

APPROACHES TO GROWTH

Growing cities are often seen as healthy and prosperous, however many cities are recognizing the implication of unchecked growth, and are developing urban growth management strategies to “manage the amount, type, extent, rate, and quality of urban development (Pollack, 2008).”

To accommodate future growth, the City of St. Albert annexed 1,337 hectares of land in 2007. A number of assumptions were made in forecasting how much land would be annexed, however a number of changes have occurred. Some of these include: regional direction from the Capital Region Board to promote sustainable urban growth; new urban developments limiting opportunities for future growth; and demographic and fiscal changes suggesting current growth patterns are no longer sustainable.

With increasing energy, infrastructure, environmental and healthcare costs, alternative forms of development began to emerge in the early 1980's to late 1990's, including

- Traditional Neighbourhood Development (TND)- well designed public spaces and buildings, grid street layout and pedestrian friendly streets;
- Transit-oriented Development (TOD)-small-town style development around the pedestrian and public transit (Walters and Brown, 2002);
- Rural Conservation design- conserving natural features and careful placement of buildings;
- New Urbanism- merger of TND, TOD and Rural Conservation. Based on compact, mixed-use neighbourhoods, with convenient and safe movement throughout neighbourhoods for all modes of transportation (Walters and Brown, 2002); and
- Smart Growth- often used interchangeably with new urbanism. Environmentally responsible, economically viable and well-designed way of developing.

In reviewing the many changes and challenges facing St. Albert, along with many other cities. Smart Growth St. Albert proposes growth and new development would follow New Urbanist principles in an effort to achieve an urban environment that is environmentally responsible, economically viable and well-designed for people. Smart Growth St. Albert is a proposal that includes many of the New Urbanist principles and adapts them to what is appropriate for the spirit and identity of St. Albert, focussing on four key principles.

REFERENCES:

Walters, D. and Brown, L., Design First: Design-based Planning for Communities, 2002.

Transit Oriented Development Advocates, TOD Case Study, Portland, Oregon, from <http://www.todadvocate.com/pdxcasestudy.htm>.

Pollock, P. Urban growth Management Strategies, 2008 from <http://law.du.edu/images/uploads/rmlui/rmlui-sustainable-UrbanGrowthManagement.pdf>

TO READ:

Public policies for managing urban growth and protecting open space: policy instruments and lessons learned in the United States reviews strategies regions and municipalities can adopt to manage growth.

Find it at:

http://www.ncrs.fs.fed.us/pubs/jrnl/2003/nc_2003_bengston_001.pdf

TO WATCH:

Built to Last providing a look at the benefits of new urbanism

Find it at:

http://www.youtube.com/watch?v=VGJt_YXloJI

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PLACES TO SEE:

Orenco Station in Portland is considered one of the most successful TODs in North America, with a mix of housing, offices, parks and retail focussed around light rail transit with frequent service to downtown Portland. Orenco Station has received numerous awards, including the National Home Builders "Master Planned Community of the Year" gold award, and State of Oregon Governor's Livability Award (Transit Oriented Development Advocates, ND).

The articles and videos referenced in the Bulletins do not necessarily reflect the position of the City of St. Albert and are meant to encourage debate and discussion.

SMART GROWTH BRIEF

APPROACHES TO GROWTH

GROWTH AND CITIES

With the movement of people from rural to urban areas, immigration and shifting demographics, many cities have grown dramatically in terms of population and land consumption. In Canada, the transformation from rural to urban started in 1921, with currently 80% of Canadians residing in cities (Bourne, 2007).

While growing cities are seen as healthy and prosperous, managing growth is important for ensuring economic, environmental and social sustainability. Many cities are recognizing the implication of unchecked growth, and are developing urban growth management strategies to:

“manage the amount, type, extent, rate, and quality of urban development. In other words, these tools can be used to manage how much growth occurs, what kind it is, where it occurs, how fast it happens, and with what impacts (Pollack, 2008).”

Growth generally refers to increases in population, but could also include increases in employment, buildings, business or land. Some growth is needed for cities to thrive, without it, a place stagnates. (Slack, 2006)

This brief will provide an overview of opportunities and challenges of growth, growth in St. Albert, a review of conventional development and the New Urbanist approach.

OPPORTUNITIES AND CHALLENGES OF GROWTH

Slack (2006) outlines some opportunities of growth:

- Employment and income – population growth generates demand for a variety of goods and service, which in turn creates opportunities for employment;
- Economies of scale – as cities grow, the per-unit cost of providing some goods and services can be reduced;
- Agglomeration economies – as cities and regions reach a certain size, they achieve a critical mass and competitive advantage in attracting workers, businesses, institutions and in turn see an increase in productivity ;
- Diversity and choice – as populations grow they become more diverse and provide more variety and choices for people; and
- Opportunities to revitalize urban areas – growth provides an opportunity to improve areas and provide even more diversity and choice for residents and business.

There are also some challenges, which Slack (2006) outlines which include:

- Sprawl;
- Congestion;
- Infrastructure costs;
- Pollution; and
- Loss of open space, and environmentally sensitive and agricultural lands.

GROWTH IN ST. ALBERT

In 2007, the City of St. Albert completed the annexation of 1,337 hectares of land to accommodate future growth. The intent was to ensure sufficient land within the city to meet future demands for residential, commercial and industrial needs for 20 years.

Initial forecast

A number of forecasting assumptions were made in determining how much land would be annexed:

- A build-out population of 75,250 is expected to occur within the pre-annexation boundaries by 2014;
- Growth rate for years subsequent to 2014 reflected historic rates of 2.6%;
- Residential density for new growth areas is 30 persons/hectare, the same as existing;
- Commercial floor space need is based on 7.7 m² per capita and assumes a 25% site coverage;
- Current inventory of vacant commercial land in St. Albert at October, 2003 was 31 hectares; and
- There is sufficient land available within the current boundaries to accommodate any further industrial development requirements for a 20-25 year planning timeframe.

From these assumptions it was determined the population at 2027 would be 105,056. The amount of land required would be:

Residential	994 ha
Commercial	130 ha
Additional land for environmental, boundary and title purposes	213 ha
TOTAL LAND	1,337 ha

Changes influencing forecast

Due to the length of time from the initiation of the annexation to its completion, as well as significant economic impacts over the last couple of years, a number of changes have occurred which impact the initial forecasts:

- Population growth has been less than 2% annually since 2001;
- Council has since decided that an additional 283 hectares of industrial land is now desired;
- A higher level of regional planning and direction is now in place through the Capital Region Board looking at more sustainable approaches to urban growth throughout the region, but in particular from the urban centres;
- There are proposed changes to land use development adjacent to St. Albert through a review of the Sturgeon Valley Area Structure Plan to the east and the designation of a significant amount of land for the University of Alberta farm to the north which limits opportunities for future growth;
- There have been significant fluctuations in the economy, which has had an impact on servicing, infrastructure and development costs;
- Demographic changes and fiscal challenges are suggesting that suburban growth in the conventional sense is no longer sustainable;
- City targets of 10,000 new local jobs by 2020 have been set in the Economic Development Plan; and
- Potential for high-capacity transit has been identified in the Transportation Master Plan.

These changes all contribute to St. Albert needing to look differently at how it will grow. With one-third of the annexation lands being considered for industrial and business development, there is now only 700 hectares of land available for residential development. If the city continues to develop in the conventional manner, the city will need to annex additional land sooner than anticipated to meet the city's residential growth needs.

CONVENTIONAL DEVELOPMENT

While suburban residential developments had their early start as early as the mid 1850s, the suburban design prevalent in cities across North America really started in the 1930s as the car began to grow in prominence. There were a number of elements that influenced the designs we see today.

US Federal Housing Authority regulations

While various amenity-rich suburban neighbourhoods had been developed earlier that included curvilinear, but connected, streets and pedestrian-focused greenways, it was the development of Radburn, New Jersey, in 1928 with its predominance of cul-de-sacs, elimination of the green space network and connected cross streets, that became the basis of development regulations established by the Federal Housing Authority. This entrenchment in federal legislation solidified a mis-guided notion that a connected, grid-iron street system could not accommodate the car. (Walters & Brown, 2002)

Tremendous profit-making opportunities

The enterprising nature of the American businessman found this approach to development of converting cheap agricultural land to desirable residences to be highly profitable. The cross streets and the connected greenways were eliminated as taking up profitable land and the facilities, like sidewalks, for pedestrians, were often not re-integrated with the street. (Walters & Brown, 2002)

The mass production of similar housing designs was also beneficial to the bottom line, as costs were lowered. This meant people could get new housing cheaper in the suburbs than it would cost them to renovate an older home in the central city, creating a larger market. (Walters & Brown, 2002)

Commercial development became designed for convenience by car and for drive-by visual marketing with no thought to community aesthetics or pedestrian space. (Walters & Brown, 2002)

As a result land became simply a commodity and site layouts were done merely for the convenience of automobiles, without any thought to urban design or environmental features or issues.

Walters and Brown (2002) summarize it well.

“Developers generally have a history of following the line of least resistance to quick profits, and thus the marketplace has succumbed to years of direction, advertising and subsidies, churning out cookie-cutter subdivisions and strip shopping centers to meet the demands that have been manufactured in the minds of Americans.”



Source www.radburn.org

A map of Radburn, New Jersey with a predominance of cul-de-sacs in the northern half.

Housing demand

After WWI and WWII, there was a huge demand for housing that had to be met quickly, and the sprawling, homogeneous tract housing became the standard.

As housing sprawled further out, travel demand increased faster than population growth, challenging the capacity of the hierarchical road systems. Roads were originally designed under the assumption that travel demand would not increase beyond the expected population growth. To compound this the traffic from all the cul-de-sacs overburdened the few collector streets, leading to more congestion and longer trip times.

Modernist movement

The modernist movement predominated city design from the 1920s. It was more an architect's view of the city as an object, with no regard as to how city life actually would function within it. The public space around buildings, their facades or the relationship between buildings and the street were never considered. But this was a dominant force in development of cities into the 1970s and beyond, with its "single use zones divided by major highways, and new large buildings constructed as singular, unrelated objects in the open space laid bare by the demolition of old neighbourhoods." (Walters & Brown, 2002)

This in turn allowed transportation engineers to dominate the structure of cities with their street designs without regard for urban form or function. As a result, the public realm "began to vanish as car-based spatial formulas drove decisions in urban design plans, from scale of regional road networks to individual site plans." (Walters & Brown, 2002)

Garden City movement

The Garden City movement was initially a reaction to the overcrowded, unsanitary conditions of industrial cities in the UK. Those who could afford it, moved out to the fresh air and green space of the countryside. Many of the common features of these early developments have been omitted from newer suburbs over the years including farms, markets and commercial activities, open space, pedestrian facilities, schools, churches or a variety of housing types.

NEW URBANISM & SMART GROWTH

In the late 1960s, Jane Jacobs published *The Life and Death of Great American Cities*, observing what made her Hudson Street neighbourhood in New York, the anti-thesis of the suburban ideal, such a successful neighbourhood. Around the same time there were a few academics and practitioners who also began questioning the predominant approach to city growth and development. Three emerging concepts eventually culminated in New Urbanism.

Traditional Neighbourhood Development

In the early 1980s, Traditional Neighbourhood Development (TND) emerged in America. It was rooted in the design of pre-automobile neighbourhoods that were developed around the streetcar. Andrés Duany and Elizabeth Plater-Zyberk are credited with developing TND. Seaside in Florida, was one of the first TND communities designed by Duany and Plater-Zyberk in 1981. Seaside was based heavily on traditional American towns and suburban developments, focussing on well designed public spaces and buildings, grid street layout and pedestrian friendly streets. Much of their influence came from Leon Krier and his work in Europe. Duany and Plater-Zyberk also began developing a more graphic approach to land use regulation with a great emphasis on form and design, and how building, streets and public spaces interacted (Walters and Brown, 2002).

Transit-oriented development

Transit-oriented Development (TOD) emerged around the same time on the West coast, with Peter Calthorpe, Doug Kelbaugh and Daniel Solomon, based on the early streetcar suburbs. TOD is similar to Traditional Neighbourhood Development, but focussed on a

small-town-style development around the pedestrian and public transit (Walters and Brown, 2002). Orenco Station is a suburb outside of Portland, Oregon and is considered one of the most successful TODs, with a mix of housing, offices, parks and retail centred around light rail transit with frequent service to downtown Portland (www.tndwest.com). Orenco Station has received numerous awards, including the National Home Builders "Master Planned Community of the Year" gold award, and State of Oregon Governor's Livability Award (Transit Oriented Development Advocates, ND).

Rural Conservation design

With the threat of suburban expansion to farmland and natural areas, Randall Arendt wrote *Rural by design: maintaining small town character* in 1994. Randall approached small town design from a conservation perspective, which was based on conserving natural features and careful placement of buildings (Walters and Brown, 2002).



Source: J. Bergum

The Metro station at Orenco Station is the focal point of the community. Transit ridership in Orenco Station is one of the highest in the country.

Charter of New Urbanism

These three approaches all contributed to the Charter of New Urbanism that was signed in 1996, with the goal of developing attractive and efficient suburbs with a focus on the region; the neighbourhood district and corridor; and the block, street and building.

New urbanism aims to alter the ways people understand and build the places where they live and work, superceding modernist concepts of separated single-use zoning areas, buildings isolated in open space and an environment dominated by the automobile. Instead, the main organizing principles involve: the creation of compact, defined urban neighbourhoods, comprising a compatible mixture of uses and housing types; a network of connected streets with sidewalks and street trees to facilitate convenient and safe movement throughout neighbourhoods for all modes of transportation; the primacy of the pedestrian over the automobile; the integration of parks and public spaces into each neighbourhood; and the placement of important civic buildings on key sites to create a strong visual structure of memorability (Walters and Brown, 2002).

What is interesting is that this approach to development extends much farther back in history than the conventional approach (Talen, 2009). And the work being done in this area is strongly based on looking at what has or has not worked in successful urban environments throughout modern history, rather than on a relatively recent ideal vision or a business bottom line.

These concepts have taken awhile to take hold. It wasn't until the 1990s that the planning profession began to really start to accept and adopt some of these principles on a more widespread basis. It wasn't until the first decade of the 21st century that the development industry began to adopt the concept of New Urbanism and Smart Growth. But the Urban Land Institute, a developer organization in the US has now begun to strongly embrace the concept, recognizing the untapped market demand and the financial benefits from this type of development. In fact, from their website it's clear they consider themselves "at the forefront of smart growth efforts . . . [and] one of the leading voices in the smart growth debate through its research and education efforts . . . [and] a resource that a variety of stakeholders at the national, regional and local levels turn to for information, advice, and concrete ideas on implementing smart growth. (ULI, nd)

Smart Growth

The terms New Urbanism and Smart Growth are often used interchangeably. Walters and Brown (2002) suggest that many see New Urbanism as "an approach that enables a community's growth to be channelled into a physical form that is more compatible with the

scale of existing neighbourhoods, discourages excessive auto use, is less costly to service, and uses less land and natural resources. These attributes provide a pretty good description of Smart Growth.” They go on to summarize Smart Growth as a way of developing that is environmentally responsible, economically viable and well-designed.

Smart Growth is also often used interchangeably with the term sustainability. The physical design concepts of Smart Growth support sustainable development, but sustainability goes farther into the long-term conservation of natural resources, energy conscious design and the enhancement of a community’s human capital. The suburbs have a significant role to play in this new movement. According to Walters and Brown (2002)

“the main battles for a sustainable urban future will be fought in the suburbs, as they pose the most difficult political terrain for design and environmental improvement.”

SMART GROWTH ST. ALBERT

In reviewing the many changes and challenges facing St. Albert, along with many other cities, Smart Growth St. Albert proposes growth and new development would follow New Urbanist principles in an effort to achieve an urban environment that is environmentally responsible, economically viable and well-designed for people, rather than cars.

Smart Growth St. Albert would focus on four key principles that were tested and given strong approval by residents through a survey and focus groups:

- Walkability
- Livability
- Connectivity
- Sustainability

CONCLUSION

With increasing energy, infrastructure, environmental, healthcare, and development costs, alternatives to conventional growth and development need to be explored.

Even traditional development interests have begun to voice alarm that the costs of sprawling development patterns have begun to outweigh the benefits, such as a Bank of America report claiming that “unchecked sprawl has shifted from an engine of ... growth to a force that threatens to inhibit growth and degrade the quality of life” (Bengston, Fletcher, Nelson, 2003).

Smart Growth St. Albert is a proposal that includes many of the New Urbanist principles and adapts them to what is appropriate for the spirit and identity of St. Albert.

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