

Assessing the Proximate Value of Parks and Open Space to Residential Properties in Alberta

A study conducted for ARPA



ARPA (Alberta Recreation and Parks Association) is a provincial charitable not-for-profit organization with a voluntary board of directors dedicated to the promotion of recreation and parks and their benefits to the quality of life of all Albertans.

Our Vision...

"A province, and communities within, that embrace and proactively use recreation and parks as essential means for enhancing individual well-being and community vitality, economic sustainability and natural resource protection and conservation."

Our mission...

ARPA strives to build healthy citizens, their communities and their environments throughout Alberta.

For more information on ARPA, our programs or services, or the benefits of recreation and parks, please visit our website at <http://www.arpaonline.ca>.

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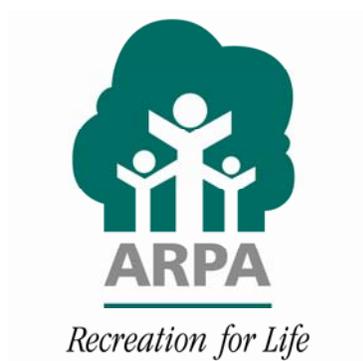
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For more details, view the full report on line at http://www.arpaonline.ca/rr/rr_research.html or see the attached backgrounder and/or contact:

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Community Parks Have Power to Boost Property Values

Alberta's increasing urbanization poses significant challenges for communities seeking to balance affordability and quality of life. In that context, this Alberta Real Estate Foundation sponsored study confirms what experts elsewhere have shown: where parkland is concerned, it's not either-or. Parks and open spaces have great potential to offer not only crucial human and environmental benefits, but net economic gain.

Municipalities generally do recognize that the value of parks extends beyond direct tax revenue generation and is integral to the quality of life needed to support economic development. They also know that spending on parks, including programming enhances the social capital of the community while deterring negative social behaviour.

Experts such as Dr. John Crompton of Texas A&M University have shown empirically that well integrated and maintained parks, open spaces and waterways enhance nearby home values, resulting in higher property taxes paid by these home-owners. The higher taxes, once aggregated, have the potential to cover the debt required to acquire and develop the park. That benefit, termed the "Proximate Principle" occurs in addition to the park's ability to foster healthier lifestyles and environments. Yet as Dr. Crompton points out, the assumption persists that investment in parks brings no economic returns.

This study, *Assessing the Proximate Value of Parks and Open Space to Residential Properties in Alberta*, shows that the Proximate Principle can be usefully applied in this province. Conducted by Serecon Management Consulting, the study examines the value of properties surrounding park space in newer subdivisions in six varied Alberta communities. It finds some properties attracting premiums of up to 15% and paying more property tax as a result. The value of these incremental taxes, once aggregated, more than equates to the annual costs of maintaining the parks in some cases. In Alberta, park acquisition and development costs in new sub-divisions are typically recovered by the developer through lot sales, rather than financed by the municipality, so debt servicing is not an issue.

Not all parks however, have as significant a positive effect on property and tax values. In fact, proximate premiums range widely and can even dip below zero for a noisy or unkempt park that intrudes on privacy. But with careful planning, communities across Alberta can integrate parks in a way that enhances the value not only of surrounding properties, but of the entire community. Communities can also employ these findings to ensure that municipal taxes are fairly distributed and thus avoid unnecessary appeals.

Funding for this ARPA study was provided by the Alberta Real Estate Foundation.

The Proximate Principle is one of many economic arguments for the importance of parks. What you've got in the end is an argument for balanced park design.

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The Proximate Principle: Answers To Key Questions

What is the Proximate Principle?

Residential homes located close to parks and open spaces frequently sell at a premium. As a result, they generate increased property tax revenue. The incremental taxes can more than equal the cost of servicing the debt required to acquire and develop the parkland. Experts in the field term the reality of this park-related benefit the “Proximate Principle”.

Why is the Proximate Principle important now?

New subdivisions are springing up all across Alberta as communities respond to population growth and urbanization. A recent ARPA study, *Municipal Green Space Allocation: Practice and Protocol in Alberta Communities*, found that many communities, including the fastest growing ones, are taking an ad hoc approach to parks planning. Parkland tends to lose out to other priorities in that environment. Yet we know from other research that parks and open spaces are crucial to healthy living and quality of life. This analysis outlines concrete economic rationale for including ample and appropriate park space in each new neighbourhood and maintaining parks and open space in older neighbourhoods.

It is widely accepted by all “community builders” that “smart growth” involves development that is environmentally sensitive, economically viable, community oriented and sustainable. However, the tools that we create to insure smart growth and the processes that we follow as municipalities often lie undeveloped, are not always followed and are often disregarded in times of rapid growth.

What parks were included in this research?

In consultation with the ARPA Parks and Open Spaces Committee, the project consultants selected parks in six urban municipalities of varying size:

- Calgary (large urban) – four park types in the community of Hidden Valley
- Strathcona County (small to mid urban/commuter) – three mainly active parks in south east Sherwood Park
- St. Albert (small to mid urban/commuter) – four park types in the community of Heritage Lakes
- Medicine Hat (mid urban) – three park types in the communities of Southridge and Northeast Crescent Heights
- Okotoks (small to mid urban/commuter) – one mixed use park in the community of Crystal Ridge
- Drayton Valley (small urban in a rural setting) – one mixed use park in the community of Northview

The parks studied serve newer, socio-demographically average, mainly single family developments that were not influenced by major regional parks. The analysis focused on parks designated as Municipal Reserve (MR), including a mix of active parks, parks associated with schools and playing fields, linear parkways and smaller neighbourhood “tot lot” parks.

How was the research conducted?

To gather qualitative information, the team did a literature review, visited the chosen sites and conducted interviews with stakeholders. Quantitative analysis included surveys in the chosen communities, calculations of capital and operating costs for each park, calculations of proximate premiums for homes near the parks and comparisons of park costs to the income gained through incremental taxes generated from the proximate premiums.

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What do experts elsewhere say about the proximate value of parks?

Dr. John Crompton, distinguished professor at Texas A&M University, has built a body of research demonstrating the proximate value of parks, open spaces or waterways. He has found that being near to green space can raise property values as much as 20% for an exceptionally well kept passive park, up to 30% for homes abutting golf courses and as high as 100% for water views. He has found proximate value extending three blocks from the park and says it could reach further. Blighted and unkempt or noisy and active parks and greenway trails, however, tend not to have net positive effect and can detract from property value.

In 2005, the City of San Carlos in California applied the Proximate Principle following Dr. Crompton's model and found that their local property tax base increased by \$1.1 million US due to 12 parks, which in turn contributed over \$120,000 in property tax revenues.

How does the Proximate Principle play out in the Alberta context?

Premiums are being paid for living near parks in the Alberta sub-divisions studied. In general, the premiums vary from about 15% to less than 1% of the cost of home and lot combined.

- High premium parks, attracting 10-15% above the norm, typically combine municipal reserve, environmental reserve and well-managed stormwater features to create a large enough mass for both pleasant views and privacy. A contiguous pathway set away from the property line further enhances the value.
- Large, well buffered active community and shared school site parks show premiums of up to 10%.
- Mixed-use neighbourhood and tot-lot parks typically attract mid-range premiums of about 5-8%.
- Smaller, active parks that generate noise or intrude on privacy show very low proximate value of 1-2%, particularly if views are obstructed (e.g., by solid wooden privacy fences). Landscaped buffer zones can somewhat mitigate those negative aspects.
- Linear parkways add value comparable to open passive park space, although poor design, intrusion on privacy, presence of negative social behaviour and unattractive fences may discount the value. Narrow walkways sandwiched between fence lines with minimal landscaping, for example, do not appear to offer a premium.

Variations in the proximate value of parks also reflect such realities as the overall supply of park space, community demographics, maturity and naturalization of landscaping and quality of the infrastructure.

Developers and market value based property assessment models apply an overall premium to a community with enhanced park or recreational amenities. Beyond that, premiums were found to apply only to lots abutting or fronting green space.

How can communities apply the Proximate Premium?

Communities wishing to calculate the proximate value of various properties are wise to use the full Proximate Value report (available at www.arpaonline.ca) as a guide.

- Referring to specific park descriptions in Table 7.1, determine which Proximate Premium best applies to the park under analysis.
- Obtain assessment values for homes bordering the park from your municipal assessment department, or access that information online, along with the applicable tax rate for the year in question.
- Calculate the value of the contribution as follows: Proximate Premium x total assessment value x local tax rate = contribution.
- Establish operating costs using one of these two methods:
 - Multiply park size times per hectare rate, based on the most comparable park analyzed in the study, or

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- Estimate operating costs using the schedule found in Table 7.2.
- Compare contribution to costs.
- Aggregate for all parks in the community.

Do Alberta developers benefit by providing parks and open space?

The presence of well-designed and ample parks helps subdivisions sell not only at higher prices, but faster, reducing developer carrying costs. Premiums for homes located around Calgary's Hidden Ranch Park alone were calculated to contribute just over \$875,000 (in today's dollars) in added lot value, \$100,000 more than park development would cost in today's dollars.

Does our tax base benefit from parks and open space?

Estimates conducted for this study indicate taxes paid by homes adjacent to parks can reasonably be expected to cover annual operating costs when the parks do not have serious negative characteristics, offer some view benefit, do not require high maintenance such as irrigation and touch enough properties to significantly boost collective tax premiums. Havenwood Park in St. Albert is a particularly good example of the power of well developed passive park space in contributing to adjacent property values. The Proximate Premium is 15%, the highest of all parks considered in this study. The park is ringed by housing, including a multi-family cluster on its north side, and has both street and pathway exposure. The tax premium contribution of the single family homes alone collectively exceeded annual operating costs by a factor of nearly 30% in the years studied.

What design factors optimize the Proximate Principle?

Design and management factors can optimize Proximate premium.

- Size matters. A one- to two-hectare park maximizes proximate value; large parks reduce the perimeter available for proximate homes and very small parks default to being no more than a walkway or large backyard and attract little if any proximate value.
- Lots with views backing onto well-designed passive natural green space, especially with walkouts, have higher value.
- Proximate values on active parks are higher where landscaped buffer zones are incorporated.
- Dispersed park designs diminish the proximate effect past the first row of homes due to competing influences.
- The highest collective tax revenue premium results from primarily passive parks of moderate size that are elongated to allow maximum individual property exposure to the parks.

Developers are learning to be much more effective at engineering and integrating storm ponds, and that is increasingly important in subdivisions with higher densities. In Okotoks, storm ponds are integrated into wetlands using pathways and buffer zones. The older methods of creating storm ponds resulted in stagnation and little aesthetic benefit.

Who needs to know?

In a rapidly growing province, decisions are made daily that would benefit from an accurate understanding of the value brought by parks and open spaces.

- **Developers** can use the Proximate Principle to maximize the number of properties exposed to parks and open space and to price those lots. Knowing that the collective parks system within a new subdivision may add up to a total community premium and thus help pay maintenance costs, they can justify ample park space and negotiate fair operating endowments with the city.
- **Municipalities** can use the Proximate Principle to help identify homes near parks that are wrongly valued, particularly in areas where no homes have recently sold. When assessments lag behind or exceed actual market values, the municipality invites the burden of assessment appeals.
- **Park planners and decision makers** can be assured that the market is willing to pay, to a point, for a basket of park benefits including views, access, recreation and exposure to the natural environment.

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- **Parks operators** should employ the Proximate Principle with caution when defending budgets, recognizing that the Proximate Premium justifies the distribution of taxes, not the overall amount of taxes collected. It is most realistic to justify parks operations on the grounds of their diverse benefits, not solely on this principle.
- **Tax assessors and rate payers** can use calculations based on the Proximate Principle to improve the accuracy of the taxes charged for properties near and farther away from parks. Market value assessments are applied in Alberta to calculate taxes to be paid, but assessors do not always have the benefit of comparable market sales on and off parks. In such cases it difficult to correctly capture the Proximate Premium, and models for adjusting for park proximity can be arbitrary.
- **Resident associations** established by developers can use the Proximate Principle to justify adjusted fee structures, such as higher fees for immediate proximity and private access and lower fees for access without views.
- **Realtors** may use the Proximate Principle to calculate listing prices when direct market comparables for properties abutting parks are unavailable.

It's got to do with fairness. Municipalities want to be as accurate as possible to avoid appeals and to distribute the tax assessment fairly.

What caveats must we employ when applying the Proximate Principle?

It's important to note that the Proximate Principle alone should not drive park design. It is but one tool among many in the planning toolbox. In addition, the Alberta context differs in some ways from other jurisdictions studied.

- Passive parks often reap higher proximate premiums, but a mix of active and passive parks is essential to an active, healthy community. Thus the absence of active parks detracts from overall community value.
- Over-emphasis on maximizing the edge effect by creating long skinny parks could leave us without the massed naturalized areas needed to support biodiversity and regenerate natural areas.
- Factors other than parks may be influencing lot values. For example, some suggest the value of properties not on a park is more influenced by the enhanced design and standard of care of homes abutting the park than by access to the park.
- The Proximate Premium justifies the distribution of taxes, but does not directly impact the total amount collected. That amount is set by a municipal budgeting process reflecting ratepayer expectations and other often conflicting priorities.
- In the municipalities studied, park budgets come out of general revenue and are not directly linked to the relative tax revenue generated by the Proximate Premium. Many communities do not keep records that enable them to directly calculate the operational costs of individual parks.
- In many of the examples referenced by Dr. Crompton, park costs are capitalized against future property tax revenues. In the Alberta examples studied, by contrast, park costs are recovered through lot sales. Thus the economic beneficiaries of the Proximate Principle differ here.
- An increasing number of Alberta cities and towns have moved to market value assessments and may already be benefiting from the realities highlighted by the Proximate Principle.
- Alberta municipalities and developers must set aside a minimum of 10% of the land within the sub-division as MR (municipal reserve) for parks and open space, following a standard set in the Municipal Government Act of 1994. Unless the standard changes, the amount of parkland available in our communities is unlikely to shift significantly.
- This study focuses on parks in newer subdivisions, not parks in mature communities or properties that have nearby access to major regional, provincial or national parks and open spaces.

A community in which there are almost no proximate premiums may be the pinnacle of community and park development.

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- This study focuses on individual properties, but it may be more useful to apply this framework to entire communities. What are the factors that give one community higher overall assessed values – that is, higher proximate premiums – than another? What is the optimal mix of parks within a community? How do parks collectively contribute in well-planned communities compared with those lacking in open space, dispersion, quality and variety? The answer to those questions would further inform the planning and design of subdivisions all across Alberta.

Trends Impacting Park Space

The following 10 trends surfaced during this study, through a literature review and through discussions and analysis of parks in six Alberta communities.

1. Municipal planners and developers plagued by property inflation may be tempted to compromise park and open space development beyond the required 10% MR to provide more affordable housing. Buyers may seek out lower-cost, less amply parked areas or choose homes not located on parks in order to limit purchase costs and future taxes.
2. Higher residential density and the trend to bigger homes on smaller lots are reducing private yards, thus increasing the use and value of public green space. For example, neighbourhood tot lots may gain higher value as individual residential lots shrink to become too small for play structures.
3. The value of the urban forest is increasingly being recognized for contributing to air and water quality, human health, biodiversity, carbon sequestration, reduced energy use and other such benefits. Yet urban forests are becoming more difficult to establish and maintain, and smaller private lots are less able to accommodate large shade trees. In some municipalities, mature trees need replacement and new subdivisions, typically developed from former farm land, have limited opportunity to integrate existing trees. Therefore, boulevards and other treed spaces may be valued even more and proximity to green space with mature tree stands may gain higher premium because of limited supply and high demand.
4. Municipal parks planners are increasingly considering “life-cycling.” That is predicting future park operating costs relative to projected use while anticipating the future needs of aging demographics. For example, municipalities tend to favour larger, cheaper to maintain parks that can be adapted for active use over smaller tot lot installations. Yet the absence of tot lots may make a neighbourhood less desirable to young families and therefore more difficult to market at the outset.
5. Some municipalities are suffering from the midstream cancellation of the 1990s Urban Parks Program. Maintenance costs are high for the capital intensive parks developed under the program, aging capital infrastructure is due to be replaced and the public is less enamored with highly developed park space, favouring natural areas instead.
6. Runoff created by higher percentages of hard and built surfaces is creating need for more innovative and effective stormwater management. Storm ponds, canal systems and bioswales are increasingly being integrated into naturalized municipal reserve sites, with a combination of private and public access. Better systems that are able to support greater biodiversity, coupled with evolving public acceptance, may increase the proximate premium associated with parks that integrate such areas.
7. Increasingly, ER (environmental reserve) and PUL (public utility right of ways and storm water systems) and MSR (school reserves) are being integrated with MR to extend the massing of parks and open spaces. This integration responds to public demand for more natural areas while increasing the areas’ ability to support biodiversity.
8. Integrated land use for parks and open space provides more opportunities for dispersed designs that maximize the “edge”

In the City of Calgary, foot and cycling traffic on the contiguous pathway system equates to an estimated one lane of commuter vehicular traffic.

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effect. This allows for more private view benefits, access points to passive space and pathways and therefore opportunity to collect higher tax revenues from a greater number of adjacent residential properties.

9. Municipalities are seeing high demand for passive walking/cycling linkages. These linear parkways may be increasingly used as alternative transportation routes. They are also attractive to developers because they maximize the number of homes backing directly onto green space. Their value will likely continue to increase as lot sizes shrink, especially in larger urban centres.
10. Municipalities are also experiencing problems regarding the unauthorized use or adaptation of parkland by adjacent residents who are extending their “private” open space beyond their property lines. Ravines and river valley properties tend to be the problematic residences. Developers and property owners who object to such public use, often resist proposed solutions such as top-of-bank trails or roadways.
11. Park planning principles that deter negative social behaviour by providing street visibility may reduce the number of homes backing onto parks and therefore dilute their potential “edge” benefit. Similarly, park lighting may interfere with privacy.
12. Resident association fees are being collected in some jurisdictions to offset park operating costs beyond municipal standards. Parks maintained to higher standards may contribute to higher proximate premiums, higher taxes and potentially a two-tiered park system.

Other Applications of the Proximate Principle

As in Dr. Crompton’s work, the Proximate Principle applies beyond traditional parks to alternative open spaces such as waterbased features and golf courses. While such spaces were not addressed in the quantitative analysis of Alberta community park types, developers confirmed that high premiums do apply to adjacent lots in these cases. As a rule of thumb, lot costs are about one-third of the total property. The premiums quoted below should not be interpreted as applying to the entire property.

- Water features command a significant premium for all lots in the neighbourhood, typically 25-50%. Views of natural wetlands are most highly valued in anecdotal conversations, although proximity to stagnant storm ponds can have a negative effect due to odour and mosquitoes. Lots backing onto private access recreational lakes demand a very high premium, likely 100-150%. Such features are supported with resident association fees, however, and the premium may be due in part to other amenities such as private residents’ clubs.
- Golf courses attract lot premiums of 15-40%, but only for adjacent properties with a view since residents can’t access the space during playing season. On the plus side, golf course layouts usually maximize the edge benefit (that is, the number of properties adjacent to the park) and offer winter serenity and opportunities for wildlife sightings. Golf courses may also provide alternative use of undevelopable lands such as reclamation sites or environmental buffer zones. And they can provide future revenue to maintain the green space to a higher standard than the municipality could attain. Even so, developers may be better served by integrating “ambient open space” into subdivision plans because benefits are of value to a broader proportion of home buyers.