



## **Markham's Economic Strategy 2009-2018**

### **An Economic Development Blueprint for the Second Decade of the 21<sup>st</sup> Century**

**May 8, 2008**

## Contents

Executive Summary .....	4
1 Vision: Build the City .....	27
2 Strategic Directions .....	30
3.0 Targeted Sector Actions.....	32
3.1 ICT and Life Sciences Convergence .....	33
3.2 Information, Entertainment and Cultural Industries .....	35
3.3 Professional, Scientific and Technical Services .....	37
3.4 Finance and Insurance .....	39
4 Building an Enabling Environment .....	49
4.1 Build the Creative City .....	50
4.1.1 Develop an Asset Map: Identifying the Arts & Cultural Industries Sector .....	50
4.1.2 Strengthen the Arts & Cultural Industries Sector: Building Cultural Enterprise .....	51
4.1.3 Link the Sector to New Opportunity: Building Bridges to Interactive Media.....	52
4.2 Build the Networked City .....	53
4.2.1 Utilize the Experts: Forming a Team for Tech-based Development .....	53
4.2.2 Pursue Mass Collaboration: Turning Knowledge into Opportunity .....	54
4.2.3 Develop Social Networking Tools: Marketing the Community through Web 2.0 .....	55
4.2.4 Make Markham Wireless: Building a 21 <sup>st</sup> Century Infrastructure .....	56
4.3 Build the Sustainable City.....	57
4.3.1 Participate in Cross-Jurisdictional Opportunities Towards Sustainability .....	58
4.3.2 Enhance Markham's Sustainability Strategy: Involving the Business Community .....	58
4.3.2 Share the Wealth: Brokering Information to the Business Community .....	59
4.3.3 Establish Sustainability Metrics: Measuring Progress in the Community .....	60
4.3.4 ICI and Sustainability: Developing an Eco-Business Park in Markham .....	61
4.4 Build the Global City .....	62
4.4.1 Establish Markham's Foreign Policy: Unleashing the City-State .....	63
4.4.2 Build on Past Success: Growing Markham's Existing International Relationships .....	63
4.4.3 Create the Global Hometown: Turning Diversity into an Economic Strategy .....	64
4.4.4 Trace the Global Supply Chains: Accessing the Flat World .....	67
4.4.5 Mobilize Support at Home: Working with Key Regional Partners .....	68
4.4.6 Create a Toolkit: Bringing Globalization to the Community .....	68

4.5	Build the Infrastructure City .....	69
4.5.1	Understand Employment Lands: Planning for Tomorrow's Needs Today .....	70
4.5.2	Plan for Rapid Transit: Expanding the Available Labour Force .....	71
4.5.3	Build a Better Road System: Enhancing Local Traffic Flow.....	72
4.5.4	Strengthen Markham's Electrical Infrastructure: Powering the Future.....	73
4.5.5	Create Airport Connections: Linking Markham to the World.....	74
4.6	Build the Branded City .....	76
4.6.1	The City of Markham – The Time is Now .....	76
4.6.2	Sell to the Talent: Understanding who the Brand is For .....	78
4.6.3	Identify Brand Champions: Partnering with the Private Sector .....	78
4.6.4	Establish an Enhanced Ambassador Program: Building on Community Credibility .....	79
4.7	Build the Talented City.....	80
4.7.1	Start Early: Building Talent at the Grassroots .....	82
4.7.2	Partner with Post-Secondary Educations: Using Centres of Excellence .....	83
4.7.3	Know Your Target: Chasing the Creative Class.....	84
4.7.4	Benefiting from the Skills of New Canadians .....	84
4.7.5	Improve Residential Opportunities: Finding a Place to Live .....	85
4.7.6	Celebrate Markham's Successes: Recognizing Markham's Firsts .....	86
4.7.7	Value Social Life: Entertaining the Talent .....	86
5	Benchmarking and Performance Measurement .....	101
	Appendix A: Background to Strategic Plan .....	106
	Appendix B: Sustainability and Economic Development .....	109
	Appendix C: SWOT Analysis Results .....	115

## Executive Summary

21<sup>st</sup> Century Canada is currently confronted by a dramatically and radically transformed economy, fundamentally different from what has gone before. New global trade linkages, disruptive technologies, international capital mobility, the rapid emergence of new international economic powers, the widespread restructuring of the workforce: these and other global trends have created a new context in which the Canadian economy must seek to adapt, innovate and thrive.

The Town of Markham's recent economic development history is a success story. It has emerged as a leading Canadian example of positive economic growth and diversity, where quality of life and quality of opportunity exist side by side, and where a truly global community links Canada to a host of international opportunities. The Town is home to a storied sampling of the world's national, cultural and linguistic mosaic at a time when international linkages are crucial to future success.

Although Markham finds itself in an enviable position, the economy is changing rapidly and irreversibly around it. Emerging technologies, changing macroeconomic environments, the advent of new global economic competitors, the rise of a highly mobile knowledge-based workforce – all of these new realities hold the potential to challenge Markham's opportunities for future growth. At the same time, Markham's past success and rapid growth is catching up with the community – transportation and electrical infrastructure are strained, land reserves are diminishing and real estate costs rising.

Markham finds itself at the end of the first decade of the 21<sup>st</sup> Century economy with all the right tools in place to overcome these obstacles. The Town boasts a world-class business community populated by global innovators and international leaders in those sectors best poised for future growth. As an example, the Town Markham and York University in partnership with 30 industry firms, associations, and centres of learning are working on establishing the National Centre for Medical Device Development (NCMDD). The NCMDD will be a centre of excellence in the convergence of technologies to commercialize new and innovative medical device products and solutions.

Markham has chosen this time, at this crucial crossroads, to step back and imagine its future. It has chosen this time to prepare a strategy to guide it into the second decade of the 21<sup>st</sup> century.

The Town of Markham last completed a comprehensive Economic Strategy in the mid-1990s. This strategy provided the Town with a set of measurable objectives that guided

the activities of the Town's Economic Development Department and resulted in significant economic growth. More specifically, with the development and execution of a series of targeted marketing plans based on this strategy, Markham has established itself as Canada's High-Tech Capital with an estimated 900 high-tech firms. Information technology, telecommunications, electronics and life sciences companies have made significant investments in Markham.

It is vitally important that Markham continue to nurture the successes of its well established high technology sector and work to develop and broaden the Town's knowledge capacity and innovation base to help grow key sectors such as the life sciences. To this end, the Town of Markham initiated a 3-phase process to develop an Economic Competitiveness Strategy.

Phase 1: Economic Base Analysis helped to broaden the community's understanding of Markham's economic landscape, and provide a road map that; (a) pinpoints the sectors and markets with strong opportunities for economic success; and (b) effectively positions Markham in such sectors and markets in order to enhance competitiveness and achieve critical economic growth.

Phase 2: Community Consultation involved a half-day of facilitated workshops including a luncheon speaker, input received from a dedicated website and from the Markham Board of Trade Leaders Committee. This consultation process has built consensus regarding Markham's strategic priority areas.

Phase 3: Recommended 10-year Economic Competitiveness Strategy for the Town of Markham. This draft report is the final step in the development of a complete Economic Development Strategy for Markham. This report was informed by the knowledge gained in the Economic Sectors Analysis and the Community Consultation. It will be presented to Markham Council and shared with the community before being adopted as a Council approved document in the early autumn.

### **Guiding Principles:**

As a starting point, Markham's new economic development strategy grounds itself in the Town's Strategic Priorities:

- To develop a Markham strategy to manage and direct, with public consultation, growth issues including: the pace of growth; land use; environmental protection and agriculture; intensification; housing mix; live/work balance; employment

lands and economic prosperity; transportation; infrastructure; urban boundary; fiscal impact; quality of life; preservation of built heritage and heritage districts; inter-governmental coordination; and implementation.

- To create a transportation/transit vision, implementation plan, funding strategy and partnership framework in order to develop an efficient, effective and environmentally sustainable transportation infrastructure including transportation options that would help protect neighbourhoods and encourage economic growth.
- To develop and implement a comprehensive coordinated sustainability strategy enabling Markham to continue to be a leader in environmental sustainability and to continue to advance innovation in our built and natural environments.
- To optimize quality municipal service delivery that is cost-effective, consistent and responsive to the public's needs.
- To update the Markham Master Plan, creating short, medium and long-term priorities to provide coordinated and safe parks, recreation, culture and library services for the residents of Markham
- To develop a clear strategy and policies to strengthen the Town's ability to promote unity and inclusiveness and to provide programs and services that address the diverse needs of Markham residents.

Within this context, this economic development strategy is envisioned as a blueprint, something central to every building process. It lays out a vision of tomorrow's Markham, and a set of plans for how to make that vision a reality.

As mentioned above, the actions recommended in this report fall under two main categories: Targeted Sector actions and Enabling Environment actions. Targeted sector actions focus on four growth sectors including:

- The convergence of ICT and Life Sciences as evidenced by Markham's strength in advanced manufacturing – in particular electrical equipment and component manufacturing, magnetic and optical media manufacturing, medical equipment manufacturing and industrial machinery manufacturing;
- Information, Entertainment and Cultural Industries – in particular software publishers, data and processing services, telecommunications firms and advertising firms, and the advantages inherent in the diversity of Markham's population;

- Professional, Scientific and Technical Services – in particular computer systems design and related services, architectural, engineering and related services and other business services;
- Finance and Insurance – in particular head office and back office operations.

Enabling environment actions focus on elements which contribute to a city's capacity to retain and attract business and labour and include: creative capacity; technological infrastructures and social networks; community sustainability; global linkages; efficient infrastructure systems (for example, roads, transit, and public utilities); an identifiable brand; and a skilled, educated and available labour force.

All the recommended actions in the economic strategy (the targeted sector actions and the enabling environment actions) are guided by four key principles:

1. **Collaboration** – although the Town of Markham has commissioned this work, it is meant as a tool for all, and there is a role in its implementation – however big or small – for every company, organization and citizen in Markham. This vision cannot be accomplished in isolation, but only through collaboration both locally and at regional and Greater Toronto Area (GTA) levels.
2. **Creativity** – new industries, new economies and new infrastructures all play a role in this plan, and these new challenges and opportunities must be approached and addressed with new solutions and new concepts. Ingenuity, creativity and innovation are the best tools for success in this environment.
3. **Convergence** – nowhere are the challenges and opportunities of the 21<sup>st</sup> Century more obvious than in the way in which technologies, industries and investments are combining and converging. Markham is strongly positioned to benefit from this convergence, but only if it acts quickly.
4. **Community Leadership** – from its political and business leadership to its formalized structures like the Markham Board of Trade's Leaders Committee, Markham has a history of sound community and corporate governance. This leadership, based now around a common vision of the future, will play a critical role in the community's success in the pursuit of the recommended strategies.

Following is a summary of key performance objectives for each strategic focus area. An outline of the key actions and success measures recommended by the Economic Development Strategy can be found in Tables 1 and 2. Table 1 focuses on existing and

recommended Targeted Sector initiatives and Figure 2 focuses on existing and recommended actions towards building an Enabling Environment.

### Performance Objectives by 2018

#### Targeted Sectors

ICT and Life Sciences Convergence	Markham regarded as “Top 3 Location” in Canada for ICT/Life Science Convergence businesses
Info, Entertainment And Culture	Markham businesses engaged in cultural industries to be within list of top 20 employers
Professional, Sci. & Tech Services	Engineering & Design sector to rank among “Top 3 Exporter” sectors in Markham
Finance and Insurance	Markham to be Canadian h.q. location of 5 “Fortune 500” banks or insurers

#### Enabling Environment

Build the Creative City	High technology employers in Markham to regard Markham as a “Creative City”
Build the Networked City	Employers in the knowledge-based industries to regard Markham as a “Networked City”
Build the Sustainable City	Markham to be ranked internationally as a “Sustainable City”
Build the Global City	New foreign direct investment in Markham to generate 100 jobs annually
Build the Infrastructure City	High technology industry site locators to rank Markham as one of “Top 3 Cities” for business location in Canada
Build the Branded City	Markham to be regarded as one of North America’s “Top 10 Cities for Business”
Build the Talented City	Employers in the knowledge-based industries to regard Markham’s labour force as one of “Top 3 Reasons” to choose to locate in Markham



**Figure 1: Targeted Sector Actions**

SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
<b>Information and Communications Technologies (ICT) and Life Sciences Convergence:</b>	<u>Performance Objective by 2018</u> <ul style="list-style-type: none"> <li>• Markham regarded as “Top 3 Location” in Canada for ICT/Life Science Convergence businesses</li> </ul>
	<u>Key Performance Indicators:</u> <ul style="list-style-type: none"> <li>• # of Research and Development facilities</li> <li>• # of firms with sales over 50% outside of Canada</li> <li>• Establish Innovation York in Markham</li> <li>• Sector growth measured by employment and number of companies in both ICT and Life Science and in converged sector</li> </ul> <u>Initiatives Underway</u> <ul style="list-style-type: none"> <li>• The Town of Markham and York University in partnership with 30 industry firms, associations, and centres of learning are working on establishing a National Centre of Medical Device Development in Markham. The NCMDD will serve as a centre of excellence in the convergence of technologies to commercialize new and innovative medical device products and solutions.</li> <li>• York University will be locating a facility in Markham in 2008 called Innovation York - its new office for industry liaison and technology transfer in the Toronto region.</li> <li>• The NCMDD's vision includes a Youth component – as part of a kindergarten to PhD continuum, the NCMDD will provide a unique environment and an alternative campus for students to experience first-hand about science and technology. As an example, programming will include</li> </ul>

SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
	<p>internships related to NCMDD projects.</p> <ul style="list-style-type: none"> <li>• Partnering with Yorkbiotech, Toronto Region Research Alliance, and others to promote Markham and the Toronto Region as a centre for innovation and technology</li> </ul> <p><u>Actions to be Taken</u></p> <ul style="list-style-type: none"> <li>• Build a strong, localized case for bioinformatics investment</li> <li>• Target the emerging biomarkers sector</li> <li>• Create a youth-driven entrepreneurship facility focused on the software elements of ICT/life science convergence</li> <li>• Emphasize the provision of higher levels of specialized support to SMEs in this target convergence sector, including a targeted Business Retention &amp; Expansion (BR&amp;E) program</li> <li>• Create stronger linkages to York University and Seneca College as a means of understanding their ongoing research and identifying opportunities for commercialization</li> <li>• Establish and grow the National Centre for Medical Device Development</li> <li>• Develop a sector specific marketing strategy for the ICT and life sciences convergence sector</li> <li>• Develop a detailed database of key assets in this sector</li> <li>• Support venture capital development</li> </ul>

SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
<b>Information, Entertainment and Cultural Industries:</b>	<u>Performance Objective by 2018</u> <ul style="list-style-type: none"> <li>• Markham businesses engaged in cultural industries to be within list of top 20 employers</li> </ul>
	<u>Key Performance Indicators:</u> <ul style="list-style-type: none"> <li>• Sector growth measured by employment and number of companies</li> </ul> <u>Initiatives Underway:</u> <ul style="list-style-type: none"> <li>• CONCERT (The Consortium on New Media, Culture &amp; Entertainment R&amp;D in the Toronto Region) chaired by York University, this consortium includes AMD, and other Markham high tech companies such as Motorola and Apple Canada. CONCERT is intended to drive innovation within the creative industries by sparking collaborative relationships and infrastructures in the GTA that strengthen and promote innovation in the screen-based industries</li> <li>• Angel and venture capital development for example, Money Chase event through partnership with Innovation Synergy Centre</li> </ul> <u>Actions to be Taken</u> <ul style="list-style-type: none"> <li>• Engage Interactive Ontario in Markham's sector development efforts</li> <li>• Launch an "Interactive Markham" organization as a tool for creating local networking linkages and building local "match-making" opportunities</li> <li>• Identify potential pilot projects with Ontario Media Development Corporation and create local consortia to pursue these funds</li> <li>• Work with existing local manufacturers of graphics processing units, motherboard chipsets and video display cards to leverage their relationships with key players in the video gaming and</li> </ul>

SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
	<p>animation sectors</p> <ul style="list-style-type: none"> <li>• Expand the “Space Race” and “Money Chase” competitions to be annual events with a focus on this sector</li> <li>• Link start-ups with resources in low-cost partner communities</li> <li>• Develop a sector specific marketing strategy for the information, entertainment and cultural industries sector</li> <li>• Develop a detailed database of key people and assets in this sector</li> </ul>
<b>Professional, Scientific and Technical Services:</b>	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• Design sector to rank among “Top 3 Exporter” sectors in Markham</li> </ul>
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• Sector growth measured by employment and number of companies</li> <li>• No. of companies working outside of Canada</li> </ul> <p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>• Partnering with Greater Toronto Marketing Alliance, Toronto Region Research Alliance, real estate, accounting, and legal firms and others to leverage investment attraction capacity</li> <li>• Examination of design and engineering sub-sectors</li> </ul>

SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
	<p><u>Actions to be Taken</u></p> <ul style="list-style-type: none"> <li>• Establish and grow a design “cluster”</li> <li>• Create campus-style research and office environments to create informal environments supportive of cross-disciplinary collaboration</li> <li>• Work with the Toronto Region Research Alliance (TRRA) and with Canadian operations of multinational tax advisory firms to focus investment attraction efforts on US-based research intensive companies that would benefit from Canadian R&amp;D tax credits</li> <li>• Attract more events, conferences and conventions in the professional, scientific and technical services sector</li> <li>• Engage universities and colleges and institutes of technology in discussions to establish a Markham design program</li> <li>• Develop a sector specific marketing strategy for the professional scientific and technical services sector</li> <li>• Develop a detailed database of key assets in this sector</li> </ul>
<b>Finance and Insurance:</b>	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• Markham to be Canadian h.q. location of 5 “Fortune 500” banks or insurers</li> </ul>
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• Sector growth measured by employment and number of companies</li> <li>• No. of regional and national headquarters</li> </ul>

SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
	<p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>• Seneca College's Markham Campus is launching an insurance industry training program</li> </ul> <p><u>Actions to be Taken</u></p> <ul style="list-style-type: none"> <li>• Articulate the community's sector-specific location advantages</li> <li>• Create a local sector identity</li> <li>• Establish human resource roundtables to address the shortage in the insurance sector</li> <li>• Join Toronto Financial Service Alliance</li> <li>• Understand the impact of Markham's rising commercial real estate costs on this sector</li> <li>• Develop a sector specific marketing strategy for the Finance and Insurance sector</li> <li>• Develop a detailed database of key assets in this sector</li> <li>• Develop an understanding of existing regional business linkages in this sector</li> </ul>

**Table 2: Creating an Enabling Environment:**

STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
<b>1. Build the Creative City</b>	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• High technology employers in Markham to regard Markham as a “City of Creativity and Innovation”</li> </ul>
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• Sector Growth: employment in targeted industries, number of new businesses registered in the creative industries</li> <li>• Customer/targeted audience perception</li> <li>• Estimated number of creative events/branded events hosted</li> </ul> <p><u>Initiatives Underway</u></p> <ul style="list-style-type: none"> <li>• CONCERT (The Consortium on New Media, Culture &amp; Entertainment R&amp;D in the Toronto Region) chaired by York University, this consortium includes AMD, and other Markham high tech companies such as Motorola and Apple Canada. CONCERT is intended to drive innovation within the creative industries by sparking collaborative relationships and infrastructures in the GTA that strengthen and promote innovation in the screen-based industries</li> <li>• Varley Gallery local and external events</li> <li>• Creativity Day (2 years)</li> <li>• Markham’s Small Business and Entrepreneurship office partnered with the Ministry of Small Business and Entrepreneurship to deliver a small business seminar to those involved in cultural industries</li> </ul>

STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Active partnerships with Arts Council and York University</li> </ul> <p><u>Actions to be Taken</u></p> <ul style="list-style-type: none"> <li>• Complete an asset mapping exercise to describe the scope of the arts and cultural industries sector</li> <li>• Develop an entrepreneurship training and commercialization program for cultural and artistic enterprises</li> <li>• Establish a program for linking the existing arts and cultural industries sector to the ICT and interactive media industries</li> </ul>
2. Build the Networked City	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• Employers in the knowledge-based industries to regard Markham as a “Networked City”</li> </ul>
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• Ranking on Intelligent Community Forum (ICF) of cities</li> <li>• # of blogs about Markham</li> <li>• custom/affinity networks or intranets for targeted client groups</li> </ul> <p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>• Regional portal</li> </ul>



STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Toronto Region Research Alliance (TRRA) interactive/Internet enabled map</li> </ul> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Establish a Technology Working Group to guide the Town</li> <li>• Unleash innovation by channelling information about emerging economic opportunities through collaborative IT channels</li> <li>• Utilize social networking tools to enhance economic development promotional efforts</li> <li>• Tie together our affiliated organizations (Yorkbiotech, ISCM, NCMDD, etc.)</li> <li>• Undertake a wifi development program to maximize wireless access and coverage</li> <li>• Become involved in the Intelligent Community Forum (ICF)</li> </ul>
3. Build the Sustainable City	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• Markham to be ranked internationally as a “Sustainable City”</li> </ul>
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• Raise awareness of and participation by the business community in green business practices</li> <li>• Green Business awards program</li> <li>• United Nations and/or Non-governmental organization award</li> <li>• Reduced impact by the business community on air and water quality</li> </ul>

STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>• The Town is undertaking a comprehensive community sustainability plan called “Green Print” which will build on the strategic plan, Official Plan, Environmental Management Plan and other initiatives, policies, guidelines and processes underway, to become a comprehensive, integrated framework that guides the Town towards a sustainable future. The Green Print will include: <ul style="list-style-type: none"> <li>▪ policies for protection of air, land, water, vegetation/habitat, wildlife and all living species</li> <li>▪ a comprehensive multi-year, multi-lingual education and communication strategy for staff and the public that involves the community and creates awareness of the Green Print</li> <li>▪ working with all levels of government to endorse and support the sustainability program</li> <li>▪ a comprehensive Climate Action Plan</li> </ul> </li> <li>• Adopt Green Building Standards and Green Community Standards</li> <li>• Develop and implement a community wide zero waste strategy</li> <li>• Prepare an enhanced Town Beautification Policy</li> <li>• Develop ideas and strategies that encourage maintaining a healthier community including local food production, bike paths and trails and security</li> <li>• Establish the Town’s ecological footprint as a baseline and a model for residents to reduce their ecological footprints</li> <li>• Develop a funding strategy and modeling tool to support these initiatives</li> <li>• Markham Manufacturers’ Sustainability Program – a program that will provide one-stop pollution prevention and energy efficiency technical assistance for small to medium sized manufacturers</li> <li>• MBT Environment Award/Achievement award</li> <li>• York Region Economic Development strategy focused on Environment</li> <li>• Markham Stouffville Hospital/Cornell Wellness Campaign for a healthy city</li> <li>• Seneca College recruited Storm Cunningham and the Revitalization Institute (help colleges and universities develop research, curricula, degrees, and journals related to restoring natural resources)</li> </ul>

STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<p>and revitalizing communities)</p> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Participate in the Toronto City Summit Alliance's Green GTA Initiative</li> <li>• Create a business-focused agenda for sustainable development</li> <li>• Introduce information-sharing programs to raise the business community's participation in efforts related to sustainability</li> <li>• Establish a set of metrics or measurements for the community's progress on sustainability</li> <li>• Adopt/introduce Toronto Region Conservation Authority (TRCA) Partners in Project Green: Eco-Business Zone initiative</li> </ul>
4. Build the Global City	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• New foreign direct investment in Markham to generate 100 jobs annually</li> </ul>
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• New business development in targeted markets/new investment from target market</li> <li>• Leverage growth/expansion of local offices/branches of internationally based corporations</li> </ul>

STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>• Markham's Economic Development Department manages a program which focuses on building formal city-to-city relationships for the purpose of facilitating investment and trade and cultural exchange. Our formal relationships include: Cary, North Carolina; Wuhan, China; Zhongguancun Science Park, Beijing; and Laval, Quebec</li> <li>• Relationship building with market-based chambers of commerce and business associations and international Consulates (eg. the US Consulate, US Commercial Service, Chinese Consulate, UK Trade and Investment Canada), Richmond Hill Markham Chinese Business Association, the Indian Institute of Technology Alumni Canada, to raise awareness of Markham's strengths and to foster investment attraction</li> <li>• Receiving inbound delegations from city partners and/or business focused missions</li> <li>• Outreach to Consular officials</li> <li>• ISCM's focused international market business to business networking events</li> </ul> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Establish a "foreign policy" to direct economic development and trade efforts in the international arena</li> <li>• Strengthen current international partnerships for economic development</li> <li>• Use the multicultural and multilingual character of Markham's own population to leverage new international partners and targets for economic development activity</li> <li>• Assess the supply chain for Markham's existing business community</li> </ul>

STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Liaise with partner organizations to build support for Markham's foreign policy</li> <li>• Create a toolkit for local leaders to use in strengthening international links</li> </ul>
5. Build the Infrastructure City	<u>Performance Objective by 2018</u> <ul style="list-style-type: none"> <li>• High technology industry site locators to rank Markham as one of "Top 3 Cities" for business location in Canada</li> </ul>
	<u>Key Performance Indicators:</u> <ul style="list-style-type: none"> <li>• Increased transit ridership</li> <li>• Decreased commuting times</li> <li>• # of hectares of science park or prestige business park</li> <li>• # of electrical events (outages, brown-outs)</li> <li>• available capacity for water and sewer</li> <li>• length of time to process a development application</li> <li>• # of kilometres of rapid transit infrastructure</li> </ul> <u>Initiatives Underway:</u> <ul style="list-style-type: none"> <li>• The Town is undertaking an Employment Lands Strategy to ensure Markham remains competitive by providing an adequate and appropriately placed supply of employment lands to meet the needs of current and future employers in all sectors of the economy</li> </ul>

STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Make it Happen Initiative- A review of the development approval processes, related conditions and agreements and building permits was undertaken and recommendations to streamline the planning process are underway</li> <li>• Expansion of water and sewer capacity to be in place by 2011</li> <li>• Working in partnership with York Region, the City of Toronto and other levels of government and government agencies including Metrolinx, GO Transit and other stakeholders to develop a vision, implementation strategy, funding model and service that establishes an integrated Greater Toronto Area transit system and road network. This should address road network improvements including the 400 series highways and local and regional roads.</li> <li>• Developing rapid transit options including, but not limited to, extension of the Yonge subway to Highway 7; VIVA and/or GO “centre to centre” service; dedicated public transit corridors within Markham; improved GO service levels on the Stouffville, Richmond Hill and Havlock lines and; service along the 407 supported by sufficient local transit service.</li> <li>• Creating transit-oriented policies for development, land use, travel demand management, live/work balance, higher density, infrastructure, education, HOV lanes, parking, cycling, safe streets and environmentally friendly transportation nodes and corridors.</li> <li>• Travel Demand Management in collaboration with the business community and Markham Board of Trade</li> <li>• Town’s Engineering Department is developing a Transportation Strategic Plan to address current and future transportation demands of residents and businesses</li> </ul> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Develop an employment lands strategy focused on future demand</li> </ul>

STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Pursue commitment to funding of expanded mass and rapid transit service</li> <li>• Adopt strategy for establishment of science park</li> <li>• Update the Town's Transportation Strategy to better reflect the needs and concerns of 21<sup>st</sup> Century employers, workers and investors</li> <li>• Develop an electrical power plan that addresses the future and changing needs of the community</li> <li>• Enhance transportation connections to the Pearson and the future Pickering airports, and promoting Markham as a "gateway" for businesses seeking easy access to international connections</li> </ul>
6. Build the Branded City	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• Markham to be regarded as one of North America's "Top 10 Cities for Business"</li> </ul>
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• Increased awareness of Markham's competitive strengths by the local business community in order to deliver a consistent and compelling promotional message about Markham's attributes internationally</li> <li>• Increased level of awareness and credibility of Markham brand</li> </ul> <p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>• Markham recently launched its new marketing DVD during a Mayor-led business mission to China. The DVD was a collaborative effort featuring senior business people from prominent Markham-</li> </ul>

STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<p>based corporations who shared their experiences on doing business in Markham</p> <ul style="list-style-type: none"> <li>• Event-specific and sponsorship ads</li> <li>• Branding events through sponsorship</li> </ul> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Identify Markham as a city (the City of Markham), review strategic positioning and adopt appropriate slogan, and engage in an aggressive marketing campaign to brand and build the city.</li> <li>• Identify key talent targets, and engage in intensive marketing to those targets</li> <li>• Establish strategic marketing partnerships with Markham-based companies</li> <li>• Establish an enhanced Markham Ambassadors program in which qualified, identified community members play leading roles in economic development marketing initiatives</li> </ul>
<p><b>7. Build the Talented City</b></p>	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• Employers in the knowledge-based industries to regard Markham's labour force as one of "Top 3 Reasons" to choose to locate in Markham</li> </ul>



STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• Educational attainment, enrolment in mentorship, internship programs</li> <li>• # and percentage of post-secondary education</li> <li>• Availability of college and university programs within the Town</li> <li>• # of patents held by local companies</li> <li>• # of international students</li> <li>• Employment rates among youth, immigrants</li> <li>• Provincial rating of Markham schools</li> </ul> <p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>• Mayor's Youth Task Force- 2008 Annual Youth Conference focused on Science in Innovation</li> <li>• A number of affordable housing policies/reviews are underway to diversify the range of housing stock offered</li> <li>• Mentoring and integrating new immigrants into labour pool in partnership with such agencies as TRIEC</li> <li>• Sponsorship of high school science competitions (robotics competition)</li> </ul> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Develop a wide-reaching and proactive K-12 outreach program to help local children and youth better understand and prepare for emerging economic trends and opportunities</li> </ul>

STRATEGIC DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Work with local post-secondary institutions to identify specific opportunities for building and growing the talent pool (including seminars, career days, a course in entrepreneurship, videos of successful new entrepreneurs)</li> <li>• Undertake a detailed study of the knowledge workforce in Markham, with an eye to understanding the workings of the community's Talent Model and to evaluate and substantiate foreign credentials and equivalencies</li> <li>• Develop a strategy for improving the range of housing stock in order to address a more diverse cross-section of needs</li> <li>• Develop a "Markham's First" campaign that identifies and promotes success stories in local innovation and achievement</li> <li>• Develop a plan for social infrastructure development, and a series of marketing tools for disseminating information about Markham's social activities</li> <li>• <b>Establish an HR roundtable</b></li> </ul>

## 1 Vision: Build the City

21<sup>st</sup> Century Canada is confronted by a dramatically and radically transformed economy, fundamentally different from what has gone before. New global trade linkages, disruptive technologies (term used to describe a new technology that unexpectedly displaces an established technology), international capital mobility, the rapid emergence of new international economic powers, the widespread restructuring of the workforce: these and other global trends have created a new context in which the Canadian economy must adapt, innovate and thrive. In this new environment, the policies and practices of the past are not only obsolete, they are sometimes counterproductive.

At every level – federal, provincial, local, corporate, personal – Canadians must rethink the way we engage with our economy and with the new opportunities it presents. To accomplish this, we must look beyond our past experience and envision the world as it will be – and as it could be if we channel our efforts and ideas in constructive, innovative and productive directions.

This is particularly true of our efforts to create economic opportunity at the local level. The Town of Markham's recent economic development history is a story of success. It has emerged as a leading Canadian example of positive economic growth and diversity, where quality of life and quality of opportunity exist side by side, and where a truly global community links Canada to a host of international opportunities.

But past success is no longer an indicator of future performance.

Although Markham finds itself in an enviable position, the economy around us is changing rapidly and irreversibly. Emerging technologies, changing macroeconomic environments, the advent of new global economic competitors, the rise of a highly mobile knowledge-based workforce – all of these new realities hold the potential to

"A vision is not just a wistful 'dream' of 'better times'... it must be grounded in the realities of what is possible and what can be achieved credibly. A vision is an image of what *can* be, given the right amount of energy and commitment. It is about possibilities, not probabilities. Probabilities tell us what is likely to happen if we keep moving in the same direction; possibilities are about what we can change and make happen if we work hard enough."

Dr. David Kozlow  
Chairman, Department of  
Economic Development  
University of Southern Mississippi  
*Economic Development Review*,  
Vol. 16, No. 2 (2000)

challenge Markham's opportunities for future growth. At the same time, Markham's past success and rapid growth is catching up with the community – transportation and electrical infrastructure are strained, land reserves are diminishing and real estate costs rising.

This radical transformation of the economy and the urban environment requires an equally radical vision of the Town's emerging economic opportunities. Like it or not, the world is changing in some very fundamental ways. If Markham wants to ride this wave, rather than being swept away by it, the community must adopt a bold, decisive and proactive vision of what it is to become.

Many of North America's great cities were founded by thinkers and visionaries who articulated the notion of the "City on the Hill" – an idealized and shining city-community that embodied the aspirations of its people, and enabled their enterprise and art to be transformed into something greater than the sum of its parts. Today, a new economy is emerging and a new world developing around us. We have entered the information age, a time of knowledge workers and innovators, where science and culture, art and entrepreneurship, life sciences and communications technology are converging in dramatic and unexpected ways. And in the midst of this new reality, this new economic context, it has once again become possible to envision the City on the Hill. Markham, perhaps more than most other communities, is positioned well to Build the City.

Markham finds itself at the end of the first decade of the 21<sup>st</sup> Century economy with all the right tools in place. It boasts a world-class business community populated by global innovators and international leaders in those sectors best poised for future growth. It is home to a diverse community comprising the world's national, cultural and linguistic mosaic at a time when international linkages are critical to future success. And it has chosen this time, at this crucial crossroads, to step back and imagine what it can become. It has chosen this time to evaluate its economic development potential and to prepare a strategy to guide it into the second decade of the twenty-first century.

The Town of Markham last completed a comprehensive Economic Strategy in the mid-1990s, one with a set of measurable objectives that guided the activities of the Town's Economic Development Department and resulted in significant economic growth. As a result of this strategy, Markham established itself as Canada's High-Tech Capital with an estimated 900 high-tech firms. However, it is important that Markham not only continue to nurture the success of its high technology sector but to also develop and broaden the Town's knowledge capacity and innovation base to help grow other emerging sectors of business and commerce. To this end, the Town of Markham initiated a 3-phase process to develop a new Economic Competitiveness Strategy.

In phase one, an Economic Base Analysis helped to broaden the community's understanding of Markham's economic landscape, and provided a road map that pinpoints the sectors and markets with strong opportunities for economic success, while effectively positioning Markham to enhance competitiveness and achieve critical economic growth. In phase two, a broad community consultation facilitated workshops and speakers, input was received from a dedicated website and direction received from the Markham Board of Trade Leaders Committee. That consultation process established a consensus regarding Markham's strategic priority areas. This current document represents the culmination of phase three – an economic competitiveness and development strategy for Markham. This document – and the strategy that it encapsulates – are intended to provide a strong, focused and specific vision of where Markham needs to go and what it needs to do in creating a successful vision for the 21<sup>st</sup> century economy.

***It is a ten-year statement of economic development principles and goals designed to guide both economic development staff and the broader community.***

In part, this economic development strategy is envisioned as a blueprint, something central to every building process. It lays out a vision of tomorrow's Markham, and a set of plans for how to make that vision a reality. In doing this, the strategy rests on four guiding principles:

1. **Collaboration** – although the Town of Markham has commissioned this work, it is meant as a tool for all, and there is a role in its implementation – however big or small – for every company, organization and citizen in Markham. This vision cannot be accomplished in isolation, but only through collaboration, both locally and at regional and GTA levels.
2. **Creativity** – new industries, new economies and new infrastructures all play a role in this plan, and these new challenges and opportunities must be addressed with new solutions and new ways of thinking. Ingenuity, creativity, knowledge and innovation are the only tools that will succeed in this environment.
3. **Convergence** – nowhere are the challenges and opportunities of the 21<sup>st</sup> century more obvious than in the way in which technologies, industries and investments are combining and converging. Markham is strongly positioned to benefit from this convergence, but it must move forward quickly.
4. **Community Leadership** – from its political and business leadership to its formalized structures like the Markham Board of Trade's Leaders Committee, Markham has a history of sound community and corporate governance. This leadership, based now around a common vision of the future, will play a critical role in the community's future success.

The strategies, plans, actions and objectives described in this blueprint are designed to maximize the community's chances of success, to lay a firm foundation on which the Markham of tomorrow may be built. All of them are designed to allow Markham's citizens to build a municipality that remains prosperous, distinguished by its excellence and successes, and that is sustainable.

## 2 Strategic Directions

Sound local economic development strategy builds upon the unique assets and resources of a community, communicating those characteristics to potential investment and development partners in a way that demonstrates an inherent value proposition unique to that place. In this sense, a community's strengths form the basis of a brand, which conveys a message about both the community's own nature and the nature of those investors and businesses who wish to locate there.

In the increasingly networked world of the global economy, such community brands, while based on local culture, tradition and identity, can increasingly be used to build dynamic external linkages that enhance the community's ability to interact with and compete in the global market. A growing number of entrepreneurial communities are now utilizing their local advantages and emerging communications technology tools to create international networks designed to spur innovation, investment and job creation, while retaining the positive cultural and environmental assets of their communities. Their tactics include:

- The use of information and communications technology tools (including established tools like VOIP and Webcam or video conferencing, and emerging Web tools such as social networks and wikis to create and maintain brand presence, external relationships, and dynamic two-way avenues of communications and promotions
- A strong commitment to environmental stewardship and sustainability, including a renewed commitment to support green technologies and green business practice, and a commitment to increasing economic efficiency and performance through a decreased ecological footprint
- A long-term commitment to local labour force development that places a high priority on early and ongoing efforts to build skills and prepare young people for the demands of the knowledge economy

- A recognition of the importance of supporting and nurturing knowledge workers as the backbone of both future economic opportunity and current cultural vibrancy
- The use of local knowledge centres and knowledge-based organizations to build national and international networks of expertise that can feed innovation, creativity and energy from other locations into the community, where they may in turn be used to support the development of local initiatives
- The utilization of the full range of a community's multicultural, multinational and multilingual human resources in a manner that opens doors to potential partnerships across the planet, and lays the foundation for international business-to-business and community-to-community cooperation
- A focus on and commitment to the most innovative and creative industries, regardless of sector, as a way of leapfrogging competitor communities, and broadening the diversity of local economies in order to avoid sector-specific economic shocks and downturns

"Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before defeat."

Sun Tzu  
*The Art of War* (c. 500 BCE)

A successful strategic plan for Markham's economic development must accomplish all these things, and more. Markham has emerged as a leading centre of the new knowledge-based economy – but as in all things, more is expected of leaders than followers. From this perspective, Markham's economic development strategy must be more than an average strategy; it must be provocative, engaging, creative and innovative – and produce good results.

Most strategies can be conceived of as roadmaps – two-dimensional representations of the path from A to B. Markham's strategy is meant to be more: it is a blueprint, a three-dimensional diagram that recognizes the community must build in many directions at once, and must succeed in reaching many destinations in the process of constructing a stronger economy. It is a blueprint for the kind of action that others will seek to imitate, the kind of action that leads to new ventures, new directions and new partnerships. In short it is a blueprint to Build the City.

Detailed research and analysis has identified four key target areas for Markham's future economic growth. These include:

- Information and Communications Technologies (ICT) and Life Sciences Convergence
- Information, Entertainment and Cultural Industries
- Professional, Scientific and Technical Services
- Finance and Insurance

Specific strategies and actions for pursuing targets in these sectors are the focus of this strategic plan. However, in order to fuel growth in the four key sectors, community investment is needed to build a solid strategic enabling environment, a physical, cultural and social context capable of supporting successful economic development activity. Section 3 of this report outlines sector-based strategic actions and Section 4 describes the actions recommended towards achieving an enabling environment for economic development as a whole.

### **3.0 Targeted Sector Actions**

The recommended actions focus on four principle target areas:

- ICT and Life Sciences Convergence
- Information, Entertainment and Cultural Industries
- Professional, Scientific and Technical Services
- Finance and Insurance



### 3.1 ICT and Life Sciences Convergence

In technological terms, convergence is the notion that technologies with distinct functionalities evolve to technologies that overlap. Where information technology and life science once stood as distinct fields of endeavour, they are increasingly becoming linked and intertwined, with the result that communities with strengths in both areas are well-positioned to capture investment in a range of new and emerging industries.

Markham is one of the fortunate communities that exhibit a strong presence in both of these sectors, and thus is well-positioned to take advantage of this trend to convergence. While it is impossible to predict exactly what products and services (and as a result, what business development opportunities) will ultimately emerge from this process, the community can take significant steps to prepare for the future, laying a foundation for investment as opportunity clarifies and solidifies.

#### Specific Strategies:

1. One of the early fields of practice to emerge from the convergence of ICT and life sciences is bioinformatics (sometimes referred to as computational biology), which uses the advanced mathematical and computational tools of information technology to solve problems and track data related to biological issues at the molecular level. Markham should capitalize on its existing strengths in ICT and life sciences to **build a strong, localized case for bioinformatics investment**, gaining the advantage of “first mover” in this emerging market. This case should be demonstrated through a series of focused marketing materials. Implementation: short-term (2008-2010).
2. A highly applied subsector of converged ICT and life sciences activity is the field of biomarkers (sometimes referred to as biosignatures). These are essentially manufactured or refined substances used to track changes or monitor processes in cell biology, epidemiology, toxicology and other medical sciences. Markham should **target the emerging biomarkers sector** as one of the first product-

“Roughly defined, “bioinformatics technology” is the backbone computational tools and databases that support genomic and related research. The spectacular rise of the commercial genomics industry and the broadening application of genomic techniques in biology and medicine have created a commercial market for bioinformatics software, hardware and services. By some estimates, the total market for bioinformatics tools and services, including custom databases, could exceed \$2.0 billion within five years. In our opinion, bioinformatics technology will become an increasingly important competitive differentiator for public and private life science companies going forward.”

Dr. Jason Reed  
Oscar Gruss Biotechnology Review  
*Trends in Commercial Bioinformatics*  
(2000)

focused, manufacturing-based opportunities within the convergence arena. Implementation: short-term (2008-2010).

3. Markham should establish a public/private partnership to **create a youth-driven entrepreneurship facility focused on the software elements of ICT/life science convergence**. Similar projects in other software fields have been successfully sponsored in other communities, including an entrepreneurship-focused facility sponsored by Microsoft at the Waterloo Accelerator Centre. Adapt this model for use in Markham, as a means of positioning the community as a centre of activity for emerging leaders in this field. Implementation: medium-term (2011-2014).
4. Within the life sciences sector, large-scale investment rarely results from site selection processes; rather, it tends to occur as large multinational companies gain a local presence through the acquisition of smaller, local research-based firms. With this in mind, Markham should **emphasize the provision of higher levels of specialized support to SMEs in this target convergence sector, including a targeted Business Retention & Expansion (BR&E) program**, recognizing that many of the big multinational firms are already in the community, and that most future growth will come through acquisition. Implementation: short-term (2008-2010).
5. **Create stronger linkages to York University as a means of understanding its ongoing research and identifying opportunities for commercialization**. Although Markham is not the home of York University, Markham and York University have partnered on a number of strategic initiatives including the National Centre for Medical Device Development (NCMDD), Consortium on New Media, Creative and Entertainment R&D in the Toronto Region (CONCERT), and Yorkbiotech (a Regional Innovation Network to promote growth of the biotechnology industry in the region). The strong links between York University and Markham may create opportunities for Markham to become the logical destination for commercialization opportunities emerging from the University. Local economic development staff should work directly with the University to establish a York Innovation Office, serving the entire Region from Markham. This office must emphasize practical links to the knowledge community within Markham, and play a bridge-building role between the academic and private worlds. Implementation: medium-term (2011-2014).
6. Markham should **continue the community's efforts to establish the National Centre for Medical Device Development**. Such a facility would serve to establish Markham's reputation in this convergence arena, while simultaneously

providing an anchor facility for significant levels of new investment. It would also serve as an attractor of significant new talent to the community, which will in turn drive new research and new entrepreneurial ventures. Implementation: short-term (2008-2015).

7. **Develop a sector specific marketing strategy for the ICT and life sciences convergence sector**, with a talent-focused branding component. Generic marketing materials are unlikely to be successful in this highly technical area of research and commercial activity. Using existing Markham companies and researchers to provide “testimonials” will add credibility to the material. Implementation: short-term (2008-2010).
8. **Develop a detailed database of key assets in this sector**, including companies, institutions, organizations and key strategic leaders/personnel. By knowing who and what is present, the community will be better able to target its retention programs, leverage its key partnerships, and extend its communications efforts more deeply into the sector. Implementation: short-term (2008-2010).
9. Many of the companies in this sector are small to medium sized enterprises (SMEs) that require continuous investment to support their growth and innovation. The Innovation Synergy Centre in Markham (ISCM) and the Markham Small Business Enterprise Centre (MSBEC) are uniquely positioned to foster and assist SMEs achieve growth. The strategy should continue to support these efforts and to work to **support venture capital development** to ensure that small business has continuous access to early-stage venture capital to help develop and expand their business.

### 3.2 Information, Entertainment and Cultural Industries

Recent work by the Canadian Interactive Alliance has demonstrated the significant growth potential for the interactive media sector, building in part on the creative skills and content development focus of key players in the arts and cultural industries. Savvy communities are increasingly understanding and exploiting the links between interactive technologies, a strong traditional arts and culture community, and the creative and engaging quality of life that attracts and secures knowledge workers.

There are 157 firms in Markham engaged in this form of activity (according to Canadian Business Patterns data), with a growing concentration of Publishing Industries, Motion

Picture and Sound Recording Industries, as well as significant numbers of Internet Service Providers, Web Search Portals and Data Processing firms. The Town should view this sector as an emerging opportunity. Historically, cultural industries have been a significant contributor to Canada's economic growth and with the introduction of new technologies that enable the distribution of cultural products and services worldwide, many communities are now actively working to ensure that indigenous cultural and linguistic offerings are available within the context of global mass culture. This sector is also an excellent complement to the concentration of ICT activity already evident in the Town.

**Specific strategies:**

1. **Engage Interactive Ontario (formerly the New Media Business Alliance and the Ontario Game Developers Association) in Markham's sector development efforts.** This means both becoming involved in the organization's existing activities, and attracting the group to participate in more Markham-based activities. Implementation: short-term (2008-2010).
2. **Launch an "Interactive Markham" organization as a tool for creating local networking linkages and building local "match-making" opportunities** (i.e. matching established wireless device manufacturers in the community with emerging handheld game developers). Implementation: short-term (2008-2010).
3. **Identify potential pilot projects with Ontario Media Development Corporation (with funding pools up to \$500,000 per project), and create local consortia to pursue these funds** as a means of kick-starting activity. Much of the work in this sector is project-based, and the Town's active assistance in facilitating applications and negotiating provincial administrative intricacies could launch significant levels of new activity. Implementation: short-term (2008-2010).
4. **Work with existing local manufacturers of graphics processing units, motherboard chipsets and video display cards to leverage their relationships with key players in the video gaming and animation sectors.** These existing relationships may be cultivated as a source of market intelligence and sound information, with the goal of gaining early access to companies considering expansion. Implementation: medium-term (2011-2014).
5. **Expand the Town's "Space Race" and "Money Chase" competitions to be an annual event with a focus on this sector,** which has a high percentage of

home and garage-based start-ups that could be attracted by the offer of office space. Similar programs have been successfully launched in Winnipeg and a number of European jurisdictions. Implementation: short-term (2008-2010).

6. Use the Town's globalization initiatives to **link start-ups with resources in low-cost partner communities** (e.g. in India and China). Seek to create joint venture opportunities where Markham's knowledge and cultural workers drive intellectual property creation, while other portions of projects are outsourced to low-cost centres, with the net effect of maximizing creator time for the development of additional ventures and projects. Implementation: long-term (2015-2017).
7. **Develop a sector specific marketing strategy for the information, entertainment and cultural industries sector**, with a talent-focused branding component. Generic marketing materials are unlikely to be successful in this creative and highly networked area of activity. Bear in mind that in marketing terms, this is a highly-sophisticated sector where only the best marketing approach will attract any positive response. At the same time, this sector is best-reached through relatively low-cost channels including social networking websites such as YouTube and Facebook. Implementation: medium-term (2011-2014).
8. **Develop a detailed database of key assets in this sector**, including companies, institutions, organizations and key strategic leaders/personnel. By knowing who and what is present, the community will be better able to target retention programs, leverage key partnerships, and extend communications efforts more deeply into the sector. Implementation: short-term (2008-2010).

### 3.3 Professional, Scientific and Technical Services

Canadian Business Patterns data suggests that for the period 2002-2006, there has been a significant increase (13% growth) in the number of Professional, Scientific and Technical Service firms in Markham, from 1,913 firms in 2002 to 2,163 firms in 2006. While individually many of these firms may employ only a small number of people, the sector continues to represent a significant growth opportunity in terms of investment attraction efforts, as it requires a well-educated labour force that is concentrated in the knowledge industries and business service sectors.

With prospects for the growth in this sector remaining strong, Markham is well-positioned to capitalize on its emerging reputation as a centre for this kind of activity. The sector is particularly important from an economic development perspective, as much of the innovation, technological advancement and process improvement that

drives productivity increases across the broader economy. This in turn unleashes new enabling technologies that improve performance in multiple industries that will arise directly from the activity of this sector.

### **Specific Strategies:**

1. Work with the York University School of Design and with Seneca College and existing design-oriented or design-capable businesses to **establish and grow a design “cluster”** in Markham. This cluster may then become a focal point of local strength in the international efforts, where Markham-based knowledge and intellectual property is linked with cost-effective manufacturing in other jurisdictions to build long-term synergistic opportunities for growth. Implementation: short-term (2008-2010).
2. **Create campus-style research and office environments to create informal environments supportive of cross-disciplinary collaboration.** This will enhance opportunities for synergistic innovation at points of convergence between sectors of local strength. Increased interaction between players in the professional, scientific and technical services sector has been shown to have positive impacts on productivity, innovation and business growth. By building this into the community’s “value proposition” for the sector, Markham will become an increasingly attractive location. Implementation: medium-term (2008-2018).
3. **Work with the Toronto Region Research Alliance (TRRA) and with Canadian operations of multinational tax advisory firms to focus investment attraction efforts on US-based research intensive companies that would benefit from Canadian R&D tax credits.** At least one major firm is currently contemplating this strategy with its existing clientele, providing Markham with a specific opportunity to create a key public/private partnership on this front, while simultaneously ensuring 3<sup>rd</sup> party credibility with (and insider access to) key companies in this sector. Implementation: medium-term (2008-2018).
4. Work to **attract more events, conferences and conventions in the professional, scientific and technical services sector**, both as a means of introducing talent from this sector to Markham’s qualities and advantages, and to enhance the experiences and networking opportunities of the talent that has already located to the community. Implementation: medium-term (2011-2014).

5. **Engage Seneca College and York University in discussions concerning a possible Markham program** with a focus on this strategic sector. Canadian universities are increasingly moving to strong community-focused partnerships for development. Markham's credibility in the professional, scientific and technical sector would be dramatically enhanced by the presence of a local university or college program. Markham's existing businesses with strengths in this sector could form the basis of a "sales pitch" – new facilities in Markham could be specifically designed to offer direct interaction between university and college researchers and key personnel from locally-operating multinational corporations in a way that will enhance academic-business partnerships, increase rates of technology commercialization, and bring new private financial resources to the university and college. Implementation: long-term (2011-2017).
  
6. **Develop a sector specific marketing strategy for the professional scientific and technical services sector**, with a talent-focused branding component. Generic marketing materials are unlikely to be successful in this highly technical, relationship-based area of research and commercial activity. Key testimonials from leading private sector voices would significantly enhance the impact of this approach. Implementation: medium-term (2011-2014).
  
7. **Develop a detailed database of key assets in this sector**, including companies, institutions, organizations and key strategic leaders/personnel. By knowing who and what is present, the community will be better able to target retention programs, leverage key partnerships, and extend communications efforts more deeply into the sector. Implementation: short-term (2008-2010).

### 3.4 Finance and Insurance

The Finance Services sector represents a significant opportunity for Markham in terms of its investment attraction efforts. The Toronto region continues to be regarded as the financial capital of Canada and is the third largest financial services centre in North America. According to the Greater Toronto Marketing Alliance (GTMA), the growth of

“Financial Services Clusters throughout the world are being reorganized. As consolidations continue, particularly among the exchanges, a new order of Financial Services Clusters will emerge dominated by a handful of cities. Factors relating to globalization, global regulatory changes, consolidations that include mergers of the world’s largest financial institutions, increasing cross-pillar activities, and rapid and revolutionary advances in technology will drive this reorganization.”

Toronto Economic Development  
Financial Services Cluster – A Review (2001)

Toronto’s financial services sector has historically outpaced that of both New York and Chicago. For its part, Markham has successfully attracted a significant number of head office and back office operations in this sector including AMEX Canada, TD Waterhouse, Liberty Mutual Insurance Group, and Allstate Insurance Co. of Canada. This should continue to be a priority target sector for the community.

However, Markham should acknowledge that in this sector where London, New York and Tokyo (among others) battle for investment and prestige, the prospects of success may be improved by cooperating with regional partners under the “Toronto” label. A regional approach, in cooperation with the Toronto Financial Services Alliance (TFSA), may still serve to drive significant investment to Markham.

### **Specific Strategies:**

1. Consult with existing Finance and Insurance sector in Markham to more explicitly **articulate the community’s location advantages**, as there is not yet a widely-understood, credible case across the broader sector. Work with the TFSA to include this information in future regional promotional efforts, and to familiarize key regional partners with Markham’s strengths. Implementation: short-term (2008-2010).
2. Help the Finance and Insurance sector within Markham to **create a local identity**. By creating a local brand or identity to parallel “Bay Street” or “Wall Street,” it may be possible to kick-start a networking group and activities, in order to better formalize linkages between both companies and talent at the local level. Once in place, such a business network may be used for sector intelligence, as a promotional partner, and as a means for more effectively integrating newly-recruited companies into the Markham community. Implementation: medium-term (2011-2014).



3. Engage the academic and business community in an effort to **establish a human resources roundtable to address the shortage of skills in the insurance sector** – with a particular emphasis on underwriters, adjudicators and actuaries – in order to make the community more attractive for corporate expansions and relocations. The Canadian insurance industry is increasingly challenged by human resources and talent shortages, and will respond favourably to initiatives that help it address its gaps. Implementation: medium-term (2011-2014).
  
4. **Participate in the Toronto Financial Services Alliance (TFSA)**, a public/private initiative created to enhance and promote the Toronto Region as a premier North American financial services centre. By linking with business, industry associations, colleges, universities and industry training institutions across the region, Markham will be linked into a valuable source for local and international competitive and sector intelligence in the financial services sector (2008-2010).
  
5. **Understand the impact of Markham's rising commercial real estate costs on this sector**, in order to determine the deterrent or displacement effect of these costs and develop a strategy for counteracting these impacts. In the near future, retention of investment in this sector may be as great a challenge as recruitment. It is, for example, possible that much of the present sector was attracted to the community because of favourable costs compared to downtown Toronto. When and if this cost advantage ceases to be significant, the community may be faced with both retention and new recruitment challenges. Consideration should also be given to the incentives question: to what degree do incentives influence this particular business calculation, and should Markham consider incentives to counter or pre-empt those that may be offered by others? Implementation: short-term (2008-2010).
  
6. **Develop a sector specific marketing strategy for the Finance and Insurance sector**, with a talent-focused branding component. Generic marketing materials are unlikely to be successful in this highly specialized area of commercial activity. At the same time, a talent focus will speak directly to one of this sector's most pressing needs. Implementation: medium-term (2008-2010).
  
7. **Develop a detailed database of key assets in this sector**, including companies, institutions, organizations and key strategic leaders/personnel. By knowing who and what is present, the community will be better able to target retention programs, leverage key partnerships, and extend communications efforts more deeply into the sector. Implementation: short-term (2008-2010).

8. **Develop an understanding of existing regional business linkages in this sector**, and leverage those relationships in order to gain direct access to potential investment attraction targets. For example, ICT firms headquartered in Markham currently provide technical support to most of Canada's major insurance companies. These existing relationships may be cultivated as a source of market intelligence and sound information, with the goal of gaining early access to companies considering expansion. Implementation: medium-term (2011-2014).

SUMMARY OF TARGETED SECTOR OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
Information and Communications Technologies (ICT) and Life Sciences Convergence:	<u>Performance Objective by 2018</u> <ul style="list-style-type: none"> <li>Markham regarded as “Top 3 Location” in Canada for ICT/Life Science Convergence businesses</li> </ul>
	<u>Key Performance Indicators:</u> <ul style="list-style-type: none"> <li># of Research and Development facilities</li> <li># of firms with sales over 50% outside of Canada</li> <li>Establish Innovation York in Markham</li> <li>Sector growth measured by employment and number of companies in both ICT and Life Science and in converged sector</li> </ul> <u>Initiatives Underway</u> <ul style="list-style-type: none"> <li>The Town of Markham and York University in partnership with 30 industry firms, associations, and centres of learning are working on establishing a National Centre of Medical Device Development in Markham. The NCMDD will serve as a centre of excellence in the convergence of technologies to commercialize new and innovative medical device products and solutions.</li> <li>York University will be locating a facility in Markham in 2008 called Innovation York - its new office for industry liaison and technology transfer in the Toronto region.</li> <li>The NCMDD's vision includes a Youth component – as part of a kindergarten to PhD continuum, the NCMDD will provide a unique environment and an alternative campus for students to</li> </ul>

SUMMARY OF TARGETED SECTOR OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
	<p>experience first-hand about science and technology. As an example, programming will include internships related to NCMDD projects.</p> <ul style="list-style-type: none"> <li>• Partnering with Yorkbiotech, Toronto Region Research Alliance, and others to promote Markham and the Toronto Region as a centre for innovation and technology</li> <li>• The ISCM and MSBEC are uniquely positioned to foster and assist SMEs in commercial efforts and to achieve growth</li> </ul> <p><u>Actions to be Taken</u></p> <ul style="list-style-type: none"> <li>• Build a strong, localized case for bioinformatics investment</li> <li>• Target the emerging biomarkers sector</li> <li>• Create a youth-driven entrepreneurship facility focused on the software elements of ICT/life science convergence</li> <li>• Emphasize the provision of higher levels of specialized support to SMEs in this target convergence sector, including a targeted Business Retention &amp; Expansion (BR&amp;E) program</li> <li>• Create stronger linkages to York University and Seneca College as a means of understanding their ongoing research and identifying opportunities for commercialization</li> <li>• Establish and grow the National Centre for Medical Device Development</li> <li>• Develop a sector specific marketing strategy for the ICT and life sciences convergence sector</li> <li>• Develop a detailed database of key assets in this sector</li> </ul>

SUMMARY OF TARGETED SECTOR OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>Support venture capital development</li> </ul>
<b>Information, Entertainment and Cultural Industries:</b>	<u>Performance Objective by 2018</u> <ul style="list-style-type: none"> <li>Markham businesses engaged in cultural industries to be within list of top 20 employers</li> </ul>
	<u>Key Performance Indicators:</u> <ul style="list-style-type: none"> <li>Sector growth measured by employment and number of companies</li> </ul> <u>Initiatives Underway:</u> <ul style="list-style-type: none"> <li>CONCERT (The Consortium on New Media, Culture &amp; Entertainment R&amp;D in the Toronto Region) chaired by York University, this consortium includes AMD, and other Markham high tech companies such as Motorola and Apple Canada. CONCERT is intended to drive innovation within the creative industries by sparking collaborative relationships and infrastructures in the GTA that strengthen and promote innovation in the screen-based industries</li> <li>Angel and venture capital development for example, Money Chase event through partnership with Innovation Synergy Centre</li> </ul> <u>Actions to be Taken</u> <ul style="list-style-type: none"> <li>Engage Interactive Ontario in Markham's sector development efforts</li> <li>Launch an "Interactive Markham" organization as a tool for creating local networking linkages</li> </ul>

SUMMARY OF TARGETED SECTOR OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
	<p>and building local “match-making” opportunities</p> <ul style="list-style-type: none"> <li>• Identify potential pilot projects with Ontario Media Development Corporation and create local consortia to pursue these funds</li> <li>• Work with existing local manufacturers of graphics processing units, motherboard chipsets and video display cards to leverage their relationships with key players in the video gaming and animation sectors</li> <li>• Expand the “Space Race” and “Money Chase” competitions to be annual events with a focus on this sector</li> <li>• Link start-ups with resources in low-cost partner communities</li> <li>• Develop a sector specific marketing strategy for the information, entertainment and cultural industries sector</li> <li>• Develop a detailed database of key people and assets in this sector</li> </ul>
<b>Professional, Scientific and Technical Services:</b>	<u>Performance Objective by 2018</u> <ul style="list-style-type: none"> <li>• Design sector to rank among “Top 3 Exporter” sectors in Markham</li> </ul>
	<u>Key Performance Indicators:</u> <ul style="list-style-type: none"> <li>• Sector growth measured by employment and number of companies</li> </ul>

SUMMARY OF TARGETED SECTOR OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>No. of companies working outside of Canada</li> </ul> <p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>Partnering with Greater Toronto Marketing Alliance, Toronto Region Research Alliance, real estate, accounting, and legal firms and others to leverage investment attraction capacity</li> <li>Examination of design and engineering sub-sectors</li> </ul> <p><u>Actions to be Taken</u></p> <ul style="list-style-type: none"> <li>Establish and grow a design “cluster”</li> <li>Create campus-style research and office environments to create informal environments supportive of cross-disciplinary collaboration</li> <li>Work with the Toronto Region Research Alliance (TRRA) and with Canadian operations of multinational tax advisory firms to focus investment attraction efforts on US-based research intensive companies that would benefit from Canadian R&amp;D tax credits</li> <li>Attract more events, conferences and conventions in the professional, scientific and technical services sector</li> <li>Engage universities and colleges and institutes of technology in discussions to establish a Markham design program</li> <li>Develop a sector specific marketing strategy for the professional scientific and technical services sector</li> <li>Develop a detailed database of key assets in this sector</li> </ul>

SUMMARY OF TARGETED SECTOR OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
SECTOR TARGETS	PERFORMANCE AND NEXT STEPS
Finance and Insurance:	<u>Performance Objective by 2018</u> <ul style="list-style-type: none"> <li>Markham to be Canadian h.q. location of 5 “Fortune 500” banks or insurers</li> </ul>
	<u>Key Performance Indicators:</u> <ul style="list-style-type: none"> <li>Sector growth measured by employment and number of companies</li> <li>No. of regional and national headquarters</li> </ul> <u>Initiatives Underway:</u> <ul style="list-style-type: none"> <li>Nothing currently underway</li> </ul> <u>Actions to be Taken</u> <ul style="list-style-type: none"> <li>Articulate the community’s sector-specific location advantages</li> <li>Create a local sector identity</li> <li>Establish human resources roundtable to address the shortage in the insurance sector</li> <li>Join Toronto Financial Service Alliance</li> <li>Understand the impact of Markham’s rising commercial real estate costs on this sector</li> <li>Develop a sector specific marketing strategy for the Finance and Insurance sector</li> <li>Develop a detailed database of key assets in this sector</li> <li>Develop an understanding of existing regional business linkages in this sector</li> </ul>

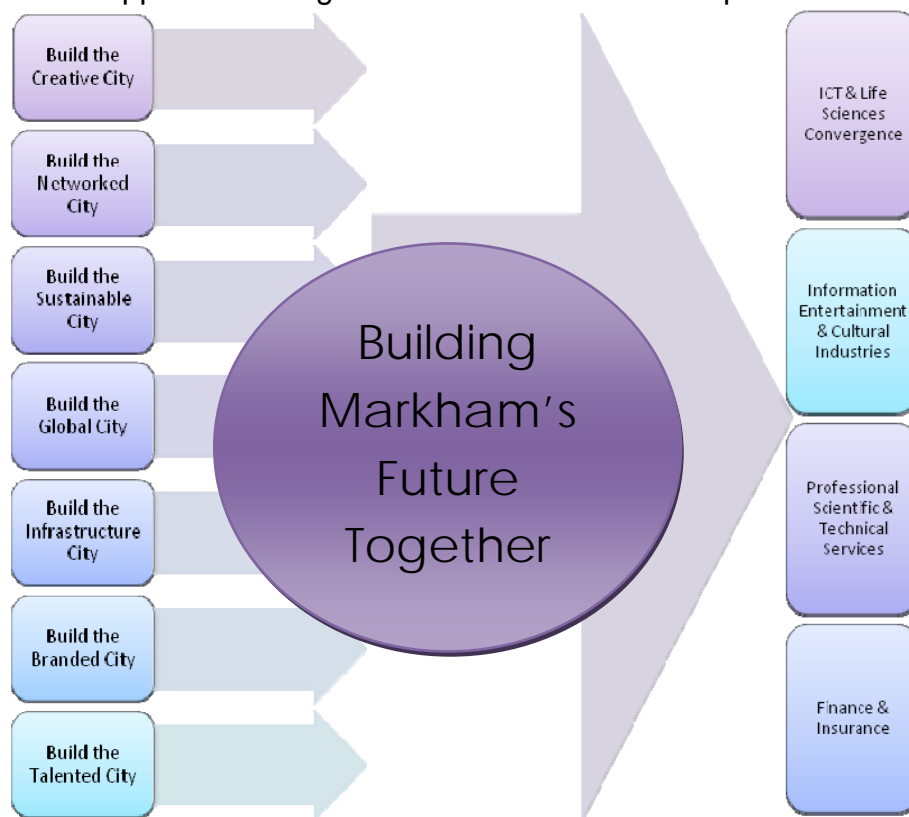


## 4 Building an Enabling Environment

To build Markham's future together and create the enabling environment for future success, Markham must focus its efforts in seven key areas:

- Build the Creative City
- Build the Networked City
- Build the Sustainable City
- Build the Global City
- Build the Infrastructure City
- Build the Branded City
- Build the Talented City

These activities are not seven steps taken in isolation – they are, in fact, a series of interconnected undertakings that lead to the creation of a strategic enabling environment that supports sector growth and economic development.



Within each of the following strategic action areas, recommendations appear in priority order with recommendations relating to timeline (short, medium or long term), the municipal role (lead or support), and suggested partners.

## 4.1 Build the Creative City

In traditional economic development practice, the cultural sector was most often seen as an “add-on” or a “secondary benefit” – the kind of thing that enhanced quality of life, but had limited economic impact. As the knowledge economy transforms the business environment, however, a strong arts and cultural sector is increasingly seen as a basic building block of economic development.

“As the economic environment changes, so too must our understanding of the role of the arts and culture in supporting it. With the remarkable convergence of creativity and technology taking place today, there are more links between the non-profit and commercial sectors than ever before. This calls for new approaches and policies that will harness the entrepreneurial energy in the arts industry, and enhance the activity we see today... creativity is a critical asset when it comes to employment, community empowerment, enhanced quality of life and education – and we have the opportunity, and the tools, to maximize it.”

The New England Council  
*The Creative Economy Initiative* (2000)

In part, this is a result of the work of researchers who have demonstrated a strong link between a community’s cultural and artistic quality of life, its ability to attract and retain key knowledge workers, and its long-term economic development prospects. Increasingly, however, the arts and cultural industries sector is being seen as a driver of economic development in its own right.

In part, this is because emerging technologies have made the profitable distribution or performance of art more accessible to a wider range of people. But more importantly, the arts and cultural sector is now seen as a driver of content-creation in the increasingly

lucrative interactive media industry.

### 4.1.1 Develop an Asset Map: Identifying the Arts & Cultural Industries Sector

The arts and cultural sector tends to be fairly well-developed in many mid-sized communities, but it is often invisible. Comprising largely independent and home-based cultural entrepreneurs, it can be difficult to identify the specific nature, focus and needs of such a sector. Cultural asset-mapping is a well-defined process that enables a community to paint a comprehensive picture of its arts and cultural industries sector, and lay a firm foundation for future development. In Markham’s case, this process

should include the development of a database identifying most or all of the sector's participants, artists, producers, directors, actors, writers... the artistic community.

**Action: Undertake an asset mapping exercise to describe and define the nature, extent and scope of the arts and cultural industries sector in Markham.**

Role & Timeline: Town in lead role, with short-term mandate (2008-2010)

Key Partners: local arts and cultural organizations

#### 4.1.2 Strengthen the Arts & Cultural Industries Sector: Building Cultural Enterprise

Artists and other cultural industries participants generally operate as if they were the sole proprietors of small businesses, but often do so without any formal business training or support. By delivering a series of workshops and seminars on how to launch, develop and operate a small business in the cultural sector, significant steps towards profitability and sustainability may be made. Using the database developed during the cultural asset mapping exercise, Markham will already have a target list for efforts in this area.

"If Canada's largest cities are to become world-class centres of design, architecture and culture, and attract young, talented, creative people, they will have to do more than invest in physical infrastructure. They will have to sustain vibrant cultures and become centres of excellence in education so that they can take advantage of the global networks that power great cities and drive Canada's economy forward."

Janice Gross Stein  
Conference Board of Canada  
*Mission Possible: Sustainable Prosperity for Canada* (2007)

Several similar projects have been piloted and delivered by the Ontario Ministry of Small Business and Entrepreneurship and the Small Business Enterprise Centres in other communities, and would serve as appropriate models for activity in Markham. The Town's recent decision to double staff support for small business and entrepreneurship lays a firm foundation for this and other initiatives.

**Action: Develop and deliver an entrepreneurship training and support program specifically designed to enhance the performance of small cultural and artistic enterprises.**

Role & Timeline: Town in support role, with short-term timeline (ongoing from 2008-2010)

Key Partners: Small Business Enterprise Centre, Ministry of Small Business and Entrepreneurship, local arts and cultural organizations

#### 4.1.3 Link the Sector to New Opportunity: Building Bridges to Interactive Media

One of the fastest-growing components of the ICT sector is interactive media, composed of industries such as video gaming, e-learning, and animation. The success of these industries rests upon the opportunity to link cultural sector actors with technology experts in joint efforts to develop and exploit original intellectual property. In essence, those who create content must be joined with those who have the capacity to design, create and deliver or distribute it.

Buoyed by strong provincial incentives and a world-class learning infrastructure, the interactive media sector is positioned for extremely strong growth in Ontario, but as yet, no natural centres of activity have emerged (with the exception of television-focused animation in downtown Toronto). By actively creating formal and informal networks and opportunities for interaction, Markham will significantly enhance opportunities for the sector's growth within the community, and potentially position itself as a major national centre of such activity.

Regional assets to support this effort are strong, anchored by the Consortium on New Media, Creative, and Entertainment R&D in the Toronto Region (CONCERT). Markham is a founding member of this group and should maintain its support for regional collaboration on this front, as well as add more local structures and initiatives. In particular, efforts to link larger players in the community (such as York University, AMD or Motorola) to small and emerging companies should be emphasized.

***Action: Establish a program for linking the existing arts and cultural industries sector to the ICT and interactive media industries to spur opportunities for commercialization, collaboration and content creation.***

Role & Timeline: Town in lead role, with short-term timeline (ongoing from 2008-2010)

Key Partners: local arts organizations, ICT entrepreneurs and companies, Seneca College, Ontario Ministry of Culture, Interactive Ontario, Canadian Interactive Alliance, Consortium on New Media & Entertainment R&D in the Toronto Region (CONCERT)

## 4.2 Build the Networked City

Information and Communications Technologies are rapidly altering every single aspect of the modern business world. Central concepts in the ICT community (such as Moore's Law and Gilder's Law) suggest that not only is change constant, but that it is accelerating exponentially. In 1946, the cost of a three-minute telephone call from New York to London was US\$650, while today the cost of that same call, using VOIP or other telephony technologies, is a few pennies. Tomorrow, it will be even less.

The challenge in establishing sound strategic technology-related actions to spur economic development is not that one cannot find things to do, but rather that one cannot imagine what it may be possible to do in the very near future. Those pursuing economic development and investment attraction opportunities must become futurists, understanding today's business needs while at the same

time anticipating the business needs of tomorrow. (It is difficult to predict businesses and technologies that have not yet been invented, but will surely be part of the business landscape within ten years. It becomes incumbent on the environment to be both welcoming and supportive.)

As "Canada's High Tech Capital", Markham has an enviable track record on this front, and has successfully used emerging technologies to creatively spur investment and growth within the community. However, as the "Internet Bubble" has given way to Web 2.0, Markham must choose how to continue to be a leader in the introduction and implementation of technology-based tools for economic development.

*With price held constant, the processing power of computers doubles every 24 months.*

"Moore's Law", coined by Intel co-founder Gordon Moore in 1965

*The cost of transferring one bit of information falls by half every 12 months.*

"Gilder's Law", coined by author and futurist George Gilder in 2000

### 4.2.1 Utilize the Experts: Forming a Team for Tech-based Development

Given the pace of technological change, it is impossible for a static strategy document to keep pace with emerging tools and opportunities. The presence of a formal, structured team of genuine experts to advise economic development staff on tools, tactics and approaches for using and understanding technology in their work will enable

Markham to continually be at the leading edge of investment attraction, promotion and development activity. It will also ensure that as new technologies dictate the need for new community or business infrastructure, Markham will be well-positioned to become a centre of “early adoption.”

***Action: Establish a Technology Working Group to advise the Town on emerging technology issues and opportunities on a quarterly basis.***

Timeline: Town in lead role, with short-term timeline (ongoing from 2008-2010)

Key Partners: creative business leaders and community members with technological expertise (people with ability to think outside the box, while maintaining an understanding of economic imperatives)

#### 4.2.2 Pursue Mass Collaboration: Turning Knowledge into Opportunity

“...Web 2.0., the living Web, the Hypernet, the active Web, the read/write Web. Call it what you like – the sentiment is the same. We’re all participating in the rise of a global, ubiquitous platform for computation and collaboration that is reshaping nearly every aspect of human affairs... Twenty years from now we will look back at this period of the early 21<sup>st</sup> Century as a critical turning point in economic and social history. We will understand that we entered a new age, one based on new principles, worldviews, and business models where the nature of the game was changed.”

Don Tapscott and Anthony D. Williams  
*Wikinomics: How Mass Collaboration Changes Everything* (2006)

A range of emerging Internet-based tools and technologies supporting widespread social networking and collaboration have been grouped under the label of “Web 2.0”. With tools like “wikis” facilitating widespread and instantaneous mass collaboration and cross-disciplinary cooperation, the very rules of how business operates, does research and pursues innovation are changing. Inevitably, many of these new tools and approaches may be adapted for use in an economic development context.

Structures such as Innocentive, yet2.com and Eureka Medical seek to match research results with entrepreneurs, or new technologies with appropriately scaled companies. A range of specialized wikis serve the needs of researchers seeking to navigate the technology commercialization process. By developing and making RSS feeds (a family of Web feed formats used to publish frequently updated content such as blog entries, news headlines, and podcasts) or other automated notification systems available to local business leaders, Markham can play an intermediary or matchmaking

role with many of these technologies, identifying emerging business opportunities to those best-suited or most interested in developing them further. At the same time, the community will be building the capacity to rapidly disseminate information regarding opportunities for collaboration. Working together will offer a key competitive advantage as the range of mass collaboration networks and opportunities continue to multiply and expand in the future.

***Action: Unleash the community's capacity for innovation by channelling information about emerging economic opportunities to collaborative groups in real time.***

Role & Timeline: Town in support role, with short-term timeline (ongoing from 2008-2010)

Key Partners: local academics, local entrepreneurs, and local business associations, Seneca College Interactive Marketing program, York University

#### 4.2.3 Develop Social Networking Tools: Marketing the Community through Web 2.0

Of all the changes initiated by the advent of Web 2.0 tools, the rise of social networking platforms is perhaps the most far-reaching in its impact. Social networking tools cast Internet users in the role of content creators, and create on-line environments for mass participation and mass collaboration. For an emerging generation of entrepreneurs and investors, websites are no longer static brochures of pre-prepared information, but interactive vehicles through which data, opinion and information are exchanged on a real-time basis. The economic development efforts of the future will see a decreased reliance on traditional web and database tools, and an increased emphasis on the use of social networks to achieve their goals.

Markham should actively work to establish, promote and maintain social networking structures and initiatives as a way of both tapping into and leading this trend. In its initial phases, such a program would concentrate on establishing a viable, vibrant presence for Markham on three key networks: Facebook, MySpace and LinkedIn. A smaller secondary presence on YouTube and flickr could also enhance future promotional efforts utilizing visual tools.

***Action: Utilize social networking tools to enhance economic development promotional efforts.***



Role & Timeline: Town in lead role, with short-term timeline (ongoing from 2008-2010)

Key Partners: Seneca College Interactive Marketing program, local business organizations, CONCERT

***Action: Tie together our affiliated organizations (Yorkbiotech, ISCM, NCMDD, etc) to leverage and optimize promotional opportunities***

Role & Timeline: Town in lead role, with short-term timeline (ongoing from 2008-2010)

Key Partners: Seneca College Interactive Marketing program, York University, NCMDD Consortium partners, local business partners

#### 4.2.4 Make Markham Wireless: Building a 21<sup>st</sup> Century Infrastructure

Much as fibre optics and wired telecommunications infrastructure were a key to successful technology investment attraction the 1990s and 2000s, many future opportunities – social, cultural and economic – will rely on the presence of wireless nodes, networks and hotspots. Beginning with focused “pilot projects,” Markham should undertake a coordinated roll-out of wireless infrastructure across the community, defining roles for public, private and not-for-profit actors, and maximizing the presence of wireless infrastructure in the community. Not only will this serve to keep pace with competing communities (Toronto, Waterloo Region, etc.) where wireless infrastructure is being rapidly built out, but it will also enable Markham to score key points in attracting and retaining tech-savvy youth, and in building a delivery mechanism for future programs and promotional efforts.

A number of “best practices” have emerged in this arena, with particularly notable successes in Cleveland, Seattle, Portland and San Francisco, while Fredericton has emerged as a leader on this front in Canada. The San Francisco initiative – a public/private partnership with EarthLink and Google – is one of the most far-reaching, while Seattle’s program focuses on public provision of services in public space, including parks and City Hall. The emerging consensus is that widely accessible wifi coverage is best, ensuring a broad uptake among the local population, and eliminating some of the cost and accessibility barriers that characterize the “digital divide.”

***Action: Undertake a wifi development program in order to maximize wireless access and coverage in Markham.***



Role & Timeline: Town in lead role, with medium-term timeline (2011-2014)

Key Stakeholders: telecom companies, utilities, wifi interests

**Action: Become involved in the Intelligent Community Forum to optimize economic growth in the broadband community and to learn from international best practices in government and industry.**

Role & Timeline: Town in lead role, with short-term timeline (2008-2010)

Key Stakeholders: telecom companies, utilities, wifi interests

### 4.3 Build the Sustainable City

In recent years, communities have become increasingly aware of and sensitive to the pressures placed on local ecosystems and environments. From international challenges like global warming to local issues such as habitat preservation and drinking water quality, communities increasingly expect economic development strategies to address not only their standard of living, but their environmental quality of life. Indeed, it appears that there may no longer be a distinction between the two. It was from this perspective that the World Commission on Environment and Development first devised the concept of “sustainable development” in 1986. They effectively argued that the only viable avenue for development is one that understands and embraces the protection and preservation of natural ecosystems and environments.

“...in the end, sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs. We do not pretend that the process is easy or straightforward. Painful choices have to be made. Thus, in the final analysis, sustainable development must rest on political will.”

World Commission on Environment and Development  
*Our Common Future* (1987)

Sound economic development practice embraces this understanding, but also recognizes that sustainable development speaks equally to the long-term viability and durability of local economic activity. Short-term economic activity and “quick fix” solutions to development challenges are thus antithetical to the healthy and sustainable operations of a viable local economy. Markham has a long history of developing positive

environmental policies and programs, including: New Urbanism Community Planning; Markham District Energy; three stream waste separation; the Greenspace Master Plan; the Small Streams Study; the Clean Air Public Awareness Campaign; the Biodiesel Pilot Project; the Green Fleet/Hybrid pilot project; the pesticide bylaw; and the Source Water Protection Plan.

Today, communities must place a high priority on sustainable development if they hope to have any success in the global competition for investment and opportunity. Not only do the most desirable workers seek to live where sustainability is prioritized, but today the most desirable companies also choose to make their investments and to locate their operations where sustainability is prized. To be effective on the economic development front, this means that Markham must not only speak to sustainability concerns, it must engage in actively addressing them.

#### 4.3.1 Participate in Cross-Jurisdictional Opportunities Towards Sustainability

Environmental challenges cross jurisdictional and political boundaries and therefore require a collaborative approach to formulating solutions. Markham should reach out to the rest of the GTA through such organizations as the Toronto City Summit Alliance's Green GTA Initiative to share best practices, establish metrics, identify cluster building initiatives and support green technologies, encourage green practices.

#### ***Action: Participate in the Toronto City Summit Alliance's Green GTA Initiative***

Role & Timeline: Town in lead role, with short-term timeline (2008-2010)

Key partners: interdivisional sustainability team, Region of York

#### 4.3.2 Enhance Markham's Sustainability Strategy: Involving the Business Community

While ecosystem clean-up or habitat preservation activities are often easily understood and undertaken by communities, the ways in which local business can play a leadership role in enhancing and protecting the local environment are sometimes overlooked. Markham should invite the business community to become an active partner with its corporate interdivisional sustainability team, to ensure that business-focused policies and programs are incorporated into the Community Sustainability Plan.

“... there appears to be an emerging consensus among Canadians on two themes: that Canada must strive for a global-best level of excellence in embracing the competitiveness challenge, and that it must adopt a sustainability perspective in so doing.”

Anne Golden  
President & CEO, Conference Board of Canada  
*Mission Possible: Successful Canadian Cities* (2007)

This effort would allow key business leaders in Markham to articulate and establish a series of specific goals as they relate to sustainable development, and to demonstrate the community’s capacity for cooperative approaches to improving the local environment. It would also serve to proactively engage the business community in a program that will strengthen existing efforts, and ensure wider impacts within the community. Examples of existing sustainability efforts in which the business community is presently involved include the Travel Demand Management Partnership with the Markham

Board of Trade, and local businesses which aim to reduce reliance on the automobile by encouraging alternatives that businesses can use, including public transit, teleworking, offering flexible work hours and car pooling, to name a few.

**Action: Create a business-focused agenda for sustainable development in Markham.**

Role & Timeline: Town in support role, with short-term timeline (2008-2010)

Key partners: interdivisional sustainability team, local environmental organizations, local business organizations, Region of York, Developers Roundtable

**4.3.2 Share the Wealth: Brokering Information to the Business Community**

Real progress on sustainability issues will require tangible and concrete action at the level of individual businesses. Markham should seek to encourage this activity in a number of ways. First, it should encourage the development of new sustainability-focused awareness-raising programs (e.g. design competitions for green buildings, or

awards programs for waste reduction initiatives). Secondly, it should assist in increasing awareness of existing sustainability initiatives with positive business impacts (e.g. the Markham Energy Conservation Office, LEED Certification). Finally, efforts should be made to provide this information to business in both a format and location (real or virtual) that is convenient and effective.

At the same time, the business community should be encouraged to develop a series of sustainability programs for itself, including such elements as guides to green product or materials sourcing, green awards for business excellence or innovation, and green audit programs (including energy, water and waste audits). Markham should consider extending the Markham Environmental Sustainability Fund (currently restricted to municipal and community projects) to include projects in the business community.

***Action: Introduce information-sharing, incentive, and awards programs to raise the business community's awareness of and participation in efforts related to sustainability, and describe best practices and successes of relevance to business.***

Role & Timeline: Town in support role, with short-term timeline (ongoing from 2008-2010)

Key Partners: Local businesses and business organizations, local environmental organizations, other municipalities including York Region and Toronto

#### 4.3.3 Establish Sustainability Metrics: Measuring Progress in the Community

Traditionally, a community's economic development success has been measured through metrics such as new tax revenues generated, or new building permits issued. At a national level, economic development has been measured through figures like Gross Domestic Product (GDP). Increasingly, however, there is a recognition that such strictly quantitative measurements are poor indicators of overall community health and well-being, and are no longer sufficient for accurate measurement of a community's economic health. A range of alternative indicators, including the Community Vitality Index and the Genuine Progress Indicator (GPI) have been developed in recent years to better measure the success or failure of community development initiatives. A number of metrics have been developed that combine both traditional and emerging econometric measures to analyse sustainability performance, often based around concepts such as the "ecological footprint" (which seeks to reduce resource consumption and waste) or the "triple bottom line" (which measures corporate performance in social and ecological as well as financial terms).

Markham should study these alternative indicators in order to develop a set of metrics that is best positioned to measure the community's true state of development. Of particular assistance in this regard will be the work of the International Sustainability Indicators Network (ISIN), a US-based network of experts in measuring progress on sustainable development. The David Suzuki Foundation also provides similar metrics for assessing sustainability and environmental performance.

***Action: Establish a set of metrics or measurements for the community's progress on the sustainability front, and prepare annual updates or "report cards" to assess progress on sustainability issues.***

Role & Timeline: Town in lead role, with medium-term timeline (ongoing from 2011-2014)

Key Partners: local business organizations, local environmental groups, the International Sustainability Indicators Network

#### 4.3.4 ICI and Sustainability: Developing an Eco-Business Park in Markham

There is a unique opportunity in Markham to take a leadership role in incorporating sustainability principles in Industrial, Commercial, Institutional (ICI) employment lands. Of particular note are the opportunities presented by the development of the Markham Stouffville Health and Wellness Centre and the Markham East Business Park. In moving forward with these business parks, a development concept modelled on the Toronto Region Conservation Authority's (TRCA) Partners in Project Green" initiative could be applied. An important aspect of the TRCA's initiative is the idea of "Eco-Industrial Networks" which encourage sustainable business practices by integrating company needs in the following ways:

- reducing costs for companies via efficiencies in the use of electricity, natural gas, water and waste
- developing by-product exchanges – one company's waste is another's raw materials
- Improved land use and transportation (increased employment densities and coordinated logistics)
- Promoting eco-economic development (attracting, retaining, and developing business opportunities)

Eco-Business Zones demonstrate that it is possible and advantageous to simultaneously pursue ecological and economic development results.

**Action: Adopt/introduce Toronto Region Conservation Authority (TRCA) Partners in Project Green: Eco-Business Zone initiative**

Role & Timeline: Town in lead role, with medium-term timeline (ongoing from 2011-2014)

Key Partners: TRCA, business community, Markham Stouffville Hospital, local environmental groups, Cornell Gates, development community

“It is now possible for more people than ever to collaborate in real-time with more other people on more different kinds of work from more different corners of the planet and on a more equal footing than at any previous time in the history of the world... we are now connecting all the knowledge centres on the planet into a single global network, which... could usher in an amazing era of prosperity, innovation and collaboration, by companies, communities, and individuals.”

Thomas L. Friedman  
*The World is Flat: A Brief History of the 21<sup>st</sup> Century* (2005)

#### 4.4 Build the Global City

Emerging communications technologies, increasingly efficient transportation networks and the free flow of investment capital in the international arena have ushered in an unprecedented era of business internationalization and globalization. This far-reaching process of change has sometimes resulted in difficult economic transitions and dislocations, but for many communities it has also opened doors to significant new opportunities. Indeed, those communities that can effectively position themselves at the centre of the new global-network economy have the opportunity to create unparalleled options for future growth and prosperity. This emerging global promise, however, is grounded in an obvious challenge: only those communities that rethink their place and role in the larger world – and undertake real change as a result – will be able to make the transition from the old economy to the new in a timely fashion.

In one sense, Markham has long been a player in the international economy. However, the nature and focus of its international linkages and connections must evolve and change if the community is to find itself in the optimal position for economic development in a globalized environment. The following recommendations help Markham build effective tools in the new reality.

#### 4.4.1 Establish Markham's Foreign Policy: Unleashing the City-State

In the late Middle Ages, nations were not the dominant force in international relations. That role instead belonged to the communities, such as City-states like Venice and City-leagues (where distant cities joined together under a common banner) like the Hanseatic League built widespread political structures linked by economic cooperation between communities. While the Peace of Westphalia in 1649 made cities subservient to national governments, the process of globalization has once again unleashed the latent ability of cities to act for themselves and for their own citizens internationally. For the first time in centuries, communities have at their disposal the tools necessary to craft their own foreign policy, and undertake programs of targeted, goal-oriented international cooperation to link their City-region with other City-regions worldwide for mutual economic benefit, development and support.

Pursuing the creation of a local foreign policy is not a simple task, and requires a level of diplomatic skill, political will and patience, as well as cultural and business sophistication not commonly found within municipal structures. However, a few key communities around the world have begun to demonstrate the effectiveness of this approach, reaping significant economic benefits, and Markham appears well-positioned to follow suit.

***Action: Markham should establish a “foreign policy” to direct its economic development and trade efforts in the international arena.***

Role & Timeline: Town in lead role, with short-term timeline (2008-2010)

Key Partners: Department of Foreign Affairs and International Trade, the Ontario Ministry of Economic Development and Trade's International Marketing Centres, partner communities in other countries

#### 4.4.2 Build on Past Success: Growing Markham's Existing International Relationships

Markham must recognize its past successes in the international arena and build upon the effective relationships that it has already created. Existing partnerships with communities in Quebec, China and the United States, as well as an emerging link to India should be nurtured and expanded. Markham also has cultural links with cities such as Nordlingen, Germany. Much as the historical Hanseatic League constituted a collection of cities acting in concert for mutual economic benefit, Markham has the



ability to place itself at the nexus of a series of increasingly deep and substantive relationships that will drive future economic development opportunities.

There are a number of emerging examples of this strategy to consider: the Internet Bay model, linking cities such as Oulu and Lulea in northern Finland and northern Sweden to pursue technology-related investment opportunities, or the Best Cities Alliance, linking Vancouver to other cities in efforts to recruit large international conferences and conventions. Markham should nurture its existing formal and informal relationships with these structures in mind, adding new partners as time, resources and economics permit.

***Action: Actively strengthen and maintain Markham's current international partnerships for economic development.***

Role & Timeline: Town in lead role, with short-term timeline (ongoing from 2008-2010)

Key Partners: existing international partners, local business community

#### 4.4.3 Create the Global Hometown: Turning Diversity into an Economic Strategy

Recent marketing work for the Town of Markham identified “Your Global Hometown” as a possible marketing slogan or tagline for some of the Town’s promotional efforts. The strongly multicultural and multilingual nature of the community are seen in this context as a foundation for creating new or enhanced international linkages and relationships, utilizing the community’s own human resources to open doors to international economic opportunities.

Underlying this global hometown concept is the notion that the community’s existing national, cultural and identity communities routinely maintain links and contacts with other members of those same communities in other countries. In a globalized environment, such links are immensely valuable, and there is an opportunity for Markham to leverage those existing relationships in a manner that can promote and enhance additional investment attraction and trade partnerships for the community’s benefit. Such activity is well-positioned for success, as the benefits of the relationship can apply equally to both ends of the newly-created international partnership.

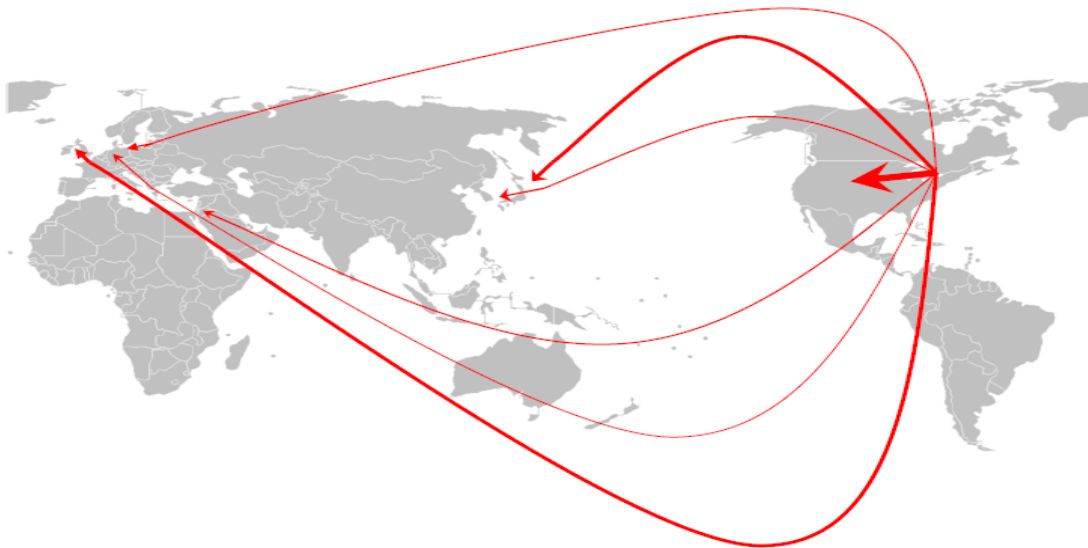
This approach also equally assumes, however, that there is a “disconnect” between the patterns of Markham’s *existing* international business linkages, and its *potential* international linkages. In essence, those countries that represent the best targets under this approach are not necessarily those on which Markham’s business community is presently focused.



Ownership of the community's Top 100 firms by employment suggests that the existing international linkages emphasize relationships with the following countries (in descending order of magnitude): United States, United Kingdom, Japan, Germany, Israel, Netherlands, and South Korea.

An international strategy based on the diversity of Markham's population would emphasize the following countries as prioritized by virtue of their "people connections" to Markham: China, England, India, Scotland, Ireland, Italy, Germany, France, Greece, Jamaica, and Philippines.

### **Markham's Present International Business Links:**



*Source: Town of Markham website (100 Largest Employers)*

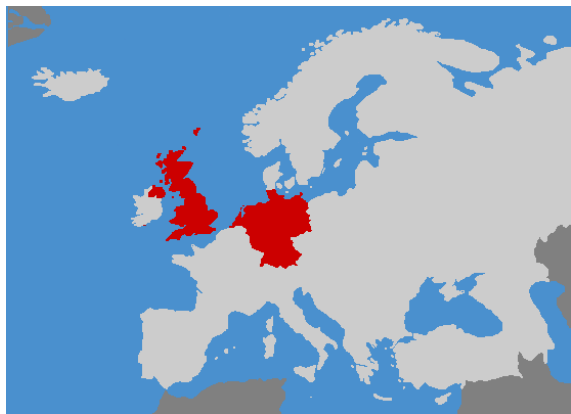
### **Markham's Potential International Links Guided by the Diversity of Markham's Population:**



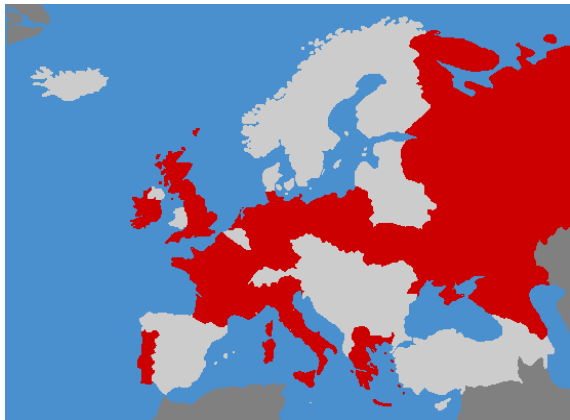
Source: Statscan 2001 Census Data

This approach can also be used in a regional context. Existing European partners include the UK, Germany and the Netherlands, but the multicultural and multilingual character of Markham suggests there also may be opportunities with Ireland, Italy, France, Greece, Poland, Macedonia, Portugal, Ukraine and Russia.

Markham's Present European Business Links



Markham's Potential Hometown European Links



Source: Town of Markham Website (100 Largest Employers) Source: Statscan 2001 Census Data

Of course, in following this approach, it may often be counter-productive to target an entire nation. Using the Hanseatic League model, Markham should consider direct, mutually beneficial partnerships with key communities in a select number of jurisdictions. This model has been successfully employed by groups such as the Best

Cities Alliance (which includes Vancouver), and in the “best practice” partnership of St. Catharines, Ontario and Oulu, Finland.

Similarly, it would not be strategic or practical to target every country identified through this process; some are better-positioned to play a complementary role to Markham’s economy than others, and in some cases, efforts may be better lead by the business community than by economic development staff. Clearly, however, some obvious targets emerge: China, France, India, Italy and Russia seem particularly likely partners in this regard.

***Action: Use the multicultural and multilingual character of Markham’s own population to leverage new international partners and targets for economic development activity.***

Role & Timeline: Town in lead role, with medium-term timeline (ongoing from 2011-2014)

Key Partners: local national and cultural associations, foreign trade offices, Department of Foreign Affairs and International Trade, Ontario International Marketing Centres, key interested individuals in Markham to be identified

#### 4.4.4 Trace the Global Supply Chains: Accessing the Flat World

In his groundbreaking book The World is Flat, Thomas Friedman traces the international supply chain for the Dell laptop computer on which he wrote his book. In doing so, he paints a startling picture of the hidden interior world of global business, and the wealth of international connections that underpin it. Undergoing a similar process for key businesses in Markham provides an opportunity to apply the “Global Hometown” model in a commercial context: local businesses will be able to understand where their own international connections lie, and begin to mobilize those connections for the community’s benefit. Where do their suppliers source components, parts and materials? What are the costs of transportation? What unknown international linkages are local businesses working with every day? Exploring these issues will reveal a wealth of information about the root supplies upon which local business relies.

This new information may lead to a wealth of new development opportunities. Some of the emerging opportunities may fall into traditional economic development areas: sourcing strategies for cost reduction, import substitution opportunities, etc. But more significantly, the knowledge gained will speak to specific and emerging investment

attraction opportunities, while simultaneously enhancing the full understanding of Markham's international ties.

***Action: Assess the supply chain for Markham's existing business community as a method for identifying additional international opportunities.***

Role & Timeline: Town in support role, with medium-term timeline (ongoing from 2011-2014)

Key Partners: local businesses and business organizations

#### 4.4.5 Mobilize Support at Home: Working with Key Regional Partners

In order to maximize the resources available for pursuing globalization strategies and foreign policy efforts, Markham must be cognizant of its own financial and human resources limitations, and effectively mobilize the support of programs, organizations and institutions with complimentary objectives, particularly as they relate to economic development and investment attraction.

This effort should include formal opportunities to present Markham's detailed international objectives, and seek an opportunity for collaborative efforts. However, in some instances, Markham may wish to extend its efforts as far as formal cooperation agreements that spell out the nature and extent of cooperation, as a means for ensuring concerted action over a specific timeline.

***Action: Liaise with federal, provincial and regional partner organizations to build buy-in and support (including resources) for pursuing Markham's foreign policy.***

Role & Timeline: Town in lead role, with medium-term timeline (ongoing from 2011-2014)

Key Partners: Community Investment Support Program (Industry Canada), Greater Toronto Marketing Alliance (GTMA), Ontario Technology Corridor, Toronto Region Research Alliance (TRRA)

#### 4.4.6 Create a Toolkit: Bringing Globalization to the Community

Mobilizing Markham's various ethnic and cultural communities, and working with the business community to understand its supply chain will both require a degree of

sophistication and background information for the community actors participating in the program. Markham Economic Development staff should work with Seneca College, the Innovation Synergy Centre (ISCM) and relevant local stakeholders to develop and

deliver a training program and toolkit that effectively increases the community's capacity to play a significant role in this internationalization process. The toolkit could consist of either physical or virtual (on-line) resources for assisting local stakeholders in their efforts to understand, create and strengthen the community's international linkages. It could also include seminars with experts in the field who are already putting in place the linkages and relationships desired.

"The state of infrastructure defines what economists call the frontier of possibilities in collective production. Like all capital investment, infrastructure investment logically precedes production activity. Capital investment is needed for private production; infrastructure is required for economic exchanges and transactions between economic agents, and hence for the very functioning of society."

Dr. Christian DeBresson and Dr. Stéphanie Barker  
*Looking to the 21<sup>st</sup> Century: Infrastructure Investments for Economic Growth and for the Welfare and Well-being of*

**Action: Create a toolkit for local community members and business leaders to use in strengthening Markham's international links.**

Role & Timeline: Town in lead role, with longer-term timeline (2015-2017)

Key Partners: Seneca College, Innovation Synergy Centre, local businesses and business organizations, local ethnic and cultural associations

## 4.5 Build the Infrastructure City

The ability of any community to attract and absorb new investment is directly linked to the capacity of its infrastructure, and the physical amenities needed to support and maintain 21<sup>st</sup> century enterprise. Infrastructure is a key determining factor at the very earliest stages of the site selection or investment decision-making process. In today's market, only those communities that invest in themselves – that build their physical systems and support structures – will find others prepared to invest in them.

Markham has developed a broad and effective infrastructural base, but as the needs and nature of the business community change, so too must the infrastructure that supports it. The following key strategic actions are necessary steps to ensure continued development success.

#### 4.5.1 Understand Employment Lands: Planning for Tomorrow's Needs Today

Industrial land use patterns – particularly those associated with prestige industrial operations in knowledge and technology based industries – are evolving rapidly. Sprawling “Greenfield” sites where companies stand in isolation are no longer the most desired locations. Instead, well-developed “campus style” facilities that increase opportunities for interaction and collaboration between knowledge workers and knowledge companies are increasingly preferred, and large business and industrial operations are seeking to co-locate with smaller and complimentary amenity-based or service-based operations. Such approaches lend themselves to intensification and urban redevelopment, but also generate parking pressures and high demand for services where light demand may have existed previously.

Markham must be better positioned to understand this changing marketplace, and to ensure that it proactively establishes a reserve of suitable land and development sites for this kind of development in the future. Regional planning efforts have emphasized the importance of this issue through a June, 2007 report on “Protecting Areas of Employment,” suggesting that it fits well with the goals of the Region’s central planning document, Vision 2026. However, high level policy must be increasingly complimented by decisions and action on the ground.

While much of the activity on this front will come from the private sector, it will be important for Markham to play a leadership role as well, by ensuring that local legislation and regulations both permit and encourage appropriate positioning of employment lands. However, it is also possible that the Town itself will need to enter the employment lands arena by directly acquiring and servicing key parcels of land in a manner consistent with the community’s long-term development objectives.

The Town is currently examining whether the current supply of employment lands in Markham is adequate to meet future demand from employers, looking at least 20 years into the future. Consideration should be given to the kinds of land or space required, potential conflicts with other kinds of land use, intensification, and possible measures that may be taken in order to secure additional employment lands if needed. In particular, the Town is lacking a location to serve as a science or R&D park. Consideration should be given to establishing a future science or R&D park in the short or medium term on lands owned by the private sector or to be acquired by the Town or public sector. The Town has taken steps in this direction by commissioning an Employment Lands Study that will examine the above.

***Action: Based on careful study of the employment lands situation, develop a formal employment lands strategy focused on future demand, with the Town in a leadership role.***

Role & Timeline: Town in lead role, with short-term timeline (2008-2010)

Key Partners: Town of Markham Planning Department, Regional Planning Department, local realtors, regional economic development partners

#### 4.5.2 Plan for Rapid Transit: Expanding the Available Labour Force

To maximize the pool of available, diverse and skilled workers in Markham, it is vital that the larger regional labour force be able to conveniently and quickly access the community; many of those workers will want to rely on public transit. While such transportation links presently exist, they are often small in scale, inconvenient in schedule and time-consuming. This undermines the ability of regional workers to participate in the local economy, and erodes Markham's attractiveness as an investment destination.

The Town must work with regional agencies and senior levels of government to introduce and maintain improved levels of mass and rapid transit as a means of ensuring adequate and diverse labour for Markham's present and future employers. Plans are underway at the municipal, regional and provincial levels to improve the transportation system and transit connections in York Region and in Markham. The recent announcements by the Ontario government to implement Move Ontario 2020, a package of 52 rapid transit projects, including the extension of the Yonge Subway line from Finch Station to Highway 7 and the VIVA Markham North-South Link from Markham Centre to Don Mills station, is a step in the right direction. Also, Ontario's gas tax program to fund public transit initiatives will go a long way towards meeting the transit needs of municipalities.

***Action: Engage senior levels of government in direct discussion of expanded mass and rapid transit service for Markham, using key business leaders as advocates and intermediaries.***

Role & Timeline: Town in support role, with short-term timeline (ongoing from 2008-2010)

Key Partners: regional transit service providers, provincial government, federal government, business community, Metrolinx



### 4.5.3 Build a Better Road System: Enhancing Local Traffic Flow

In the era of “Just in Time” delivery of goods and materials, and the private sector’s reliance on the specialized skills of individual knowledge workers, the smooth and safe flow of traffic on major road systems is integral to business success. Gridlock, extended commute times and system under-capacity are all increasingly detrimental to communities seeking new investment. While Markham is geographically well-positioned at the centre of a range of regional transportation corridors, it must increasingly consider how the state of those corridors is impacting its competitiveness, and amend its own transportation planning to facilitate and accommodate the changing needs of the business community. This consideration must be focused and specific: the City’s East-West transportation corridors play a different role and serve a different clientele than its North-South corridors. Failure to address these concerns directly could effectively marginalize Markham as a destination for future development opportunities and investments.

The Town is taking steps to address the impact of the transportation system in the Town’s economic future. As an example, the Town’s Engineering Department is developing a Transportation Strategic Plan which will include discussion papers on travel demand management and goods movement. These papers are intended to address current and future transportation demands in the Town. New roadways and interconnections are being built and/or are being considered in addition to the higher order and more day-long transit operations. Newer and more intensified communities will favour a greater variety of transportation forms. This plan will identify current trends and directions in Markham and identify ways in which new and established residents and businesses can be encouraged to use alternative modes of transportation including public transit and other active transportation modes. This plan will also include a comprehensive Goods Movement Study (GMS) for Markham that is needed to better understand the issues, constraints and opportunities facing the municipality regarding goods movement and to

“People, goods, and services must be connected in ways that are both efficient and sustainable. The gridlock we currently face is a drag on our productivity, a disincentive to come to our big cities, and deeply damaging to the environment. Without major investment in the transportation infrastructure of our biggest cities, Canada will meet none of its basic goals.”

Janice Gross Stein  
Conference Board of Canada  
*Mission Possible: Sustainable Prosperity for Canada (2007)*



rationalize them from a Regional and Provincial perspective. The GMS would determine specific transportation actions that need to be taken to increase better performance for the Town's transportation requirements, economic systems and end users.

The objective of this plan is to:

- Identify the nature, scale and economics of the Town's freight transportation industry
- Identify opportunities and strategies for promoting efficient transportation of goods in the Town of Markham and its surrounding regions
- Identify detailed access needs and strategies to ensure a transportation system that provides for efficient movement of goods
- Identify the necessary system details for the inter-modal components of the Regional corridor and Town-wide transportation requirements, programs and congestion management plans
- Prepare Town-wide long range inter-modal transportation plans for goods movement
- Provide an up-to-date assessment of the strengths and weaknesses of the freight transportation and logistics systems
- Develop a strategic vision for improving these systems as a way to retain and attract "new economy" businesses to the Town of Markham
- Recommend a prioritized implementation plan for addressing the greatest goods movement and logistics needs in the most cost-effective manner

***Action: Update the Town's Transportation Strategy to better reflect the needs and concerns of 21<sup>st</sup> Century employers, workers and investors, with the added benefit of creating a workable system that enhances the driving experience of all Markham residents.***

Role & Timeline: Town in support role, with medium-term timeline (ongoing from 2011-2014)

Key Partners: business community, provincial government, 407 ETR, York Region

#### 4.5.4 Strengthen Markham's Electrical Infrastructure: Powering the Future

"People, goods, and services must be connected in ways that are both efficient and sustainable. The gridlock we currently face is a drag on our productivity, a disincentive to come to our big cities, and deeply damaging to the environment. Without major investment in the transportation infrastructure of our biggest cities, Canada will meet none of its basic goals."

Janice Gross Stein  
Conference Board of Canada  
*Mission Possible: Sustainable Prosperity for Canada (2007)*

Electrical power infrastructure is an often-overlooked component of economic development infrastructure. Information technologies, scientific and technical research and a range of other emerging industry sectors require significant amounts of steady and reliable power, and the community that is unable to provide sustained and uninterrupted service of sufficient quality is not well-positioned for success.

Markham has a mixed reputation on this front, and needs to invest both time and money in improving its power infrastructure and reliability. While Powerstream is making some significant steps in this direction, and Powerstream's mission statement explicitly articulates its role in economic development, more must be done to ensure that the business community's present and future concerns are adequately addressed. The community must remediate much of its existing system, prepare for upgraded standards in new development, and pay special attention to the power-related aspects of any new commercial and industrial development, particularly those in future business parks and campuses.

***Action: Develop an electrical power plan that takes into account the probable future needs of the community, and establishes standards and regulations that will support and enhance the roll-out of adequate electrical infrastructure.***

Role & Timeline: Town in support role, with medium-term timeline (ongoing from 2011-2014)

Key Partners: Ontario Power Authority, Powerstream, provincial utilities, local development community, local business

#### 4.5.5 Create Airport Connections: Linking Markham to the World

In the increasingly mobile and global business environment, rapid access to airports and international travel is a key site selection factor. In addition to being home to Buttonville Airport, one of the top ten busiest airports in Canada, Markham is strategically located between Lester B. Pearson International Airport in Mississauga and the proposed airport facilities in Pickering. Markham should work to ensure that businesses and residents have fast and easy access via both highway and mass transit systems to both of these locations. This work should include attempts to improve connections to Pearson, while proactively positioning Markham as a "gateway" to the Pickering airport.

***Action: Enhance transportation connections to the Pearson and Pickering airports, and promote Markham as a “gateway” for businesses seeking easy access to international connections.***

Role & Timeline: Town in lead role, with long-term timeline (ongoing from 2015-2017)

Key Partners: regional, provincial and federal government agencies, airport authorities

## 4.6 Build the Branded City

Branding plays a crucial role in defining perceptions and creating opportunities for further dialogue. Traditional economic development branding has often been focused on the creation of taglines or slogans (e.g. “Canada’s High Tech Capital”) employed in the hopes of creating an elusive positive lasting impression in the minds of potential investors. In today’s economy, however, positive impressions alone do not often drive investment decisions, and taglines may seem quaint and antiquated.

“Brands were originally developed as labels of ownership. However today it is what they do for people that matters much more, how they reflect and engage them, how they define their aspiration and enable them to do more. Powerful brands can drive success in competitive and financial markets, and indeed become the organisation’s most valuable assets.”

Peter Fisk  
CEO, Chartered Institute of Marketing  
*Marketing Genius: Finding the Big Idea that Defines You* (2006)

Today, the target of economic development marketing activities is increasingly “talent” or “knowledge” or “innovation” – vaguely-defined targets whose mobility, fickleness and diversity make them much harder to reach with traditional marketing approaches

than traditional corporate targets. Marketing targets are no longer monolithic institutions where one size fits all – rather, an array of messages are required to reach out to an array of targets, highly segmented and carefully defined.

The focus of Markham’s future marketing efforts is thus not shaped by a singular slogan or approach or campaign; it must instead be an ongoing campaign that evolves with the community, and reflects the interests of each new target as it is identified. As a result, today’s most successful economic development brands are inspirational in nature... they understand what people seek to be, and attempt to convey a message that – within a specific jurisdiction – those dreams are achievable. In part, this is lifestyle marketing. But in part, it represents the rising power of the individual worker in the knowledge economy, and the growing sense that where the workers choose to go, the companies will soon follow behind.

### 4.6.1 The City of Markham – The Time is Now

Ever since the launch of the “Canada’s High-Tech Capital” campaign in 1997, Markham has been perceived as a city by its targeted investors, by site selectors, and certainly by its competition. When the municipality first launched its website in 1999 as

[www.town.markham.on.ca](http://www.town.markham.on.ca), it was quickly determined that there was a need to eliminate reference to “town” and to simplify the url to conform to the prevailing perception by clients (and many residents) that Markham acts and competes like a “city”. Therefore, Markham’s web address morphed into [www.city.markham.on.ca](http://www.city.markham.on.ca) and ultimately has become [www.markham.ca](http://www.markham.ca). In the national and international markets where Markham competes for investment and recognition, the prevailing reference to Markham is as “the City of Markham”. Among government trade and investment officials (domestically and overseas), and even in the GTA, it is increasingly rare to hear Markham referred to as a town. This is not surprising given that Markham’s population has exceeded 100,000 for over 20 years (the commonly regarded benchmark for city status), and that Markham has consistently been distinguished for winning awards in competitions with major cities (Communities in Bloom, Economic Development Marketing Awards, Design and Planning Awards, etc.). In fact, when Markham economic development officials explain that Markham is a town, there is often a palpable sense of disappointment by the person who made the error --- as though they regard town status as inferior and diminished --- necessitating Markham officials to quip that “Markham is a City that calls itself a Town”.

Markham has the size, distinctions, sophistication, and infrastructure that make it logical and credible to be regarded and identified as a city. A growing segment of Markham’s population appears to agree with this perception. In the latest Environics poll of residents, 24% regard themselves as “Big City Promoters” favouring more urban centre amenities and atmosphere- an increase from 19% in 2001. At the same time, the number of residents who consider themselves “Small Town Boosters” has decreased from 41% to 30%. Markham’s status as a city in all but name is an obstacle for economic development purposes. Despite being the largest municipality in the Region of York (expected to reach 1.0 million in 2008), the categorization of Markham as a town has no economic development merit, but does often cause Markham to be classified in provincial and federal lists with towns and not cities. In an electronic age in which business and research is conducted in the blink of an eye, the absence of Markham in a list of cities is potentially more damaging than could have been imagined just a few years ago. As Markham enters the second decade of the 21<sup>st</sup> Century, it is recommended that its status be re-classified as a city.

***Action: Identify Markham as a city (the City of Markham), and engage in an aggressive marketing campaign to brand and build the city.***

Role & Timeline: Town in lead role, with short-term timeline (ongoing from 2008-2010).

Key Partners: local business leaders and entrepreneurs, active community members.

#### 4.6.2 Sell to the Talent: Understanding who the Brand is For

If one of the targets of economic development marketing efforts is the talent that attracts firms, then marketing efforts must shift accordingly. Richard Florida has written extensively on the presence of the “creative class” as a key indicator of future economic development success, suggesting that there are opportunities to be pursued by identifying and reaching out to specific creative communities, interest groups and even professions. With this in mind, brands become a tool for addressing the aspirations and goals of very small sub-sectors of the broader community. In this regard, a particular brand may have limited appeal in the broad context, but powerful appeal to a key target demographic. Markham should seek to identify a small number of key talent targets, and develop brands appropriate to those targets.

***Action: Identify a small number of key talent targets, and engage in intensive branding and marketing for those targets.***

Role & Timeline: Town in lead role, with short-term timeline (ongoing from 2008-2010)

Key Partners: local “creative class” workers, local business organizations, marketing firms

#### 4.6.3 Identify Brand Champions: Partnering with the Private Sector

Markham is fortunate to be home to a significant number of companies with their own global brand recognition. As the community identifies its targets and selects appropriate branding and marketing activities to pursue, consideration should be given to the synergistic opportunities presented by partnering with widely recognized global players. A message targeting interactive media workers (for example) may be greatly strengthened by input from or the presence of IBM, AMD or Motorola in marketing materials. Honda resonates with key youth markets, while Johnson & Johnson or IBM may offer crossover opportunities to researchers in the medical devices, ICT or life sciences sectors. Where possible, Markham should take full advantage of the presence of these corporations, and seek to establish marketing partnerships that enhance the reach and effectiveness of its branding and marketing campaigns.

**Action: Establish strategic marketing partnerships with Markham-based companies whose own brands will resonate with particular talent targets.**

Role & Timeline: Town in lead role, with short-term timeline (ongoing from 2008-2010)

Key Partners: multinational businesses with a significant local presence, TRRA

#### 4.6.4 Establish an Enhanced Ambassador Program: Building on Community Credibility

Increasingly, the goal of branding and marketing exercises is “authenticity,” and in the highly segmented, compartmentalized world of economic development branding, the most credible voices are the voices of individual business and community leaders who have nothing personal to gain from economic development success. As voices with perceived neutrality and honesty, these individual community “ambassadors” become the most believable communicators in a crowded marketplace. A number of communities have now managed highly successful community ambassador programs for years, through which major economic development initiatives are led and championed by strong community voices.

Under these initiatives, community and business leaders are provided with specific tools and tactics to employ during the normal course of their business operations, so that investment opportunities and partners, financial and human resources and international trade opportunities that may be brought to the community are quickly and effectively identified. Once identified, professional economic development staff are able to provide specialized follow-up, but the most effective ambassador programs are able to mobilize literally hundreds of well-placed volunteers to help further the local economic development agenda. Given Markham’s cultural, linguistic and international diversity, an internationally-focused ambassador program could be particularly effective.

Markham should examine successful efforts in this field, and update them for use in the knowledge-based economy: an expert-to-expert, professional-to-professional, practitioner-to-practitioner communications focus will stand out in the current marketplace, and deliver substantive marketing results in the areas that matter most.

**Action: Establish an enhanced Markham Ambassadors program in which community members play leading roles in economic development marketing initiatives (the internationalization training described in action 2.4.6 above could be a component of this action).**



Role & Timeline: Town in lead role, with medium-term timeline (ongoing from 2011-2014)

Key Partners: local business leaders and entrepreneurs, active community members

## 4.7 Build the Talented City

It has become a truism of the knowledge economy that a company's most valuable assets walk out the front door every night to go home. For those seeking to succeed in economic development in the northern industrialized world, the attraction and retention of genuine talent has become a top priority. Without talent, economic development opportunities are limited, but with talent come intellectual property, innovation, emerging technologies, and a range of other assets and attributes attractive to employers and investors.

As a result, where communities once competed for bricks and mortar investment – for factories and buildings, assembly lines and distribution centres – leading edge

communities are now engaged in a fierce global competition for talent. This is a new playing field, where few tactics have a long enough track record to establish a clear pattern of success or failure. Like all fields of competition, however, the talent arena is not a place for the timid or the hesitant: where opportunity exists, it must be seized immediately or be lost. The winners in this competition have much to gain: Silicon Valley, Mumbai, Dublin and Helsinki have all become giants, seemingly overnight. For others, their chance for wealth in economic development is slipping away, one transatlantic flight at a time.

Winning the talent competition requires two concrete actions. First, a community must recognize that it is in a contest, and choose to act accordingly. Secondly, it must enact a series of strategies designed to bring about success.

“...if you want to be an entrepreneurial community that grows and develops, that creates worth, that generates higher living standards and good jobs, you have to understand that that doesn't come from big factories or big assembly lines or a great stock of raw materials. There's only really one asset you have. That's people. People are the core of economic competitiveness... the places that harness the creativity of their people, the places that mobilize the creativity of their people, the places that develop creative people and attract creative people, those places will win. And, in that sense, place – community, city, town – is critical.”

Dr. Richard Florida  
CEO, Creative Class Group  
Striking the Right Notes on Entrepreneurship  
speech, St. Louis (2005)





#### 4.7.1 Start Early: Building Talent at the Grassroots

In his economic development book Eat the Rich, P.J. O'Rourke noted that at the time of independence, Tanzania had less than 20 university graduates in the entire country. This meant that there were no formally trained teachers, and the inability to train the next generation of Tanzanians became one of the major stumbling blocks to developing the country. Markham, of course, compares well to Tanzania, but Markham can also learn the lesson O'Rourke was attempting to teach: a community's future is built in large part on the educational opportunities it can afford its children. As Markham seeks to pursue its economic development goals and win the talent competition, it would be well-served to start at home. The community's emerging generations, now in the community's schools, will form the backbone of its future labour force and talent pool. It will be far more effective for the community to grow new talent – scientists, artists, researchers, engineers - from within than to continually seek to recruit them from outside. To this end, the starting point for all efforts to expand the talent pool should be the community's own children.

Increased opportunities for introducing students to knowledge-based sectors and opportunities should be emphasized, as should entrepreneurial skills and the language skills that will be central to international business relations in the future. Visible role models from among the distinct national and cultural communities, as well as women, will be key to inspiring young minds and opening young eyes to their potential. While sciences, information technology and engineering should be strongly emphasized, such programs should not neglect future arts, cultural and creative community leaders. Youth should be actively engaged with employers in business, government and the arts, so that they understand the skills that will be necessary to help them succeed in the workplace.

At the same time, existing resources for youth – teachers, guidance counsellors, mentors – must be equipped with knowledge and perspectives on the emerging local economy in a way that will allow them to accurately advise and assist Markham's youth in maximizing their future potential.

***Action: Develop a wide-reaching and proactive K-12 outreach program to help introduce local children and youth to tomorrow's economic potential today, with a particular focus on helping them to better understand and prepare for emerging economic trends and opportunities.***

Role & Timeline: Town in support role, with short-term timeline (ongoing from 2008-2010)

Key Partners: local businesses, local school boards, local educators, youth organizations, Small Business Enterprise Centre, Innovation Synergy Centre, Arts organizations

**Action: Establish Human Resource Roundtables to connect industry leaders with educational institutions from K-12 through to PhD levels for the purpose of identifying and addressing skills gaps in key industries.**

Role & Timeline: Town in support role, with short-term timeline (ongoing from 2008-2010)

Key Partners: local businesses, local school boards, local educators, youth organizations, Small Business Enterprise Centre, Innovation Synergy Centre

#### 4.7.2 Partner with Post-Secondary Educations: Using Centres of Excellence

The presence of Seneca College and the important linkages to York University are among the community's greatest talent resources. Markham's economic development strategy must continually seek to create partnerships to support both life-long learning (thereby upgrading the community's talent pool) and to utilize the community's academic and intellectual strengths to attract bright minds from other communities. In this sense, the post-secondary institutions are both a training centre for existing talent, and an attractor of new talent. Explicitly recognizing and encouraging these two roles offers opportunities for more directed and goal-oriented cooperation.

The National Centre for Medical Devices (NCMDD) consortium has shown leadership in this regard by planning to provide, as a key part of its business plan, programs that foster a widespread interest in converging medical technologies, devices and science. They also seek to develop entrepreneurship and skills in the business realm from kindergarten through to the PhD level.

**Action: Work with local post-secondary institutions to identify specific opportunities for building and growing the talent pool.**

Role & Timeline: Town in lead role, with short-term timeline (ongoing from 2008-2010)

Key Partners: York University, Seneca College

### 4.7.3 Know Your Target: Chasing the Creative Class

The rise of the knowledge economy and the emergence of a creative class of knowledge workers signal an end to some traditional economic development approaches. One of the many consequences of this shift is a dispersion of economic development targets: where once it sufficed to attract a single company with 200 employees, today it may be necessary to attract the 200 employees in order to lure a single company. While the role of corporations in driving investment remains a strong, central component of economic growth, understanding the nuances of this emerging trend is a significant challenge and is key for any community seeking to play a leadership role in the knowledge economy.

To this end, Markham should undertake a fuller study of its relationship with the knowledge workforce, as a prelude to launching a talent attraction program. For example, a detailed study of Richard Florida's "Talent Model" will assist in understanding the role of municipal and regional social policies and their impact on the appeal of the community from a talent perspective. But with major research on the topic falling under labels like "The Flight of the Creative Class" and "The Young and Restless in the Knowledge Economy," the clear implication is that communities must understand the nature of their targets if they hope to hang onto them in a transient and chaotic economic environment.

***Action: Undertake a detailed study of the knowledge workforce in Markham, with an eye to understanding the workings of the community's Talent Model, and strategic options for manipulating that model for the community's benefit.***

Role & Timeline: Town in lead role, with short-term timeline (2008-2010)

Key Partners: educational institutions, local business organizations, the ISCM, MSBEC

"Access to talented and creative people is to modern business what access to coal and iron ore was to steelmaking. It determines where companies will choose to locate and grow, and this in turn changes the ways cities must compete."

Richard Florida  
University of Toronto  
*The Rise of the Creative Class* (2002)

### 4.7.4 Benefiting from the Skills of New Canadians

New Canadians living in Markham bring to the community a wealth of education and skills that are often underutilized and undervalued. If Markham is to remain competitive in a knowledge economy the Town must work with the business community, employment agencies, educational and training institutions, the York Region District School Board, and others to evaluate and substantiate foreign credentials and equivalencies to facilitate entry into the labour market for new immigrants. This would remove barriers for immigrants and help businesses combat the problem of deepening skills shortages by increasing the supply of available skilled and talented labour.

***Action: Evaluate and substantiate foreign credentials and equivalencies***

Role & Timeline: Town in support role, with medium-term timeline (2008-2014)

Key Partners: educational institutions, local business organizations, Toronto Region Immigrant Employment Council (TRIEC), York Region District School, Region of York, the ISCM, MSBEC

#### 4.7.5 Improve Residential Opportunities: Finding a Place to Live

The presence of affordable and appropriate housing is also a key element in winning the talent competition. If real estate prices are too high, or rental options are too few, or the configuration of residential options is such that there is no relevant available options, talent will not locate to a community. Simply put, if a talented young professional cannot find adequate, appropriate and affordable housing, he or she will not remain in the community over the long-term, eroding the community's competitiveness.

Rapidly escalating real estate costs in Markham, though a sign of success, are a cause for concern in this regard.

***Action: Through key policy instruments such as the Growth Management Strategy, Markham must continue to improve the range of housing stock in order to facilitate a more diverse cross-section of needs, and work with the local real estate community to catalogue and promote what options are available.***

Role & Timeline: Town in lead role, with medium-term timeline (ongoing from 2011-2014)

Key Partners: Planning department, real estate community; support for low cost housing initiatives like MICAH (Markham Interchurch Committee for Affordable Housing)

4.7.6 Celebrate Markham’s Successes: Recognizing Markham’s Firsts

With a long history of social, technological and commercial innovation, Markham has seen its fair share of successes, achievements and “firsts.” The Town should develop a celebratory promotional campaign that highlights this history, positioning the Town as both a centre of achievement and a place where individual contributions are recognized and remembered. This will create an impression of a community that is both successful, and supportive of its human capital.

The “firsts” identified through the programs should be selected to emphasize particular strengths, resources, assets or characteristics that highlight Markham’s innovative and leading-edge nature. Some examples include patents, innovative products, discoveries, prize winners, explorers, first arrivals, etc. This information should be distributed widely through non-traditional means – such as notepads at conferences, “Did You Know?” cards in local hotels, and a range of other low-cost but highly visible avenues.

**Action: Develop a “Markham’s First” campaign that identifies and promotes success stories in local innovation and achievement.**

“The flow of economically useful ideas in our societies – those very ideas that tell us how to reconfigure the rock, soil, wood, and air around us into the miraculous things that serve our needs – is a consequence not just of economic but also of social factors...”

Tad Homer-Dixon  
University of Toronto  
The Ingenuity Gap (2000)

Role & Timeline: Town in support role, with medium-term timeline (ongoing from 2011-2014)

Key Partners: local cultural organizations, local business organizations, local academic institutions, local history societies

4.7.7 Value Social Life: Entertaining the Talent

Much of the talent in the new economy – based as it is on new technology and new training – is young; certainly the portion that is most mobile and most open to recruitment is young. As a result, strategies for attracting talent must place a strong emphasis on providing venues for entertainment and social interaction that will appeal to youth. Strong arts or music scenes, a vibrant nightlife, recreational opportunities and the potential presence of romantic partners are all strong attractors for this

demographic. As a result, successful economic development initiatives will seek ways to disseminate information about a community's social resources, and encourage the responsible development of a social and entertainment infrastructure. Markham Centre, Markham Village/Pacific Mall, Unionville Main Street, and Markham Village are all examples of areas that should be promoted. Development and promotion of Markham's cultural assets could also achieve multiple objectives and attract visitors to the Town if channelled through York Region's tourism initiatives.

***Action: Develop a plan for social infrastructure development, and a series of marketing tools for disseminating information about Markham's social activities.***

Role & Timeline: Town in support role, with long-term timeline (ongoing from 2015-2017)

Key Partners: Planning department, local businesses, arts and cultural organizations

SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
1. Build the Creative City	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• High technology employers in Markham to regard Markham as a “Creative City”</li> </ul>
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• Sector Growth: employment in targeted industries, number of new businesses registered in the creative industries</li> <li>• Customer/targeted audience perception</li> <li>• Estimated number of creative events/branded events hosted</li> </ul> <p><u>Initiatives Underway</u></p> <ul style="list-style-type: none"> <li>• CONCERT (The Consortium on New Media, Culture &amp; Entertainment R&amp;D in the Toronto Region) chaired by York University, this consortium includes AMD, and other Markham high tech companies such as Motorola and Apple Canada. CONCERT is intended to drive innovation within the creative industries by sparking collaborative relationships and infrastructures in the GTA that strengthen and promote innovation in the screen-based industries</li> <li>• Varley Gallery local and external events</li> <li>• Creativity Day (2 years)</li> </ul>



SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Markham's Small Business and Entrepreneurship office partnered with the Ministry of Small Business and Entrepreneurship to deliver a small business seminar to those involved in cultural industries</li> <li>• Active partnerships with Arts Council and York University</li> </ul> <p><u>Actions to be Taken</u></p> <ul style="list-style-type: none"> <li>• Complete an asset mapping exercise to describe the scope of the arts and cultural industries sector</li> <li>• Develop an entrepreneurship training and commercialization program for cultural and artistic enterprises</li> <li>• Establish a program for linking the existing arts and cultural industries sector to the ICT and interactive media industries</li> </ul>
<b>2. Build the Networked City</b>	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• Employers in the knowledge-based industries to regard Markham as a "Networked City"</li> </ul>
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• Ranking on Intelligent Community Forum (ICF) of cities</li> <li>• # of blogs about Markham</li> </ul>

SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• custom/affinity networks or intranets for targeted client groups</li> </ul> <p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>• Regional portal</li> <li>• Toronto Region Research Alliance (TRRA) interactive/Internet enabled map</li> </ul> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Establish a Technology Working Group to guide the Town</li> <li>• Unleash innovation by channelling information about emerging economic opportunities through collaborative IT channels</li> <li>• Utilize social networking tools to enhance economic development promotional efforts</li> <li>• Tie together our affiliated organizations (Yorkbiotech, ISCM, NCMDD, etc.)</li> <li>• Undertake a wifi development program to maximize wireless access and coverage</li> <li>• Become involved in the Intelligent Community Forum (ICF)</li> </ul>

SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
3. Build the Sustainable City	<u>Performance Objective by 2018</u> <ul style="list-style-type: none"> <li>Markham to be ranked internationally as a “Sustainable City”</li> </ul>
	<u>Key Performance Indicators:</u> <ul style="list-style-type: none"> <li>Raise awareness of and participation by the business community in green business practices</li> <li>Green Business awards program</li> <li>United Nations and/or Non-governmental organization award</li> <li>Reduced impact by the business community on air and water quality</li> </ul> <u>Initiatives Underway:</u> <ul style="list-style-type: none"> <li>The Town is undertaking a comprehensive community sustainability plan called “Green Print” which will build on the strategic plan, Official Plan, Environmental Management Plan and other initiatives, policies, guidelines and processes underway, to become a comprehensive, integrated framework that guides the Town towards a sustainable future. The Green Print will include: <ul style="list-style-type: none"> <li>policies for protection of air, land, water, vegetation/habitat, wildlife and all living species</li> <li>a comprehensive multi-year, multi-lingual education and communication strategy for staff and the public that involves the community and creates awareness of the Green Print</li> <li>working with all levels of government to endorse and support the sustainability program</li> <li>a comprehensive Climate Action Plan</li> </ul> </li> <li>Adopt Green Building Standards and Green Community Standards</li> <li>Develop and implement a community wide zero waste strategy</li> <li>Prepare an enhanced Town Beautification Policy</li> </ul>

SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Develop ideas and strategies that encourage maintaining a healthier community including local food production, bike paths and trails and security</li> <li>• Establish the Town's ecological footprint as a baseline and a model for residents to reduce their ecological footprints</li> <li>• Develop a funding strategy and modeling tool to support these initiatives</li> <li>• Markham Manufacturers' Sustainability Program – a program that will provide one-stop pollution prevention and energy efficiency technical assistance for small to medium sized manufacturers in the Town of Markham</li> <li>• MBT Environment Award/Achievement award</li> <li>• York Region Economic Development strategy focused on Environment</li> <li>• Markham Stouffville Hospital/Cornell Wellness Campaign for a healthy city</li> </ul> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Participate in the Toronto City Summit Alliance's Green GTA Initiative</li> <li>• Create a business-focused agenda for sustainable development</li> <li>• Introduce information-sharing programs to raise the business community's participation in efforts related to sustainability</li> <li>• Establish a set of metrics or measurements for the community's progress on sustainability</li> <li>• Adopt/introduce Toronto Region Conservation Authority (TRCA) Partners in Project Green: Eco-Business Zone initiative</li> </ul>

SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
4. Build the Global City	<u>Performance Objective by 2018</u> <ul style="list-style-type: none"> <li>New foreign direct investment in Markham to generate 100 jobs annually</li> </ul>
	<u>Key Performance Indicators:</u> <ul style="list-style-type: none"> <li>New business development in targeted markets/new investment from target market</li> <li>Leverage growth/expansion of local offices/branches of internationally based corporations</li> </ul> <u>Initiatives Underway:</u> <ul style="list-style-type: none"> <li>Markham's Economic Development Department manages a program which focuses on building formal city-to-city relationships for the purpose of facilitating investment and trade and cultural exchange. Our formal relationships include: Cary, North Carolina; Wuhan, China; Zhongguancun Science Park, Beijing; and Laval, Quebec</li> <li>Relationship building with market-based chambers of commerce and business associations and international Consulates (eg. the US Consulate, US Commercial Service, Chinese Consulate, UK Trade and Investment Canada), Richmond Hill Markham Chinese Business Association, the Indian Institute of Technology Alumni Canada, to raise awareness of Markham's strengths and to foster investment attraction</li> <li>Receiving inbound delegations from city partners and/or business focused missions</li> <li>Outreach to Consular officials</li> </ul>

SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• ISCM's focused international market business to business networking events</li> </ul> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Establish a “foreign policy” to direct economic development and trade efforts in the international arena</li> <li>• Strengthen current international partnerships for economic development</li> <li>• Use the multicultural and multilingual character of Markham’s own population to leverage new international partners and targets for economic development activity</li> <li>• Assess the supply chain for Markham's existing business community</li> <li>• Liaise with partner organizations to build support for Markham’s foreign policy</li> <li>• Create a toolkit for local leaders to use in strengthening international links</li> </ul>
5. Build the Infrastructure City	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• High technology industry site locators to rank Markham as one of “Top 3 Cities” for business location in Canada</li> </ul>
	<p><u>Key Performance Indicators:</u></p>

SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Increased transit ridership</li> <li>• Decreased commuting times</li> <li>• # of hectares of science park or prestige business park</li> <li>• # of electrical events (outages, brown-outs)</li> <li>• available capacity for water and sewer</li> <li>• length of time to process a development application</li> <li>• # of kilometres of rapid transit infrastructure</li> </ul> <p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>• The Town is undertaking an Employment Lands Strategy to ensure Markham remains competitive by providing an adequate and appropriately placed supply of employment lands to meet the needs of current and future employers in all sectors of the economy</li> <li>• Make it Happen Initiative- A review of the development approval processes, related conditions and agreements and building permits was undertaken and recommendations to streamline the planning process are underway</li> <li>• Expansion of water and sewer capacity to be in place by 2011</li> <li>• Working in partnership with York Region, the City of Toronto and other levels of government and government agencies including Metrolinx, GO Transit and other stakeholders to develop a vision, implementation strategy, funding model and service that establishes an integrated Greater Toronto</li> </ul>

SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<p>Area transit system and road network. This should address road network improvements including the 400 series highways and local and regional roads.</p> <ul style="list-style-type: none"> <li>• Developing rapid transit options including, but not limited to, extension of the Yonge subway to Highway 7; VIVA and/or GO “centre to centre” service; dedicated public transit corridors within Markham; improved GO service levels on the Stouffville, Richmond Hill and Havlock lines and; service along the 407 supported by sufficient local transit service.</li> <li>• Creating transit-oriented policies for development, land use, travel demand management, live/work balance, higher density, infrastructure, education, HOV lanes, parking, cycling, safe streets and environmentally friendly transportation nodes and corridors.</li> <li>• Travel Demand Management in collaboration with the business community and Markham Board of Trade</li> <li>• Town’s Engineering Department is developing a Transportation Strategic Plan to address current and future transportation demands of residents and businesses</li> </ul> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Develop an employment lands strategy focused on future demand</li> <li>• Pursue commitment to funding of expanded mass and rapid transit service</li> <li>• Adopt strategy for establishment of science park</li> <li>• Update the Town’s Transportation Strategy to better reflect the needs and concerns of 21<sup>st</sup> Century employers, workers and investors</li> </ul>



SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Develop an electrical power plan that addresses the future and changing needs of the community</li> <li>• Enhance transportation connections to the Pearson and the future Pickering airports, and promoting Markham as a “gateway” for businesses seeking easy access to international connections</li> </ul>
<b>6. Build the Branded City</b>	<u>Performance Objective by 2018</u> <ul style="list-style-type: none"> <li>• Markham to be regarded as one of North America’s “Top 10 Cities for Business”</li> </ul>
	<u>Key Performance Indicators:</u> <ul style="list-style-type: none"> <li>• Increased awareness of Markham’s competitive strengths by the local business community in order to deliver a consistent and compelling promotional message about Markham’s attributes internationally</li> <li>• Increased level of awareness and credibility of Markham brand</li> </ul> <u>Initiatives Underway:</u> <ul style="list-style-type: none"> <li>• Markham recently launched its new marketing DVD during a Mayor-led business mission to China. The DVD was a collaborative effort featuring senior business people from prominent Markham-based corporations who shared their experiences on doing business in Markham</li> <li>• Event-specific and sponsorship ads</li> </ul>

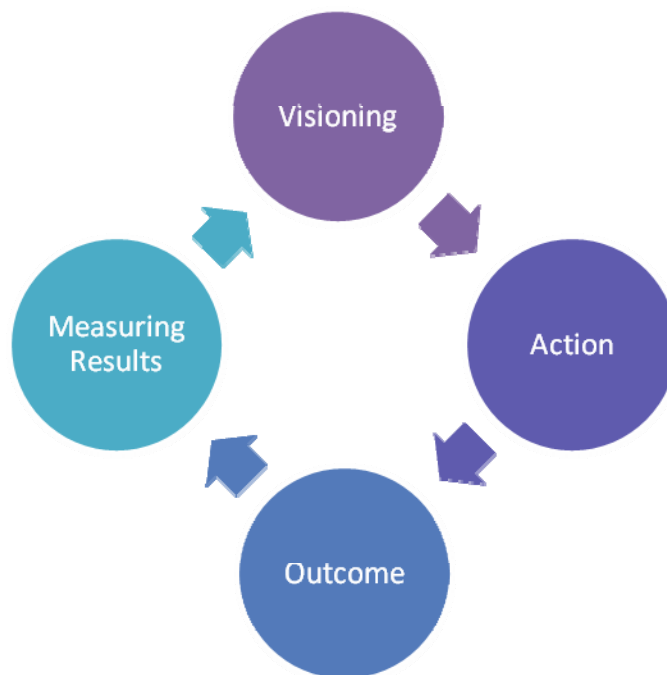
SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<ul style="list-style-type: none"> <li>• Branding events through sponsorship</li> <li>• Environics survey of residents</li> </ul> <p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Identify Markham as a city (the City of Markham), and engage in an aggressive marketing campaign to brand and build the city.</li> <li>• Identify key talent targets, and engage in intensive marketing to those targets</li> <li>• Establish strategic marketing partnerships with Markham-based companies</li> <li>• Establish an enhanced Markham Ambassadors program in which qualified, identified community members play leading roles in economic development marketing initiatives</li> </ul>
<b>7. Build the Talented City</b>	<p><u>Performance Objective by 2018</u></p> <ul style="list-style-type: none"> <li>• Employers in the knowledge-based industries to regard Markham's labour force as one of "Top 3 Reasons" to choose to locate in Markham</li> </ul>

SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<p><u>Key Performance Indicators:</u></p> <ul style="list-style-type: none"> <li>• Educational attainment, enrolment in mentorship, internship programs</li> <li>• # and percentage of post-secondary education</li> <li>• Availability of college and university programs within the Town</li> <li>• # of patents held by local companies</li> <li>• # of international students</li> <li>• Employment rates among youth, immigrants</li> <li>• Provincial rating of Markham schools</li> </ul> <p><u>Initiatives Underway:</u></p> <ul style="list-style-type: none"> <li>• Mayor's Youth Task Force- 2008 Annual Youth Conference focused on Science in Innovation</li> <li>• A number of affordable housing policies/reviews are underway to diversify the range of housing stock offered</li> <li>• Mentoring and integrating new immigrants into labour pool in partnership with such agencies as TRIEC</li> <li>• Sponsorship of high school science competitions (robotics competition)</li> </ul>

SUMMARY OF ENABLING ENVIRONMENT OBJECTIVES, INDICATORS, INITIATIVES AND ACTIONS	
ENABLING ENVIRONMENT DIRECTIONS	PERFORMANCE AND NEXT STEPS
	<p><u>Actions to be Taken:</u></p> <ul style="list-style-type: none"> <li>• Develop a wide-reaching and proactive K-12 outreach program to help local children and youth better understand and prepare for emerging economic trends and opportunities</li> <li>• Work with local post-secondary institutions to identify specific opportunities for building and growing the talent pool (including seminars, career days, a course in entrepreneurship, videos of successful new entrepreneurs)</li> <li>• Undertake a detailed study of the knowledge workforce in Markham, with an eye to understanding the workings of the community's Talent Model and to evaluate and substantiate foreign credentials and equivalencies</li> <li>• Develop a strategy for improving the range of housing stock in order to address a more diverse cross-section of needs</li> <li>• Develop a "Markham's First" campaign that identifies and promotes success stories in local innovation and achievement</li> <li>• Develop a plan for social infrastructure development, and a series of marketing tools for disseminating information about Markham's social activities</li> <li>• Establish an HR roundtable</li> </ul>

## 5 Benchmarking and Performance Measurement

The process of evaluating progress and success in economic development delivery should be continuous. Each success generates more opportunities, each failure a series of lessons for improved future performance. Behind any discussion of legitimate performance measurements and benchmarking activities must lie the following approach to integrating evaluation with action:



Nevertheless, measuring the impact of economic development programs is a contentious and problematic area of ongoing debate and research. Markham staff should continue to monitor emerging discussions and trends in this regard, but the following tools may be of some value in evaluating progress in the implementation and effectiveness of this strategy.

“Action should culminate  
in wisdom.”

*Baghavad Gita* (c. 400  
BCE)

The most commonly used traditional measure of the success of an Economic Development Office (EDO) relates to the numbers of new jobs and tax revenues created. Sometimes it is the only measure that is requested or understood by

stakeholders, despite the fact that the objective of economic development projects is not always to create jobs and taxes, but instead to foster an environment that enables investment and development to occur.

There are merits to this measure but there are also dangers. In the past, EDOs have been accused of overstating their impact; it is easy to claim that investments would have come to the community even without the support of an EDO. There are alternative models to measure success in economic development. As an example, some communities have created a formula to measure how much impact the economic development organization had in attracting or maintaining an investment. A factor of 75-100% indicates that the economic development office was instrumental, 50-75% indicates a high degree of involvement, 25-50% reflects a moderate involvement (such as approval expediting), while 0-25% is low involvement, (such as assisting with start-up). The Factor is then multiplied by the total taxes and jobs to arrive at “Jobs” and “Taxes” generated as a result of the economic development office’s involvement. This model requires staff to contact each company to ensure that their assigned factor was appropriate, and reflective of the company’s experience – in case a member of the community were to want to verify the figures independently. The metrics in this model represent a simple but accurate method of measuring direct economic development impacts. Although narrow in scope, the technique can be an effective measure of performance in some limited areas of activity.

Another model assesses overall economic development performance by examining statistics from twelve key indicators. They are: number of companies by cluster; number of employees by cluster; rate of change in median size of company; percentage of urban/rural households and businesses with broadband access; percentage of post-secondary and secondary school education attainment; risk capital investment by stage of company and relative share; start-up activity and relative impact; unemployment rate; total dollars of research conducted in the academic and industrial base; participation rate in labour force; property tax assessment base.

Although strictly econometric indicators are relatively easy to generate and allow for ongoing trend analysis, they do not paint a complete picture of economic service delivery. Markham must also look to a range of other, non-traditional metrics of performance to assess progress in implementing this economic development strategy. It should, for example, develop and deliver a wide and ongoing series of survey-based assessments of performance, utilizing online tools like [surveymonkey.com](https://www.surveymonkey.com) to undertake

these exercises. Annual surveys of client satisfaction and partner satisfaction would be appropriate first uses of this technique.

Markham has laid substantial groundwork for this approach with its NQI initiative. The National Quality Institute (NQI) is an independent, not-for-profit organization recognized as Canada's leading authority on workplace excellence. NQI provides strategic business frameworks, services and tools to help organizations focus on continuous improvement and positive outcomes.

Application of the NQI municipal excellence framework will include regular use of client satisfaction surveys to gauge specific requirements and levels of satisfaction for partners and clients. A standardized series of questionnaires should be developed for each group, and delivered on an ongoing basis. Although results should be monitored on an ongoing basis, data should be aggregated and tallied on an annual basis, in order to compare year-over-year perceptions of performance by both clients and partners.

Within the body of the strategic recommendations, a number of other specific evaluation tools have been mentioned, and should be adopted:

- Sustainability indicators delivered through the International Sustainability Indicator Network (ISIN), including indicators focused on the community's ecological footprint, and analysis of the community's triple bottom line
- Business-based sustainability measures, such as energy consumption and conservation measures
- Measurements that combine quality of life with economic variables, such as the Genuine Progress Indicator (GPI)
- Emerging measures such as the Community Vitality Index (and its related Business Vitality Index) currently being promoted by the Ontario Ministry of Agriculture, Food and Rural Affairs, and being piloted in communities such as Brockville

At the same time, there are a number of third party evaluations occurring on a regular basis, and a sound measure of Markham's progress may lie in Markham's appearance on or improved ranking in a series of existing indices and lists measuring a range of variables and achievements. Possibilities here are numerous, but could include:

- *Canadian Business* Magazine's rankings of "Canada's Best Cities for Business"
- The Intelligent Community Forum annual ranking of the "Top Seven" and "Top 21" most Intelligent Communities in the World

- The Economic Developers Association of Canada's annual "Marketing Canada" awards
- *Corporate Knights* Magazine's annual ranking of the "Most Sustainable Cities in Canada"
- KPMG's annual "Competitive Alternatives" study
- *Today's Parent* Magazine's annual ranking of the "Five Best Cities for Families"
- The Appleton Charitable Foundation's annual list of "National Sustainable Urban Transportation Rankings"
- *Computerworld's* annual "Best Places to Work in IT" rankings

Metrics may also be developed related to the numbers of companies with operations in Markham that appear on widely-recognized third party rankings; increasing representation on these lists can be seen as a sign of successful investment attraction. Such lists could include:

- *Canadian Business* Investor 500 and Tech 100 companies
- *National Post* FP Business 500 and Fast 50 companies
- *Fortune* 100 and *Fortune* 500 companies
- *Forbes* 500 and *Forbes* International 500
- *Washington Post* 200
- *Computerworld* Premier 100 IT Leaders
- *Branham* 300 list of Canadian ICT companies
- *U.S. Banker* 100 Largest Financial Services Companies

In the case of these rankings and lists, Markham should develop an annual "survey of surveys" in which a straightforward counting of rankings and attributes from these external sources are added together. Each year, a new tally may be produced, which may be compared against previous tallies for evidence of progress or challenges on the economic development front. For example:



	<i>Canadian Business</i> Cities Ranking	<i>Canadian Business</i> Tech 100 Companies	<i>Fortune 500</i> Companies	<i>US Banker 100</i> Companies	Annual Score
Year 1	#2 of 40 (39 points)	14 companies present in Markham (14 points)	18 companies present in Markham (18 points)	7 companies present in Markham (7 points)	78 points
Year 2	#4 of 40 (37 points)	17 companies present in Markham (17 points)	21 companies present in Markham (21 points)	6 companies present in Markham (6 points)	81 points

In this fictional example, Year 2 shows a modest improvement in external rankings and metrics over Year 1, and suggests progress on the economic development front.

Of course, metrics are not economic development in and of themselves. When employed effectively, they may shed light on some element of the economic development process. Collectively, they may help to paint a picture of the larger processes – positive or negative – underway within a community or regional economy. The ultimate metric of economic development success, however, is left to the community: when business and community leaders are satisfied that progress is being made – that it is possible to Build the City – then success is in sight.

## Appendix A: Background to Strategic Plan

In recognition of the importance of Markham's continuing economic growth and competitiveness, Council adopted a 20-year vision for the Town in November 2002. The vision has a strong focus on economic growth and innovation as validated by the following statement:

*"Markham...the leading Canadian municipality – embracing technological innovation, celebrating diversity, characterized by vibrant and healthy communities – preserving the past, building for the future."*

Council also maintains that the key goal of economic development is to *"establish, promote and support Markham as the best location for diverse high-tech and related businesses."*

The Town of Markham last completed a comprehensive Economic Strategy in the mid-1990s. This strategy provided the Town with a set of measurable objectives that guided the activities of the Town's Economic Development Department and resulted in significant economic growth. More specifically, with the development and execution of a series of targeted marketing plans based on this strategy, Markham has established itself as Canada's High-Tech Capital with an estimated 900 high-tech firms. Information technology, telecommunications, electronics and life sciences companies have made significant investments in Markham.

It is vitally important that Markham not only continue to nurture the successes of its well established high technology sector but also work to develop and broaden the Town's knowledge capacity and innovation base to help grow key sectors such as the life sciences. To this end, the Town of Markham initiated a 3-phase process to develop an Economic Competitiveness Strategy.

Phase 1: Economic Base Analysis helped to broaden the community's understanding of Markham's economic landscape, and provided a road map that; (a) pinpoints the sectors and markets with strong opportunities for economic success; and (b) effectively positions Markham in such sectors and markets in order to enhance competitiveness and achieve critical economic growth.

Phase 2: Community Consultation involved a half-day of facilitated workshops including a luncheon speaker, input received from a dedicated website and from the Markham Board of Trade Leaders Committee. This consultation process has built consensus regarding Markham's strategic priority areas.

Phase 3: Draft of Economic Competitiveness Strategy for the Town of Markham. This draft report is the next logical step in the development of a complete Economic Development Strategy for Markham. This report will be informed by the knowledge gained in the Economic Sectors Analysis and the Community Consultation. This report will only be a draft as the Economic Development department and the Markham Board of Trade Leaders Committee will provide further input before report finalization.

To promote Markham as the best location for diverse high-tech business a thorough Economic Development Strategy is required. The proposed comprehensive Economic Development Strategy will provide the town with context for future investment attraction and business growth through embracing technological innovation and celebrating the town's diversity. This Strategy possesses a wide variety of strategic objectives and actions that will ensure a foundation for long-term prosperity in Markham. The Strategy will be employed as a guide to direct the long-term planning focus for the Town. It will provide strategic action plans to be implemented by the Town's Economic Development department and will be used as a tool to build community interactions and collaborations.

During Phase 1 and Phase 2 four key sectors of opportunity were identified as prominent sectors for business growth and development for Markham. ICT and life sciences; Information, Entertainment and Cultural industries; Professional scientific and technical services; and Finance and Insurance. They have been identified as emerging industries that have a capacity for innovation and the presence of engaged local entrepreneurs within Markham.

As part of the Greater Toronto Area (GTA) Markham is situated in the third largest ICT cluster in North America. Markham is home to several significant global icons in the ICT sector such as IBM and Motorola. The Town has branded itself as "Canada's High-Tech Capital" for good reason as nine of Canada's top fifty Research and Development spenders are located in Markham. These R & D investments provide further impetus for the growth of the ICT sector by pushing innovation to the fore within the industry. Another important aspect to the growth of ICT in the GTA is the breadth of available labour that is provided by the several post-secondary institutions. These universities and colleges offer 83 different ICT-related programs to ensure an abundant labour supply into the future. The life sciences sector is an emerging strength for the GTA, with half of the Canada's brand pharmaceutical manufacturers located here. The life sciences sector has successfully attracted international researchers and 20,000 students into the bio-tech programs offered in the GTA's post-secondary institutions.

With the onset of new digital technologies and the strength of the ICT sector in Markham there is an emerging opportunity for the growth of the Information, Entertainment and Cultural Industries in Markham. The Town's strong multi-cultural identity can be linked with interactive media to create digital heritages and provide new opportunities to link media creation with cultural heritage and community building. Markham already has several strong multi-national linkages which create the opportunity to build international partnerships within the context of an interconnected

world. These unique linkages can be utilized to create a global brand for Markham. Investment and growth of the Information, Entertainment and Cultural industries in Markham will enable the Town to attract highly skilled newly immigrated people who help define the Town's cultural milieu and provide an important labour resource, while creating an inter-linkage of Markham's ethnic communities.

The Professional, Scientific, and Technical Services sector will provide new opportunities for economic growth in Markham. This sector is poised for increased growth as these services are inter-related with the growth of the ICT and Life Sciences sector. As the ICT and Life Sciences' sectors innovate and expand the business, technical, and scientific services needed to foster this growth will increase. The recent federal government announcement of a Science, Technology and Innovation Council signifies the motivation to position Canada as a global leader in scientific and technical innovation. Markham's investment into the Innovation Synergy Centre advances this sector's growth opportunities by connecting the businesses within the sector to the other industrial sector enabling business and partnership opportunities.

Known as Canada's financial capital the GTA has a diverse representation of banks, credit agencies, security dealers and insurance companies. The headquarters for Canada's five largest domestic banks and six of the ten largest insurance companies are located within the GTA. As well, Canada's largest stock exchange, the Toronto Stock Exchange, provides an anchor for the financial sector within the GTA. These financial institutions have made significant investment in technology to ensure that they are at the leading edge of innovation in a highly competitive and global sector. These investments provide the GTA with an excellent opportunity to provide cutting-edge financial services to the global market. The strength of the Finance and Insurance sector in the GTA affords an opportunity to attract investment in this sector to Markham.

## Appendix B: Sustainability and Economic Development

According to Statistics Canada, nine out of ten Canadians rate the environment as one of their top concerns.<sup>1</sup> Whether it is climate change, energy conservation, waste management, transportation/transit congestion or air pollution, there is rarely a day when the environment and sustainability are not front page news. It is acknowledged by our federal government that Climate Change is real, and that cities, towns, companies and individuals need to all play a part in becoming conscious of energy use.

Just as physical, social, and economic patterns of human development are intertwined so too are environmental sustainability, quality of life and economic growth. Markham's Economic Development Strategy will secure a path to achieving the Town's long-term objectives for building prosperity while incorporating sustainability as a guiding principle. Markham's competitiveness requires us to move in this direction in order to enhance quality of life, attract and retain a talented skilled labour force, and foster innovation and creativity – core elements of a knowledge-based community.

The strategy will be aligned to the Town's and Region's overall sustainability policies and will seek to:

- A. Promote and encourage sustainable business practices;
- B. Develop and maintain an innovative and diverse economy; and
- C. Ensure local employment opportunities for the current and future resident population.

### Defining Sustainability

Sustainability refers to development that meets the needs of the present without compromising the ability of future generation to meet their own needs. A more specific definition was developed by the American Planning Association and describes sustainability as having the following four “dimensions”:

1. Sustaining communities as good places to live, and that offer economic and other opportunities to their inhabitants;
2. Sustaining the values of our society – things like individual liberty and democracy;
3. Sustaining the biodiversity of our natural environment, both for the contribution that it makes to the quality of human life or for its own inherent value; and

<sup>1</sup> Statistics Canada 2000. Human Activity and the Environment, 2000. Ottawa: Minister of Public Works

4. Sustaining the ability of natural systems to provide life supporting services, rarely counted by economists.<sup>2</sup>

## **Economic Development Actions Towards Sustainability**

*Viable local economies are able to create employment and income for all parts of the local community. They [contribute to the attraction] of a city rather than threaten its citizens through pollution or the probability of hazards. Viable local economies promote diversity in the structure and size of local companies and thus are less vulnerable to political or economic change. (International Council for Local Environmental Initiatives, Local Governments for Sustainability)*

### **i. Promote and Encourage Sustainable Business Practices**

The actions listed below would be encouraged in partnership with the business community, other Town departments, the Region of York, municipalities in the Greater Toronto Area, and our international partners. Together we will work to:

Encourage businesses that reduce dependence on fossil fuels, extracted underground minerals, and metals; for example, businesses that:

- i. Reduce employee and product transport vehicle trips
- ii. Are locally based or home based, reducing or eliminating the need to commute

Encourage businesses that reduce dependence on chemicals and unnatural substances; for example, enterprises that:

- i. Meet or exceed clean air standards and clean water standards
- ii. Minimize or reduce use of chemicals and employ proper disposal and recycling mechanisms of these
- iii. Use by-products of other processes or whose wastes can be used as the raw materials for other industrial processes

Encourage businesses that reduce activities that encroach upon nature; for example enterprises that:

- i. Use recycled or by-products of other businesses minimizing the use of virgin raw materials
- ii. Prevent activities that emit waste or pollutants into the environment

<sup>2</sup> American Planning Association. Policy Guide for Planning for Sustainability, Ratified by Board of Directors, April 17, 2000, New York.

iii. Reuse processed water

Encourage businesses that meet human need fairly and efficiently, for example enterprises that:

- i. Promote financial and social equity in the workplace
- ii. Create vibrant community-based economies with employment opportunities that allow people economic self-determination and environmental health

Encourage businesses that incorporate sustainability in their organization's creative process and develop innovative methods and technologies to reduce Markham's overall environmental footprint by:

- i. Developing an information brochure that suggests ways in which the business community can improve its environmental performance and reduce its ecological footprint;
- ii. Facilitating thoughtful discourse between corporate and community sustainability experts and companies less familiar with sustainability principles in order to help generate new opportunities for innovation and idea generations. This could facilitate discussion where local academia, environmental thinkers/leaders, corporations, and small business talk about how to incorporate sustainability into business processes and practices;
- iii. Producing a list of green technology companies in Markham to encourage businesses to buy green and to promote local "green" technologies and capabilities to improve environmental performance;
- iv. Attract and retain green companies. Green companies are those that offer products or services that directly or indirectly reduce the impact on the environment, and do not pollute while producing their output;
- v. Encouraging companies to incorporate triple bottom line accounting into their practices to achieve a greater awareness of their decisions on the environment, society and the external economy – and how those impacts are related;
- vi. Introducing "Green awards" for businesses in Markham to encourage sustainable business practices;
- vii. Promoting the adoption of cleaner transport initiatives to reduce emissions and fuel use including choosing fuel efficient fleet vehicles and encouraging employees to use public transit, through such programs as the YRT/VIVA Business Benefits Program; and

- viii. Extending the *Markham Environmental Sustainability Fund* to the business community. The purpose of the program is to provide financial assistance to fund Town internal and community projects and initiatives that promote environmental responsibility. For the business community, this program could be applied as a rewards program offering an honorarium to those companies that have demonstrated environmental leadership. It is a way of recognizing green business in Markham. Town funding could be leveraged by the private sector and utility companies.

ii. Develop and Maintain an Innovative and Diverse Economy

In line with York Region's Sustainability Strategy, *Towards a Sustainable Region*, improving sustainability can make a place more competitive by creating balanced communities, helping to attract a talented labour force and providing a climate for growth of innovative and competitive companies that can contribute towards a resilient, diverse and prosperous economy.

1. Facilitating development of key business clusters to maximize collaboration and supply linkages within the region, keeping wealth within Markham and the region.
2. In line with Markham's economic development strategy, building on Markham's economic diversity by advancing growth in four key sectors: the convergence of ICT and life sciences; Information, Entertainment and Cultural Industries; Professional scientific and technical services; and Finance and Insurance. Also, targeting multiple markets in our investment attraction activities including the USA, China and India so that we are less vulnerable to global shifts in one particular market.
3. Partnering with business and community organizations to develop a skills training and education strategy. The strategy is necessary to ensure Markham businesses remain globally competitive and to ensure local residents have access to jobs that fully utilize their respective skills.

iii. Ensure Local Employment Opportunities for the Current and Future Residents

Over the last decade, suburban municipalities across Canada have seen a markedly faster population growth than their urban neighbours. At the same time, employment growth in the suburbs has been on the rise. According to the Census, between 1996 and 2001, for each new job created within a 5km radius of a city core, nearly five were



created in the suburbs.<sup>3</sup> As a result, commuting patterns have become more complex as suburb to suburb commuting has increased without the support of necessary transit links and a higher dependence on the automobile.

Further intensifying the rate of growth in the region is the Provincial Growth Plan for the Greater Golden Horseshoe Place to Grow which forecasts 4 million more people and almost 2 million more jobs in the region by 2031. Add to the mix the Province's Greenbelt Plans which protect 1.8 million acres of land from urban development including the Oak Ridges Moraine and the result is significant development pressure and rising land values on all land south of the Greenbelt, including land designated for agricultural purposes. The Province's Growth Plan has set aside lands to protect – all other lands will need to be made available for phased development in order to meet project growth in Markham.

Preserving employment land for future economic opportunities is a key policy direction of the Province's Places to Grow Plan. The Plan places strong emphasis on providing an adequate supply of employment lands for a variety of non-residential uses to ensure the vitality of the GGH and Provincial economy. The goals of the strategy with respect to employment lands are to:

#### Goals:

- i. Provide an adequate supply of industrially and commercially zoned lands to maintain and attract highly skilled, creative and well-paid jobs close to where people live
- ii. Through land use policy, encourage intensification to optimize efficiency and use of public transit and other municipal services

#### Objectives:

- i. Develop a long term policy to protect employment lands and to designate additional lands along the 400 series highways for employment use
- ii. Strengthen the relationship between industry mix, housing stock, and resident labour force

<sup>3</sup> American Planning Association. Policy Guide for Planning for Sustainability, Ratified by Board of Directors, April 17, 2000, New York.

- iii. Pursue increase supply of market-ready land close to 400 series highways
- iv. Establish business park opportunities in eastern Markham
- v. Retain employment lands – there is a limited supply of 20+ acre parcels outside cathedral and 404 North

Recommended Actions:

- i. Create an Employment Land Securement Program (similar to Town's environmental land securement program) to ensure that an adequate supply of employment lands is available to meet current and future needs. The focus would be on securing land along the 400 series highways.
- ii. Participate in the Town's Environmental Policy Review and Consolidation

**D. Policy Challenges with Respect to Markham's Agricultural Lands:**

- Most agricultural lands are owned by non-farmers – developers are holding the land for future development and optimizing tax breaks by retaining farming practices through renting to farmers
- Parcels are small and limited in terms of crop potential
- There is a lack of certainty of farmers due largely to land tenure arrangements and the result is a disincentive to make the capital investments necessary for a viable farming industry
- Farmers must choose low investment crops with high commercial value to make a profit

Appendix C: SWOT Analysis Results

As part of a detailed study of the Town of Markham’s economic development opportunities, external consultants recently conducted a “SWOT” (“Strength, Weaknesses, Opportunities, Threats”) exercise in the community. To inform the SWOT analysis, personal interviews and surveys were completed with 22 key stakeholders, 49 local businesses, and a subsequent focus group session involving eight of the members of the Markham Board of Trade Leaders Committee. The input from these businesses

“Canada lags behind most developed economies in productivity growth. Our resource sectors require significant new strategic investment if they are to meet global competition, and our biggest cities are starved for investment compared with global cities elsewhere. In vital sectors of our economy, we are not keeping up with our competitors.”

Janice Gross Stein  
Conference Board of Canada  
*Mission Possible: Sustainable Prosperity for Canada (2007)*

and individuals serves to inform the Town of the perceived gaps in economic development opportunities and the potential strengths that can be enhanced to build Markham’s local economy. It also serves to highlight a range of local economic weaknesses and strategic threats that hold the potential to undermine future development efforts in the community.

One of the pre-eminent concerns for Markham emerging from the SWOT analysis relates to Markham’s transportation system. The transportation infrastructure has been identified as both a strength and a weakness for the Town. The Town’s relatively high commuting workforce takes advantage of the various transportation networks that intersect throughout Markham. The flexibility and ease of use of the transportation infrastructure are key components in turning this into a positive asset in the future. The Town should study

transportation use patterns to ensure this asset remains as a viable resource and does not impede economic growth due to increased traffic levels. The Town should develop a comprehensive plan for roads, transit, telecom, rapid rail and regional links.

Where this asset is deemed to be a weakness is the lack of available public transportation infrastructure. The Economic Sectors Analysis completed by Urbanmetrics in early 2007 notes the lack of housing options within the Town’s limits. This report identified very few options beyond single detached homes for the Markham populace. This weakness creates a barrier for lower-income citizens and younger citizens who are forced to commute to work. A plan to address the lack of mixed-use

residential opportunities must be co-ordinated with increased access to public transportation infrastructure.

If these assets are built in concert it will create a plethora of opportunities for the populace. Increased public transportation infrastructure will help alleviate any increased burdens on the current transportation network by decreasing the number of cars on the street. Increased housing options will provide students and lower-income citizens with an opportunity to settle within the Town's limits, thereby decreasing the total number of commuters and decreasing stress on the transportation infrastructure. Additionally, increasing the type of housing stock will allow the younger population more options as they develop through their various life stages. The SWOT analysis notes the strength of a highly educated workforce in Markham; it would be advantageous to ensure that this workforce has housing choices throughout their lifecycle. By increasing housing stock the young population will be encouraged to stay within the Town's limits as they mature from multi-unit dwellings to a broader range of housing choices such as single and semi detached homes.

Identified as both a weakness and a threat to future economic growth in Markham is the availability of land for development. As increased population and business growth places pressure on the land within Markham, there is a sense that the strategic planning of land-use must be put in place before all the commercially viable land is developed or redeveloped. As the Town matures from a suburban environment to an urban environment a land-use strategy must consider both the needs of business as well as the residents. This should include strategic planning for intensification, which will include greenfield and brownfield redevelopment. There is a strong threat that much of the land will be developed into residential housing without consideration of the needs for employment lands and commercial development. This threat is increased because of the lack of large parcels of vacant employment lands that can attract a prestige campus style development into Markham. The local individuals and businesses who provided insight into the SWOT analysis feel there is an important opportunity to develop and implement an improved urban planning process that ensures a balance; adequate employment lands, residential areas, environmental and park space, transportation networks, and recreation facilities.

The respondents who participated in the SWOT process identified several other strengths that can continue to foster economic growth for Markham. The Town is perceived to have a friendly inviting atmosphere that is receptive to newcomers, both residents and businesses alike. The positive business climate between the business community and the Town's administration is a strength that should continue to be fostered. Identified as an opportunity to continued business growth is the Town's

multicultural make-up. A concentration on developing global networks can enhance the sense of a multi-cultural community. By enhancing these multi-cultural linkages Markham can extend its business networks to take advantage of a global economy.