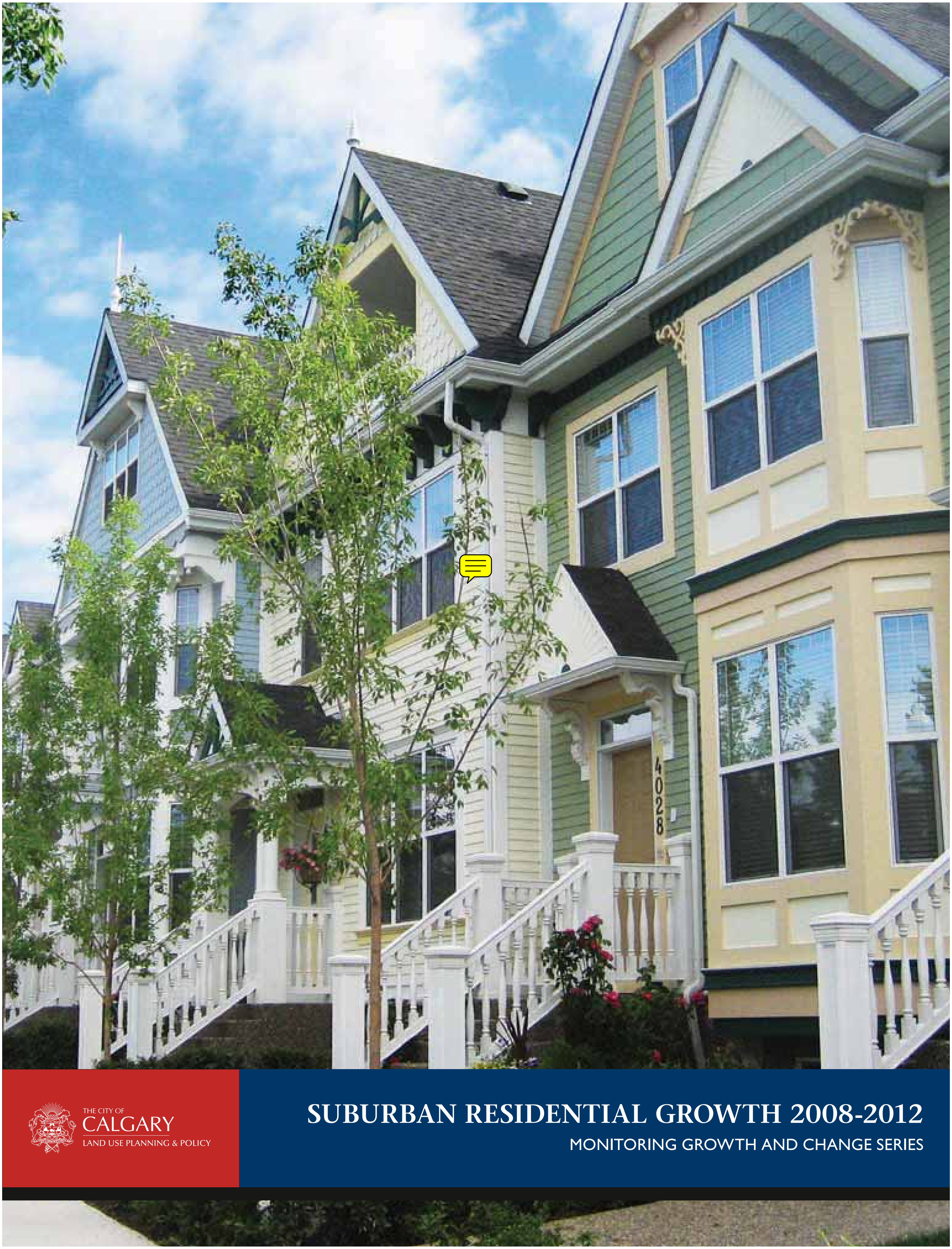


THE CITY OF
CALGARY
LAND USE PLANNING & POLICY

# SUBURBAN RESIDENTIAL GROWTH 2008-2012

MONITORING GROWTH AND CHANGE SERIES

## PUBLISHING INFORMATION


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This information update is prepared by an inter-departmental team.

CITY OF CALGARY

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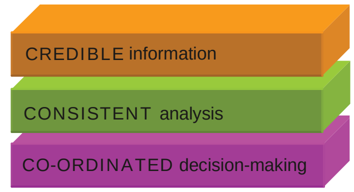
We are grateful for the contribution of the Urban Development Institute and the Calgary Region Home Builders Association in preparing this document.

# Monitoring Growth and Change Series




Calgary's growth-related challenges are significant, but so are the benefits of orderly, well-managed and equitably-financed growth. The City of Calgary is responsible for managing and coordinating the planning and investment needed to accommodate growth.

Corporate Economics & Geodemographics has developed a research program to analyse growth expectations and coordinate plans for infrastructure and services to support that growth. The result of this program is a series of information documents collectively titled, Monitoring Growth & Change. This series includes two annual publications: *Suburban Residential Growth* and *Accommodating Growth: Coordinating Municipal Capital Investment, and two triennial publications (2007, 2010, etc.): Industrial Areas Growth* and *Established Areas Growth & Change.*

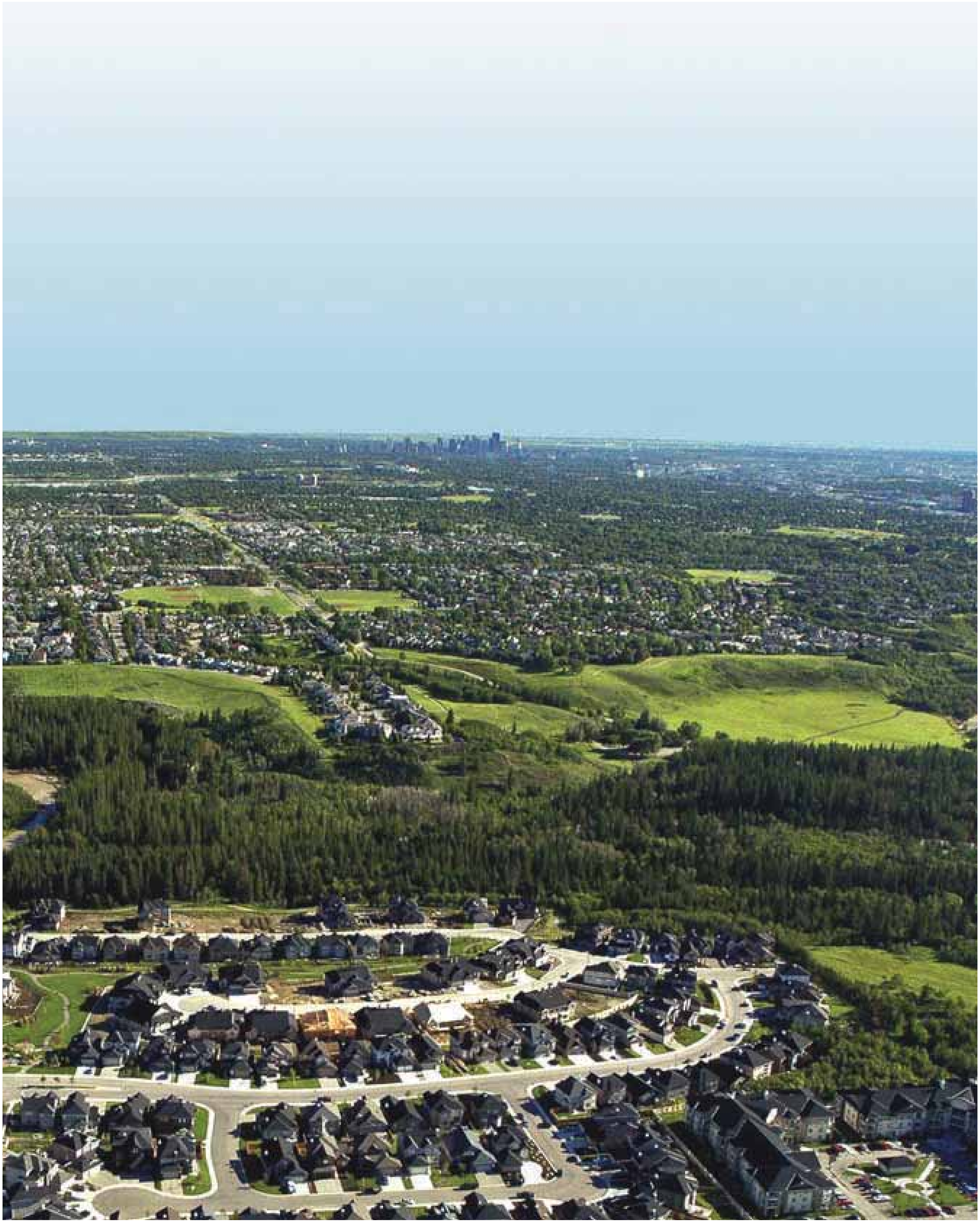
These information products are intended to be used by both the Administration and City Council to better coordinate municipal capital investment priorities in growing areas of the City, to better understand the dynamics affecting established and new suburban areas. This enables more informed decisions on how to effectively accommodate short- and long-term growth.

The Monitoring Growth and Change series is not intended to directly support business development. *For business development, investment and site selection inquiries please contact:*

*Calgary Economic Development*
*Phone: (403) 221-7831 or 1-888-222-5855*
*Website: www.calgaryeconomicdevelopment.com*

The Monitoring Growth & Change series does provide City Council, the administration, private developers and the public with the base information they need to plan for growth and change. The four documents share some common information, but each has a specialised focus as the following table highlights.

| Report Title | Suburban Residential Growth | Accommodating Growth: Coordinating Municipal Capital Investment | Established Areas: Growth & Change | Industrial Area Growth |
|---|---|---|---|---|
| Release | Annual - MAY | Annual - Under Review | Triennial - 2010 | Triennial - 2010 |
| Focus | Suburban residential development (last five years and next five years) | Mapping The City's 10-year Capital Plan in relation to expected growth in new and established areas | Established areas (providing a better understanding of how they are growing and changing) | Industrial land supply and growth expectations (last five years and next five years) |
| Content | • City approach to managing residential land supply<br>• Suburban residential land inventory including: planning approval status, and infrastructure servicing status & plans for water, wastewater, and transportation<br>• Historical suburban residential development activity<br>• Methodology for growth forecast distributions | • Overview of infrastructure financing required for growth included in The City's 10-year capital plan<br>• Growth-related capital projects by location for all business units<br>• Operational framework for The City's growth management processes<br>• Three-year base document with annual updates (starting in 2009) | • Historical trend information including data on population, age cohorts, dwelling units, residential, residential development activity, occupancy rates, vacancy rates and dwelling unit density<br>• Census data presented by urban structure profile and individual community | • City approach to managing industrial land supply<br>• Industrial land inventory including: planning approval status, and infrastructure servicing status and plans for water, wastewater, and transportation<br>• Current industrial development activity<br>• Recommendations for industrial policy studies and research |
| Key Info | • Five-year population and housing projections by city sector<br>• existing land supply and expected future demand | • Five, 10, and 15-year population projections for new and established areas<br>• growth-related capital projects by location | • Urban structure based summaries and profiles of growth and change in the established areas | • Five-year industrial employment projections by industrial area<br>• existing land supply and expected future demand |



# Executive Summary

*The Short-Term Growth Management Strategy* (STGMS) was adopted by Council to assist in accommodating short term growth while avoiding the premature investment in municipal infrastructure (water, wastewater and drainage). This document and the information contained within helps guide the extension of services into areas where it is most appropriate to grow from the dual objective of efficiently managing City investment and maintaining enough serviced land to support a competitive housing market. This report details various facts and observations that attempts to provide key information to the many stakeholders who use this document on the dynamics of Calgary's Suburban Growth Market.

*Some of the highlights of this are reported below.*

With 31 communities in which to locate new suburban growth the choice for new housing is significant as is the amount of population that these communities can accommodate. Over the last five years these new areas of Calgary has captured 105 percent of the population. Not only has 100 percent of Calgary's growth occurred in these areas it has continued to be a choice for internal movement from the built up established areas as well. An additional 5 percent of population have moved from the existing areas into these new suburbs over the last five years. Monitoring of this movement has been declining in past years and the expectation is that this share should continue to decrease as Calgary gains opportunities for re-development in the established areas and as Calgary's built form increases and ages.

Calgary's population and housing growth over the next five years is forecast to be quite significant. An expected 57,400 more housing units are forecast to be built between 2008 to 2012 city wide. In addition, Calgary's population increase for the same period is expected to be 121,800 people the majority of this through net migration. The land, housing, and population expected to occur in the new communities puts pressure on the availability of Calgary's serviced land capacity to accommodate this growth. These new suburban communities are expected to house 129,000 people within 46,000 units on approximately 2,586 hectares or 6,390 acres of land. However, the current supply of fully serviced land is measured to be at 1,726 hectares which could accommodate just over 33,400 total units and could accommodate approximately 89,000 people. This represents a shortfall in supply of 12,600 units that would be required to meet demand. In order to accommodate these extra units servicing solutions in specific sectors will need to be applied within the next five years to handle the expected growth and to prevent land shortages in particular sectors. Information on the supply by sector is located on Table 24.

*The estimated serviced capacity currently existing could accommodate the forecasted growth for approximately* ***three and one half*** *years.*

Although the current supply of fully serviced land can not accommodate the expected demand over the five year period ***based upon todays existing capacity*** there are servicing solutions underway (City funded and Developer funded) that will increase this supply. For details on these projects and improvements see "Part 8 Servicing Supply/Demand And Implications" for the various infrastructure upgrades and solutions.

*With regards to the un-built suburban planned land supply with approved Area Structure Plans (A.S.P.) and Community Plans in place the inventory as of April 2007 was 7,705 vacant subdivided unit capacity (vacant registered lots and vacant approved tentative plans). In additon, The City of Calgary also measures the capacity of remaining un-built unsubdivided lands within these areas. The inventory this year states an unsubdivided capacity of 4,513 hectares or 11,151 acres. This can supply 95,300 total units (unsubdivided are those un-built lands with outline and or un-built A.S.P.'s or Community Plan areas). Combining both vacant subdivided and unsubdivided capacities could accommodate an estimated population of 274,600 residents.*

Development proceeds in all sectors of Calgary at various rates dependant on supply, demand, location and consumer preference for housing choice. Although each of these sectors, in isolation, could continue to develop based upon the supply of fully serviced land cumulative effects of Calgary's growth and development and on a city wide basis could result in a need for improvements in the city facilities. It is by projecting growth that additional capital projects (treatment plants, reservoirs, etc.) may be planned to meet the increases in service demands as the city grows. Additonally, the full development of many of these areas may also require major transportation improvements and provision of a variety of necessary public facilities and services. It is intended that these cumulative requirements will be identified and monitored through the *Accommodating Growth: A Framework For Coordinating Municipal Capital Investment* report process.

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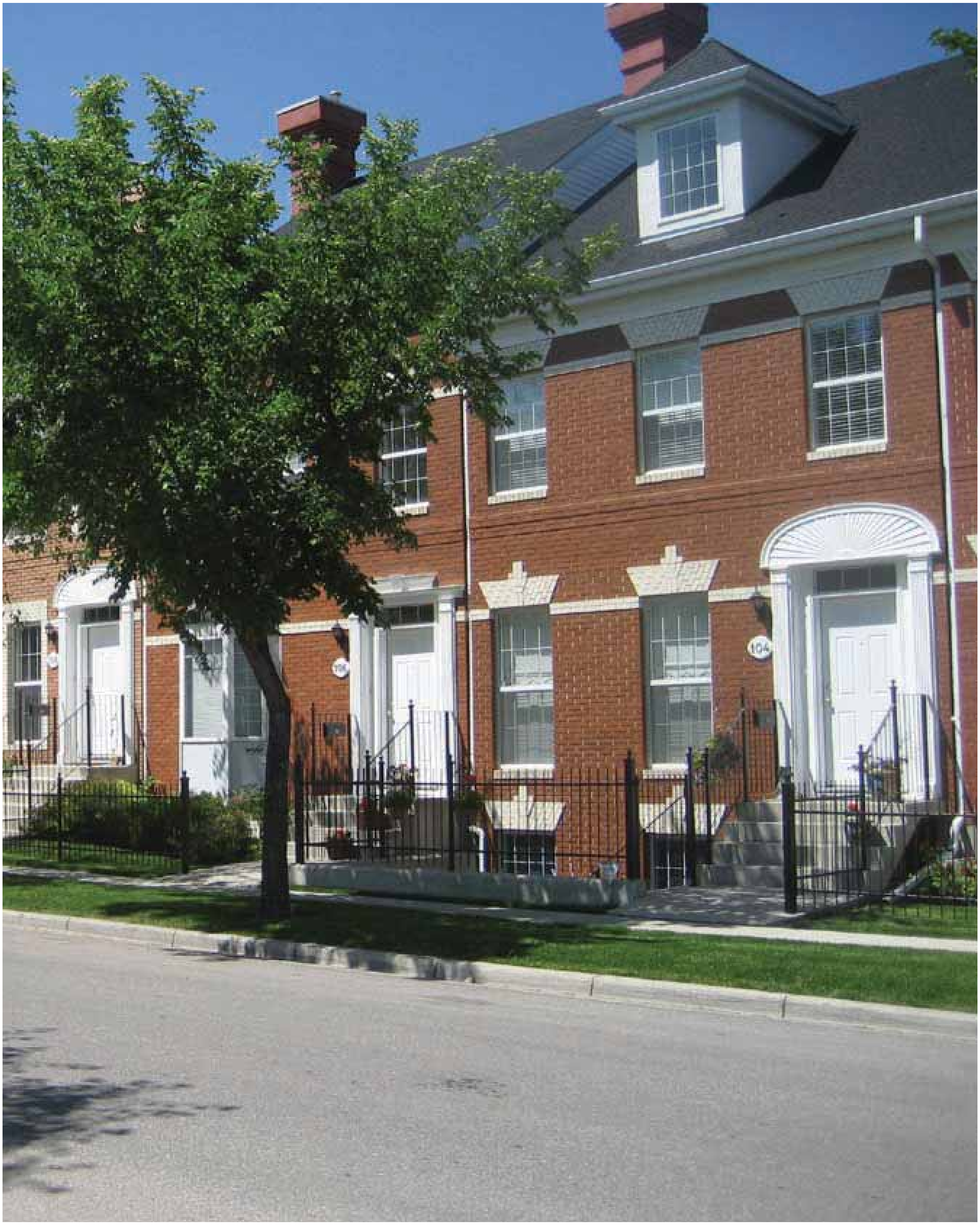
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# Part 1 – Introduction

The purpose of this report is to examine, on an annual basis, the expected fit between residential land demand and supply over the coming five-year period. The intent is to identify whether a sufficient supply of readily developable land exists, in a variety of locations, to facilitate competitive land and housing markets.

The land development and house-building industries attempt to be as responsive as possible to changes in the marketplace. The amount of housing constructed, the location of development activity and the types of housing will vary with changing rates of population growth, consumer preferences, interest rates, house prices, expectations for the future and competition in the marketplace.

It is also important to note that this distribution of market expectations reflects the unique circumstances in each sector with respect to the availability of land and infrastructure (serviced land) as well as the ownership of developable land in any given sector. The timing and scale of servicing and subdivision expectations may be more directly affected by marketing strategies of individual developers which can affect the amount of housing constructed in a given sector.

The development industry is responsible for funding a large portion of growth-related infrastructure and services in the City of Calgary. The City has developed a Standard Development Agreement (SDA) through annual negotiations with the Urban Development Institute (Calgary Chapter) that details the developers' obligations to provide public infrastructure and make financial contributions in the form of fees and levies in the development of new subdivisions. In addition to funds acquired through the SDA, Front Ending Agreements provide an opportunity for the City to advance infrastructure projects with the direct participation of the development industry. With this type of agreement, the area developer(s) agrees to finance a required infrastructure project through the payment of the interest changes on loans, allowing projects to proceed where capital budget priorities would not otherwise allow.

As a result, the transition of "raw" land (i.e., vacant or in agricultural use) to fully serviced, subdivided, "ready-to-build-on" lots involves a good deal of uncertainty. Within this changing environment, The City is called upon to provide utilities and transportation services to enable the "bringing on-stream" of new lands for development. The timing of expenditures for sewers, water and other utilities must be coordinated prior to housing construction. Some transportation facilities may be needed to provide initial access to new development; other facilities may be provided later, as areas develop. The City must also plan for and provide a wide range of other municipal facilities and services to new communities as they grow. This ongoing "balancing" occurs in several forums at the same time (e.g., planning and subdivision approvals, budgeting processes, utility construction scheduling). To assist this balancing process, a shared view of the next five years is necessary.

This report is designed to provide an accurate description of recent suburban residential development inventory and activity in Calgary and to forecast demand for the 2008 - 2012 period. - its contribution lies in providing a solid, comprehensive information base to support planning, development and budgeting decisions for utilities in the short term.

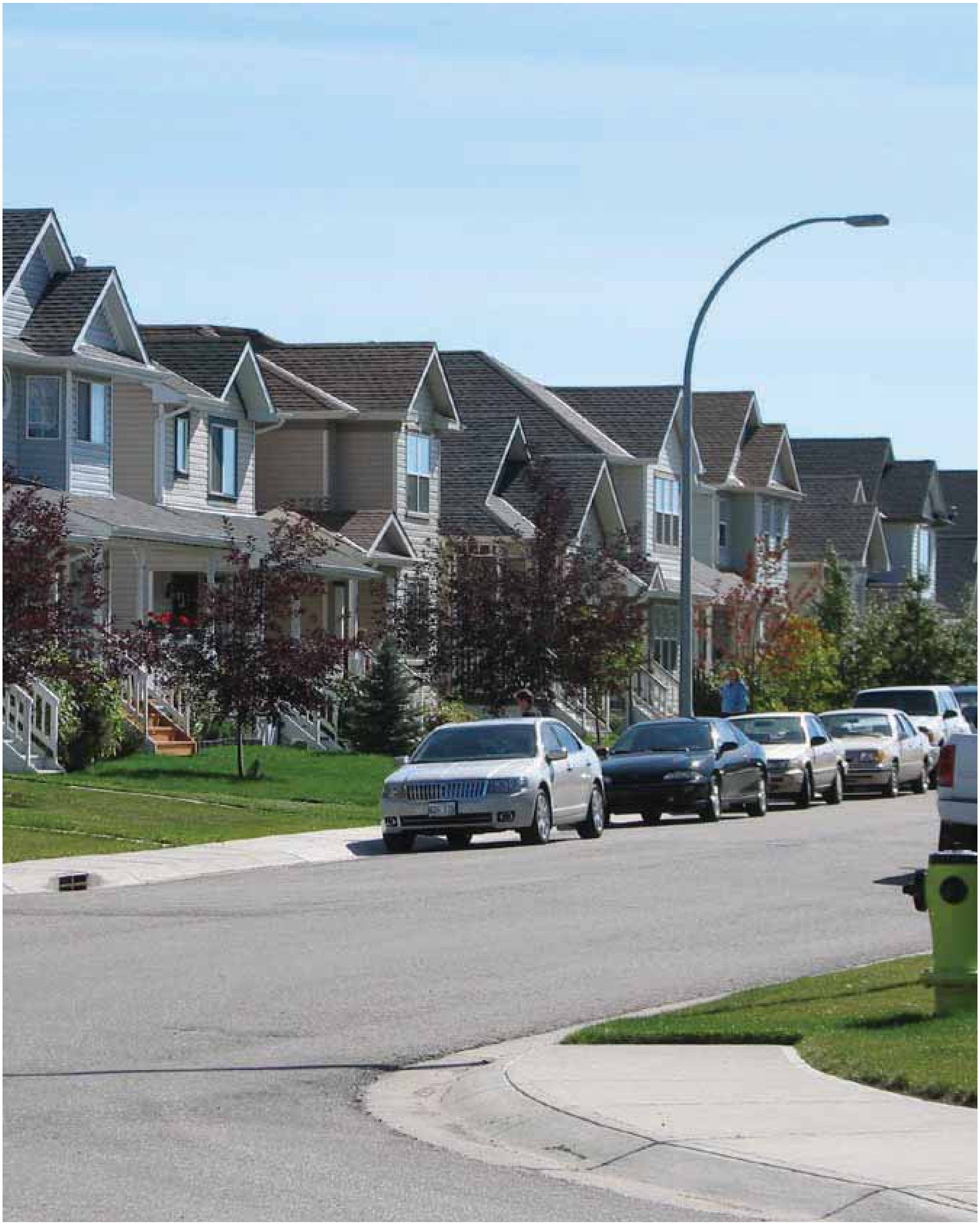
**The annual updates to this report include:**

- inventory of the residential land supply by sector in the suburban areas of Calgary,
- review current development activity around the city, sector and community,
- forecast housing and residential land supply,
- assess the balance between existing serviced land supply and the expected demand; and
- recommend the timing of service extensions in specific sectors

**This methodology provides:**

- a common information base,
- a detailed and yearly analysis of suburban growth dynamics, and
- a framework to evaluate requests for new service extensions.

The methodology employed in the annual updates is a "market-driven" methodology and only deals with the timing of delivery of water, wastewater and drainage infrastructure in the five-year horizon. It does not address the capital costs of service extensions.



# Part 2 – How To Use This Information

*The Suburban Residential Growth Update* assesses Calgary's past and current suburban residential land inventory as well as expected supply/demand conditions for the coming five-year period (2008 -2012). This information is updated annually, in accordance with the Short-Term Growth Management Strategy, as approved by Council.

All forecasts are projections to April of each year to coincide with the annual April civic census. This means that the housing and population forecasts would represent what is required from April 2007 (latest available civic census) to April 2008, April 2009, April 2010, April 2011 and April 2012. The existing and remaining population, housing and land supply inventory is also based upon the conditions at the time of the 2007 civic census in order to utilize civic census survey information. This allows for an analysis of the existing built form in relation to the remaining capacity in any particular area or community and **to provide a starting point in the building out of the vacant and future residential land supply.**

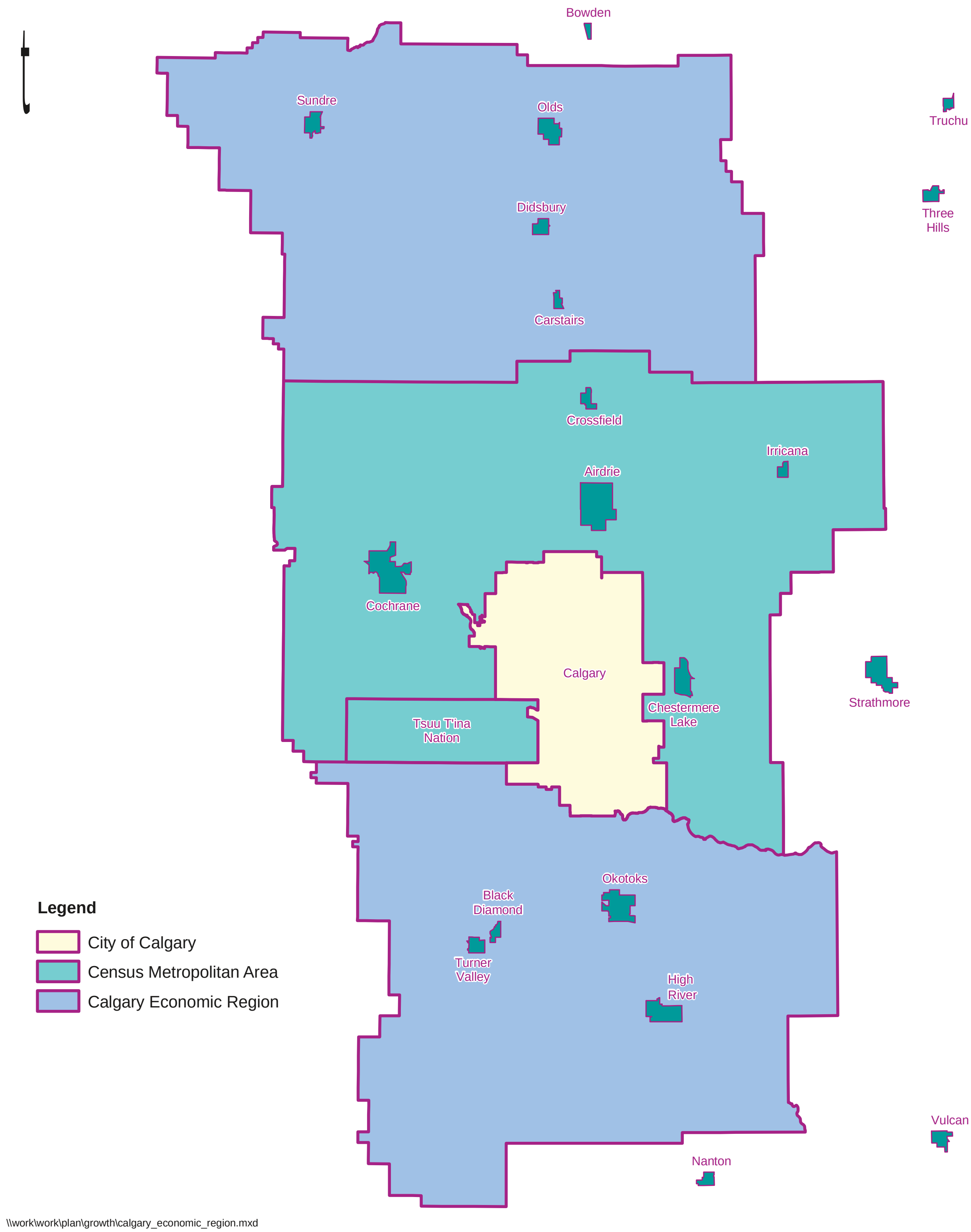
The document provides a detailed look at historical information and future estimates on residential growth in the form of figures, tables and maps. This report also provides an overview of residential growth areas on a sector by sector basis.

In addition to the various **City Business Units, representatives of the Urban Development Institute and the Calgary Region Home Builders' Association have reviewed and provided assistance in the preparation this report.** This industry has provided letters of comment in the Appendix of this report.

It is also important to note that any policy that may be developed or decisions taken that may be informed by the information contained in this document are required to meet Council's Triple Bottom Line (TBL) initiative.

For more information on the Triple Bottom Line initiative please visit the City of Calgary website at:
www.calgary.ca/tbl

Map 1: Calgary Economic Region



# Part 3 – The Calgary Market

The purpose of this report is to examine the expected fit between residential land demand and supply over the coming five year period (2008 - 2012). The City's Land Use Planning & Policy Business Unit provides housing and population forecasts for Calgary on an annual basis. This annual forecast and related economic information is provided in a published document called Calgary and Region Socio-Economic Outlook 2007-2012 with long term economic trends 2013-2037. From this city forecast the housing and population are further allocated into the newly developing suburban communities of Calgary.

On the basis of the information and analysis in this report, the following conclusions are presented.

## 3.1 Economic Outlook 2008 - 2012

Calgary's overall economic prospects for the coming five-year period were published by The City's Land Use Planning & Policy Business Unit in October of 2007. The document called Calgary and Region Socio-Economic Outlook 2007-2012 with long term economic trends 2013-2037 contains information that monitors and forecasts the local economy throughout the year. Each fall, the Socio-Economic Outlook is prepared to assist Council and the city administration with economic condition forecasts. The information is prepared as a reference for the administration useful in planning and budget processes. The Socio-Economic Outlook presents forecasts for a selected number of economic and social issues and variables. The document also provides analysis of those factors that are considered most likely to have a significant effect on the local economy over the forecast period. Some of those analysis, factors and forecasts are subsequently used in this residential growth update report. **For detailed review of the underlying economic future it is advised that reference should be made to that document.** However, for the needs of this Suburban Residential Growth 2008-2012 update some of the more relevant conclusions for future suburban residential growth is summarized in the following information.

The Calgary Economic Region (CER), which includes Calgary and surrounding communities, is expected to retain its position as one of the leading economic regions in Alberta and Canada. Although economic diversification, which include other drivers that impact growth is slowly taking place the

Table 1: Selected Economic Indicators

| Forecast 2008 to 2012 | 2008 | 2009 | 2010 | 2011 | 2012 | 2008-2012 |
|---|---|---|---|---|---|---|
| City of Calgary Population | 1,047,900 | 1,074,500 | 1,068,000 | 1,121,100 | 1,142,800 | |
| Annual Population Growth | 27,700 | 26,800 | 24,400 | 21,300 | 21,600 | 121,800 |
| Total Population Growth % | 2.7% | 2.5% | 2.3% | 2.0% | 1.9% | |
| Net Migration | 17,600 | 16,800 | 14,600 | 12,600 | 12,200 | 73,800 |
| Natural Increase | 10,100 | 10,000 | 9,800 | 8,700 | 9,400 | 48,000 |
| | | | | | | |
| City of Calgary Housing Growth (Total Units) | 13,000 | 12,500 | 11,400 | 10,400 | 10100 | 57,400 |
| Single & Semi-Detached(60% of total) | 7,800 | 7,500 | 6,840 | 6,240 | 6,060 | 34,440 |
| Multi Units (Apartment & Row)(40% of total) | 5,200 | 5,000 | 4,560 | 4,160 | 4,040 | 22,960 |
| *Forecasts for Single, Semi and Multi Unit are projected from the shares achieved from the last five years between 2003-2007 with slightly higher multi projections assumed.* | | | | | | |
| Calgary Economic Region | | | | | | |
| "CER" Population | 1,236,000 | 1,272,000 | 1,306,000 | 1,335,000 | 1,365,000 | |
| "CER" Population Growth % | 3.2% | 3.0% | 2.6% | 2.3% | 2.2% | |
| Housing Starts | 17,000 | 16,000 | 15,000 | 14,000 | 13,000 | 75,000 |
| Total Employment Growth % | 2.7% | 2.4% | 2.6% | 2.3% | 1.6% | |
| Unemployment Rate % | 3.7% | 4.0% | 3.7% | 3.7% | 4.0% | |
| Inflation Rate % | 4.0% | 2.2% | 2.1% | 2.1% | 2.2% | |

Source: City of Calgary Civic Census, Planning Development & Assessment - Land Use Planning & Polcy, Calgary & Region Economic Outlook 2007-2012,

## Table 1 Continued: Selected Economic Indicators

| Historical 2003 to 2007 | 2003 | 2004 | 2005 | 2006 | 2007 | 2003-2007 |
|---|---|---|---|---|---|---|
| City of Calgary Population | 922,000 | 933,000 | 956,000 | 992,000 | 1,020,000 | |
| Annual Population Growth | 17,300 | 11,200 | 22,600 | 35,700 | 28,000 | 114,800 |
| Total Population Growth % | 1.9% | 1.2% | 2.4% | 3.7% | 2.8% | |
| Net Migration | 9,000 | 2,300 | 13,700 | 25,800 | 17,600 | 68,400 |
| Natural Increase | 8,300 | 8,900 | 8,900 | 9,900 | 10,400 | 46,400 |
| | | | | | | |
| City of Calgary Housing Growth (Total Unit Starts) | 11,877 | 12,194 | 12,042 | 14,133 | 10,947 | 61,947 |
| Single & Semi-Detached | 7,908 | 7,742 | 8,329 | 9,394 | 6,619 | 39,992 |
| Multi Units (Apartment & Row) | 3,969 | 4,452 | 3,713 | 4,739 | 4,328 | 21,201 |
| *(Housing Starts based upon Canada Mortgage & Housing Corporation)* | | | | | | |
| | | | | | | |
| Calgary Economic Region | | | | | | |
| "CER" Population | NA | NA | NA | 1,161,000 | 1,198,000 | |
| "CER" Population Growth % | NA | NA | NA | 1.7% | *3.2%* | |
| Housing Starts | 14,500 | 14,000 | 15,200 | 17,800 | 17,300 | 78,800 |
| Total Employment Growth % | 2.0% | 3.2% | 0.9% | 7.9% | 4.7% | |
| Unemployment Rate % | 5.3% | 5.0% | 3.9% | 3.4% | 3.0% | |
| Inflation Rate % | 3.5% | 1.8% | 2.0% | 4.6% | *5.0%* | |

Source: Canada Mortgage & Housing, City of Calgary Planning Development & Assessment - Land Use Planning & Policy, Calgary & Region Economic Outlook 2007-2012, 2006 may include estimates if data was not available. Estimates are in italics.

primary forecasts as identified in the Socio-Economic Outlook report and this document is based on the assumption that the region would retain its role as home to the energy sector. The local economy should benefit from solid investment activity in the energy sector (peaking in 2009). Residential and non-residential investment, and consumer and government spending stays strong to 2009 and then grows at a slower rate to 2012. Slower rates of job creation and lower levels of housing starts should result in a reduced rate of growth in consumer expenditures and therefore a deceleration in the rate of economic growth.

The unemployment rate is a good indicator of economic performance. The current unemployment rate sits at around 3.0 percent, which is below full employment by most definitions. The Job market should remain tight for most of the forecast period. The demand for labour is being driven by relatively high levels of investment in the province's energy and related sectors. Also, modest labour force growth stemming from an aging population should keep the unemployment rate low. The forecast for the CER is expected to continue between 3.7 and 4.0 percent for the forecast period as a result.

The population in the CER is projected to increase from 1.2 million in 2007 to 1.4 million in 2012. Future growth will be largely influenced by net migration and is expected to be the major source of population growth during the forecast period. An active labour force with strong job growth and relatively low unemployment rates should draw migrants to the Calgary Economic Region. Population growth is projected to grow at a rate of between 3.2 percent down to 2.2 percent in the forecast period

Forecast Risk:

Upside Risk - Alberta, as an energy producer, would benefit from higher energy prices. These prices are expected to increase the energy industry's cash flow and profitability and therefore induce further drilling activities. Increased investment spending would result in non-residential and residential construction growing above the baseline forecasts as economic and demographic activity increase.

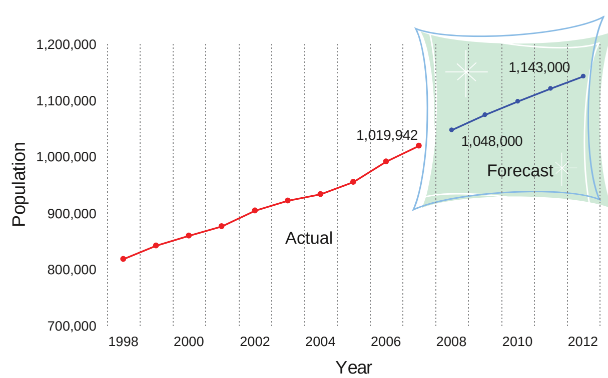
Downside Risk - The chances for a higher forecast than the baseline are minimal as the province and the CER face severe labour and resource constraints. The province and regional economies have operated beyond capacity for a number of years and consequently the province and CER are experiencing above average inflation rates that are adding substantially to project costs.

**For further information relating to these and other indicators please view the Calgary and Region Socio-Economic Outlook 2007-2012 with long term economic trends 2013-2037.**

## 3.2 Calgary Population 2008 - 2012

With regards to The City of Calgary, the centre of the Calgary Economic Region, the population was 1,019,942 as of April 2007 Civic Census adding 28,183 people over 2006 counts. Net migration accounted for 17,631 of the population increase. The other factor in Calgary's population increase was natural increase, defined as births less deaths, amounting to 10,552 between April 2006 and April 2007. This count is in line with The City's October 2006 forecast report which projected a population of 1,020,000 persons for 2007. Forecast population for 2008 is estimated to reach 1,047,900 and 1,142,800 by 2012. Net migration is expected to be the major source of new population growth over the forecast period as a vibrant labour market with low unemployment rates should attract migrants to the city and the region.

### Figure 1: Recent and Forecast Population Growth For Calgary (1998 - 2012)

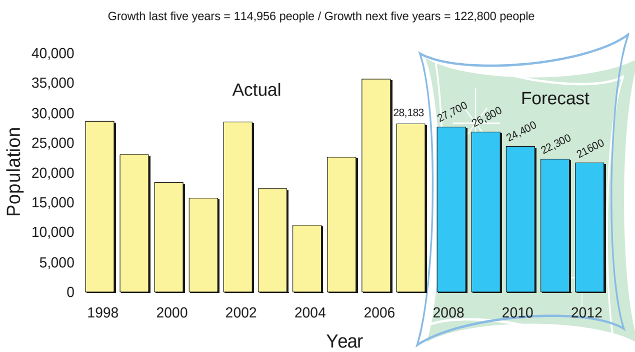



Source: City of Calgary: Civic Census, Planning Development & Assessment-Land Use Planning & Policy, Calgary & Region Economic Outlook 2007-2012 Calgary and Region report

Over the last five years Calgary's population grew by 114,955 people or 22,991 people per year. The forecast over the next five years is for 121,800 people or 24,360 people per year.

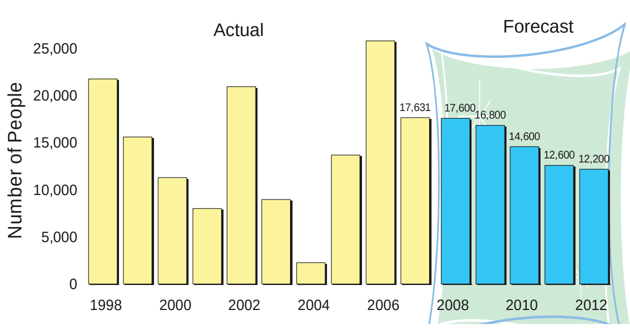
Net migration is expected to average 14,760 people per year over the forecast period adding 73,800 persons while natural increase growth should average 9,600 people annually for a total of 48,000 persons.

Figure 2: Annual Population Growth Actual (1998-2007) and Forecast (2008 - 2012)




Source: City of Calgary: Civic Census, Planning Development & Assessment-Land Use Planning & Policy, Calgary & Region Economic Outlook 2007-2012 Calgary and Region report

Figure 3: Annual Net Migration For Calgary Actual (1998 - 2007) and Forecast (2008 - 2012)




Source: City of Calgary: Civic Census, Planning Development & Assessment-Land Use Planning, Calgary & Region Economic Outlook 2007-2012 Calgary and Region report

Net migration is expected to be the major source of population growth during the forecast period. An active labour forecast with strong job creation and relatively low unemployment rates should draw migrants to Calgary and the Calgary Economic Region. The migrants who arrive in the region are generally of child bearing age and they contribute to population growth over time through births. It is also important to note that net migration is the most volatile component of population growth and the most difficult to predict.

Table 2 : Short-Term Population Projections 2008 - 2012

| Year | Net Migration | Natural Increase | Gain in Population | Calgary Population |
|---|---|---|---|---|
| 2006-2007 April (Actual) | 17,631 | 10,552 | 28,183 | 1,019,942 |
| 2007 - 2008 | 17,600 | 10,100 | 27,700 | 1,047,900 |
| 2008 - 2009 | 16,800 | 10,000 | 26,800 | 1,074,500 |
| 2009 - 2010 | 14,600 | 9,800 | 24,400 | 1,098,900 |
| 2010 - 2011 | 12,600 | 8,700 | 21,300 | 1,121,100 |
| 2011 - 2012 | 12,200 | 9,400 | 21,600 | 1,142,800 |
| **Total 2008-2012** | **73,800** | **48,000** | **121,800** | |

Numbers may not add up due to rounding
Source: City of Calgary: Civic Census, Planning Development & Assessment-Land Use Planning & Policy , Calgary and Region Economic Outlook 2007-2012

## 3.3 Calgary Housing 2008 - 2012

In 2007, the demand for housing in Calgary was supported by relatively low mortgage rates, high employment and wage growth. The supply of new homes to the market was constrained by the lack of an experienced labour force and inflated building materials. Prices for new homes reached record levels and this resulted in housing affordability falling to extremely low levels. Housing affordability therefore presents a major downside risk to the housing outlook and declining housing affordability may lead to a shift towards increased numbers of multi-family unit construction as these units generally are lower priced than single unit housing.

Over the forecast period, housing starts in the City of Calgary are expected to total 13,000 units in 2008 and trend downward to 10,100 units by 2012 adding a total of 57,400 total units to Calgary by 2012. This decline in is in part due that the pace of housing starts has been running ahead of demographic requirements since 2002 and the significant pent-up demand that accumulated over the 1990's is wearing off. As a result, housing starts should grow in line with economic and demographic activity.

### Table 3: Calgary Housing Starts 2003 - 2007

| Year | Single Unit | Semi Detached | Row | Apartment | Total | Total Single & Semi | Total Multi-Unit | % Multi Unit |
|---|---|---|---|---|---|---|---|---|
| | Units | Units | Units | Units | Units | Units | Units | |
| 2003 | 7,300 | 608 | 1,092 | 2,877 | 11,877 | 7,908 | 3,969 | 33% |
| 2004 | 6,982 | 760 | 796 | 3,656 | 12,194 | 7,742 | 4,452 | 37% |
| 2005 | 7,493 | 836 | 984 | 2,729 | 12,042 | 8,329 | 3,713 | 31% |
| 2006 | 8,396 | 998 | 713 | 4,026 | 14,133 | 9,394 | 4,739 | 34% |
| 2007 | 5,893 | 726 | 962 | 3,366 | 10,947 | 6,619 | 4,328 | 40% |
| Five Year Average | 7,213 | 786 | 909 | 3,331 | 12,239 | **7,998** | **4,240** | **35%** |

Source: Canada Mortgage and Housing Corporation, Housing Now Reports

Multi Unit includes Apartment and Townhouse Units (Row) / Single Unit include Single & Semi-Detached

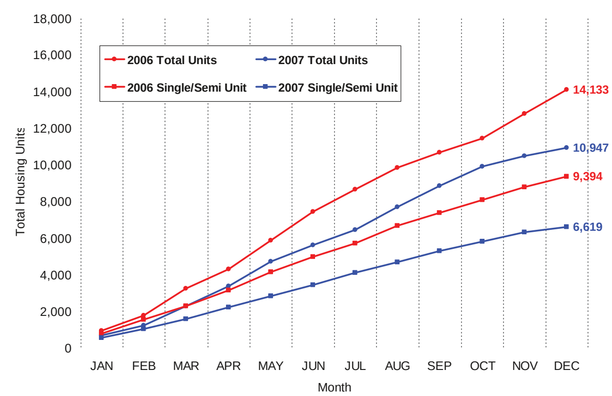
The decrease in starts will be more evident for single family homes because of three reasons: (a) after significant price appreciation and higher mortgage carrying costs housing is becoming increasingly unaffordable for the average family. (b) multi family homes because of relatively lower prices are becoming the more affordable alternative. (c) high demand for rental housing from migrants should boost multiple starts relative to single starts. Relatively low interest rates and employment growth should combine to maintain momentum in the housing markets.

This demand for new housing is also driven by increases in the number of households needed (e.g., an increasing population and/or changes in its composition) and changes in consumer housing needs/preferences (e.g., consumers choosing a newer or larger house). Depending on the population and where they choose to live tends to create the demand for housing which impacts levels of growth in particular sectors of the city. Each sector has areas that traditionally served specific market segments and in conjunction with housing choice impacts the level of demand in these areas.

Since no forecast exists for Single Family and Multi Family projections a five year historical average is used to determine the unit split for 2008-2012 forecast period with slight modifications for expected future housing type changes. Historically, (measured by CMHC housing starts & building permits) Single Units and Semi Detached housing have averaged around 60-65 percent of the total units constructed. In comparison, Multi Unit (apartment and townhouse) has captured 35-40 percent. Applying this ratio to the total unit forecast for the 2008-2012 period generates an estimated 34,440 Single Unit/Semi Detached and 22,960 Multi Unit requirement.

Canada Mortgage and Housing Corporations (CMHC) survey on housing starts in 2007 show the majority of the units were Single Units (5,893) and Semi Detached (726) representing 60 percent of the total units. Multi Unit construction represented the other 40 percent adding 962 Townhouse (Row) and 3,366 Apartments for a total of 4,328 units. Total housing starts on average between 2003 and 2007 represented 12,239 units per year.

### Figure 4: Cumulative Housing Starts, Number of Units (2006 & 2007)




Source: Canada Mortgage and Housing Corporation: Housing Now, Monthly Reports

The focus of this report is on the demand for populatiion and housing units in the new suburban or future communities of Calgary. These suburban areas in this document change year to year as communities start and complete or as new communities are created. Map 11 shows the **thirty one currently developing communities** of Calgary some of which are nearly complete, some just starting while others are in various stages of their development.

***The capacity for housing and population growth in these areas are monitored as long as there is significant vacant residential land remaining for housing and population growth which does include vacant registered or subdivided lots (including approved Tentative Plans) that are still not built upon as of April 2007.***

This capacity is determined by mapping the actual locations of the existing and under construction units into an inventory system (Geographical Information System) as collected through the annual Civic Census collected each year in April. This provides a detailed starting point for determining the remaining vacant land & housing capacity by community and sector. In addition, the remaining unsubdivided capacities of approved Land Use and Community Plan areas are calculated based upon developer submitted capacities (Outline Plans, CPC Agenda data, Developer Concept Plans, or Community Plan information) to complete the un-built capacities for land, housing and population.

### Table 4: Forecast Housing Growth 2008 - 2012 City Wide Unit Forecasts

| | | Total City Wide Acres of Residential Land Required | | |
|---|---|---|---|---|
| Year | Single & Multi Total Units | **@ 17 U.P.H.* (7 upa)** | @ 20 U.P.H.* (8 upa) | @ 22 U.P.H.* (9 upa) |
| 2007 (Actual) | 10,947 | **640** | 550 | 500 |
| 2008 | 13,000 | **760** | 650 | 590 |
| 2009 | 12,500 | **740** | 630 | 570 |
| 2010 | 11,400 | **670** | 570 | 520 |
| 2011 | 10,400 | **610** | 520 | 470 |
| 2012 | 10,100 | **590** | 510 | 460 |
| 2008-2012 | 57,400 | **3,370** | 2,880 | 2,610 |
| | Units added | **Hectares** | Hectares | Hectares |
| | | 8,327 | 7,116 | 6,449 |
| | | Acres | Acres | Acres |

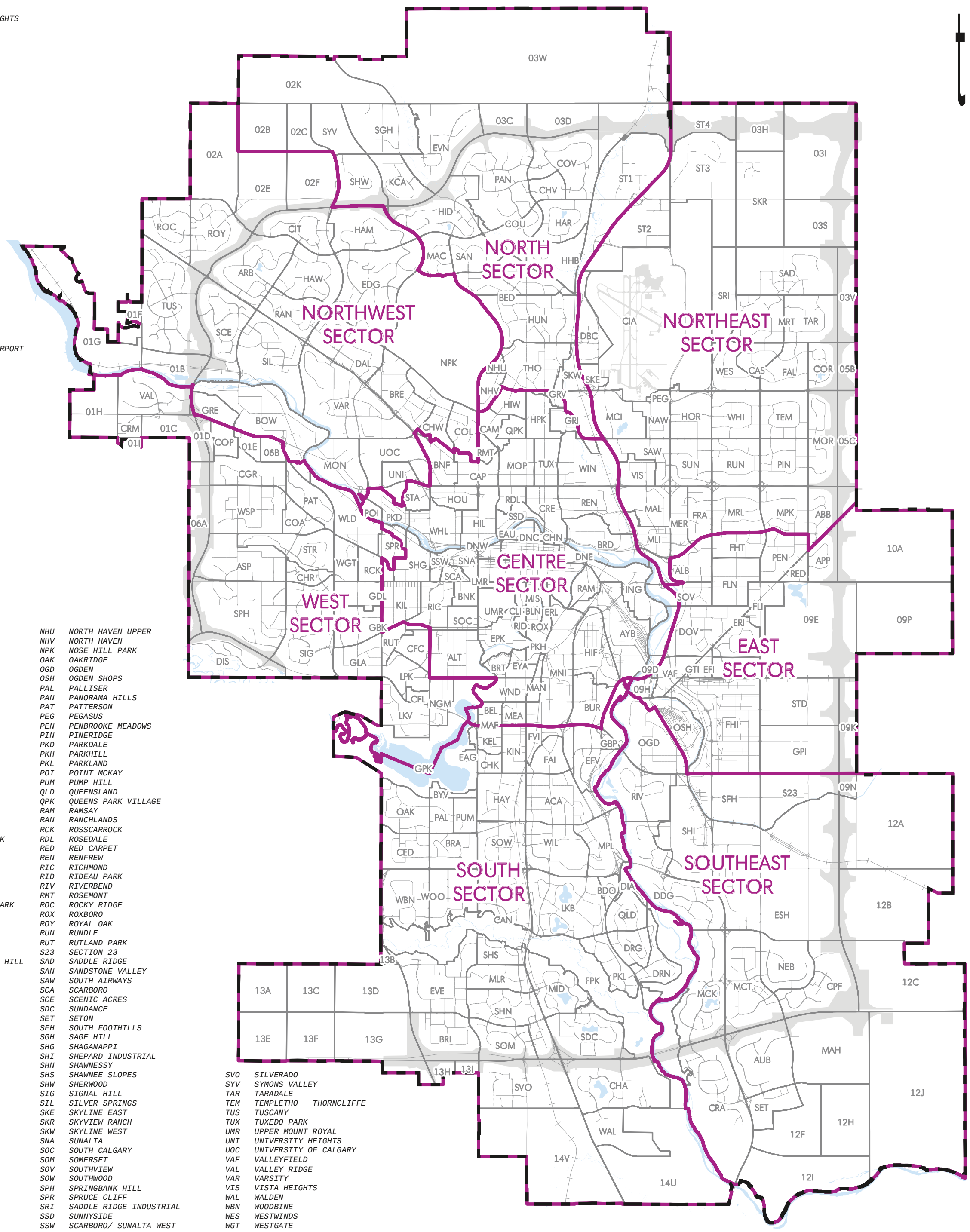
* U.P.H. = Units Per Hectare is based on Gross Residential Density (1 ha = 2.47 acres)
* U.P.A = Units Per Acre
Source: Canada Mortgage and Housing Corportation, City of Calgary: Civic Census, Planning Development & Assessment-Land Use Planning & Policy & Calgary and Region Economic Outlook 2007-2012
* Hectares of Approximate land need for Total City Wide unit growth
* The Calgary Plan promotes a minimum of 17 units per hectare (7 units per acre) density for new suburban community growth.
Multi Unit includes Apartment and Townhouse Units/Single Unit include Single & Duplex Units

It is this demand for new housing drives the demand for all new subdivisions. This new subdivision, in turn, creates a need to extend and upgrade municipal infrastructure. As a result, the manner in which housing demand is distributed among the various sectors of the city affects the need for and timing of substantial expenditures by The City to service new growth areas.

Over the last five years the new suburban communities captured 71% of the total new housing in Calgary. While most housing growth is occurring in the new suburban areas, a small proportion (5-10 percent) of the total new single and Semi Detached starts and 43-60 percent of Apartment and Townhousing/Row) is constructed in existing, developed neighbourhoods depending on the individual year. This occurs through infill/redevelopment in older inner-city community's i.e., Garrison Woods, as well as construction on vacant lands remaining in various locations throughout the city such as Quarry Park. The location, housing type, numbers and growth share is monitored yearly and is used as a indicator when assigning the proportion of` the growth forecasts to new suburban communities (The distribution of the 2007 building permit applications is illustrated in Map 5 and 6).

Map 2: Suburban Sectors and Community Districts, 2008

| CODE | DISTRICT |
|---|---|
| ABB | ABBEYDALE |
| ACA | ACADIA |
| ALB | ALBERT PARK/RADISSON HEIGHTS |
| ALT | ALTADORE |
| APP | APPLEWOOD PARK |
| ARB | ARBOUR LAKE |
| ASP | ASPEN WOODS |
| AUB | AUBURN BAY |
| AYB | ALYTH/BONNYBROOK |
| BDO | BONAVISTA DOWNS |
| BED | BEDDINGTON HEIGHTS |
| BEL | BEL-AIRE |
| BLN | BELTLINE |
| BNF | BANFF TRAIL |
| BNK | BANKVIEW |
| BOW | BOWNESS |
| BRA | BRAESIDE |
| BRD | BRIDGELAND/RIVERSIDE |
| BRE | BRENTWOOD |
| BRI | BRIDLEWOOD |
| BRT | BRITANNIA |
| BUR | BURNS INDUSTRIAL |
| BYV | BAYVIEW |
| CAM | CAMBRIAN HEIGHTS |
| CAN | CANYON MEADOWS |
| CAP | CAPITOL HILL |
| CAS | CASTLERIDGE |
| CED | CEDARBRAE |
| CFC | CFB - CURRIE |
| CFL | CFB - LINCOLN PARK PMQ |
| CGR | COUGAR RIDGE |
| CHA | CHAPARRAL |
| CHK | CHINOOK PARK |
| CHN | CHINATOWN |
| CHR | CHRISTIE PARK |
| CHV | COUNTRY HILLS VILLAGE |
| CHW | CHARLESWOOD |
| CIA | CALGARY INTERNATIONAL AIRPORT |
| CIT | CITADEL |
| CLI | CLIFF BUNGALOW |
| COA | COACH HILL |
| COL | COLLINGWOOD |
| COP | CANADA OLYMPIC PARK |
| COR | CORAL SPRINGS |
| COU | COUNTRY HILLS |
| COV | COVENTRY HILLS |
| CPF | COPPERFIELD |
| CRA | CRANSTON |
| CRE | CRESCENT HEIGHTS |
| CRM | CRESTMONT |
| DAL | DALHOUSIE |
| DBC | DEERFOOT BUSINESS CENTRE |
| DDG | DOUGLASDALE/GLEN |
| DIA | DIAMOND COVE |
| DIS | DISCOVERY RIDGE |
| DNC | DOWNTOWN COMMERCIAL CORE |
| DNE | DOWNTOWN EAST VILLAGE |
| DNW | DOWNTOWN WEST END |
| DOV | DOVER |
| DRG | DEER RIDGE |
| DRN | DEER RUN |
| EAG | EAGLE RIDGE |
| EAU | EAU CLAIRE |
| EDG | EDGEMONT |
| EFI | EASTFIELD |
| EFV | EAST FAIRVIEW INDUSTRIAL |
| EPK | ELBOW PARK |
| ERI | ERIN WOODS |
| ERL | ERLTON |
| ESH | EAST SHEPARD INDUSTRIAL |
| EVE | EVERGREEN |
| EVN | EVANSTON |
| EYA | ELBOYA |
| FAI | FAIRVIEW |
| FAL | FALCONRIDGE |
| FHI | FOOTHILLS |
| FHT | FOREST HEIGHTS |
| FLI | FOREST LAWN INDUSTRIAL |
| FLN | FOREST LAWN |
| FPK | FISH CREEK PARK |
| FRA | FRANKLIN |
| FVI | FAIRVIEW INDUSTRIAL |
| GBK | GLENBROOK |
| GBP | GLENDEER BUSINESS PARK |
| GDL | GLENDALE |
| GLA | GLAMORGAN |
| GPI | GREAT PLAINS |
| GPK | GLENMORE PARK |
| GRE | GREENWOOD/GREENBRIAR |
| GRI | GREENVIEW INDUSTRIAL PARK |
| GRV | GREENVIEW |
| GTI | GOLDEN TRIANGLE |
| HAM | HAMPTONS |
| HAR | HARVEST HILLS |
| HAW | HAWKWOOD |
| HAY | HAYSBORO |
| HHB | HARVEST HILLS BUSINESS PARK |
| HID | HIDDEN VALLEY |
| HIF | HIGHFIELD |
| HIL | HILLHURST |
| HIW | HIGHWOOD |
| HOR | HORIZON |
| HOU | HOUNSFIELD HEIGHTS/BRIAR HILL |
| HPK | HIGHLAND PARK |
| HUN | HUNTINGTON HILLS |
| ING | INGLEWOOD |
| KCA | KINCORA |
| KEL | KELVIN GROVE |
| KIL | KILLARNEY/GLENGARRY |
| KIN | KINGSLAND |
| LKB | LAKE BONAVISTA |
| LKV | LAKEVIEW |
| LMR | LOWER MOUNT ROYAL |
| LPK | LINCOLN PARK |
| MAC | MACEWAN GLEN |
| MAF | MAYFAIR |
| MAH | MAHOGANY |
| MAL | MAYLAND HEIGHTS |
| MAN | MANCHESTER |
| MCI | MCCALL |
| MCK | MCKENZIE LAKE |
| MCT | MCKENZIE TOWNE |
| MEA | MEADOWLARK PARK |
| MER | MERIDIAN |
| MID | MIDNAPORE |
| MIS | MISSION |
| MLI | MAYLAND |
| MLR | MILLRISE |
| MNI | MANCHESTER INDUSRIAL |
| MON | MONTGOMERY |
| MOP | MOUNT PLEASANT |
| MOR | MONTEREY PARK |
| MPK | MARLBOROUGH PARK |
| MPL | MAPLE RIDGE |
| MRL | MARLBOROUGH |
| MRT | MARTINDALE |
| NAW | NORTH AIRWAYS |
| NEB | NEW BRIGHTON |
| NGM | NORTH GLENMORE PARK |
| NHU | NORTH HAVEN UPPER |
| NHV | NORTH HAVEN |
| NPK | NOSE HILL PARK |
| OAK | OAKRIDGE |
| OGD | OGDEN |
| OSH | OGDEN SHOPS |
| PAL | PALLISER |
| PAN | PANORAMA HILLS |
| PAT | PATTERSON |
| PEG | PEGASUS |
| PEN | PENBROOKE MEADOWS |
| PIN | PINERIDGE |
| PKD | PARKDALE |
| PKH | PARKHILL |
| PKL | PARKLAND |
| POI | POINT MCKAY |
| PUM | PUMP HILL |
| QLD | QUEENSLAND |
| QPK | QUEENS PARK VILLAGE |
| RAM | RAMSAY |
| RAN | RANCHLANDS |
| RCK | ROSSCARROCK |
| RDL | ROSEDALE |
| RED | RED CARPET |
| REN | RENFREW |
| RIC | RICHMOND |
| RID | RIDEAU PARK |
| RIV | RIVERBEND |
| RMT | ROSEMONT |
| ROC | ROCKY RIDGE |
| ROX | ROXBORO |
| ROY | ROYAL OAK |
| RUN | RUNDLE |
| RUT | RUTLAND PARK |
| S23 | SECTION 23 |
| SAD | SADDLE RIDGE |
| SAN | SANDSTONE VALLEY |
| SAW | SOUTH AIRWAYS |
| SCA | SCARBORO |
| SCE | SCENIC ACRES |
| SDC | SUNDANCE |
| SET | SETON |
| SFH | SOUTH FOOTHILLS |
| SGH | SAGE HILL |
| SHG | SHAGANAPPI |
| SHI | SHEPARD INDUSTRIAL |
| SHN | SHAWNESSY |
| SHS | SHAWNEE SLOPES |
| SHW | SHERWOOD |
| SIG | SIGNAL HILL |
| SIL | SILVER SPRINGS |
| SKE | SKYLINE EAST |
| SKR | SKYVIEW RANCH |
| SKW | SKYLINE WEST |
| SNA | SUNALTA |
| SOC | SOUTH CALGARY |
| SOM | SOMERSET |
| SOV | SOUTHVIEW |
| SOW | SOUTHWOOD |
| SPH | SPRINGBANK HILL |
| SPR | SPRUCE CLIFF |
| SRI | SADDLE RIDGE INDUSTRIAL |
| SSD | SUNNYSIDE |
| SSW | SCARBORO/ SUNALTA WEST |
| ST1 | STONEY 1 |
| ST2 | STONEY 2 |
| ST3 | STONEY 3 |
| ST4 | STONEY 4 |
| STA | ST. ANDREWS HEIGHTS |
| STD | STARFIELD |
| STR | STRATHCONA PARK |
| SUN | SUNRIDGE |
| SVO | SILVERADO |
| SYV | SYMONS VALLEY |
| TAR | TARADALE |
| TEM | TEMPLETHO THORNCLIFFE |
| TUS | TUSCANY |
| TUX | TUXEDO PARK |
| UMR | UPPER MOUNT ROYAL |
| UNI | UNIVERSITY HEIGHTS |
| UOC | UNIVERSITY OF CALGARY |
| VAF | VALLEYFIELD |
| VAL | VALLEY RIDGE |
| VAR | VARSITY |
| VIS | VISTA HEIGHTS |
| WAL | WALDEN |
| WBN | WOODBINE |
| WES | WESTWINDS |
| WGT | WESTGATE |
| WHI | WHITEHORN |
| WHL | WEST HILLHURST |
| WIL | WILLOW PARK |
| WIN | WINSTON HEIGHTS/MOUNTVIEW |
| WLD | WILDWOOD |
| WND | WINDSOR PARK |
| WOO | WOODLANDS |
| WSP | WEST SPRINGS |

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# Part 4 – Land Available For Suburban Residential Development

Land considered available, as of April 2007, for residential development in the suburban market includes four types of land:

- Vacant subdivided lots in new suburban communities.
- Land in the process of being subdivided.
- Vacant land with approved Land Use in place.
- Those remaining lands which are, as yet, unsubdivided, but which are identified for future residential use as identified in Area Structure Plans or Community Plans.

The status of this supply changes constantly as approved lots are registered and serviced, as construction begins on vacant lots, and as plans are developed or amended. The intent here is to provide an accurate assessment of overall residential land supply, reflecting that supply as of April 2007. As such **the full un-built capacity of Calgary's developing suburban areas could accommodate 274,600 people.**

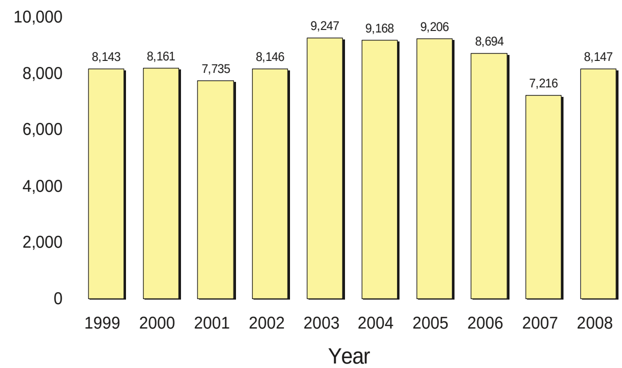
Servicing status in the developing areas of the suburbs changes constantly and the information shown within this document reflects the most current information available at the time of preparation of this report.

## 4.1 Vacant Residential Lot Inventory Urban Development Institute

The Calgary Chapter of the Urban Development Institute (U.D.I.) compiles a survey of vacant suburban residential lots which may or may not have shallow utilities in place. According to this survey completed January 2008, there were approximately 8,147 vacant lots. The inventory between 1999 and 2008 has varied between 7,216 and 9,247 lots.

It should be noted that the surveys between The City and U.D.I. do not necessarily match in terms of the how counts are collected and locations of the survey but both are used as an indicator of supply capacity.

Figure 5: Vacant Lot Survey - The Urban Development Institute (1999 - 2008)




Source: Urban Development Institute Survey

Table 5: Distribution of Vacant Serviced Lots, By Sector 2006, 2007 and 2008

| | 2006 | | 2007 | | 2008 | |
|---|---|---|---|---|---|---|
| Sector | Vacant Lots | % | Vacant Lots | % | Vacant Lots | % |
| North | 1,260 | 14% | 1,211 | 17% | 1,895 | 23% |
| Northeast | 1,359 | 16% | 680 | 9% | 487 | 6% |
| East | 0 | 0% | 0 | 0% | 0 | 0% |
| Southeast | 1,931 | 22% | 2,511 | 35% | 2,811 | 35% |
| South | 1,814 | 21% | 1,525 | 21% | 1,734 | 21% |
| West | 1,247 | 14% | 748 | 10% | 944 | 12% |
| Northwest | 1,083 | 12% | 541 | 7% | 276 | 3% |
| Total Suburbs | 8,694 | 100% | 7,216 | 100% | 8,147 | 100% |

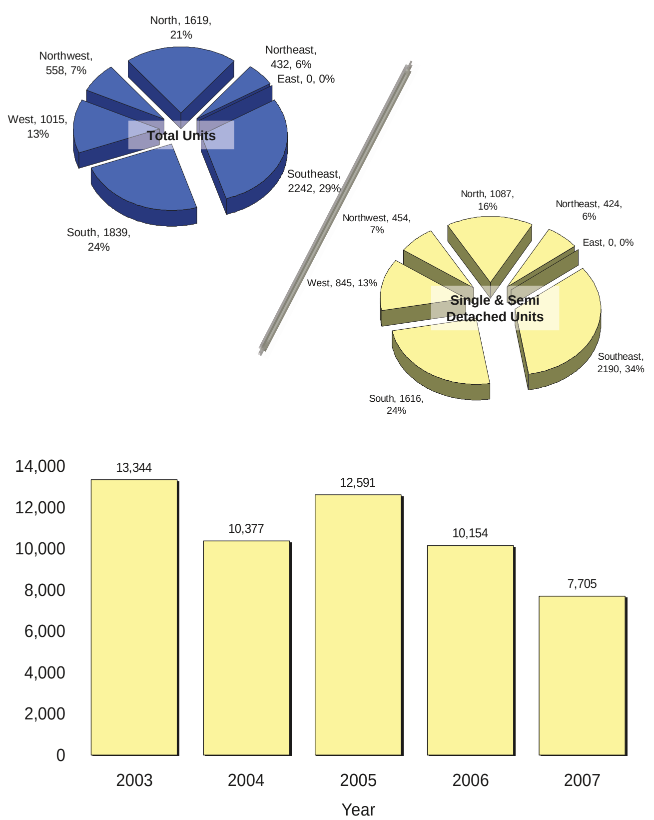
Numbers may not add up due to rounding
Source: Urban Development Institute (U.D.I.) Survey, 2006, 2007 & 2008 January

## 4.2 "Subdivided" Inventory of Available Residential Supply

A detailed inventory (April 2007) was made by Planning, Development & Assessment of the current capacities of Single Unit, Semi Detached, Townhouse (Row) and Apartment availability for each developing suburban community in Calgary.

The inventory locates and counts the existing and under construction units using civic census information at the parcel level. The remainder of the vacant parcels from Registered Plans, Approved Tentative Plans are tracked and counted into this inventory through the use The City

## Figure 6: Distribution & Supply of Vacant Subdivided Units by Sector, April 2007 & City Wide 2003-2007




Source: Planning Development & Assessment. Units are those lands that are either vacant at the time of April Civic Census (registered lots) and includes vacant subdivided unit capacity as identified in approved Tentative Plans as of April each year coinciding with the Civic Census.

of Calgary's Geographical Information System, which locates and generates the available remaining unbuilt lot supply in the new communities. The results for this year show that approximately 7,705 total units could be built into the vacant lots as existed at that time. This supply includes those lots or potential units that were serviced and available to builders, as well as lots recently approved through Tentative Plans of subdivision (these lots will become serviced with shallow utilities in the near term). **Of this amount 6,616 vacant lots were available for single and Semi Detached units while a 1,089 Multi Unit capacity existed. The total of these units could accommodate approcimately 23,000 people.**

This is a lower suburban inventory supply than what typically existed in Calgary over the last five years. Given the total unit supply of approved vacant land the April 2007 inventory can accommodate less than one year of residential growth given expected demand. However, this does not include unsubdivided lands which when subdivided will add additional capacity.

The estimated suburban single and Semi Detached lot supply, by sector, is detailed in Table 6. The distribution of vacant lots is and past capacity is illustrated in Figure 6.

## Table 6: Estimated Supply of Approved "Subdivided" Single, Semi Detached & Multi Units in Suburban Areas By Sector, April 2007

| Sector | Single/Semi Under Construction | Multi Unit Under Construction | Total Under Construction | Vacant Single/Semi | Vacant Multi Unit | Total Vacant Units | % Vacant Total Units |
|---|---|---|---|---|---|---|---|
| North | 763 | 330 | 1,093 | 1,087 | 532 | 1,619 | 21% |
| Northeast | 528 | 214 | 742 | 424 | 8 | 432 | 6% |
| East | 0 | 0 | 0 | 0 | 0 | 0 | 0% |
| Southeast | 1,157 | 405 | 1,562 | 2,190 | 52 | 2,242 | 29% |
| South | 1,118 | 443 | 1,561 | 1,616 | 223 | 1,839 | 24% |
| West | 680 | 384 | 1,064 | 845 | 170 | 1,015 | 13% |
| Northwest | 571 | 410 | 981 | 454 | 104 | 558 | 7% |
| Total | 4,817 | 2,186 | 7,003 | 6,616 | 1,089 | 7,705 | 100% |

Source: City of Calgary: Civic Census, Planning Development & Assessment-Land Use Planning & Policy, Estimates include registered lots & associated units in approved Tentative Plans. Under construction units based upon Civic Census information. Percentage numbers may not add due to rounding. Multi Unit represent apartments and townhousing (row).

## 4.3 "Unsubdivided" Inventory of Available Residential Supply

In addition to the vacant subdivided land supply inventory, a detailed inventory of the remaining capacities of the unsubdivided supply is collected each year. The current unsubdivided suburban residential land supply is indicated, by sector, in Table 7. The distribution of that land supply is shown on Figure 7. As of April 2007, there were an estimated 4,513 gross residential hectares (11,151 acres) intended for residential and related uses. This information is collected from developer anticipated lot and unit counts, within approved Outline Plans and Land Use applications for both single, Semi Detached and Multi Units and the remaining capacities of Community Plans. For lands without Outline Plans in place, density targets as identified in the Community Plans are used to calculate potential units. Where no range is given or otherwise specified eight units per acre is used until such time as Land Use is submitted or approved. **In total the unsubdivided land could accommodate approximately 95,338 new residential units which could house 251,600 people.** Map 3 shows the unsubdivided residential land supply for the entire city, while detailed maps of the residential land supply, by sector, are contained further in this report under "Part 8 Servicing Supply/Demand and Implications".

It is important to understand that this inventory does not include large areas of land for which future Land Use policy has not been determined through Community Plans. These excluded areas are shown in Grey on the servicing maps further into the report in Part 8 Servicing Supply/Demand and Implications. They will continue to be excluded from the residential land inventory until Community Plans are in place and/or more extensive technical analysis is undertaken to determine the likely developable residential components.

The lands included in the inventory are classified according to the availability or capacity of water and sewer (storm and sanitary) services, as this infrastructure must be in place before development can proceed.

*Areas classified as "Fully Serviced" have "Utility Capacity in Place" and indicate that major utility services have either been installed or will be provided by the developers without further major City expenditures, although the land is currently neither subdivided nor developed with on-site services. This means that the lands have the capacity to handle development.*

The two remaining classes describe lands with some, but not all, utility capacity in place (Partially Serviced) or lands having no capacity in place (Unserviced).

### Table 7: Estimated Supply of "Unsubdivided" Residential Land By Sector, April 2007

| | Unit Capacity | | | |
|---|---|---|---|---|
| Sector | Fully Serviced | Partially Serviced | Unserviced | Total Supply |
| North | 8,966 | 11,757 | 0 | 20,723 |
| Northeast | 3,636 | 13,902 | 0 | 17,538 |
| East | 0 | 0 | 0 | 0 |
| Southeast | 9,278 | 20,592 | 0 | 29,870 |
| South | 4,181 | 13,789 | 0 | 17,970 |
| West | 6,652 | 1,870 | 0 | 8,522 |
| Northwest | 715 | 0 | 0 | 715 |
| Total | 33,428 Units | 61,910 Units | 0 Units | 95,338 Units |

| | Gross Residential Hectares | | | |
|---|---|---|---|---|
| Sector | Fully Serviced | Partially Serviced | Unserviced | Total Supply |
| North | 408 | 505 | 0 | 913 |
| Northeast | 183 | 514 | 0 | 698 |
| East | 0 | 0 | 0 | 0 |
| Southeast | 401 | 955 | 0 | 1,356 |
| South | 198 | 675 | 0 | 873 |
| West | 473 | 138 | 0 | 611 |
| Northwest | 62 | 0 | 0 | 62 |
| Total | 1,726 Hectares<br>4,268 Acres | 2,787 Hectares<br>6,887 Acres | 0 Hectares<br>0 Acres | 4,513 Hectares<br>11,151 Acres |

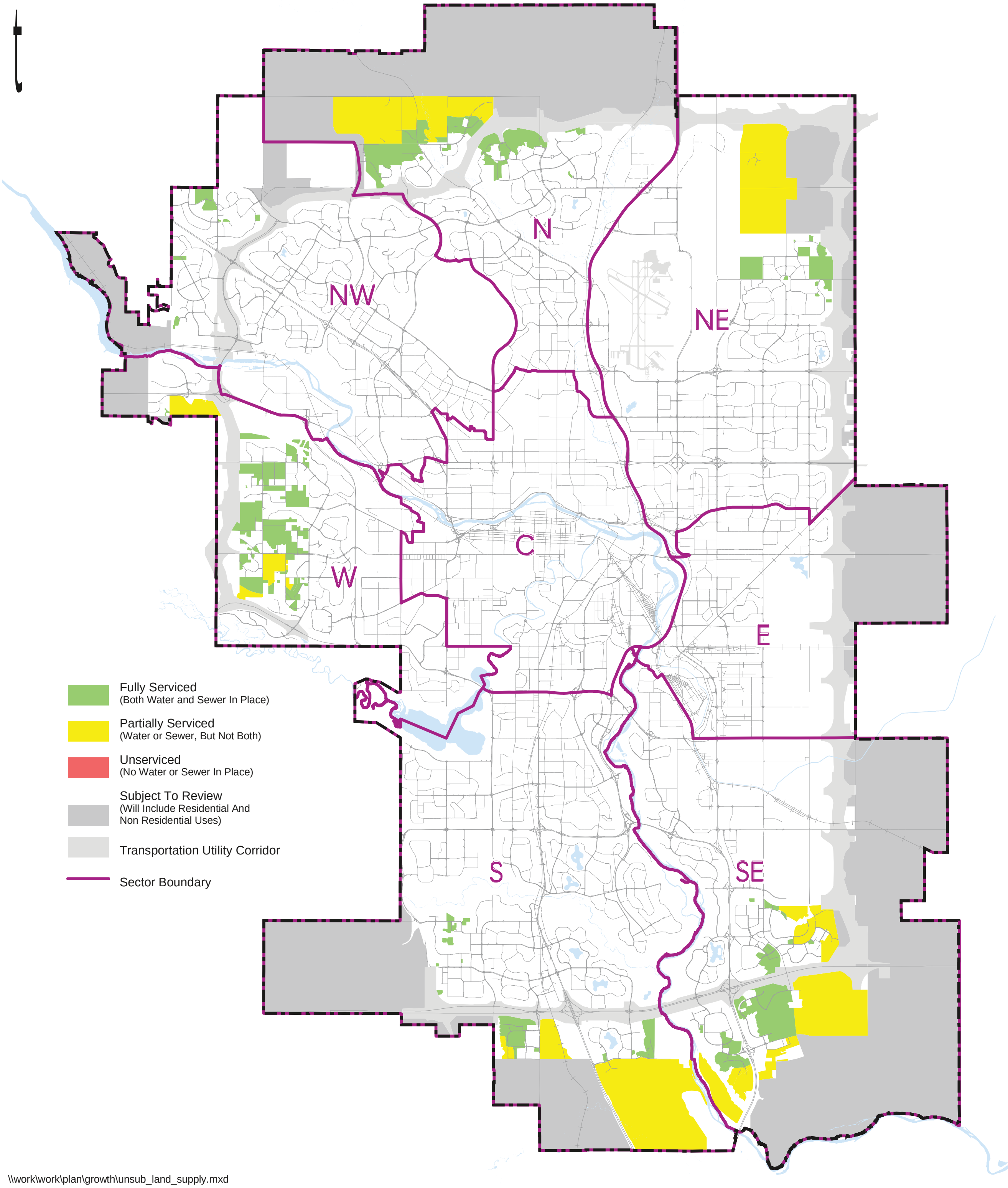
"**Fully Serviced**": represents lands that have utility capacity in place (both water and sewer in place)

"**Partially Serviced**": represents lands that have some utility capacity in place (water or sewer but not both)

"**Unserviced**": represents lands that have no utility capacity in place (no water or sewer in place)
The inventory excludes areas of land for which land use policy (Community Plans) have not been approved. (1 ha = 2.47 acres).

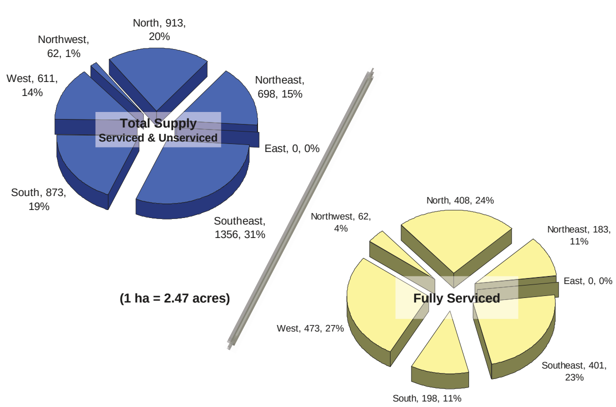
Source City of Calgary Planning Development & Assesment - Land Use Planning & Policy

Map 3: Unsubdivided Residential Land Supply (April 2007)



The maps shown in Part 8 are mapped according to servicing status. These servicing maps do not take into account the availability of downstream transportation capacity, which is discussed throughout the text, nor do they indicate the costs to construct the required services. It cannot be assumed that areas classified as "Partially Serviced" are necessarily less costly to service (including transportation infrastructure) than those areas considered "Unserviced." Their relative cost depends very much on the unique circumstances in each area. In light of this, the coding of these two categories should not be construed to imply the intended sequence of development. Generally, servicing costs and attractiveness to the market have been the main determinants of when individual areas are brought on-stream. More specific information about servicing thresholds / budgets / constraints / sequencing will be provided through the *Accommodating Growth: A Framework For Coordinating Municipal Capital Investment report*.

### Figure 7: Distribution of the Unsubdivided Residential Land Supply in Hectares, April 2007




Source: City of Calgary: Planning Development & Assessment-Land Use Planning & Policy

As noted above, transportation requirements may impose a further constraint on development, but the extent of constraint may vary from situation to situation. Although the required transportation facilities may be substantial in some situations, there is a greater degree of flexibility in the timing of the expenditures. Transportation facilities are not generally required in their final form until substantial development has occurred. Notwithstanding this, it must be emphasized that some of the areas, while having all or some utility capacity in place, may also have major transportation constraints which affect their developability in the 2008-2012 period (refer to Part 7 under "Transportation Factors").

It should also be noted that although The City may not be responsible for constructing major servicing projects in areas with utility capacity in place, it may still need to budget for costs associated with specific transportation and utility improvements constructed by individual developers.

It is also understood that this servicing analysis does not take into account the related need for other public facilities (e.g., recreation facilities, libraries, fire stations) or services (e.g., transit, police, fire, EMS, social services) also required to support growth in a specific area. More specific information about facilities and services will be provided through the *Accommodating Growth: A Framework For Coordinating Municipal Capital Investment report*.

4.3.1 Fully Serviced: Areas with Utility Capacity in Place

With the exception of the East Sector and diminishing opportunities in the Northwest Sector, a supply of land exists in each sector which is immediately developable, with capacity in the system to develop with water and sewer (storm and sanitary) facilities in place. These areas are shown in "green" on the maps as shown in Part 8 "Servicing Supply/Demand and Implications" of this report.

**These lands are not, as yet, subdivided, nor do they have local "on-site" services in place. There is, however, capacity in the utility "system" to accommodate their development without requiring significant City expenditures for major trunks, watermains, reservoirs, etc. In this sense, they are considered to be "Fully Serviced" with utility capacity in place.** Of these areas, those with specific transportation system constraints are identified in Part 7 of this report.

These areas represent approximately 1,726 hectares (4,264 acres), In total, areas with utility capacity in place as of April 2007 could accommodate approximately 33,428 total units, representing a three to four year supply of residential growth based on the projections in Table 19.

Although each of these areas, in isolation, could develop without additional major expenditures for water and sewer lines, the cumulative effects of simultaneous development in

all of these areas could result in a need for improvements in the facilities. Additional capital projects (treatment plants, reservoirs, etc.) will be required to meet increases in city-wide service demands as the city grows. Full development of many of these areas may also require major transportation improvements and provision of a variety of necessary public facilities and services. It is intended that these cumulative requirements will be identified and monitored through the *Accommodating Growth: A Framework For Coordinating Municipal Capital Investment report process*.

4.3.2 Partially Serviced: Areas Having Some Utility Capacity in Place

In the areas considered as "Partially Serviced" some utility capacity exists (identified in "yellow") as shown in Part 8 "Servicing Supply/Demand and Implications" of this report. Some capacity exists in at least one major municipal utility (storm sewer, sanitary sewer or water). In each instance, The City requires additional capital expenditures before large-scale development can commence. The areas designated as "Partially Serviced" total approximately 2,787 hectares (6,887 Acres) and could accommodate approximately 61,910 units. The full development of many of these (yellow) areas, on a sector basis, will require major transportation expenditures.

4.3.3 Unserviced: Areas Having No Utility Capacity in Place

The third category of lands (shown in red - See Part 8 maps) includes all of the remaining unsubdivided residential lands which are identified through Area Structure Plans and Community Plans (either approved or close to approval). These lands in this years inventory represent approximately 0 hectares in total.

## 4.4 Vacant Residential Supply With Land Use Approved

Another measure of the capacity of new suburban areas is that of approved Land Use in place. The capacity of this includes both subdivided and portions of unsubdivided land of unbuilt areas with approved Land Use. For the development industry and The City having Land Use is a means of preparing for development in such that the major planning of utilities, roads, expected housing and other related land uses can be accommodated. It then allows for the phasing of development in logical processes that will

### Table 8: "Estimated" Development Potential Of Vacant Residential Land With Land Use Approval

August 2007

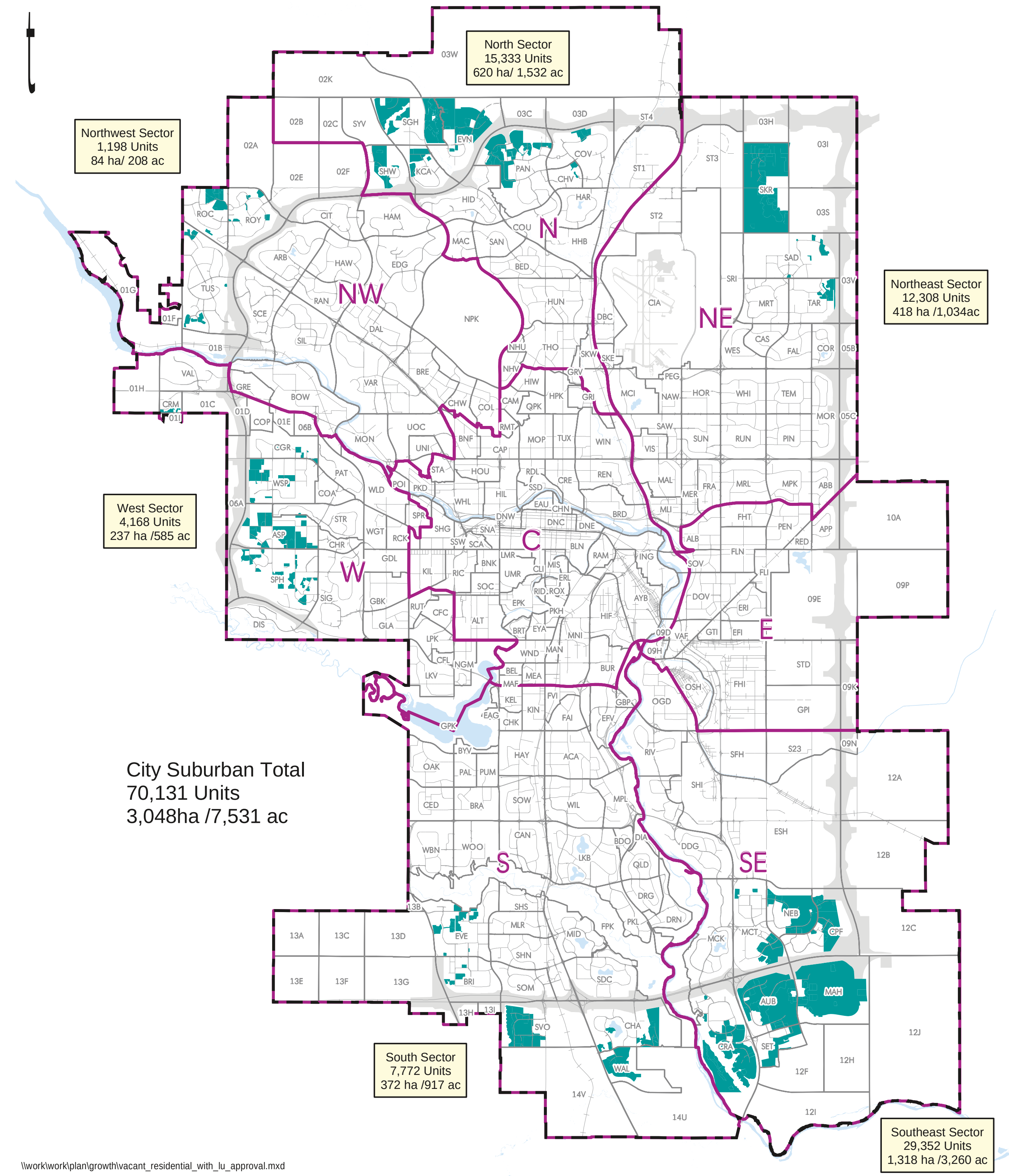
| | Serviced Land With Land Use * (Has All Major Utility Capacity in Place; Water, Storm & Sewer-Green Areas) | | | | | | | | | | | | | | **Unserviced Land** With Land Use (Not all Major Utility Capacity in Place-Yellow & Red Areas) | | Serviced & Unserviced Subdivided & Unsubdivided Total Supply With Land Use | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Subdivided Land** (Tentative Plan Approved) | | | | **Unsubdivided Land** (Outline Plan Approved) | | | | | **Total Supply** (Subdivided and Unsubdivided) | | | | (Unsubdivided) Outline Plan Approved | | | | |
| | | | | | Single | | Multi | | | | | | | | | | | |
| City Sector and Community | Single (Units) | Multi (Units) | Total (Units) | Hectares at 19.8 uph | (Units) | (Hectares) | (Units) | (Hectares) | Total Hectares | Single (Units) | Multi (Units) | (Hectares) | Population Capacity | (Units) | (Ha) | Total (Units) | Total Population Capacity | Total Hectares |
| **NEW SUBURBS** | | | | | | | | | | | | | | | | | | |
| NORTH | 1,087 | 532 | 1,619 | 82 | 3,835 | 264 | 3,385 | 46 | 310 | 4,922 | 3,917 | 411 | 24,750 | 6,494 | 228 | 15,333 | 42,930 | 620 |
| NORTHEAST | 424 | 8 | 432 | 22 | 365 | 23 | 669 | 4 | 27 | 789 | 677 | 54 | 4,100 | 10,842 | 369 | 12,308 | 34,460 | 418 |
| EAST | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| SOUTHEAST | 2,190 | 52 | 2,242 | 113 | 5,111 | 352 | 4,167 | 49 | 401 | 7,301 | 4,219 | 541 | 32,260 | 17,832 | 804 | 29,352 | 82,190 | 1,318 |
| SOUTH | 1,616 | 223 | 1,839 | 93 | 2,077 | 153 | 1,805 | 27 | 180 | 3,693 | 2,028 | 294 | 16,020 | 2,051 | 99 | 7,772 | 21,760 | 372 |
| WEST | 845 | 170 | 1,015 | 51 | 1,812 | 159 | 1,278 | 21 | 180 | 2,657 | 1,448 | 242 | 11,490 | 63 | 5 | 4,168 | 11,670 | 236 |
| NORTHWEST | 454 | 104 | 558 | 28 | 556 | 54 | 84 | 2 | 56 | 1,010 | 188 | 91 | 3,350 | 0 | 0 | 1,198 | 3,350 | 84 |
| **NEW SUBURBS' TOTAL** | | | | | | | | | | | | | | | | | | |
| | 6,616 Units | 1,089 Units | 7,705 Units | 389 Hectares | 13,756 Units | 1,005 Hectares | 11,388 Units | 149 Hectares | 1,154 Hectares | 20,372 Units | 12,477 Units | 1,634 Hectares | 91,970 People | 37,282 Units | 1,505 Hectares | 70,131 Units | 196,360 People | 3,048 Hectares |

Note: Population Capacity = Units multiplied by 2.8 people per unit. (1ha (hectare) = 2.47 acres) 19.8 uph equal 8.0 units per acre

* Servicing Status is based upon definitions outlined in the Suburban Residential Growth Information Update 2008-2012. Serviced acres are areas where service capacity is avalilable I.e., water, and sewer (storm and sanitary).Meaning that capacity in the utility system exists to accommodate development without requiring significant City expenditures for major trunks, watermains, reservoirs, etc.

Source: City of Calgary: Civic Census, Planning Development & Assessment-Land Use Planning & Policy

Map 4: Vacant Residential with Land Use Approval, Vacant Land Supply as of April 2007, Land Use as of August 2007



allow for more immediate development timing through the submissions of Tentative Plans on the unsubdivided portions of land. Once subdivided lots can be released to the home building industry. Usually having Land Use approved allows The City and development industry a certainty of what is likely required for future development in the near, mid-term and sometimes long-term. The information provided here acts as a indicator of supply of that capacity as of April 2007 using approved land use as it existed in August 2007. At this time there was 3,048 hectares or 7,536 acres that could accommodate approximately 70,131 units and house roughly 196,360 people within this approved supply. If growth maintained itself at the forecasted next five year rate until the current supply of Land Use was exhausted (and not adding more lands to this supply) there would be enough capacity today to accommodate a seven to eight year supply city wide at current growth rates. However, It should be noted that not all of this land and unit capacity has full servicing in place and is not immediately available for development as various transportation and servicing solutions may still be required in certain locations to allow for development to proceed. Locations of the vacant residential with Land Use approved" are identified on Map 4.