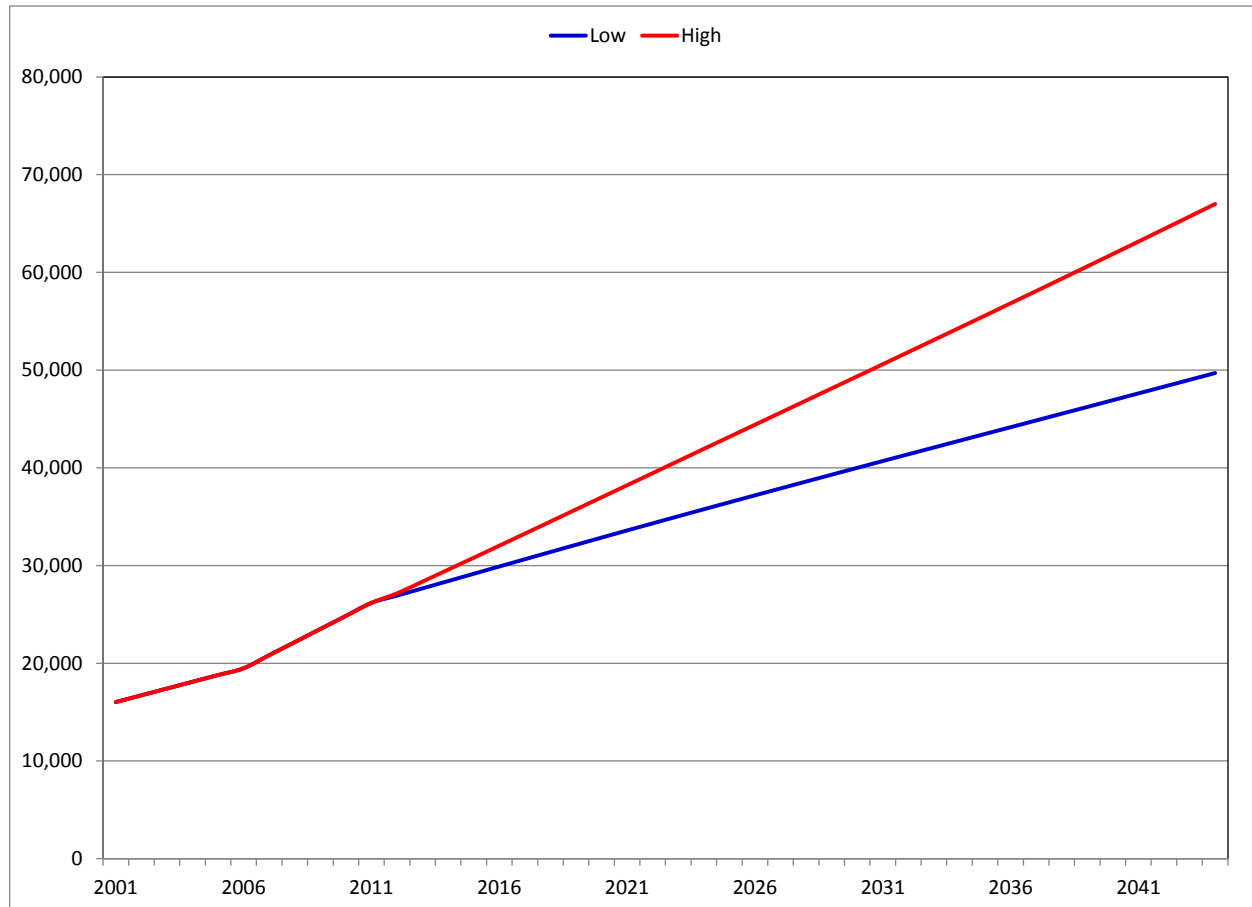
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Population of Redwater 2001 to 2044



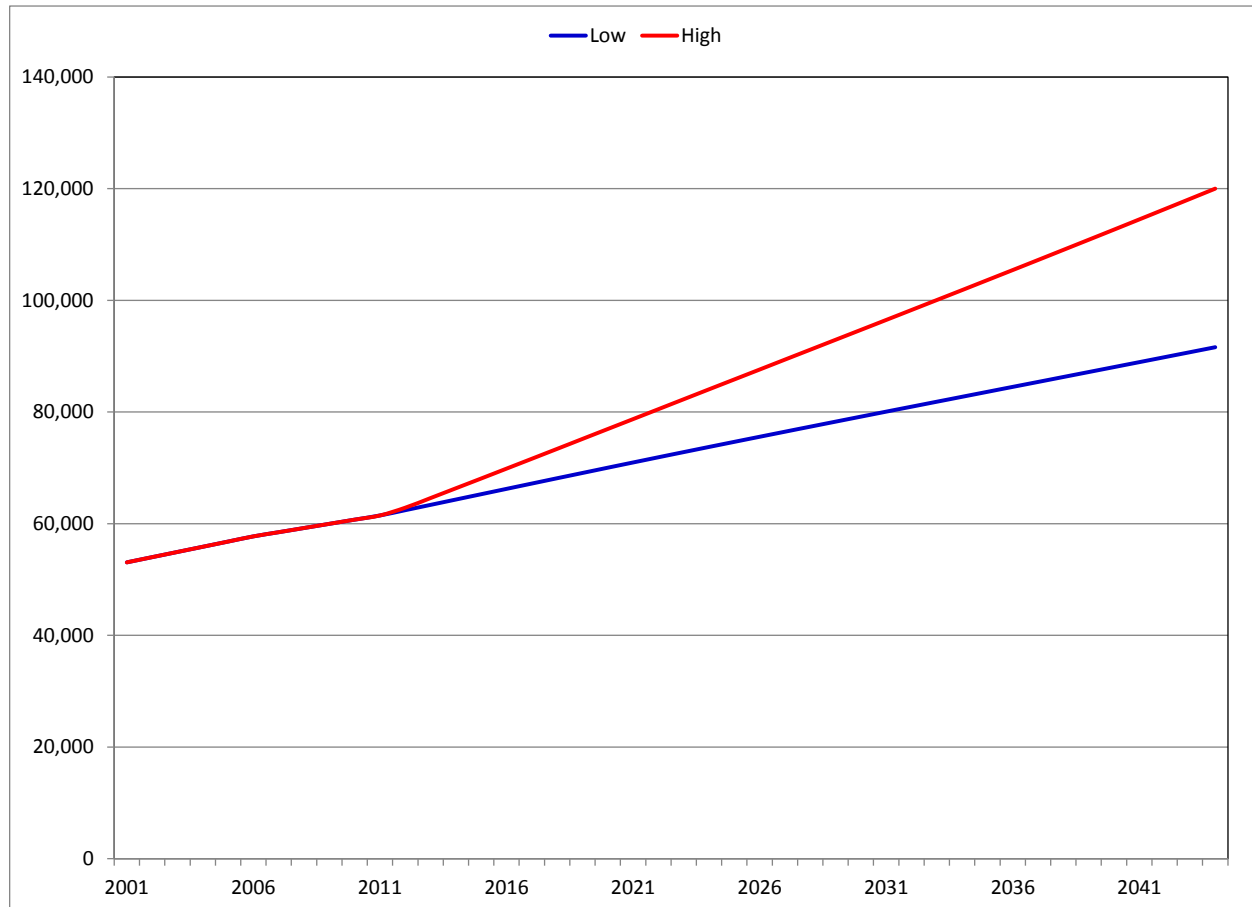
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Population of Spruce Grove 2001 to 2044



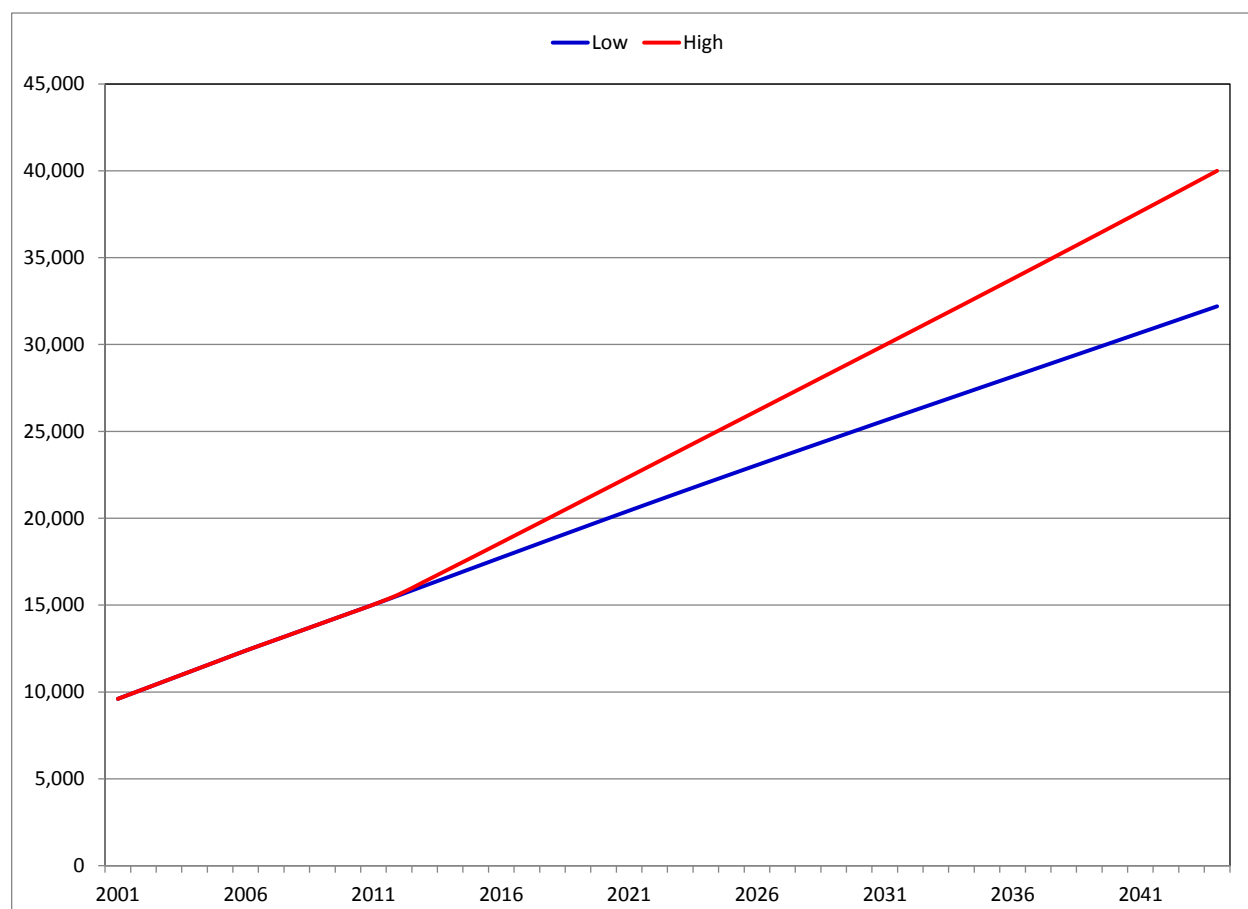
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Population of St. Albert 2001 to 2044



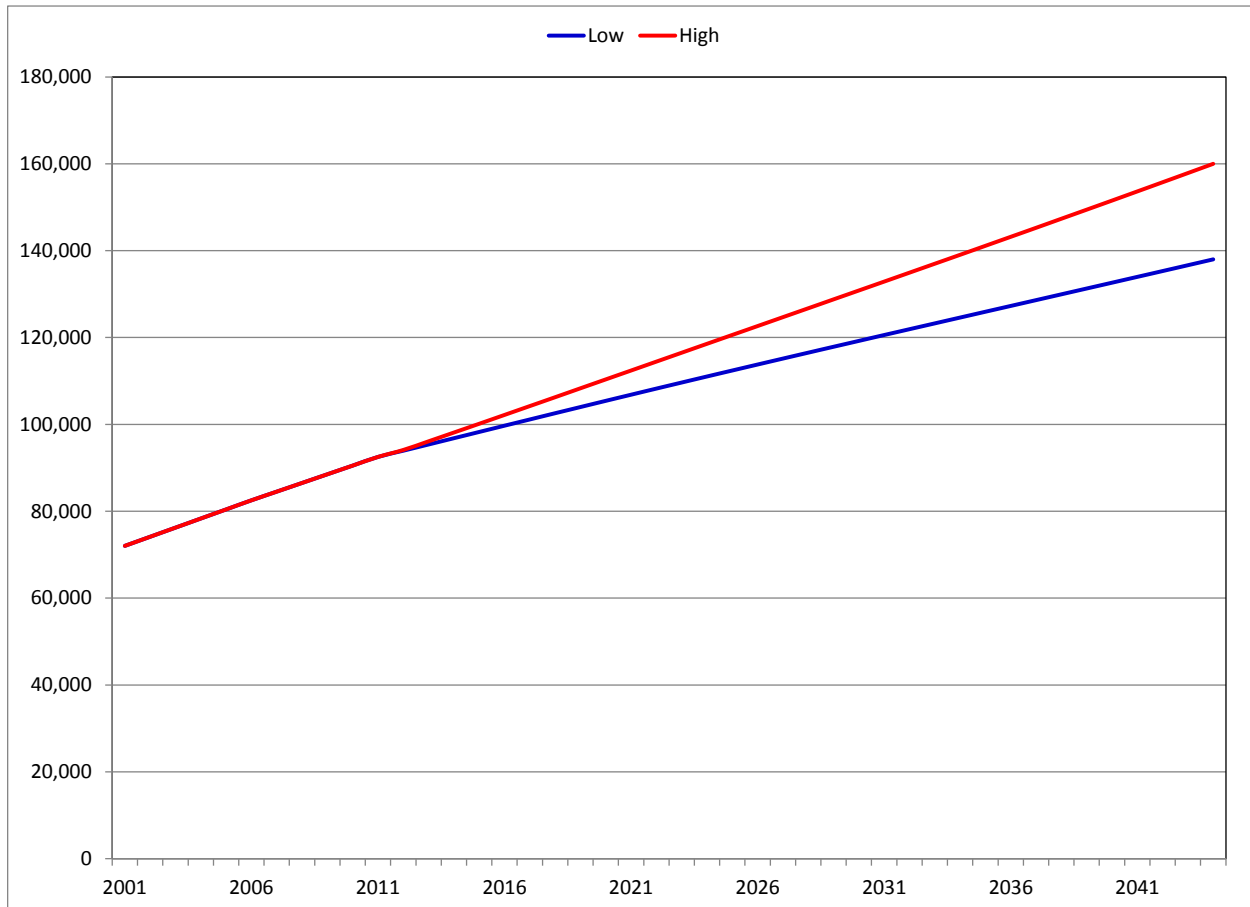
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Population of Stony Plain 2001 to 2044



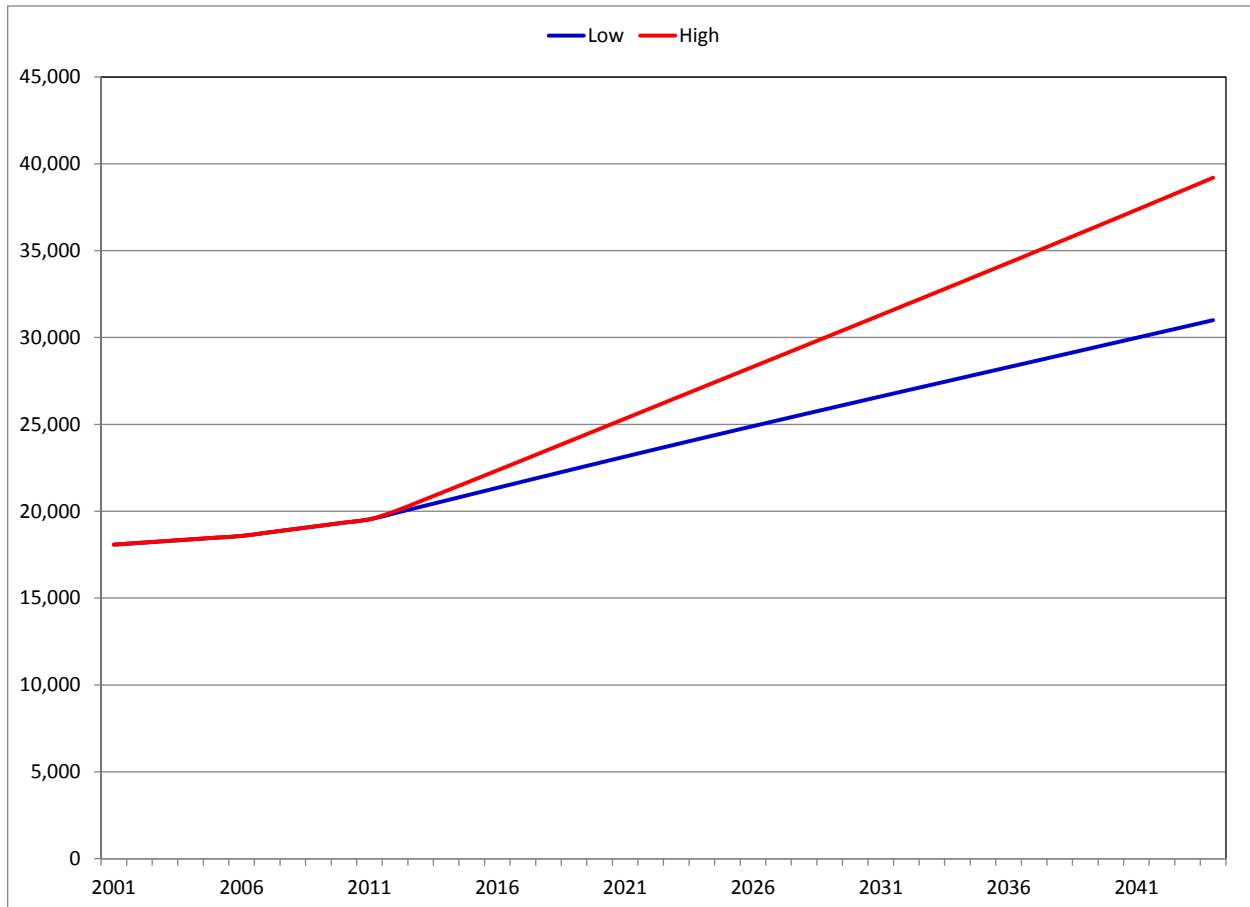
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Population of Strathcona County 2001 to 2044



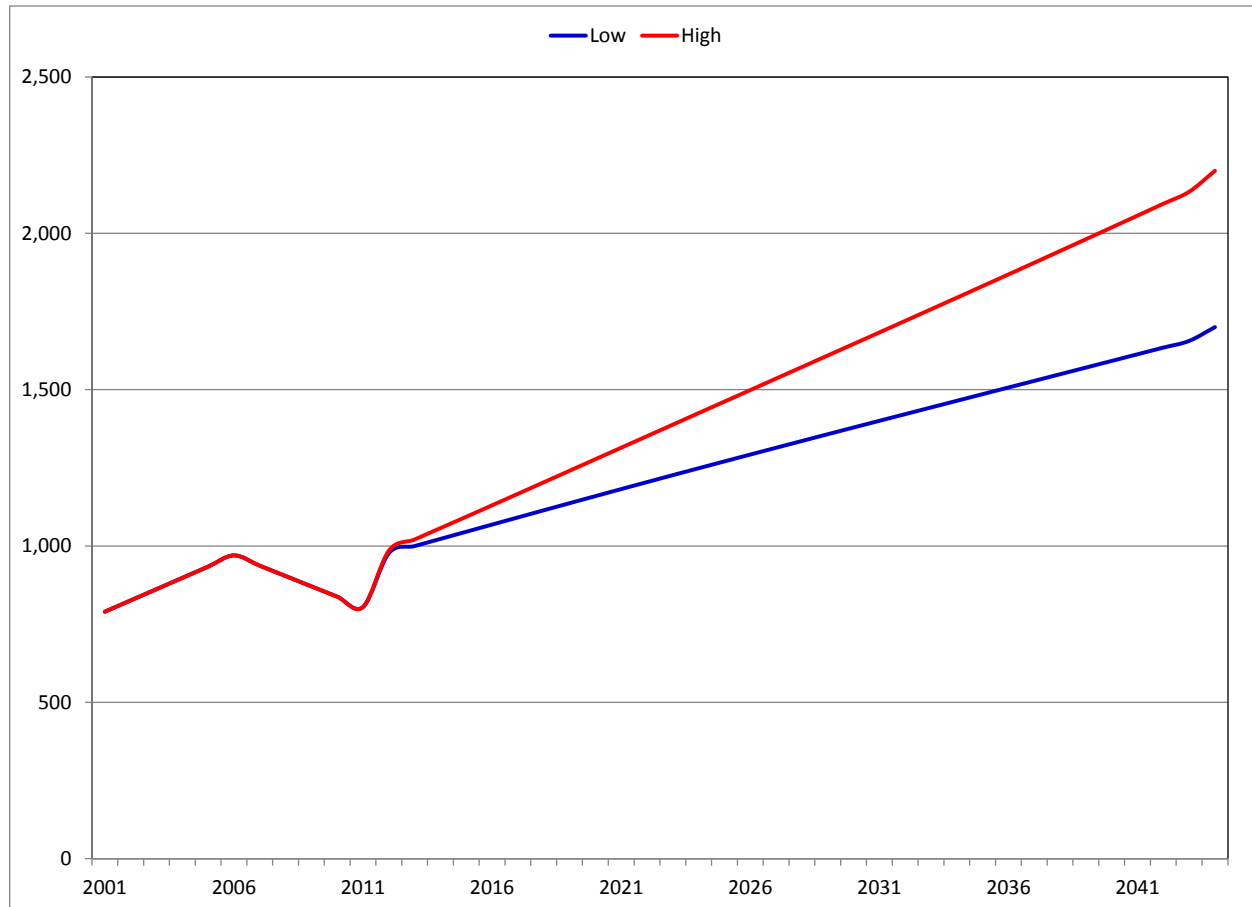
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Population of Sturgeon County 2001 to 2044



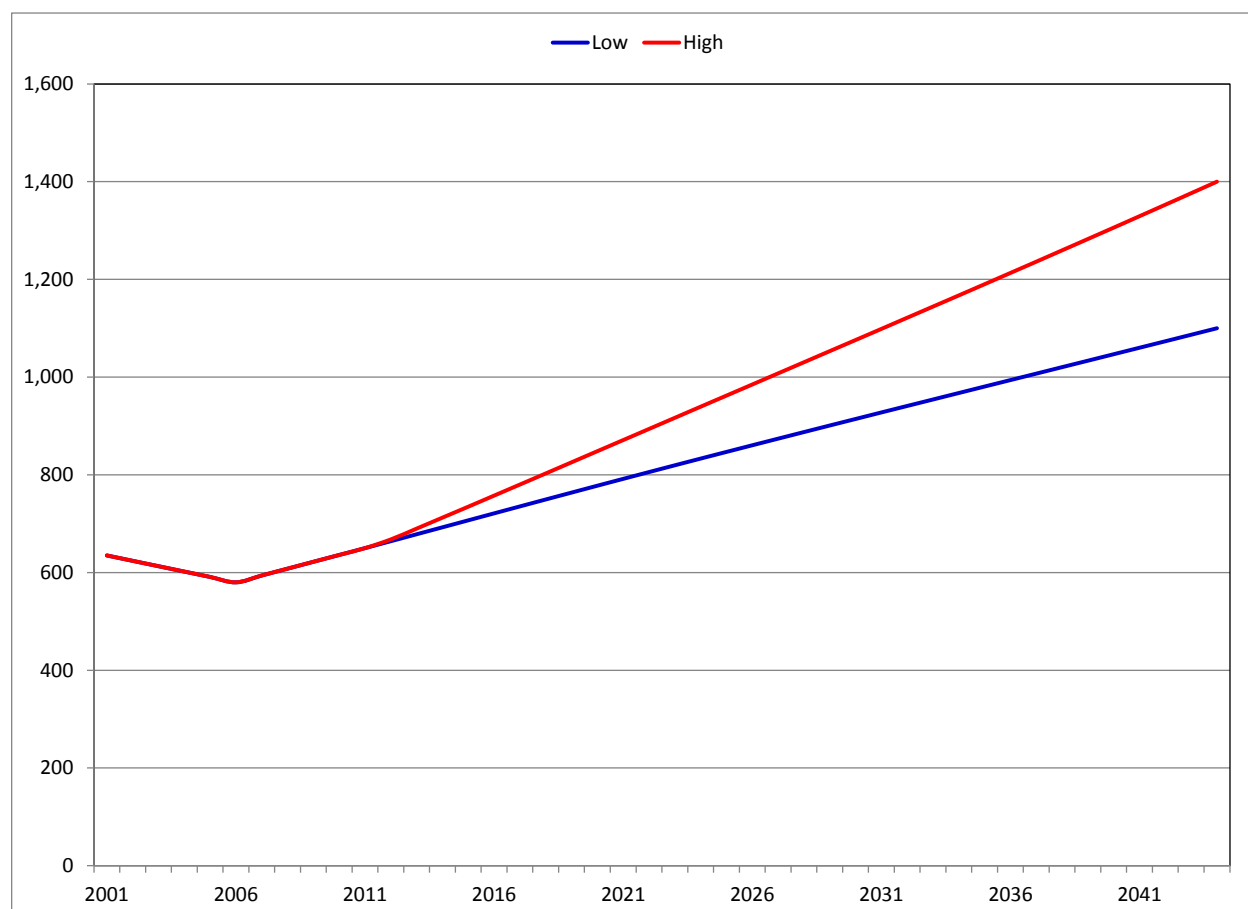
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Population of Thorsby 2001 to 2044



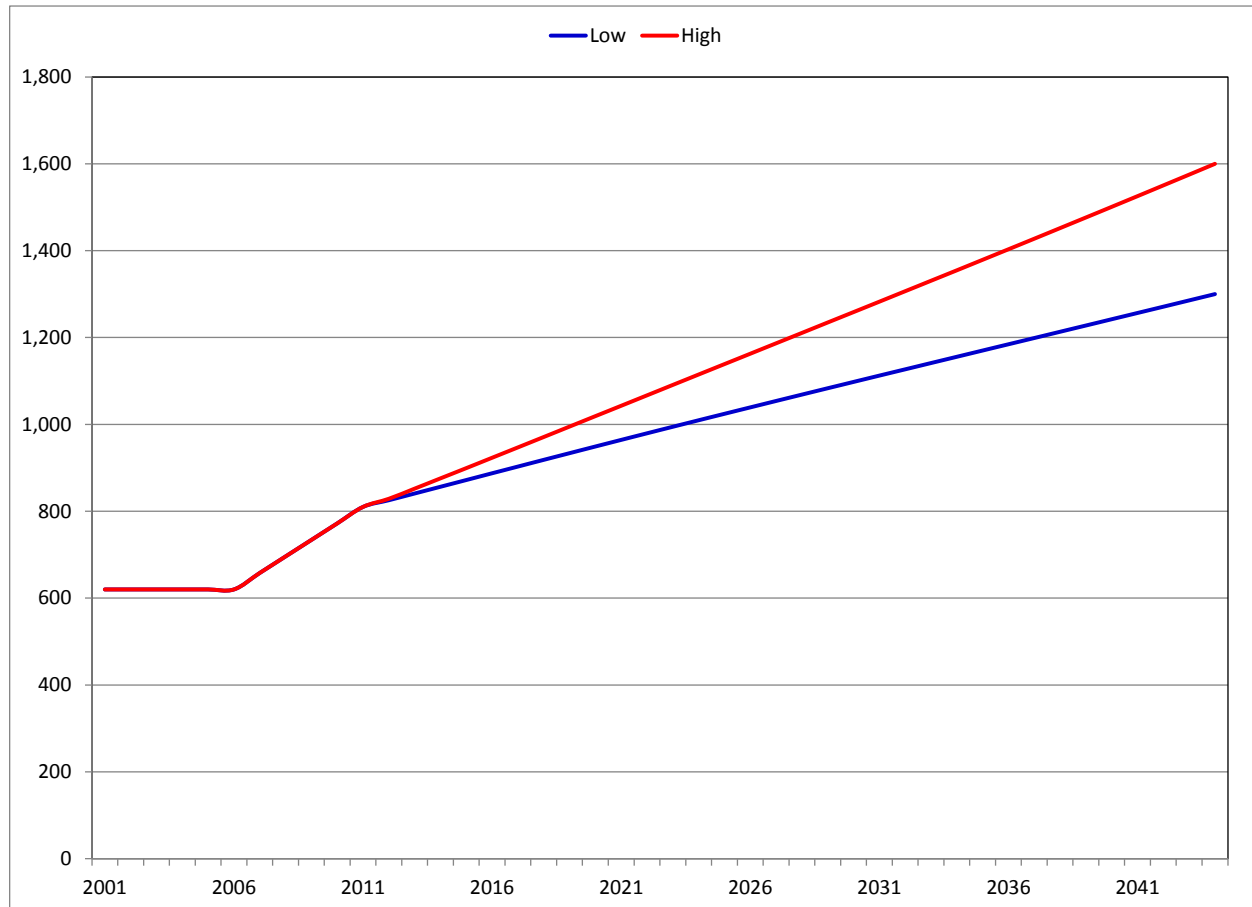
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Strategic Projections 2013 to 2044

Population of Wabamun 2001 to 2044



Source:
Statistics Canada Censuses of 2001, 2006 and 2011
Interpolated Annual Estimates between Census Years by Strategic Projections
Strategic Projections 2012 to 2044

Population of Warburg 2001 to 2044



Source:
Statistics Canada Censuses of 2001, 2006 and 2011
Interpolated Annual Estimates between Census Years by Strategic Projections
Strategic Projections 2012 to 2044