



THE BUSINESS OF LAND USE PLANNING

By Jeff Greene

Summary

The capital costs of infrastructure, as well as the cost of maintenance and replacement costs, combined with a limited range of revenue generating tools, is creating challenges for many communities. As all land use decisions made by a community ultimately create fiscal outcomes it is critical for these decisions to consider the financial affects of development. The City of Airdrie, Alberta is one community that has addressed the challenge by adopting "Fiscal Impact Modeling" as part of its land use decision process. Fiscal Impact Analysis is a Smart Growth practice that allows communities to have a greater understanding of the net benefits or costs of development proposals.

Sommaire

Le coût en capital des infrastructures, ainsi que les coûts d'entretien et de remplacement, alliés à la gamme limitée des outils susceptibles de rapporter des recettes, soulèvent des défis pour maintes collectivités. Dans la mesure où toutes les décisions touchant l'utilisation des terres qui sont prises à l'échelon communautaire engendrent des issues fiscales, ces décisions doivent absolument tenir compte des retombées financières du développement. La Ville d'Airdrie (Alberta) a fait face au problème en intégrant un modèle de l'incidence fiscale à son processus décisionnel sur l'utilisation des terres. L'analyse de l'incidence fiscale est une pratique de croissance intelligente qui permet aux collectivités de mieux saisir les avantages nets ou les coûts des propositions de mise en valeur.

The Corporation of the City of Airdrie is located four miles north of Calgary, Alberta. Like many communities, Airdrie began alongside the railroad and was an agricultural service community for the surrounding area.

Airdrie has grown in population at an annual rate of five percent. A city of less than 2,000 in the mid 1970s, it grew to over 23,000 by 2001. From 1996 to 2001, Airdrie was the fastest growing city in Alberta and the fourth fastest growing centre in Canada. The 2002 and 2003 Airdrie Municipal Census's indicated that population growth has increased by eight percent in each of those years.

Because of its proximity to Calgary, Airdrie is at risk of becoming a satellite community and losing its identity. This is not acceptable to residents and local decision makers. The desire is strong for Airdrie to strive to achieve balanced growth by offering a full range of community services and commercial development opportunities to its residents and businesses. Of particular concern in

this balancing process is the need to maintain an adequate supply of residential and non-residential lands to accommodate short- and long-term growth.

Rapid growth in the residential sector is causing concomitant growth in public expenditures related to increased demands on infrastructure, community facilities and public services. With growth come increased expectations from an increasingly diverse host of stakeholder groups. The challenge for the City of Airdrie is to resist the threat of becoming a bedroom community and to plan for balanced growth. The City also needs to be in a financial position to collect sufficient revenues to pay for municipal capital expenditures for new infrastructure and community services. Finding the means to support long-term costs at a level of service that meets the expectations of its residents and the business community is the essence of the challenge.

A predominantly residential community built out at low density and serving a

commuter population traveling daily into Calgary would be an incomplete and ineffective community. Residential growth in and of itself intuitively results in a net drain on public finances. Residential development needs to be supported by offsetting revenue streams from commercial and industrial land uses. A balanced community will reduce the impact of commuter traffic and greenhouse gas emissions. Generating sufficient revenues from residential and non-residential land uses will enable the City of Airdrie to support balanced growth. Striving for community diversity and a more efficient use of a limited land base will also contribute to community identity, a sense of community and sufficient revenues to achieve a financially sustainable community.

Airdrie Council and the City's administration have determined a course that considers the *triple bottom line* for community development (triple bottom line refers to achieving a balance between a corporation's social responsibility, environmental stewardship and fiscal

realities). The City is on a path to financial sustainability to ensure that sufficient revenues are available to deliver the full range of community services and to become a mature city at build-out.

Business Strategy

Airdrie is incorporating Fiscal Impact Analysis (FIA) into its land use planning and decision-making process. The City recognizes that good fiscal planning is required at the same time that land use plans are prepared or being evaluated. All municipal revenues and expenditures result from the land use planning and development processes. If land development that results from implementation of the City's Municipal Development Plan does not generate sufficient revenue for short-term capital and ongoing replacement, and for operating and maintenance costs, the City will not be financially sustainable. Also, if the City does not generate sufficient revenues, over the long term it will not be able to maintain infrastructure and community services at current levels or at levels that are acceptable to the community.

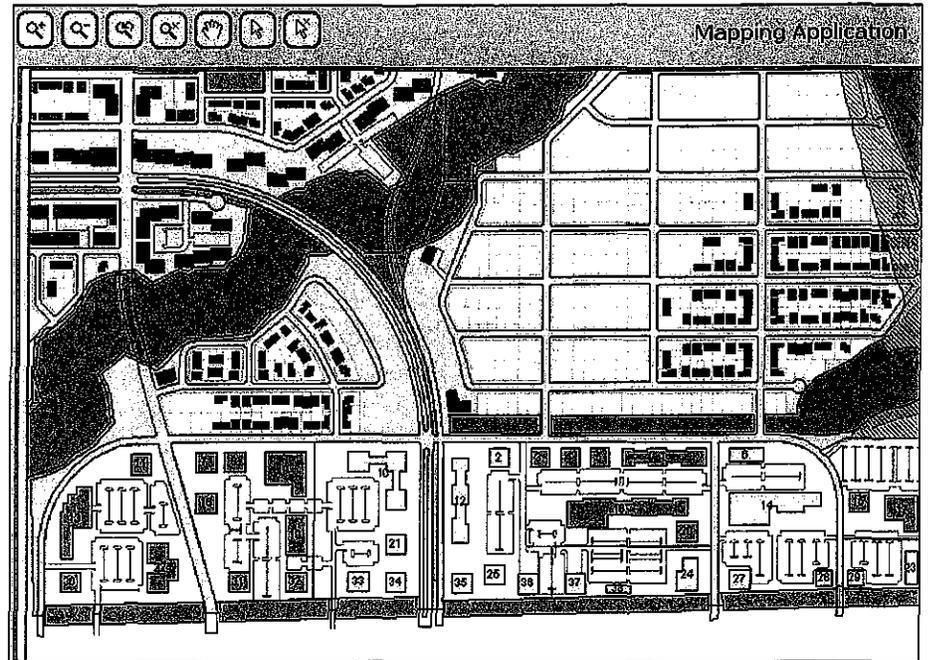
Whole Communities

To preserve its sense of community, the City must invest in new community services and the staff and equipment needed to maintain a high level of service. These services would include parks, trails, major recreation facilities, an efficient network of roads, library, police, fire protection and emergency services.

The challenge for any city is to determine the right proportion of residential and non-residential land use that would achieve long-term financial sustainability. Is the current mix of 71 percent residential, 29 percent commercial/industrial land use adequate to sustain the municipality, or should Airdrie strive for a mix of 65 to 35 percent or 60 to 40 percent residential to commercial/industrial land uses? The determination of what is acceptable to achieve fiscal balance is different for each municipality, because each municipality has a different mix of land uses and standards, and many different variables in the calculation of revenues and costs.

Fiscal Balance

The City of Airdrie has created a policy environment that indicates that a healthy community can best be achieved



GIS Visualization and data transfer
Plan by: Corush Wright

through a balance between a variety of residential housing alternatives, public facilities and employment-generating development. Historically, the City has maintained a strong employment base through large industrial operations in industrial parks. As the growth of new businesses slowed because of land shortages, and relative to the demand for residential development, City Council identified the need to improve the balance between these use types as an urgent priority.

This resulted in a strong interest in FIA. Traditionally, FIA has been used to assess the impact of site-specific major development projects or special studies such as annexations or growth management studies. Typically, individual consultants specializing in cost benefit analysis, which had a narrower focus, did these analyses. The reality is that all development applications create either a positive or negative fiscal impact on the community. Therefore, hiring consultants to complete a large number of FIAs each year would be cost prohibitive for most municipalities.

To this end, the City of Airdrie introduced the practice of undertaking in-house FIA of proposed developments. By using a fiscal impact model, the City was able to highlight the fact that the level of services delivered to residential communities

exceeded the revenues collected from those developments. By comparison, commercial/industrial developments resulted in a net benefit to the City from a financial perspective, as they contributed more in revenues than they cost the City. The balancing factor in supporting growth is level of service and type and amount of non-residential development. In both cases, the level of service provided to the community reflects the demands and expectations of residents and the business community. As such, community values can contribute to some of the fiscal challenges. The fiscal model is useful as an education tool and can highlight how changes to level of service can affect a community's fiscal and social agenda.

Use of the fiscal impact model fits in with the new interest in "Smart Growth". It allows municipalities to examine growth scenarios and alternative ways of increasing revenues and reducing costs while trying to maintain acceptable levels of service in their communities. Having a tool that will assess and predict as accurately as possible the implications of Smart Growth initiatives is paramount in the decision-making process. After a corporate direction has been set, the municipality will move toward achieving the fiscal goals of Smart Growth by FIA of land use policies. By completing FIAs for development applications, the

municipality will have detailed and realistic assessments of the proposed land use.

The City of Airdrie recently completed several FIAs using an in-house model provided by InfraCycle Software Ltd. of Ottawa. Both high-level, community-wide analysis and more detailed project-specific analysis were completed using the model. The in-house FIA empowers municipal staff by providing them with hands-on experience, an intimate understanding of the impact of developments, and a knowledge of which components of costs and revenues contribute to a net positive or negative benefit to the municipality. The information is used to make adjustments to policy plans and deficiencies in development proposals; to assist the municipality in policy decisions related to growth management; and to assist the City in negotiations with developers and adjacent municipalities during the annexation process.

The Fiscal Impact Model

The "cost of growth" is an issue that is on the minds of the City's administration, its elected officials and the public. Cost of growth is most often discussed in the context of short-term capital costs, but it should also be viewed in a broader context and include short-term and all long-term recurring costs. Recurring costs include the replacement, operation and maintenance of infrastructure and community services.

Municipalities tend to require developers to pay for the capital cost of growth or to contribute some amount to the cost of growth. Typically, developers build infrastructures such as roads, sidewalks, streetlights, traffic signals, pathways and, sometimes, park facilities. At the end of a warranty period, which is usually one or two years, the developer transfers ownership of the infrastructure to the municipality. Municipalities may believe that they have achieved a milestone by requiring the developer to pay for all or most of the capital cost; however, this may lead to a false sense of security. The municipality must still invest capital to provide community services such as libraries, police and fire protection, emergency services, major recreation facilities and waste management; and to supply public works yards, municipal vehicles and human resources. Although

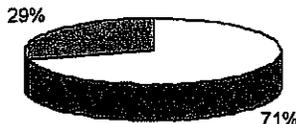
developers may pay for short-term capital items in a community, the perpetual cost for replacement, operations and maintenance may not be supported from revenues that accrue for the land use that the infrastructure is intended to serve.

The model used by the City of Airdrie differs from other FIA models because it is designed to specifically assess municipality-wide and site-specific land use plans. It also incorporates a "total cost accounting approach", which includes hard infrastructure, community services and administration. All short-term and long-term costs needed to support a development, land use plan or community are evaluated. The costing analysis is offset by an analysis of municipal revenues from all sources that support the community. The model can be linked to geographic information systems for efficient and accurate electronic transfer of data.

How the Model Was Used by the City of Airdrie

Analyses of several growth scenarios were completed to determine the land use mix that would attain higher revenues for the City at build-out. The City of Airdrie determined that it needed to adjust its land use mix to move toward achieving a proportion of 40 percent non-residential to 60 percent residential. The charts below illustrate the land use mix at different stages of the analysis.

Residential – Commercial Land Use Mix – City at Build-out

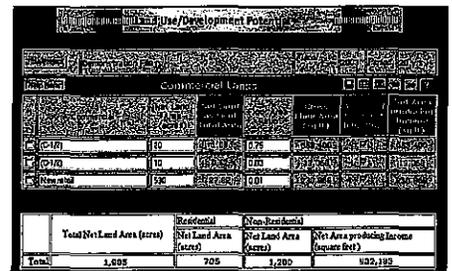


Residential – Non-residential Land Uses – City After Annexation

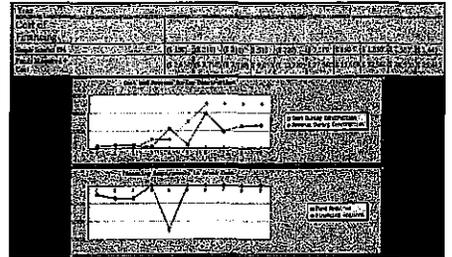


The City's assessment split is currently 81 percent residential and 19 percent non-residential; taxes have increased in the past two years as this imbalance widens. The initial assumption in annexing additional land was that this

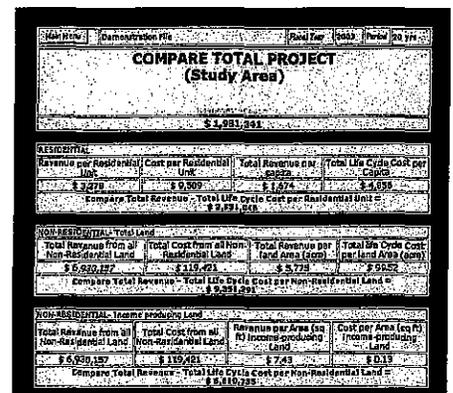
Selective screen shots of Infracycle Software used by the City.



Land Use and Development Potential Analysis



Calculating the break even Point and the Lag-Time between Capital Costs and Revenues



Bottom Line Summary Report

ratio could be achieved with the land use mix proposed in a growth study conducted in 2000. The FIA enabled the municipality to evaluate alternatives and fine tune the annexation proposal to ensure that the City would reach its goal of 40 percent revenues from non-residential while maintaining its current level of service and rate of property assessment. As well as analyzing the implications of annexations, the model may be used for the following purposes:

- comparisons of alternative land use scenarios with existing conditions;
- assessment of growth management and revenue goals;
- strategic planning: cost and revenues at build-out;
- lot levy studies;
- site-specific studies;

- redevelopment plans; and
- capital budgeting.

FIA's were also completed for several project-specific area structure plans. These plans were primarily residential subdivisions supported by local retail use. The current level of service and the current revenue structure were used in the analysis. The FIA found that over time, there would be a shortfall in revenues over costs. Since the FIA was completed in-house, staff had intimate knowledge of the details of the costs and revenues and had an advantage when negotiating changes with the developer.

Conclusions

Promoting a Smart Growth agenda makes absolute sense. Whether we live in a city, town or urban community, we all contribute to the ultimate bottom

line of our communities. The planning profession has led the charge on promoting a Smart Growth agenda. While decisions about revenue-generating ability or inability continue to occur at senior levels of government, local municipalities cannot stand idly by. We must adapt and learn to speak the language of the decision makers who ultimately render decisions on community building efforts, be that a council, developer or resident. Planners must provide decision makers with the best possible information. They must promote practices in the use and disposition of lands that meet communities' fiscal realities, but that also contribute to the preservation of an increasingly diminished land base, affected watersheds and unique areas. Achieving fiscal balance requires discipline and vision. ■

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References and Notes

1. Brown and Associates Planning Group. City of Airdrie Growth Study. Calgary; 2000.



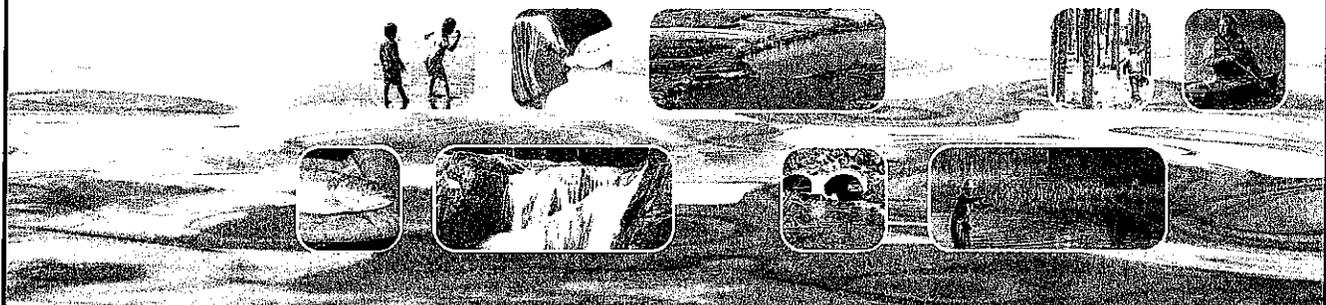
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