



City of Markham Review of Parkland Dedication By-law, Policies and Practices

Final Report
May 2013

The **Planning** Partnership

in association with: Greenberg Consultants | Integris | NBLC | WeirFoulds



EXECUTIVE SUMMARY

The City of Markham has embarked upon this Parkland Dedication Study with the objective to review and update its existing parkland dedication policies and procedures given the evolving urban structure of this rapidly growing and maturing City. This study is a collaborative effort between the members of a project consulting team and the members of various departments of the City.

This study examines current approaches to park planning and acquisition at the City and in other jurisdictions and reflects upon best practices. This study promotes an updated parkland dedication process and explanatory procedures that are relevant to the ongoing success of the City. The goal of the parkland system concept, and parkland dedication approach for Markham is to ensure that the City can provide the right amount and type of space at the right locations for the current and future residents of Markham.

This Parkland Dedication Study provides direction to the City for the preparation and adoption of parkland system and dedication policies for inclusion in the new Official Plan, a new Parkland Dedication By-law and implementation of various tools to assist the Town, the development industry and the community through this process.

This report summarizes the results of the study, including the process, research, consultation, analysis, findings, conclusions and recommendations undertaken by the consulting team and staff of the City of Markham. The following summary is an overview of this report.

Chapter 1

Chapter 1 is an Introduction to the study, including a brief outline of the background and basis for the study, discussion of the current and evolving planning context in the City, an overview of Markham's existing parkland system and future direction and the legislative basis for parkland dedication. Chapter 1 of this report provides:

- Recognition that a public parks system is an essential component in the development of a complete community and that the conveyance of parkland is an important instrument in the way municipalities can influence development.
- Observations that indicate that user preferences are changing as the character of the City becomes more urban and ethnically diverse and that the provision of parkland and associated facilities has become a critical priority ensuring the health of the existing and future population.
- An overview of stakeholder consultation, including the process and results of a series of interviews and meetings with various stakeholders. The approach to parkland dedication, as identified through stakeholder consultation, must strive to be appropriate, equitable, consistent and long-lasting.

Chapter 2

Chapter 2 of this report outlines the public interest and business case for the establishment of a high quality public realm – including a robust and interconnected public parklands system. Chapter 2 provides:

- A detailed overview of the evolution of the urban structure of various municipalities in the Greater Golden Horseshoe and the Region of York, which is influenced by a fundamental shift in public policy towards planning and growth management at the Provincial level.
- Recognition that Markham requires a comprehensive public parkland system that grows and evolves with population and employment growth over time. Public parks have many benefits for healthier communities and function as community-gathering places and serve a critical recreational function that increases social capital.
- Identification of Markham's evolving urban structure, and recognition that the City must support the urban

structures of its immediate neighbours in Toronto, Richmond Hill and Vaughan to ensure a high level of integration and accessibility on a regional basis.

- Recognition that a high-quality public realm has tremendous value, which increases economic value and contributes to the enhancement of the quality of place/quality of life within the community.
- Confirmation that investment in the public realm - including the public parkland system - has shown to promote increased property values and tax assessment, reinvestment by the private sector in old and new building stock, maintenance of existing retailers and the attraction attract new businesses as well as being able to enhance a city's reputation. Further, this type of investment has proven to be important for economic development and community development initiatives.

Chapter 3

Chapter 3 of this report provides a comprehensive overview of the legislative framework and current practices for parkland dedication in Ontario and, more specifically, the City of Markham. Chapter 3 provides:

- A discussion of the legislative authority for Ontario municipalities to require conveyance of parkland or cash-in-lieu of parkland for various forms of development.
- A review of the range of current legislative tools available to Ontario municipalities under the Planning Act, including some of the other aspects of the Planning Act provisions, such as - cash-in-lieu payments and land valuation, reductions for sustainability and flexibility for implementation under the Act.
- An overview of current standards for parkland provision under the current City of Markham Official Plan, existing standards utilized for development

applications and Markham's current parkland dedication practices.

- A discussion of some of the alternative or customized approaches to securing parkland beyond conventional land conveyances or cash-in-lieu agreements to facilitate development in key Secondary Plan areas, including those utilized in Markham Centre and Cornell. This section also addresses the appropriate timing for parkland dedication and cash-in-lieu payments.
- An investigation of some possible additions that may be required to Markham's parks hierarchy in order to adapt to the City's evolving structure such as urban squares, courtyards/plazas, strata parks and remnant landscape components.

Chapter 4

Chapter 4 suggests that the public parkland system hierarchy within the City will be inclusive of Destination Parks (outside of City ownership and control), City-Wide Parks, Community Parks and Neighbourhood Parks, including active neighbourhood parks, urban squares, parkettes, urban plazas and strata parks.

Chapter 4 concludes with a discussion of potential discounts or reductions in parkland dedication or cash-in-lieu requirements to facilitate provision or development of affordable housing, housing for seniors or for heritage conservation.

Chapter 5

Chapter 5 of this report focuses on a comparative analysis which includes a review of parkland dedication practices in other jurisdictions. Chapter 5 provides:

- A review of parkland dedication practices from municipalities in the Greater Toronto Area, including practices and standards utilized by Toronto, Brampton, Vaughan, Mississauga, Oshawa and Richmond Hill as well as practices in other Provinces.

- Detailed comparative analyses that:
 - + Tests Markham's parkland dedication approaches against the Planning Act's regular and alternative standards and the approaches currently being utilized by Richmond Hill, Vaughan and Toronto.
 - + Looked at how variations in development area, density, household size and average land values affect parkland dedication requirements in each of the respective municipalities.
 - + Reviews the amount of parkland that would be required for residential development under the current policies of Markham in relation to the other municipalities examined in the GTA.

Chapter 5 concludes that Markham's current approach to parkland conveyance is generally acceptable under the provisions of the Planning Act, and:

- That the application of the Alternative Planning Act standard (1 hectare per 300 dwelling units) under the low density residential development scenarios (single and semi-detached house forms) is appropriate.
- Under the medium (townhouses and multi-plex house forms) and high density (apartment forms) scenarios, Markham currently applies its own Alternative standard (1.2141 hectares per 1,000 residents) and this standard is considered to be an equitable approach as it establishes a per person requirement and is thus related directly to the demand for park space on a per person basis.
- As the density increases, the Markham Alternative standard is increasingly considered a development incentive in comparison to the Planning Act Alternative of 1 hectare per 300 dwelling units.
- The Markham Alternative standard is also considered flexible because it can respond to fluctuations in land

cost, site size and changes in density and household size in a consistent and reasonable way.

Chapter 6

Chapter 6 of this report addresses the Conclusions and Recommendations of this study. In summary, this study recommends that:

- A new parkland hierarchy, including urban park types and strata parks be identified.
- The City promote comprehensive planning to ensure that all neighbourhoods and districts in Markham are appropriately served by the public parkland system.
- The City consider the following four key principles as guidance in dealing with the issues of parkland system development and acquisition:

Principle 1: That land dedication for parks should be based on a principle that directly relates parkland contributions to the population generated by new development. This is in sync with Markham's current approach.

Principle 2: That the amount of parkland contribution for all residential housing forms should be equitable, and based on the land use designations, and anticipated development forms identified in the new Markham Official Plan.

Principle 3: That all development generates a demand for public open space, and that, wherever possible, all developments should provide on-site public and connected park space.

Principle 4: That where public park space is not possible or practical, that the City accept cash-in-lieu of parkland for the purposes of enhancing the supply of parkland elsewhere in the municipality, to the benefit of all residents in the City.

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- The City's public parkland system be acquired, in part, by the following means:
 - + The land acquisition powers authorized by public statutes, including the Planning Act, the Official Plan and the implementing Parkland Dedication By-Law.
 - + Funds allocated in the City's budget, dedicated reserves or joint acquisition programs.
 - + Voluntary conveyance, donations, gifts, bequests from individuals or corporations.
 - + Funds allocated by any authority having jurisdiction.
 - Markham's proposed new and more refined approach to parkland conveyance is implemented as follows:
 - + For lands proposed for industrial or commercial purposes, 2 percent of the gross land area.
 - + For all other land uses, except for residential purposes, 5 per cent of the gross land area.
 - + For lands proposed for residential purposes:
 - Where the residential development is comprised of single-detached and semi-detached dwelling units considered by the City to be low density house forms, parkland conveyance shall be based on 1 hectare/300 dwelling units;
 - Where the residential development is comprised of multi-plex block, street or stacked townhouse dwelling units considered by the City to be medium density house forms, parkland conveyance shall be based on 1 hectare/300 dwelling units, or 1.2 hectare/1,000 residents, whichever is less; and,
 - Where the residential development is comprised of apartment dwelling units considered by the City to be a high density house form, parkland conveyance shall be based on 1.2 hectares/1,000 residents.
 - The report provides Markham with several options to consider and implement with respect to further conveyance reductions or exemptions under certain conditions, as follows:
 - + For residential apartments, this study recommends the option whereby the amount of parkland conveyance required is further reduced as density increases, and only within identified "Intensification Areas" as shown on Map 2 to the New Markham Official Plan as follows:
 - The conveyance required shall be 1.2 hectares per 1,000 people, for that component of a residential development having a Residential Gross Floor Area (GFA) of less than 3.0 Floor Space Index (FSI);
 - The conveyance required shall be reduced by 30% for that component of a development having a Residential GFA between 3.0FSI and 6.0 FSI; and,
 - The conveyance required shall be reduced by 65% for that component of a residential development having a Residential GFA greater than 6.0 FSI.
- The above rates shall be applied and calculated on a cumulative basis. To qualify for the reduced rate, the proposed development shall be consistent

with any applicable built form, height and massing guidelines and in conformity with policies of the Official Plan and any applicable Secondary Plan, all to the satisfaction of the City.

- + In addition to the foregoing, the following reductions and/or exemptions from public parkland conveyances are proposed where a development:
 - Is a public use;
 - Includes affordable housing in accordance with the definition of affordable housing in the Provincial Policy Statement;
 - Is a nursing home as defined by the Long-Term Care Act, 2007;
 - Is being undertaken by a not-for-profit organization; or,
 - Is within a Heritage Conservation Area and it incorporates and conserves a cultural heritage resource.
- In addition to those major parkland conveyance issues, this study also makes recommendations on:
 - + The impact of parkland dedication rates on small-scale intensification.
 - + The identification of both credits and new requirements where there is a change in use and/or development potential.
 - + The use of cash-in-lieu land provisions including direction for when it is appropriate, when the land value will be calculated, and how to calculate the value of land.
 - + the identification of lands deemed to be acceptable or not acceptable for conveyance;
- This report provides guidance and opportunities to be explored related to the ongoing maintenance of the public parkland system.
- This report identifies some other tools that will have an impact upon acquisition and development of parkland, including Development Charges, the Zoning By-law, Sections 37 and 42 of The Planning Act and Commercial leases, permits and licenses.

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1.0 INTRODUCTION

1.1 Background

The City of Markham is one of the fastest growing municipalities in the country, with a population now exceeding 300,000. Markham has and will continue to experience an unprecedented and rapid transformation from a primarily suburban community to what is becoming an increasingly dense and urban municipality. While the City of Markham is widely recognized as one of the most progressive and responsive municipalities in terms of planning and managing its growth, unrelenting development pressures create unique policy challenges that require equally swift realignments to ensure that policy directives and procedural protocols address what is happening on the ground. One of those policy challenges, and the focus of this Report, is related to parkland dedication.

Markham's Existing Parkland System & Future Directions

According to the City of Markham's Integrated Leisure Master Plan (ILMP - 2010), the existing parkland system reflects an emphasis on a high quality of life and environmental stewardship. The system includes nearly 160 parks, numerous open spaces and woodlots – including “Canada's premier urban wilderness park” – Rouge Park, and 120 kilometres of multi-use trails and pathways. The City continues to construct new parkland on an ongoing basis, including numerous sports fields, playgrounds, waterplay facilities, a tennis centre, ice rink and skatepark.

As the City grows, improvements and additions to the parkland system will be needed to keep pace with increased demand. The City recognizes that the provision of parkland and associated facilities is a critical priority for managing future population growth, and that user preferences are changing as the character of the City becomes more urban and ethnically diverse. Public feedback collected by the City indicates residents now prefer facilities that are connected and located in proximity to where they live, so that they can travel to them by foot or bicycle, rather than by car (ILMP - 2010). To satisfy these preferences, the City recognizes it will need to switch to a more neighbourhood-based approach to parkland planning, particularly in high-density areas where active transportation and public transit are prioritized.

Changing demographics associated with both immigration and an aging population will also impact the provision of parkland in the future.



Demand for non-traditional parkland system components will need to be met. For example, ethno-cultural communities often use parks for more social gatherings, picnics and casual sport, while seniors often seek out relaxing, flexible spaces for passive recreational uses (ILMP - 2010). In general, parkland is expected to increasingly be used for informal and unstructured activities that enhance community engagement.

Parkland Dedication & Growth Management

Sections 42, 51.1 or 53 of the Planning Act effectively establish the legal parameters for Markham to establish parkland dedication policies and procedures. For the past number of decades, the City's interpretation of those regulations has been based on the desire to generate a public parks system that met the needs of its traditional suburban character that relied on car-based access. While this planning philosophy still exists, it is now being balanced with a more urban approach to planning in areas such as Cornell Centre, Markham Centre, Langstaff Gateway, and in intensification areas identified by the Province, the Region and the City. As recognized in the Integrated Leisure Master Plan (ILMP - 2010):

Although low density residential development will continue, future residents in intensified areas (such as Markham Centre, Langstaff, etc.) will inhabit communities that look and feel very different to most of Markham today; these areas will be defined by their dense populations, high-rise building, mix of land uses, access to transit, pedestrian linkages, and vibrant streetlife.

The rapidly urbanizing growth of Markham presents unique challenges and opportunities related to development and redevelopment. With rapid urbanization, there is a concern that the City's current parkland dedication policy regime and its associated implementation procedures may not necessarily be reflective of changing municipal growth patterns and socio-economic trends. Within the ILMP - 2010, the City recognized that smaller sized housing units in intensification areas will generate increased demand for parkland, including new types of urban parkland. In response, the City will need to revise traditional planning assumptions and service standards so that it can provide "alternative community spaces" that serve the needs of people in intensification areas. Moreover, the City recognizes the need for new approaches that "reflect the premium on land, [and] the existence of non-municipal providers" (ILMP - 2010).

In this context, the City now needs to review and potentially reinterpret the policies and procedures that help generate the public parks system in a form appropriate for its evolving urban context. The City therefore wishes to revisit its current Parkland Dedication Policy, and align it with the policy direction and urban structure plan currently being developed for the GGH, the Region of York and within the City's new Official Plan.

Further, it is the City's objective that the reinterpretation of those regulations is carried out through a consultative process that is transparent, recognizes the inherent differences in suburban and urban land values and that does not obviate the achievement of its growth and development objectives – to achieve the planned urban structure.

1.2 Purpose

In order to ensure that the growing and changing population of Markham is well-served by its public parks system, and that the nature of the parkland generated reflects the evolving higher density built form and ethnic diversity, the City must consider its parkland dedication and cash-in-lieu powers, policies and procedures so that its future public parks system provides the right type of space, at the right level of design and in the right location. The objective of this report is to articulate the results of the stakeholder consultation exercise, review relevant background documents and analyze current City priorities, policies and procedures. This analysis helps to form a comprehensive understanding of the City's existing regulatory context. At the same time, the report also includes research into a range of municipal case studies and best practices in parkland policy provisions. Lastly, this report provides key conclusions and recommendations resulting from the study, which will assist with the implementation of a revised approach towards parkland dedication practices. These practices include new policies, procedures, standards and tools to assist the City in achieving its goals with respect to the parks system and the planned urban structure.

More specifically this project:

- Reviews and analyzes the City's existing policies and procedures in the context of current legislation, with special attention paid to higher density forms of development.
- Examines more specifically high-density development scenarios that explore the current application of Markham's parkland dedication policies and procedures and identify strengths and weaknesses.

- Compares Markham’s current parkland dedication policies and procedures with the comparable planning regimes of other municipalities within the GGH to assist in determining innovative approaches and best practices.
- Explores options for innovative policies and urban park system components that need to be added to the City’s public park system hierarchy to ensure that the desired urban character is achieved. In addition, innovative park system management and maintenance programs will be explored for potential application in Markham.
- Develops new policies and procedures for parkland dedication that are equitable and defensible under the Planning Act, and reflect Markham’s evolving urban development realities, including:
 - Preparation of revised Official Plan policies, including the required policies that authorize reductions to cash-in-lieu of parkland payments if a development proposal includes specified sustainability features; and,
 - Prepare a Parkland Dedication By-law and Procedures Manual that ensures consistency and incorporates improvements to the parkland dedication process within the City of Markham. It is anticipated that the further development and refinement of this Procedures Manual will be an ongoing initiative overseen by the City of Markham.

This project, including this report and other products, represent a collaborative effort between the members of the project consulting team and staff from various departments of the City of Markham.

1.3 Stakeholder Consultation

Process

The objective of the stakeholder consultation process carried out in the context of this project was to establish a comprehensive understanding of the issues and opportunities on the topics of parkland dedication and public parks system development to serve as the focus for future work on policy and procedure refinements in the City of Markham. The stakeholder consultation process through the course of this project included:

- One-on-one meetings with Councillors.
- Presentation and discussion with developers' group and BILD.
- Meetings with key City staff involved in the parkland dedication process.
- Meetings with Cornell, Markham Centre and Milliken Advisory Committees.
- Six presentations to Development Services Committee (all presentations are attached as Appendices to this report).

Results

To date, there have been a series of meetings with Councillors, presentations to BILD and to key City staff, meetings with the Advisory Committees from Milliken, Cornell and Markham Centre and two presentations of the work in progress to the Development Services Committee.

Based on the stakeholder consultation exercise to date, it has become clear that one of the key factors affecting the risks involved in the development approval process and the cost of development is parkland dedication. It is not the only factor, but it is an important one.

Some of the other comments and concepts that have been recorded include:¹

- Markham has done a good job securing, building and maintaining its public parks system in its more suburban context.
- There is always a feeling that more parkland is required. There was a basic direction that Markham should achieve the maximum amount of parkland that it is entitled to under the Planning Act.
- There is no consistently applied approach to parkland dedication used in the GGH. In fact, there is a different set of regulations and procedures for virtually every municipality, and there may be a unique or negotiated approach applied on a site specific basis within each municipality.

¹ This Report presents a compendium of statements and thoughts from an array of stakeholders, and it is recognized that some statements conflict with others.

- There is a concern that because there is no consistency, there could be a situation where municipalities will compete for developer attention through strategic reductions in development risk and/or cost factors, to the detriment of the public interest in achieving a GGH-wide urban structure. The corollary may also be true, municipalities may frustrate the achievement of higher density forms of development through manipulation of the key risk and/or cost factors.
- General recognition that securing and maintaining an urban parks system requires a different approach than the suburban approach currently in place (i.e. a mix of public, strata and private space with public access easements). Urban development requires context specific parkland dedication policies and procedures with an underlying recognition that urban forms of parkland or open space include a wide spectrum of substantially different park and open space types.
- New parks need to be provided and the character/function of new and existing parks needs to be developed and to evolve – this can be costly and needs to be funded by a variety of sources – taxes, DCs, and cash-in-lieu of land for parks. There are municipal financial implications of reducing or altering dedication rates and/or cash-in-lieu values.
- An understanding that other available tools under the Planning Act, The Development Charges Act and other relevant legislation will also have a role in how an urban parks system will be achieved and maintained over time.
- A sense that parks are “the gift that keeps on taking”. While it is easy to argue that the City should be acquiring the greatest quantity of parkland possible, it is important to recognize the significant costs of maintaining parkland in perpetuity, and to consider whether those funds could be used to address other municipal priorities. Notably, the cost of maintaining parkland is even greater for the urban parks planned in Markham Centre and other intensification areas.
- Considering the significant costs associated with maintaining parks in perpetuity, it is important that the City only accept parkland that will have a real value to the community, and not left over “bits and

pieces”, as has occasionally happened, for example in Cornell and other OPA 5 communities.

- The sense is that current parkland dedication regulations and procedures, and specifically cash-in-lieu policies, may be viewed as a significant disincentive for higher density forms of residential development, even where those forms of development are desirable. There is strong and consistent agreement within the development industry that the alternative parkland dedication standard identified in the Planning Act of 1 hectare for every 300 dwelling units is simply inappropriate for application on the highest density forms of development because:
 - The amount of land generated by that standard could well be greater than the development site itself; and,
 - The cost of cash-in-lieu payable could be greater than the value of the development site itself, and in many cases may render some higher density projects financially unviable. This concern has been consistently raised by representatives of the development industry.
- That the parkland dedication maximums identified in the Planning Act are not entitlements, and that a municipality must justify the subsequent use of any parkland dedication requirement, whether it is at the maximum, or below it. This theory, while a new approach taken by the development industry, has been tested at the Ontario Municipal Board, and is now subject to an appeal before the courts.
- These issues, when considered comprehensively across the GGH may have a dramatic impact on the ability to achieve the fundamental principles of the Provincial, Regional and municipal planning documents:
 - There may be a reluctance to develop within the defined urban centres and transit supportive corridors, thereby reducing the viability of transit investment, or slowing the development of transit facilities;
 - Growth targets, particularly the intensification targets, may not be met;



- Planned infrastructure will be underutilized and subsequently both inefficient and expensive; and,
- There will be a continued reliance on the automobile, and an ongoing preference for typical suburban forms of development.
- There is a strong desire in Markham to work collaboratively to achieve an approach to urban parks system development and parkland dedication procedures that are:
 - **Appropriate** – delivers a great public parks system that is integrated, connected and appropriate, and that meets the diverse needs of urban, suburban and rural Markham;
 - **Equitable** – is fair and reasonable to all the stakeholders, including the City, the development industry and the existing and future residents of the City;
 - **Consistent** – is applied equally and fairly to all applicants without the need for individual deal-making, or site-specific adjustments; and,
 - **Long-Lasting** – will serve the City well over the coming 10 to 15 years, without the need for constant amendments.



2.0 PUBLIC INTEREST/BUSINESS CASE

2.1 An Evolving Urban Structure

In 1960 there was no York Region. What is now the City of Markham included the small hamlets of Markham, Unionville and Thornhill and a great deal of farmland.

Starting in the early 1970s, coinciding with the establishment of York Region in 1971, significant suburban growth became focused on the southern tier of York Region municipalities of Vaughan, Richmond Hill and Markham. This growth pattern responded to improved accessibility and the desire to live and work in low density, relatively discreet and homogenous districts.

In the 1980s and early 1990s, the suburban growth pattern proliferated and, to a great extent, has consumed Richmond Hill and much of Vaughan and Markham. This growth pattern has continued its march northward to begin to exert its influence on York Region's northern municipalities. This growth phenomenon is typically referred to as suburban sprawl.

By the mid-1990s, it had become evident that there were substantial financial and environmental costs associated with suburban sprawl. Not only were irreplaceable high quality farmland and natural features being consumed by development at an alarming rate, there was a growing concern that the Region's economic competitiveness and quality of life would suffer if traffic gridlock, lower air quality and a lack of housing choices, including affordable housing, were allowed to continue unabated.

These substantial concerns brought to the forefront the public's perception of good planning, the concepts of intensification, transit oriented development, smart growth and sustainability. These concepts reflect the desire to ensure that the accommodation of future growth balances financial responsibility with environmental protection and the creation of healthy, livable, diverse and successful communities.

In support of that conceptual thinking of the mid-1990s, the new millennium witnessed a dramatic shift in the planning policies and procedures applicable to the Province of Ontario, with a focus on the Greater Golden Horseshoe. The implementation of a new legislative regime ushered in a new era of "hands-on" Provincial involvement in the



land use planning and development business in Ontario, and particularly within the GGH. New Provincial planning policy was articulated in (among others):

- The Provincial Policy Statement (2005);
- The Greenbelt Plan (2005);
- Places to Grow: Growth Plan for the Greater Golden Horseshoe (2006); and,
- The Provincial Planning Act (Bill 51-2007).

All of these documents work together to ensure that growth in the GGH is well managed, and is focused on the conservation of cultural and natural heritage resources and the creation of healthy and complete communities that are efficient and cost effective. Following from those key principles, requirements for a new urban structure of urban centres and corridors served by an integrated transportation system focused on transit have become the basis of local planning strategies for the past decade.

It is now 2012. The GGH, York Region and its constituent municipalities, including the City of Markham, have been allocated, (through Schedule 3 of Places to Grow and the approved, but under appeal York Region Official Plan) tremendous growth potential over the next 20 years:

Table 1: Population and Employment Forecasts – 2011 to 2031

	2011	2031
	Population	Employment
	Population	Employment
GGH	9,090,000	4,640,000
	11,500,00	5,560,000
York		
Region	1,060,000	590,000
	1,500,000	780,000
Markham	309,300	135,000
	421,600	240,600

Ongoing growth is a positive sign of a successful community. Strong growth is the cornerstone for economic development and the creation of a more rich and diverse urban environment. However, in order for

Markham to maintain its reputation for success – economically, aesthetically and in terms of quality of place and quality of life - this anticipated growth must be accommodated in an urban structure that facilitates transit supportive urban centres and corridors, in balance with its already established and more traditional suburban forms of building.

Furthermore, Markham's new urban structure must recognize and support the urban structures of its immediate neighbours in Toronto, Richmond Hill and Vaughan to ensure a high level of integration and accessibility on a regional basis. The entire GGH is growing and evolving, becoming much more urban. Markham's future growth and the policies and procedures that will facilitate that growth, must recognize that ongoing change.

Notwithstanding a general understanding and acceptance of the importance of this planned change in urban structure and the need to move toward a more balanced transportation system, the challenges of achieving it remain. Issues of location, accessibility, timing, economics, aesthetics and market acceptance are proving to be difficult to overcome, especially when substantial competition among municipal jurisdiction prevails, and when substantial opportunities for lower intensity greenfield development continue to compete for developer and consumer attention.

In addition to the emerging market support for higher density forms of development in Markham, there remains the concern that the playing field between lower density greenfield development and intensified mixed use development and redevelopment has not yet become level – to the substantial benefit of greenfield development. Intense, mixed use development in urban centres and along transit corridors provides substantial benefits to the broader community and must be viewed as being “in the public interest.”

Low intensity greenfield development is a well rehearsed program. There are few technical constraints, comparatively straightforward approvals processes and procedures and substantial market support for the end product. The costs of greenfield development are also well established and well known. On the other hand, mixed use, higher density urban forms of development were, until very recently, considered a specialists product. Difficulties with financing, cost control, approvals and the potential additional complexities of redevelopment are exacerbated by an evolving regulatory context and uncertainty with



respect to public infrastructure emplacement, particularly decisions on high order transit, make this form of development inherently more risky, and more expensive.

From an urban structure context, it is already well known that the status quo is not sustainable in the long-term, and that the planned evolution of our communities toward higher density forms of development is a requirement, not a choice. If higher density development and particularly residential development, is shown to be unviable from a market and/or fiscal perspective, and parkland dedication is one of the significant reasons it is being frustrated, then a recalibration of parkland dedication and cash-in-lieu procedures is also a requirement, not a choice. This recalibration, of course, would need to be understood in the context of other factors involved in making any project, or any particular form of development “unviable”.

2.2 The Importance of Investment in the Public Realm

Investment in the public realm (including public parks, streetscapes, public buildings) is good for a city’s image, health, beauty and quality of life. It is also good for the bottom line. Investment in the public realm will help to ensure that new jobs are created, commercial and business centres are enhanced, property values have increased and that income is generated for its investors for many years to come. Numerous studies have shown that a significant investment in the public realm can:

- *Promote increased property values and tax assessment* - A healthy retail sector dramatically enhances the economic benefits through the collection of HST. Enhanced property values will enrich property tax assessments. An improved overall environment will attract more residential development. Increased residential density will increase the residential property tax base. Investment in the public realm is fundamentally supportive of these benefits.
- *Promote reinvestment by the private sector in old and new building stock* - Experience across North America indicates that public sector investment stimulates private sector investment in new buildings. Creating a beautiful public realm is an investment in the future. It is expected that the development of an exceptional public realm will secure existing tax revenues and will have the potential to generate tremendous additional financial returns to all levels of government.



- *Maintain existing retailers and attract new businesses* - Success breeds success, and an enhanced public realm will ensure the retention of current tenants and will attract new retailers. Public investment sends a strong and positive message to the private sector.
- *Enhance a city's reputation* - Tourism will increase with an array of facilities, activities and events that are supported by the public sector. By identifying an area as having the potential to become a key tourist destination, its transformation will enhance the municipality's ability to attract tourists from within the region, and around the world. The public realm, to a large extent, creates the image of the City.

Real estate markets, especially residential markets, place a high value on proximity to parks and open space as an advantage, both through the amenity it provides as well as the views and privacy it allows. In fact, a number of real estate studies suggest that a premium exists for residences located close to parks and open space. The following are some interesting points taken from studies exploring the relationship between property values and proximity to parks/open space:

- In a study of residential units within 245 metres (800 feet) of parks in Portland, Oregon, it was estimated that a 1% to 3% property value premium could be attributed to the park (Bolitzer & Netusil, 2000);
- In Dallas, Texas, homes facing one of 14 parks were found to be worth 22% more than homes more than 1.3 kilometres (one half mile) from such amenities (Miller, 2001); and,
- It has been suggested that a positive impact of about 20% on property values abutting or fronting a park is a reasonable point of departure, and that the impact is likely to be substantial up to within roughly 150 metres (500 feet).

Well designed and well maintained parkland is a good investment. As the City becomes more urban, there will be greater impacts on public space, including simple “wear and tear” on existing and new parkland. A City-wide corporate review of parkland viability needs to be undertaken to ensure that parkland programming, maintenance protocols and redevelopment/renewal are in keeping with community needs.

2.3 Case Studies Confirm the Importance of Public Sector Investment in the Public Realm

Times Square, New York

In the early 1980s, Times Square was filled with illegal or illicit businesses, and was shunned by residents and tourists alike. In 1984, there were only 3,000 people in the 13-acre Times Square area involved in legitimate businesses, generating a total of \$6 million US in property taxes.

In 1992, the 42nd Street Redevelopment Plan, worth over \$2.6 billion US, dramatically changed the face of Times Square. Financed with over \$300 million US in public money, the redevelopment has been enormously successful with more than \$2.5 billion US in private sector development built since 1995.

In 1992, when the Times Square Business Improvement District started, lease rates averaged \$38.00 US/ft², and vacancy rates were 20%. In 2001, lease rates had increased to \$58.00 US/ft² and vacancy rates have dropped to just under 5%. Today, the area is home to 280 restaurants and 670 retail stores. Tourism has increased dramatically with over 12 million theatre patrons spending \$590 million US annually on tickets alone.



Post Office Square Park, Boston

For years, a two acre parcel of land in the midst of Boston's Financial District was occupied by an unsightly, 500,000 square foot concrete parking garage. But, in the early 1980s, at the urging of surrounding businesses, the City joined a unique public-private partnership to demolish the structure and create an underground garage covered by a graceful park. Most observers agree, Post Office Square Park has changed Boston forever. The Park has boosted the value of surrounding properties, while providing an elegant green focus to an otherwise crowded commercial area.



Millennium Park, Chicago

Chicago's Millennium Park is an oft-cited example of the potential economic spin-offs associated with public investment. Located on Chicago's waterfront, the Park has completely transformed what was formally a desolate stretch of rail yards, parking lots and remnant industrial uses. Since opening in 2004, Millennium Park has quickly become one of the City's primary landmarks and tourist draws, in large part because of its high quality design and impressive public art

collection, including works by renowned artists Jaume Plensa and Anish Kapoor. Not only does Millennium Park generate substantial revenues from tourists who come to Chicago to experience it, but within a year of its opening, residential real estate values in adjacent neighbourhoods saw a nearly \$1,000 per square metre increase. Within that same year, approximately \$1.4 billion in residential development was directly attributed to the Park's development (as reported in a 2006 New York Times article).

Dundas Square, Toronto

In 1998, as part of its Yonge Street Regeneration Project, the City of Toronto approved the expropriation and demolition of the buildings on site and the construction of Yonge-Dundas Square. The Square is managed as a commercial venture by a broad based stakeholder group including local businesses and Ryerson University.

The City's investment in the acquisition of the private landholdings and in the development of a public open space has spawned extensive real estate investment along Dundas Street, has attracted new, high value retail tenants and driven out much of the criminal element that had formerly populated the area.

***Waterfront Toronto, Toronto***

Recognizing the importance of parks as a key component of the urban structure and as a way to demonstrate commitment to a development vision, Waterfront Toronto has been actively planning and developing parks and public spaces as part of its overall waterfront revitalization efforts. Dedicating approximately 25% of the waterfront area to parks and public spaces, the Waterfront Parks and Public Spaces Framework is planning an interconnected parks system with over 90 individual parks and public spaces.

To date, Waterfront Toronto has made considerable investments in parkland development, with nearly 20 new or enhanced parks and public spaces opened since 2004. Two of its most recently completed park projects, Sherbourne Common and Sugar Beach, have already reached near-iconic status, cited in various publications for their innovative designs and appearing in numerous City tourism promotional campaigns.

2.4 Investment in the Public Realm is an Important Economic Development Initiative

The principle inherent to these Case Studies, and others, is to leverage public sector investment into a private sector investment response and long-term economic prosperity. Public realm investment is required as a key stimulus to enhance the demand for development (influencing the market) by investing in the city, which, in turn, will establish the appropriate environment for revitalization and investment.

Municipalities need to recognize and promote parkland's important contribution to city-building as an economic imperative. A high-quality public realm has a tremendous value - hard economic value in terms of real estate value, market value, tourism value and assessment value - that needs to be continuously enhanced through public sector investment. Experience has shown that the following economic benefits of investment in the public realm are achievable:

- Creation of the environment for economic success - which leads to increased lease rates and reduced vacancy rates;
- Increased tourism - which builds the reputation, and creates jobs in the food and beverage, accommodation and retail sectors of the economy; and,
- Stimulation of private sector redevelopment activity - which enhances property values and leads to increased property tax assessment.



2.5 Investment in the Public Realm is an Important Community Development Initiative

Beyond economic considerations, parks are also an important anchor for community development and engagement. As stated in the ILMP - 2010:

“Public buildings and spaces make up the fabric of community “place” ... They tend to be people-attractions that create life and vitality and, in turn, help to develop stronger, more resilient communities that contribute to community safety and quality of life.”

Parks are community-gathering places and serve an important recreational function that, in turn, plays a critical role in building



community and increasing social capital. Findings from a report by the Canadian Parks and Recreation Association that was cited in Markham's Integrated Leisure Master Plan state that 89% of residents from across the Province "*agree that recreation programs, parks and facilities make it easier to socialize and feel included*". Flowing from this recognition, a number of community and social benefits associated with parks and recreational services were identified in the Canadian Parks and Recreation Association report, including:

- Improving personal health and well-being;
- Advancing social development;
- Enhancing quality of place and quality-of-life;
- Building strong and engaged communities; and,
- Reducing social service costs as a result of the wider social and community benefits realized through parks and recreational services.

Notwithstanding the inherent benefits of parkland, the ability of residents to realize and maximize these benefits is dependent upon a willingness to find locally-appropriate opportunities to work collectively, share responsibility, and create a sense of ownership. The City of Markham's ILMP - 2010 refers to this as the concept of "living community centres", or "a way of bringing parks to life" by animating them with celebrations, markets, brick bake ovens, community gardens, concerts and performances, outdoor fitness classes, public art, and more. Not only do the parks "come to life", but the process creates neighbourhood-based relationships that improve individual well-being and strengthen the community.

3.0 LEGISLATIVE FRAMEWORK/CURRENT PRACTICES

3.1 The Planning Act

Public parks systems play a crucial role in the quality of life of Markham's urban and suburban communities. The parks system provides gathering places, recreational opportunities, linkages and landmarks. Parks establish a sense of place and are an organization element of community design.

It is a fundamental requirement of good planning practice that in an appropriate parkland system – the right amount, the right mixture of park types, the right levels and quality of design and the right programming – be planned and built to serve the existing and future residents of the City of Markham.

However, the legislative tools, and specifically in the Planning Act, the alternative maximum standard of 1 hectare for 300 dwelling units, is considered to be fundamentally flawed if applied to the maximum permitted as it applies to the highest density forms of residential development. The fiscal impact of this land taking – or cash-in-lieu of land – has a significant detrimental impact on the financial viability of any given higher density residential development, in Markham and elsewhere. The negative financial impact is exacerbated as density is increased.

The problem is that the Planning Act formula relates land taking to dwelling units, which does not take into consideration the dramatic range of people generated by various forms of housing. The key is to relate parkland taking to the number of people generated by a given development. This approach ensures consistency of the parkland per person ratio between urban and suburban forms of development.

Parkland conveyance authority comes from Planning Act, Section 42, which pertains to parkland conveyances associated with development and redevelopment, and Sections 51.1 and 53, which pertain to parkland requirements as a condition of plan of subdivision approval and consent, respectively.



Land Conveyance

The Planning Act establishes parameters around conveyances for park or other public recreational purposes, as follows:

- Not exceeding 2% of land area in the case of commercial or industrial development.
- Not exceeding 5% of land area, in the case of all other types of development, including residential development.
- For residential purposes, the Act permits municipalities to utilize an alternative requirement of conveyance for park or other public recreational purposes based on a maximum rate of 1 hectare for every 300 dwelling units, subject to the inclusion of enabling policies within the approved local Official Plan.

All three parkland conveyance rates are identified as maximums in the Planning Act.

Cash-in-Lieu and Land Valuation

Municipalities may also accept payment of cash-in-lieu of a parkland conveyance. Where cash-in-lieu of land conveyance is accepted, land values are to be determined based on the following criteria:

- As per Section 42 (6.4), which applies to land development and redevelopment, land values are to be determined based on the value on the day before the first building permit is issued.
- As per Section 51.1 (4) and 53 (12), which apply to subdivision developments and consents, respectively, the land value is to be determined based on the value on the day before the approval of the draft plan of subdivision or provisioned consent, as the case may be.

Reductions for Sustainability

As per Section 42 (6.2 and 6.3), a municipality may establish policies to permit a reduction in cash-in-lieu payments where a redevelopment project meets certain sustainability criteria as set out in the Official Plan and where no land is available to be conveyed for park or other public recreational purposes.

This is a relatively new provision under the Planning Act and, based on a scan of other Ontario municipalities, has not been tested or implemented to date.

Implementation Flexibility

While establishing the methods and parameters for parkland conveyance and cash-in-lieu of parkland, the Planning Act does provide some inherent flexibility in the way municipalities implement their parkland conveyance policies and procedures. This flexibility is effectively provided by what the Act remains silent on. Specifically, the Planning Act does not:

- Prescribe, for residential development, which method of parkland conveyance is to be applied in any situation, or any criteria that should be met in making that decision;
- Require that any analysis be undertaken to justify the use of either approach (this issue is currently subject to legal review); or,
- Indicate if, where or when the municipality may require less than the maximums identified in either approach.

3.2 The City of Markham Official Plan

The current Official Plan policies for parkland and open space planning, which establish an overall objective of developing a linked open space system, are very comprehensive. Section 3.9 of the current Official Plan establishes the policy framework with respect to the City's public parks system, including setting targets for parkland by parkland type (S.3.9.3 f), as follows:

- 1.2141 ha./1,000 people for Neighbourhood Parks;
- 0.8094 ha./1,000 people for Community Parks; and,
- 1.0118 ha./1,000 people for City Parks.

It is important to note that the total amount of parkland required as identified in the Official Plan is 3.0353 hectares per 1,000 residents. The City currently limits its taking of parkland dedication through Planning Act development applications to 1.2141 hectares per 1,000 residents, plus the contribution to the parkland supply from commercial and industrial developments.

In addition to guiding the City to acquire parkland through conveyance in accordance with the maximums identified in the Planning Act (S.3.9.4

c) i)), including provisions for the use of the 1 ha per 300 dwelling units alternative rate, the Official Plan also directs the City to prepare a Parkland Dedication By-law that varies the approach to parkland dedication by density designation (S. 3.9.4 a)).

Overall, for residential development, the Official Plan establishes a minimum parkland dedication requirement of 5% of the land area being developed or redeveloped for residential purposes, and a maximum conveyance related thereto of 1.2141 ha. per 1,000 persons.

Where mixed-use developments are proposed, the City uses a pro-rata approach to determining parkland dedication, using the alternative rate for residential development, with the commercial and/or industrial component being subject to the 2% parkland conveyance standard.

In addition to establishing the parameters for parkland conveyances, the Official Plan also provides additional policy direction with respect to the acceptance and use of cash-in-lieu monies, how density is calculated to determine land conveyance amounts and general requirements pertaining to the physical condition or eligibility criteria for the parkland being conveyed.

Finally, the Official Plan also builds in some flexibility for the City as to how it allocates parkland in order to achieve its overarching parkland and open space objectives. As per Section 3.9.4 d):

“In order to conform to the overall objective of an open space system with linkages, and to allow flexibility in allocating parklands, the Town may exchange lands, accept lots in lieu, or cash-in-lieu of park dedications in individual developments. The proceeds may be applied to the acquisition of parkland in other areas if considered more appropriate to serve the needs of a coordinated open space system as envisaged in this Plan.”

3.3 Markham’s Current Parkland Dedication Practices

Enabled by the Planning Act and the Official Plan, the City’s Conveyance of Parkland By-law (By-law 195-90) authorizes the City to obtain land for parks.

As indicated above, the Official Plan establishes a minimum parkland requirement of 5% of the land area, with parkland conveyances capped at a maximum of 1.2141 ha. per 1000 persons for residential development

and redevelopment. The intent of this approach is to provide some degree of relief to higher density forms of residential development. For example, if the average household size in an apartment is 1.91 ppu, then the parkland dedication requirement is the equivalent of 1 ha. per 431 dwelling units, significantly less than the alternative Planning Act Standard.

Overall, the City provides medium and higher density development with two key beneficial parkland conveyance benefits. First, depending on the household size assumptions used, the City's policies effectively discount residential conveyance. Second, the City's current approach, as per the Official Plan, establishes a cap on the conveyance requirement for residential uses at the lesser of 1 hectare per 300 dwelling units or 1.2141 hectares per 1,000 people.

3.4 Current Parkland Supply and Analysis

Current Parkland Supply

Markham recently undertook an analysis to quantify the amount of municipal parkland in Markham. The City of Markham comprises an area of 21,230 hectares. The City currently contains about 160 parks, totaling an area of about 540 hectares. Based upon a 2011 population of 309,300 persons (Region of York Official Plan), this results in the provision of about 1.76 hectares per 1,000 persons.

Current Municipal Parkland Standards

Markham's current Official Plan contains a policy which requires that municipal parks be delivered at a rate of 3.03 ha./1000 persons broken down as follows:

Neighbourhood Parks at a rate of 1.2141 ha./1000 persons

Community Parks at a rate of 0.8094 ha./1000 persons

Town (City) Parks at a rate of 1.0118 ha./1000 persons

The parkland that can be acquired through the Planning Act dedication is currently capped at 1.2141 ha./1000 persons and this has historically supplied the Neighbourhood and Community Parks component of the overall parks system.



3.5 Area Specific Parkland Dedication, Delivery and Funding Arrangements

Reflecting the increasing complexities of Markham's urban planning and development activity, the City has utilized alternative or customized approaches to securing parkland, beyond conventional land conveyances or cash-in-lieu agreements, to facilitate development in a number of its key Secondary Plan areas.

Markham Centre Parkland Funding and Delivery Agreement

Markham Centre's Parkland Funding and Delivery Agreement is a prime example of the City implementing a customized agreement to secure parkland within a Secondary Plan area. The Funding and Delivery Agreement is based on a set of Council endorsed principles ("Markham Centre Parkland Principles") which provide, in relatively substantial detail, guidance on the "dedication and delivery of public parks, squares and urban public plazas throughout the Markham Centre Secondary Plan area".

Some of the key principles, which were updated in 2006, include:

- Utilizing a 3 acres (1.2141 ha.) per 1,000 population standard for residential development (using a 2.2 ppu assumption for all unit types), the 2% standard for commercial development and a combined rate for mixed-use development;
- Targeting 60% of the conveyance requirement be achieved through land conveyance and the remaining 40% through cash-in-lieu, with the cash-in-lieu component based on land values updated annually through a City-led appraisal and based on an average across the entire Secondary Plan Area;
- Committing to use cash-in-lieu funds for the purchase of parkland, including "improved parkland at an enhanced urban standard" within Markham Centre;
- Requiring that the majority of parkland within Markham Centre be "urban in character and quality", delivered to a minimum standard of 3 times the City-wide parkland development standard;
- Emphasizing that lands offered for dedication need to demonstrate a "substantial public benefit, as opposed to a private benefit"; and,

- Opening up the possibility for granting below grade rights for the development of structured parking facilities beneath parkland, subject to certain considerations/criteria.

A subsequent agreement, the “Parkland Implementation Agreement”, will be required to specify the calculation of land conveyance, cash-in-lieu payments and obligations associated with the design, construction and delivery of “improved” parks at the time of development.

Cornell Master Parks Agreement

In the case of the Cornell Planning District Secondary Plan Area, the City of Markham entered into a “Master Parks Agreement” with the Cornell Landowners Group (June 5, 2007), to specify the parameters of the minimum parkland conveyance and other community land conveyance required within the Secondary Plan Area.

Some of the key features of the Cornell Master Parks Agreement include:

- Establishing minimum parkland conveyance of 137.5 acres (including a combination of new lands and lands dedicated under previous development agreements within the Secondary Plan Area);
- Establishing additional “other community land” conveyance requirements, beyond the defined parkland conveyance amount;
- Locking in the minimum land conveyance requirements, regardless of potential changes to the quantity of proposed residential units or commercial and employment lands (clause 2), with two key exceptions:
 - That additional parkland conveyances could be required if additional density was sought along the Highway 7 Corridor (clauses 9 to 11); and,
 - That enhancements and/or facilities (e.g. park structures, pedestrian bridges and other special parkland or open space treatments) would be accepted in-lieu of parkland owing;
- Specifying where those parkland and other community lands are to be located, as per the Revised Open Space Master Plan;

- Outlining an “infrastructure in lieu of land” clause specifying that 1.69 acres of the total conveyance requirement be provided through the construction of trail infrastructure and pedestrian bridges at a minimum construction value of \$650,000 (in 2004 dollars) and the removal and disposal of an existing roadbed associated with the Markham By-Pass roadway; and,
- Encouraging the development of the “Central Community Park” at the earliest possible stage in the development process.

The Timing for Parkland Dedication/Cash-in-lieu

There has recently been discussion about what is an appropriate time in the development approval process for the City to request parkland dedications and/or cash-in-lieu - at the subdivision stage or at the site plan stage, or some combination of the two.

Typically, the City addresses parkland/cash in lieu comprehensively through a plan of subdivision, when it is possible to do so. If the subdivision contains blocks for residential multiples or mixed residential commercial, the City requires parkland dedication/cash-in-lieu based on the residential unit yields or land areas specified in the draft plan statistics, but also includes a clause in the subdivision agreement that indicates that the parkland or cash-in-lieu amounts will be adjusted upward at site plan approval, if unit yields on individual blocks are higher than originally anticipated in the draft plan stats. If yields are lower than the draft plan, the City does not provide a rebate.

When the City deals with an application on a lot that was not created by plan of subdivision that, was created before parkland dedication requirements were commonplace or the approval involves a change in use or intensity of use, the City will reconcile parkland dedication requirements at the site plan stage. In the case of a change of use, where some parkland may have been dedicated in the past, there is typically a credit for earlier parkland dedications and only the redevelopment uptick is calculated part of the site plan agreement.

There has been some discussion recently that it may be advantageous to regularly defer parkland dedication/cash in lieu on mixed use, or medium and high density blocks from the subdivision approval stage to the site plan stage. This is due, in part, because cash-in-lieu value is calculated on the basis of developed land (on the day before building permit) in the case of site plans, whereas it is calculated on the basis of raw land (day before draft plan approval) when parkland is required as a condition of

subdivision approval. As a result, land values would be higher if required at the site plan stage vs. the subdivision stage.

On the other hand, the big disadvantage of deferring parkland conveyance/cash in lieu to the site plan stage involves the need to separately negotiate parkland dedication for each individual site plan, and the possibility that the original developer may have sold the site to a new owner prior to the site plan application, and that the new owner who not be aware that parkland dedication was still outstanding when they bought the property. Also, developers generally prefer to address parkland dedication at the subdivision stage rather than at the site plan stage.

When the City deals with redevelopment of existing lots (i.e. no plan of subdivision) there is no choice but to reconcile parkland dedication at the site plan stage.

Other Approaches – Off-Site Land Conveyances

The City has recently entertained and accepted off-site land conveyances whereby a development proponent (in this case, Sierra Building Group – Main Street Markham) has purchased land off-site for the express purpose of conveying it to the City for parkland purposes. In such circumstances, the City must be satisfied that an on-site land conveyance is not feasible and that the land being conveyed off-site is in reasonable proximity to the proposed development.

There are certainly benefits to this approach for both the City and the development proponent. The City is able to secure new parkland, to its satisfaction, without having to search and negotiate a land acquisition deal, while the developer is able to retain a greater degree of control with respect to the cost of the land dedication. Furthermore, it is arguable that a private developer can acquire land more efficiently and effectively than the City would be able to if it were to use cash-in-lieu monies to purchase parkland itself. These positive attributes are in variance to some of the concerns previously raised.

Conclusions

Overall, these sorts of specialized parkland conveyance arrangements reflect the City's willingness to try to innovate and establish reasonable and fair parkland conveyance requirements that balance the City's need for new parkland and, at the same time, facilitate new development.

Furthermore, these three cases – particularly the Parkland Principles and subsequent Funding and Delivery Agreement for Markham Centre – signal the City’s desire and recognition of the need to address parkland conveyance differently in suburban and urban contexts.

Certainly, having the flexibility to evaluate and accept such alternative arrangements is important, but such agreements need to be implemented in a more clear and consistent manner to ensure fairness and improve clarity around the rules.

As an example, the City of Toronto’s Municipal Code (Section 415-23) establishes some basic conditions for accepting off-site parkland conveyances that could be adapted for use by the City:

“C. Where on-site parkland dedication is not feasible, an off-site parkland dedication that is accessible to the area where the development site is located may be substituted for an on-site dedication, provided that:

- (1) The off-site dedication is a good physical substitute for any on-site dedication;*
- (2) The value of the off-site dedication is equal to the value of the on-site dedication that would otherwise be required; and,*
- (3) Both the City and the applicant agree to the substitution.*

D. Land to be conveyed shall be in conformity with Council policies and guidelines for parkland.”

Nevertheless, the key point here is that the City needs a consistent approach to parkland conveyance protocols – which can be differentiated in terms of urban and suburban contexts – that is applied equally and fairly to all applicants without the need for individual deal-making or site-specific adjustments, except in accordance with common applicable standards and criteria.

4.0 INNOVATIVE PARKLAND SYSTEM COMPONENTS & POLICIES

4.1 An Innovative Policy Approach

Planning for an urban parkland system requires nuanced policies that support the development of a high quality and diverse parkland system. Parkland conveyance policies should enable a variety of solutions for different contexts and locations, with built in flexibility and quality control mechanisms. Beyond parkland conveyance, flexibility and quality control considerations are needed within supporting municipal policies and practices that dictate how parkland is integrated as an element of community design, and how it can be used.

Flexibility - There should be enough flexibility in the policy to take into account and respond to context-specific priorities, such as the presence of natural features, or opportunities to provide community-specific facilities or to improve the connectivity of the parks and trails network beyond the specific development site. Policies should also respond to changes in real estate values over time.

Quality Control – Quality control mechanisms should be built into parkland conveyance policies and practices. To ensure the maximum public amenity is achieved, parkland conveyance needs to be addressed early on in the development approval process, and the City needs to have a major say in the shape and location of new parks and squares. For example, it is essential that park spaces in major redevelopment areas are centrally located, and not relegated to less desirable, left over spaces. The use of cash-in-lieu funds is another opportunity to maximize the amenity provided by parkland, and it is important that the City combines its financial resources to create meaningful parks in targeted areas, for example by preparing a comprehensive parkland acquisition strategy.

Community Design – Integrating adjacent land uses can contribute to the success of parks. Parkland use can be optimized by ensuring edges are animated with active urban uses (often commercial uses), by integrating public facilities (such as public buildings, schools, daycare, libraries, etc.) with parkland, and by promoting the joint use of outdoor spaces. Enhanced opportunities for public consultation during community design will also contribute to the success of parkland identified through greater park usage and a better fit with identified community and neighbourhood preferences and needs.

Revenue Generation – Potential sources of dedicated revenue in parks should be permitted and explored, for example through leases and licenses for desirable uses such as cafés, restaurants, and markets. These uses not only generate revenue, they can enhance the quality and use of parkland.

4.2 Additions to the Parks Hierarchy

While a reasonable approach to estimate park needs, the ultimate demand for public parks will not be determined solely by the number of people who live and work in an area. This is particularly true in an urban context where the mixed use environment draws a more varied group of residents, employees, shoppers, and where the use of parks may also be focused on the attraction of residents from other parts of the City, or regional tourists. In these contexts, the demand for parkland by different uses will overlap, which generates much heavier demand for, and use of, public space. Within a City, residents may also travel to parks beyond their neighbourhood that offer different amenities. For example, “downtown” residents may travel out of the core to access playing fields in lower density areas, while people living in more residential areas may travel downtown to experience the more urban parks.

There are indeed many factors that will affect the level of demand for space, the types of demands on that space, and the level of design required to respond to both. These factors include the suburban/urban context, the character of the park space and its broader role within the community, or the City. Different sizes and types of parks are appropriate in different contexts.

The City of Markham’s current park hierarchy, as identified in the Official Plan, is largely based on a typical suburban model, including City Parks, Community Parks, Neighbourhood Parks and Parkettes. The suburban park hierarchy is considered significantly different from a more urban model, and the City’s own ILMP - 2010 recognizes that:

“Markham’s park classification system needs to evolve to reflect changes to the urban fabric, including the opportunities to establish smaller and more urban parks.”

Certainly, there are different demand characteristics as well as different design standards and cost thresholds within the City’s evolving urban context. Additional types of parkland need to be added to the typical suburban hierarchy to adapt to the City’s evolving urban structure –



urban squares, courtyards/plazas, strata parks and remnant landscape components are appropriate and necessary within the City's defined centres and corridors to achieve the desired urban character.

Consideration of a new parkland dedication regime for Markham's medium and higher density development forms must also take into account the need for large scale City-wide and Community scale parks, which are often overlooked. Urban dwellers will also seek out these larger and more passive park system components. As Markham becomes more urbanized, the need for these facilities (large land areas, including major recreational facilities) will increase substantially. However, without a strategy, these large types of parks may become increasingly difficult to acquire.

Discussion of a revised structure for a parkland hierarchy is addressed through the Parkland Manual attached as **Appendix C** to this report as well as in the proposed New Official Plan policies.

4.3 Parkland on Structures and Stratified Parkland Arrangements

In response to growing intensification pressures and high-density development activity, urban municipalities – Markham among them – are increasingly looking at the development of park facilities on top of structures or buildings in order to secure needed parkland within the urban context.

Facilitated through various strata arrangements, the development of parkland or publicly accessible open spaces on top of buildings or structures, such as parking garages, is not a new innovation or phenomenon. This sort of strata parkland development simply reflects the need for land efficiencies in higher density urban contexts where land values are elevated and available land supplies are constrained.

San Francisco's Union Square, a 2.6 acre urban plaza that was originally opened in 1850, had the world's first parking garage built under it in the late 1930s. Likewise, Toronto's Nathan Philips Square has one of the largest underground parking garages located underneath it (with space for 2,400 cars).

In Toronto, there are a few examples of public open spaces situated on top of parking garages (i.e. Town Hall Square Park at Yorkville Avenue and Yonge Street). However, according to City of Toronto staff, while the City does take strata ownership over these sites, it does not formally



count them towards the parkland dedication requirement, citing the City's Official Plan policy that requires that conveyed parkland be free of any "encumbrances" (Section 3.2.3, policy 8). Regardless of their technical status in terms of land conveyances, these sorts of open spaces do function as parkland.

Spurred on by proposed development in the Vaughan Metropolitan Centre and the Yonge Steeles Corridor Secondary Plan, the City of Vaughan is also actively exploring the merits of permitting "Stratified Title Agreements" (strata parks) for certain public lands, including public parks, in order to accommodate private sector uses such as underground garages, underpasses and other building related elements.

As a first step, the City of Vaughan has recognized that:

- "• Accommodating Strata Title Arrangement(s) could significantly contribute to the realization of the City's public policy objectives as set in the City's Official Plan.*
- Not accommodating some Strata Title Arrangement(s) would likely frustrate the timely achievement of the City's public policy objectives as set out in the Official Plan."*

Subsequently, Vaughan has established four preliminary principles with respect to strata title agreements that it is currently seeking feedback on. They include:

- "• The prime purpose and functionality of the effected public realm property should not be materially compromised.*
- The burdens of accommodating such arrangements as well as any related future responsibilities should be directly assumed by the proponent (landowner) or the successor owner.*
- There should be some reasonable contribution by the proponent/landowner to the City such as enhanced site improvements, amenity facilities or monetary.*
- All such accommodations should be considered on a case-by-case basis, based on context and technical justification and should be discretionary in favour of the City."*

In Markham, strata parkland agreements are typically stipulated as part of a Site Plan Control Agreement. Liberty Development's World on Yonge development is a recent example of a strata parkland agreement that the City has entered into. As part of the overall parkland requirement, the City credited the developer for the conveyance of part of the "surface strata" for on-site parkland. The Site Plan Control Agreement also sets out requirements for access easements and maintenance, restrictions on the sale or transfer of park, as well as design and construction standards for the park and its substructure.

While ownership, easement and maintenance arrangements can and do vary in the delivery of strata parklands; in most circumstances, the developer or condominium corporation is responsible for the maintenance of the substructure while the municipality is responsible for the maintenance of the park.

Some of the key and interrelated considerations or issues associated with strata parkland arrangements include:

Structural Integrity

A critical consideration in the development of parkland atop of a building structure is ensuring adequate waterproofing of the concrete foundations to mitigate potential water damage to the structure and associated utilities that, in turn, could cause significant maintenance issues and affect the usability of the park in the long-term.

The potential need to remove the park to facilitate maintenance of the parking garage beneath is a potentially huge administrative and financial issue in the long-term.

Land ownership

There is debate as to whether public ownership or private ownership is more beneficial when it comes to strata parkland agreements. The benefit of public ownership is that the parkland is effectively protected in perpetuity, whereas privately held parkland runs the potential risk of future redevelopment and possible financial risks.

Maintenance

The issue of park maintenance is another key issue that can be a particular point of contention in stratified parkland arrangements, with control and level of maintenance as the central concerns.



The ability to require the conveyance of land (or cash-in-lieu) for parks purposes found in Section 42 of the Planning Act does not extend to providing a contract power. The ability to enter into a contract to deal with aspects of the dedication, for example maintenance obligations, easements or combining other source funds for a specific purpose, needs to be found elsewhere. Obvious sources include:

- Agreements under Plans of Subdivision, Condominium or consent approvals;
- Agreements as a condition of a variance, where related; and,
- Agreements under Section 37 of the Planning Act.

Historically, the OMB expressed reluctance to consider a public park over a private parking garage. This may no longer be the case where appropriate legal authority, drafting and security arrangements are put into place to deliver and maintain the obligations established.

At issue is the degree of sophistication of the municipal objective and its implementation. The ability to commit a future condominium corporation to establish and maintain a security fund for the replacement of a sub-grade structure in order to support a public park is a matter requiring discussion with legal Counsel. There are examples of such arrangements in the United States, one being Patriot Park in Phoenix, Arizona.

Typically the municipality will prefer to retain control of maintenance. However, maintenance agreements can be negotiated that allocate responsibility for maintenance to the owner(s) of the subsurface strata, subject to prescribed maintenance standards. Nevertheless, given the level of investment associated with constructing parks on top of structures – and investment in the development of any urban parks for that matter – high maintenance standards must be upheld.

Notwithstanding the previous paragraph, it is the Operations Departments preference that strata parks be in private ownership, with a public easement. It has been identified that the Operations Department cannot maintain these spaces to condominium landscaping standards. If strata parks continue to be retained in public ownership, a Maintenance Management Plan is required, and Council must be made aware that strata parks have a cost premium with respect to maintenance.

Perceived ownership

Regardless of the actual ownership arrangement, the perceived ownership of the park can also be a significant issue. If the park ‘feels’ like private property, then it is not serving its intended function as publicly accessible open space. Therefore parks built on top of structures need to be carefully designed to ensure that – regardless of their ownership – they are open, inviting and accessible, and in turn ‘feel’ and function as public parks.

Market Issues

A developer of a residential condominium may encounter sales resistance on a project if maintenance fees, in any amount, are directed to the up keep of a public amenity over the long-term. Parks that straddle underground parking facilities that are damaged due to root penetration or other park impacts may represent a market threat to developers.

Programming Constraints

The programming of strata parks for public use will likely be constrained by a variety of technical issues as well as adjacent resident impact issues.

Other Associated Issues

- Should there be full or partial parkland credit for strata parks?
- How can the long-term maintenance and liability issues be overcome?
- Is there potential for establishing municipal reserve funds, or other innovative funding strategies?

4.4 Discounts for Specific Uses/Districts

Though the stakeholder consultation process, an issue has been raised about the potential for parkland dedication and/or cash-in-lieu being further discounted to facilitate specific uses or development within specific districts of the City. For example, the development of affordable housing, housing for seniors or other community facilities/institutional uses and cultural uses may be considered a substantial community benefit, that may be facilitated through the application of a reduced parkland dedication/cash-in-lieu requirement.

Further, the use of a reduced parkland dedication/cash-in-lieu

contribution may also be appropriate to provide relief for new residential developments in the City's Heritage Conservation Districts. There is anecdotal evidence that the City has recently had three projects that went through the entire planning process only to be halted when the amount of cash-in-lieu of parkland was determined. These projects included a four-storey retail/residential development on Yonge Street in the Thornhill Heritage Conservation District and two multi storey projects (5 and 6 storeys) in the Markham Village Heritage Conservation District.

One of these projects, the Sierra Developments project in Markham Village is now going ahead as the owner and City just recently worked out a solution in which the owner purchased some property for the City adjacent to the Museum, which was equivalent to the parkland they were to provide. It is important to note that this occurred because the land was purchased at a much lower cost than the equivalent cash-in-lieu payment would have been.

Generally, the applicants in these cases indicated that the costs of development in a Heritage Conservation Districts are substantially higher due to the older infrastructure, and the enhanced design and material requirements due to the Heritage Conservation District policies and Design Guidelines. In response to the issue, the developer stated:

"It is fair to say that the façade for this building is significantly more expensive than for a building in any other location in Markham, since we have incorporated specific design features to accommodate the important heritage character of Main Street in our design."

The developer was also implementing site enhancements on adjacent properties. At the time (2005), the City offered a phased payment schedule with the second and third payment secured through a site-specific agreement to provide some financial relief.

Given that it is an objective of the City to have enhanced heritage friendly buildings in the defined Heritage Conservation Districts, it has been suggested that parkland dedication requirements should be reduced or eliminated in these very special areas as an incentive to encourage appropriate infill development and heritage sensitive design.

5.0 COMPARATIVE ANALYSIS

5.1 Parkland Dedication Practices in Other Jurisdictions

5.1.1 Other Provinces

In a 2004 survey undertaken by Evergreen, a questionnaire and follow up interviews were conducted with 26 out of 30 of Canada's largest urban (lower tier) municipalities. The main themes of the survey and accompanying report² principally addressed greenspace acquisition or securement tools, strategies and capacity, as well as green space stewardship. The survey identified provincial planning legislation and other statutes and policies that addressed open space acquisition in the municipalities that participated and allowed a comparison of legislation and the framework for parkland dedication and acquisition that each municipality operated within.

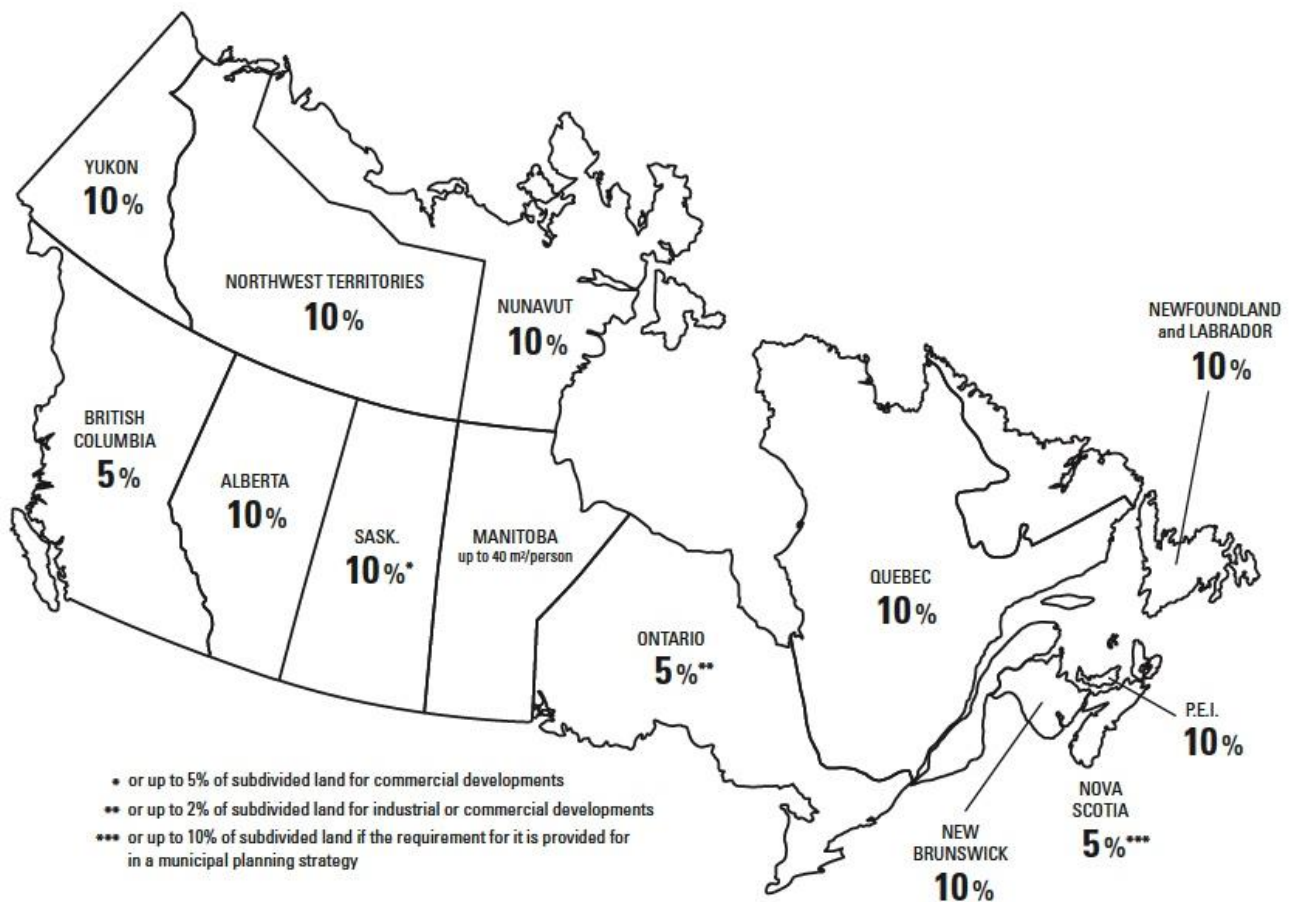
According to the report, Provincial parkland dedication rates in Canada vary from 2 percent to 10 percent of the associated land area and there is legislation in all but four Provinces allowing municipalities to require a parkland dedication of up to 10 percent to be developed. Figure 1 illustrates the legislated parkland dedication rates in Canada's Provinces and Territories excerpted from the report. Specific examples include:

- Nova Scotia – the standard dedication of 5 percent of the associated land area can be increased to 10 percent if the requirement is provided for in a municipal planning strategy.
- Manitoba – parkland dedication is determined at a rate of 40 square metres for every occupant of the subdivision.
- British Columbia and Ontario – the dedication can be up to 5 percent of the associated land area (or 2 percent for industrial and commercial developments).

The report also indicates that where municipalities seek to acquire parkland above and beyond the amount dictated by dedication standards, that there are other planning tools often used or available by or within Provincial legislation, including density bonusing and the control or conveyance of lands unsuitable for development.

² Evergreen, *Green Space Acquisition and Stewardship in Canada's Urban Municipalities, Results of a Nationwide Survey*, Evergreen, 2004

Figure 1: Legislated Parkland Dedication Rates in Canada's Provinces and Territories



5.1.2 What's going on in the GTA?

BILD (Building Industry and Land Development Association) recently completed a survey of municipal Parkland Dedication and Cash-in-Lieu By-Laws and Policies. The survey, which looked at 26 municipalities across the GTA, compared land dedication rates, cash-in-lieu calculations and land appraisal methodologies, potential exemptions and any additional costs associated with the conveyance process.

While the parameters set out in the Planning Act serve as the basis for all municipal parkland dedication policies and procedures, there is little consistency amongst municipalities in the way those parameters are interpreted and implemented. BILD's survey of municipal parkland dedication approaches reveals a number of key differences in terms of caps on land dedication, differential treatment of low, medium and high-density developments and land valuation methods.

The following is an overview of some of the varied parkland dedication approaches being implemented across the GTA, with a particular focus on approaches used in higher density development scenarios. **Appendix A**, which is data provided by BILD, provides a more detailed summary table of parkland dedication policies by municipality.

The text and data that follows is based on the BILD data, and has been check through a review of relevant planning policy, and in some cases, through telephone interviews with local planning staff. While the Study Team has attempted to ensure the reliability of the information, there may be instances where it is out of date, or inaccurate.

City of Toronto

The City of Toronto utilizes an Alternative Rate of 0.4 ha. per 300 dwelling units for lands within "parkland acquisition priority areas" which caps parkland dedication and cash-in-lieu amounts based on set land area thresholds as follows:

- Sites less than 1 ha.: parkland will not exceed 10% of development site (cash-in-lieu cannot exceed 10% of the value of development site)
- Sites 1 ha to 5 ha.: parkland will not exceed 15% of development site (cash-in-lieu cannot exceed 15% of the value of development site)

- Site greater than 5 ha: parkland will not exceed 20% of development site (cash-in-lieu cannot exceed 20% of the value of development site)

City of Brampton

The City of Brampton is currently undertaking a review of its parkland dedication by-law. As part of its review, the City recently adopted an increase to its cash-in-lieu provisions, with transitional rates based on Land Use Type, Price per Acre (day before Draft Plan Approval); and/or, Per Unit Rate (based on factor of 1 ha./300 dwelling units) as follows:

Land Use Type	Price per Hectare (day before Draft Plan Approval)	Per Unit Rate (based on factor of 1 ha./300 dwelling units)
Low Density Residential	\$1,111,950	\$3,706
Medium Density Residential	\$2,038,575	\$6,177
High Density Residential	\$2,038,575	\$6,177
Commercial	\$2,100,350 (where non-subdivision development, land values will be based on site specific approval, valued at the day prior to Building Permit issuance)	N/A
Institutional (excluding schools)	\$1,359,050 (where non-subdivision development, land values will be based on site specific approval, valued at the day prior to Building Permit issuance)	N/A
Industrial	\$550,000 (where non-subdivision development, land values will be based on site specific approval, valued at the day prior to Building Permit issuance)	N/A

In addition, the City is also considering proposed policy amendments to implement specific dedication rates for medium and high density development at 0.06 ha. and 0.25 ha. per 300 dwelling units respectively. This information was collected by and contained in a report prepared by BILD. It is understood to reflect proposals by the City at the time of the survey, but which may have since been modified.

City of Vaughan

As part of its parkland dedication policies, the City of Vaughan has implemented a fixed unit rate of \$4,100 per unit for the purposes of calculating cash-in-lieu for high-density developments.

This approach was put into place by Vaughan in 2005 and was based upon an appraisal of representative property values at the time. The parkland strategy in Vaughan's Official Plan utilizes either the standard 5% requirement under the Planning Act, or the 1 ha. per 300 dwelling units, whichever is greater. The \$4,100 fixed unit rate is a cap per unit used by the City. The City is in the process of considering an increase in that figure to \$8,500 to reflect increased property values since the standard was introduced, and the \$8,500 will also be a cap.

The Parks Master Plan for Vaughan identifies that there is a need for 2.5 hectares of parkland per 1000 people for active recreation and a total of 4.9 hectares per 1000 people, which is inclusive of "open space" lands. The municipality finds the collection of cash-in-lieu to be a better approach to addressing their overall parkland needs as it allows them to deal with the issue of how to fund improvements to parkland. The municipality utilizes the cash-in-lieu of land provisions to purchase improved parkland.

Vaughan is also in the process of studying the issue of, and approach to, addressing parkland needs and policy requirements to establish a parkland dedication protocol, or cash-in-lieu land payment.

City of Mississauga

In order to address parkland dedication in higher density urban context, the City of Mississauga have focused on variable land valuation approaches. Most notable, the City has established a provision in its parkland dedication policies that enable it to calculate the value of land for medium/high density development at less than market value "in accordance with such formula as contained in any policy that may be approved by Council".

In addition, where the 1 ha./300 dwelling unit approach is used, market value is estimated using a City-wide land average of medium density residential lands in order to encourage higher density residential development.

City of Oshawa

The City of Oshawa has implemented parkland dedication policies that allow it to utilize area-specific alternative rates for the purposes of calculating cash-in-lieu, as a means to incentivize development in priority development areas:

- 0.15 ha. per 300 dwelling units for net residential density of 101 units/ha. or greater on lands within the Main Central Area, Sub-Central Area or Community Central Area
- 0.30 ha. per 300 dwellings units for net residential density of 52 units/ha. or greater on lands within the Central Business District, Main Central Area, Sub-Central Area or Community Central Area

Town of Richmond Hill

Like the City of Vaughan, the Town of Richmond Hill's parkland dedication policies also implement a fixed unit rate approach for calculating cash-in-lieu of parkland.

The Town of Richmond Hill is in the process of preparing a parkland background study in order to address parkland dedication requirements. Previously, the City utilized the alternative Planning Act standard of 1 hectare per 300 dwelling units, but recently they adopted a cash-in-lieu rate set at \$10,000 per dwelling unit. Council made this decision on the basis of their review of work in progress. This standard has only been applied at the Liberty and Campus 2000 developments to date and only applied on anything above 16 uph.

This standard is only intended to be in effect until the end of the year and it is expected that further work will be completed by then in support of the approach to addressing parkland need and requirements through parkland dedication or cash-in-lieu payment. It is understood that the Town's use of the \$10,000.00 per unit standard has been recently extended into 2013.

5.2 Testing Parkland Dedication Approaches and Impacts

The following overview compares Markham's current parkland dedication approaches against the Planning Act's permitted thresholds and the approaches currently being implemented by Richmond Hill, Vaughan and Toronto, in low, medium and high-density development scenarios.

The purpose of this analysis is to look at how variations in development area, density, household size and average land values affect parkland dedication requirements in each of the respective municipalities and to compare the amount of parkland that would be required for residential development under the current policies of Markham and these other municipalities.

These municipalities were selected because they represent a diversity of approaches to parkland dedication being utilized across the Province that vary from the applicable Planning Act standards. Variations found in the approach for calculating the parkland dedication amount included use of:

- land area-based rates (% of the development site's area);
- unit-based rates (e.g. area/no. of dwelling units or people);
- fixed rates (e.g. \$/unit); and,
- caps/maximums on the amount of parkland dedication that can be required (e.g. 10% of the development site).

Appendix B provides the detailed data and calculations in tabular form that serve as the basis for this analysis.

Residential parkland dedication rates that were tested for this analysis are drawn from the following Provincial and municipalities' policies, as outlined in Section 5.1.2:

- Regular Planning Act Standard – 5% of the development site
- Alternative Planning Act Standard – 1 ha. per 300 dwelling units
- City of Markham (current) – 1.2141 ha./1,000 people
- Town of Richmond Hill – \$10,000/unit
- City of Vaughan – \$4,100/unit
- City of Toronto – 0.4 ha. per 300 dwelling units for lands within “parkland acquisition priority areas”, with caps based on set land areas (<1 ha. at 10%, 1-5 ha. at 15%, and >5 ha. at 20%)

Development scenarios were tested that varied in terms of site size, the density of development, number of people per unit, and the value of land, as outlined in Table 1. The scenarios can be summarized as follows:

- Scenarios A1-C1: Low Density for small, medium and large sites (1, 5, 20 ha.)
- Scenarios A2-C2: Medium Density for small, medium and large sites (1, 5, 20 ha.)
- Scenarios A3-C3: High Density for small, medium and large sites (1, 5, 20 ha.)

Through basic modeling of each municipality's parkland dedication policies, values were generated for:

- amount (m²) of parkland per person (PPP);
- cost (\$) per person (PPP);
- cost (\$) per unit (PKPU); and,
- total cost (\$) of parkland dedication (for 1, 5 and 20 ha. sites).

Table 1. Variables & Assumptions

Site Size					Hectare (ha.)				
Small					1				
Medium					5				
Large					20				
Land Cost Assumption (LCA)									
Small		LCA1			\$ 1,500,000/ha.				
		LCA2			\$ 3,000,000/ha.				
Medium		LCA1			\$ 3,700,000/ha.				
		LCA2			\$ 6,200,000/ha.				
		LCA3			\$ 15,000,000/ha.				
High		LCA1			\$ 4,325,000/ha.				
		LCA2			\$ 10,000,000/ha.				
		LCA3			\$ 37,000,000/ha.				
Density	Units per hectare (uph)				Persons	per		unit	
Low	17				3.36				
	27								
	37								
Medium	37				2.64				
	58								
	80								
High	80				1.91				
	114								
	148								

Summary of Acronyms Used in Tables

ha.	hectare
du	dwelling units
ppu	persons per unit
uph	units per hectare
PPP	parkland per person
PKPU	parkland per unit
LCA	land cost assumption
LCA1	land cost assumption 1
LCA2	land cost assumption 2
LCA3	land cost assumption 3
RPA	Regular Planning Act Standard
APA	Alternative Planning Act Standard
MA	Markham Alternative Standard
RHA	Richmond Hill Alternative Standard
VA	Vaughan Alternative Standard
TA	Toronto Alternative Standard

5.3 Analysis

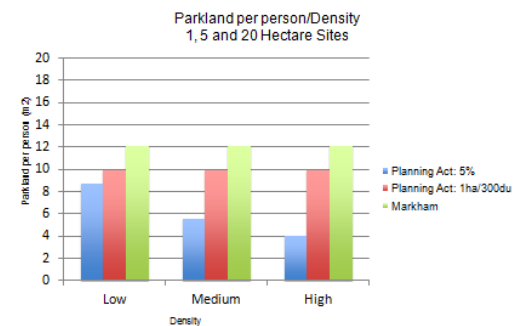
5.3.1 Analysis of Low Density Scenarios (17 to 37 uph) on Small, Medium and Large Sites (1, 5 and 20 ha.)

The following is a summary of key observations made from the comparative analysis involving the small, medium and large sites under the low, medium and high density scenarios for the five parkland dedication standards tested. It should be noted that site size did not impact the parkland dedication output on a per unit or per person basis for any of the standards (Regular Planning Act, Alternative Planning Act, Markham Alternative, Vaughan Alternative and Richmond Hill Alternative). However, because the overall land costs are higher for the medium and large site sites, the total cost of the parkland dedication for a 5 ha. and 20 ha. sites is greater than for the smaller sites, but this is merely a function of the larger parcel size (Table A1iii).

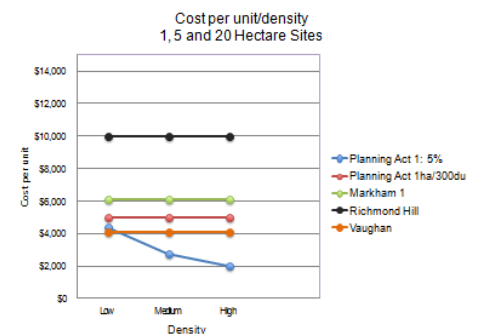
Regular Planning Act Standard (5%)

- Regular Planning Act standard generates a consistent amount of parkland as it is based upon a percentage of land area, regardless of location or density
- Amount of parkland per person varies between 4.02 to 8.75 m², with parkland per person output decreasing as density increases
- Cost of parkland per person under Land Cost Assumption 1 ranges from \$603 to \$1,313 and \$1,206 to \$2,026 under Land Cost Assumption 2, cost of parkland per person also decreases as density increases
- Cost of parkland per unit under Land Cost Assumption 1 ranges from \$2,027 to \$4,411 and \$4,054 to \$8,823 under Land Cost Assumption 2, cost of parkland per person also decreases as density increases
- Total cost of parkland dedication under Land Cost Assumption 1 is \$75,000 for 1 ha., \$375,000 for 5 ha. and \$1,500,000 for 20 ha. and under Land Cost Assumption 2 is \$150,000 for 1 ha., \$750,000 for 5 ha. and \$3,000,000 for 20 ha.
- Total cost of parkland dedication is consistent on a per ha. basis, regardless of density

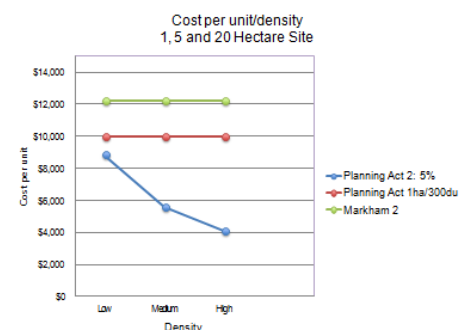
Comparison of Amount of Parkland Per Person
Low Density – Small, Medium and Large Sites
(1, 5 and 20 hectares)



Cost of Parkland Per Unit for Low Density Sites
(Land Cost Assumption: \$1,500,000/ha.)



Cost of Parkland Per Unit for Low Density Sites
(Land Cost Assumption: \$3,000,000/ha.)



Alternative Planning Act Standard (1 ha./300 dwelling units)

- Amount of parkland per person remains constant at 9.92 m² regardless of density
- Cost of parkland per person remains constant at \$1,488 under Land Cost Assumption 1, \$2,976 under Land Cost Assumption 2
- Cost of parkland per unit remains constant at \$5,000 under Land Cost Assumption 1, \$10,000 under Land Cost Assumption 2
- Alternative Planning Act standard produces a consistent amount and cost of parkland per person and parkland per unit across all densities as it is a function of the number of units
- Total cost of parkland dedication under:
 - Land Cost Assumption 1 is \$85,000-\$185,000 for 1 ha.; and,
 - Land Cost Assumption 2 is \$170,000-\$370,000 for 1 ha.

Markham Alternative Standard (1.2141 ha./1,000 people)

- The Markham Alternative standard of 1.2141 hectares per 1,000 people is unique, as it directly relates parkland dedication to the population generated by development.
- Amount of parkland per person generated is 12.14 m², which is higher rate of generation than both the Regular Planning Act standard and the Alternative Planning Act standard under the Low Density scenario
- Cost of parkland per person remains constant under density scenarios at \$1,821 under Land Cost Assumption 1 and \$3,642 under Land Cost Assumption 2, both of which are higher than the Regular Planning Act standard and the Alternative Planning Act standard
- Cost of parkland per unit remains constant for density scenarios \$6,119.06 under Land Cost Assumption 1 and \$12,238.13 under Land Cost Assumption 2, both of which are higher than the Regular Planning Act standard and the Alternative Planning Act standard
- Total cost of parkland dedication under:
 - Land Cost Assumption 1 is \$104,024-\$226,405 for 1 ha; and,
 - Land Cost Assumption 2 is \$208,048-\$452,810 for 1 ha.

- The Markham Alternative standard exceeds the Alternative Planning Act standard of 1 ha. per 300 dwelling units and is unlikely to be permitted

Richmond Hill Alternative Standard (\$10,000/unit)

- Cost of parkland per person under Land Cost Assumption 1 is \$2,976 and cost of parkland per unit under Land Cost Assumption 1 is \$10,000
- Unlike other standards based upon provision of a set amount of parkland in relation to a specific land area or number of persons/units, the Richmond Hill Alternative standard is a fixed cash-in-lieu rate of \$10,000 per residential dwelling unit
- Application of the Richmond Hill Alternative standard does not generate a specific amount of parkland per person as once the cash-in-lieu payment has been made, it is incumbent on the municipality to allocate funds for the acquisition of parkland and then acquire the land and develop it for parks purposes, but difficult to track and assess
- Total cost of parkland dedication under:
 - Land Cost Assumption 2 is \$170,000-\$370,000 for 1 ha.

Vaughan Alternative Standard (\$4,100/unit)

- The Vaughan Alternative standard, like the Richmond Hill Alternative standard, does not generate a specific amount of parkland per person as it is fixed number
- As it is a fixed number, cost of parkland per person remains constant under density scenarios at \$1,220 under Land Cost Assumption 1 and cost of parkland per unit is also constant at \$4,100/unit
- Total cost of parkland dedication under:
 - Land Cost Assumption 1 is \$69,700-\$151,700 for 1 ha.
- In some instances, the Vaughan Alternative standard is either below or above what would be permitted under the Regular Planning Act standard, whereas in all cases is it below what would be permitted under the Alternative Planning Act standard

Table A1: Low Density – Small, Medium and Large Sites (1, 5 and 20 ha.)¹

Density >	Amount of PPP (m ²)			Cost of PPP (\$)			Cost of PKPU (\$)		
	17 uph	27 uph	37 uph	17 uph	27 uph	37 uph	17 uph	27 uph	37 uph
RPA1 (LCA1) \$1,500,000	8.75	5.51	4.02	\$1,313	\$826	\$603	\$4,411	\$2,777	\$2,027
RPA2 (LCA2) \$3,000,000	8.75	5.51	4.02	\$2,626	\$1,653	\$1,206	\$8,823	\$5,555	\$4,054
APA1 (LCA1) \$1,500,000	9.92			\$1,488			\$5,000		
APA2 (LCA2) \$3,000,000	9.92			\$2,976			\$10,000		
MA1 (LCA1) \$1,500,000	12.14			\$1,821			\$6,119		
MA2 (LCA2) \$3,000,000	12.14			\$3,642			\$12,238		
RHA (LCA1) \$1,500,000	n/a			\$2,976			\$10,000		
VA (LCA1) \$1,500,000	n/a			\$1,220			\$4,100		

¹ The parkland output values (PPP and PKPU) are identical for the small, medium and large site size scenarios.

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Table Aiii. Cost of Parkland Dedication by Site for Low Density Scenarios

Site Size >	Small (1 ha.)			Medium (5 ha.)			Large (20 ha.)		
Density >	17 uph	27 uph	37 uph	17 uph	27 uph	37 uph	17 uph	27 uph	37 uph
RPA1 (LCA1) \$1,500,000	\$75,000			\$375,000			\$1,500,000		
RPA2 (LCA2) \$3,000,000	\$150,000			\$750,000			\$3,000,000		
APA1 (LCA1) \$1,500,000	\$85,000	\$135,000	\$185,000	\$425,000	\$675,000	\$925,000	\$1,700,000	\$2,700,000	\$3,700,000
APA2 (LCA2) \$3,000,000	\$170,000	\$270,000	\$370,000	\$850,000	\$1,350,000	\$1,850,000	\$3,400,000	\$5,400,000	\$7,400,000
MA1 (LCA1) \$1,500,000	\$104,024	\$165,214	\$226,405	\$520,120	\$826,073	\$1,132,026	\$2,080,481	\$3,304,294	\$4,528,107
MA2 (LCA2) \$3,000,000	\$208,048	\$330,429	\$452,810	\$1,040,240	\$1,652,147	\$2,264,053	\$4,160,963	\$6,608,589	\$9,056,214
RHA (LCA2) \$3,000,000	\$170,000	\$270,000	\$370,000	\$850,000	\$1,350,000	\$1,850,000	\$3,400,000	\$5,400,000	\$7,400,000
VA (LCA1) \$1,500,000	\$69,700	\$110,700	\$151,700	\$348,500	\$553,500	\$758,500	\$1,394,000	\$2,214,000	\$3,034,000

5.3.2 Analysis of Medium Density Scenarios on Small, Medium and Large Sites

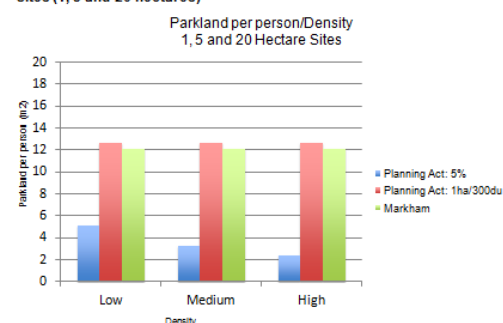
The following is a summary of some of the key observations from the comparative analysis involving the small, medium and large sites under the high density scenarios. Please note that for the medium density scenarios, the land cost assumptions were raised. This results in higher parkland costs, but only as a function of the higher land value.

With the exception of the Toronto Alternative standard, which is described in greater detail below, all of the standards function in the same way regardless of site size in the medium density scenarios (i.e. all of the parkland per person and parkland per unit amounts/costs are the same for small, medium and large sites). The only variation is in the total cost of parkland dedication per site, which increases because the overall land costs are higher for the medium and large sites (Table A3ii).

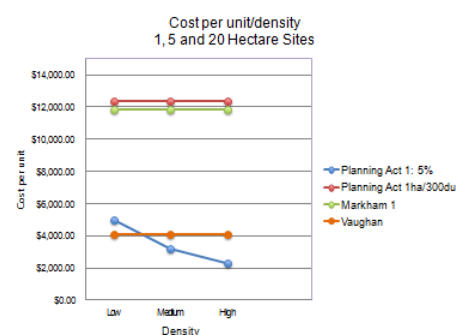
Regular Planning Act Standard (5%) – Land Cost Assumptions 1, 2 and 3

- Regular Planning Act standard generates a consistent amount of parkland as it is based upon a percentage of land area, regardless of location or density
- Amount of parkland per person varies between 2.37 to 5.12 m², with amount of parkland per person output decreasing as density increases
- Cost of parkland per person under Land Cost Assumption 1 is \$875-\$1,893, \$1,467-\$3,173 under Land Cost Assumption 2 and \$3,551-\$7,678 under Land Cost Assumption 3, with the cost decreasing as density increases
- Cost of parkland per unit under Land Cost Assumption 1 is \$2,312-\$5,000, \$3,875-\$8,378 under Land Cost Assumption 2 and \$9,375-\$20,270 under Land Cost Assumption 3, with the cost decreasing as density increases
- Total cost of parkland dedication under:
 - Land Cost Assumption 1 is \$185,000 for 1 ha;
 - Land Cost Assumption 2 is \$310,000 for 1 ha; and,
 - Land Cost Assumption 3 is \$750,000 for 1 ha.

Comparison of Amount of Parkland Per Person
Medium Density – Small, Medium and Large
Sites (1, 5 and 20 hectares)



Cost of Parkland Per Unit for Medium Density Sites
(Land Cost Assumption: \$3,700,000/ha.)



- Total cost of parkland dedication is consistent on a per ha. basis, regardless of density

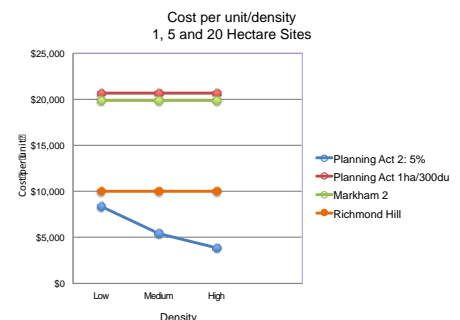
Alternative Planning Act Standard (1 ha./300 dwelling units)

- Amount of parkland per person remains constant at 12.63 m² regardless of density
- Cost of parkland per person remains constant at \$4,671 under Land Cost Assumption 1, \$7,828 under Land Cost Assumption 2 and \$18,939 under Land Cost Assumption 3
- Cost of parkland per unit remains constant at \$12,333 under Land Cost Assumption 1, \$20,666 under Land Cost Assumption 2 and \$50,000 under Land Cost Assumption 3
- Alternative Planning Act standard produces a consistent amount and cost of parkland per person and parkland per unit across all densities as it is a function of the number of units
- Total cost of parkland dedication under:
 - Land Cost Assumption 1 is \$456,333-\$986,666 for 1 ha.;
 - Land Cost Assumption 2 is \$764,666-\$1,653,333 for 1 ha.; and,
 - Land Cost Assumption 3 is \$1,850,000-\$4,000,000 for 1 ha.

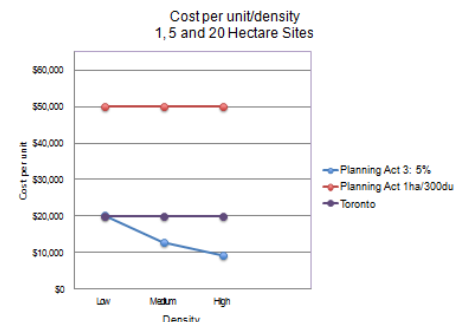
Markham Alternative Standard (1.2141 ha./1,000 people)

- Amount of parkland per person generated is 12.14m², which is a higher rate of parkland generation than Regular Planning Act standard, but lower than the Alternative Planning Act standard
- Cost of parkland per person remains constant under density scenarios at \$4,492 under Land Cost Assumption 1 and \$7,527 under Land Cost Assumption 2, which is higher than the Regular Planning Act standard, but lower than the Alternative Planning Act
- Cost of parkland per unit remains constant for density scenarios \$11,859 under Land Cost Assumption 1 and \$19,872 under Land Cost Assumption 2, which are higher than the Regular Planning Act standard, lower than Alternative Planning Act standard
- Total cost of parkland dedication under:
 - Land Cost Assumption 1 is \$438,795-\$948,746 for 1 ha.; and,

Cost of Parkland Per Unit for Medium Density Sites (Land Cost Assumption: \$6,200,000/ha.)



Cost of Parkland Per Unit for Medium Density Sites (Land Cost Assumption: \$15,000,000/ha)



- Land Cost Assumption 2 is \$735,278-\$1,589,791 for 1 ha.

- The Markham Alternative standard exceeds the Regular Planning Act standard, but is lower than the Alternative Planning Act standard

Richmond Hill Alternative Standard (\$10,000/unit)

- Cost of parkland per person under Land Cost Assumption 1 is \$3,787 and cost of parkland per unit under Land Cost Assumption 1 is \$10,000
- Unlike other standards based upon provision of a set amount of parkland in relation to a specific land area or number of persons/units, the Richmond Hill Alternative standard is a fixed cash-in-lieu rate of \$10,000 per residential dwelling unit
- Application of the Richmond Hill Alternative standard does not generate a specific amount of parkland per person once the cash-in-lieu payment has been made, it is incumbent on the municipality to allocate funds for the acquisition of parkland and then acquire the land and develop it for parks purposes, but difficult to track and assess
- Total cost of parkland dedication under:
 - Land Cost Assumption 2 is \$370,000-\$800,000 for 1 ha.

Vaughan Alternative Standard (\$4,100/unit)

- The Vaughan Alternative Standard, like the Richmond Standard, does not generate a specific amount of parkland per person as it is fixed number
- As it is a fixed number, cost of parkland per person remains constant under density scenarios at \$1,553 under Land Cost Assumption 1 and cost of parkland per unit is also constant at \$4,100/unit
- Total cost of parkland dedication under:
 - Land Cost Assumption 1 is \$151,700-\$328,000 for 1 ha.
- In some instances, the Vaughan Alternative standard is either below or above what would be permitted under the Regular Planning Act standard, whereas in all cases is it below what would be permitted under the Alternative Planning Act standard

Analysis of Toronto Alternative Standard (0.4 ha./300 units)

- Application of the Toronto Alternative standard generates a consistent parkland per person amount of 5.05 m² for all density scenarios, which is either slightly below or equivalent to the Regular Planning Act standard at various densities, but well below the Alternative Planning Act standard
- Application of the Toronto Alternative standard under the various density scenarios produces consistent values for cost of parkland per person (\$7575.76) and parkland per unit (\$20,000) across all density scenarios, except that a cap kicks in for just the 1 ha. site, and only at the higher density range (80 uph)
- The Toronto Alternative standard is rather similar to the highest values under the Alternative Planning Act standard for cost of parkland per person and parkland per unit, but less than half what could be achieved under the Alternative Planning Act standard

Table A2i: Medium Density – Small, Medium and Large Sites (1, 5 and 20 ha.)¹

Density >	Amount of PPP (m ²)			Cost of PPP (\$)			Cost of PKPU (\$)		
	37 uph	58 uph	80 uph	37 uph	58 uph	80 uph	37 uph	58 uph	80 uph
RPA1 (LCA1) \$3,700,000/ha.	5.12	3.27	2.37	\$1,893	\$1,208	\$875	\$5,000	\$3,189	\$2,312
RPA2 (LCA2) \$6,200,000/ha.	5.12	3.27	2.37	\$3,173	\$2,024	\$1,467	\$8,378	\$5,344	\$3,875
RPA3 (LCA3) \$15,000,000/ha.	5.12	3.27	2.37	\$7,678	\$4,898	\$3,551	\$20,270	\$12,931	\$9,375
APA (LCA1) \$3,700,000/ha.	12.63			\$4,671			\$12,333		
APA2 (LCA2) \$6,200,000/ha.	12.63			\$7,828			\$20,666		
APA3 (LCA3) \$15,000,000/ha.	12.63			\$18,939			\$50,000		
MA1 (LCA1) \$3,700,000/ha.	12.14			\$4,492			\$11,859		
MA2 (LCA2) \$6,200,000/ha.	12.14			\$7,527			\$19,872		
RHA (LCA2) \$6,200,000/ha.	n/a			\$3,787			\$10,000		
VA (LCA1) \$3,700,000/ha.	n/a			\$1,553			\$4,100		
TA (LCA3) 1 ha. site only ¹ \$15,000,000/ha. \$3,700,000 cap (10%)	5.05	5.05	4.88	\$7,575	\$7,575	\$7,102	\$20,000	\$20,000	\$18,750
TA Pre Cap Constant (for 5 and 20 ha. sites)	5.05			\$7,575			\$20,000		

¹ The parkland output values (PPP and PKPU) are identical for the medium site (5 ha.) and large site (20 ha.) scenarios, except for the TA standard was triggered under the 80 uph scenario on 1 ha. sites. Under the medium and large site scenarios, the TA standard cap was not triggered in any of the scenarios, as such, the “pre cap constant” values apply consistently.

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Table Azii. Cost of Parkland Dedication by Site for Medium Density Scenarios

Site Size	Small (1 ha.)			Medium (5 ha.)			Large (20 ha.)		
Density	37 uph	58 uph	80 uph	37 uph	58 uph	80 uph	37 uph	58 uph	80 uph
RPA1 (LCA1) \$3,700,00	\$185,000			\$925,000			\$3,700,000		
RPA2 (LCA2) \$6,200,000	\$310,000			\$1,550,000			\$6,200,000		
RPA2 (LCA3) \$15,000,000	\$750,000			\$3,750,000			\$15,000,000		
APA1 (LCA1) \$3,700,00	\$456,333	\$715,333	\$986,666	\$2,281,666	\$3,576,666	\$4,933,333	\$9,126,666	\$14,306,666	\$19,733,333
APA2 (LCA2) \$6,200,000	\$764,666	\$1,198,666	\$1,653,333	\$3,823,333	\$5,993,333	\$8,266,666	\$15,293,333	\$23,973,333	\$33,066,666
APA3 (LCA3) \$15,000,000	\$1,850,000	\$2,900,000	\$4,000,000	\$9,300,000	\$14,500,000	\$19,900,000	\$37,000,000	\$58,000,000	\$80,000,000
MA1 (LCA1) \$3,700,00	\$438,795	\$687,841	\$948,746	\$2,193,975	\$3,439,205	\$4,743,731	\$8,775,903	\$13,756,821	\$18,974,926
MA2 (LCA2) \$6,200,000	\$735,278	\$1,152,598	\$1,589,791	\$3,676,391	\$5,762,992	\$7,948,955	\$14,705,567	\$23,051,971	\$31,795,822
RHA (LCA2) \$6,200,000	\$370,000	\$580,000	\$800,000	\$1,850,000	\$2,900,000	\$4,000,000	\$7,400,000	\$11,600,000	\$16,000,000
VA (LCA1) \$3,700,00	\$151,700	\$237,800	\$328,000	\$758,500	\$1,189,000	\$1,640,000	\$3,034,000	\$4,756,000	\$6,560,000
TA (LCA3) \$15,000,000	\$740,000	\$1,160,000	\$1,600,000	\$3,700,000	\$5,800,000	\$8,000,000	\$14,800,000	\$23,200,000	\$32,000,000
TA Cap (10, 15, 20% Land Value)	\$1,500,000	\$1,500,000	\$1,500,000	\$11,250,000	\$11,250,000	\$11,250,000	\$60,000,000	\$60,000,000	\$60,000,000

5.3.3 Analysis of High Density Scenarios on Small, Medium and Large Sites

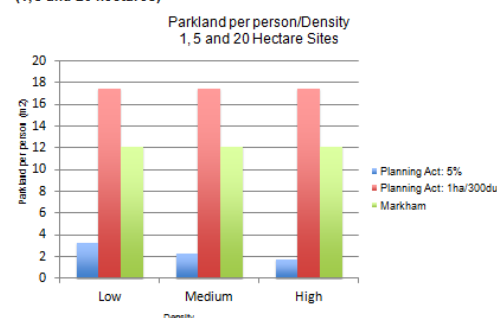
The following is a summary of some of the key observations from the comparative analysis involving the small, medium and large sites under the high density scenarios. Please note that for the high density scenarios, the land cost assumptions were raised. This results in higher parkland costs, but only as a function of the higher land value.

With the exception of the Toronto Alternative standard, which is described in greater detail below, all of the standards function in the same way regardless of site size in the high density scenarios (i.e. all of the parkland per person and parkland per unit amounts/costs are the same for small, medium and large sites). The only variation is in the total cost of parkland dedication per site, which increases because the overall land costs are higher for the medium and large sites (Table A3ii).

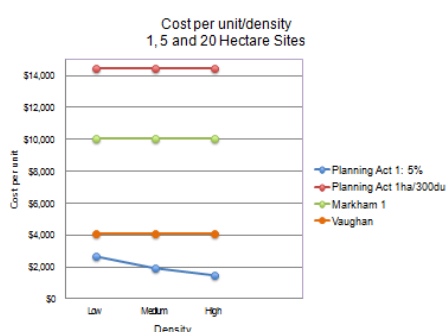
Regular Planning Act Standard (5%) – Land Cost Assumptions 1, 2 and 3

- Regular Planning Act standard generates a consistent amount of parkland as it is based upon a percentage of land area, regardless of location or density
- Amount of parkland per person varies between 1.77 and 3.27 m², with amount of parkland per person output decreasing as density increases
- Cost of parkland per person under Land Cost Assumption 1 is \$765-\$1,415, \$1,768-\$3,272 under Land Cost Assumption 2 and \$6,544-\$12,107 under Land Cost Assumption 3, with the cost decreasing as density increases
- Cost of parkland per unit under Land Cost Assumption 1 is \$1,461-\$2,703, \$3,378-\$6,250 under Land Cost Assumption 2 and \$12,500-\$23,125 under Land Cost Assumption 3, with the cost decreasing as density increases
- Total cost of parkland dedication under:
 - Land Cost Assumption 1 is \$216,250 for 1 ha.;
 - Land Cost Assumption 2 is \$500,000 for 1 ha.; and,
 - Land Cost Assumption 3 is \$1,850,000 for 1 ha.
- Total cost of parkland dedication is consistent on a per ha. basis, regardless of density

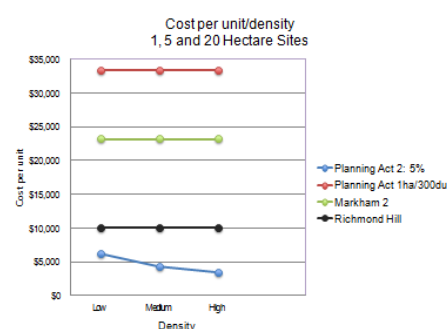
Comparison of Amount of Parkland Per Person High Density – Small, Medium and Large Sites (1, 5 and 20 hectares)



Cost of Parkland Per Unit for High Density Sites (Land Cost Assumption: \$4,350,000)



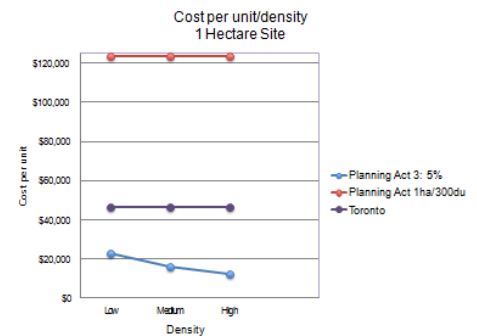
Cost of Parkland Per Unit for High Density Sites (Land Cost Assumption: \$10,000,000/ha.)



Alternative Planning Act Standard (1 ha./300 dwelling units)

- Amount of parkland per person remains constant at 17.45 m² regardless of density
- Cost of parkland per person remains constant at \$7,547 under Land Cost Assumption 1, \$17,452 under Land Cost Assumption 2 and \$64,572 under Land Cost Assumption 3
- Cost of parkland per unit remains constant at \$14,416 under Land Cost Assumption 1, \$33,333 under Land Cost Assumption 2 and \$123,333 under Land Cost Assumption 3
- Alternative Planning Act standard produces a consistent amount and cost of parkland per person and parkland per unit across all densities as it is a function of the number of units
- Total Cost of parkland dedication under:
 - Land Cost Assumption 1 is \$1,153,333-\$2,133,666 for 1 ha.;
 - Land Cost Assumption 2 is \$2,666,666-\$4,933,333 for 1 ha.; and,
 - Land Cost Assumption 3 is \$9,866,666-\$18,253,333 for 1 ha.

Cost of Parkland Per Unit for High Density Sites
(Land Cost Assumption: \$37,000,000/ha.)

**Markham Alternative Standard (1.2141 ha./1,000 people)**

- Amount of parkland per person generated is 12.14m², which is a higher rate of parkland generation than Regular Planning Act standard, but lower than the Alternative Planning Act standard
- Cost of parkland per person remains constant under density scenarios at \$5,250 under Land Cost Assumption 1, which is higher than the Regular Planning Act, but lower than the Alternative Planning Act standard
- Cost of parkland per person remains constant under density scenarios at \$12,141 under Land Cost Assumption 2, which is higher than or equivalent to the Regular Planning Act standard, but lower than the Alternative Planning Act standard
- Cost of parkland per unit remains constant under density scenarios at \$10,029 under Land Cost Assumption 1, which is higher than the Regular Planning Act standard, but lower than the Alternative Planning Act standard
- Cost of parkland per unit remains constant under density scenarios at \$23,189 under Land Cost Assumption 2, which is higher than the

Regular Planning Act standard, but lower than the Alternative Planning Act standard

- Total cost of parkland dedication under:
 - Land Cost Assumption 1 is \$438,795-\$948,746 for 1 ha.; and,
 - Land Cost Assumption 2 is \$735,278-\$1,589,791 for 1 ha.
- The Markham Alternative standard exceeds the Regular Planning Act standard, but is lower than the Alternative Planning Act standard

Richmond Hill Alternative Standard (\$10,000/unit)

- Cost of parkland per person under Land Cost Assumption 1 is \$5,235 and cost of parkland per unit under Land Cost Assumption 1 is \$10,000
- Unlike other standards based upon provision of a set amount of parkland in relation to a specific land area or number of persons/units, the Richmond Hill Alternative cash-in-lieu standard is a fixed rate of \$10,000 per residential dwelling unit
- Application of the Richmond Hill Alternative standard does not generate a specific amount of parkland per person as once the cash-in-lieu payment has been made, it is incumbent on the municipality to allocate funds for the acquisition of parkland and then acquire the land and develop it for parks purposes, but difficult to track and assess
- Total cost of parkland dedication under:
 - Land Cost Assumption 2 is \$800,000-\$1,480,000 for 1 ha.

Vaughan Alternative Standard (\$4,100/unit)

- The Vaughan Alternative standard, like the Richmond Hill Alternative standard, does not generate a specific amount of parkland per person as it is fixed number
- As it is a fixed number, cost of parkland per person remains constant under density scenarios at \$2,146 under Land Cost Assumption 1 and cost of parkland per unit is also constant at \$4,100/unit
- Total cost of parkland dedication under:

- Land Cost Assumption 1 is \$328,000-\$606,800 for 1 ha.
- The Vaughan Alternative standard is above what would be permitted under the Regular Planning Act standard,, but below what would be permitted under the Alternative Planning Act standard

Analysis of Toronto Alternative Standard (0.4 ha./300 units)

- Application of the Toronto Alternative standard generates should generate a consistent parkland per person amount of 6.98 m² for all density scenarios, however the cap is triggered for the 1 ha. site in all density scenarios and for the 5 ha. site at the 114 and 148 uph density scenarios, which reduces the parkland per person in each case, although each is above the Regular Planning Act standards but below the Alternative Planning Act standard
- Application of the Toronto Alternative standard under the various density scenarios produces consistent values for cost of parkland per person (\$25,828) and parkland per unit (\$49,333) except where the caps are triggered for the 1 ha. and 5 ha. sites at certain density scenarios
- The Toronto Alternative standard is greater than what could be required under the Regular Planning Act standard at all densities, but is significantly less than what could be required under the Alternative Planning Act standard

Table A3i: High Density – Small, Medium and Large Sites (1, 5 and 20 ha.)¹

Density >	Amount of PPP (m ²)			Cost of PPP (\$)			Cost of PKPU (\$)		
	80 uph	114 uph	148 uph	80 uph	114 uph	148 uph	80 uph	114 uph	148 uph
RPA1 (LCA1) \$4,325,000/ha.	3.27	2.30	1.77	\$1,415	\$993	\$765	\$2,703	\$1,896	\$1,461
RPA2 (LCA2) \$10,000,000/ha.	3.27	2.30	1.77	\$3,272	\$2,296	\$1,768	\$6,250	\$4,385	\$3,378
RPA3 (LCA3) \$37,000,000/ha.	3.27	2.30	1.77	\$12,107	\$8,496	\$6,544	\$23,125	\$16,228	\$12,500
APA (LCA1) \$4,325,000/ha.	17.45			\$7,547			\$14,416		
APA2 (LCA2) \$10,000,000/ha.	17.45			\$17,452			\$33,333		
APA3 (LCA3) \$37,000,000/ha.	17.45			\$64,572			\$123,333		
MA1 (LCA1) \$4,325,000/ha.	12.14			\$5,250			\$10,029		
MA2 (LCA2) \$10,000,000/ha.	12.14			\$12,141			\$23,189		
RHA (LCA2) \$10,000,000/ha.	n/a			\$5,235			\$10,000		
VA (LCA1) \$4,325,000/ha.	n/a			\$2,146			\$4,100		
TA 1 ha. site (LCA3) \$37,000,000/ha.	6.54	4.59	3.54	\$24,214	\$16,992	\$13,089	\$46,250	\$32,456	\$25,000
TA 5 ha. site (LCA3) \$37,000,000/ha.	6.98	6.88	5.32	\$25,828	\$25,489	\$19,633	\$49,333	\$48,684.21	\$37,500
TA 20 ha. site (LCA3) \$37,000,000/ha.	6.98	6.98	6.98	\$25,828	\$25,828	\$25,828	\$49,333	\$49,333	\$49,333
TA Pre Cap Constant (5 and 20 ha. sites)	6.98			\$25,828			\$49,333		

¹ The parkland output values (PPP and PKPU) are identical for the small (1 ha.), medium site (5 ha.) and large site (20 ha.) scenarios except for the TA standard. The TA standard cap was triggered on both the 1 ha. and 5 ha. sites, but not the 20 ha. site. The instances where the cap was triggered are listed by site size.

Table A3ii. Cost of Parkland Dedication by Site for High Density Scenarios

Site Size Density	Small (1 ha.)			Medium (5 ha.)			Large (20 ha.)		
	80 uph	114 uph	148 uph	80 uph	114 uph	148 uph	80 uph	114 uph	148 uph
RPA1 (LCA1) \$4,325,000	\$216,250			\$1,081,250			\$4,325,000		
RPA2 (LCA2) \$10,000,000	\$500,000			\$2,500,000			\$10,000,000		
RPA2 (LCA3) \$37,000,000	\$1,850,000			\$9,250,000			\$37,000,000		
APA1 (LCA1) \$4,325,000	\$1,153,333	\$1,643,500	\$2,133,666	\$5,766,666	\$8,217,500	\$10,668,333	\$23,066,666	\$32,870,000	\$42,673,333
APA2 (LCA2) \$10,000,000	\$2,666,666	\$3,800,000	\$4,933,333	\$13,333,333	\$19,000,000	\$24,666,666	\$53,333,333	\$76,000,000	\$98,666,666
APA3 (LCA3) \$37,000,000	\$9,866,666	\$14,060,000	\$18,253,333	\$49,333,333	\$70,300,000	\$91,266,666	\$197,333,333	\$281,200,000	\$365,066,666
MA1 (LCA1) \$4,325,000	\$802,350	\$1,143,348	\$1,484,347	\$4,011,750	\$5,716,744	\$7,421,738	\$16,047,002	\$22,866,978	\$29,686,954
MA2 (LCA2) \$10,000,000	\$1,855,144	\$2,643,581	\$3,432,017	\$9,275,724	\$13,217,906	\$17,160,089	\$37,102,896	\$52,871,626	\$68,640,357
RHA (LCA2) \$10,000,000	\$800,000	\$1,140,000	\$1,480,000	\$4,000,000	\$5,700,000	\$7,400,000	\$16,000,000	\$22,800,000	\$29,600,000
VA (LCA1) \$4,325,000	\$328,000	\$467,400	\$606,800	\$1,640,000	\$2,337,000	\$3,034,000	\$6,560,000	\$9,348,000	\$12,136,000
TA (LCA3) \$37,000,000	\$3,946,666	\$5,624,000	\$7,301,333	\$19,733,333	\$28,120,000	\$36,506,666	\$78,933,333	\$112,480,000	\$146,026,666
TA Cap (10, 15, 20% Land Value)	\$3,700,000	\$3,700,000	\$3,700,000	\$27,750,000	\$27,750,000	\$27,750,000	\$148,000,000	\$148,000,000	\$148,000,000

5.3.4 Summary of Analysis of Low, Medium and High Density Scenarios on Small, Medium and Large Sites (1, 5 & 20 ha.)

For this analysis, six different approaches to parkland dedication were tested to determine how the parkland output (parkland per person in land area, parkland per person in dollars and parkland per unit in dollars) of each standard varies according to the density of development, and the size of the development site. The six approaches were also compared to one another in terms of the amount of parkland per person generated (m²).

Density

By and large, the standards functioned the same in the low, medium and high-density scenarios. There were some minor differences or variations, as noted below.

The Regular Planning Act standard is the only standard that is sensitive to density on a cost per unit or cost per person basis. With the Regular Planning Act, the amount of parkland decreases as density increases (both in terms of the amount of parkland per person (m²) and the cost of parkland per unit or person (\$)). This function is accentuated as density increases. At the highest end of the density spectrum, the Regular Planning Act standard generates significantly less parkland per person than at the lowest density scenario (1.77 ha./person at 148 uph versus 8.75 ha./person at 17 uph). While the per unit amount and cost decrease with density, the total cost of parkland dedication per site remains constant. This is because the total cost (or amount) is amortized over the larger number of units.

The Regular Planning Act standard is considered inequitable since lower density development generally provides more private outdoor open space on private property, and the owners may have less need or be less likely to utilize public lands for such uses. In comparison, residents of higher density development are more reliant on public parkland to meet their recreational needs.

Compared to the Regular Planning Act, the unit-based standards (Alternative Planning Act standard, Markham Alternative standard, Vaughan Alternative standard, Richmond Hill Alternative standard) produce a consistent amount and cost of parkland on a per unit basis (parkland per person and parkland per unit) regardless of density. However, density does impact the total cost of parkland dedication per

site, but is presumably off-set by higher rates of return from additional unit sales. Under the unit-based standards, as density increases so does the total cost of parkland dedication. This is because the per unit cost accumulates without any other limitation (i.e. no “cap”) and thus generates a higher total cost.

The Toronto Alternative standard is like the other unit-based standards, but with a cap on the amount of parkland (m² and \$) that can be required. Like the other unit-based standards, the Toronto Alternative standard generates a consistent amount of parkland on a per unit basis (parkland per person or parkland per unit), until the parkland dedication cap is triggered when the density increases to certain point and thus increases the total dedication. Once the cap is triggered (when it reaches 10, 15 or 20% of the value of the site, depending upon the site size) the parkland per person and the parkland per unit and parkland per unit amount and cost reach a peak and then begin to decrease as density increases. This happens because any units above that cap are essentially “free”, so the overall unit cost is reduced. Conversely, the total cost of parkland dedication per site for the Toronto Alternative standard increases as density increases – until the cap is triggered, at which point the total cost remains constant. As intended, the cap was more likely to be triggered at higher densities, and particularly on smaller sites.

Site Size

In terms of the impact of site size on parkland output, all but one of the standards generated the same amount of parkland per unit or person regardless of site size (i.e. the PPP and PKPU values did not change based on site size). However, because the overall land costs are higher for the medium and large sites, the total cost of the parkland dedication for a 5 ha. and 20 ha. sites is greater than for 1 ha., but this is merely a function of the larger parcel size.

The only standard for which the per unit value changed between the small, medium and large site scenarios was the TA standard, and only for the scenarios in which the cap was triggered. In these situations, the impact of density on parkland cost (total and per unit) was inversed, as described above, however, this was a function of the cap and not the site size. Notably, the cap was triggered on the 1 ha. site under the medium density scenario and on the 1 and 5 ha. sites under the high density scenario.

Comparison of the Standards

When all standards are compared against one another, the Alternative Planning Act standard and Markham alternative standards always seem to generate the greatest amount of parkland, and an amount that was greater than for the Regular Planning Act. In some cases (lower density residential development), the Markham Alternative standard exceeds the Alternative Planning Act standard maximum and thus would not be allowed under The Planning Act.

The Markham Alternative standard and Alternative Planning Act standards sometimes set the upper limits or the middle ground. The Alternative Planning Act standard was higher than the Markham Alternative standard in the medium and high density scenarios, but lower than the Markham Alternative standard in the low density scenarios. As such, the Markham Alternative standard exceeds the Planning Act maximum in the low-density scenarios only.

The Toronto Alternative and Regular Planning Act standards tended to generate the least amount of parkland relative to the other standards (i.e. consistently less than the Richmond Hill alternative standard, Vaughan alternative standard, Alternative Planning Act, or Markham Alternative standards), although the ranking of these three among each other varied depending on the density of development, as follows:

- The Toronto Alternative standards were not tested under the low-density scenarios (as they are inherently intended for medium to high density development), and as such, the Regular Planning Act standard generated the least amount of parkland in terms of parkland per person (m²), parkland per person (\$) and parkland per unit (\$) in the low-density scenarios.
- In the medium density scenarios, the Regular Planning Act standard generated more parkland than the Toronto Alternative standard only under the lowest medium density (37 uph). Otherwise, at 58 and 80 uph, the Toronto Alternative standard generated more parkland than the Regular Planning Act standard.
- In the high-density scenarios, the Regular Planning Act standard consistently generated the least amount parkland.

A ranking of the six standards is summarized below:

Low Density (17, 27, 37 uph): RHA > VA > MA > **APA** > RPA
 Medium Density (37, 58, 80 uph): RHA > VA > **APA** > MA > TA/RPA*
 High Density (80, 114, 148 uph): RHA > VA > **APA** > MA > TA > RPA
 * dependent on density

5.4 SUMMARY OF COMPARATIVE ANALYSIS

Implications of the Use of Planning Act Standards

- In most scenarios, the Regular Planning Act standard generates the least amount of parkland or cash-in-lieu. This approach is considered inappropriate because it does not consider at all the value of density increases or increases in population on a given development site.
- Use of the Regular Planning Act standard (5% dedication) also generates parkland in an inequitable manner, wherein the amount of parkland per person decreases as density increases, even though there is less private amenity space in higher density developments and a greater need for public parkland.
- Use of the Alternative Planning Act standard (1 ha. per 300 du) would provide for more equitable distribution of parkland between low-low and low-high density areas, and a greater amount of parkland overall than the Regular Planning Act standard.
- The Alternative Planning Act standard is more equitable than the Regular Planning Act standard and generates the greatest amount of parkland permitted under the Planning Act, making it a desirable approach.

However, there are other factors that need to be considered specific to Markham. It is important to recognize that medium and high-density development will primarily occur along major transportation corridors and in centres and that the City may support this distribution of density in support of transit and other planning objectives. To support those objectives, it will be important to ensure the parkland dedication requirement balances the need for parkland to serve these areas and provides an appropriate level of service, but that it does not deter or detract from the ability or desire of the private sector to provide these forms of development or create an undue strain on the feasibility of redevelopment. Whether or not the application of the Alternative Planning Act standard, or any other alternative rate, would affect the feasibility of redevelopment remains to be tested.

The Differential Need for Parkland in Low and High Density Areas

- It is appropriate that the parkland generation requirement in a low-density scenario should be less than that for medium and higher density scenarios because in a low density context there are more frequent and larger opportunities for private open space, which can be seen to balance the difference. Further, more urban (medium and higher density areas) tend to attract not only residential parkland use, but also more use by tourists and other residents as these areas generate activities that attract these additional users.

The Financial Impact of Parkland Dedication

- From the perspective of financial viability, there are a number of economic factors that impact the feasibility of medium and high-density residential projects. Land, servicing and development costs and charges, as well as market demand and pricing thresholds are all significant factors, which contribute to viability. Parkland dedication requirements are not an insignificant element in the financial analysis, but would likely play much less of a role than the above factors.

However, from a developer's perspective, it is important that the standards and requirements are consistent and predictable and known in advance of when analysis and decisions are made regarding land purchase and project initiation. The degree to which development in Markham is sensitive to parkland dedication costs remains to be empirically determined, but based on the analysis presented here, in most cases the Markham Alternative standard is similar to or less than the Alternative Planning Act standard.

Best Practices from Other Jurisdictions

- The Alternative Planning Act and Toronto Alternative standards account for density, but do so on a per dwelling unit basis. In practice, household size (i.e. the number of people per unit) is a more accurate measure of the population generated by development, and of how density influences the level of demand on the parks system. Although high-density development generates a greater number of units than low-density development, the number of people per unit typically decreases as density increases.
- Of the unit-based standards tested (which all account for the impact of density), the Markham Alternative standard is the only one that directly accounts for the number of people generated by development, and as such is the most equitable rate for generating parkland dedication. The exact value (i.e. amount of parkland /

number of people) generated by the Markham Alternative standard fell within the mid-range of the standards, which suggests it is an appropriate rate, except in the low density scenario where it exceeds the Planning Act maximum.

- The unit-based approach to parkland dedication (e.g. Alternative Planning Act) has been criticized for penalizing high density development because the total cost of parkland dedication can escalate indefinitely as the number of units accumulate.
- Of the unit-based standards, the Toronto Alternative standard was the only one that included a cap on the amount of parkland dedication that can be required on any given site (e.g. 5% on 1 ha development site). This approach ensures that density is taken into account so that higher density development generates more parkland than lower density development – but only to a certain point. This approach is effective as a planning tool because it ensures parkland dedication supports the intensification objectives of growth management. However, the use of a cap creates a situation where some component of a development is basically exempt from the provision of parkland, or cash-in-lieu of land. This is not considered equitable or appropriate.

5.5 CONCLUSIONS AND RECOMMENDATIONS FROM COMPARATIVE ANALYSIS

- Markham's current approach to parkland conveyance is acceptable under the provisions of the Planning Act (1 hectare per 300 dwelling units or 1.2141 hectares per 1,000 residents, whichever is less).
- In the Low Density Scenarios, the Alternative Planning Act standard (1 hectare per 300 dwelling units) establishes the maximum permissible land conveyance, or cash-in-lieu of land.
- In the Medium Density Scenarios, Markham applies its Alternative of 1.2141 hectares per 1,000 residents and that provides some relief from the Alternative Planning Act standard. In this regard, Markham has positioned itself as having a lower standard than Richmond Hill, but slightly higher than Toronto, and about double that of Vaughan, on a cost per unit basis.
- In the High Density Scenarios, Markham applies its Alternative standard of 1.2141 hectares per 1,000 residents and that provides

substantial relief from the Planning Act Alternative standard. In this regard, Markham has positioned itself again as having a lower standard than Richmond Hill, but higher than Toronto and Vaughan, on a cost per unit basis.

- The Markham Alternative standard is considered the most equitable and consistent approach. It is a unique approach in that it establishes a per person requirement for parkland, as opposed to relating parkland conveyance to the size of the site, or the number of dwelling units. This approach is a good one because it can deal with fluctuations in land cost, site size, as well as changes in density and household size in a consistent and reasonable way.
- Density and household size have a dramatic impact on a parks system because they generate park users and influence the scale and character of the parks that are required. Therefore, an approach that does not consider the impact of density and household size, such as the Regular Planning Act standard of 5 percent of land area is less relevant as it generates a disproportionate share of park space to lower density areas.
- Approaches, such as the Alternative Planning Act standard, and the Markham Alternative standard certainly respond to the impacts of density, but only the Markham approach also deals with the impact of household size. In this case, if household size is not factored into the equation, then the Planning Act Alternative can be seen as overstating parkland requirements.

Based on this analysis, future parkland conveyance requirements in Markham should:

- Generate a significant contribution towards achievement of the City's future parkland needs.
- Reflect the impact of density. Higher densities should generally generate higher amounts of parkland than low densities.
- Be as accurate as possible in terms of reflecting the impact of density on parkland demand. For example, by basing the parkland dedication requirement on the actual number of people expected to be generated by development, not the number of units.

- Support intensification objectives. A cap on the amount of parkland dedication could be established to ensure that medium and high-density development is not discouraged or detrimental to its financial viability.
- In general, a rate consistent with the Alternative Planning Act standard of 1 ha per 300 dwelling units should be used for lower density development. This rate could be converted to a “per person” rate to better reflect actual demand for parkland.
- This analysis shows that in Markham, parkland conveyance requirements should be established as follows:
 - The objective should be to achieve in Low Density contexts 9.92 square metres of parkland per person through the application of the Alternative Planning Act standard of 1 hectare per 300 dwelling units; and,
 - The objective should be to achieve 12.14 square metres per person in Medium and High Density contexts through the application of the Markham Alternative standard of 1.241 hectares per 1,000 residents.
- It is appropriate that the parkland generation requirement in a low-density scenario is less than that for medium and higher density scenarios because in a low density context there are more frequent and larger opportunities for private open space, which can be seen to balance the difference. Further, more urban (medium and higher density) areas tend to attract not only residential parkland use, but also more use by tourists and other residents of Markham as these areas generate activities that attract these additional users.
- In specific locations where intensification is encouraged or where other forms of development or objectives are desired, such as along corridors or within centres, consideration should be given to the use of mechanisms such as a reduced alternative rate and/or a cap on the amount of parkland dedication that can be required. The intent should be to seek a balance between the greater demand generated for parkland in medium and high-density areas with the financial impact of parkland dedication on the feasibility of redevelopment, which remains to be tested. Again, the rate could be converted to a “per person” rate to better reflect actual demand for parkland.

6.0 KEY CONCLUSIONS AND RECOMMENDATIONS

The following is an overview of the key conclusions and recommendations resulting from the research, analyses and discussions conducted as part of this study and highlighted within this report.

Implementation of a revised approach towards parkland dedication practices for the City of Markham, including new policies, procedures and standards is proposed to occur through the adoption of the recommendations within this report, as well as a proposed Official Plan Amendment, a new Parkland Dedication By-law as well as other tools, including a Procedures Manual, to be used in the future. These actions are intended to enable or assist the City to achieve its planned urban structure, to secure and develop a comprehensive, high quality and viable parkland system and to contribute to the overall strength and health of the community.

The proposed new approach recommended in this report is appropriate because:

- It is tied directly to parkland demand on a per person basis and current parkland objectives;
- Reflects the evolving urban structure in Markham; and,
- Is based on a revised parkland hierarchy.

The proposed approach establishes revised parkland dedication requirements and provides a greater degree of certainty with respect to implications upon future development. Further, the refined parkland approach provides a significant incentive for higher density, apartment house forms, which is a positive response to the primary concern raised by the development industry.

The conclusions and recommendations of this report focus on the residential parkland conveyance requirements because parkland conveyance for commercial, industrial and other land uses were not considered major issues, or as controversial in the context of this study. Nonetheless, all parkland dedication requirements, for all land uses are impacted by the recommendations in this report, as the intent is for the products of this study to be comprehensive in nature.

6.1 Why is a Discussion of Parkland Dedication Important?

In order for Markham to maintain its reputation for success – economically, aesthetically and in terms of quality of place/quality of life - anticipated growth must be accommodated in an urban structure that facilitates transit supportive urban centres and corridors, in balance with its already established and more traditional suburban forms of building. Part of that success is focused on maintaining a comprehensive public parkland system that grows and evolves with population and employment growth over time.

The planned urban structure must be achieved

From a broad urban structure context, it is already well known that the planned evolution of communities towards increased overall densities and higher density forms of development is a requirement, not a choice. Public parks are a critical component of this evolution that needs to be provided in conjunction with all forms of development.

There is an economic imperative

Investment in the public realm (parks, streetscapes, public buildings) is good for a city's image, health, beauty and quality of place/quality of life. It is also good for the bottom line. Investment in the public realm will help to ensure that new jobs are created, commercial and business centres are enhanced, property values increased and that income is generated for its investors for many years to come.

A high-quality public realm has a tremendous value - hard economic value in terms of acting as a catalyst and enhancing real estate value, tourism value and assessment value and creating spin-off effects within the community that needs to be continuously enhanced.

Public Parks are key to community development

Public parks are also an important anchor for community development and engagement, particularly in medium and higher density residential or mixed use development areas where there is less private outdoor space available and a greater focus on public space.

Public parks are community-gathering places and serve an important recreational function that, in turn, contributes to stronger and healthier communities. Key benefits of public parks include:

- Improving personal health and well-being;

- Advancing social development;
- Enhancing quality of place/quality-of-life;
- Building strong and engaged communities; and,
- Reducing social service costs as a result of the wider social and community benefits realized through parks and recreational services.

It is a fundamental requirement of good planning practice that an appropriate public parkland system – the right amount, the right mixture of park types, the right levels and quality of design and the right programming – be planned and built to serve the existing and future residents of the City of Markham.

The public parkland system must also acknowledge and respond to the evolving planned urban structure intended for Markham in order to contribute to its ongoing success.

6.2 What are the Current or Evolving Problems and Concerns?

Issues and concerns have been identified

The public parks system is not only an essential component in the development of a complete community, the conveyance of public parkland, as articulated under the Planning Act, is an important instrument in the way municipalities can influence development.

Although Markham has had an approach and structure in place for many years to facilitate the provision of public parkland, there are concerns or problems that have been identified or are evolving. The purpose of this study is to identify and address those problems and concerns in order to achieve the City's goals, its planned urban structure and to have a positive influence on development.

There are unique challenges and new opportunities for Markham

The rapidly urbanizing growth of Markham presents unique challenges and opportunities related to development and redevelopment. With rapid urbanization, there is a concern that the City's current parkland dedication policy regime and its associated implementation procedures may not necessarily be reflective of, or facilitate changing municipal growth patterns, policy directions and socio-economic trends.

For example, the planned urban structure and evolving urban form of portions of Markham present opportunities for different parkland challenges and opportunities, such as the focus on neighbourhood parks in high density areas, the creation of small urban squares or linear parks and the establishment of park spaces in new, previously unutilized locations, such as on top of parking garages or above building podiums or rooftops.

There is a lack of consistency in the approach to parkland dedication across Ontario

Currently, there is not any consistently applied approach to parkland conveyance used in the Greater Golden Horseshoe or across the Province of Ontario. Even though there are standards under the Planning Act for the dedication of parkland and cash-in-lieu payments, the reality is that there are different approaches, regulations, procedures and rates used in virtually every municipality. In addition, there may be unique or negotiated approaches applied on a site-specific basis in each municipality.

Inconsistency or uncertainty adds to the cost of development, such as the cost and ability to obtain project financing. The lack of consistency is a concern for the development industry in terms of having to navigate through the complexities of the issue each time it is applied differently within separate jurisdictions. In turn, this results in uncertainty with respect to risks, and development costs.

The lack of consistency in approaches is also problematic as there is a fear that some municipalities may alter their approach in order to secure developer interest through strategic reductions in development risk and/or or cost factors, to the detriment of the public interest in achieving a Region-wide urban structure. Municipalities may also go to the opposite extreme and implement approaches, which serve to frustrate the achievement of higher density forms of development through manipulation of the key risk and/or cost factors.

The current Planning Act standards have flaws

The regular Planning Act residential standard of 5% of the land area provides for a consistent amount of parkland on sites of similar sizes regardless of their density. The 5% standard is considered inequitable when applied to projects with increased densities, as it continues to supply same amount of public parkland regardless of density – as it relates to the number of units or the number of people/jobs produced.

The 5% standard results in less parkland per unit/per person as density increases.

In addition to the direct relationship between the number of people generated vs. the amount of public parkland generated, higher density developments typically have less private indoor and private outdoor living space per unit and as such, their residents tend to have a greater need and reliance upon public park space. Therefore, the application of the 5% standard would be inadequate for anything but lower density forms of development.

At the other end of the spectrum, the development industry has raised significant concerns with use of the Alternative Planning Act Standard of 1 hectare per 300 dwelling units. This Standard, while recognizing the impact of dwelling units on public parkland need, does not consider the impact of household size reductions. The negative impact is exacerbated as density is increased. The use of the Alternative Planning Act standard for low and medium density forms of development is, however, appropriate.

The Alternative Planning Act Standard may act as a disincentive to higher density development

The development industry has indicated that development of higher density forms of development involves much more capital and risk than lower density forms of development. The sense is that current Planning Act parkland dedication regulations and procedures, and specifically cash-in-lieu policies, may act as a significant disincentive for higher density developments, even where those forms of development are desirable.

The analysis undertaken as part of this study highlights the cost implications of the application of this standard on high density development, particularly the application of the Alternative Planning Act Standard when applied without limitation. The analysis seems to support the notion that the standards represent a disincentive, and perhaps in some cases it would even be prohibitive to achieving this form of development. This sentiment is echoed by the development industry as they have voiced their concern with the application of the Alternative Planning Act Standard. In response, it should be noted that currently Markham does not apply the Alternative Planning Act Standard to high density development proposals.

The development industry desires control and certainty over costs

The development industry is generally concerned with maintaining control and certainty over all hard and soft costs related to development. These costs have a direct impact on the cost and affordability of delivering their product to the consumer or the marketplace and thus a direct impact upon their profitability. In addition to the cost of parkland dedication and cash-in-lieu payments discussed in this report, their concerns also extend to other costs, including land, labour, materials, approvals, services, infrastructure and various development charges, fees and levies.

In fact, the impact of parkland conveyance, or cash-in-lieu of land, while an important cost factor, is considered substantially less important than other identified development costs.

The development industry seeks a rate that is rational and justifiable

Although the development industry is generally very active in lobbying against any changes that result in increases to the cost of development, one of their primary concerns is that various bodies are accountable in their approaches and decision-making. They wish to ensure that any proposed change which impacts the cost of development is reasonable, justified or directly tied to the issue and that it considers other applicable Provincial or municipal goals and objectives.

The development industry also encourages the Province and municipalities to be creative in their thinking and come up with innovative solutions where a one-size fits all solution may not be appropriate or may have serious implications for one market segment.

The development industry promotes the use of caps on parkland conveyance requirements

Notwithstanding that the Markham approach of relating public park conveyance to population yield is considered appropriate, the development industry has requested that caps on the overall dedication required on high density residential projects be implemented.

The implementation of caps certainly limits the amount of public parkland, or cash-in-lieu of land on any given development project. However, the approach promoted in this report does not support the use of caps as it ignores the concept of relating parkland conveyance to the amount of population generated and would dramatically reduce the amount of public parkland conveyed to the municipality. A cap is the same as providing an elimination of public parkland conveyance

requirement for higher density development proposals, and is not considered an appropriate approach for Markham. The proposed approach proposed in this report involves strategic reductions in the rate for higher density uses that will act as an incentive to encourage these forms of development.

All development costs ultimately get passed on to the consumer

The representatives of the development industry have clearly stated that all development costs ultimately get passed on to the consumer, which can impact affordability and marketability. Given that these costs flow through directly to the consumer, there is no impact directly on the financial feasibility of a given project that results from the imposition of a public parkland dedication requirement. There may be market-related issues, but not fiscal feasibility issues.

Public parkland conveyance represents a small component of development costs

Financial analyses carried out in the course of this project indicated that, in general, development costs are influenced in a minor way by parkland conveyance/cash-in-lieu of parkland. Not unimportant, but not significant.

While the total costs of parkland conveyance on a large development proposal may appear substantial, those numbers need to be considered on a per unit or per person basis. Once the costs of conveyance are considered in this way, the impact of parkland conveyance on the financial pro forma of a development proposal is considered comparatively minor, particularly when viewed in the context of Markham's current public parkland conveyance requirements.

A reasonable relationship should exist between the dedication value and the population served

The City's current approach recognizes the issues with both the 5% of land area approach, and the application of the Planning Act Alternative of 1 hectare per 300 dwelling units.

The City's proposed approach relates the amount of public parkland to be conveyed to the population that is generated by the development. This approach recognizes that the need for parkland is related to the density, and to the related population accommodated within a development proposal. This is considered more equitable than either of the approaches codified in the Planning Act.

Markham's current approach has historically worked well

Traditionally, Markham has done a good job securing, building and maintaining its public parks system in its more suburban context. The current Markham Alternative (1.2141 hectares per 1,000 residents) standard is considered to be an equitable and consistent approach as it is directly tied to population that it is intended to serve. It is a unique approach in that it establishes a per person requirement for parkland, as opposed to relating parkland dedication to the size of the site, or simply the number of dwelling units.

6.3 Recommending a New and Refined Approach to Parkland Dedication in Markham

Over the course of this project, there has been a tremendous amount of discussion about very specific issues and topics that need to be addressed within the City's policies for parkland and parkland acquisition. Some of those issues and topics are under the purview of this project, others are complementary components that while related to this project, require further refinement and discussion by City staff. The following issues and topics have been included:

The Parks System

- General Parks Policies;
- Destination Parks;
- City-Wide Parks;
- Community Parks;
- Neighbourhood Parks; and,
- Comprehensive Planning.

Parkland Acquisition/Management

- Parkland Acquisition Tools;
- Conveyance of land for park purposes;
- Credits/New Requirements;

- Reductions/Exemptions;
- Cash-in-lieu of Parkland;
- Determination of Value;
- Land Acceptable/Not Acceptable;
- Maintenance;
- Administration; and,
- Other Tools.

A new and more refined approach is proposed for Markham

In recognition of some of the deficiencies that have been identified by the development industry with the current approach to public parkland dedication, Markham has undertaken this study with the objective of developing a comprehensive planning policy regime that addresses the City's aspirations for a public parkland system, including issues related to parkland acquisition and parkland conveyance opportunities through the Planning Act, and which will help it to achieve its planned urban structure.

The approach to the development of this proposed comprehensive planning policy regime has been rational and methodical, with the intent being to attempt to justify or substantiate each assumption as fully as possible.

Further, throughout this study the development industry has provided significant input and feedback that has been duly considered, and has influenced the proposed new Official Plan policies and the proposed new Parkland Dedication By-law.

Collaboration has been fundamental to Markham's new and refined approach

Today, Markham has indicated a strong desire to work collaboratively with stakeholders, including the development industry, to achieve an approach to urban parks system development, and parkland dedication procedures that are:

- *Appropriate* – delivers a great public parks system that is appropriate for urban, suburban and rural Markham;

- *Equitable* – is fair and reasonable to all the stakeholders, including the City, the development industry and the existing and future residents of the City;
- *Consistent* – is applied equally and fairly to all applicants without the need for individual deal-making, or site-specific adjustments; and,
- *Long-Lasting* – will serve the City well over the coming 10 to 15 years, without the need for constant amendments.

Markham's proposed new and more refined approach is fair and justifiable

Markham's current approach which utilizes the Planning Act Alternative for low and medium density housing forms, and the Markham Alternative Standard 1.2141 hectares per 1,000 residents for higher density house forms is considered to be a very equitable and consistent approach as it is directly tied to population that it is intended to serve.

Proposed adjustments to the approach to parkland dedication resulting from this study will build upon this current approach, but refine the way that the standard is applied to higher density development.

Four key principles have emerged from this study

1. The first principle is that land dedication for parks should be based on a principle that directly relates parkland contributions to the population generated by new development. This is in sync with Markham's current approach.
2. The second principle is that the amount of parkland contribution for all residential housing forms should be equitable, and based on the land use designations, and anticipated development forms identified in the new Markham Official Plan.
3. The third principle is that all development generates a demand for public open space, and that, wherever possible all developments should provide on-site public and connected park space.
4. The fourth principle is that where public park space is not possible or practical, that the City accept cash-in-lieu of parkland for the purposes of enhancing the supply of parkland elsewhere in the municipality, to the benefit of all residents in the City.

6.3.1 The Parks System

The text included in this Section is intended to assist the City in the ongoing preparation and establishment of a new parkland hierarchy throughout the City. Some of the concepts and standards developed in this Section may be incorporated (as modified) in the new Official Plan.

General Parks Policies

Markham seeks to establish and grow a comprehensive public parkland system, including a variety of parks with different scales and functions, and of varied character and design requirements. The comprehensive public parkland system is proposed to include Destination Parks, City-Wide Parks, Community Parks and Neighbourhood Parks.

The recommended comprehensive public parkland system policies are as follows (these statements are intended to assist the City):

- The growth of the City's public parkland system will be related to overall population growth in the City, and will be responsive to changing land use intensity and demographic shifts within Markham.
- The City of Markham will establish and grow a comprehensive public parkland system that will include a variety of public parks with different scales, and functions, with correspondingly varied characters and design requirements. The comprehensive public parkland system within the City will include:
 - .i Destination Parks (outside of City ownership and control);
 - .ii City-Wide Parks;
 - .iii Community Parks;
 - .iv Neighbourhood Parks; and,
 - .v Strata Parks.

Destination Parks

- The Destination Parks component, including those lands within a defined Conservation Area and/or lands associated with the evolving Rouge Park are considered public parkland that is intended to serve broader regional, provincial and, in some cases, national interests. In general, these lands:

- perform an important environmental function, and provide recreational uses and opportunities not typical for an adjacent urban population;
 - are not owned or controlled by the City, and therefore the City cannot ensure recreational space programming, or control the area's development for urban recreational land uses or facilities; and,
 - based on the above, these lands are not considered to contribute in any significant way to the public parkland needs of the City of Markham residents.
- The City's public parkland system will provide an array of seasonal and year round programmable attractions. All of the City's public parks shall be designed to establish an appropriate character and to perform a specific function or functions. All of the City's public parks will be developed with high quality materials that are sustainable.
 - All of the City's public parks shall have adequate frontage on one or more public roads, commensurate with the size and location of the park. Detailed community and building design shall ensure that all City parks are accessible and appropriate for the neighbourhood, community or area that it serves.
 - It is the intent of the City to promote innovation in the acquisition, design and development of its public parkland system. If the City is satisfied that the general aims of its planning policy regime with regard to park sizes, locations and functions are met in a particular area, then variations from the specific standards set out in the policies herein shall be permitted without further Amendment.
 - The City's public parkland system shall incorporate a full range and mixture of City-Wide Parks, Community and Neighbourhood Parks, generally in accordance with the policies herein. However, the standards and requirements for parks shall not be interpreted to be rigid or inflexible, and will be refined in the context of comprehensive planning for individual communities.

City-Wide Parks

The following are the intended characteristics of the City-Wide Parks:

- City-Wide Parks may be identified on the Schedules to the Official Plan and/or within Secondary Plans, and will be acquired by the City over time utilizing the full array of acquisition tools available.
- City-Wide Parks include large scale parks, generally in excess of 6 hectares, but potentially much larger. They are expected to accommodate facilities and provide programs for the entire City outside of those standard facilities provided in Community and Neighbourhood Parks.
- City-Wide Parks provide space for active and passive culture and recreation for all age groups including a wide range of specialized facilities, which serve a number of communities, neighbourhoods and areas.

Community Parks

The following are the intended characteristics of the Community Parks:

- Community Parks may be identified on the Schedules to the Official Plan and/or within Secondary Plans, and will be acquired by the City over time utilizing the full array of acquisition tools available.
- Community Parks include large scale parks, generally in excess of 6 hectares, but potentially much larger. They are expected to accommodate facilities and provide programs for individual communities within the City, outside of those standard facilities provided in Neighbourhood Parks.
- Community Parks are intended to provide space for active and passive culture and recreation for all age groups including a wide range of specialized facilities such as sports fields, large waterplay facilities, extensive junior and senior playgrounds, large park pavilions, public art, performance areas and historical interpretive information, and park maintenance facilities, which serve a number of communities, neighbourhoods and areas.
- The majority of all residences within a defined neighbourhood should be within a 10-minute walk (approximately 800 metres) of a Community Park.

Neighbourhood Parks

The following are the intended characteristics of the Neighbourhood Parks:

- Neighbourhood Parks may be identified on the Schedules to the Official Plan. However, Secondary Plans are expected to identify conceptually the Neighbourhood Park Strategy, including policies that ensure that the City's public parkland system is achieved through subsequent planning approvals processes.
- Neighbourhood Parks are expected to be acquired primarily through the parkland conveyance requirements of the Planning Act and the Official Plan.
- It is the intent of the City that all residents will be able to walk or cycle to a Neighbourhood Park, which will require that they live within approximately 400 metres of the nearest Neighbourhood Park.
- Neighbourhood Parks include parks of varied sizes and scales, and provide space for, in some instances, field sports, playgrounds and the recreational needs of a local residential area as well as passive recreational spaces to serve local sub-neighbourhoods and urban areas.

In other instances, Neighbourhood Parks are intended as formal pedestrian spaces, in support of the adjacent higher density, mixed use development, specifically designed to reinforce a high quality formalized relationship with its adjacent building use and streetscape.

- The Neighbourhood Parks component of the City's parkland hierarchy may include the following types of public parkland:
 - *Active Neighbourhood Parks* – Active Neighbourhood Parks are intended to serve an entire neighbourhood. They are expected to be within approximately 1.0 to 6.0 hectares in size.

Typically, Active Neighbourhood Parks provide space for field sports, playgrounds and the recreational needs of a local, primarily low-density residential area.

The majority of all residents within a defined neighbourhood should be within a 5-minute walk (approximately 400 metres) of an Active Neighbourhood Park.

- *Urban Squares* – Urban Squares are moderately scaled parks found within the identified centres, corridors and intensification areas. They are expected to be between 0.5 and 5.0 hectares in size.

Urban Squares are designed to be iconic public spaces that become landmarks and destinations that attract residents and tourists alike. Urban Squares accommodate special features such as fountains and public art to add to visual interest and place making. They provide for multifunctional flexible programming and space for social gatherings, festivals and civic functions.

The majority of all residents, visitors and businesses should be within a 5 to 10-minute walk (approximately 400 to 800 metres) of an Urban Square when within an identified centre, corridor or intensification area.

- *Parkettes* – Parkettes are the smallest component of the City's parkland system, and are generally found within the City's low-to-medium-density residential neighbourhoods. They are typically about 0.5 to 1.5 hectares in size.

Typically Parkettes provide passive recreational space to serve local residential neighbourhoods. The majority of all residents within a defined neighbourhood should be within a 2 to 5-minute walk (150 to 400 metres) of a Parkette.

- *Urban Public Plazas* – An Urban Public Plaza is a small component of the parkland hierarchy usually located within the identified centres, corridors or intensification areas. They are typically between 0.02 and 0.5 of a hectare in size.

Urban Public Plazas should be widely distributed throughout the identified centres, corridors and intensification areas to ensure easy access and multiple opportunities for rest, relaxation, visual interest, and civic engagement.

Urban Public Plazas are intended to provide social spaces that are animated by their adjacent uses such as café's and shops. The

majority of all residents, visitors and businesses should be within a 2 to 5-minute walk (150 to 400 metres) of a Plaza when within a defined centre, corridor or intensification area.

The following policies apply to the establishment of Urban Public Plazas:

- + all development applications on sites greater than 0.2 hectares in size shall include a location for an Urban Public Plaza;
- + an Urban Public Plaza shall generally have a minimum area of 200 square metres, with a minimum frontage on at least one abutting public sidewalk of 10.0 metres;
- + large sites may include a single, large-scale Urban Public Plaza and/or a series of smaller Urban Public Plazas; and,
- + an Urban Public Plaza shall not be encumbered by driveways, access lanes, garbage storage areas, utility vaults or other such uses that would take away from the quiet enjoyment of the space.

Strata Parks

- A Strata Park is a component of the parkland hierarchy that is built on a development site, over top of a structure. Strata Parks are typically found within the City's identified centres, corridors and intensification areas and, depending upon their scale and function, can perform as an Active Neighbourhood Park, Urban Square or Urban Public Plaza.
- Where a Strata Park is proposed that is either to be conveyed to the City, or to remain in private ownership, it may contribute to the parkland conveyance requirement of the development, subject to the following:
 - the owner and/or the condominium corporation covenants the strata park is a public space;
 - it is built to the standards and specifications of the City, including a functional and accessible relationship to grade;

- it is to be maintained either by the City, or to the satisfaction of the City;
 - it is open and accessible to the public in accordance with municipal by-laws; and,
 - there is an agreement in place that ensures all of the foregoing, that is acceptable to the City.
- Given the inherent encumbrances on the use and development of the land in a Strata Park, the value of the contribution to the parkland conveyance by any Strata Park shall be discounted at the discretion of the City.
 - The amount of any given discount will be considered on a site by site basis by the City during the preparation of the other required agreement, and will consider the level of encumbrance anticipated based on the physical layout of the park – only the actual space usable by the public will be considered, as well as the likely restrictions on public programming of the space.

Open Space Lands

- Open Space Lands are intended to form part of the City's larger parks and open space system. Open space lands will provide benefits to the parks and open system beyond those provided by City Parks, but are not suitable for City Park programs and facilities and therefore, not accepted as parkland dedication under the Planning Act. Open Space lands may be public lands or privately owned lands that are publicly accessible. Examples of Open Space Lands may include portions of the Natural Heritage Network lands and associated *vegetation protection zones*, transportation and utility corridors, stormwater management facilities, lands required for pedestrian and bicycle routes, and other open space lands encumbered by easements or use restrictions.

Comprehensive Planning

- It is the intent of the City that new development be planned on a comprehensive basis through a Secondary Plan process. Where this is done, the City will ensure that the public parkland requirements identified in the Official Plan and implementing Parkland Dedication By-law are achieved.

The City may permit the establishment of an Area Specific Parkland Agreement that is based on an approved Secondary Plan and is intended to deliver the identified parkland system in a way that is both equitable and acceptable to the City.

- Where an existing neighbourhood, or series of contiguous existing neighbourhoods have:
 - no comprehensive Secondary Plan; or,
 - are considered deficient in public parkland and/or associated facilities and programs; or,
 - have absorbed significant levels of development intensification; or,
 - have experienced a demographic shift in terms of ethnicity, or household characteristics.
- The City shall undertake an analysis to determine the existing level of service for parks and leisure services and facilities, and if determined to be underserved in any way, to include a strategy to acquire additional public parkland within the area and/or to enhance existing facilities and programs to bring the service levels up to City standards, and to recognize the specific demographic/cultural circumstances of the area.
- As a result of this analysis, the City may utilize the cash reserves established through the collection of cash-in-lieu of parkland conveyance to identify and purchase lands within any area of the City considered to be deficient in public parkland.

6.3.2. Parkland Acquisition Tools

The discussion in this Section of this report is intended to assist the City in the development of a revised Parkland Dedication By-law. In this regard, the wording and concepts presented in this report are subject to additional modification and refinement as the City works toward the approval of a new By-law.

It is proposed a number of tools be utilized to help the City achieve its public parkland objectives. The following parkland acquisition tools are recommended:

- The City's public parkland system will be acquired by the following means:
 - the land acquisition powers authorized by public statutes, including the Planning Act, the Official Plan and the implementing Parkland Dedication By-law;
 - funds allocated in the City's budget, dedicated reserves or joint acquisition programs;
 - voluntary conveyance, donations, gifts, bequests from individuals or corporations; and/or,
 - funds allocated by any authority having jurisdiction.

Conveyance of land for park purposes

- The identified conveyance of land for parkland policies shall be applied equally to all types of development regardless of sponsorship, tenure or occupancy. The actual rates of dedication may vary, and will be established in the Official Plan and in the implementing Parkland Dedication By-law.
- As a condition of *development approval* or *redevelopment* of land, Markham may, through the implementing Parkland Dedication By-law, require that land be conveyed for parks or other recreational purposes in an amount not exceeding:
 - for lands proposed for industrial or commercial purposes, 2 percent of the gross land area; and
 - for all other land uses, except for residential purposes, 5 per cent of the gross land area; and,
 - for lands proposed for residential purposes:
 - + where the residential development is comprised of single-detached and semi-detached dwelling units considered by the City to be low density house forms, parkland conveyance shall be based on 1 hectare/300 dwelling units.
 - + where the residential development is comprised of multi-plex block, street or stacked townhouse dwelling units considered

by the City to be medium density house forms, parkland conveyance shall be based on 1 hectare/300 dwelling units, or 1.2 hectare/1,000 residents, whichever is less.

- + where the residential development is comprised of apartment dwelling units considered by the City to be a high density house form, parkland conveyance shall be based on 1.2 hectares/1,000 residents.
 - + under no circumstance, shall any parkland conveyance, for any house form in any density category, be less than 5 percent of the gross land area.
- For lands that include a mixture of land uses, conveyance requirements are the sum of the parkland conveyances for each individual use as identified above. For uses described in .i and .ii above, the land area for the purposes of calculating the amount of required parkland conveyance shall be determined by the sum of:
 - the *Gross Floor Area* of that part of the ground floor exclusively devoted to such uses; and,
 - any surface parking area exclusively devoted to such uses.
 - That notwithstanding the above, the City may make further adjustments to the parkland conveyance requirements for any *development approval* or *redevelopment*, in accordance with the Planning Act, the Parkland Dedication By-law and/or any applicable development agreement.
 - Land conveyed to the City under this Section shall be used for public parkland or other public recreational purposes, but may be sold at any time, at the discretion of the City, and subject to the policies of the Official Plan and implementing Parkland Dedication By-Law.

The approach to parkland conveyance for residential development is based on a number of factors. First, it is proposed that the baseline conveyance shall be based on the following:

“For lands proposed for residential uses, 1 hectare per 300 dwelling units OR 1.2 hectares per 1,000 residents, whichever is less...”

This statement implies that in some cases the Planning Act Alternative requirement of 1 hectare per 300 dwelling units will be applied, and in other cases the City's Alternative of 1.2 hectares per 1,000 persons will be applied. This is, in fact the case.

The analysis carried out in this study indicates that since the Planning Act Alternative of 1 hectare per 300 dwelling units is considered a maximum, that no other alternative proposed by the City can result in a higher conveyance yield.

In a general sense, the Planning Act Alternative is appropriate to apply to low-density residential development, which includes single-detached and semi-detached house forms.

In medium density residential situations – multi-plex and townhouse forms, the Planning Act Alternative and the City's Alternative result in a similar parkland conveyance number, so either standard may be applied, and the standard that requires the least parkland conveyance will be utilized.

In High Density Residential categories of development, only the City's Alternative of 1.2 hectares per 1000 persons will be utilized because it will always generate less parkland conveyance than the Planning Act Alternative. This approach is considered to be appropriate as it establishes a reasonable reduction from the Planning Act standard and, as such, provides an incentive for higher density residential development forms to help Markham achieve its planned urban structure.

Markham may consider allowing for further reductions or exemptions for parkland conveyance for the highest density forms of housing

In addition to the reductions in the overall parkland dedication requirements proposed in the text above, Markham may also consider reductions or exemptions for the highest density residential apartment types, and within specific geographic locations throughout the City.

This Study provides Markham with a number of options to consider for further conveyance reductions or exemptions. These options evolved or were modified during the course of the Study, based upon feedback and comments which were received from City Staff, the Development Services Committee, the development industry, stakeholders and the public.

As previously noted, one of the primary concerns expressed by the development industry was the financial implications of the Alternative Planning Act Standard of 1.0 ha./300 dwelling units on high density development proposals. To alleviate this concern to some degree:

- First, the base line parkland conveyance requirement of for higher density apartments 1.2 ha./1000 people is substantially less than the Alternative Planning Act Standard of 1.0 ha./300 dwelling units; and,
- Second, a graduated approach to parkland conveyance for higher density apartment development projects within identified “Intensification Areas” as shown on Map 2 to the New Markham Official Plan is proposed. The initial recommendation was that the amount of parkland conveyance required be further reduced as density increases, as follows:
 - The conveyance required shall be 1.2 ha./1000 people, for that component of a residential development having a *Residential Gross Floor Area (GFA)* of less than 2.5 *Floor Space Index (FSI)*;
 - The conveyance required shall be 0.9 ha./1000 people, for that component of a development having a *Residential GFA* between 2.5 *FSI* and 5.0 *FSI*;
 - The conveyance required shall be 0.6 ha./1000 people, for that component of a residential development having a *Residential GFA* greater than 5.0 *FSI* up to 8.0 *FSI*; and,
 - The conveyance required shall be 0.3 ha./1000 people, for that component of a residential development having a *Residential GFA* greater than 8.0 *FSI*.

The above rates shall be applied and calculated on a cumulative basis. To qualify for the reduced rate, the *development* or *redevelopment* shall be consistent with any applicable built form, height and massing guidelines and in conformity with policies of the Official Plan and any applicable Secondary Plan, all to the satisfaction of the City.

The following table summarizes the residential conveyance requirements recommended in this report and illustrates the relative implications upon the quantity of parkland required for various forms of development in comparison to the maximum Alternative Standard of 1 hectare per 300 units under the Planning Act:

	High-Rise Residential (Apartments)	Mid-Rise Residential (Multi-plex, street/block/stacked townhouses)	Low-Rise Residential (Single and semi- detached)
Household Size Assumption	1.91 ppu	2.64 ppu	3.36 ppu
Conveyance Requirement			
a. Baseline Standard of 1.2 ha./1,000 persons for FSI less than 2.5	1 ha./436 units 0.69 ha./300 units <i>Less than Planning Act Alternative</i>	1 ha./316 units 1 ha./300 units <i>Approximately equal to Planning Act Alternative</i>	1 ha./248 units 1.2 ha./300 units <i>Exceeds Planning Act Alternative</i>
b. 0.9 ha./1,000 persons	Between 2.5 + 5.0 FSI 1 ha./582 units 0.52 ha./300 units	n/a	n/a
c. 0.6 ha./1,000 persons	Between 5.0 + 8.0 FSI 1 ha./873 units 0.34 ha./300 units	n/a	n/a
d. 0.3 ha./1,000 persons	Greater than 8.0 FSI 1 ha./1,747 units 0.17 ha./300 units	n/a	n/a

The proposed approach of linking the rate of parkland dedication specifically to a particular type or form of housing and the exact number of units within a development provides for a far more accurate reflection of the likely demand for parkland, particularly if the number of dwelling units is converted to a “per person” or “per resident” rate. Further, the use of a graduated (declining) standard that is being proposed for high density apartment development that provides for a cumulative and significant incentive in the parkland standard as density increases is recognized as having a potential benefit to the municipality and is preferred over an outright cap that stops collecting parkland altogether after a certain point.

It is noted that the residents of higher density forms of housing may be more reliant upon public outdoor spaces or parkland for leisure or

recreation than do residents of lower density forms of development that have more private outdoor amenity space at their disposal. However, it is also recognized that such higher density forms of housing typically provide extensive common indoor and outdoor space that serves to supplement or compensate for limited private outdoor amenity space associated with an individual unit. In addition, given the lifestyle that may be associated with higher density forms of development, residents are often more reliant upon more “urban” and compact forms of parks, open space and public/private spaces (such as roof-top patios, courtyards, streetside cafes) that are typically provided as part of such developments or associated with these types of communities or environments. As such, the notion that residents may be deprived of adequate spaces or opportunities for recreation and leisure through a reduced parkland standard for development above certain densities may be incorrect.

The use of such an approach will assist in meeting a variety of Provincial and municipal planning and growth management goals and objectives as it allows the City to achieve the planned urban structure, provides an incentive for intensification and results in a more suitable distribution of parkland, while enabling the City to respond to changing demographics and household trends.

Revised Parkland Dedication Reduction Proposal

On the basis of the graduated approach which was initially suggested, comments were received from the Development Services Committee, the development industry and the public. The range of comments suggested that the initially proposed reduction was granted too early in the density hierarchy, whereas other comments suggested that the reduction was actually granted too late in the density hierarchy and only available to the highest density developments that rarely occur in Markham. It was suggested that the reduction be applied sooner and apply to the mid-range density developments that are more typical of Markham. Lastly, comments provided suggested that the overall approach to reductions should be simplified by providing for fewer reduction categories.

The consulting team provided the City of Markham with a number of options for a simplified approach with fewer reduction categories. In all options, there was an initial stage where no reduction is proposed and an additional one or two categories with a graduated reduction and the percentage varying depending upon the specific scenario. The option with one reduction categories is the most simple and provides

for one, across the board reduction for developments that exceed 3.0 FSI. The options with two reduction categories, while being only slightly more complex, are still fairly straight-forward. These options also propose no reduction for densities of less than 3.0 FSI, a first stage reduction for densities between 3.0 and 6.0 FSI and for a greater reduction above 6.0 FSI.

The following table summarizes the difference between the various scenarios and the reduction proposed under each. The fundamental difference in these scenarios is the front-ending of the incentivization of development.

FSI	47.5% Scenario	35/60% Scenario	30/65% Scenario	25/70% Scenario
0-3.0 FSI	No Red.	No Red.	No Red.	No Red.
3.0-6.0 FSI	47.5%	35% Red.	30% Red.	25% Red.
6.0+ FSI	Red.	60% Red.	65% Red.	70% Red.

All scenarios provide for no reduction for development under 3.0 FSI. This is increased from 2.5 under the previous recommendation for reductions and will ensure maximum generation of parkland or cash-in-lieu for those residential developments most typical to Markham. This further refinement to the graduated approach is warranted and appropriate. It will ensure that development within the majority of the City's Intensification Areas will be required to provide parkland at the City's regular rate of 1.2 hectares per 1,000 people. It is felt that much of the City's development potential in these areas will be within this density range. It is felt that the incentive program for higher density development will be more favourable if provided earlier in the density hierarchy rather than later. Further, there is a rationale to incentivize to a greater extent, those developments that fall within the 3.0 to 6.0 density range as opposed to substantially increasing the incentive as development gets denser as it may have the unwanted effecting of promoting even higher density developments.

For developments that achieve a density of 9.0 FSI or greater, the incentive impacts are the same for all scenarios as well as the initially proposed reduction recommendations.

It is recommended that in terms of the revised reduction approaches, either the two-tier approach (47.5% reduction) or the 35/65% reduction scenario under the three-tier approach identified above, be implemented by the City of Markham. Either would achieve municipal

parkland dedication and urban structure objectives, balanced against the requests and interests of the development industry as articulated through BILD.

By granting the recommended reduction, the worst case scenario would result in a parkland dedication reduction of 31.7%. However, the large majority of developments within Markham would not fall within this category and this scope of reduction would not be typical. Most developments would fall within density ranges of less than 3.0 FSI that would require a parkland dedication of 100% of the normal rate. For a development with an FSI of 3.5, the reduction under the 30/65% scenario would result in only a 5% parkland dedication reduction. A 5 to 10% “loss” of parkland dedication can be expected for the large majority of developments that exceed 3.0 FSI.

It should be stressed that the reduction incentives are not expected to impact the overall parkland supply if the purchase of lands for parkland with cash-in-lieu funds is properly managed. As a matter of principle, the City's priority is to first achieve actual land dedication within any given development application where possible and to only accept cash-in-lieu of parkland where land dedication is not practical or feasible.

Where the City provides a reduction as an extra incentive for high density development, it is unlikely that there is sufficient land available to enable dedication for public parks purposes. In these cases, the City should have no difficulty in acquiring land in other areas of the City to fulfil its parkland objectives given the differential in lands values among different areas of the City. For example, cash-in-lieu derived from development within Major Urban Centres would enable the City to purchase between up to 3 times more land outside of the Major Urban Centres or up to 10 times more land outside of the Urban Boundary for rural recreational uses. Proposed reductions will result in no overall loss of parkland dedication and may also provide for an equitable distribution of parkland throughout the municipality.

Other potential reductions/exemptions

In addition to the foregoing, the following additional reductions and/or exemptions from public parkland conveyances are proposed:

- The City may consider a reduction to, or exemption from, conveyance for park purposes where a development or redevelopment:

- is a public use;
 - includes affordable housing in accordance with the definition of affordable housing in the Provincial Policy Statement;
 - is a nursing home as defined by the Long-Term Care Act, 2007;
 - is being undertaken by a not-for-profit organization; or,
 - is within a Heritage Conservation District or a Heritage Conservation District Study Area and the development is in substantial conformity with the policies and guidelines of the heritage conservation district plan, the Markham Official Plan and any applicable Secondary Plan.
- Any conveyance reduction or exemption as described above shall be established by the City on a case-by-case basis, subject to an assessment of the following:
 - the scale of the proposed development or redevelopment;
 - its anticipated impact on the use and supply of public parkland in the adjacent community;
 - the proposal's contribution to the achievement of the City's relevant planning objectives as expressed in the Official Plan.

New and refined approach is not expected to affect small-scale intensification

The new and refined approach has been tailored so that it will not dramatically affect small-scale intensification within the City, as follows:

- No conveyance for park purposes is required for the following:
 - the enlargement or alteration of an existing residential building provided that it continues to conform to the Zoning By-law and does not increase the number of dwelling units that lawfully exist prior to such development or redevelopment; and,
 - notwithstanding the above, no conveyance for park purposes is required for the creation of a Secondary Suite.

Credits/New Requirements

This study recommends that parkland dedication requirements take into account where parkland or cash-in-lieu of parkland has previously been conveyed or provided to the City, as follows:

- If land has been conveyed, or is required to be conveyed to the City for park purposes, or if a payment of cash-in-lieu of such conveyance has been received by the City or is owing to it under the implementing Parkland By-law or as a condition imposed under Sections 42, 51.1 or 53 of the Planning Act, no additional conveyance or payment in respect of the land subject to the earlier conveyance or payment is required in respect of subsequent development or redevelopment, unless:
 - there is a change in the proposed development or redevelopment which would increase the residential population; or,
 - land originally proposed for development or redevelopment for commercial or industrial purposes is now proposed for development or redevelopment for other purposes.

In the above instances, the development or redevelopment shall be subject to a recalculation of parkland conveyance, in accordance with the Planning Act, the policies of the Official Plan and the implementing Parkland Dedication By-law.

- Where an application for development or redevelopment indicates a reduced level of residential population than is currently existing, or approved but not yet built, the parkland conveyance shall be reassessed by the City. Any surplus parkland conveyance or cash-in-lieu payment made to the City, may be applied as a credit for future development or redevelopment by the same proponent. A proponent may be defined as an individual, an incorporated company or a group of incorporated companies that are bound together, by an agreement acceptable to the City.
- Subject to the approval of the City, in any instance where land in excess of the amount of land required for dedication has been conveyed to the City for park purposes in association with development or redevelopment, the excess may be applied as a credit to future development or redevelopment by the same proponent.

Cash-in-lieu of Conveyance for Park Purposes

The Planning Act provides direction to the City, and permits the collection of cash-in-lieu of a parkland conveyance. It is the City's intent in practice to require and accept parkland as a first priority, and to only accept cash-in-lieu of parkland in necessary instances where the conveyance of land is neither practical nor appropriate, as follows:

- It is the objective of the City to obtain the maximum amount of parkland permissible by the policies of the Official Plan and the implementing Parkland Dedication By-law through land dedication. However, the City, at its discretion, may accept the payment of money, or a combination of land and payment of money, up to the value of the land otherwise required to be conveyed in lieu of the conveyance of land.
- The City shall accept cash-in-lieu of conveyance only under the following circumstances:
 - where no opportunity exists to provide suitable parkland on the development/redevelopment site;
 - where the required land conveyance fails to provide an area of appropriate size, configuration or location for development of a public park;
 - where the required land conveyance would render the remainder of the development/redevelopment of the site unusable or impractical for development;
 - where existing park facilities in the vicinity of the site area are adequate to serve the projected population.

City staff have assisted in establishing how the cash-in-lieu funds are to be held and spent. The cash-in-lieu fund is a bank account established for the purposes of acquiring public parkland as required. The public parkland bank account is not tied to any specific development, and is to be used at the discretion of the City.

- All money received by the City through payments of cash-in-lieu of park conveyance, and all money received on the sale of public parkland less eligible expenses, shall be paid into a special account

and spent only for the acquisition of land to be used for park or for other public recreational purposes.

- The money in the special account may be invested in securities in which the municipality is permitted to invest under the Municipal Act, and the earnings derived from the investment of the money shall be paid into the special account. The auditor in the auditor's annual report shall report on the activities and status of the account.

Determination of Value for Cash-in-Lieu Purposes

Development approvals in Markham can have a relatively short time frame, or a more indefinite one, depending on the market of the proposed use and/or the motivation of the developer. Because of this time differential, the timing for the determination of value was identified as a controversial issue with the development industry. It is their objective to establish the value of land as early in the development approval process as possible in order to establish the lowest cost at that given point in time. Whereas, it is the City's objective to establish the price of cash-in-lieu when development is imminent, in order to maximize the cash-in-lieu payment. The Planning Act provides two options, and this study recommends that the decision for determining when the cash-in-lieu value is at the discretion of the City, based on the following:

- The City shall establish, in the case of development or redevelopment the value of any required cash-in-lieu of parkland as of the day before the day the building permit is issued in respect of the development or redevelopment or, if more than one building permit is required for the development or redevelopment, as of the day before the day the first permit is issued. In the case of land division through either plan of subdivision or consent, such valuation shall be on the day prior to draft plan approval or the granting of a provisional consent, as the case may be.
- Where a Draft Plan of Subdivision includes a mixture of uses and/or a mixture of housing types, the City shall further segment the Draft Plan of Subdivision as follows:
 - for all uses that require Site Plan Approval, the land value for any required payment for park purposes conveyance shall be established as of the day before the day the building permit is issued; and,

- for all other uses within the Draft Plan of Subdivision, where Site Plan Approval is not required, the land value for any required payment for park purposes conveyance shall be established as of the day before the day of the approval of the Draft Plan of Subdivision, less those lands identified above.
- Where cash-in-lieu of a conveyance for park purposes is required, the value of the land shall be determined by a market appraisal, carried out by an independent, accredited appraiser approved by the City. Where there is a dispute over land value, the City may require a peer review by another independent, accredited appraiser at the applicant's expense. The City shall establish a standard appraisal format.
- Notwithstanding the above, the City may utilize other valuation approaches, including, but not limited to:
 - a recent record of land sale - not more than 1 year old, and applicable to the same land parcel; or,
 - a per hectare land value established by the City on an annual basis.

Land Acceptable/Not Acceptable for Conveyance

In providing parkland throughout the City for use of its residents, Markham wishes to secure lands, which will be suitable for their health, safety and enjoyment. Lands to be dedicated must also be suitable to perform their intended role within the prescribed parkland hierarchy. Lands should not possess or result in conditions, which are inefficient for their use, or that result in excessive costs to the municipality to develop for parks purposes.

Although the acceptance of lands to be conveyed for parkland will ultimately be at the discretion of the City, the following policies are recommended:

- The acceptance of lands to be conveyed for park purposes shall be at the discretion of the City, and subject to a Phase 1 Environmental Site Assessment, or if necessary in the sole opinion of the City, a Phase II Environmental Site Assessment or Record of Site Condition. Lands considered suitable for conveyance for parks purposes shall specifically not include the following:
 - any natural heritage feature or hydrologic feature including the

- vegetation protection zone identified in the Official Plan or Zoning By-law in effect at the time of determination;
- any natural heritage feature or hydrologic feature including the vegetation protection zone identified by a required Environmental vegetation protection zone identified by a required Environmental Impact Study and where lands are conveyed into public ownership;
 - lands identified as Environmental Protection Area by the Official Plan;
 - utility rights-of-way;
 - any lands encumbered by easements or right-of-use agreements that restrict, in any way, the City's use of the land for public park or other recreational purposes, other than those to which the City is a Party;
 - land areas required only to provide connecting pedestrian and bicycle routes;
 - any other lands deemed by the City as unsuitable for park purposes conveyance, due to size, road frontage, topography, contamination or location.
- Natural heritage features including woodlands, wetlands, woodlots and valleylands such as ponds, rivers and creeks and associated vegetation protection zones may be incorporated into lands conveyed to the municipality, and retained in their natural state, recognizing that such features are an asset to the community. These lands shall not be acceptable as part of the parkland conveyance requirement.
 - Land for park purposes may be designed to include stormwater detention features. In instances where, in the opinion of the City, the stormwater detention facility precludes in whole or in part the use of that portion of the area for typical park purposes, then such stormwater detention areas shall not be accepted as part of the conveyance requirement.
 - The City may accept the conveyance of lands that are not contiguous to the site that is subject to development or redevelopment,

provided that the value of the land to be provided off-site is approximately equal to the value of the lands from the subject development or redevelopment site intended for park purposes. The City may also accept a combination of off-site land, on-site land and/or cash-in-lieu of the conveyance of land.

Administration

- The Parkland Dedication By-law, when approved, shall be administered by the Director of Planning and Urban Design.
- Where a parkland conveyance and/or cash-in-lieu of parkland is required, the City shall not issue a Building Permit, and no person shall construct a building on the remainder of the land proposed for development or redevelopment unless arrangements for the conveyance of the land and/or payment of the cash-in-lieu of land have been made that are satisfactory to the City.
- In the event of a qualifying/eligible dispute between the City and an owner of land on the determined amount of land and/or the value of land, either party may apply to the Municipal Board to have the value determined and the Board shall make a final determination of the matter, in accordance with the Planning Act.
- It is not the intent of this report or the implementing Official Plan policies or Parkland Dedication By-law to frustrate, invalidate or supersede existing agreements that have been previously executed between landowners/developers and the City of Markham with respect to area specific parkland dedication, delivery and funding arrangements, provided that the proposed development proceeds in the manner set out under such agreements.
- Any legal or administrative costs associated with the conveyance of land shall be the responsibility of the transferor.
- The parkland conveyance policies of the Official Plan and implementing Parkland Dedication By-law shall be reviewed by the City every 2 years to ensure their ongoing validity in the evolving development context within the City. Factors utilized in the calculation of parkland dedication requirements such as household sizes and land values shall be updated on a regular basis to ensure they remain valued. In addition, the further development and refinement of the Procedures Manual will be an ongoing initiative overseen by the City of Markham.

6.3.3 Public Park Maintenance

This Section of this report is intended to provide the City with some ongoing guidance with respect to urban park maintenance protocols. It is part of the bigger issue of Markham's evolving park hierarchy as more intense and more urban park spaces are developed in the future.

"Maintaining Parks and Greenspace Improves Life and Attracts Business"

Brad Lee – Toronto Star, October 2, 2012

The City of Markham has established an excellent maintenance protocol for its traditional suburban park types that include play fields, sports facilities and children's play areas. As the City urbanizes, uses are more integrated and densities increase, the new palette of urban park spaces will require both an enhanced design response, and correspondingly enhanced maintenance protocols.

Highly utilized urban park spaces, while tending to be smaller than their suburban counterparts, may require daily, or twice daily maintenance procedures to keep pace with the types and levels of usage. Their level of profile and use, as well as their unique design features and plant materials simply require more maintenance. This requirement means that not only are urban parks 10 to 15 times more expensive to build, they are also likely to be approximately 5 to 10 times more expensive to maintain, and may require specialized equipment and/or expertise.

The following provides some general guidelines for alternative approaches to park maintenance:

Design for Lower Maintenance

- As noted, urban parks, due to their complexity and use patterns can be extremely expensive to maintain. Typically, urban parks have more planting beds (rather than just lawn) and a greater diversity of plant material to achieve visual and seasonal interest. Paving materials are also more diverse and require ongoing maintenance.
- The City should promote more sustainable urban parks that require less maintenance over time. Landscape architects can design with relatively low maintenance paving materials, furniture and plant material, while recognizing that all components of an urban park will still need to be maintained simply because of their high use characteristics.

- Plant material in an urban setting is crucial and requires special attention for maintenance, for example:
 - Selection of plant species that are drought tolerant once their root systems are established is one example of reducing the maintenance requirements for water;
 - Understanding the role of soil chemistry, soil volumes and soil types is also important to support lower maintenance plant material and must be specified in tandem with plant material; and,
 - Pruning requirements of plant material can also be taken into consideration in the design process, to reduce maintenance.
- The maintenance requirement for watering of plant material is important to consider early in the design process. Landscape architects can work together with architects and engineers to identify opportunities for water sources from adjacent buildings, for example, such as recycled rain water from roof tops (which provide the cleanest source of rainwater) that can be stored in cisterns, filtered and reused for irrigation.

Even drought tolerant plant material needs irrigation to become established (the first year or two) and maintenance plans also need to prepare for extended drought periods to keep planted areas healthy and attractive.

Memorandum of Understanding

- There is, in some municipalities, an information gap between those who are responsible for park design and development and those who will be responsible to maintain those parks once completed.
- Include parks maintenance staff in the review of the parks design and development process to ensure that there is a full understanding and ultimately a clear commitment to establishing the required maintenance protocols. The intent of a park design, program and facilities need to be clearly identified early in the process by Urban Design staff on a City-wide basis to ensure appropriate consideration of issues related to their ability to maintain the plant materials, landscape surfaces and features over the long-term. Any special equipment or maintenance expertise should be identified before the park design is built.

- A decision to proceed with a complex (enhanced) design, requiring enhanced maintenance, must include an Agreement between the parks design and development group and the parks maintenance group that the park and all its component parts can, and will be maintained in accordance with required best practices.
- Further, the increase in maintenance budget needs to be understood and agreed to by commissioners/directors and disseminated to the front line staff as an agreed to direction.

Agreement to Maintain to City Standards – Strata Parks

- Where a strata park has been approved, and the park remains in the ownership of the associated condominium corporation, it shall be a requirement of the legal agreement that the “park be maintained to City Standards” or a higher standard. City standards are likely to be considered the minimum standard.
- For this approach to urban park development to be successful, there will need to be a very clear definition of just what “maintained to City Standards” means. For each park developed in this context, the City will need to establish a park maintenance protocol that can be measured, and ultimately enforced. The park maintenance protocol may include the following requirements, subject to City-wide standards approved by Council:
 - Maintain, in accordance with approved protocols, all plant materials, paving materials, park furniture, structures and art installations;
 - Expeditiously (within 30 days) replace any dead, dying or damaged plant materials;
 - Expeditiously (within 30 days) replace or repair any damaged or uneven paving materials, park furniture and/or art installations;
 - Remove graffiti, scratchiti, debris, animal waste and empty garbage containers at least on a daily basis; and,
 - Remove snow from, and salt paved areas as required.

The Role of a BIA or Registered Neighbourhood Association

- The City may not be in a position to provide ongoing park maintenance to the standard that any specific urban park design requires. This will have a tremendous impact on the appearance, and ultimately the property values in proximity.
- Business Improvement Areas (BIA) have a mandate to assist in the maintenance of commercial business areas, and are funded by local business operators and land owners through a component of their municipal taxation. Certainly BIA's can work with the City's parks maintenance staff to augment the maintenance protocols of the City. At the very least, BIA's and business owners should be asked to assist in maintaining adjacent public realm components as part of their property maintenance procedures.
- While Neighbourhood Associations are not provided with a stable funding source through municipal taxation, there are jurisdictions in Canada that rely on local neighbourhood involvement in the maintenance of adjacent public parks. The City should pursue this form of relationship, or, at the very least, ask higher density residential developments to assist in maintaining adjacent public realm components as part of their property maintenance procedures.

Park Maintenance Trust Funds

- The City may not be in a position to provide ongoing park maintenance to the standard that any specific urban park design requires.
- In the United States, many jurisdictions have required that urban parks be maintained by a Trust Fund. Typically the Trust Fund is established while the park is in the design and development stages. Trust Funds can be funded by the private sector (a tax deduction in the US), by the public sector, or through some combination of both. The Trust Fund Board retains maintenance contractors and takes on the responsibility to maintain the public park to a prescribed level of quality, and the City absolves themselves of further maintenance responsibilities.

Adopt-a-Park Program

It is important to note that an adopt-a-park program is not a replacement for ongoing maintenance of City parkland, but an opportunity to augment existing responsibilities.

- Local service clubs, school groups, horticultural societies or interested citizens/citizen groups may wish to become involved in specific park maintenance events, and/or for ongoing maintenance responsibilities.
- The City should consider expanding the existing adopt-a-park program where individuals or groups can become the guardian of a specific park or some component thereof. The City would need to establish an individual protocol, and prepare agreements to facilitate this type of intervention. The program could simply be to raise funds to retain a maintenance team, or there could be a strategy to utilize the sweat equity of these groups. Nonetheless, the City would need to retain management control, while harnessing the tremendous enthusiasm and potential of service clubs, school groups, horticultural societies or interested citizens/citizen groups.

Commercial Leases, Permits and Licenses

The City should consider implementing a cost-recovery program through commercial leases, permits and licenses. Although these are not planning tools per se, leases, permits and licenses are an opportunity to generate revenue for parks maintenance and to animate park spaces. Commercial uses that are compatible with park uses (such as cafés, restaurants, farmer's markets, fitness classes) can be invited into the parkland system by providing a formal application process and by pre-identifying target locations and opportunities.

Key opportunities for consideration include:

- *Events/Public Space Programming* - Events and festivals are an integral part of a City's cultural palette, but it is essential that they are planned in such a way as to minimize any negative impacts on residents, and to maximize their benefits to the City at large. The estimated economic benefits that accrue from these festivals and events is recognized, as are the many social benefits.
- *Group Events at Park Pavilions* - The many pavilions located in public parks across the City are well-used for gatherings, such as picnics and charity events. Rental rates and scheduling programs should be

established by the City to ensure set-up and clean-up costs are recovered.

- *Commercial Fitness Uses in Parks* - City parks are an attractive place that can be used to carry out business activities related to exercise, such as boot camps, Tai Chi or yoga. These commercial fitness uses in parks naturally seek out pleasant locations that promote a particular experience for participants.
- *Small-Scale Commercial Opportunities/Kiosks* - Small scale commercial activities should be permitted and supported throughout the parkland system and along the trails networks. These small-scale commercial uses will make the parkland system more attractive for visitors, and generate revenue for the City and private sector.
- *Larger-Scale Commercial Opportunities* - The Markham parkland system is a natural attraction, creating tremendous business opportunities to locate commercial facilities, such as restaurants and banquet facilities that enhance tourism opportunities, as well as other retail and commercial office space that bring everyday vitality to public parks.

6.4 Other Tools Will Have an Impact

There are a range of other tools that the City will need to consider in achieving the desired highly connected and complete parkland system within the City. The following text highlights additional tools to be considered.

Development Charges

Development Charges cannot be used for the acquisition of land for parks, but can play an important role in funding some of the public recreational and sports facilities that would be appropriately placed within the public parkland system. It is of extreme importance that within the urban centres and corridors major public buildings be built to reinforce and support the urban parkland system. Care must be taken to ensure that public libraries, museums, arenas, recreational and cultural centres are located on substantial urban squares within the urban context to promote relationships among the institutions, the parks system and the ancillary uses/programming that enliven both.

The Zoning By-law - Private Open Space

The zoning by-law should be utilized to ensure that individual high density development projects include private and semi-private amenity space for the use by the occupants of the building. Private balconies, semi-private rooftop or at-grade gardens should be considered in every development.

The Zoning By-law could consider a minimal requirement for a minimum of 10 m²/100m² of Gross Leasable Floor Area to be provided as private and/or semi-private amenity space for all developments within the centres, corridors and intensification designations, as identified on Schedule A to the Official Plan.

The Planning Act - Section 37

Section 37 of the Planning Act allows the municipality to exchange increases in height and/or density for defined community benefits. Community benefits can include enhancements to the public park system and recreational services, including additional land, and capital improvements. Further, Section 37 can be utilized to implement a public art program, which should, like the public buildings, be used to enhance the importance and visibility of the public parks system, especially the defined Urban Squares and Urban Public Plazas. The City of Markham Council approved a public art policy for Markham in May 2012.

The Planning Act – Section 42 - Sustainability

The Planning Act, in Section 42, provides an opportunity for the City, in its Official Plan to provide relief from the parkland conveyance requirement in exchange for meeting specific sustainability criteria. While research has not identified any municipalities taking advantage of this sub-section in the Act just yet, it is important to consider both empowering policy in the new Official Plan, as well as an approach to facilitate the incentive.

The City has not explored this option through this study, preferring, instead to focus its sustainability program on other implementation tools and techniques.

CITY OF MARKHAM

REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES + PRACTICES

APPENDIX A: Comparison Matrix of Parkland Dedication Policies and Practices

Note – Survey information was collected and prepared by BILD in November 2011. Certain information may reflect proposals by the various municipalities at the time of the survey, but which may have since been modified. While the Study Team has attempted to ensure the reliability of the information, there may be instances where it is out of date, or inaccurate.

Municipality	Conveyance of Land for Parks Purposes / Dedication				Cash-in-lieu of Land Dedication/Development size / Value of Cash-in-lieu	Land Valuation Appraisals	Exemptions - Types of Development	Additional Costs
	Residential	Commercial	Industrial	Any other type of land use • Mixed Use	Development Types • All • Low Density • Medium Density • High Density			
City of Markham	At the rate of 1 ha for each 300 dwelling units proposed OR Land equal to 5% of land to be developed	Land equal to 2% of land to be developed	Land equal to 2% of land to be developed	LANDS FOR PURPOSES OTHER THAN COMMERCIAL OR INDUSTRIAL Land equal to 5% of land to be developed SINGLE PARCEL OF LAND The rate should be applied to the same proportion of the GFA of the use	CIL will be calculated at the set rate determined by land use Payment of money in an amount equal to the value of the lands the day before the (first) Building Permit is issued	APPRAISALS Shall be determined in accordance with generally accepted appraisal principles	Any land for which a building permit has been issued prior to the date of enactment of this By-law	N/A
City of Toronto	Land equal to 5% of land to be developed	Land equal to 2% of land to be developed	Land equal to 2% of land to be developed	ALTERNATIVE RATE (Varies and is area/site specific but this rate will apply to “parkland acquisition priority areas”) Land at a rate of 0.4 ha for each 300 dwelling units For sites less than 1 ha parkland will not exceed 10% of the development site For sites 1 ha to 5 ha parkland will not exceed 15% of the development site For sites greater than 5 ha parkland will not exceed 20% of the development site MIXED USE Respective rates shall be applied to the total land area of the parcel in the same proportion as the GFA of the residential use is to the GFA of the non-residential use	1) Residential Sites less than 1 ha 10% of the value of the development site 2) Sites 1-5 ha 15% of the value of the development site 3) Greater than 5 ha 20% of the value of the development site	APPRAISALS Shall be carried out by the direction of the Executive Director, facilities and Real Estate and will be conducted or commissioned by City Staff Shall be determined in accordance with generally accepted appraisal principles	<ul style="list-style-type: none"> Non-profit housing Replacement buildings or structures Single detached and semi-detached replacement dwellings Nursing homes All publicly funded buildings Additions or alterations of less than 200 sq. metres to existing non-residential buildings 	<ul style="list-style-type: none"> Applicant incurs legal fees and land transfer taxes on all parkland dedications to the City Appraisal costs shall be paid by the owner
City of Vaughan	At the rate of 1 ha for each 300 dwelling units propose	Land equal to 2% of land to be developed	Land equal to 2% of land to be developed	INSTITUTIONAL No lands are required to be conveyed LANDS OTHER THAN COMMERCIAL OR INDUSTRIAL Land equal to 5% of land to be developed SINGLE PARCEL OF LAND The rate should be applied to the same proportion of the GFA area of the use	CIL will be calculated at the set rate determined by land use Payment of money in an amount equal to the value of the lands the day before the (first) Building Permit is issued A fixed unit rate of \$4,100.00 shall be used to calculate the CIL	APPRAISALS Shall be determined in accordance with generally accepted appraisal principles	Exceptions – Any building additions	N/A
Town of Richmond Hill	Land at the rate of 1 ha for each 300 dwelling units propose OR Land equal to 5% of land to be developed	Land equal to 2% of land to be developed	Land equal to 2% of land to be developed	MIXED USE Land will be conveyed at the rate applicable to the predominant proposed use and all land proposed for development will be included in calculating the required amount of land to be conveyed	CIL will be calculated at the set rate determined by land use Payment of money in an amount equal to the value of the lands the day before the (first) Building Permit is issued June 27,2001-December 21, 2012 applicable Rate: The value of land shall be calculated at a fixed rate of \$10,000 per proposed dwelling unit	APPRAISALS Shall be determined in accordance with generally accepted appraisal principles	<ul style="list-style-type: none"> To a development or redevelopment where the predominant proposed use of the land is for Special Resident Uses or for Institutional uses To a residential development that will not result in an increase in the number of dwelling units To a commercial or industrial purpose that will not result in an increase in the GFA 	N/A

Municipality	Conveyance of Land for Parks Purposes / Dedication				Cash-in-lieu of Land Dedication/Development size / Value of Cash-in-lieu	Land Valuation Appraisals	Exemptions - Types of Development	Additional Costs
	Residential	Commercial	Industrial	Any other type of land use <ul style="list-style-type: none">Mixed Use	Development Types <ul style="list-style-type: none">AllLow DensityMedium DensityHigh Density			
Town of Aurora	Land at the rate of 1 ha for each 300 dwelling units propose OR Land equal to 5% of land to be developed	Land equal to 2% of land to be developed	Land equal to 2% of land to be developed	CIL will be calculated at the set rate determined by land use Payment of money in an amount equal to the value of the lands the day before the (first) Permit is issued		APPRAISALS Shall be determined in accordance with generally accepted appraisal principles	<ul style="list-style-type: none">Residential dwelling destroyed by fire, Acts of God or other causesWhere no increase in the number of residential dwelling units results	N/A
Town of Newmarket	Land equal to 5% of land to be developed OR Land at a rate of 1 ha for each 300 dwelling units	Land equal to 2% of land to be developed	Land equal to 2% of land to be developed		CIL will be calculated at the set rate determined by land use Payment of money in an amount equal to the value of the lands the day before issuance of the (first) Building Permit or draft Plan of Subdivision	APPRAISALS Shall be determined in accordance with generally accepted appraisal principles	N/A	N/A
Town of Oakville	Land equal to 5% of land to be developed OR Land at a rate of 1 ha for each 300 dwelling units (whichever is greater)	Land equal to 2% of land to be developed	Land equal to 2% of land to be developed	Land equal to 5% of land to be developed MIXED USE The applicable percentage rate regarding the amount of land conveyed shall be the rate which yields the maximum parkland dedication or CIL	CIL will be calculated at the set rate determined by land use Payment of money in an amount equal to the value of the lands the day before issuance of the (first) Building Permit	APPRAISALS <ul style="list-style-type: none">The Manager of Realty Services will determine whether the Town requires the dedication of land or moneyRealty Services will also be responsible for establishing the value of the land for the purpose of calculating any required paymentShall be determined in accordance with generally accepted appraisal principles	N/A	Survey costs shall be paid by the land owner

Municipality	Conveyance of Land for Parks Purposes / Dedication				Cash-in-lieu of Land Dedication/Development size / Value of Cash-in-lieu	Land Valuation Appraisals	Exemptions - Types of Development	Additional Costs
	Residential	Commercial	Industrial	Any other type of land use <ul style="list-style-type: none">Mixed Use	Development Types <ul style="list-style-type: none">AllLow DensityMedium DensityHigh Density			
City of Burlington	Land equal to 5% of land to be developed OR Land at a rate of 1 ha for each 300 dwelling units			ANY OTHER TYPE OF LAND USE Land equal to 5% of land to be developed	Payment of money in an amount equal to the value of the lands the day before the day the (first) Building Permit or approval of a Plan of Subdivision authorizing development is issued The land value of the land to be developed x 5% The number of units in the proposed development divided by 300 x the per ha land value of the land to be developed OR The number of units in the proposed development x \$6,500, (whichever is less) The number of units in the proposed development divided by 300 x the per ha land value of the land to developed OR The number of units in the proposed development x \$5,500, (whichever is less)	APPRAISALS Shall be determined in accordance with generally accepted appraisal principles	N/A	N/A
City of Mississauga	Land equal to 5% of the land to be developed OR 1 ha of land for every 300 dwellings proposed, whichever is greater	Land equal to 2% of land to be developed	FOR RELIGIOUS ASSEMBLY AND INDUSTRIAL Land equal to 2% of land to be developed	ALL OTHER LAND TYPES NOT MENTIONED Land equal to 5% of the land to be developed MIXED USE The applicable percentage rate regarding the amount of land conveyed shall be calculated by determining what the predominant use on the land is and then the percentage rates set out above MEDIUM/HIGH DENSITY The value of land may be calculated at such value which is less than its market value in accordance with such formula as contained in any policy that may be approved by council	CIL will be calculated at the set rate determined by land use. The value of land shall be determined as of the day before the issuance of the (first) building permit NON-RESIDENTIAL CIL calculated based on the percentage increase in GFA The following formula will be used: New Total GFA = Previous Total GFA – Demolished GFA + New GFA CIL owing = (New Total GFA – Previous Total GFA)/ Previous Total GFA x Total Market Value x 2%	DIRECT COMPARISON APPROACH Appropriate adjustments shall be made to the comparable sales to deduct any part of the DC or CIL of Parkland payments in the sales prices of the comparable properties 1 ha/300 DWELLING UNITS APPROACH <ul style="list-style-type: none">Market value will be estimated using a City-wide land average of medium density residential lands in order to encourage higher density residential developmentAverage value of 1 ha of medium density lands is divided by 300 dwelling units to find the standard rate per unit for residential development	<ul style="list-style-type: none">Development, redevelopment, subdivisions or consentsRedevelopment of residential and non-residential properties which have been razed by fire or other accidental causesAdditions or alterations to existing residential buildings which do not increase the number of dwelling units	All appraisal costs shall be paid by the land owner

Municipality	Conveyance of Land for Parks Purposes / Dedication				Cash-in-lieu of Land Dedication/Development size / Value of Cash-in-lieu	Land Valuation Appraisals	Exemptions - Types of Development	Additional Costs
	Residential	Commercial	Industrial	Any other type of land use <ul style="list-style-type: none">Mixed Use	Development Types <ul style="list-style-type: none">AllLow DensityMedium DensityHigh Density			
						<p>APPRAISALS</p> <ul style="list-style-type: none">If an applicant objects to the land value evaluation, appraisal may be performed at the applicant's expense and prepared by an accredited appraiser, reviewed by Realty ServicesThe Realty Services Section of the Corporate Services Department will prepare a market valuation to estimate the land value to provide a basis to calculate CILShall be determined in accordance with generally accepted appraisal principles		
City of Brampton (proposed policies)	Land equal to 5% of the land to be developed			<p>LOW DENSITY Land at a rate of ___ha for each ___dwelling units(TBD)</p> <p>MEDIUM DENSITY Land at a rate of .06 ha for each 300 dwelling units</p> <p>HIGH DENSITY Land at a rate of .25 ha for each 300 dwelling units</p>	<p>RESIDENTIAL Low Density: \$450k/ac. Medium Density: \$825k/ac. or \$5,330/unit High Density: \$825k/ac. or \$6,800/unit</p> <p>OTHER FORMS OF DEVELOPMENT</p> <ul style="list-style-type: none">CIL payable would continue to be based on the value of the land, the day prior to draft plan approvalSite specific valuation would be required for CIL valuation (no use of flat City-wide 'blanket' rates) <p>INDUSTRIAL & COMMERCIAL The approach to the collection of CIL on industrial and commercial CIL (at building permit issuance) is working well and should not be changed</p>	<p>APPRAISALS</p> <ul style="list-style-type: none">Shall be determined in accordance with generally accepted appraisal principlesCIL Calculation methodology should be linked, as much as possible, to 'marketMay include the option for the landowner to get an outside appraisal	<ul style="list-style-type: none">The addition or alteration to an existing building or structure used for Commercial or Industrial purposesProposed development which would increase the density of development	N/A

Municipality	Conveyance of Land for Parks Purposes / Dedication				Cash-in-lieu of Land Dedication/Development size / Value of Cash-in-lieu	Land Valuation Appraisals	Exemptions - Types of Development	Additional Costs
	Residential	Commercial	Industrial	Any other type of land use <ul style="list-style-type: none">Mixed Use	Development Types <ul style="list-style-type: none">AllLow DensityMedium DensityHigh Density			
City of Oshawa	Land equal to 5% of land to be developed	Land equal to 2% of land to be developed	Land equal to 2% of land to be developed	<p>ALL OTHER LAND TYPES Land equal to 5% of land to be developed</p> <p>MIXED USE The Value will be calculated in accordance with the following formula: (.02 x A x (B/D)) + (0.5 x A x (C/D))</p> <p>A= the appraised value of land B= the area in square metres of the portion of the parcel of land used for commercial or industrial purposes C= the area in square metres of the portion of the parcel of land used for a use other than commercial or industrial purposes D= the area in square metres of the parcel of land</p>	<p>Payment of money in an amount equal to the value of the lands the day before issuance of the (first) Building Permit or draft approval for Plan of Subdivision</p> <p>CALCULATION City may require the conveyance of land at the following alternative rates:</p> <p>0.15 ha per 300 dwelling units for net residential density of 101 units per ha</p> <p>OR</p> <p>Greater on lands within the Main Central Area, Sub-Central Area or a Community Central Area.</p> <p>0.3 ha per 300 dwelling units for net residential density of 52 units per ha</p> <p>OR</p> <p>Greater on lands located in the Central Business District, Main Central Area, Sub-Central Area or Community Central Areas</p> <p>In mixed use developments, the rates shall only be applied to the residential component</p>	APPRAISALS Shall be determined in accordance with generally accepted appraisal principles	<ul style="list-style-type: none">Accessory building for residential useAny development which does not result in an increase in the number of residential dwelling units or the enlargement of an existing dwellingDevelopment of land by Native peopleDevelopment on lands that are part of the Central Business District Renaissance Community Improvement AreaLands outside of a registered Plan of Subdivision used solely for: a non-profit institution, a hospital, non-profit housing, a nursing homeA new commercial building that does not exceed 2,500 sq. ft. or an enlargement ofan existing commercial building if the GFA does not exceed 2,500A new industrial building that does not exceed 5,000 sq. ft. or an enlargement of an existing industrial building if the GFA is enlarged by 50% or lessAn agricultural building or structureA non-profit institutionA hospitalNon-profit housingA nursing home	N/A

CITY OF MARKHAM

REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES + PRACTICES

APPENDIX B: Testing Parkland Dedication Approaches and Impacts: Supporting Data and Calculations

Table A1: 1 Hectare Sites - Low Density

	Scenario 1	Scenario 2	Scenario 3
Area of Land (ha)	1.00	1.00	1.00
Density (uph)	17.00	27.00	37.00
Units Generated	17.00	27.00	37.00
Population Generated			
3.36 ppu	57.12	90.72	124.32
Planning Act 1			
Land Cost Assumption (\$/ha)	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00
Parkland at 5% (ha)	0.05	0.05	0.05
Parkland/Person (m2)	8.75	5.51	4.02
Cost	\$75,000.00	\$75,000.00	\$75,000.00
Cost/Person	\$1,313.03	\$826.72	\$603.28
Cost/Unit	4,411.76	2,777.78	2,027.03
Parkland at 1ha/300 du	0.06	0.09	0.12
Parkland/Person (m2)	9.92	9.92	9.92
Cost	\$85,000.00	\$135,000.00	\$185,000.00
Cost/Person	\$1,488.10	\$1,488.10	\$1,488.10
Cost/Unit	\$5,000.00	\$5,000.00	\$5,000.00
Planning Act 2			
Land Cost Assumption (\$/ha)	\$3,000,000.00	\$3,000,000.00	\$3,000,000.00
Parkland at 5% (ha)	0.05	0.05	0.05
Parkland/Person (m2)	8.75	5.51	4.02
Cost	\$150,000.00	\$150,000.00	\$150,000.00
Cost/Person	\$2,626.05	\$1,653.44	\$1,206.56
Cost/Unit	8,823.53	5,555.56	4,054.05
Parkland at 1ha/300 du	0.06	0.09	0.12
Parkland/Person (m2)	9.92	9.92	9.92
Cost	\$170,000.00	\$270,000.00	\$370,000.00
Cost/Person	\$2,976.19	\$2,976.19	\$2,976.19
Cost/Unit	\$10,000.00	\$10,000.00	\$10,000.00

Markham 1			
Land Cost Assumption	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00
Parkland at 1.2141 ha/1000 people	0.07	0.11	0.15
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$104,024.09	\$165,214.73	\$226,405.37
Cost/Person	\$1,821.15	\$1,821.15	\$1,821.15
Cost/Unit	6,119.06	6,119.06	6,119.06
Markham 2			
Land Cost Assumption	\$3,000,000.00	\$3,000,000.00	\$3,000,000.00
Parkland at 1.2141 ha/1000 people	0.07	0.11	0.15
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$208,048.18	\$330,429.46	\$452,810.74
Cost/Person	\$3,642.30	\$3,642.30	\$3,642.30
Cost/Unit	12,238.13	12,238.13	12,238.13

Richmond Hill			
Land Cost Assumption	\$3,000,000.00	\$3,000,000.00	\$3,000,000.00
Parkland at \$10,000/unit - CIL	\$170,000.00	\$270,000.00	\$370,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$2,976.19	\$2,976.19	\$2,976.19
Cost/Unit	10,000.00	10,000.00	10,000.00
Vaughan			
Land Cost Assumption	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00
Parkland at \$4100 per unit - CIL	\$69,700.00	\$110,700.00	\$151,700.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$1,220.24	\$1,220.24	\$1,220.24
Cost/Unit	4,100.00	4,100.00	4,100.00

TABLE A2: 1 Hectare Sites - Medium Density

	Scenario 1	Scenario 2	Scenario 3
Area of Land (ha)	1.00	1.00	1.00
Density (uph)	37.00	58.00	80.00
Units Generated	37.00	58.00	80.00
Population Generated			
2.64 ppu	97.68	153.12	211.20
Planning Act 1			
Land Cost Assumption (\$/ha)	\$3,700,000.00	\$3,700,000.00	\$3,700,000.00
Parkland at 5% (ha)	0.05	0.05	0.05
Parkland/Person (m2)	5.12	3.27	2.37
Cost	\$185,000.00	\$185,000.00	\$185,000.00
Cost/Person	\$1,893.94	\$1,208.20	\$875.95
Cost/Unit	5,000.00	3,189.66	2,312.50
Parkland at 1ha/300 du	0.12	0.19	0.27
Parkland/Person (m2)	12.63	12.63	12.63
Cost	\$456,333.33	\$715,333.33	\$986,666.67
Cost/Person	\$4,671.72	\$4,671.72	\$4,671.72
Cost/Unit	\$12,333.33	\$12,333.33	\$12,333.33
Planning Act 2			
Land Cost Assumption (\$/ha)	\$6,200,000.00	\$6,200,000.00	\$6,200,000.00
Parkland at 5% (ha)	0.05	0.05	0.05
Parkland/Person (m2)	5.12	3.27	2.37
Cost	\$310,000.00	\$310,000.00	\$310,000.00
Cost/Person	\$3,173.63	\$2,024.56	\$1,467.80
Cost/Unit	8,378.38	5,344.83	3,875.00
Parkland at 1ha/300 du	0.12	0.19	0.27
Parkland/Person (m2)	12.63	12.63	12.63
Cost	\$764,666.67	\$1,198,666.67	\$1,653,333.33
Cost/Person	\$7,828.28	\$7,828.28	\$7,828.28
Cost/Unit	20,666.67	20,666.67	20,666.67
Planning Act 3			
Land Cost Assumption (\$/ha)	\$15,000,000.00	\$15,000,000.00	\$15,000,000.00
Parkland at 5% (ha)	0.05	0.05	0.05
Parkland/Person (m2)	5.12	3.27	2.37
Cost	\$750,000.00	\$750,000.00	\$750,000.00
Cost/Person	\$7,678.13	\$4,898.12	\$3,551.14
Cost/Unit	20,270.27	12,931.03	9,375.00
Parkland at 1ha/300 du	0.12	0.19	0.27
Parkland/Person (m2)	12.63	12.63	12.63
Cost	\$1,850,000.00	\$2,900,000.00	\$4,000,000.00
Cost/Person	\$18,939.39	\$18,939.39	\$18,939.39
Cost/Unit	50,000.00	50,000.00	50,000.00

Markham 1			
Land Cost Assumption	\$3,700,000.00	\$3,700,000.00	\$3,700,000.00
Parkland at 1.2141 ha/1000 people	0.12	0.19	0.26
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$438,795.17	\$687,841.07	\$948,746.30
Cost/Person	\$4,492.17	\$4,492.17	\$4,492.17
Cost/Unit	11,859.33	11,859.33	11,859.33
Markham 2			
Land Cost Assumption	\$6,200,000.00	\$6,200,000.00	\$6,200,000.00
Parkland at 1.2141 ha/1000 people	0.12	0.19	0.26
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$735,278.39	\$1,152,598.55	\$1,589,791.10
Cost/Person	\$7,527.42	\$7,527.42	\$7,527.42
Cost/Unit	19,872.39	19,872.39	19,872.39

Richmond Hill			
Land Cost Assumption	\$6,200,000.00	\$6,200,000.00	\$6,200,000.00
Parkland at \$10,000/unit - CIL	\$370,000.00	\$580,000.00	\$800,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$3,787.88	\$3,787.88	\$3,787.88
Cost/Unit	10,000.00	10,000.00	10,000.00
Vaughan			
Land Cost Assumption	\$3,700,000.00	\$3,700,000.00	\$3,700,000.00
Parkland at \$4100 per unit - CIL	\$151,700.00	\$237,800.00	\$328,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$1,553.03	\$1,553.03	\$1,553.03
Cost/Unit	4,100.00	4,100.00	4,100.00
Toronto			
Land Cost Assumption	15,000,000.00	15,000,000.00	15,000,000.00
Parkland at .4 ha/300 du	0.05	0.08	0.11
Parkland/Person (m2)	5.05	5.05	5.05
Cost	\$740,000.00	\$1,160,000.00	\$1,600,000.00
Cost/Person	\$7,575.76	\$7,575.76	\$7,102.27
Cost/Unit	\$20,000.00	\$20,000.00	\$18,750.00
* for a 1 ha site, capped at 10% of the value of the Development Site	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00

TABLE A3: 1 Hectare Sites - High Density

	Scenario 1	Scenario 2	Scenario 3
Area of Land (ha)	1.00	1.00	1.00
Density (uph)	80.00	114.00	148.00
Units Generated	80.00	114.00	148.00
Population Generated			
1.91 ppu	152.80	217.74	282.68
Planning Act 1			
Land Cost Assumption (\$/ha)	\$4,325,000.00	\$4,325,000.00	\$4,325,000.00
Parkland at 5% (ha)	0.05	0.05	0.05
Parkland/Person (m2)	3.27	2.30	1.77
Cost	\$216,250.00	\$216,250.00	\$216,250.00
Cost/Person	\$1,415.25	\$993.16	\$765.00
Cost/Unit	2,703.13	1,896.93	1,461.15
Parkland at 1ha/300 du	0.27	0.38	0.49
Parkland/Person (m2)	17.45	17.45	17.45
Cost	\$1,153,333.33	\$1,643,500.00	\$2,133,666.67
Cost/Person	\$7,547.99	\$7,547.99	\$7,547.99
Cost/Unit	\$14,416.67	\$14,416.67	\$14,416.67
Planning Act 2			
Land Cost Assumption (\$/ha)	\$10,000,000.00	\$10,000,000.00	\$10,000,000.00
Parkland at 5% (ha)	0.05	0.05	0.05
Parkland/Person (m2)	3.27	2.30	1.77
Cost	\$500,000.00	\$500,000.00	\$500,000.00
Cost/Person	\$3,272.25	\$2,296.32	\$1,768.78
Cost/Unit	6,250.00	4,385.96	3,378.38
Parkland at 1ha/300 du	0.27	0.38	0.49
Parkland/Person (m2)	17.45	17.45	17.45
Cost	\$2,666,666.67	\$3,800,000.00	\$4,933,333.33
Cost/Person	\$17,452.01	\$17,452.01	\$17,452.01
Cost/Unit	\$33,333.33	\$33,333.33	\$33,333.33
Planning Act 3			
Land Cost Assumption (\$/ha)	\$37,000,000.00	\$37,000,000.00	\$37,000,000.00
Parkland at 5% (ha)	0.05	0.05	0.05
Parkland/Person (m2)	3.27	2.30	1.77
Cost	\$1,850,000.00	\$1,850,000.00	\$1,850,000.00
Cost/Person	\$12,107.33	\$8,496.37	\$6,544.50
Cost/Unit	23,125.00	16,228.07	12,500.00
Parkland at 1ha/300 du	0.27	0.38	0.49
Parkland/Person (m2)	17.45	17.45	17.45
Cost	\$9,866,666.67	\$14,060,000.00	\$18,253,333.33
Cost/Person	\$64,572.43	\$64,572.43	\$64,572.43
Cost/Unit	\$123,333.33	\$123,333.33	\$123,333.33

Markham 1			
Land Cost Assumption	\$4,325,000.00	\$4,325,000.00	\$4,325,000.00
Parkland at 1.2141 ha/1000 people	0.19	0.26	0.34
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$802,350.13	\$1,143,348.93	\$1,484,347.73
Cost/Person	\$5,250.98	\$5,250.98	\$5,250.98
Cost/Unit	10,029.38	10,029.38	10,029.38
Markham 2			
Land Cost Assumption	\$10,000,000.00	\$10,000,000.00	\$10,000,000.00
Parkland at 1.2141 ha/1000 people	0.19	0.26	0.34
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$1,855,144.80	\$2,643,581.34	\$3,432,017.88
Cost/Person	\$12,141.00	\$12,141.00	\$12,141.00
Cost/Unit	23,189.31	23,189.31	23,189.31

Richmond Hill			
Land Cost Assumption	\$10,000,000.00	\$10,000,000.00	\$10,000,000.00
Parkland at \$10,000/unit - CIL	\$800,000.00	\$1,140,000.00	\$1,480,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$5,235.60	\$5,235.60	\$5,235.60
Cost/Unit	10,000.00	10,000.00	10,000.00
Vaughan			
Land Cost Assumption	\$4,325,000.00	\$4,325,000.00	\$4,325,000.00
Parkland at \$4100 per unit - CIL	\$328,000.00	\$467,400.00	\$606,800.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$2,146.60	\$2,146.60	\$2,146.60
Cost/Unit	4,100.00	4,100.00	4,100.00
Toronto			
Land Cost Assumption	37,000,000.00	37,000,000.00	37,000,000.00
Parkland at .4 ha/300 du	0.11	0.15	0.20
Parkland/Person (m2)	6.98	6.98	6.98
Cost	\$3,946,666.67	\$5,624,000.00	\$7,301,333.33
Cost/Person	\$24,214.66	\$16,992.74	\$13,089.01
Cost/Unit	\$46,250.00	\$32,456.14	\$25,000.00
* for a 1 ha site, capped at 10% of the value of the Development Site	\$3,700,000.00	\$3,700,000.00	\$3,700,000.00

Table B1: 5 Hectare Sites - Low Density

	Scenario 1	Scenario 2	Scenario 3
Area of Land (ha)	5.00	5.00	5.00
Density (uph)	17.00	27.00	37.00
Units Generated	85.00	135.00	185.00
Population Generated			
3.36 ppu	285.60	453.60	621.60
Planning Act 1			
Land Cost Assumption (\$/ha)	\$7,500,000.00	\$7,500,000.00	\$7,500,000.00
Parkland at 5% (ha)	0.25	0.25	0.25
Parkland/Person (m2)	8.75	5.51	4.02
Cost	\$375,000.00	\$375,000.00	\$375,000.00
Cost/Person	\$1,313.03	\$826.72	\$603.28
Cost/Unit	4,411.76	2,777.78	2,027.03
Parkland at 1ha/300 du	0.28	0.45	0.62
Parkland/Person (m2)	9.92	9.92	9.92
Cost	\$425,000.00	\$675,000.00	\$925,000.00
Cost/Person	\$1,488.10	\$1,488.10	\$1,488.10
Cost/Unit	\$5,000.00	\$5,000.00	\$5,000.00
Planning Act 2			
Land Cost Assumption (\$/ha)	\$15,000,000.00	\$15,000,000.00	\$15,000,000.00
Parkland at 5% (ha)	0.25	0.25	0.25
Parkland/Person (m2)	8.75	5.51	4.02
Cost	\$750,000.00	\$750,000.00	\$750,000.00
Cost/Person	\$2,626.05	\$150.00	\$150.00
Cost/Unit	8,823.53	5,555.56	4,054.05
Parkland at 1ha/300 du	0.28	0.45	0.62
Parkland/Person (m2)	9.92	9.92	9.92
Cost	\$850,000.00	\$1,350,000.00	\$1,850,000.00
Cost/Person	\$2,976.19	\$2,976.19	\$2,976.19
Cost/Unit	\$10,000.00	\$10,000.00	\$10,000.00

Markham 1			
Land Cost Assumption	\$7,500,000.00	\$7,500,000.00	\$7,500,000.00
Parkland at 1.2141 ha/1000 people	0.35	0.55	0.75
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$520,120.44	\$826,073.64	\$1,132,026.84
Cost/Person	\$1,821.15	\$1,821.15	\$1,821.15
Cost/Unit	6,119.06	6,119.06	6,119.06
Markham 2			
Land Cost Assumption	\$15,000,000.00	\$15,000,000.00	\$15,000,000.00
Parkland at 1.2141 ha/1000 people	0.35	0.55	0.75
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$1,040,240.88	\$1,652,147.28	\$2,264,053.68
Cost/Person	\$3,642.30	\$3,642.30	\$3,642.30
Cost/Unit	12,238.13	12,238.13	12,238.13

Richmond Hill			
Land Cost Assumption	\$7,500,000.00	\$7,500,000.00	\$7,500,000.00
Parkland at \$10,000/unit - CIL	\$850,000.00	\$1,350,000.00	\$1,850,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$2,976.19	\$2,976.19	\$2,976.19
Cost/Unit	10,000.00	10,000.00	10,000.00
Vaughan			
Land Cost Assumption	\$7,500,000.00	\$7,500,000.00	\$7,500,000.00
Parkland at \$4100 per unit - CIL	\$348,500.00	\$553,500.00	\$758,500.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$1,220.24	\$1,220.24	\$1,220.24
Cost/Unit	4,100.00	4,100.00	4,100.00

TABLE B2: 5 Hectare Sites - Medium Density

	Scenario 1	Scenario 2	Scenario 3
Area of Land (ha)	5.00	5.00	5.00
Density (uph)	37.00	58.00	80.00
Units Generated	185.00	290.00	400.00
Population Generated			
2.64 ppu	488.40	765.60	1,056.00
Planning Act 1			
Land Cost Assumption (\$/ha)	\$18,500,000.00	\$18,500,000.00	\$18,500,000.00
Parkland at 5% (ha)	0.25	0.25	0.25
Parkland/Person (m2)	5.12	3.27	2.37
Cost	\$925,000.00	\$925,000.00	\$925,000.00
Cost/Person	\$1,893.94	\$1,208.20	\$875.95
Cost/Unit	5,000.00	3,189.66	2,312.50
Parkland at 1ha/300 du	0.62	0.97	1.33
Parkland/Person (m2)	12.63	12.63	12.63
Cost	\$2,281,666.67	\$3,576,666.67	\$4,933,333.33
Cost/Person	\$4,671.72	\$4,671.72	\$4,671.72
Cost/Unit	\$12,333.33	\$12,333.33	\$12,333.33
Planning Act 2			
Land Cost Assumption (\$/ha)	\$31,000,000.00	\$31,000,000.00	\$31,000,000.00
Parkland at 5% (ha)	0.25	0.25	0.25
Parkland/Person (m2)	5.12	3.27	2.37
Cost	\$1,550,000.00	\$1,550,000.00	\$1,550,000.00
Cost/Person	\$3,173.63	\$2,024.56	\$1,467.80
Cost/Unit	8,378.38	5,344.83	3,875.00
Parkland at 1ha/300 du	0.62	0.97	1.33
Parkland/Person (m2)	12.63	12.63	12.63
Cost	\$3,823,333.33	\$5,993,333.33	\$8,266,666.67
Cost/Person	\$7,828.28	\$7,828.28	\$7,828.28
Cost/Unit	20,666.67	20,666.67	20,666.67
Planning Act 3			
Land Cost Assumption (\$/ha)	\$75,000,000.00	\$75,000,000.00	\$75,000,000.00
Parkland at 5% (ha)	0.25	0.25	0.25
Parkland/Person (m2)	5.12	3.27	2.37
Cost	\$3,750,000.00	\$3,750,000.00	\$3,750,000.00
Cost/Person	\$7,678.13	\$4,898.12	\$3,551.14
Cost/Unit	20,270.27	12,931.03	9,375.00
Parkland at 1ha/300 du	0.62	0.97	1.33
Parkland/Person (m2)	12.63	12.63	12.63
Cost	\$9,250,000.00	\$14,500,000.00	\$20,000,000.00
Cost/Person	\$18,939.39	\$18,939.39	\$18,939.39
Cost/Unit	50,000.00	50,000.00	50,000.00

Markham 1			
Land Cost Assumption	\$18,500,000.00	\$18,500,000.00	\$18,500,000.00
Parkland at 1.2141 ha/1000 people	0.59	0.93	1.28
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$2,193,975.83	\$3,439,205.35	\$4,743,731.52
Cost/Person	\$4,492.17	\$4,492.17	\$4,492.17
Cost/Unit	11,859.33	11,859.33	11,859.33
Markham 2			
Land Cost Assumption	\$31,000,000.00	\$31,000,000.00	\$31,000,000.00
Parkland at 1.2141 ha/1000 people	0.59	0.93	1.28
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$3,676,391.93	\$5,762,992.75	\$7,948,955.52
Cost/Person	\$7,527.42	\$7,527.42	\$7,527.42
Cost/Unit	19,872.39	19,872.39	19,872.39

Richmond Hill			
Land Cost Assumption	\$31,000,000.00	\$31,000,000.00	\$31,000,000.00
Parkland at \$10,000/unit - CIL	\$1,850,000.00	\$2,900,000.00	\$4,000,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$3,787.88	\$3,787.88	\$3,787.88
Cost/Unit	10,000.00	10,000.00	10,000.00
Vaughan			
Land Cost Assumption	\$18,500,000.00	\$18,500,000.00	\$18,500,000.00
Parkland at \$4100 per unit - CIL	\$758,500.00	\$1,189,000.00	\$1,640,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$1,553.03	\$1,553.03	\$1,553.03
Cost/Unit	4,100.00	4,100.00	4,100.00
Toronto			
Land Cost Assumption	75,000,000.00	75,000,000.00	75,000,000.00
Parkland at .4 ha/300 du	0.25	0.39	0.53
Parkland/Person (m2)	5.05	5.05	5.05
Cost	\$3,700,000.00	\$5,800,000.00	\$8,000,000.00
Cost/Person	\$7,575.76	\$7,575.76	\$7,575.76
Cost/Unit	\$20,000.00	\$20,000.00	\$20,000.00
* for a 5 ha site, capped at 15% of the value of the Development Site	\$11,250,000.00	\$11,250,000.00	\$11,250,000.00

TABLE B3: 5 Hectare Sites - High Density

	Scenario 1	Scenario 2	Scenario 3
Area of Land (ha)	5.00	5.00	5.00
Density (uph)	80.00	114.00	148.00
Units Generated	400.00	570.00	740.00
Population Generated			
1.91 ppu	764.00	1,088.70	1,413.40
Planning Act 1			
Land Cost Assumption (\$/ha)	\$21,625,000.00	\$21,625,000.00	\$21,625,000.00
Parkland at 5% (ha)	0.25	0.25	0.25
Parkland/Person (m2)	3.27	2.30	1.77
Cost	\$1,081,250.00	\$1,081,250.00	\$1,081,250.00
Cost/Person	\$1,415.25	\$993.16	\$765.00
Cost/Unit	2,703.13	1,896.93	1,461.15
Parkland at 1ha/300 du	1.33	1.90	2.47
Parkland/Person (m2)	17.45	17.45	17.45
Cost	\$5,766,666.67	\$8,217,500.00	\$10,668,333.33
Cost/Person	\$7,547.99	\$7,547.99	\$7,547.99
Cost/Unit	\$14,416.67	\$14,416.67	\$14,416.67
Planning Act 2			
Land Cost Assumption (\$/ha)	\$50,000,000.00	\$50,000,000.00	\$50,000,000.00
Parkland at 5% (ha)	0.25	0.25	0.25
Parkland/Person (m2)	3.27	2.30	1.77
Cost	\$2,500,000.00	\$2,500,000.00	\$2,500,000.00
Cost/Person	\$3,272.25	\$2,296.32	\$1,768.78
Cost/Unit	6,250.00	4,385.96	3,378.38
Parkland at 1ha/300 du	1.33	1.90	2.47
Parkland/Person (m2)	17.45	17.45	17.45
Cost	\$13,333,333.33	\$19,000,000.00	\$24,666,666.67
Cost/Person	\$17,452.01	\$17,452.01	\$17,452.01
Cost/Unit	\$33,333.33	\$33,333.33	\$33,333.33
Planning Act 3			
Land Cost Assumption (\$/ha)	185,000,000.00	185,000,000.00	185,000,000.00
Parkland at 5% (ha)	0.25	0.25	0.25
Parkland/Person (m2)	3.27	2.30	1.77
Cost	\$9,250,000.00	\$9,250,000.00	\$9,250,000.00
Cost/Person	\$12,107.33	\$8,496.37	\$6,544.50
Cost/Unit	23,125.00	16,228.07	12,500.00
Parkland at 1ha/300 du	1.33	1.90	2.47
Parkland/Person (m2)	17.45	17.45	17.45
Cost	\$49,333,333.33	\$70,300,000.00	\$91,266,666.67
Cost/Person	\$64,572.43	\$64,572.43	\$64,572.43
Cost/Unit	\$123,333.33	\$123,333.33	\$123,333.33

Markham 1			
Land Cost Assumption	\$21,625,000.00	\$21,625,000.00	\$21,625,000.00
Parkland at 1.2141 ha/1000 people	0.93	1.32	1.72
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$4,011,750.63	\$5,716,744.65	\$7,421,738.67
Cost/Person	\$5,250.98	\$5,250.98	\$5,250.98
Cost/Unit	10,029.38	10,029.38	10,029.38
Markham 2			
Land Cost Assumption	\$50,000,000.00	\$50,000,000.00	\$50,000,000.00
Parkland at 1.2141 ha/1000 people	0.93	1.32	1.72
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$9,275,724.00	\$13,217,906.70	\$17,160,089.40
Cost/Person	\$12,141.00	\$12,141.00	\$12,141.00
Cost/Unit	23,189.31	23,189.31	23,189.31

Richmond Hill			
Land Cost Assumption	\$50,000,000.00	\$50,000,000.00	\$50,000,000.00
Parkland at \$10,000/unit - CIL	\$4,000,000.00	\$5,700,000.00	\$7,400,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$5,235.60	\$5,235.60	\$5,235.60
Cost/Unit	10,000.00	10,000.00	10,000.00
Vaughan			
Land Cost Assumption	\$21,625,000.00	\$21,625,000.00	\$21,625,000.00
Parkland at \$4100 per unit - CIL	\$1,640,000.00	\$2,337,000.00	\$3,034,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$2,146.60	\$2,146.60	\$2,146.60
Cost/Unit	4,100.00	4,100.00	4,100.00
Toronto			
Land Cost Assumption	185,000,000.00	185,000,000.00	185,000,000.00
Parkland at .4 ha/300 du	0.53	0.76	0.99
Parkland/Person (m2)	6.98	6.98	6.98
Cost	\$19,733,333.33	\$28,120,000.00	\$36,506,666.67
Cost/Person	\$25,828.97	\$25,489.12	\$19,633.51
Cost/Unit	\$49,333.33	\$48,684.21	\$37,500.00
* for a 5 ha site, capped at 15% of the value of the Development Site	\$27,750,000.00	\$27,750,000.00	\$27,750,000.00

Table C1: 20 Hectare Sites - Low Density

	Scenario 1	Scenario 2	Scenario 3
Area of Land (ha)	20.00	20.00	20.00
Density (uph)	17.00	27.00	
Units Generated	340.00	540.00	740.00
Population Generated			
3.36 ppu	1,142.40	1,814.40	2,486.40
Planning Act 1			
Land Cost Assumption (\$/ha)	\$30,000,000.00	\$30,000,000.00	\$30,000,000.00
Parkland at 5% (ha)	1.00	1.00	1.00
Parkland/Person (m2)	8.75	5.51	4.02
Cost	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00
Cost/Person	\$1,313.03	\$826.72	\$603.28
Cost/Unit	4,411.76	2,777.78	2,027.03
Parkland at 1ha/300 du	1.13	1.80	2.47
Parkland/Person (m2)	9.92	9.92	9.92
Cost	\$1,700,000.00	\$2,700,000.00	\$3,700,000.00
Cost/Person	\$1,488.10	\$1,488.10	\$1,488.10
Cost/Unit	\$5,000.00	\$5,000.00	\$5,000.00
Planning Act 2			
Land Cost Assumption (\$/ha)	\$60,000,000.00	\$60,000,000.00	\$60,000,000.00
Parkland at 5% (ha)	1.00	1.00	1.00
Parkland/Person (m2)	8.75	5.51	4.02
Cost	\$3,000,000.00	\$3,000,000.00	\$3,000,000.00
Cost/Person	\$2,626.05	\$1,653.44	\$1,206.56
Cost/Unit	8,823.53	5,555.56	4,054.05
Parkland at 1ha/300 du	1.13	1.80	2.47
Parkland/Person (m2)	9.92	9.92	9.92
Cost	\$3,400,000.00	\$5,400,000.00	\$7,400,000.00
Cost/Person	\$2,976.19	\$2,976.19	\$2,976.19
Cost/Unit	\$10,000.00	\$10,000.00	\$10,000.00

Markham 1			
Land Cost Assumption	\$30,000,000.00	\$30,000,000.00	\$30,000,000.00
Parkland at 1.2141 ha/1000 people	1.39	2.20	3.02
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$2,080,481.76	\$3,304,294.56	\$4,528,107.36
Cost/Person	\$1,821.15	\$1,821.15	\$1,821.15
Cost/Unit	6,119.06	6,119.06	6,119.06
Markham 2			
Land Cost Assumption	\$60,000,000.00	\$60,000,000.00	\$60,000,000.00
Parkland at 1.2141 ha/1000 people	1.39	2.20	3.02
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$4,160,963.52	\$6,608,589.12	\$9,056,214.72
Cost/Person	\$3,642.30	\$3,642.30	\$3,642.30
Cost/Unit	12,238.13	12,238.13	12,238.13

Richmond Hill			
Land Cost Assumption	\$30,000,000.00	\$30,000,000.00	\$30,000,000.00
Parkland at \$10,000/unit - CIL	\$3,400,000.00	\$5,400,000.00	\$7,400,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$2,976.19	\$2,976.19	\$2,976.19
Cost/Unit	10,000.00	10,000.00	10,000.00
Vaughan			
Land Cost Assumption	\$30,000,000.00	\$30,000,000.00	\$30,000,000.00
Parkland at \$4100 per unit - CIL	\$1,394,000.00	\$2,214,000.00	\$3,034,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$1,220.24	\$1,220.24	\$1,220.24
Cost/Unit	4,100.00	4,100.00	4,100.00

TABLE C2: 20 Hectare Sites - Medium Density

	Scenario 1	Scenario 2	Scenario 3
Area of Land (ha)	20.00	20.00	20.00
Density (uph)	37.00	58.00	80.00
Units Generated	740.00	1,160.00	1,600.00
Population Generated			
2.64 ppu	1,953.60	3,062.40	4,224.00
Planning Act 1			
Land Cost Assumption (\$/ha)	\$74,000,000.00	\$74,000,000.00	\$74,000,000.00
Parkland at 5% (ha)	1.00	1.00	1.00
Parkland/Person (m2)	5.12	3.27	2.37
Cost	\$3,700,000.00	\$3,700,000.00	\$3,700,000.00
Cost/Person	\$1,893.94	\$1,208.20	\$875.95
Cost/Unit	5,000.00	3,189.66	2,312.50
Parkland at 1ha/300 du	2.47	3.87	5.33
Parkland/Person (m2)	12.63	12.63	12.63
Cost	\$9,126,666.67	\$14,306,666.67	\$19,733,333.33
Cost/Person	\$4,671.72	\$4,671.72	\$4,671.72
Cost/Unit	\$12,333.33	\$12,333.33	\$12,333.33
Planning Act 2			
Land Cost Assumption (\$/ha)	\$124,000,000.00	\$124,000,000.00	\$124,000,000.00
Parkland at 5% (ha)	1.00	1.00	1.00
Parkland/Person (m2)	5.12	3.27	2.37
Cost	\$6,200,000.00	\$6,200,000.00	\$6,200,000.00
Cost/Person	\$3,173.63	\$2,024.56	\$1,467.80
Cost/Unit	8,378.38	5,344.83	3,875.00
Parkland at 1ha/300 du	2.47	3.87	5.33
Parkland/Person (m2)	12.63	12.63	12.63
Cost	\$15,293,333.33	\$23,973,333.33	\$33,066,666.67
Cost/Person	\$7,828.28	\$7,828.28	\$7,828.28
Cost/Unit	20,666.67	20,666.67	20,666.67
Planning Act 3			
Land Cost Assumption (\$/ha)	\$300,000,000.00	\$300,000,000.00	\$300,000,000.00
Parkland at 5% (ha)	1.00	1.00	1.00
Parkland/Person (m2)	5.12	3.27	2.37
Cost	\$15,000,000.00	\$15,000,000.00	\$15,000,000.00
Cost/Person	\$7,678.13	\$4,898.12	\$3,551.14
Cost/Unit	20,270.27	12,931.03	9,375.00
Parkland at 1ha/300 du	2.47	3.87	5.33
Parkland/Person (m2)	12.63	12.63	12.63
Cost	\$37,000,000.00	\$58,000,000.00	\$80,000,000.00
Cost/Person	\$18,939.39	\$18,939.39	\$18,939.39
Cost/Unit	50,000.00	50,000.00	50,000.00

Markham 1			
Land Cost Assumption	\$74,000,000.00	\$74,000,000.00	\$74,000,000.00
Parkland at 1.2141 ha/1000 people	2.37	3.72	5.13
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$8,775,903.31	\$13,756,821.41	\$18,974,926.08
Cost/Person	\$4,492.17	\$4,492.17	\$4,492.17
Cost/Unit	11,859.33	11,859.33	11,859.33
Markham 2			
Land Cost Assumption	\$124,000,000.00	\$124,000,000.00	\$124,000,000.00
Parkland at 1.2141 ha/1000 people	2.37	3.72	5.13
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$14,705,567.71	\$23,051,971.01	\$31,795,822.08
Cost/Person	\$7,527.42	\$7,527.42	\$7,527.42
Cost/Unit	19,872.39	19,872.39	19,872.39

Richmond Hill			
Land Cost Assumption	\$124,000,000.00	\$124,000,000.00	\$124,000,000.00
Parkland at \$10,000/unit - CIL	\$7,400,000.00	\$11,600,000.00	\$16,000,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$3,787.88	\$3,787.88	\$3,787.88
Cost/Unit	10,000.00	10,000.00	10,000.00
Vaughan			
Land Cost Assumption	\$74,000,000.00	\$74,000,000.00	\$74,000,000.00
Parkland at \$4100 per unit - CIL	\$3,034,000.00	\$4,756,000.00	\$6,560,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$1,553.03	\$1,553.03	\$1,553.03
Cost/Unit	4,100.00	4,100.00	4,100.00
Toronto			
Land Cost Assumption	300,000,000.00	300,000,000.00	300,000,000.00
Parkland at .4 ha/300 du	0.99	1.55	2.13
Parkland/Person (m2)	5.05	5.05	5.05
Cost	\$14,800,000.00	\$23,200,000.00	\$32,000,000.00
Cost/Person	\$7,575.76	\$7,575.76	\$7,575.76
Cost/Unit	\$20,000.00	\$20,000.00	\$20,000.00
* for a 20ha site, capped at 20% of the value of the Development Site	\$60,000,000.00	\$60,000,000.00	\$60,000,000.00

TABLE C3: 20 Hectare Sites - High Density

	Scenario 1	Scenario 2	Scenario 3
Area of Land (ha)	20.00	20.00	20.00
Density (uph)	80.00	114.00	148.00
Units Generated	1,600.00	2,280.00	2,960.00
Population Generated			
1.91 ppu	3,056.00	4,354.80	5,653.60
Planning Act 1			
Land Cost Assumption (\$/ha)	\$86,500,000.00	\$86,500,000.00	\$86,500,000.00
Parkland at 5% (ha)	1.00	1.00	1.00
Parkland/Person (m2)	3.27	2.30	1.77
Cost	\$4,325,000.00	\$4,325,000.00	\$4,325,000.00
Cost/Person	\$1,415.25	\$993.16	\$765.00
Cost/Unit	2,703.13	1,896.93	1,461.15
Parkland at 1ha/300 du	5.33	7.60	9.87
Parkland/Person (m2)	17.45	17.45	17.45
Cost	\$23,066,666.67	\$32,870,000.00	\$42,673,333.33
Cost/Person	\$7,547.99	\$7,547.99	\$7,547.99
Cost/Unit	\$14,416.67	\$14,416.67	\$14,416.67
Planning Act 2			
Land Cost Assumption (\$/ha)	\$200,000,000.00	\$200,000,000.00	\$200,000,000.00
Parkland at 5% (ha)	1.00	1.00	1.00
Parkland/Person (m2)	3.27	2.30	1.77
Cost	\$10,000,000.00	\$10,000,000.00	\$10,000,000.00
Cost/Person	\$3,272.25	\$2,296.32	\$1,768.78
Cost/Unit	6,250.00	4,385.96	3,378.38
Parkland at 1ha/300 du	5.33	7.60	9.87
Parkland/Person (m2)	17.45	17.45	17.45
Cost	\$53,333,333.33	\$76,000,000.00	\$98,666,666.67
Cost/Person	\$17,452.01	\$17,452.01	\$17,452.01
Cost/Unit	\$33,333.33	\$33,333.33	\$33,333.33
Planning Act 3			
Land Cost Assumption (\$/ha)	\$740,000,000.00	\$740,000,000.00	\$740,000,000.00
Parkland at 5% (ha)	1.00	1.00	1.00
Parkland/Person (m2)	3.27	2.30	1.77
Cost	\$37,000,000.00	\$37,000,000.00	\$37,000,000.00
Cost/Person	\$12,107.33	\$8,496.37	\$6,544.50
Cost/Unit	23,125.00	16,228.07	12,500.00
Parkland at 1ha/300 du	5.33	7.60	9.87
Parkland/Person (m2)	17.45	17.45	17.45
Cost	\$197,333,333.33	\$281,200,000.00	\$365,066,666.67
Cost/Person	\$64,572.43	\$64,572.43	\$64,572.43
Cost/Unit	\$123,333.33	\$123,333.33	\$123,333.33

Markham 1			
Land Cost Assumption	\$86,500,000.00	\$86,500,000.00	\$86,500,000.00
Parkland at 1.2141 ha/1000 people	3.71	5.29	6.86
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$16,047,002.52	\$22,866,978.59	\$29,686,954.66
Cost/Person	\$5,250.98	\$5,250.98	\$5,250.98
Cost/Unit	10,029.38	10,029.38	10,029.38
Markham 2			
Land Cost Assumption	\$200,000,000.00	\$200,000,000.00	\$200,000,000.00
Parkland at 1.2141 ha/1000 people	3.71	5.29	6.86
Parkland/Person (m2)	12.14	12.14	12.14
Cost	\$37,102,896.00	\$52,871,626.80	\$68,640,357.60
Cost/Person	\$12,141.00	\$12,141.00	\$12,141.00
Cost/Unit	23,189.31	23,189.31	23,189.31

Richmond Hill			
Land Cost Assumption	\$200,000,000.00	\$200,000,000.00	\$200,000,000.00
Parkland at \$10,000/unit - CIL	\$16,000,000.00	\$22,800,000.00	\$29,600,000.00
Parkland/Person	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$5,235.60	\$5,235.60	\$5,235.60
Cost/Unit	10,000.00	10,000.00	10,000.00
Vaughan			
Land Cost Assumption	\$86,500,000.00	\$86,500,000.00	\$86,500,000.00
Parkland at \$4100 per unit - CIL	\$6,560,000.00	\$9,348,000.00	\$12,136,000.00
Parkland/Person (m2)	0.00	0.00	0.00
Parkland Generated	0.00	0.00	0.00
Cost/Person	\$2,146.60	\$2,146.60	\$2,146.60
Cost/Unit	4,100.00	4,100.00	4,100.00
Toronto			
Land Cost Assumption	740,000,000.00	740,000,000.00	740,000,000.00
Parkland at .4 ha/300 du	2.13	3.04	3.95
Parkland/Person (m2)	6.98	6.98	6.98
Cost	\$78,933,333.33	\$112,480,000.00	\$146,026,666.67
Cost/Person	\$25,828.97	\$25,828.97	\$25,828.97
Cost/Unit	\$49,333.33	\$49,333.33	\$49,333.33
* for a 20ha site, capped at 20% of the value of the Development Site	\$148,000,000.00	\$148,000,000.00	\$148,000,000.00

CITY OF MARKHAM

REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES + PRACTICES

APPENDIX C:

DRAFT Markham Parkland Manual

DRAFT Markham Parkland Manual

1.1 Public Parkland Is Important to the City of Markham

In order for Markham to maintain its reputation for success – economically, aesthetically and in terms of quality of place/quality of life - anticipated growth must be accommodated in an urban structure that facilitates transit supportive urban centres and corridors, in balance with its already established and more traditional suburban forms of building. Part of that success is focused on maintaining a comprehensive public parkland system that grows and evolves with population and employment growth over time.

The planned urban structure must be achieved

From a broad urban structure context, it is already well known that the planned evolution of communities towards increased overall densities and higher density forms of development is a requirement, not a choice. Public parks are a critical component that needs to be provided in conjunction with all forms of development.

There is an economic imperative

Investment in the public realm (parks, streetscapes, public buildings) is good for a city's image, health, beauty and quality of place/quality of life. It is also good for the bottom line. Investment in the public realm will help to ensure that new jobs are created, commercial and business centres are enhanced, property values increased and that income is generated for its investors for many years to come.

A high-quality public realm has a tremendous value - hard economic value in terms of acting as a catalyst and enhancing real estate value, tourism value and assessment value and creating spin-off effects within the community that needs to be continuously enhanced.

Public Parks are key to community development

Public parks are also an important anchor for community development and engagement, particularly in medium and higher density residential or mixed use development areas where there is less private outdoor space available and a greater focus on public space.

Public parks are community-gathering places and serve an important recreational function that, in turn, contributes to stronger and healthier communities. Key benefits include:

- Improving personal health and well-being;
- Advancing social development;
- Enhancing quality of place/quality-of-life;
- Building strong and engaged communities; and,

- Reducing social service costs as a result of the wider social and community benefits realized through parks and recreational services.

It is a fundamental requirement of good planning practice that an appropriate public parkland system – the right amount, the right mixture of park types, the right levels and quality of design and the right programming – be planned and built to serve the existing and future residents of the City of Markham.

The public parkland system must also acknowledge and respond to the evolving planned urban structure intended for Markham in order to contribute to its ongoing success.

1.2 A New and Refined Approach to Parkland Dedication in Markham

Collaboration has been fundamental to Markham's new and refined approach

Today, Markham has indicated a strong desire to work collaboratively with stakeholders, including the development industry, to achieve an approach to urban parks system development, and parkland dedication procedures that are:

- *Appropriate* – delivers a great public parks system that is appropriate for urban, suburban and rural Markham;
- *Equitable* – is fair and reasonable to all the stakeholders, including the City, the development industry and the existing and future residents of the City;
- *Consistent* – is applied equally and fairly to all applicants without the need for individual deal-making, or site-specific adjustments; and,
- *Long-Lasting* – will serve the City well over the coming 10 to 15 years, without the need for constant amendments.

Four key principles guide decision-making

1. The first principle is that land dedication for parks should be based on a principle that directly relates parkland contributions to the population generated by new development. This is in sync with Markham's current approach.
2. The second principle is that the amount of parkland contribution for all residential housing forms should be equitable, and based on the land use designations, and anticipated development forms in the new Markham Official Plan.
3. The third principle is that all development generates a demand for public open space, and that, wherever possible all developments should provide on-site public and connected park space.

4. The fourth principle is that where public park space is not possible or practical, that the City accept cash-in-lieu of parkland for the purposes of enhancing the supply of parkland elsewhere in the municipality, to the benefit of all residents in the City.

1.2 Planning Regime for Parks

The following text is intended to provide guidance to the preparation of new Official Plan policies and a new Parkland Dedication By-law. It is anticipated that the concepts and wording provided in this manual will be refined through the approval processes for those statutory instruments.

General Parks Policies

- The growth of the City's public parkland system will be related to overall population growth in the City, and will be responsive to changing land use intensity and demographic shifts within Markham.
- The City of Markham will establish and grow a comprehensive public parkland system that will include a variety of public parks with different scales, and functions, with correspondingly varied characters and design requirements. The comprehensive public parkland system within the City will include:
 - .i Destination Parks (outside of City ownership and control);
 - .ii City-Wide Parks;
 - .iii Community Parks;
 - .iv Neighbourhood Parks; and,
 - .v Strata Parks.

Destination Parks

- The Destination Parks component, including those lands within a defined Conservation Area and/or lands associated with the evolving Rouge Park are considered public parkland that is intended to serve broader regional, provincial and, in some cases, national interests. In general, these lands:
 - perform an important environmental function, and provide recreational uses and opportunities not typical for an adjacent urban population;
 - are not owned or controlled by the City, and therefore the City cannot ensure recreational space programming, or control the area's development for urban recreational land uses or facilities; and,
 - based on the above, these lands are not considered to contribute in any significant

way to the public parkland needs of the City of Markham residents.

- The City's public parkland system will provide an array of seasonal and year round programmable attractions. All of the City's public parks shall be designed to establish an appropriate character and to perform a specific function or functions. All of the City's public parks will be developed with high quality materials that are sustainable.
- All of the City's public parks shall have adequate frontage on one or more public roads, commensurate with the size and location of the park. Detailed community and building design shall ensure that all City parks are accessible and appropriate for the neighbourhood, community or area that it serves.
- It is the intent of the City to promote innovation in the acquisition, design and development of its public parkland system. If the City is satisfied that the general aims of its planning policy regime with regard to park sizes, locations and functions are met in a particular area, then variations from the specific standards set out in the policies herein shall be permitted without further Amendment.
- The City's public parkland system shall incorporate a full range and mixture of City-Wide Parks, Community and Neighbourhood Parks, generally in accordance with the policies herein. However, the standards and requirements for parks shall not be interpreted to be rigid or inflexible, and will be refined in the context of comprehensive planning for individual communities.

City-Wide Parks

- City-Wide Parks may be identified on the Schedules to the Official Plan and/or within Secondary Plans, and will be acquired by the City over time utilizing the full array of acquisition tools available.
- City-Wide Parks include large scale parks, generally in excess of 12 hectares, but potentially much larger. They are expected to accommodate facilities and provide programs for the entire City outside of those standard facilities provided in Community and Neighbourhood Parks.
- City-Wide Parks provide space for active and passive culture and recreation for all age groups including a wide range of specialized facilities, which serve a number of communities, neighbourhoods and areas.

Community Parks

- Community Parks may be identified on the Schedules to the Official Plan and/or within Secondary Plans, and will be acquired by the City over time utilizing the full array of acquisition tools available.
- Community Parks include large scale parks, generally in excess of 6 hectares, but potentially

much larger. They are expected to accommodate facilities and provide programs for individual communities within the City, outside of those standard facilities provided in Neighbourhood Parks.

- Community Parks are intended to provide space for active and passive culture and recreation for all age groups including a wide range of specialized facilities such as sports fields, large water play facilities, extensive junior and senior playgrounds, large park pavilions, public art, performance areas and historical interpretive information, and park maintenance facilities, which serve a number of communities, neighbourhoods and areas.
- The majority of all residences within a defined neighbourhood should be within a 10-minute walk (approximately 800 metres) of a Community Park.

Neighbourhood Parks

- Neighbourhood Parks may be identified on the Schedules to the Official Plan. However, Secondary Plans are expected to identify conceptually the Neighbourhood Park Strategy, including policies that ensure that the City's public parkland system is achieved through subsequent planning approvals processes.
- Neighbourhood Parks are expected to be acquired primarily through the parkland conveyance requirements of the Planning Act and the Official Plan.
- It is the intent of the City that all residents will be able to walk or cycle to a Neighbourhood Park, which will require that they live within approximately 400 metres of the nearest Neighbourhood Park.
- Neighbourhood Parks include parks of varied sizes and scales, and provide space for, in some instances, field sports, playgrounds and the recreational needs of a local residential area as well as passive recreational spaces to serve local sub-neighbourhoods and urban areas.

In other instances, Neighbourhood Parks are intended as formal pedestrian spaces, in support of the adjacent higher density, mixed use development, specifically designed to reinforce a high quality formalized relationship with its adjacent building use and streetscape.

- The Neighbourhood Parks component of the City's parkland hierarchy may include the following types of public parkland:
 - *Active Neighbourhood Parks* – Active Neighbourhood Parks are intended to serve an entire neighbourhood. They are expected to be within approximately 1.0 to 6.0 hectares in size.
Typically, Active Neighbourhood Parks provide space for field sports, playgrounds and the recreational needs of a local, primarily low-density residential area.

The majority of all residents within a defined neighbourhood should be within a 5-minute walk (approximately 400 metres) of an Active Neighbourhood Park.

- *Urban Squares* – Urban Squares are moderately scaled parks found within the identified centres, corridors and intensification areas. They are expected to be between 0.5 and 5.0 hectares in size.

Urban Squares are designed to be iconic public spaces that become landmarks and destinations that attract residents and tourists alike. Urban Squares accommodate special features such as fountains and public art to add to visual interest and place making. They provide for multifunctional flexible programming and space for social gatherings, festivals and civic functions.

The majority of all residents, visitors and businesses should be within a 5 to 10-minute walk (approximately 400 to 800 metres) of an Urban Square when within an identified centre, corridor or intensification area.

- *Parkettes* – Parkettes are the smallest component of the City's parkland system, and are generally found within the City's low-to-medium-density residential neighbourhoods. They are typically about 0.5 to 1.5 hectares in size.

Typically Parkettes provide passive recreational space to serve local residential neighbourhoods. The majority of all residents within a defined neighbourhood should be within a 2 to 5-minute walk (150 to 400 metres) of a Parkette.

- *Urban Parkettes* – An Urban Parkette is a small component of the parkland hierarchy usually located within the identified centres, corridors or intensification areas. They are typically between 0.02 and 0.5 of a hectare in size.

Urban Parkettes should be widely distributed throughout the identified centres, corridors and intensification areas to ensure easy access and multiple opportunities for rest, relaxation, visual interest, and civic engagement.

Urban Parkettes are intended to provide social spaces that are animated by their adjacent uses such as cafés and shops. The majority of all residents, visitors and businesses should be within a 2 to 5-minute walk (150 to 400 metres) of a Urban Parkette when within a defined centre, corridor or intensification area.

The following policies apply to the establishment of Urban Parkettes:

- + all development applications on sites greater than 0.2 hectares in size shall include a location for an Urban Parkette;
- + an Urban Parkette shall generally have a minimum area of 200 square metres, with a minimum frontage on at least one abutting public sidewalk of 10.0 metres;
- + large sites may include a single, large-scale Urban Parkette and/or a series of smaller Urban Parkettes; and,
- + an Urban Parkette shall not be encumbered by driveways, access lanes, garbage storage areas, utility vaults or other such uses that would take away from the quiet enjoyment of the space.

Strata Parks

- A Strata Park is a component of the parkland hierarchy that is built on a development site, over top of a structure. Strata Parks are typically found within the City's identified centres, corridors and intensification areas and, depending upon their scale and function, can perform as an Active Neighbourhood Park, Urban Square or Urban Parkette.
- Where a Strata Park is proposed that is either to be conveyed to the City, or to remain in private ownership, it may contribute to the parkland conveyance requirement of the development, subject to the following:
 - the owner and/or the condominium corporation covenants the strata park is a public space;
 - it is built to the standards and specifications of the City, including a functional and accessible relationship to grade;
 - it is to be maintained either by the City, or to the satisfaction of the City;
 - it is open and accessible to the public in its design and functions in accordance with municipal by-laws; and,
 - there is an agreement in place that ensures all of the foregoing, that is acceptable to the City.
- Given the inherent encumbrances on the use and development of the land in a Strata Park, the value of the contribution to the parkland conveyance by any Strata Park shall be discounted at the discretion of the City.
- The amount of any given discount will be considered on a site by site basis by the City during the preparation of the other required agreement, and will consider the level of encumbrance

anticipated based on the physical layout of the park – only the actual space usable by the public will be considered, as well as the likely restrictions on public programming of the space.

Open Space Lands

- Open Space Lands are intended to form part of the City’s larger parks and open space system. Open space lands will provide benefits to the parks and open system beyond those provided by City Parks, but are not suitable for City Park programs and facilities and therefore, not accepted as parkland dedication under the Planning Act. Open Space lands may be public lands or privately owned lands that are publicly accessible. Examples of Open Space Lands may include portions of the Natural Heritage Network lands and associated *vegetation protection zones*, transportation and utility corridors, stormwater management facilities, lands required for pedestrian and bicycle routes, and other open space lands encumbered by easements or use restrictions.

Comprehensive Planning

- It is the intent of the City that new development be planned on a comprehensive basis through a Secondary Plan process. Where this is done, the City will ensure that the public parkland requirements identified in the Official Plan and implementing Parkland Dedication By-law are achieved.

The City may permit the establishment of an Area Specific Parkland Agreement that is based on an approved Secondary Plan and is intended to deliver the identified parkland system in a way that is both equitable and acceptable to the City.

- Where an existing neighbourhood, or series of contiguous existing neighbourhoods have:
 - no comprehensive Secondary Plan; or,
 - are considered deficient in public parkland and/or associated facilities and programs; or,
 - have absorbed significant levels of development intensification; or,
 - have experienced a demographic shift in terms of ethnicity, or household characteristics.
- The City shall undertake an analysis to determine the existing level of service for parks and leisure services and facilities, and if determined to be underserved in any way, to include a strategy to acquire additional public parkland within the area and/or to enhance existing facilities and programs to bring the service levels up to City standards, and to recognize the specific demographic/cultural circumstances of the area.

- As a result of this analysis, the City may utilize the cash reserves established through the collection of cash-in-lieu of parkland conveyance to identify and purchase lands within any area of the City considered to be deficient in public parkland.

Parkland Acquisition Tools

- The City's public parkland system will be acquired by the following means:
 - the land acquisition powers authorized by public statutes, including the Planning Act, the Official Plan and the implementing Parkland Dedication By-law;
 - funds allocated in the City's budget, dedicated reserves or joint acquisition programs;
 - voluntary conveyance, donations, gifts, bequests from individuals or corporations; and/or,
 - funds allocated by any authority having jurisdiction.

Conveyance of land for park purposes

- The identified conveyance of land for parkland policies shall be applied equally to all types of development regardless of sponsorship, tenure or occupancy. The actual rates of dedication may vary, and will be established in the Official Plan and in the implementing Parkland Dedication By-law.
- As a condition of development approval or redevelopment of land, Markham may, through the implementing Parkland Dedication By-law, require that land be conveyed for parks or other recreational purposes in an amount not exceeding:
 - for lands proposed for industrial or commercial purposes, 2 per cent of the gross land area;
 - for all other land uses, except for residential purposes, 5 per cent of the gross land area; and,
 - for lands proposed for residential purposes:
 - + where the residential development is comprised of single-detached and semi-detached dwelling units considered by the City to be low density house forms, parkland conveyance shall be based on 1 hectare/300 dwelling units.
 - + where the residential development is comprised of multi-plex block, street or stacked townhouse dwelling units considered by the City to be medium density house forms, parkland conveyance shall be based on 1 hectare/300 dwelling units, or 1.2 hectare/1,000 residents, whichever is less.

- + where the residential development is comprised of apartment dwelling units considered by the City to be a high density house form, parkland conveyance shall be based on 1.2 hectares/1,000 residents.
 - + under no circumstance, shall any parkland conveyance, for any house form in any density category, be less than 5 percent of the gross land area.
- For lands that include a mixture of land uses, conveyance requirements are the sum of the parkland conveyances for each individual use as identified above. For uses described above, the land area for the purposes of calculating the amount of required parkland conveyance shall be determined by the sum of:
 - the *Gross Floor Area* of that part of the ground floor exclusively devoted to such uses; and,
 - any surface parking area exclusively devoted to such uses.
- Land conveyed to the City under this Section shall be used for public parkland or other public recreational purposes, but may be sold at any time, at the discretion of the City, and subject to the policies of the Official Plan and implementing Parkland Dedication By-law.
- It is anticipated that the City will establish a consistent and transparent approach to calculating parkland conveyance, based on the identified requirements.

Markham may consider allowing for further reductions or exemptions for parkland conveyance for the highest density forms of housing

One of the primary concerns expressed by the development industry was the financial implications of the Alternative Planning Act Standard of 1.0 ha./300 dwelling units on high density development proposals. To alleviate this concern to some degree:

- First, the base line parkland conveyance requirement of for higher density apartments 1.2 ha./1000 people is substantially less than the Alternative Planning Act Standard of 1.0 ha./300 dwelling units; and,
- Second, this study recommended a number of options in the form of graduated approaches to parkland conveyance for higher density apartment development projects within identified “Intensification Areas” as shown on Map 2 to the New Markham Official Plan. The recommendation is that the amount of parkland conveyance required is further reduced as density increases, as follows:
 - The conveyance required shall be 1.2 ha./1000 people, for that component of a residential development having a *Floor Space Index (FSI)* of less than 3.0;

- The conveyance required shall be 0.84 ha./1000 people, for that component of a residential development having a *Floor Space Index* of between 3.0 and 6.0; and,
- The conveyance required shall be 0.42 ha./1000 people, for that component of a residential development having a *Floor Space Index* greater than 6.0.

The above rates shall be applied and calculated on a cumulative basis. To qualify for the reduced rate, the *development* or *redevelopment* shall be consistent with any applicable built form, height and massing guidelines and in conformity with policies of the Official Plan and any applicable Secondary Plan, all to the satisfaction of the City.

Other potential reductions/exemptions

- The City may consider a parkland conveyance reduction or exemption from, conveyance for park purposes where a development or redevelopment:
 - is a public use;
 - includes affordable housing in accordance with the definition of affordable housing in the Provincial Policy Statement;
 - is a nursing home as defined by the Long-Term Care Act, 2007;
 - is being undertaken by a not-for-profit organization; or,
 - is within a Heritage Conservation Area or a Heritage Conservation District Study Area and the development is in substantial conformity with the policies and guidelines of the heritage conservation district plan, the Markham Official Plan and any applicable Secondary Plan.
- Any conveyance reduction or exemption under the above shall be established by the City on a case-by-case basis, subject to an assessment of the following:
 - the scale of the proposed development;
 - its anticipated impact on the use and supply of public parkland in the adjacent community;
 - the proposal's contribution to the achievement of the City's relevant planning objectives as expressed in the Official Plan.
- No parkland conveyance for park purposes is required for the following:
 - the enlargement or renovation of an existing residential building provided that it

continues to conform to the Zoning By-law and does not increase the number of dwelling units that lawfully exist prior to such development or redevelopment; and,

- notwithstanding the above, no parkland conveyance for park purposes is required for the creation of a Secondary Suite.

Credits/New Requirements

- If land has been conveyed, or is required to be conveyed to the City for park purposes, or if a payment of cash-in-lieu of such conveyance has been received by the City or is owing to it under the implementing Parkland By-law or as a condition imposed under Sections 42, 51.1 or 53 of the Planning Act, no additional conveyance or payment in respect of the land subject to the earlier conveyance or payment is required in respect of subsequent development or redevelopment, unless:
 - there is a change in the proposed development or redevelopment which would increase the density of development; or,
 - land originally proposed for development or redevelopment for commercial or industrial purposes is now proposed for development or redevelopment for other purposes.

In the above instances, the development or redevelopment shall be subject to a recalculation of parkland conveyance, in accordance with the Planning Act, the policies of the Official Plan and the implementing Parkland Dedication By-law.

- Where an application for development or redevelopment indicates a reduced level of residential population than is currently existing, or approved but not yet built, the parkland conveyance shall be reassessed by the City. Any surplus parkland conveyance or cash-in-lieu payment made to the City, may be applied as a credit for future development or redevelopment by the same proponent. A proponent may be defined as an individual, an incorporated company or a group of incorporated companies that are bound together, by an agreement acceptable to the City.
- Subject to the approval of the City, in any instance where land in excess of the amount of land required for dedication has been conveyed to the City for park purposes in association with development or redevelopment, the excess may be applied as a credit to future development or redevelopment by the same proponent.

Cash-in-lieu of Conveyance for Park Purposes

- It is the objective of the City to obtain the maximum amount of parkland permissible by the policies of the Official Plan and the implementing Parkland Dedication By-law. However, the City, at its discretion, may accept the payment of money, or a combination of land and

payment of money, up to the value of the land otherwise required to be conveyed in lieu of the conveyance of land.

- The City shall accept cash-in-lieu of conveyance only under the following circumstances:
 - where no opportunity exists to provide suitable parkland on the development/redevelopment site;
 - where the required land conveyance fails to provide an area of appropriate size, configuration or location for development of a public park;
 - where the required land conveyance would render the remainder of the development/redevelopment of the site unusable or impractical for development;
 - where existing park and recreational facilities in the vicinity of the site area are adequate to serve the projected population.
- All money received by the City through payments of cash-in-lieu of park conveyance, and all money received on the sale of public parkland less eligible expenses, shall be paid into a special account and spent only for the acquisition of land to be used for park or for other public recreational purposes.
- The money in the special account may be invested in securities in which the municipality is permitted to invest under the Municipal Act, and the earnings derived from the investment of the money shall be paid into the special account. The auditor in the auditor's annual report shall report on the activities and status of the account.

Establishing the Value of Land

- The City shall establish, in the case of development or redevelopment the value of any required cash-in-lieu of parkland as of the day before the day the building permit is issued in respect of the development or redevelopment or, if more than one building permit is required for the development or redevelopment, as of the day before the day the first permit is issued. In the case of land division through either plan of subdivision or consent, such valuation shall be on the day prior to draft plan approval or the granting of a provisional consent, as the case may be.
- Where a Draft Plan of Subdivision includes a mixture of uses and/or a mixture of housing types, the City shall further segment the Draft Plan of Subdivision as follows:
 - for all uses that require Site Plan Approval, the land value for any required payment for park purposes conveyance shall be established as of the day before the day the building permit is issued; and,

- for all other uses within the Draft Plan of Subdivision, where Site Plan Approval is not required, the land value for any required payment for park purposes conveyance shall be established as of the day before the day of the approval of the Draft Plan of Subdivision, less those lands identified above.
- Where cash-in-lieu of a conveyance for park purposes is required, the value of the land shall be determined by a market appraisal, carried out by an independent, accredited appraiser approved by the City. Where there is a dispute over land value, the City may require a peer review by another independent, accredited appraiser at the applicant's expense. The City shall establish a standard appraisal format.
- Notwithstanding the above, the City may utilize other valuation approaches, including, but not limited to:
 - a recent record of land sale - not more than 1 year old, and applicable to the same land parcel; or,
 - a per hectare land value established by the City on an annual basis; or,

where appropriate in the opinion of the Manager of Real Property, an in-house valuation of the market value of the land prepared by the Manager of Real Property.

Land Acceptable/Not Acceptable for Conveyance

In providing parkland throughout the City for use of its residents, Markham wishes to secure lands which will be suitable for their health, safety and enjoyment. Lands to be dedicated must also be suitable to perform their intended role within the prescribed parkland hierarchy. Lands should not possess or result in conditions which are inefficient for their use or that result in excessive costs to the municipality to develop for parks purposes.

Although the acceptance of lands to be conveyed for parkland will ultimately be at the discretion of the City, the following policies are recommended:

- The acceptance of lands to be conveyed for park purposes shall be at the discretion of the City, and subject to a Phase 1 Environmental Site Assessment, or if necessary in the sole opinion of the City, a Phase II Environmental Site Assessment or Record of Site Condition. Lands considered suitable for conveyance for parks purposes shall specifically not include the following:
 - any natural heritage feature or hydrologic feature including the vegetation protection zone identified in the Official Plan or Zoning By-law in effect at the time of determination;
 - any natural heritage feature or hydrologic feature including the vegetation protection

zone identified by a required Environmental vegetation protection zone identified by a required Environmental Impact Study and where lands are conveyed into public ownership;

- lands identified as Environmental Protection Area by the Official Plan;
 - utility rights-of-way;
 - any lands encumbered by easements or right-of-use agreements that restrict, in any way, the City's use of the land for public park or other recreational purposes, other than those to which the City is a Party;
 - land areas required only to provide connecting pedestrian and bicycle routes;
 - any other lands deemed by the City as unsuitable for parkland conveyance, due to size, road frontage, topography, contamination or location.
- Natural heritage features including woodlands, wetlands, woodlots and valleylands such as ponds, rivers and creeks and associated vegetation protection zones may be incorporated into lands conveyed to the municipality, and retained in their natural state, recognizing that such features are an asset to the community. These lands shall not be acceptable as part of the parkland conveyance requirement.
 - Land for park purposes may be designed to include stormwater detention features. In instances where, in the opinion of the City, the stormwater detention facility precludes in whole or in part the use of that portion of the area for typical park purposes, then such stormwater detention areas shall not be accepted as part of the conveyance requirement.
 - The City may accept the conveyance of lands that are not contiguous to the site that is subject to development or redevelopment, provided that the value of the land to be provided off-site is approximately equal to the value of the lands from the subject development or redevelopment site intended for park purposes. The City may also accept a combination of off-site land, on-site land and/or cash-in-lieu of the conveyance of land.

Administration

- The Parkland Dedication By-law, when approved, shall be administered by the Director of Planning and Urban Design.
- Where a parkland conveyance and/or cash-in-lieu of parkland is required, the City shall not issue a Building Permit, and no person shall construct a building on the remainder of the land proposed for development or redevelopment unless arrangements for the conveyance of the land and/or payment of the cash-in-lieu of land have been made that are satisfactory to the City.

- In the event of a qualifying/eligible dispute between the City and an owner of land on the determined amount of land and/or the value of land, either party may apply to the Municipal Board to have the value determined and the Board shall make a final determination of the matter, in accordance with the Planning Act.
- Any legal or administrative costs associated with the conveyance of land shall be the responsibility of the transferor.
- The parkland conveyance policies of the Official Plan and implementing Parkland Dedication By-law shall be reviewed by the City every 2 years to ensure their ongoing validity in the evolving development context within the City. Factors utilized in the calculation of parkland dedication requirements such as household sizes and land values shall be updated on a regular basis to ensure they remain valued.

1.3 Public Park Maintenance

“Maintaining Parks and Greenspace Improves Life and Attracts Business”

Brad Lee – Toronto Star, October 2, 2012

Design for Lower Maintenance

- Urban parks, due to their complexity and use patterns can be extremely expensive to maintain. Typically, urban parks have more planting beds (rather than just lawn) and a greater diversity of plant material to achieve visual and seasonal interest. Paving materials are also more diverse and require ongoing maintenance.
- The City should promote more sustainable urban parks that require less maintenance over time. Landscape architects can design with relatively low maintenance paving materials, furniture and plant material, while recognizing that all components of an urban park will still need to be maintained simply because of their high use characteristics.
- Plant material in an urban setting is crucial and requires special attention for maintenance, for example:
 - Selection of plant species that are drought tolerant once their root systems are established is one example of reducing the maintenance requirements for water;
 - Understanding the role of soil chemistry, soil volumes and soil types is also important to support lower maintenance plant material and must be specified in tandem with plant material; and,
 - Pruning requirements of plant material can also be taken into consideration in the design process, to reduce maintenance.

- The maintenance requirement for watering of plant material is important to consider early in the design process. Landscape architects can work together with architects and engineers to identify opportunities for water sources from adjacent buildings, for example, such as recycled rain water from roof tops (which provide the cleanest source of rainwater) that can be stored in cisterns, filtered and reused for irrigation.

Even drought tolerant plant material needs irrigation to become established (the first year or two) and maintenance plans also need to prepare for extended drought periods to keep planted areas healthy and attractive.

Memorandum of Understanding

- There is, in some municipalities, an information gap between those who are responsible for park design and development and those who will be responsible to maintain those parks once completed.
- Include parks maintenance staff in the review of the parks design and development process to ensure that there is a full understanding and ultimately a clear commitment to establishing the required maintenance protocols. The intent of a park design, program and facilities need to be clearly identified early in the process by Urban Design staff on a City-wide basis to ensure appropriate consideration of issues related to their ability to maintain the plant materials, landscape surfaces and features over the long-term. Any special equipment or maintenance expertise should be identified before the park design is built.
- A decision to proceed with a complex (enhanced) design, requiring enhanced maintenance, must include an Agreement between the parks design and development group and the parks maintenance group that the park and all its component parts can, and will be maintained in accordance with required best practices.
- Further, the increase in maintenance budget needs to be understood and agreed to by commissioners/directors and disseminated to the front line staff as an agreed to direction.

Agreement to Maintain to City Standards – Strata Parks

- Where a strata park has been approved, and the park remains in the ownership of the associated condominium corporation, it shall be a requirement of the legal agreement that the “park be maintained to City Standards.” City standards are likely to be considered the minimum standard.
- For this approach to urban park development to be successful, there will need to be a very clear definition of just what “maintained to City Standards” means. For each park developed in this context, the City will need to establish a park maintenance protocol that can be measured, and ultimately enforced. The park maintenance protocol may include the following requirements, subject to City-wide standards approved by Council:

- Maintain, in accordance with approved protocols, all plant materials, paving materials, park furniture, structures and art installations;
- Expeditiously (within 30 days) replace any dead, dying or damaged plant materials;
- Expeditiously (within 30 days) replace or repair any damaged or uneven paving materials, park furniture and/or art installations;
- Remove graffiti, scratchiti, debris, animal waste and empty garbage containers at least on a daily basis; and,
- Remove snow from, and salt paved areas as required.

The Role of a BIA or Registered Neighbourhood Association

- The City may not be in a position to provide ongoing park maintenance to the standard that any specific urban park design requires. This will have a tremendous impact on the appearance, and ultimately the property values in proximity.
- Business Improvement Areas (BIA) have a mandate to assist in the maintenance of commercial business areas, and are funded by local business operators and land owners through a component of their municipal taxation. Certainly BIA's can work with the City's parks maintenance staff to augment the maintenance protocols of the City. At the very least, BIA's and business owners should be asked to assist in maintaining adjacent public realm components as part of their property maintenance procedures.
- While Neighbourhood Associations are not provided with a stable funding source through municipal taxation, there are jurisdictions in Canada that rely on local neighbourhood involvement in the maintenance of adjacent public parks. The City should pursue this form of relationship, or, at the very least, ask higher density residential developments to assist in maintaining adjacent public realm components as part of their property maintenance procedures.

Park Maintenance Trust Funds

- The City may not be in a position to provide ongoing park maintenance to the standard that any specific urban park design requires.
- In the United States, many jurisdictions have required that urban parks be maintained by a Trust Fund. Typically the Trust Fund is established while the park is in the design and development stages. Trust Funds can be funded by the private sector (a tax deduction in the US), by the public sector, or through some combination of both. The Trust Fund Board retains maintenance contractors and takes on the responsibility to maintain the public park to a prescribed level of quality, and the City absolves themselves of further maintenance responsibilities.

Adopt-a-Park Program

It is important to note that an adopt-a-park program is not a replacement for ongoing maintenance of City parkland, but an opportunity to augment existing responsibilities.

- Local service clubs, school groups, horticultural societies or interested citizens/citizen groups may wish to become involved in specific park maintenance events, and/or for ongoing maintenance responsibilities.
- The City should consider expanding the existing adopt-a-park program where individuals or groups can become the guardian of a specific park or some component part thereof. The City would need to establish an individual protocol, and prepare agreements to facilitate this type of intervention. The program could simply be to raise funds to retain a maintenance team, or there could be a strategy to utilize the sweat equity of these groups. Nonetheless, the City would need to retain management control, while harnessing the tremendous enthusiasm and potential of service clubs, school groups, horticultural societies or interested citizens/citizen groups.

Commercial Leases, Permits and Licenses

The City should consider implementing a cost-recovery program through commercial leases, permits and licenses. Although these are not planning tools per se, leases, permits and licenses are an opportunity to generate revenue for parks maintenance and to animate park spaces. Commercial uses that are compatible with park uses (such as cafés, restaurants, farmer's markets, fitness classes) can be invited into the parkland system by providing a formal application process and by pre-identifying target locations and opportunities. Key commercial opportunities for consideration include:

- *Events/Public Space Programming* - Events and festivals are an integral part of a City's cultural palette, but it is essential that they are planned in such a way as to minimize any negative impacts on residents, and to maximize their benefits to the City at large. The estimated economic benefits that accrue from these festivals and events is recognized, as are the many social benefits.
- *Group Events at Park Pavilions* - The many pavilions located in public parks across the City are well-used for gatherings, such as picnics and charity events. Rental rates and scheduling programs should be established by the City to ensure set-up and clean-up costs are recovered.
- *Commercial Fitness Uses in Parks* - City parks are an attractive place that can be used to carry out business activities related to exercise, such as boot camps, Tai Chi or yoga. These commercial fitness uses in parks naturally seek out pleasant locations that promote a particular experience for participants.

- *Small-Scale Commercial Opportunities/Kiosks* - Small scale commercial activities should be permitted and supported throughout the parkland system and along the trails networks. These small-scale commercial uses will make the parkland system more attractive for visitors, and generate revenue for the City and private sector.
- *Larger-Scale Commercial Opportunities* - The Markham parkland system is a natural attraction, creating tremendous business opportunities to locate commercial facilities, such as restaurants and banquet facilities that enhance tourism opportunities, as well as other retail and commercial office space that bring everyday vitality to public parks.

1.4 Other Tools May be Utilized

Development Charges

Development Charges cannot be used for the acquisition of land for parks, but can play an important role in funding some of the public recreational and sports facilities that would be appropriately placed within the public parkland system. It is of extreme importance that within the urban centres and corridors major public buildings be built to reinforce and support the urban parkland system. Care must be taken to ensure that public libraries, museums, arenas, recreational and cultural centres are located on substantial urban squares within the urban context to promote relationships among the institutions, the parks system and the ancillary uses/programming that enliven both.

The Zoning By-law - Private Open Space

The zoning by-law should be utilized to ensure that individual high density development projects include private and semi-private amenity space for the use by the occupants of the building. Private balconies, semi-private rooftop or at-grade gardens should be considered in every development.

The Zoning By-law could consider a minimal requirement for a minimum of 10 m²/100m² of Gross Leasable Floor Area to be provided as private and/or semi-private amenity space for all developments within the centres, corridors and intensification designations, as identified on Schedule A to the Official Plan.

The Planning Act - Section 37

Section 37 of the Planning Act allows the municipality to exchange increases in height and/or density for defined community benefits. Community benefits can include enhancements to the public park system and recreational services, including additional land, and capital improvements. Further, Section 37 can be utilized to implement a public art program, which should, like the public buildings, be used to enhance the importance and visibility of the public parks system, especially the defined Urban Squares and Urban Parkette. The City of Markham Council approved a public art policy for Markham in May 2012.

The Planning Act – Section 42 - Sustainability

The Planning Act, in Section 42, provides an opportunity for the City, in its Official Plan to provide relief from the parkland conveyance requirement in exchange for meeting specific sustainability criteria. While research has not identified any municipalities taking advantage of this sub-section in the Act just yet, it is important to consider both empowering policy in the new Official Plan, as well as an approach to facilitate the incentive.

The City has not explored this option through this study, preferring, instead to focus its sustainability program on other implementation tools and techniques.

CITY OF MARKHAM

REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES + PRACTICES

APPENDIX D:

**Town of Markham Parkland Dedication
By-Law and Policy Review Presentation to
DSC – November 8, 2011**

Town of Markham Parkland Dedication By-law and Policy Review

**Presentation to Development Services Committee
November 8, 2011**

This Presentation

- **Current Parkland Dedication legislation**
- **Issues related to application of By-law**
- **Proposed Review of Markham's By-law**
- **Next steps**

The Current Legislative Environment

Authority comes from Ontario Planning Act, Sections 42 and 51.1

5% of land area in the case of residential development, and

2% of land area, in the case of commercial or industrial development

A local by-law may require that land be conveyed at a rate of 1 hectare for every 300 dwelling units (or less)



The Current Legislative Environment

The Planning Act of Ontario

The Act requires that municipalities have a by-law in place requiring parkland dedication through development

A specific Official Plan policy is necessary in order to utilize the alternative provisions of 1 hectare (or less) of land/300 dwelling units

Markham has had the appropriate local legislation in place since 1990



The Current Legislative Environment

Town of Markham By-laws and Policies

By-law 195-90 provides the Town with authorization to obtain land for parks

In 1994 the Official Plan was amended to allow for the **1 ha per 300 dwelling units** alternative provisions

Under the current OP policy, a **maximum** contribution of **3 ac (1.2ha) per 1000 persons** may be required in calculating neighbourhood parks component



Markham's Practice Respecting Parkland Dedication

- The **greater** of 5% of the land area **or** the lesser of:

- 1 ha per 300 units **or**
 - 3 ac (1.2 ha) per 1000 people for neighbourhood parkland

- Where conveyance not practical, payment is required equal to the value of land that would have been conveyed

Parkland Dedication Practice by Density/Built Form

OPA #5 Area (Low-density/greenfield) communities:

The greater of 5% of the land area

Or the lesser of 1 ha/300 units or 3 acres (1.2 ha) per 1000 persons for neighbourhood parks

Plus 1 ac/1000 persons for community parkland

Parkland Dedication Practice by Density/Built Form

For high-density development:

1 ha/300 units

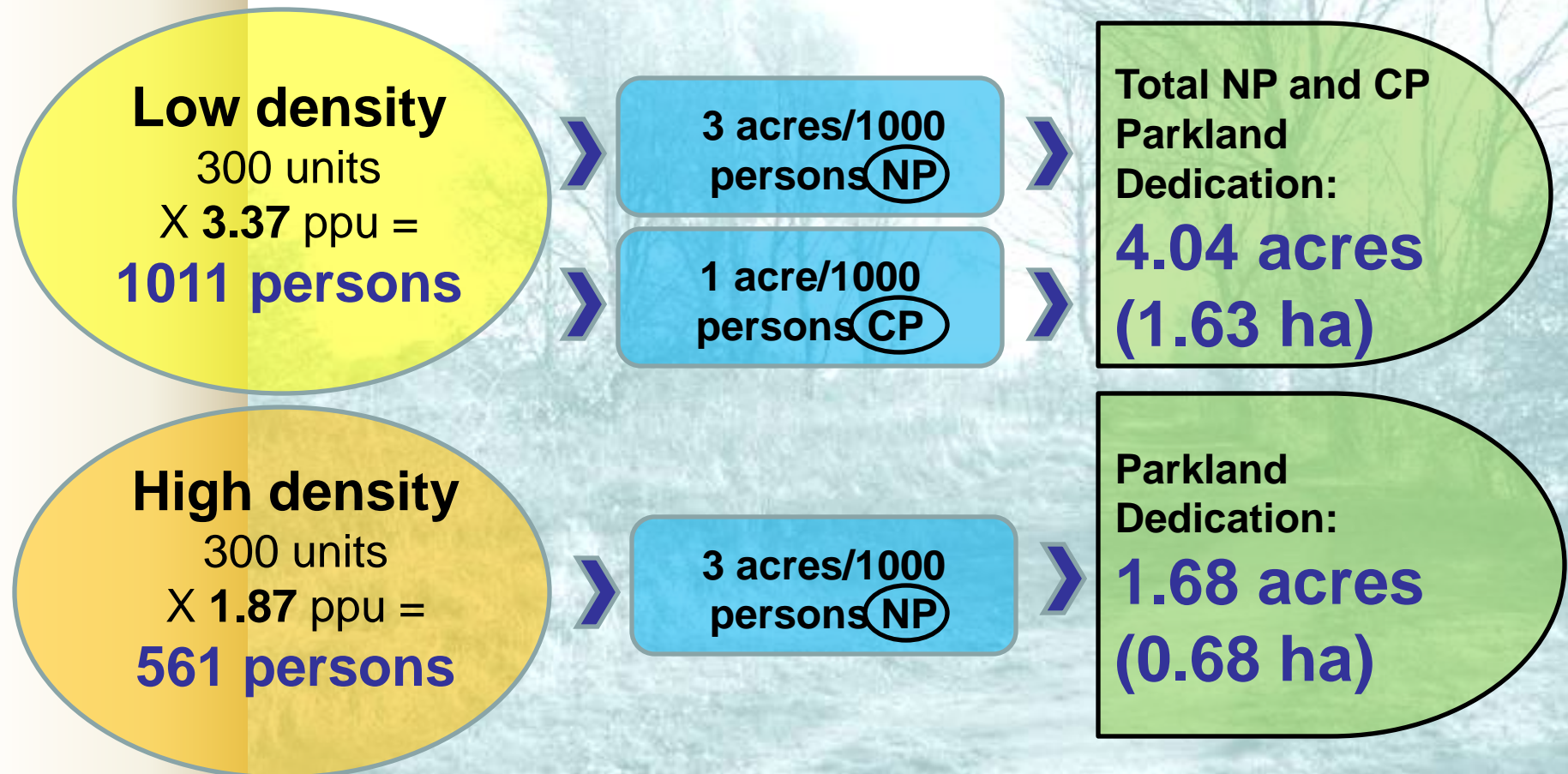
**capped at 3 ac (1.2ha) /1000 persons for
Neighbourhood Parks;**

Community Parks dedication not required
for high density infill

Parkland dedication excludes valleylands and
acquisitions for Town and Regional scale
Parks.

Parkland Dedication Practice by Density/Built Form

Comparison of Parkland Dedication by Density



Markham's Practice Respecting Parkland Dedication

Determining Land Value

For **site plan applications**, the land value is determined the day before a building permit is first issued for development (as per Planning Act)

For **subdivision applications**, the land value is determined the day before draft plan approval (as per Planning Act)

A land appraisal is required, or alternatively an agreement of purchase and sale, not more than one year old

For **Developer Group Agreements**, the participants agree amongst themselves as to value, and the Trustee manages compensation between over and under dedicated landowners

Application of By-law and Policy

Higher Density Development

Rules are fairly complex and their **real world** application is at times challenged by the development community due to Markham's evolution to a "**higher density urban**" community

At certain land values and densities, the value of cash-in-lieu payable to the Town may render some high density projects financially unviable for the developer

Urban Growth Centre densities (e.g. Markham Centre and Langstaff) require specific parkland dedication policies

Cash-in-lieu policies may be viewed as a disincentive for infill development that the Town would otherwise see as desirable for the community

Proposed Review of Markham's Parkland By-law

Why now?

A comprehensive review of the by-law is necessary

Current nature of development requires a clear and defensible means of calculating parkland dedication and land valuation

The Town's Intensification Strategy makes this review timely

Interests of the development community must balance with the interests of the Town



Proposed Review of Markham's Parkland By-law

A Review of Existing Policies and Practices

Financial implications
Effect on future parkland inventory
Strata Parks
Off-site Land Dedications
Private Parks with Public Access

Proposed Review of Markham's Parkland By-law

A Review of Existing Policies and Practices

Intensification sites
Urban Growth Centres
Mixed-use developments

Institutional uses
Residential additions
Affordable housing

Sustainability criteria



Proposed Review of Markham's Parkland By-law

The Review Process – Independent Third Party Review

2012 budget includes funding for a consultant review of the current policy and practices

- Review and critique of Town's current practices
- Examination of specific high-density case studies in Markham
- Comparison of Markham's policy with policies of other municipalities
- Prepare a Draft Parkland Dedication By-law and Policy incorporating improvements to process and clarification of application of policy to all types of development

Proposed Review of Markham's Parkland By-law

The Review Process – Independent Third Party Review

Prepare the required Draft Official Plan policies for inclusion in the new OP in order that the new Parkland Dedication By-law may be implemented, as well as to provide clear direction for possible adjustments in the required contribution for:

certain types of development
certain areas of development
the meeting of sustainability criteria

Proposed Review of Markham's Parkland By-law

The Review Process – Independent Third Party Review

Consultant will be required to meet regularly with Staff, Council, Community stakeholders:

5 internal meetings with key Staff

3 full-day meetings with community stakeholders in one-on-one sessions

3 meetings with Development Services Committee



Next Steps



Submissions from interested consultants have been received

Staff will evaluate submissions and recommend a preferred consultant

Consultant will begin work on the project by the end of November, and conclude by mid-April

Development Services Committee will be consulted throughout the process

Council will be provided with study results, and may then direct Staff to amend the Official Plan and Parkland Dedication By-law



Town of Markham Parkland Dedication By-law and Policy Review

**Presentation to Development Services Committee
November 8, 2011**

CITY OF MARKHAM

REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES + PRACTICES

APPENDIX E:

**Town of Markham Parkland Dedication
By-Law and Policy Review Status Update
DSC – March 20, 2012**

Town of Markham Parkland Dedication By-law and Policy Review

STATUS UPDATE
Development Services Committee
March 20, 2012

The Team

The Planning Partnership team includes:

- Greenberg Consultants Inc. – National and international experience with urban park hierarchies;
- N. Barry Lyon Consultants Ltd. – Fiscal analysis;
- WeirFoulds – Municipal legal advisors; and,
- Integrus Real Estate Counsellors – land appraisal services.

Purpose of this Study

To conduct a review of Markham's current policy and practices for Parkland Dedication:

- Review and critique of Town's current practices
- Examination of specific high-density case studies in Markham
- Comparison of Markham's policy with policies of other municipalities
- Prepare the required empowering Official Plan policies for inclusion in the new OP
- Prepare a Parkland Dedication By-law and Policy incorporating improvements to process and application

Consultation Process

- One-on-one meetings with Councillors (ongoing)
- Presentation and discussion with developers' group and BILD
- Meeting with key Town staff involved in the Parkland Dedication process
- Meetings with Cornell, Markham Centre and Milliken Advisory Committees
- Three (3) presentations to Development Services Committee

What we have heard so far - Council

- Markham has done a good job securing and maintaining parkland in its more suburban context
- A feeling that more parkland is required
- General recognition that securing and maintaining an urban park system requires a different approach
- A basic direction that Markham should achieve the maximum amount of parkland that it is entitled to under the Planning Act
- An understanding that other tools, such as Section 37 and Development Charges will have a role in how an urban park system will be achieved

What we have heard so far – Developers

- Urban development requires context specific parkland dedication policies
- The cost of cash-in-lieu payable to the Town may render some higher density projects financially unviable
- Cash-in-lieu policies may be viewed as a disincentive for higher density developments
- The Planning Act is not an “entitlement” to parkland. The municipality must justify its approach to parkland dedication/cash-in-lieu
- The Toronto approach is desirable

What we have heard so far - Overall

A strong desire to work collaboratively to achieve an approach to park system development, and parkland dedication protocols that is:

- Appropriate – delivers a great parkland system that is appropriate for urban, suburban and rural Markham
- Equitable – is fair and reasonable to all the stakeholders, including the Town, the development industry and the existing and future residents of the Town
- Consistent – is applied equally and fairly to all applicants without the need for individual deal-making, or site-specific adjustments
- Long-Lasting – will serve the Town well over the coming 10 to 15 years, without the need for constant amendments

The Legislative Environment

Authority comes from Ontario Planning Act, Sections 42 and 51.1

- A maximum of 2% of land area in the case of commercial or industrial development
- A maximum of 5% of land area, in the case of all other types of development
- Alternatively, for residential development, land be conveyed at a maximum rate of 1 hectare for every 300 dwelling units

These rates are identified as maximums in the Planning Act. Municipalities may also accept cash-in-lieu of a parkland dedication

The Official Plan

- The current Official Plan policies for parkland planning are very comprehensive
- The Town does park planning on the basis of achieving the target of 3.0353 hectares per 1000 people (S.3.9.3 f):
 - 1.2141 ha/1000 for Neighbourhood Parks
 - 0.8094 ha/1000 for Community Parks
 - 1.0118 ha/1000 for Town Parks
- The policies empower the Town to acquire parkland through dedication in accordance with the maximums identified in the Planning Act (S.3.9.4 c) i))
- The Town can prepare a Parkland Dedication By-law that varies the approach to parkland dedication by density designation (S. 3.9.4 a))

The Official Plan

- Section 42, subsection 6.2 of the Planning Act permits the Town to reduce the cash-in-lieu of parkland payment if prescribed sustainability criteria are met. A new, empowering policy with sustainability criteria is required to permit the Town to exercise this opportunity
- At this point, a major Amendment to the Parkland Policies is not recommended, with the following exceptions:
 - A general wording review to enhance readability;
 - The addition of empowering policies to implement Section 42, subsection 6.2 of the Planning Act; and,
 - Enhancements to S.3.9.3 a) and f) by the inclusion of additional urban park categories to the parkland hierarchy of the Town.

Current Markham Practice

- Markham By-law 195-90 authorizes the Town to obtain land for parks
- In 1994 the Official Plan was amended to allow for the 1 ha per 300 dwelling units alternative provisions, as provided in The Planning Act
- Under the current OP policy, there is a minimum requirement of 5% of the land area, and a maximum contribution of 1.2141 ha per 1000 persons required in calculating neighbourhood parks component for residential development
- This approach provides relief to higher density forms of residential development. For example:
 - If the average household size in an apartment is 1.65 ppu, then the parkland dedication requirement is the equivalent of 1 ha per 606 dwelling units;
 - If the average household size in a detached dwelling is 3.33 ppu, then the parkland dedication requirement is the equivalent of 1 ha per 300 dwelling units

Current Markham Practice

It is the Town's current practice:

- For low density neighbourhoods, historically the 5% of the land proposed for residential development and 2% for industrial/commercial development are used for calculating the required parkland dedication
- For medium and higher density residential development, the lesser of the 1 ha/300 dwelling units, or 1.2141 ha/1000 population is applied
- For mixed-use buildings that include a high density residential component and a retail commercial component:
 - the lesser of the 1 ha/300 dwelling units, or 1.2141 ha/1000 population for the residential component; PLUS,
 - 2% of the land proposed for development for the retail commercial component

Current Markham Practice

It is the Town's current practice:

- For mixed-use buildings that include only retail and/or commercial office space, 2% of the development parcel land area is used for calculating the required parkland dedication
- To develop separate, area specific parkland dedication, delivery and funding agreements for Secondary Plan Areas, and one is pending for Markham Centre
- Overall, the Town provides medium and higher density development with two key beneficial parkland dedication benefits:
 - It requires residential dedications at less than 1 hectare/300 dwelling units, depending upon household size; and,
 - It caps that dedication requirement for residential uses

What's Going on in the GTA?

- BILD (Building Industry and Land Development Association) recently completed a survey of municipal Parkland Dedication and Cash-in-Lieu By-Laws and Policies
- The survey looked at 26 municipalities across the GTA
- The survey compared land dedication rates, cash-in-lieu calculations and land appraisal methodologies, potential exemptions and any additional costs associated with the conveyance process

What's Going on in the GTA?

Brampton

- Currently undertaking a review of its parkland dedication by-law
- Recently adopted an increase to its cash-in-lieu provisions, with transitional rates based on:
 - Land Use Type;
 - Price per Acre (day before Draft Plan Approval); and/or,
 - Per Unit Rate (based on factor of 1 ha/300 dwelling units)
- Proposed policy amendments are also considering specific dedication rates for medium and high density development at 0.06 ha and 0.25 ha per 300 dwelling units respectively

What's Going on in the GTA?

Toronto

Utilizes an Alternative Rate for lands within “parkland acquisition priority areas”:

- Generally 0.4 ha per 300 dwelling units
- Sites less than 1 ha: parkland will not exceed 10% of development site (cash-in-lieu cannot exceed 10% of the value of development site)
- Sites 1 ha to 5 ha: parkland will not exceed 15% of development site (cash-in-lieu cannot exceed 15% of the value of development site)
- Site greater than 5 ha: parkland will not exceed 20% of development site (cash-in-lieu cannot exceed 20% of the value of development site)

What's Going on in the GTA?

Vaughan

- Uses a fixed unit rate of \$4,100 for calculating cash-in-lieu for high density developments

Mississauga

- Established provision that the value of land for medium/high density development may be calculated at less than market value “in accordance with such formula as contained in any policy that may be approved by Council”
- Utilize various land valuation methods – where the 1 ha/300 dwelling unit approach is used, market value is estimated using a City-wide land average of medium density residential lands in order to encourage higher density residential development

What's Going on in the GTA?

Oshawa

May utilize alternative rates for the purposes of calculating cash-in-lieu, as follows:

- 0.15 ha per 300 dwelling units for net residential density of 101 units/ha or greater on lands within the Main Central Area, Sub-Central Area or Community Central Area
- 0.30 ha per 300 dwellings units for net residential density of 52 units/ha or greater on lands within the Central Business District, Main Central Area, Sub-Central Area or Community Central Area

Richmond Hill

- Uses a fixed unit rate of \$10,000 per dwelling unit for calculating cash-in-lieu

Next Steps

- Presentation to DSC **March 20, 2012**
- Draft Background Report will be complete for March 31, 2012
- Consultations will continue with advisory committees, etc. through April-May 2012
- Recommendations will be formulated, draft by-law/policies prepared for presentation to DSC in May 2012
- Based on input, revisions will be made as necessary and a final report provided to DSC in June 2012

Town of Markham Parkland Dedication By-law and Policy Review

STATUS UPDATE
Development Services Committee
March 20, 2012

CITY OF MARKHAM

REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES + PRACTICES

APPENDIX F:

**Town of Markham Parkland Dedication
By-Law and Policy Review Presentation to
DSC – May 1, 2012**

Town of Markham Parkland Dedication By-law and Policy Review

**Presentation to Development Services Committee
May 1, 2012**

The Team

The Planning Partnership team includes:

- Greenberg Consultants Inc. – National and international experience with urban park hierarchies;
- N. Barry Lyon Consultants Ltd. – Fiscal analysis;
- WeirFoulds – Municipal legal advisors; and,
- Integris Real Estate Counsellors – land appraisal services.

Key Findings To Date

- The planned urban structure that includes higher density centres and corridors that facilitates transit must be achieved. This is a fundamental requirement that affects the protection of the environment, economic development and the long-term quality of life.
- There is an economic imperative – a high quality public realm, including public parks, has a tremendous economic value – in terms of real estate value, property assessment value and tourism value.
- Parks are key to community development – an appropriate parkland system – the right amount, the right mixture and distribution of park types, the right quality of design and the right programming – contributes to a stronger and healthier community.

Key Findings To Date

- There is a concern that the Planning Act parkland dedication requirements, and the Town's subsequent application of those requirements may not be reflective of changing municipal growth patterns and socio-economic trends. For example:
 - There is no consistently applied approach to parkland dedication used in the Greater Golden Horseshoe. This lack of consistency may lead to municipal competition for higher density development, or, to a significant frustration to the achievement of the planned urban structure;
 - The Planning Act Alternative of 1 hectare/300 dwelling units is fundamentally flawed if applied to its maximum. The fiscal impact of its application has a significant detrimental affect on the viability of higher density house forms; and,

Key Findings To Date

- These issues, when considered together, and at a broad scale, will have a tremendous cumulative effect on the ability to achieve key Provincial, Regional and municipal planning principles:
- There may be a reluctance to develop within the defined urban centres and corridors, thereby reducing the viability of transit investment, or slowing the development of transit facilities;
- Growth targets, particularly intensification targets, may not be met;
- Planned infrastructure will be underutilized and subsequently both inefficient and expensive; and,
- There will be a continued reliance on the automobile, and an ongoing preference for typical suburban forms of development.

Key Findings To Date

- Markham has done a good job securing, building and maintaining its public parkland system in its more suburban context.
- Markham has established an Alternative Parkland dedication requirement that is based on acquiring parkland on the basis of population growth, rather than dwelling unit growth.

This is considered a more equitable approach because it recognizes that the need for public parkland is related to the number of people, and allows for the consideration of reducing household sizes as density increases.

The Markham Alternative generates substantially less parkland than the Planning Act Alternative where high density residential development is involved. It can be considered an “incentive” to higher density forms of housing.

The Emerging Planning Policy Context

4 Objectives

- To ensure that the Town of Markham has the best system of public parks, in both its urban and suburban contexts.
- To expand the park hierarchy in the Official Plan to include the full array of urban and suburban park types, and to describe their intended scale character and function.
- To ensure that the Town's parkland dedication policies consider the detrimental financial impact of the Alternative residential dedication policy of the Planning Act of 1 hectare per 300 dwelling units.
- To ensure that the provisions of the Planning Act are interpreted and implemented in a way that is consistent and equitable.

The Emerging Planning Policy Context

Emerging Elements

The first element of a parkland dedication policy is to generate an amount of land to be dedicated:

- *For Industrial and Commercial Development*

For all Industrial and commercial forms of development, the Town shall include in its policies that a maximum of 2 percent of the land area (net environmental features) may be dedicated for public park purposes.

- *For all other forms of development except industrial, commercial and residential*

For all other forms of development, excluding industrial, commercial, and residential, the Town shall include in its policies that a maximum of 5 percent of the land area (net environmental features) may be dedicated for public park purposes.

The Emerging Planning Policy Context

- *For Residential Development*

Based on new, higher density residential neighbourhoods required by Provincial and Regional policy, the 5 percent of land area is no longer adequate to achieve public parkland objectives.

As such, parkland dedication should be calculated for residential development on the basis of the Planning Act Alternative of a maximum of 1 hectare per 300 dwelling units OR 1.2141 hectares per 1000 people whichever is less.

In low and medium density residential development scenarios, the Planning Act Alternative of 1 hectare per 300 dwelling units is appropriate, and typically generates less land than the Town's Alternative of 1.2141 hectares per 1000 persons.

The Emerging Planning Policy Context

- *For Residential Development... continued*

In higher density residential development scenarios, the Town's Alternative of 1.2141 hectares per 1000 persons is appropriate, and typically generates less than the Planning Act Alternative of 1 hectare per 300 dwelling units. This is considered an "incentive" to higher density development because it generates substantially less land than the Planning Act Alternative.

For extremely high density residential development scenarios, the Town may wish to consider a further reduction to the Town's Alternative of 1.2141 hectares per 1000 persons, should Council determine a further "incentive" to high density development is warranted.

The Emerging Planning Policy Context

- *For Mixed Use Development*

For mixed use developments, parkland dedication shall be based on a the pro-rated calculation, as follows:

(% of Commercial or Industrial GFA x Land Area) x 2% = e square metres of parkland

PLUS

(% of non-commercial, non industrial and non-residential GFA x Land Area) x 5% = f square metres of parkland

PLUS

1 hectare/300 dwelling units OR 1.2141 hectares/1000 persons, whichever is less = g square metres of parkland

The Emerging Planning Policy Context

- The second element of a parkland dedication policy is to permit the use of cash-in-lieu of the land dedication requirement:
- All development shall include public parkland, either as part of a comprehensive plan, or on a site by site basis. Cash-in-lieu of parkland should only be accepted where the full parkland dedication is not possible, to the satisfaction of the Town.
- For the purposes of calculating the value of a cash-in-lieu payment, the value of the land shall be determined as of the day before the day the building permit is issued in respect of the development or redevelopment or, if more than one building permit is required for the development or redevelopment, as of the day before the day the first permit is issued.

Or, where the development is part of a plan of subdivision, the value of the land shall be determined as of the day before the day of the approval of the draft plan of subdivision.

The Emerging Planning Policy Context

Cash-in-lieu... continued

- All cash-in-lieu funds received by the municipality shall be paid into a special account and spent only for the acquisition of land to be used for park or other public recreational purposes, including the erection, improvement or repair of buildings and the acquisition of machinery for park or other public recreational purposes.

The Emerging Planning Policy Context

The third element of a parkland dedication policy is to recognize that the Ontario Municipal Board is available as a dispute resolution body:

- In the event of a dispute between a municipality and an owner of land as to the amount of land or cash-in-lieu payment, either party may apply to the Municipal Board and the Board shall make a final determination of the matter.

The Emerging Planning Policy Context

Following these three key elements, there are a variety of other issues that this project is considering for inclusion within the Town's new Parkland Dedication Policy Regime:

- The reduction of parkland dedication requirements based on an individual development's achievement of identified sustainability criteria, such as achievement of LEED Platinum/Gold status or equivalent.
- The reduction of parkland dedication requirements for certain categories of land uses that are considered "in the public interest", such as places of worship, government uses, seniors housing, affordable housing.

The Emerging Planning Policy Context

Other issues...continued

- The need for comprehensive planning in existing neighbourhoods to determine parkland and/or recreational facility requirements.
- The permission/requirement for strata parks (or similar park forms), and the legal instruments that will facilitate and manage them in the long-term.
- Alternative/innovative park maintenance and management strategies.
- Clarified and streamlined administrative procedures.

Next Steps

- Refine and release DRAFT Interim Report 1
- Meetings with key Advisory Committees
- Meeting with BILD to review work in progress
- Prepare DRAFT Policy Approach (new Official Plan Policies and Parkland Dedication By-Law)
- Presentation to Development Services Committee

CITY OF MARKHAM

REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES + PRACTICES

APPENDIX G:

**Town of Markham Parkland Dedication
By-Law and Policy Review Presentation to
DSC – June 26, 2012**

Town of Markham Parkland Dedication By-law and Policy Review

**Presentation to Development Services Committee
June 26, 2012**

Purpose of Today's Presentation

The purpose of today's presentation is to:

- Describe the preliminary approach to Parkland Dedication policy; and,
- Identify the next steps in the process.

Basis of the Policy Approach

The fundamental basis of the parkland dedication policy regime is characterized as a refined status quo.

As such, we are suggesting a number of key refinements that will make the application of the approach more easily understood and more consistently applied.

It is our opinion that the approach that is recommended is:

- consistent with Provincial legislation;
- is fair and equitable; and,
- can be applied consistently.

Issue 1: Identify Parkland Acquisition Tools

The Town can acquire parkland through a number of tools, in addition to the conveyance requirements of the Planning Act, including:

- funds allocated in the Town's budget;
- donations, gifts, bequests;
- funds or land provided by any authority having jurisdiction;
- density transfers, height and/or density bonusing; and,
- expropriations.

Issue 2: Conveyance of Land

The conveyance of land through development/redevelopment under the Planning Act:

- 2% of land area for commercial or industrial development;
- 5% of land area for all other land uses, except residential;
- for residential uses, either 1 ha per 300 dwelling units, or 1.2141 ha per 1,000 people, whichever is less; and,
- for mixed use development, calculated based on the pro-rated sum of the requirements for the various uses proposed.

Issue 2:...Conveyance of land

- provide a definition of what constitutes “land area”;
- requirement that land conveyed be used for public parkland purposes; and,
- identify that public parkland may be sold at any time by the municipality.

In addition to the typical Planning Act approach, there will be policy direction that permits the Town to vary parkland dedication requirements to ensure that all identified parkland requirements are achieved, including the provision of Community-scale, or Town-wide parkland.

Item 3: Cash-in-lieu of Parkland

- identify Town' primary intent to acquire parkland;
- ensure that Town may accept cash-in-lieu of parkland, at its discretion;
- identify circumstances where cash-in-lieu is appropriate;
- ensure that all monies collected to go to a “special parkland account”; and,
- include policy related to investment of monies in the “special parkland account” .

Issue 4: Determination of Value

- identify when in the planning approvals process that cash-in-lieu is valued – typically at Site Plan Approval or Draft Plan Approval; and,
- policy to require appropriate appraisal, and opportunity for Town Peer Review at the applicants expense.

Issue 5: Credits/New Requirements

- policy to require additional parkland when development intensification is proposed, or there is a change to a residential or mixed use project; and,
- potential for parkland credit where over-dedication results from reduced development potential.

Issue 6: Reductions/Exemptions

- policies for the Town to reduce or exempt certain forms/types of development from parkland dedication requirements; and,
- to be determined on a case by case basis, at the discretion of the Town.
- the Town will reserve the right to promote alternative parkland dedication requirements, or cash-in-lieu of land, for higher density residential land uses, including, potentially the provision of a cost per person or cost per unit cap, among other approaches.

Issue 7: Comprehensive Planning

- for large, greenfield or intensification areas, a requirement for comprehensive planning, including an Area Specific Parkland Agreement;
- for existing neighbourhoods a requirement for a Leisure System Service Analysis to determine level of parkland/recreation facilities; and,
- opportunity for Town to use cash-in-lieu funds to acquire parkland in areas identified as underserved by the Leisure System Service Analysis.

Issue 8: Land Acceptable/Not Acceptable

- all lands conveyed to the Town as public parkland to be in a physical condition acceptable to the Town;
- policy to identify, specifically, what lands are not considered acceptable to the Town;
- opportunity for the Town to accept lots in lieu of parkland, and the requirement that they be sold to generate funds for the “special parkland account”; and,
- opportunity for the Town to accept non-contiguous lands, provided lands to be conveyed are approximately equal in value.

Issue 9: Administration...

- Town to pass a Parkland Dedication By-law to implement policy regime;
- administration of the By-law to be delegated to the Director of Planning and Urban Design;
- no Building Permits to be issued unless parkland dedication/cash-in-lieu arrangements satisfactory to the Town have been made;
- disputes to be resolved at the Ontario Municipal Board;
- legal/administrative costs to be responsibility of applicant; and,
- requirement that the by law be reviewed and updated every 2 years.

Issue 9: ...Administration

Given that the proposal is not a major departure from current practice it is suggested that:

- it be implemented first through a rewritten policy section as part of the ongoing Official Plan Review, and not through a topic-specific Official Plan Amendment; and,
- that the implementing Parkland Dedication By-law be prepared and approved following adoption of the Official Plan Review process.

Next Steps

- Meet with BILD and other representatives of the development industry;
- Complete the Council Interview process;
- Finalize:
 - The Interim Report
 - The DRAFT Official Plan Policy Section
 - The DRAFT Parkland Dedication By-law
 - The DRAFT Parkland Dedication Administrative Manual; and,
- Report back to Development Services Committee in September for a final presentation.

CITY OF MARKHAM

REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES + PRACTICES

APPENDIX H:

**Town of Markham Parkland Dedication
By-Law and Policy Review Presentation to
DSC – January 2013**



REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES AND PRACTICES

The Planning Partnership
with: Greenberg Consultants |
Integrus | NBLC | WeirFoulds

City of Markham

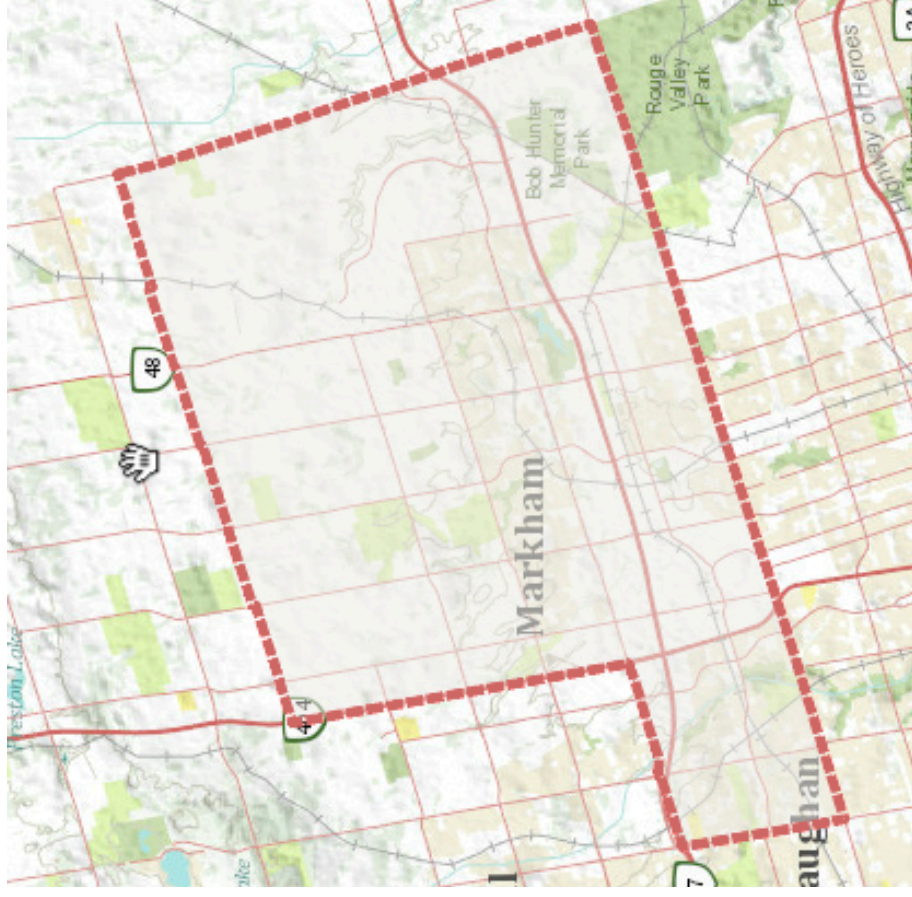
January 2013

Purpose

1. Review and analyze City's existing policies and procedures
2. Case studies regarding application of current policies/procedures to high-density development
3. Comparison of current parkland dedication policies and procedures in other municipalities
4. Options for innovative policies and park system to reflect City's planned structure and intended character
5. New conveyance policies and procedures for Markham's evolving urban structure, within parameters of the Planning Act

Background

1. One of fastest growing municipalities in Canada
2. Population of over 300,000 people, has experienced rapid population growth
3. Over 160 parks
4. Growth and demand for new parkland will continue



Importance of the Public Realm

1. A public parks system is an essential component of a complete community
2. Investment in parkland system is an important economic and community development initiative
3. Parkland system promotes increased property values/tax assessment, reinvestment by the private sector and attracts new businesses
4. The public's needs/preferences for location and type of parkland are changing
5. The City needs a parkland system that is appropriate for the evolving context and one that is equitable, consistent and long-lasting



Key Conclusions and Observations

The Case for Public Parkland

1. The planned urban structure must be achieved, and it includes public parkland.
2. Public parkland enhances real estate value and the City's image.
3. Public parkland is part of a comprehensive economic development strategy.
4. Public parkland is key to community development and public health.

Key Conclusions and Observations

Issues and Concerns have been Identified

1. Rapid urbanization and intensification requires a review of current parkland acquisition methods.
2. The current Planning Act tools don't appear to reflect a more urban context.
3. The current Planning Act Alternative of 1 hectare per 300 dwelling units may be a disincentive to higher density development.

Key Conclusions and Observations

The Development Industry has raised a number of issues

1. They seek more certainty and control over development costs.
2. They seek a parkland conveyance rate that is rational and justifiable.
3. They promote both a reduced rate of conveyance, and “caps” on total conveyance requirements.

Key Conclusions and Observations

There are key observations that must be considered

1. All development costs are ultimately passed on to the consumer.
2. Parkland conveyance represents a comparatively very small component of the cost of development.
3. A reasonable relationship should exist between parkland conveyance and the population to be served.
4. Markham's current approach has worked well in the past.

General Recommendations

The new approach to parkland conveyance is considered both fair and justifiable.

1. The new approach includes a new hierarchy of public parklands, including new more urban park typologies.
2. The new approach provides policies for comprehensive planning and a process to rectify current parkland deficiencies throughout the City.
3. The new approach clarifies and deals with a number of issues raised by the Development Industry.
4. The new approach includes a significant incentive for intensified urban development in appropriate locations in Markham.

Detailed Recommendations

Basic parkland conveyance requirements

1. For lands to be developed for industrial or commercial purposes, 2% of the gross land area.
2. For lands to be developed for all other land uses, except residential, 5% of the gross land area.
3. For lands to be developed for residential purposes, 1 ha/300 dwelling units, or 1.2 ha/1000 persons, whichever is less.
4. For mixed use developments, the sum of the parkland conveyance requirements for each individual use, as identified above.

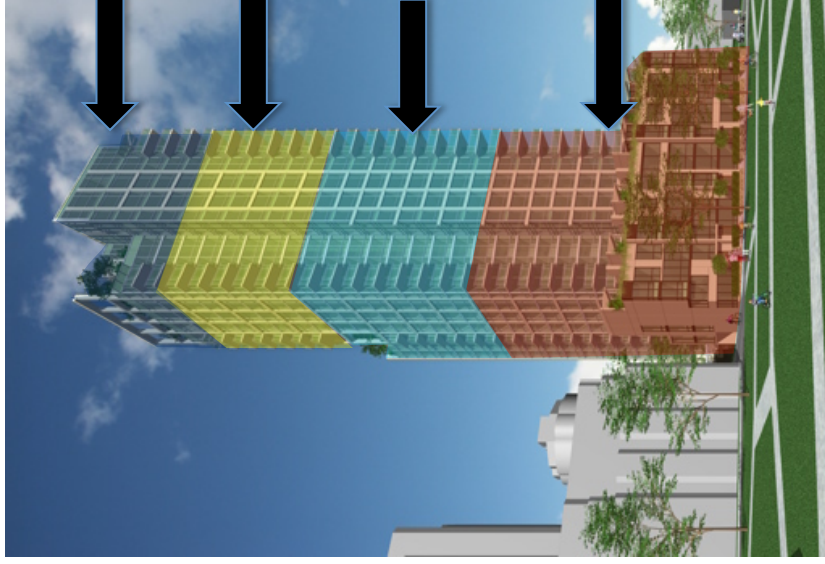
Detailed Recommendations

Reductions to the conveyance requirement for Apartments

1. For Apartment Form Buildings, this Study recommends a graduated and cumulative approach to parkland conveyance requirements:
 - Where the net density is less than 2.5 FSI, the conveyance requirement shall be 1.2 ha/1000 people;
 - Where the net density is between 2.5 FSI and 5.0 FSI, the conveyance requirement shall be 0.9 ha/1000 people for that component;
 - Where the net density is between 5.0 FSI and 8.0 FSI, the conveyance requirements shall be 0.6 ha/1000 people for that component; and,
 - Where the net density is over 8.0 FSI, the conveyance requirement shall be 0.3 ha/1000 people for that component.

Detailed Recommendations

Proposed sequential/cumulative reductions for high density residential development



Over 8.0 FSI
0.3 ha/1000 people
(75% reduction for that component)

+

Between 5.0 and 8.0 FSI
0.6 ha/1000 people
(50% reduction for that component)

+

Between 2.5 and 5.0 FSI
0.9 ha/1000 people
(25% reduction for that component)

+

Less than 2.5 FSI
1.2 ha/1000 people

Detailed Recommendations

Other reductions to the conveyance requirement

1. The City may also provide parkland conveyance reductions, or exemptions where the development:
 - Is a public use;
 - Includes Affordable Housing, as defined by the Province;
 - Is a Nursing Home as defined by the Province;
 - Is undertaken by a not-for-profit organizations; and/or,
 - Is within a Heritage Conservation District and it incorporates and conserves a Cultural Heritage Resource.

Detailed Recommendations

Parkland conveyance can be waived

1. The City may waive a parkland conveyance requirement to facilitate small scale intensification initiatives, such as:
 - For the enlargement of an existing residential building, provided no additional dwelling units are created; or,
 - For the creation of a Secondary Suite, where permitted.

Detailed Recommendations

Credits/new conveyance requirements

1. It is recommended in this Study that parkland conveyance requirements take into account where parkland conveyance (or cash-in-lieu payments) has previously been provided:
 - Generally, if a development proponent has over-conveyed, or over-paid to the City, there is a credit mechanism; and, similarly,
 - Where a development proponent has under-conveyed, or under-paid to the City, there is a mechanism for the City to recalculate the requirements, and to require further conveyance or cash from the proponent.

Detailed Recommendations

Cash-in-lieu of parkland conveyance

1. It is recommended in this Study that the City obtain the maximum amount of parkland conveyance permissible by the tools identified in the Official Plan and Parkland Conveyance By-law.
2. Notwithstanding that, the City may accept cash-in-lieu of parkland conveyance only under identified circumstances.
3. All money received by the City through cash-in-lieu of parkland payments shall be paid into a special account, and spent only for the acquisition of land to be used for public park purposes or for other public recreational purposes.

Detailed Recommendations

Determination of value for cash-in-lieu of parkland conveyance

1. For development proposals that do not require further land division, such valuation shall be made on the day before the issuance of the building permit, or if more than one permit is required to facilitate a phased development, the day before the first building permit is issued.
2. For development that requires that lands be subdivided through a plan of subdivision, or through the consent to sever processes, such land valuation shall be made on the day prior to the draft plan approval or the granting of a provisional consent.

Detailed Recommendations

Determination of value for cash-in-lieu of parkland conveyance

3. Where a Draft Plan includes a mixture of uses and/or a mixture of housing types that may be phased over a long period of time, the City may further segment the Draft Plan for the purposes of calculating a cash-in-lieu of conveyance land value to coincide with the actual timing of development.

Generally, for land parcels or lots that will require Site Plan Approval, the land value for any cash-in-lieu of parkland payment shall be made on the day before the building permit is issued.

Detailed Recommendations

Determination of value for cash-in-lieu of parkland conveyance

1. Where cash-in-lieu of a parkland conveyance is required, the value of the land shall be determined by a market appraisal, carried out by an independent, accredited appraiser approved by the City. The City shall establish a standard appraisal format.
2. The City may authorize alternative valuation approaches, including:
 - A recent record of land sale; or,
 - A per hectare land value established by the City on an annual basis.

Detailed Recommendations

Lands acceptable/not acceptable for parkland conveyance

1. The acceptance of lands to be conveyed to the City for parkland purposes shall be at the discretion of the City, and shall specifically not include:
 - Lands designated Environmental Protection Area in the Official Plan;
 - Natural heritage feature or hydrologic feature, including required buffers or vegetation protection zone identified in the Official Plan, the Zoning By-law or as identified in an EIS; • Utility rights-of-way;
 - Any lands encumbered by easements or right-of-use agreements, other than those to which the City is a Party;
 - Land areas required only to provide connecting pedestrian and bicycle routes; and,
 - Any other lands deemed unsuitable for parkland purposes by the City.

Detailed Recommendations

Lands acceptable/not acceptable for parkland conveyance

2. Lands designated Environmental Protection Area in the Official Plan, any natural heritage feature or hydrologic feature, including required buffers or vegetation protection zone identified in the Official Plan, the Zoning By-law or as identified in an EIS may be incorporated into lands conveyed to the City, but these lands shall not be part of the parkland conveyance requirement.
3. Lands for park purposes may be designed to include SWM facilities. However, where these facilities preclude in whole, or in part, the use of that portion of the site for park purposes, then the SWM facilities shall not be part of the parkland conveyance requirement.
4. The City may accept land that is not contiguous to the development parcel, provided that the value of the land to be provided is approximately equal to the cash-in-lieu value of the lands from the subject development site.

Detailed Recommendations

Administration

1. By-law to be administered by the Director of Planning and Urban Design.
2. Building Permits not issued until parkland conveyance/cash-in-lieu arrangements have been made satisfactory to the City.
3. Disputes between the City and proponents with respect to land valuation may be adjudicated by the OMB.
4. Cost associated with land conveyance/cash-in-lieu arrangements are the responsibility of the transferor
5. Review of parkland conveyance policies of the Official Plan and the Parkland Conveyance By-law to be reviewed in conjunction with Official Plan Review Process.

CITY OF MARKHAM

REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES + PRACTICES

APPENDIX I:

**Assessment of Sequential/Cumulative
Rates for High Density Developments –
Markham, April 2013**



ASSESSMENT OF SEQUENTIAL/CUMULATIVE RATES FOR HIGH DENSITY DEVELOPMENTS

purpose

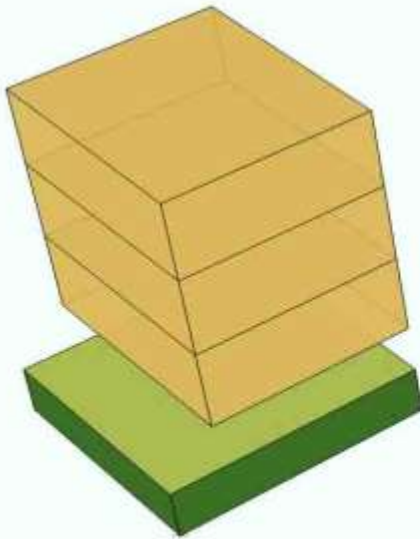
1. The relationship among lot coverage, density and height
2. Value of parkland conveyance reduction for high density scenarios
3. Comparison to “no reduction” scenario
4. Additional considerations related to reductions for high density
5. Comparative analysis from other jurisdictions
6. Overview of proposed parkland hierarchy
7. Miscellaneous issues and questions

study: density / fsi

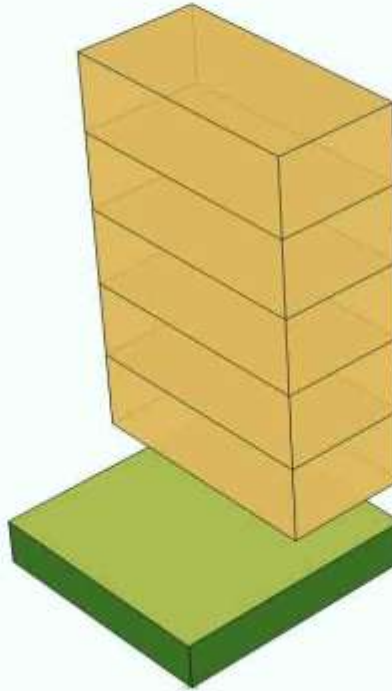
A FSI of 2.5 means that the total floor area of a building is 2.5 times the area of the site.

FSI : floor space index

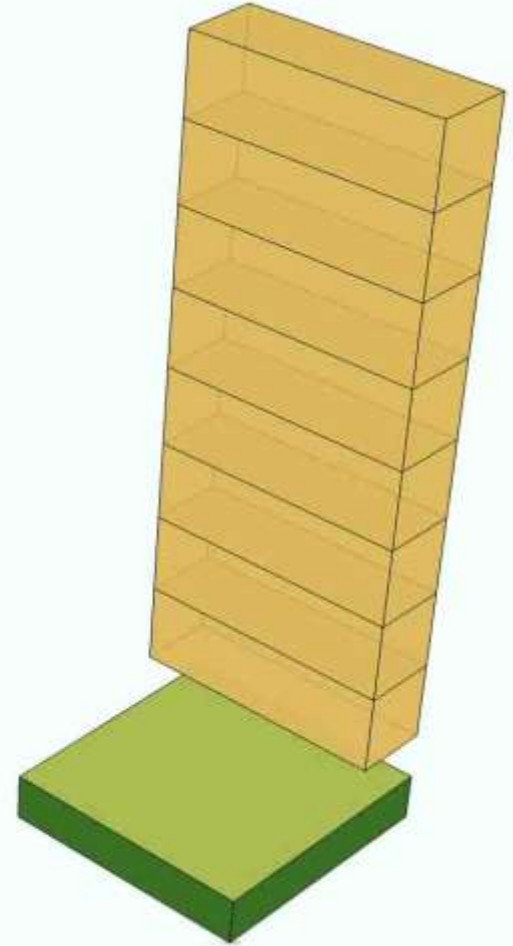
$$\text{FSI} = \frac{\text{Gross Floor Area}}{\text{Site Area}}$$



FSI 2.5
lot coverage 80%
3 storeys



FSI 2.5
lot coverage 50%
5 storeys



FSI 2.5
lot coverage 30%
8 storeys

density / fsi

There is a direct relationship among lot coverage, density (FSI) and building height:

$$\text{Building Height} = \text{FSI} \times \frac{1}{\text{Lot Coverage}}$$

$$\text{FSI} = \text{Lot Coverage} \times \text{Building Height}$$

$$\text{Lot Coverage} = \text{FSI} / \text{Building Height}$$

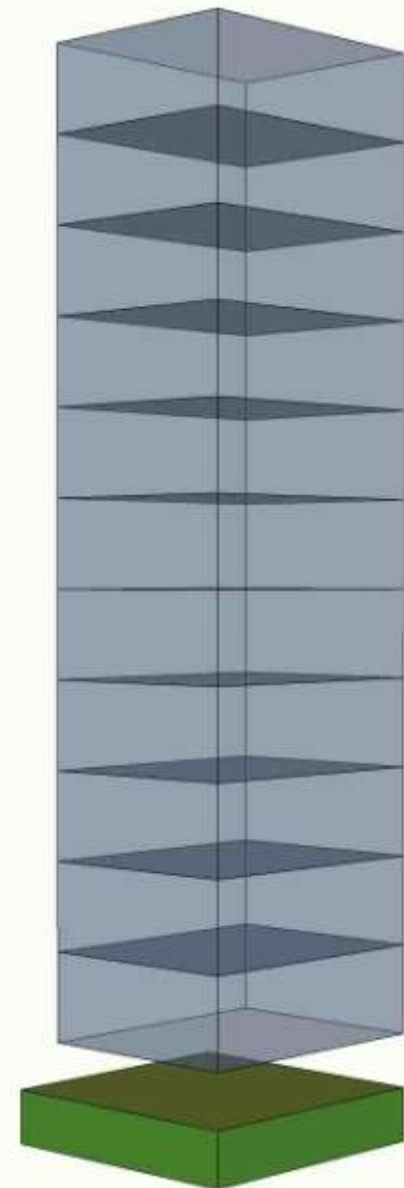
case study: **density / fsi**

DEVELOPMENT STATISTICS

Site Area (m ²)	1,000 m ² (0.25 of an acre)
Floor Space Index	9.0
Lot Coverage (%)	80%
GFA (m ²)	9,000 m ²
Building Height (storeys)	11 storeys
Floor Plate (m ²)	800 m ²
Dwelling Units (at 120 m ² /unit)	75 units
Residents (at 1.91 ppu)	144 people

PARKLAND CONVEYANCE – NO DISCOUNT

At rate of 1.2 ha/1,000 persons	1,728 m ²
Cash-in-lieu (\$4,325,000/ha.)	\$747,360
Cost/unit	\$9,965 per unit



FSI 9.0
coverage 80%
11 storeys

DRAFT

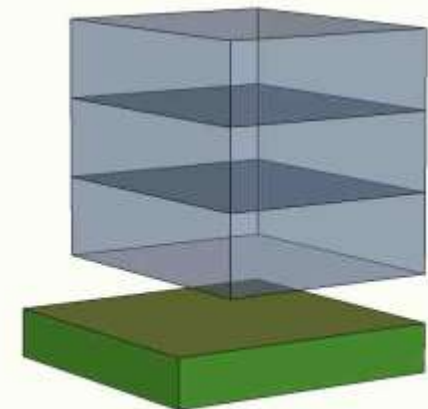
case study: **density / fsi**

DEVELOPMENT STATISTICS

Site Area (m ²)	1,000 m ² (0.25 of an acre)
Floor Space Index	2.5
Lot Coverage (%)	80%
GFA (m ²)	2,500 m ²
Building Height (storeys)	3 storeys
Floor Plate (m ²)	800 m ²
Dwelling Units (at 120 m ² /unit)	21 units
Residents (at 1.91 ppu)	40 people

PARKLAND CONVEYANCE

At rate of 1.2 ha/1,000 persons	480 m ²
Cash-in-lieu (\$4,325,000/ha.)	\$207,600
Cost/unit	\$9,885 per unit



FSI 2.5
coverage 80%
3 storeys

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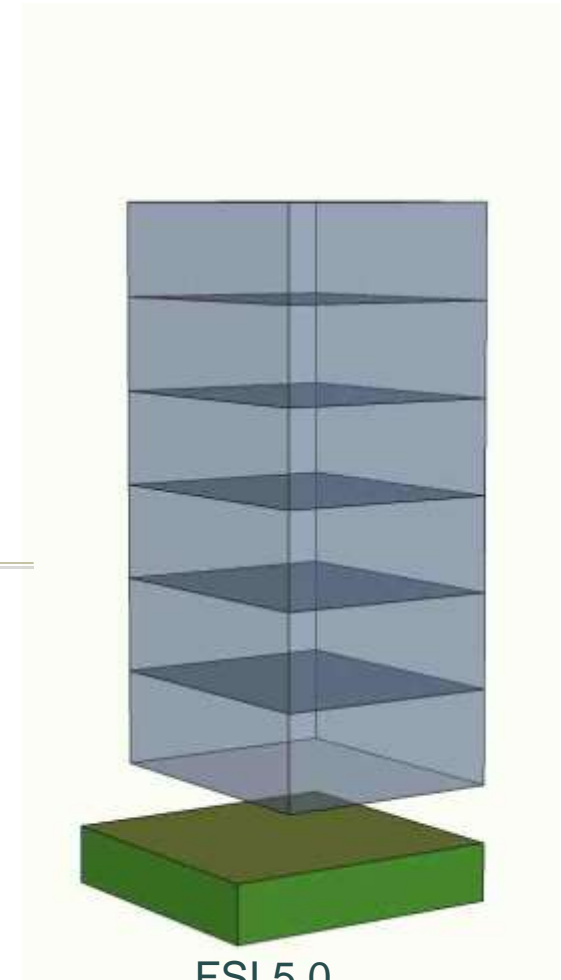
case study: density / fsi

DEVELOPMENT STATISTICS

Site Area (m ²)	1,000 m ² (0.25 of an acre)
Floor Space Index	5.0
Lot Coverage (%)	80%
GFA (m ²)	5,000 m ²
Building Height (storeys)	6 storeys
Floor Plate (m ²)	800 m ²
Dwelling Units (at 120 m ² /unit)	41 units
Residents (at 1.91 ppu)	78 people

PARKLAND CONVEYANCE

40 residents at 1.2 ha/1,000 persons	470 m ²
39 residents at 0.9 ha/1,000 persons	350 m ²
Total	820 m ²
Cash-in-lieu (\$4,325,000/ha.)	\$354,650
Cost/unit	\$8,650 per unit



FSI 5.0
coverage 80%
6 storeys

DRAFT

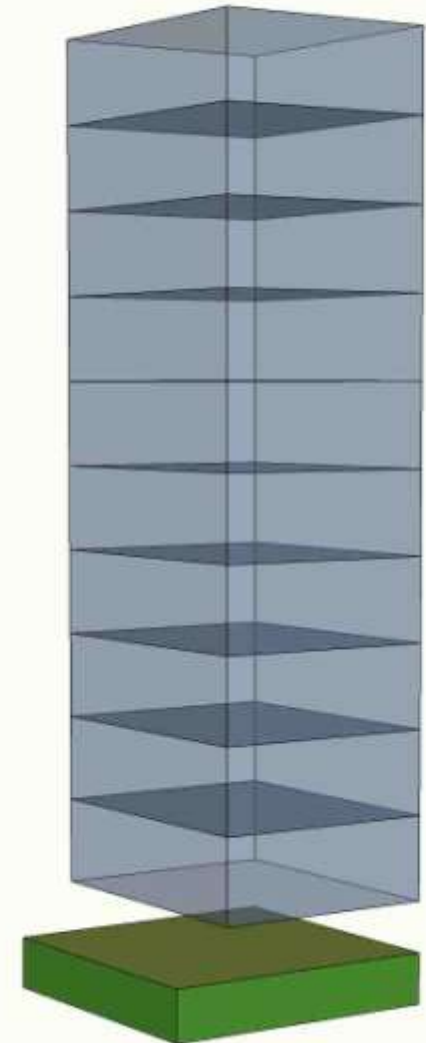
case study: density / fsi

DEVELOPMENT STATISTICS

Site Area (m ²)	1,000 m ² (0.25 of an acre)
Floor Space Index	8.0
Lot Coverage (%)	80%
GFA (m ²)	8,000 m ²
Building Height (storeys)	10 storeys
Floor Plate (m ²)	800 m ²
Dwelling Units (at 120 m ² /unit)	67 units
Residents (at 1.91 ppu)	128 people

PARKLAND CONVEYANCE

40 residents at 1.2 ha/1,000 persons	480 m ²
40 residents at 0.9 ha/1,000 persons	360 m ²
48 residents at 0.6 ha/1,000 persons	290 m ²
Total	1,130 m ²
Cash-in-lieu (\$4,325,000/ha.)	\$488,725
Cost/unit	\$7,295 per unit



FSI 8.0
coverage 80%
10 storeys

DRAFT

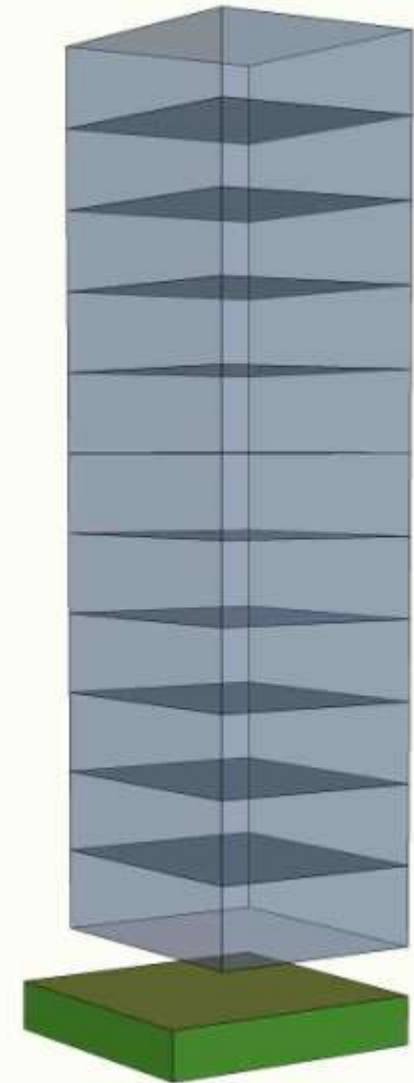
case study: density / fsi

DEVELOPMENT STATISTICS

Site Area (m ²)	1,000 m ² (0.25 of an acre)
Floor Space Index	9.0
Lot Coverage (%)	80%
GFA (m ²)	9,000 m ²
Building Height (storeys)	11 storeys
Floor Plate (m ²)	800 m ²
Dwelling Units (at 120 m ² /unit)	75 units
Residents (at 1.91 ppu)	144 people

PARKLAND CONVEYANCE

40 residents at 1.2 ha/1,000 persons	480 m ²
40 residents at 0.9 ha/1,000 persons	360 m ²
48 residents at 0.6 ha/1,000 persons	290 m ²
16 residents at 0.3 ha/1,000 persons	50 m ²
Total	1,180 m ²
Cash-in-lieu (\$4,325,000/ha.)	\$510,350
Cost/unit	\$6,805 per unit



FSI 9.0
coverage 80%
11 storeys

DRAFT

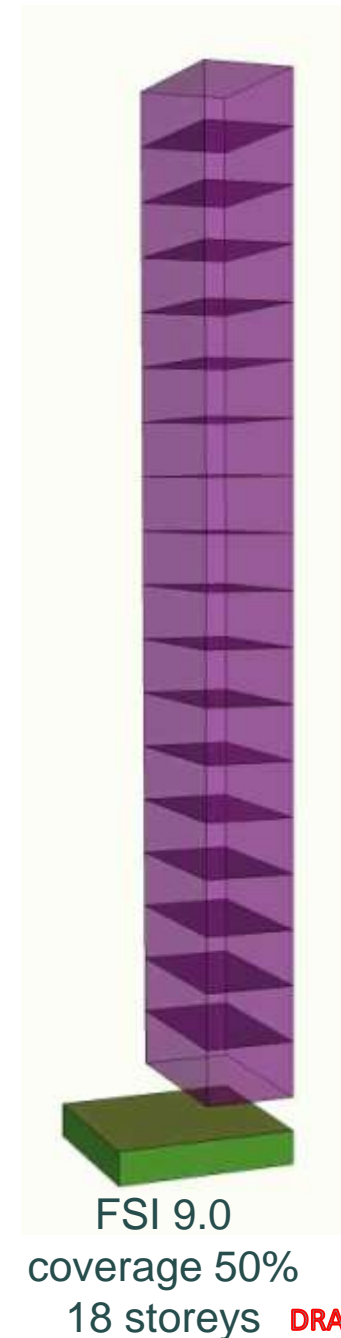
case study: density / fsi

DEVELOPMENT STATISTICS

Site Area (m ²)	1,000 m ² (0.25 of an acre)
Floor Space Index	9.0
Lot Coverage (%)	50%
GFA (m ²)	9,000 m ²
Building Height (storeys)	18 storeys
Floor Plate (m ²)	500 m ²
Dwelling Units (at 120 m ² /unit)	75 units
Residents (at 1.91 ppu)	144 people

PARKLAND CONVEYANCE

40 residents at 1.2 ha/1,000 persons	480 m ²
40 residents at 0.9 ha/1,000 persons	360 m ²
48 residents at 0.6 ha/1,000 persons	290 m ²
16 residents at 0.3 ha/1,000 persons	50 m ²
Total	1,180 m ²
Cash-in-lieu (\$4,325,000/ha.)	\$510,350
Cost/unit	\$6,805 per unit



difference between 1.2ha/1,000 persons standard vs. proposed graduated approach

1.2ha/1,000 people

0 to 2.5 FSI	480m ²	\$9885/unit	21 units	\$207,600 cash-in-lieu
2.5 to 5.0 FSI	936m ²	\$9885/unit	41 units	\$405,285 cash-in-lieu
5.0 to 8.0 FSI	1,536m ²	\$9885/unit	67 units	\$662,295 cash-in-lieu
8.0 to 9.0 FSI	1,728m ²	\$9885/unit	75 units	\$741,375 cash-in-lieu

Graduated Approach

0 to 2.5 FSI	480m ²	\$9885/unit	21 units	\$207,600 cash-in-lieu
2.5 to 5.0 FSI	820m ²	\$8650/unit	41 units	\$354,650 cash-in-lieu
5.0 to 8.0 FSI	1,130m ²	\$7295/unit	67 units	\$488,725 cash-in-lieu
8.0 to 9.0 FSI	1,180m ²	\$6805/unit	75 units	\$510,350 cash-in-lieu

difference between 1ha/300 dwelling units, 1.2ha/1,000 persons standard vs. proposed graduated approach: CASH-IN-LIEU

Total Cost (@9.0 FSI)	\$747,360.00	vs	\$510,350.00
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Cost/Unit	\$9,965.00	vs	\$6,805.00
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- Difference is approximately 31.7% reduction overall and cost/unit reduction
- Average Price of Standard Condominium Apartment in Markham is \$325,000*
 - * Royal LePage House Price Survey Q4 2012
- Parkland dedication amount represents about 3% of the cost of a Condominium in Markham

difference between 1.2ha/1,000 persons standard vs. proposed graduated approach: PARKLAND GENERATED

Total Land (@9.0 FSI)	1730 m2	vs	1180 m2
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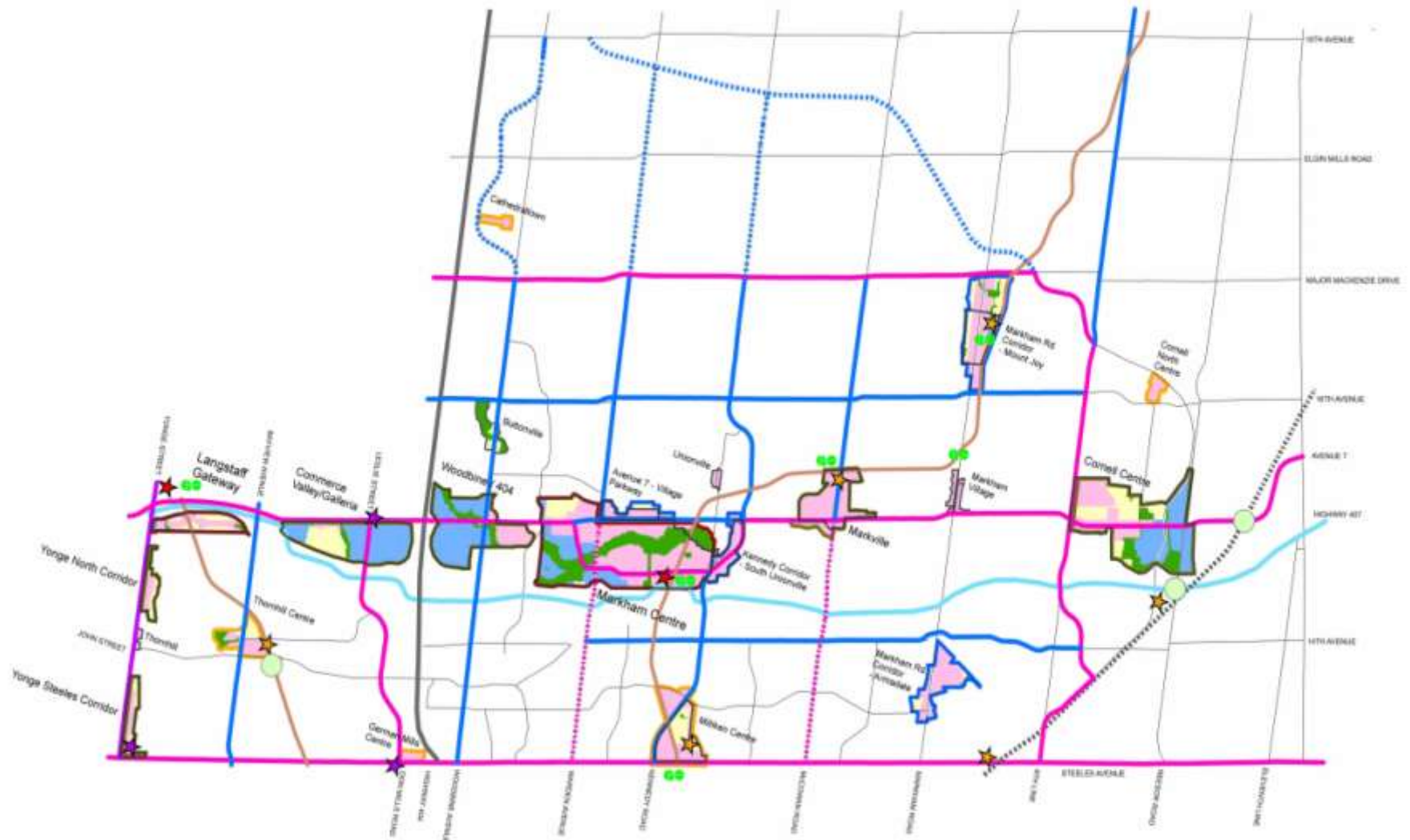
Land/Unit	23 m2	vs	15.7 m2
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- Difference is approximately 31.7% reduction overall and land/unit reduction
- Parkland dedication amount represents about 3% of the cost of a Condominium in Markham

additional considerations related to reductions for high density

- Council may consider the graduated approach for high density development only within centres and corridors
- To qualify for reductions, development shall be consistent with built form, height and massing guidelines and policies of the Official Plan and Secondary Plans
- Reductions provide an incentive for establishing higher density development and allows the City to achieve the planned urban structure

markham's centres & corridors



parkland purchase opportunities

- Variations in land values across Markham
- \$4,325,000/ha urban versus \$1,500,000/ha suburban
- Ability to purchase/acquire more suburban land for parks with “urban cash-in-lieu”
 - 1ha of “Urban Land” = 2.9ha of “Suburban Land”

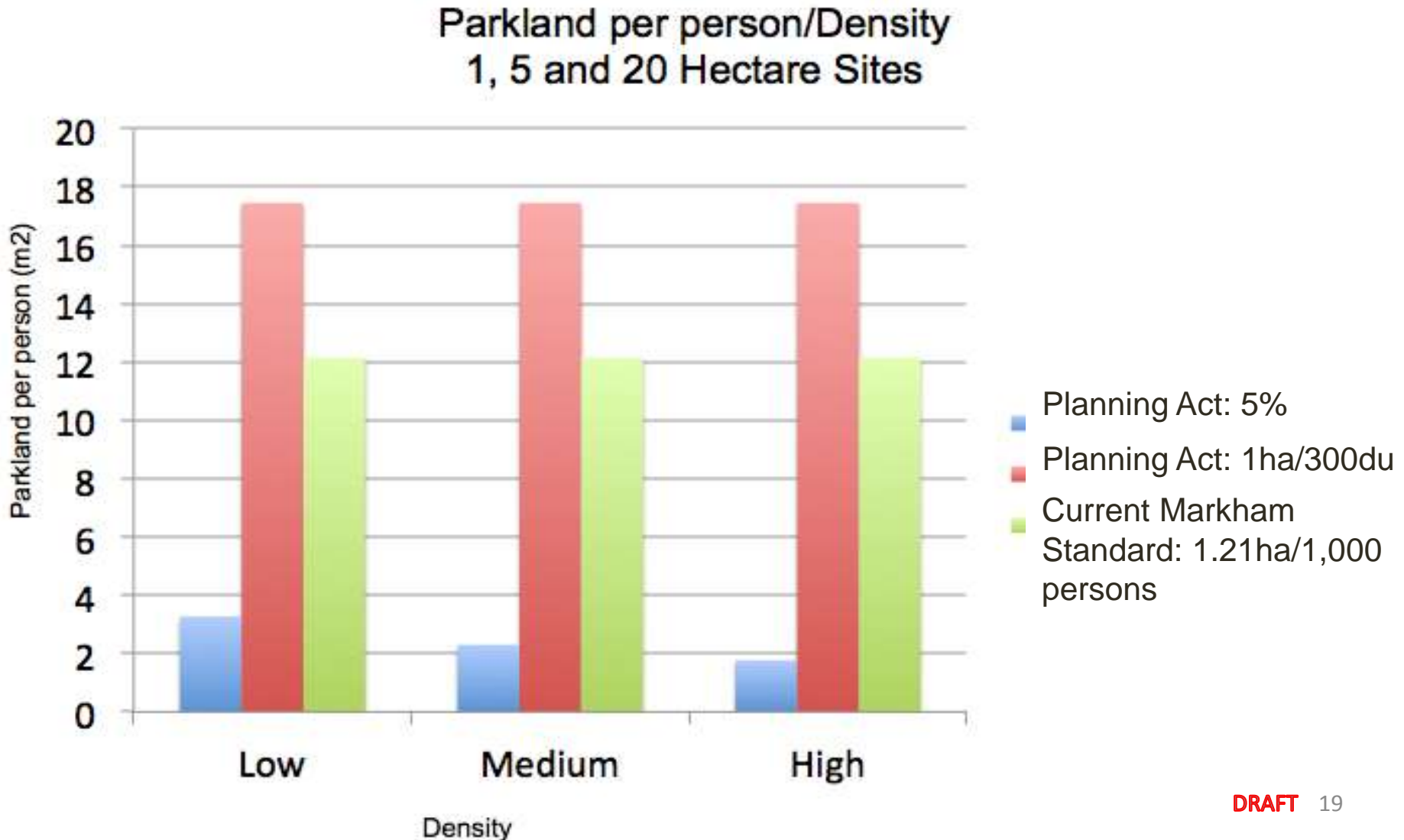
approach in other jurisdictions

- BILD surveyed 26 GTA municipalities
- Compared land dedication rates, cash-in-lieu calculations, land appraisal methodologies, potential exemptions and additional costs
- Key differences included caps on land dedication, differential treatment of varying density developments and land valuation methods
- Focused on approaches used in higher density residential development scenarios
- BILD found a wide variation in approaches and methodologies across GTA

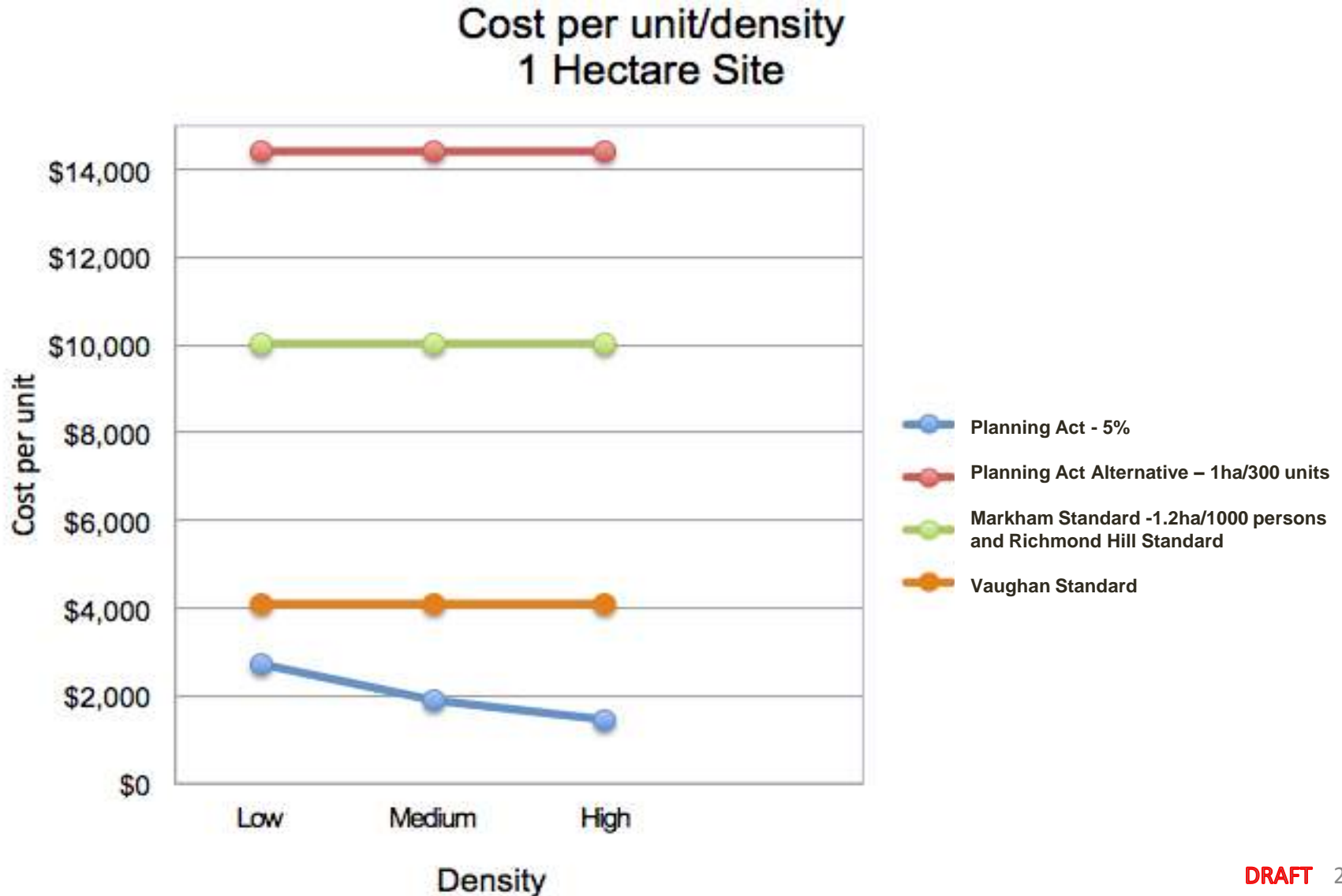
testing parkland dedication approaches & impacts

- Tested Markham's current approach against Planning Act's standards and approaches are being implemented by Richmond Hill, Vaughan and Toronto
- In each municipality, looked at how variations affected parkland dedication requirements for development area, density, household size and average land values
- Municipalities were selected due to the diversity of approaches to parkland dedication that varied from the applicable Planning Act standards

comparison of amount of parkland per person for high density sites (1, 5 and 20 hectares)



cost of parkland per unit for high density sites (land cost assumption - \$4,325,000/ha)



conclusions for comparative analysis

- Markham's current standard is 1 hectare per 300 dwelling units or 1.2141 hectares per 1,000 residents, whichever is less
- In Low and most Medium Density scenarios, the Alternative Planning Act (1 ha/300du) standard establishes the maximum permissible land conveyance
- The Markham Alternative (1.2 ha/1,000 residents) is appropriately applied to the high end of medium density and high density residential scenarios

conclusions for comparative analysis

The Markham Alternative standard:

- Directly accounts for the number of people generated by development
- Considered the most equitable and consistent approach
- Can deal with fluctuations in land cost, site size and changes in density and household size in a consistent and reasonable way

parkland hierarchy

- Markham's proposed parks hierarchy to be comprised of:
 - Destination Parks
 - City-Wide Parks
 - Community Parks
 - Neighbourhood Parks



destination parks

- Outside of City ownership and control
- Include lands within a defined Conservation Area and/or lands associated with the evolving Rouge Park and are intended to serve broader regional, provincial and national interests
- Do not contribute to the delivery of neighbourhood and community park needs, facilities and programs



city-wide parks

- Typically, large scale parks in excess of 12 hectares
- Accommodate facilities and provide programs for City residents not typically provided in Community and Neighbourhood Parks
- Serve a number of communities, neighbourhoods and areas
- May also include “Special Purpose Parks” that preserve natural/ecological features, as well as significant cultural and historical resources
- Examples may include Milliken Reservoir Park and Proposed Sports Park

community parks

- Generally in excess of 6 hectares
- Expected to accommodate facilities and provide programs for individual communities, outside of those standard facilities provided in Neighbourhood Parks
- Provide space for active and passive culture and recreation
- The majority of residents should be within a 10-minute walk (approximately 800 metres) of a Community Park
- Examples are Simonston Park and Berczy and Wismer central parks

neighbourhood parks

- Includes parks of varied sizes and scales, and provides for the recreational needs of a local residential area
- Residents generally live within approximately 400 metres of a Neighbourhood Park



neighbourhood parks

- Types of Neighbourhood Parks
 - **Active Parks** – provide space for field sports, playgrounds and recreational needs of local residential area
 - **Urban Squares** – accommodate special features such as fountains and public art to add to visual interest and place making
 - **Parkettes** – are the smallest component of the City's parkland system and provide passive recreational space
 - **Urban Parkettes** – are located within identified centres, corridor or intensification areas and provide social spaces that are animated by their adjacent uses

miscellaneous issues & questions

- Exemption for nursing homes/affordable housing/non-profit
- Other Council concerns
- Public questions and comments



CITY OF MARKHAM

REVIEW OF PARKLAND DEDICATION BY-LAW, POLICIES + PRACTICES

APPENDIX J:

**The Planning Partnership Memorandum –
April 29, 2013**

MEMORANDUM

To: Tom Villella, Project Manager, City of Markham
From: Ron Palmer
Date: April 29, 2013
Subject: Markham Parkland Study

REVISED GRADUATED APPROACH TO PARKLAND DEDICATION

Further to our meeting last week, please accept this memorandum as further analysis and recommendations with respect to the proposed “graduated approach” to calculating parkland dedication for higher density residential development proposals.

Table 1, below, identifies the statistics generated by the approach suggested in the current DRAFT By-Law. This approach is used as the baseline for the alternate scenarios that follow. It is important to note that there are a number of assumptions that are inherent to this suggested approach that are carried forward in the development of the alternative scenarios, including:

- Site area is 1,000m²;
- Lot coverage is 80%, resulting in a floor plate of 800m²;
- Dwelling units size is estimated at 120m²/unit;
- Household size is calculated at 1.91 persons/unit; and,
- Land cost is estimated at 4,325,000 per hectare.

Table 1	NR	Proposed
0-2.5FSI	480m ²	480m ²
2.5-5FSI	480m ²	360m ²
5-8FSI	576m ²	290m ²
8 FSI and above	192m ²	50m ²
Parkland Generated	1,728m²	1,180m²
Cash-in-lieu Generated	\$747,360.	\$510,350.
Average Cost/Unit	\$9,965.	\$6,805.
% Overall Reduction		31.7%

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Toronto, Ontario, M5R 2A9



On the basis of the suggested graduated approach in the current DRAFT By-Law, we heard comments from DSC that indicated that the approach should be simplified (fewer categories) and that, potentially, the initial reduction was granted too early in the density hierarchy. From BILD, we heard that the approach was of interest, but the real incentive for intensification came too late in the density hierarchy, applying to only the very highest density categories. It was the suggestion of BILD that the incentive be provided sooner, applying to mid-range density developments, more typical in the City of Markham.

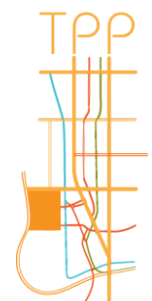
Table 2 represents the most simple approach. There are two density categories – 0 to 3.0 FSI, where no further reduction is applied, and above 3.0 FSI, where a 47.5% reduction applies. The FSI category that is not subject to a dedication reduction increases from 2.5 FSI to 3.0 FSI. This will ensure maximum generation of parkland or cash for those residential developments most typical to Markham within the identified intensification centres and corridors, with the exception of Markham Centre and Langstaff, where densities are planned to exceed 3.0 FSI, and include buildings up to and beyond 9.0 FSI.

It is important to note also that the proposed incentive of a 47.5% reduction applies to developments as soon as they exceed the 3.0 FSI threshold. The average reduction for a building at 9.0 FSI remains as suggested at 31.7%. This is certainly in line with the request of BILD to get into the incentive zones sooner in the density hierarchy, while maintaining the overall incentive impact as in the suggested graduated approach in the current DRAFT By-Law.

Table 2	NR	47.5%
0-3FSI	576m2	576m2
3 FSI and above	1,152m2	605m2
Parkland Generated	1,728m2	1,181m2
Cash-in-lieu Generated	\$747,360.	\$510,782.
Average Cost/Unit	\$9,965.	\$6,810.
% Overall Reduction		31.7%

Table 3 proposes a number of scenarios that establish 3 categories, from 0.0 FSI to 3.0 FSI, where no reduction is proposed, from 3.0 FSI to 6.0 FSI, where a first stage reduction is proposed, and from 6.0 and beyond, where a greater reduction is proposed. For a building that achieves 9.0 FSI, the incentive impact is the same as the scenarios developed in Table 1 and in Table 2. The fundamental difference with these scenarios is the front-ending of the incentivization of development.

The 25/70% scenario is very similar to the suggested scenario in Table 1, except there are 3 categories instead of 4. This scenario does not really resolve the request by BILD that the graduated approach be more front-ended for reduction. Like all of the scenarios, it does achieve, for a building at 9.0 FSI, the same overall reduction.



The 30/65% scenario does address to some degree, BILD's request. It represents about a 5% further reduction for those developments that achieve a density of between 3.0 and 6.0 FSI than was originally proposed as identified in Table 1.

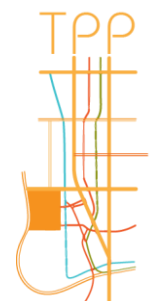
The 35/60% scenario provides a 10% further reduction in parkland dedication requirements, and is in line with the request made by BILD. Again, like all of the scenarios, it does achieve, for a building at 9.0 FSI, the same overall reduction, and includes a greater front-end reduction

Table 3	NR	35/60%	30/65%	25/70%
0-3FSI	576m2	576m2	576m2	576m2
3-6FSI	576m2	374m2	403m2	432m2
6 FSI and above	576m2	230m2	202m2	173m2
Parkland Generated	1,728m2	1,180m2	1,181m2	1,181m2
Cash-in-lieu Generated	\$747,360.	\$510,350.	\$510,782.	\$510,782.
Average Cost/Unit	\$9,965.	\$6,805.	\$6,810.	\$6,810.
% Overall Reduction		31.7%	31.7%	31.7%

Overall, it is my opinion that further refinements to the graduated approach identified in the current DRAFT By-Law is warranted for two reasons:

- Item 1. That the threshold density be raised from 2.5 FSI to 3.0 FSI to ensure that development within the majority of the City's intensification centres and corridors is required to provide parkland dedication at the City's rate of 1.2 hectares per 1,000 people. It is felt that much of the City's development potential in these areas will be within this density range.
- Item 2. That, in accordance with the request of BILD, that the incentive program for higher density development be more favourable earlier in the density hierarchy, rather than later. This is a reasonable request given the implementation of Item 1. Further, there is a rationale to incentivize to a greater extent, those developments that fall within the 3.0 to 6.0 FSI density range, as opposed to substantially increasing the incentive as developments get denser. That approach, as identified in the current DRAFT By-Law, may have the unwanted side effect of promoting higher density projects that are not desired by the City in order to achieve development cost efficiencies, including the maximization of the parkland reduction.

It is my recommendation, subject to further discussion with City Staff, that either the two-tier approach identified in Table 2, or the 35/65% scenario identified in Table 3, best achieve municipal objectives balanced with the requests of the development industry, as represented by BILD.



ANTICIPATED IMPACT OF REVISED GRADUATED APPROACH

There has been substantial discussion around the actual “impact” the proposed graduated parkland dedication reduction will have on the achievement of the desired parkland system in the City of Markham to the year 2031. The following is an explanation of the anticipated impact:

Principles for Residential Development

1. It is expected that the baseline parkland dedication throughout the City will be 1 hectare per 300 dwelling units or 1.2 hectares per 1000 residents, whichever is less. The “control” or maximum parkland dedication permitted by the Planning Act is 1 hectare per 300 dwelling units.

Generally, low to medium density development are to be calculated at 1 hectare per 300 dwelling units, and medium and higher density developments are to be calculated at 1.2 hectares per 1000 people. At an average household size of 2.78 persons per unit, 1 hectare per 300 dwelling units and 1.2 hectares per 1000 people generate the same parkland dedication.

TABLE 1: Parkland Dedication Comparison	1 ha/300 du	1.2 ha/1000 people
Low Density – Household Size 3.36 ppu		
• Parkland/Person	9.9 m2/person	12.0 m2/person
• Parkland/Unit	33.3 m2/unit	40.3 m2/unit
Medium Density – Household Size 2.64 ppu		
• Parkland/Person	12.6 m2/person	12.0 m2/person
• Parkland/Unit	33.3 m2/unit	31.7 m2/unit
High Density – Household Size 1.91 ppu		
• Parkland/Person	17.4 m2/person	12.0 m2/person
• Parkland/Unit	33.3 m2/unit	22.9 m2/unit

2. It is the intent of the City to achieve land dedication within any given development application, and to only accept cash-in-lieu of parkland where land dedication is not practical.

Application of those principles

3. The City, for the purposes of this analysis, can be divided into three primary components (see attached Map):
 - Lower Density and Historic Markham;
 - Urban Centres and Corridors; and,
 - Major Urban Centres (Markham Centre + Langstaff).



4. *Parkland Dedication Strategy for Lower Density and Historic Markham* – For these components of the City, new development is expected to be primarily low to medium density. At the Secondary Plan level, parkland dedication will be calculated at 1 hectare per 300 dwelling units. As such, the City will be achieving the MAXIMUM DEDICATION PERMITTED BY THE PLANNING ACT. In this regard, and given that individual developments are unlikely to exceed an FSI of 3.0, the graduated reduction approach for high density development will HAVE NO IMPACT on parkland dedication calculations.
5. *Urban Centres and Corridors* - For these components of the City, new development is expected to be primarily medium to high density, achieving FSI's of 3.0 or less. In these areas, parkland dedication will be calculated at 1 hectare per 300 dwelling units or 1.2 hectares per 1,000 people, whichever is less. As such, parkland will be dedicated generally at the current level of 1.2 hectares per 1000 persons, and the graduated reduction approach for high density development will HAVE NO IMPACT on parkland dedication calculations.
6. *Major Urban Centres (Markham Centre + Langstaff)* – For these components, the graduated approach will apply. There are a number of key points:
 - It is estimated that most, if not all new development within Markham Centre and in Langstaff will be 3.0 FSI or greater. It is important to note that the first 3.0 FSI will be required to dedicate land at 1.2 hectares per 1000 people. In this regard, for the first 3.0 FSI generated, the graduated reduction approach for high density development will HAVE NO IMPACT on parkland dedication calculations.
 - High density buildings will, depending upon how dense they are, typically generate a parkland dedication that is substantially in excess of the land available on-site to dedicate. This means that virtually all high density buildings within Markham Centre and Langstaff will need to provide cash-in-lieu of parkland for some component of their dedication requirement.
 - The cash-in-lieu generated can be used in any combination of the following three ways:
 1. To acquire land within the Major Urban Centre on sites identified in the Secondary Plan as public parkland. In this instance the land value to cash generated is equal – a 1:1 ratio;
 2. To acquire land outside of the Major Urban Centre, within the Centres + Corridors, or within the existing built up area of Markham. In this instance the land value to cash generated is not expected to be equal but to be between a 1:1 and 1:2 ratio. This means that with the cash-in-lieu derived from development within the Major Urban Centres, the City may purchase up to twice as much land per dollar; or,



3. To acquire land outside of the Urban Boundary for rural recreational use. In this instance the land value to cash generated is expected to be at least at a 1:3 ratio. This means that with the cash-in-lieu derived from development within the Major Urban Centres, the City may purchase three, or even 4 times as much land per dollar.

Conclusions

7. The primary conclusion of this overview analysis is that the City, while providing an extra incentive to the highest density forms of residential development should have no problem acquiring enough land to fulfill overall objectives for public parkland due to the land value differential among different areas within the City.
8. This approach is considered a reasonable one because there is simply not enough land within the Major Urban Centres of Markham Centre and Langstaff to dedicate for public park purposes, and it is the intent of the legislation that permits the acceptance of cash-in-lieu of parkland to acquire lands elsewhere throughout the City, as required.

Ron Palmer BES, MCIP, RPP

