

CALGARY, AB an overview of development trends

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Calgary: An Overview of Development Trends

Calgary is currently one of Canada's fastest growing cities. It is facing immense pressure for residential growth along the edges of the city. Calgary has serious problems with traffic as a network of highways moves residents from the outlying residential areas downtown or to business and industrial parks. Calgary has adopted policies that reflect a desire for greater sustainability, smarter growth, and transit oriented development. Higher density housing forms, such as townhouses, are becoming popular in the new developments being built on Calgary's suburban edge. While this is in-line with City planning goals, it also reflects the high cost of land and housing in Calgary. In the summer of 2007, when this information was collected, the average house price reached \$500,000.



Map 2: Map of the City of Calgary. Industrial areas are outlined in purple. New residential developments highlighted in this report are located in the South East along Deerfoot Trail, and in the North East and North West. (Wikimedia Commons 2008)

The Suburbs Project at Dalhousie University explores development trends in the Canadian suburbs. We are studying the trends and perceptions within the suburbs of Calgary as well as within Markham in the suburban area of Toronto, and in Surrey in the suburban region of Vancouver. In the summer of 2007 we assessed municipal policies, visually analysed new developments and conducted interviews with planners. councillors, and developers.

More information about this project and reports on the other case study municipalities can be found at:

http://suburbs.planning.dal.ca



Map 1: The City of Calgary is located in Southern Alberta, Canada. (Wikipedia 2008)

Development History

At the turn of the century the primary industry was ranching. Oil was discovered in 1914 and Calgary turned into boomtown. The first Calgary Stampede was held in 1912 and remains one of the largest tourist draws to the city. Oil and mining extraction remains the strongest sector in the economy; however, manufacturing, transportation and logistics, and information technology have become growth industries. (Calgary Economic Development 2006: online)



Figure 1: Historic view of the Calgary Tower (http://media.canada.com/gallery/tower_125/tower_06.jpg)



Figure 2:Historic 8th Avenue, Calgary (http://calgarypubliclibrary.com/calgary/historic_tours/images/lh-pc-6.jpg)



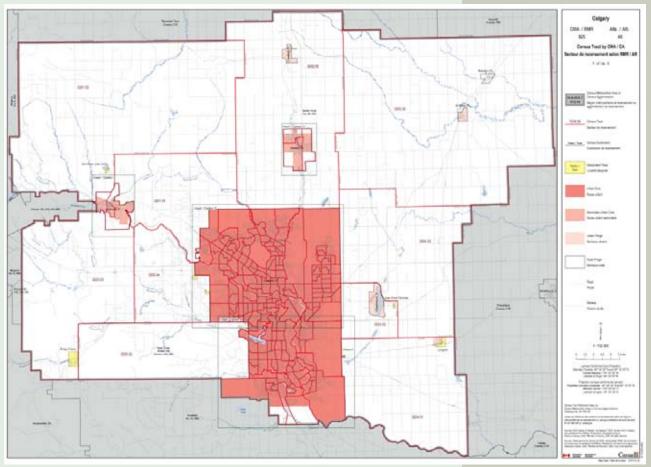
Figure 3:Alberta oil sands (http://images.theglobeandmail.com/v5/content/photos/oilsands_a1.jpg)

Census Snapshot

Calgary has experienced major population growth in the past years. As all of Alberta booms, Calgary remains a strong economic hub and an important place for employment. According to the 2006 national census, the city of Calgary has a population of 988,193, and a 12.4 growth rate between 2001 and 2006. The Calgary CMA incorporates the city of Calgary and surrounding municipalities including: Cochrane, Airdrie, Chestermere, and Langdon. The CMA reached a population of 1,079,310 and grew at 13.9% growth rate between 2001 and 2006. Calgary grew three times faster than the national growth rate of 5.4%, and also had a higher growth rate than Alberta, 10.6% and the City of Edmonton 9.6%. Calgary did not have as high a growth rate as the municipalities that are being most directly impacted by the oil boom like Wood Buffalo (24.3%) and Grande Prairie (27.3%).

Q: How would you characterize the rate of growth?

Insane...We have approximately 20,000 people moving here every year... It doesn't seem to let up... With that kind of growth we need to be constantly making sure there's enough land use approved to handle the growth. We're finding that the majority of the new growth is going to the suburbs. I think it's 119%, which is all of the new growth, as well as the people in the inner established communities moving to the suburbs. That's something that we're trying to change by working on policies in the inner city to try to encourage more density and development in the inner city. Interview C07



Map 3: Calgary Census Metropolitan Area (CMA). City of Calgary denoted in red (Statistics Canada 2006 Geography Online)

Census Snapshot continued...

Population pyramids reveal that Calgary's population is quite young. Calgary has a slightly higher percentage of single people (35.7%) and a slightly lower percentage of married people (49.3%) compared to the rest of Alberta (34.0% single & 50.7% married).

Median household income in the Calgary CMA is \$68,579, which is higher than the Alberta average at 63,988. Calgary CMA has a slightly higher median household income than the Toronto CMA (\$64,128), Vancouver CMA (\$64,332), Montreal CMA (\$61,361), and Halifax CMA (\$66,867).

Calgary residents are a very mobile group. Only 47.8% of residents in the Calgary CMA lived at the same address for over five years at the time of the 2006 census. 32.2% moved to Calgary from elsewhere within Alberta, 8% moved from another province and 6% from another country. Within the Calgary CMA, 22.2% of residents identify as visible minorities. The largest group is Chinese, followed by South Asian, Filipino, Black, Southeast Asian, Latin American, and Arab.

There are 433,616 total private dwellings in the Calgary CMA. 59.6% are single detached houses, 15% are apartments with less than five storeys, 8.7% are row houses and 5.8% are semi-detached houses. There are less single detached houses as a percentage of the total housing stock than in Alberta as a whole, which has 63.4% single detached housing and a lower overall percentage of higher density housing types.





We are growing rapidly around most of our edges and need to accommodate this influx of population. The last couple of years it's been between 20,000 and 35,000 people a year coming to Calgary. Our new suburbs are actually taking over 120% of that growth... our established communities are really starting to depopulate. As the boomers start to age and leave, a lot of them are going to the inner city, but a lot of them are going into new projects out on the edge, in the new communities. In some cases the deaths over births are higher in those communities just on demographics. But also the thinking was that a lot of the kids who grew up in those neighbourhoods stayed at home. They didn't make the transition into their own apartments or townhouse, they went right from the basement into a new house in the suburbs. Interview C10

It keeps hitting records. It looks like that is going to slow down, actually level off a bit if not drop and plateau... Calgary as a city is hitting an affordability crunch now where it's not really the affordable city it was ten years ago. Interview C10

Planning Structure & Development Environment

Calgary operates under the Unicity model, which means that planning and growth management decisions are made be one central municipal council. The Unicity model is intended as an efficient way to direct growth in the entire area, and has potential to facilitate a meaningful understanding of inter-relationships between city core and suburban areas. Generally speaking the city is divided into Quarters, and officially into political wards represented by Aldermen.

At the city of Calgary, Planners and development technicians struggle to keep on top development applications in the climate of economic boom and the concomitant massive population growth.

Calgary has always been focussed on a unicity concept, which means everything in our boundary we will plan, and plan efficiently. Everything beyond our boundary is up to the M.D. or Airdrie and the other smaller municipalities to deal with. Because the city is so large we have a lot people working in Calgary who live in Airdire, and Cochrane and Okotoks and there's more need for regional planning right now. Interview CO7

Policy documents influencing planning and development in Calgary include: The Calgary Plan, Land Use Bylaw, Growth Area Management Plan, Community Plans, Area Structure Plans, and Area Redevelopment Plans. The Sustainable Suburbs Plan was developed in the mid-1990s and encouraged an approach to planning suburbs that mirrored the language of smart growth and new urbanism. Currently, the Calgary Plan is under review and will be updated in light of massive city expansion.

Because of the seemingly unending demand for housing, there is new development on the suburban edge in every, as well as infill in the inner suburbs and city. Some developers own very large parcels of land in particular quarters and are

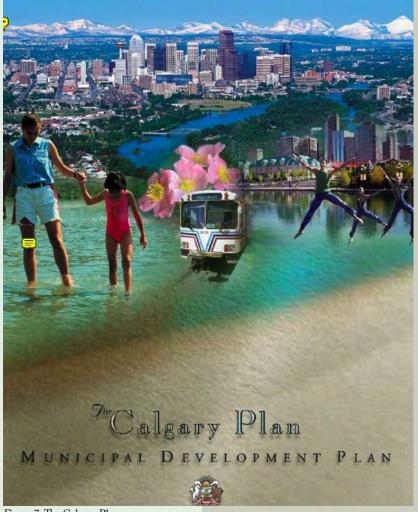


Figure 7: The Calgary Plan

Results of the Field Research

The planning, design and development trends in Calgary reveal the influences of smart growth, transit oriented design, and new urbanism. The trends we observed in the summer of 2007 include: higher density subdivision housing, an emphasis on streetscapes and a street grid, public transit, high density housing forms around transportation hubs, mixed use, privatization, branding and community marketing by amenity, such as private lakes, golf or health clubs.

Planning & Development Trends

Influences of Smart Growth, Transit Oriented Design & New Urbanism

The city of Calgary was leading the way towards smarter growth in the mid-1990s when it released the sustainable suburbs study. The study showcased the ideological leanings of planning staff towards smart growth and new urbanism. The early new urbanism communities in Calgary include Garrison Woods, which is located on the site of a redeveloped military base and McKenzie Towne, which had a master plan done by renowned new urbanism champion, Andres Duany.

New urbanism planning and design elements, such as higher density housing, front porches, and back lanes are built into high end developments that are "branded" as new urbanist like Garrison Woods, Garrison Green, and McKenzie Towne. The increasingly commonality of certain new urban elements, like high density and back lanes is more likely due to rising land and development costs and an extreme shortage of affordable housing than a conscious effort to design new urbanist communities.



Figure 9: High density condominium development common in Calgary's new suburbs





Figure 8: Narrow and small single detached

In the new suburbs, what the developers are telling us is that the starter home has now become either a unit in a walk-up apartment or a townhouse. The units are getting smaller. At the same time we know our communities are getting denser. We're putting more units per acre in.

Interview C10



Figure 10: Calgary's new suburbs are increasingly private

Transit Oriented Design (TOD)

New urbanism can be understood as an umbrella term that covers a number of related approaches to planning and design. Where as Markham has picked up a lot on the neotraditional design aspects of new urbanism, Calgary appears to be more influenced by the transitoriented-design aspects. In Calgary this means developing "transit nodes" in the areas around light rail stations, and planning for high density housing and mixed uses within walking distance of those nodes. Calgary plans to extend their LRT in the future, and sooner than that, to improve bus service in the outlying suburban areas. There is thus, in theory, potential for higher density nodes even within the new suburban regions. Traffic is a major problem in Calgary; due to the separation of land uses residents have to travel from residential subdivisions to intensive business and industrial parks clustered in a few areas of the city. Rush hour traffic can make commuting a very onerous ordeal for Calgarians. Planning staff and aldermen are therefore really pushing for an improvement in transit, and starting to re-think separation of uses in their new master planned areas.

In this city, getting people out of their automobile and getting them to move other ways either by transit or walking or cycling even. Making automobiles the second choice, or the choice for bigger distances. The most convenient mode has to be either transit for trips to work or be able to walk. From a community health point of view that's huge. We have been criticized as a city, and trends have shown that we're getting heavier and bigger... From that health point of view that's big. Greenhouse gas emissions is another reason to get into other modes of transit. Interview C10



Figure 11: Large divided highways connect central Calgary with its outlying subdivisions



Figure 12: Bus service has been extended to many new residential developments. This bus stop is in McKenzie Towne, one of Calgary's new urbanism developments.

Mixed Use

Mixed use is basically reversing the standard pattern of North American suburban development and permits different uses on the same lot or the same block. One respondent differentiated the terminology on mixed use, by explaining the difference between mixed use horizontal, which is where uses are mixed at the block scale, and vertical mixed use where residential uses are situated on top of commercial operations. Calgary is seeing a greater mix of use at the block scale, and is also seeing a greater mix in housing types and densities within neighbourhoods. Vertical mixed use is less prevalent as the consumer preference for lower density housing forms remains strong.

Mixed-use horizontal, that is different types of housing in the city has gone up to around 30%-35% in some area with townhousing, semis, apartments, as opposed to single-family. We're getting almost a 1/3, 2/3 division in some communities, which is very very high compared to the '90s. In our core commercial areas, we're getting a good mix of commercial and apartments and multi-family. I would say we're getting good mixed uses development now in the suburbs. Pretty good.

Vertical separation is somewhat of a nostalgic concept still in Calgary, where the person runs a store and lives above it. It would say we're not getting much of that at all. You have different types of uses separated vertically, like retail on the bottom and apartments on top, offices on top with retail on the bottom. We have the odd development that has been successful, but it's not wide-spread. I'm not sure the market embraces vertical separation to the extent that the new urbanists think it should. It's somewhat a throw-back to the '50s, where people maybe did that more for economic regions. Now you have large-scale corporations that build local commercial and they don't want people living above it. People can afford single-family homes and don't want to perhaps do that so much. I'd have to say for market reasons it's not an overwhelming success.



Figure 15: Vertical mixed use in Garrison Woods, a new urbanism development in Calgary



Figure 13: McKenzie Town High Street Pub



Figure 14: McKenzie Town High Street shops

Re: McKenzie Towne High Street: At the time, we didn't do residential above retail because there was no desire for that in the market. Today we would probably re-think that and we would put some elements of residential above. Interview C02

Suburban Neighbourhood Character

(a) Street

Curvilinear streets and cul-de-sacs still dominate in the Calgary suburbs, even when there are back lanes; making for some complicated street parking in the front of houses. Planners expressed a desire to return to the grid in order to make the urban form more adaptable to change and more amenable to bus service.



Figure 16: Cul-de-sacs are common in Calgary



Figure 17: The circular shape of cul-de-sacs make it difficult to park on the street. These cars are parked perpendicular with the curb, rather than parallel with it. Even though the driveways and garages are on back lanes, residents still want to park in front of their homes.

From a new urbanist point of view, we're getting areas of the community that I would call new urbanist, certainly those town centres. The small lot housing, on the narrow lots is creating some of that streetscape that the new urbanists support. Front porches, reduced front yard setbacks, friendly streets, narrow streets. We are starting to get some of that. The market has certainly taken some of that up Interview C10

Suburban Neighbourhood Character

(b) Back Lanes

Back lanes in Calgary are rarely paved and never snow ploughed. Garages on the back lanes appear to be constructed as the owners have the time, desire and money to have them built. The back lanes in the Calgary suburbs are therefore very diverse in appearance and are not integrated with the architectural design of the houses, as they are in Markham, Ontario.



Figure 18: Back lane in a Calgary suburb



Figure 19: Back lane in a Calgary suburb with many different styles of garages and sheds as they are not put in by the developer, but later by the residents



Figure 20: As a contrast to Calgary, back lanes in Markham, Ontario have a more uniform appearance because the garages are often put in by the developers at the time the development is being constructed

Suburban Neighbourhood Character

(c) Sidewalks

The sidewalks in new housing subdivisions are often directly beside the road and merge with a curb that slopes down to the road. Since there are few public boulevards, between the sidewalks and streets, there are few street trees and many of the utilities are moved up to the owners front lawn.



Figure 21: Small sidewalks in a Calgary subdivision

(d) Community Branding

Developers and builders brand themselves throughout their communities. Grand entrance features are common, as are flags and directional signage throughout the development leading to specific, marketed neighbourhoods. One developer, Hopewell has incorporated brass sculptures in all of its developments, which is a clever marketing feature that marks it as a Hopewell community without having to emblazon their name throughout.



Figure 22: Branding feature for Cranston

Successes and Challenges of the New Urbanism Approach

New urbanist communities have a lot of "curb appeal". In the opinion of one respondent, will age well because they resemble older, much loved neighbourhood forms and are generally duplicating older architectural styles. Garrison Woods and Garrison Green are very high-end, expensive neighbourhoods close to the city centre. Since they are infill developments on former military-owned land, they had the benefit of a desirable central location even though the city had expanded around it. These neighbourhoods have high-end housing products on streets that are lined with large older trees, kept in the development process. The overall impact is one that many Calgarians find attractive, which has contributed to an increased acceptance of higher-density housing in new urbanism influenced communities.

One of the challenges with the new urbanism approach in Calgary is that, with the exception of Garrison Woods and Garrison Green, communities such as McKenzie Town and others that are incorporating elements of new urbanism are still very much on the edge of town and fail to realize their goal of becoming walkable communities. Big boxes rule the retail sector and are clustered in power centres that people must drive to in order to get their groceries and other items. Buy-in to new urbanism and other "more progressive" approaches has been difficult to get from some developers, city engineers, and the consumers themselves.



Figure 23: High end new urbanism housing product in McKenzie Towne, Calgary

The problem I always thought is it's a nice contained community, but really you're out on the edge of town and you're a freeway away from anywhere. You literally have to go onto Deerfoot Trail to get somewhere...
Interview C10

Trying to get that industry to move towards innovation is a challenge. but it's doable, it's starting to happen. Now with council introducing these 11 sustainability principles, it's sending a signal to the development industry that they have to come up with new ways to implement these principle and work with us, so that we can develop the policies to require that form of development to take place... The consumer has to be aware of ways in which they can also contribute to implementing these principles. For example, we want to make communities more walkable. We want to encourage people to move away from taking 10 vehicle trips per day and reducing that amount by getting out to walk or cycle, find alternative ways of getting what you have to get done. But you also have to provide the facilities in the community so that they don't have to drive a long distance. Interview C02

Privatization in Calgary's Suburbs

(a) Lake Communities

Lake communities are proliferating. Calgarians crave water, and developers are giving it to them in the form of man-made lakes located centrally within a community. The lakes are lined and filled with potable city water. Larger "estate" homes are built around the lake, and the size of the house and lot get smaller and value and cost decrease as distance from the lake increases. The lakes, community centres at the lakeside and surrounding parks and green space are private, fenced and gated, and only accessible by community residents who become mandatory "club" members with monthly or yearly dues along with the purchase of their house. Concern for the future could be supplying these private amenities with drinkable city water.



Figure 24: Development around the lake at Auburn Bay



Figure 25: Private clubhouse at Auburn Bay

I think the city does have concern... as I understand they used fresh, treated water, which in the long run is not probably a very good use of our water. They do it because they create amenity for swimming and that. They have to have treated water, but as water becomes more scarce they're probably going to be seen as ... a misuse of a valuable resource. They create a nice focus for the communities... but they're private in the sense that you have to live in that community, and I think literally have a key or go through a check point to get in and use them. They're not true public amenities. Interview c10

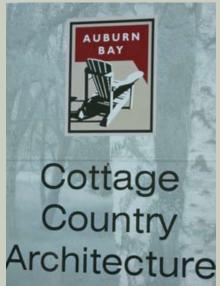


Figure 26: Ad for Auburn Bay lake com-



Figure 27: Fence around the lake

Privatization in Calgary's Suburbs

(b) Condominiums

Private condominium developments are common in the suburbs, with varying degrees of gating or other physical markers indicating private property. While some condominium developments cater to the high-end of the market, condominium townhouses are also providing an affordable starter housing option in suburban developments. The condominium townhouses are the most affordable housing type in many of the new neighbourhoods.

Figure 28: Townhouse condominiums on private roads in Calgary's suburbs



Figure 29: Townhouse condominiums on private roads in Calgary's suburbs

Certainly within a condominium complex you might have an entrance way with a private gate across it. In a sense that's not a whole lot different than someone who might have a gate in their yard. I wouldn't, but some people want that ... Interview c10

Privatization in Calgary's Suburbs

(c) Seniors Condominiums

Seniors communities are common, and operate under the condominium ownership structure. Aging baby boomers will place additional demand on the housing industry for these types of developments. These communities are private, often gated, and emphasize their "resort" style elements: pools, fitness centres, dining rooms. Many allow residents to choose the level of assistance they require so that those needing medical or other care can receive it as needed. Some seniors communities cater to a wide range of ages and abilities: from recent retirees to those needing full time nursing care.

The demographics and immigration and the whole where this country is going is necessarily supportive of suburbs. If we get older, suburbs don't necessarily cater to a large senior class, or if they do, they may be house locked or lower floor locked because they can't get upstairs, they can't get outside because they need a car. I think you're going to have a lot of isolated people. If not isolated in their homes, certainly within their communities because we're so dependent on the auto to connect. Interview c10

The retirement residence industry is constantly changing and it's also booming, as you're probably aware of. It is evolving and everyone in this business, specifically retirement residences have to need to know where they want to go with this business. We can see where it's eventually going to go, we're not guite there yet. Again, this aging in place concept, you're dealing with for example, a supportive living manor. Supportive living being more of a want than a need. It's not need-based so it's a little bit different than assisted living where people really do need a hand and that's why they can't stay in their own home. People who live here are just as independent has people who live in their own home, except that there's more services and it's far more social. It's a much more fun place to live than sitting in a house by yourself watching t.v. and probably eating out of a tin... Interview C06



Figure 30: Prince of Peace Seniors Community, residence for those who needed a higher level of care Figure 32: Ad for a retirement residence in Calgary

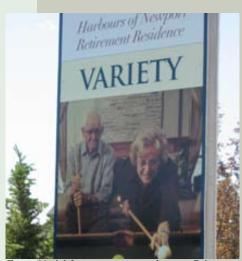




Figure 31 Prince of Peace Seniors Community, life-leased bungalows



Figure 33: Prince of Peace Seniors Community, entrance feature, soon to be gated

Greening Calgary's Infrastructure

Innovative and "green" storm water management techniques were discussed in the interviews. Partially directed by the city's desire to reduce maintenance costs for waste water management, many developers are moving away from standard storm water ponds and into systems that more closely resemble wetlands and natural systems. Some developers are even intentionally retaining "seed banks" from the land before grading, in order to incorporate local plant species into the natural drainage systems. Wetlands are becoming "features" and "amenities" that developers are selling as part of the aesthetic and recreation package of their communities.

The wetlands are very popular because of all the birds and the natural wild life that are attracted there. They're very pretty and they come on very quickly because we have learning the value of using the natural seed bank. When you strip the land you set aside a seed bank from the existing wetland areas if they have been disturbed in any way for development, and we reintroduce that back in. So we're bringing on the vegetation growth and the aquatics probably two or three years ahead of planting aquatic benches. We still will introduce some of that, but it's very interesting.

Interview C08



Figure 34: Wetlands and natural grasses becoming selling features in Calgary's new developments

That's what everyone associates with Calgary, that closeness to the mountains. Things like views, the river valley and even things like wetlands are becoming recognized as part of the prairie ecosystem. In many cases we've built wetlands as a bit of a sewer or storm water treatment before water goes back into the river. But the reality is that we've got a lot of existing ones that we should be protecting and enhancing as opposed to rebuilding. Part of that in this new community plan for the new suburbs that we'll be having in the North East is focusing on that. Creating a wetland attraction. That will be the local natural amenity in that area. Interview C10

Conclusion

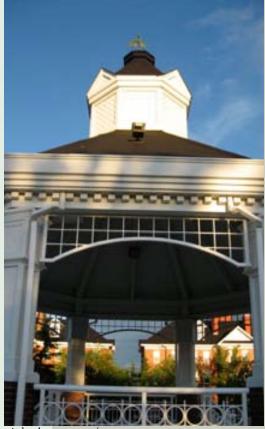
Breaking the decades old development pattern of a suburban landscape with separated land use, and the love affair with the personal automobile will be a challenge for Calgary's future. Planners, aldermen, and developers interviewed demonstrated commitment to making change happen. Whether or not the economy, transit funding and consumer preferences will fall into place to make future mixed use projects on Calgary's suburban edge successful is yet to be seen.











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