

| | |
|----------------------|---|
| C | 1 |
| COMMUNICATION | |
| VMC - JUNE 12 / 18 | |
| ITEM - | 3 |

TO: VAUGHAN METROPOLITAN CENTRE SUB-COMMITTEE

FROM: CHIEF, CORPORATE INITIATIVES AND INTERGOVERNMENTAL RELATIONS

DATE: TUESDAY, JUNE 12, 2018

SUBJECT: ITEM # 3, REPORT NO. 3, VMC SUB-COMMITTEE MEETING, JUNE 12, 2018
SMART CITY ADVISORY TASK FORCE UPDATE AND RECOMMENDATIONS

Purpose

To provide the Vaughan Metropolitan Centre Sub-Committee with Attachment 1 to the subject report.

Recommendation

1. That "Attachment 1" to the report of the Chief, Corporate Initiatives and Intergovernmental Relations, dated June 12, 2018, be received.

Background

Attached is the Findings Report titled, Smart City Advisory Task Force Findings Report. This is Attachment #1 to the staff report Smart City Advisory Task Force Update and Recommendations.

Attachment

1. Smart City Advisory Task Force Findings Report

Respectively submitted,



Tim Simmonds
Chief, Corporate Initiatives and Intergovernmental Relations

Smart City Advisory Task Force



Findings Report



vaughan.ca/**SmartCity**



Letter from the Chair of the Task Force

Smart City initiatives have been a key component in the ongoing evolution of the City of Vaughan. With our City in the midst of inspiring, generational change, we know that a Smart City approach must shape the decisions we make today and well into the future.

As a City, we will continue to build on the momentum of our application to the Federal Government's Smart Cities Challenge, in which the City highlighted the need to increase social cohesion and civic participation.

As Mayor, I created Vaughan's Smart City Advisory Task Force to continue to make a significant impact on every aspect of city life.

The attached report contains a robust set of recommendations that will feed into Vaughan's Smart City initiatives and roadmap. They include:

- Incorporating a Smart City focus in the City's next Term of Council Service Excellence Strategy Map.
- Developing a Smart City communication plan and strategy for citizen engagement and continued feedback from Vaughan residents.
- Continuing the Smart City Advisory Task Force for the next term of Council.
- Creating a Smart City unit within Economic and Cultural Development, Chief Corporate Initiatives and Government Relations Portfolio, with dedicated staff.
- Preparing a multi-year Smart City business plan by City staff, and this should include a strategic roadmap, a governance model terms of reference, and budget for inclusion in the 2019 Budget process.

Technology has played a vital role in Vaughan's renaissance and it is critically important that, as a City, we set in place a legacy of sound Smart City initiatives. By doing so, we can help ensure a brighter future for current and future residents of the City of Vaughan.

Yours sincerely,

Hon. Maurizio Bevilacqua, P.C.
Mayor



TABLE OF CONTENTS

02 FORWARD

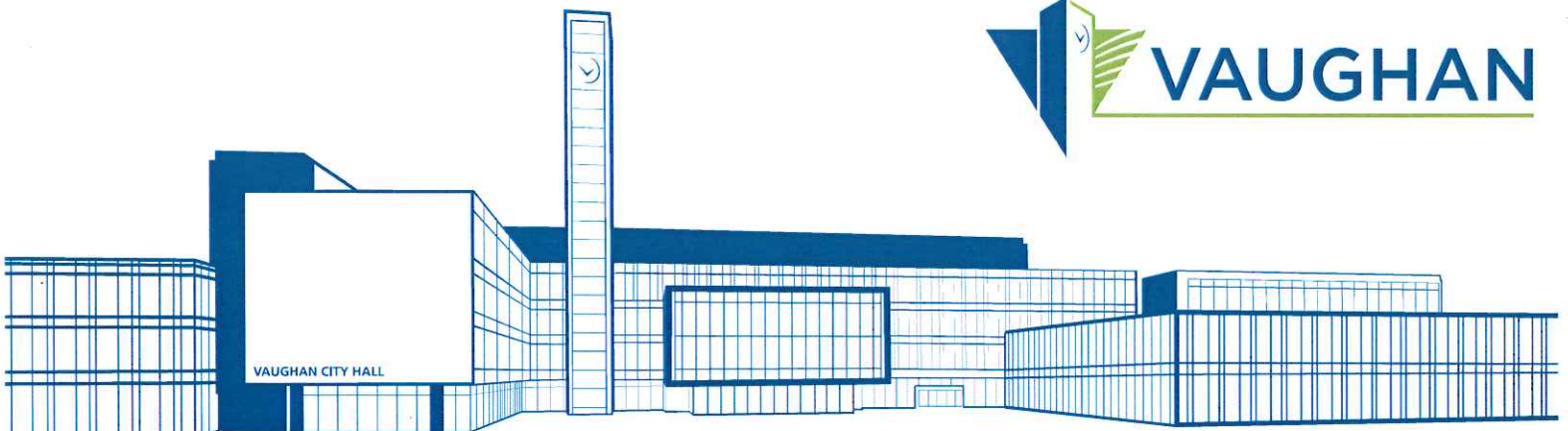
04 BACKGROUND

09 CITIZEN ENGAGEMENT

11 FINDINGS AND RESULTS

20 RECOMMENDATIONS AND NEXT STEPS

**21 MAYOR MAURIZIO BEVILACQUA
SMART CITY ADVISORY TASK
FORCE MEMBERS**



FORWARD

Bill Hutchison, Facilitator

Mayor Maurizio Bevilacqua Smart City Advisory Task Force

Background

The massive wave of new developments in telecommunications, computing and software is enabling the world's rapidly growing "Smart City" transformation. Today, the annual investment in Smart City transformations is \$1 trillion, growing to \$3 trillion by 2023. This astounding growth illustrates the urgency of global urban efforts to become more competitive, create new knowledge jobs and attract incoming investments while transforming cities and towns into better places to live- with happy citizens as an ultimate goal. As in the industrial revolution and other transformation movements, cities have a choice: Join the race or fall behind.

With a history of 25 years of smart urban transformation, there are many examples of what works and what does not work in the transformation process. We are not automating a factory and Smart City transformation is not primarily a technology initiative. Successful Smart Cities focus on ensuring the most effective outreach and ongoing engagement with their citizens, businesses and all others in the community. New ideas and suggested outcomes are collected in a wide range of themes, such as health and wellness, energy, environment, digital and social inclusion, innovation and new company development as a few examples. A credible process for prioritizing the feedback has to be created and the prioritized results are then passed to City Council for their review.

The Vaughan Process

In June 2017, Vaughan adopted a Smart City planning and prioritizing process similar to one used by cities that have previously won global

"Smart City" awards. Two of the most important elements in the process are an intensive outreach to citizens, through surveys, interviews and workshops, requesting their big ideas and priorities for their city's future and the creation of a Smart City Advisory Task Force (SCATF). Vaughan's SCATF is comprised of seven "Citizen" appointees and 35 "Stakeholders" who are leaders with recognized leadership and experience in themes of likely importance for Vaughan's "Smart" future transformation.

Another important element has been Mayor Maurizio Bevilacqua's agreement to Chair the SCATF. This level of leadership and demonstrated commitment has been important when attracting the high caliber of Task Force participants and it sends a strong message of Vaughan's Smart City priority, which is important for attracting future incoming investment. The Mayors of other award-winning Smart Cities are also visibly leading their transformations.

I was honoured when Vaughan retained me to be the Facilitator for the creation and facilitation of their SCATF and related activities. Since 1994 I have been the strategic advisor or executive leader of a number of award-winning Smart City initiatives in Asia/Pacific, North America, Europe and Eurasia while implementing a process very similar to Vaughan's. For the past six years it has been my pleasure to also be an Advisory Partner or Board Chair for three different ongoing research programs, led by faculty at the University of Toronto and involving up to 10 other Canadian universities, all focused on economic, environmental and social concepts for future Smart Cities. My role as a Distinguished Research Fellow at the U of T's Munk School is also relevant to future Smart Cities.

The Strategic Advisory Task Force

Seven Vaughan Citizens on the SCATF responded to a public call for participation and the 35 Stakeholders were carefully selected from the Toronto Region and beyond to ensure a wide level of experience and leadership in areas such as health services, sustainability, community engagement, construction and development, diversity and inclusion, energy, technology and communications, new fintech opportunities, research and innovation. Eleven of the 35 Stakeholders also happen to be Vaughan citizens and 69 per cent of Stakeholders are CEOs or C-suite executives.

Input for subsequent review and suggested prioritization by the SCATF has come from a wide range of citizens using direct interviews, social media, surveys and direct letters, with a combined exposure to 32,000 Vaughan citizens. In addition, there have been seven, two-hour focus group workshops with approximately 20 participants in each workshop with themes listed above. The combination of ideas and suggested outcomes were subsequently organized for reviews and ranking by the SCATF, based on members' broad perspectives and experience across many themes. The recommendations and this findings report are the results of the entire process, including the SCATF's final deliberations.

As the Facilitator of the SCATF, I commend the excellent work by the Task Force members. I fully endorse the recommendations made by the Task Force in this Findings Report, the City of Vaughan's process has been collaborative and citizen driven with expertise from leading industry and community stakeholders.

Ongoing

The SCATF members, combining the Stakeholders and Vaughan citizens represent a depth and breadth of very relevant Future Smart City knowledge and experience among the very best in the world. It is vital that the work of the SCATF continue, I recommend that Council re-establish the Task Force for another term as this group of experts can provide valuable input and ideas as the City moves forward with its Smart City transformation and evolution.

Respectfully submitted,



Bill Hutchison P.Eng. FCIPS. FWAPS.

Distinguished Research Fellow, Munk School,
University of Toronto

Chair, i-CANADA Alliance

Facilitator, Mayor Maurizio Bevilacqua's Smart City
Advisory Task Force

BACKGROUND

The City of Vaughan is in the midst of a transformation with major city-building initiatives underway, including a new downtown core and Canada's first Smart Hospital. The City of Vaughan is at a critical juncture to think about its future through a Smart City approach.

There are hundreds of definitions for what a Smart City is and cities are now adopting their own definitions. Key elements that are common among the various definitions include the use of technology and data, an emphasis on collaboration and partnerships, citizen engagement, a culture of sharing and a focus on sustainability and resilience. The main goal of a Smart City is to improve overall quality of life and to make service delivery more seamless and efficient with the most optimal use of resources. The Federal Government of Canada has simplified a Smart City approach to one that uses data and connected technology to improve quality of life.

The International Organization for Standardization (ISO) under the Technical Committee on Sustainable Cities and Communities defines a Smart City as: one that increases the pace at which it provides

social, economic, and environmental sustainability outcomes. Smart cities respond to challenges such as climate change, rapid population growth, and political and economic instability by fundamentally improving how they engage society, apply collaborative leadership methods, work across disciplines and city systems, and use data information and modern technologies to deliver better services and quality of life to those in the city (residents, businesses, visitors), now and for the foreseeable future, without unfair disadvantage of others or degradation of the natural environment.

“Vaughan citizens are the most important asset because they embody the spirit of this City. They embrace city building in a real and genuine way. As we continue to build Vaughan, we need to keep the human connection in mind. Working to be a Smart City is a chance to encourage greater civic engagement, accelerate economic growth and generate government efficiencies. Being a Smart City puts Vaughan on the leading edge of innovation to adapt to a growing community that values sustainability and creativity.”

- Mayor Maurizio Bevilacqua



A Smart City has the potential to enhance:



Infrastructure and technology by having the right communication infrastructure (fibre broadband) and cyber-security in place to support innovation



Citizen living by improving access to health care (online access anywhere, anytime, enabling seniors to live in their own homes longer), education (quality education available online), social infrastructure (better access to information and consolidated services), and more equal opportunities



Governance by improving transparency and accountability with open data, changing the way local governments interact and offer services to citizens through digital democracy and participatory government processes



Economy by diversifying industry and changing the way people work through collaboration, co-working, remote working and support for start-ups



Safety by faster reactions to public safety threats, more integrated services, use of sensors and surveillance cameras, better flow of traffic and better lighting of public spaces



Mobility by changing the way we move goods and people, lowering congestion and making optimal use of transportation infrastructure



Environment by more effective monitoring for resource conservation and efficiency, green technology and infrastructure



Data is often at the core of many Smart City definitions. A Smart City is about making smarter choices, taking on a holistic approach to problem solving and implementing smarter solutions that impact all sectors and data is the main driver for this approach. Under the leadership of Mayor Bevilacqua who is strongly committed to open data, the City of Vaughan is building a culture of data. The Mayor has been part of the World Council on City Data (WCCD) leadership since 2011, helping to spearhead and lead the efforts locally and internationally on open data and using data for informed decision-making. As a result of this effort, the City of Vaughan has engaged in international benchmarking and learning from other key international cities since 2011. International benchmarking promotes economic development and enables the City to identify common issues and themes to learn and share best practices with cities globally.

The WCCD's Global City Registry for ISO 37120 Sustainable Development of Communities - Indicators for City Services and Quality of Life is the first international standard for cities on open data, and the City of Vaughan has been a Platinum certified city since 2015, demonstrating its commitment to global efforts for standardized open data and confidence in its data. The City of Vaughan has been selected by the WCCD to become one of the first cities to pilot a new international standard for Smart Cities - ISO 37122.

Digital Transformation

Vaughan is at the onset of its digital transformation, developing a prototype for open data, expanding online service delivery and evaluating and investing in new digital technologies to enhance productivity and support key public initiatives. Vaughan's Smart City developments and initiatives will further build on this digital transformation.

The City of Vaughan's Digital Strategy defines how Vaughan will interact with citizens digitally, including communications, access to data and content, public connectivity, digital literacy and mobile applications. At the core of Vaughan's digital transformation is

understanding staff and citizens, their needs and motivations, and implementing change within the City to design more human services. Through this digital transformation, the City is adopting a new approach and way of thinking about services and service design, challenging the status quo, encouraging collaboration across departments to break down silos and seek out solutions.

Smart City initiatives complement and further support the City of Vaughan's digital transformation that is already underway and aligns with the four focus areas identified in the Digital Strategy:

- An engaged community – a Smart City enables citizens to be more aware and informed of what's happening in their community and providing the resources for citizens to be fully engaged in the City.
- Citizens can do business with the City through digital channels – a Smart City provides seamless and efficient digital services for citizens to do business with the City.
- Be an open and transparent government – a Smart City uses open data to facilitate dialogue with citizens and for informed decision making.
- Internal transformation and modernize city processes – a Smart City changes the way the City of Vaughan staff work and interact and engage with citizens and adopting a culture of data.



Vaughan's Current Reality - A Need for a Smart City Approach

Vaughan is one of the fastest growing municipalities



Vaughan's population reached over 335,000 in 2018 — a 13.9% increase from 2011

- Vaughan needs to be smart about how to deal with this growth and challenges that are associated with rapid growth
- Planning for more high density communities
- Ensuring there are viable housing options and job opportunities

Vaughan is extremely diverse



46.3% of residents born outside of Canada and 105 different languages spoken

- Vaughan needs to celebrate its diversity to increase a sense of belonging and social cohesion
- Leveraging Vaughan's diversity to build a more vibrant communities

A strong entrepreneurial spirit in Vaughan



15.2% of the labour force self-employed, which is the highest rate of self-employment when compared to other Ontario cities with a population of 250,000

- More co-working spaces along with incubators/innovation hubs to help support entrepreneurs
- Start-up and scale-up ecosystem

Very large commuter population



63% of the workforce travel outside the city or region for work.

Vaughan is also a net importer of jobs, drawing in more workers each day from across the Greater Toronto Area than the resident labour force, resulting in many people commuting into the city for work

**84% travel to work in a private vehicle
13% use public transit
3% walk, cycle or use another mode of transportation for their commute**

- Opportunities for shared mobility options
- Promote a culture of sharing where residents are empowered to carpool and take transit
- Change the way people work by promoting more remote working and satellite offices in co-working spaces in Vaughan to reduce commuting

Vaughan is aging



14.2% of Vaughan residents are seniors and there has been a 35% increase in the past five years

- Having the right infrastructure and support system in place to improve accessibility for aging
- Better solutions for seniors to get to their medical appointments for those that cannot drive
- Families need to be empowered so they can properly care for their aging family members and so that seniors can stay in their homes longer

Mayor Maurizio Bevilacqua's Smart City Advisory Task Force

The Mayor's Smart City Advisory Task Force has been established and held its inaugural meeting on Tuesday Dec. 12, 2017. Since then, the SCATF has met a total of five times.

The Smart City Advisory Task Force, is comprised of 42 members. This includes 35 leading Canadian and U.S. leaders in social, economic and environmental subjects of future Smart City importance and seven citizen members. A majority, 69 per cent of Task Force members, are C-Suite-level individuals directly responsible for affecting change within their organization. The Task Force is facilitated by William Hutchison, Chair, i-CANADA Alliance and Distinguished Research Fellow at the Munk School, University of Toronto, with more than 20 years experience in building Smart Cities.

The membership of the Task Force is carefully selected to reflect a holistic approach to city-building, including seven citizen members who provide a critical voice for Vaughan residents. Members have been selected from the following sectors:

- Education
- Transportation
- Social Welfare
- Arts & Culture
- Health Care and Medical Community
- Research & Innovation
- Information, Communications and Technology Companies
- Financial Services Industries
- Construction Industry
- Environment

Canada's Smart Cities Challenge

The Federal Government of Canada launched the Smart Cities Challenge in Fall 2017 and the City of Vaughan responded to this Challenge with the help of the Task Force and Vaughan citizens. The Challenge calls on communities to address local issues through new partnerships, using a Smart Cities approach. This means achieving meaningful outcomes for residents through the use of innovation, data and connected technology. The competition is open to all municipalities, local or regional governments, and Indigenous communities across Canada.

Vaughan could qualify to win one of two prizes of up to \$10 million for communities with populations under 500,000 people. Vaughan's application was submitted on April 24, 2018. In Summer 2018, the federal government will announce a short list of 20 qualifying communities who will be given a \$250,000 grant to create a feasible action plan. The winners will be announced Spring 2019.

Extensive consultations including seven focus group workshops were held to engage citizens and gather input from all Vaughan residents.



CITIZEN ENGAGEMENT

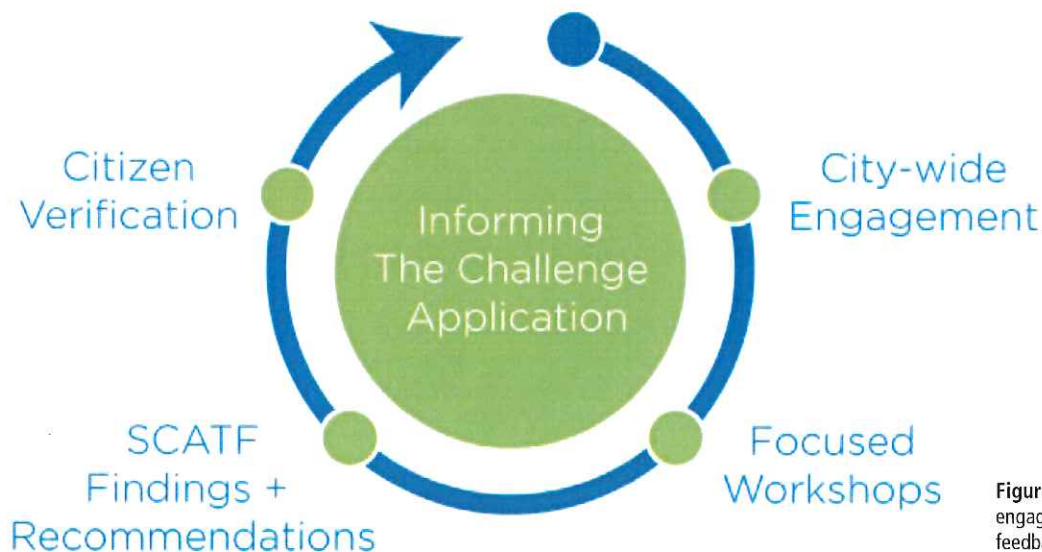


Figure 1: Citizen engagement feedback loop

Over the past year, extensive citizen engagement has been undertaken to give residents a voice in defining issues and challenges with regards to Vaughan's future. Input from the citizen engagement process also informed Vaughan's application to the Federal Government's Smart Cities Challenge and provided the foundation for the recommendations made in this report by the Task Force.

City staff created a comprehensive engagement and outreach strategy with a full feedback loop, consisting of city-wide outreach, focused workshops, input and feedback from the Task Force, Vaughan staff and citizen verification to ensure citizen priorities and needs were reflected in the Smart Cities Challenge application and the recommendations of the Task Force.

Citizen-wide surveys were conducted to solicit citizen needs and priorities

The City reached out to residents by traditional email blast through various networks, including: Vaughan Business Enterprise Centre (2,700); Vaughan Chamber of Commerce (900); City of Vaughan internal staff (City of Vaughan Social Media Channels: Twitter – 12,843, Facebook – 4,722, Instagram – 2,519); Vaughan Councillors also reached out to

their respective constituents with a survey emailed to 8,000 residents and businesses. Surveys were also conducted at Winterfest with more than 100 citizens.

The wider citizen survey asked Vaughan residents to identify the theme and area that the City should focus on for its Smart Cities Challenge application. The six themes identified by Infrastructure Canada were: healthy living and recreation, economic opportunities, environmental quality, safety and security, empowerment and inclusion and mobility. Citizens were also asked to share their big idea for Vaughan's Smart Cities Challenge.

Seven focused workshops were held based on a number of themes, including millennials, arts and culture, inclusion and empowerment, environmental sustainability, industry and innovation, health and wellness and an open community engagement.

The digital transformation tool for decision-making processes, PowerNoodle, was used during the workshops in order to facilitate meaningful conversations with stakeholders. To obtain the expertise of a wide spectrum of experts, the City held six focused workshops and a community engagement workshop, which were open to all residents. The seven workshops were each comprised of approximately 20

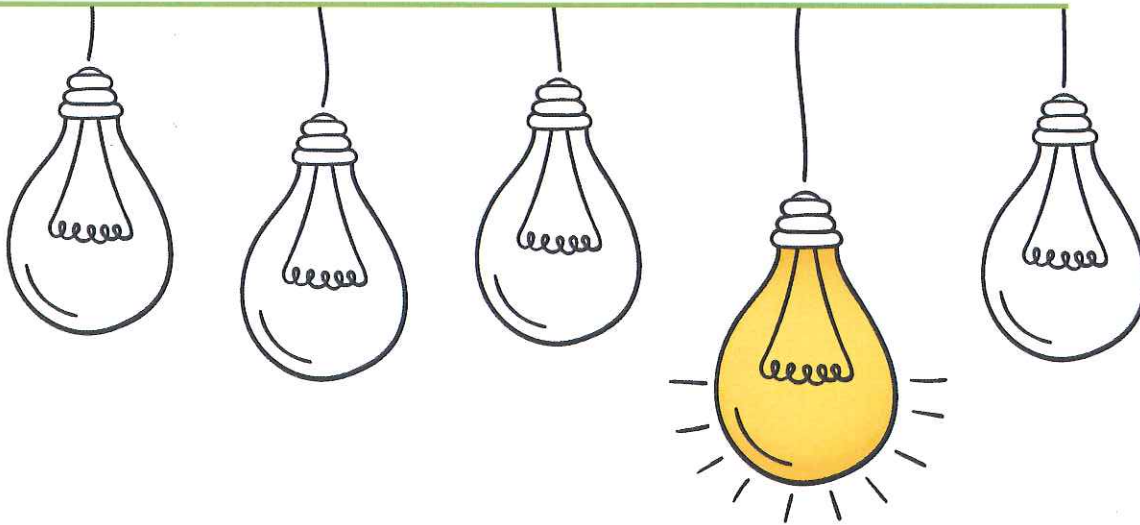
leaders in the subject, and output from the workshops and feedback from the citizen surveys and related interviews provided input to the Task Force. Task Force members then collaboratively used their senior-level experience to provide input and feedback for recommendations on Vaughan's Smart City priorities, as outlined in this report.

An art inspired curated Smart City event, called “smARTcities: Exploring the Digital Frontier” offered Vaughan residents a unique engagement opportunity.

Artist Ron Wild integrated Vaughan-centric imagery into a symbolic visual vocabulary to envision the transformative role that technology and the Internet of Things (IoT) can play. The City used art as a medium to educate, and facilitate conversations with residents on Smart Cities. As part of this exhibit, the “smARTcities SALON Night” was an engaging discussion held with an expert panel consisting of artist Ron Wild, Oren Berkovich, CEO, SingularityU Canada Summit, Lilian Radovac, Urbanist Professor, University of Toronto and the City of Vaughan CIO, Frank Di Palma. Members of the audience contributed to an engaging discussion about art, innovation and city-building, filtered through the context of Smart City transformation. As part of this process, Vaughan citizens were encouraged to submit digital interpretations illustrating the transformative potential for Smart City technologies and all submissions will be integrated into an original MEGAsmARTcities digital map remixed and composed by Ron Wild.



FINDINGS AND RESULTS



Feedback from Citizen Engagement and Consultations

During the April 24, 2018 Task Force meeting, members assessed and ranked the top five outcomes from each of the seven workshops, i.e., assessing 35 outcomes. The following top priorities as identified by Vaughan citizens through the focused workshops along with their ideas and opportunities to address these priorities have been ranked and prioritized by members of the SCATF. The following is the compilation of top-ranked community priorities:

Top Community Outcomes Ranked

- Accessible community hub that integrates wellness, food, gardening, entrepreneurship & art to citizens
- Better informed decision making and awareness with Data for optimizing what is in place and future needs
- Enhance the technology infrastructure
- Renewable energy and energy efficiency
- Viable and affordable housing options
- Improve Education Capacity and Capability
- Create healthy work-life balance in the workplace with wellness programs.
- Disrupt the current governance model to have a more meaningful and transformative engagement loop
- Make Vaughan an international destination for innovative technology companies
- Improve service delivery and innovative collaboration
- Family oriented programs instead of focusing on one particular population
- Improve community infrastructure
- Improve traffic flow to keep people and goods moving
- Commitment to decreasing the digital divide

The following chart is a mapping of citizens' needs identified during the consultation process along with some examples of outcomes, ideas and opportunities as generated during the focused workshops and SCATF meetings.

| What we heard from Vaughan Citizens | Outcomes, Ideas and Opportunities |
|--|--|
| Improve traffic congestion and better flow of traffic | <ul style="list-style-type: none"> • Vaughan traffic app with real time data and updates • Integrated traffic light system • Promote remote working and staggering work schedules |
| More arts and culture and programming to create a more vibrant city | <ul style="list-style-type: none"> • Digitally rich "expo" style cultural centre • Online broadcast of events • Portal with information on events • Encourage community to organize more events and programming • Front yard festival |
| More connected communities, everyone identifies within their own communities – no sense of Vaughan as a whole | <ul style="list-style-type: none"> • Events to bring the communities together • Promote the Vaughan Metropolitan Centre as the new meeting place for Vaughan residents • Complete streets and village living |



| What We Heard from Vaughan Citizens | Outcomes, Ideas and Opportunities |
|---|---|
| More access to information and services | <ul style="list-style-type: none"> • One Vaughan Portal – consolidated information and services • Vaughan app • Enhance the technology infrastructure • Commitment to decreasing the digital divide • Disrupt the current governance model to have a more meaningful and transformative engagement loop • Citizen dashboard |
| Focus on data informed decision making – data for businesses, sensors for monitoring environmental quality, plan for future needs etc. | <ul style="list-style-type: none"> • Better informed decision making and awareness with Data for optimizing what is in place and future needs • IoT sensors on streetlights • Citizen dashboard |
| Participation and inclusion of all communities (including marginalized, youth, aging, newcomers etc.) | <ul style="list-style-type: none"> • Family-oriented programs instead of focusing on one particular population • Improve community infrastructure • Viable and affordable housing options, including co-living and sharing opportunities |
| Need for mental health awareness | <ul style="list-style-type: none"> • Create healthy work-life balance in the workplace with wellness programs • Accessible community hub that integrates wellness, food, gardening, entrepreneurship and art to citizens • Vaughan corporate wellness challenge |
| More jobs in Vaughan, prevent brain drain and make Vaughan the place to go to and not only the place to leave | <ul style="list-style-type: none"> • Make Vaughan an international destination for innovative technology companies • Viable and affordable housing options • Start-up/Scale-up ecosystem |

Smart City Vision and Guiding Principles

Extensive citizen consultations revealed that Vaughan's vision and definition for a Smart City is inclusive and vibrant. Collaboration, through a culture of sharing and learning, is the core value of Vaughan's Smart City work. A Smart City is a result of smarter solutions across all sectors, therefore requires a holistic approach to city-building. It is not the traditional siloed approach.

As described in the City's Strategic Plan, Vaughan Vision 2020, Vaughan will continue to be a city of choice that promotes diversity, innovation and opportunity for all citizens, fostering a vibrant community life that is inclusive, progressive, environmentally responsible and sustainable. Since the City of Vaughan is committed to its citizens and ensuring no one is left behind, this means policies and programs are inclusive and enable every resident an equal opportunity to participate. The main goals of a Smart City are to increase economic growth and improve quality of life while ensuring sustainability. The City is committed to improving the daily lives of residents, making Vaughan one of the most livable cities in Canada with a quality of life that is second to none.

A Smart City ensures better use of resources, cost savings, more informed decisions based on the use of data, more efficient and seamless services, community collaboration and partnerships, improvements to safety and security, ease of doing business and equal opportunities for all citizens.

Communication and continuous citizen engagement is an important component for successful Smart City implementation. The City of Vaughan's updated strategic plan Vision 2040 should include a Smart City approach that is shaped and informed by citizens. The City of Vaughan needs to continue its citizen engagement with a strategic communication plan to promote awareness of the benefits of a Smart City.

Smart City Infrastructure

Communication infrastructure is the foundation for a Smart City.

In order for any Smart City initiative or project to be successful, the right communication infrastructure need to be in place. Infrastructure is more than just hard physical infrastructure that



consists of roads and bridges. More importantly, a Smart City requires the right communication infrastructure. High-speed fibre networks and points of presence to connect IoT across the city need to be in place for Smart City technology and projects to be built upon.

Having the right infrastructure in place for Smart City initiatives requires the City to work closely with partners and businesses, including developers, engineers, architects and technology providers to ensure communication infrastructure is in place before it's too late. Once hard infrastructure is built, it is too difficult and costly to integrate communication infrastructure. This must be considered at the initial planning stage. The City of Vaughan must consider long-term needs, and plan ahead.

It is also important for the City of Vaughan to participate in international Smart City networks. The City of Vaughan is in discussions with U.S.-based Smart Gigabit Cities "SGC" Cluster to become the first Canadian city to participate in this network. The SGC Cluster includes 20 U.S. mid- and smaller-sized cities, along with the City of Adelaide, Australia. Created by U.S. Ignite, a not-for-profit agency initiated by the Obama White House to stimulate innovation, the SGC project was one of the U.S. government's Smart Cities Challenge initiatives in 2015. Cities in the cluster each have a very high bandwidth innovation district for start-ups, and each city commits to creating two new Smart City Apps

and sharing them with the other cities in the Cluster, thereby creating and sharing a total of 40 new Smart City Apps. The City of Vaughan will become a full participant using high-bandwidth, low-latency technology called SAVI that is seamlessly compatible with the U.S. technology. Participating in this cluster will provide a unique opportunity for start-ups in Vaughan to collaborate with start-ups in the 20 U.S. cities. It will also facilitate collaboration and engagement between Vaughan's socially focused organizations, to share ideas and easily arrange online high-bandwidth collaboration and discussions using the gigabit networks in each participating city.





Sarah's Story

Residents shared their experiences of being part of the “sandwich generation,” which revealed, first-hand, the impact to their well-being and productivity. One resident, Sarah, told us her story about the stresses of looking after her mother and her young children. She is an entrepreneur, who often spends countless hours commuting to Waterloo or Toronto to work because of the lack of incubators in Vaughan. The pressures of her Vaughan-based home life will often create conflict with her commute-based work life. The result is an overall decrease in her productivity and well-being. She explained the frustration of being stuck in traffic, missing a day of work, all compounded by having to deal with an already stressful situation. She is often driving her children to their activities and her mother to her medical appointments. Sometimes her mother calls with an emergency and she is all the way in Waterloo and with the traffic it is difficult for her to rush back to Vaughan to take care of her mother's needs. This adds to her already stressful situation.

A future Vaughan with Smart City initiatives will allow Sarah to stay in Vaughan and work at one of the many co-working and incubator spaces which offer support for her to scale up her business. Her business is growing because she is now able to get her products to her customers faster and more efficiently through the use of drone delivery.

Sarah can arrange for alternative mobility options including the use of autonomous vehicles to help take her mother to medical appointments and children to their activities, so this will free up more of Sarah's time to grow her business. She schedules her mother's medical appointments and children's activities using the Vaughan app. Sarah is also able to check in on her mother through a monitor and receives alerts if her mother falls and is in need of help. Sarah can now work in peace without having to constantly worry about her mother.

With one click on her phone Sarah is able to monitor her energy use in her home, turning off lights she may have forgotten. Sarah's daughter suffers from asthma and she is able to monitor the air quality within her home. She also receives alerts when the outdoor air quality index is high so she knows to monitor her daughter's outdoor activities.

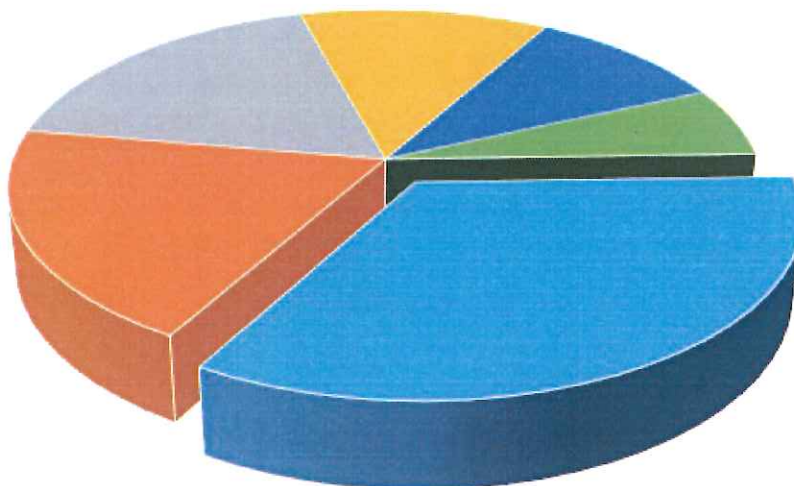


Figure 2: Survey results on focus area for the Smart Cities Challenge

Focus Areas

SCATF Ideation for Smart Cities Challenge

Citizens identified healthy living and recreation as the focus area for Vaughan's Smart Cities Challenge. Based on the healthy living and recreation focus and the inputs from the citizen engagement process the City of Vaughan identified mental well-being through building social cohesion as the main goal for its Challenge.

During the third meeting of the Task Force on March 25, 2018, the findings and results from the citizen engagement and consultation process were presented to Task Force members for consideration. The information was analyzed and summarized by City Staff and presented to Task Force members for input. Task Force members worked in break out groups to discuss findings and citizen priorities to identify solutions and projects for the Smart Cities Challenge.

Six Big Ideas Were Generated By The Working Groups

1. Accessible Digital Gateway to help provide on demand services with real-time information through a citizen dashboard.

2. Build co-working space infrastructure across Vaughan starts-up and larger corporations outside of Vaughan.

3. Digitally rich "expo" style cultural centre with a digital footprint accessible from anywhere. Multiple pavilions: for seasonal, cultural, multi-use facility events for all citizens.

4. Shared economy place to live. Providing affordable housing to bring people together especially the marginalized populations.

5. Vaughan Corporate Wellness Challenge. Getting everyone in the City involved with physical fitness which links to mental well-being.

6. Create an interactive (physical and digital) community hub. That includes: digital space, physical space, wellness, micro agriculture, connecting the younger population to older populations and create Town Halls that are not "corporate" but for the people.

Digital Garden

The suggested ideas from the Task Force members and findings from the citizen engagement process were consolidated by City staff into a “Digital Garden” proposal for Vaughan’s Smart Cities Challenge application. The proposal calls for the creation of a Digital Garden; an online platform to build social cohesion and create a more connected and engaged city through the Vaughan LaunchPad as the main community/innovation hub located in the Vaughan Metropolitan Centre and the five Local Gardens representing the community hotspots. Much like the concept of community gardens, the Digital Garden is a collaborative community initiative, with which citizens come together to plant fruits and vegetables for the community. However, in this case, data and ideas can be used by the City and the community to generate solutions. Much like community gardens, the Digital Garden will be a platform for sharing knowledge and learning, getting residents engaged and cultivating a culture of sharing, serving the greater community and building a sense of community belonging. The concept of the Digital Garden will be an online platform, however, the LaunchPad will be a physical space where people come together to work and share ideas. It will be the new meeting point for Vaughan residents. This will break down silos between Vaughan staff, local businesses, community organizations and residents. The Digital Garden will cement and cultivate a “One Vaughan” sentiment and make Vaughan one of the most connected and socially cohesive cities.

Task Force Discussion on Smart City Governance and Management Framework for Vaughan

The Task Force discussed possible governance frameworks to be included as recommendations going forward to Council on Vaughan’s Smart City initiatives. The main take-aways from the Smart City governance structures discussion were: Smart City initiatives need to be driven from a central office/division that report to the head of the organization, Smart City priorities

and action items need to align with Vaughan’s Smart City vision and strategic direction, there needs to be a sense of urgency and the model must be sustainable, citizen engagement and communication is key, community collaboration is vital and projects must be measurable.

The following is a summary of the discussion on Smart City governance during the April 24, 2018 Task Force meeting:

Executive Leadership: Smart City initiatives must be driven by one person with an executive leadership role reporting directly to the head of the organization. There must be strong central leadership and executive ownership in order for Smart City initiatives to be implemented and successful. This could be a Smart City Office or Smart City Division, it is important that this office/division has the authority and capacity to coordinate Smart City initiatives across the City. Since politicians and city staff are risk averse, executive leadership needs to drive down management objectives and these must be in sync with strategic objectives. It was noted that some cities have called the role Chief Transformation Officer and the Mayor mentioned that Dubai has a central Smart City office.

Roadmap and Strategic Priorities: Community priorities identified are broad, they must align with Vaughan’s Smart City strategic direction and vision. A Smart City strategy will help identify high-level principles and strategic pillars for Vaughan’s Smart City direction.

Citizen Engagement: There must be continuous citizen engagement and consistent communication with citizens. There needs to be a continuous feedback loop with citizens. It would be important for citizens to be involved and included in the governance model to give them a sense of ownership.

Community Collaboration: Community and neighbourhood assets should be leveraged to support Smart City initiatives. Community networks need to be partners in Vaughan Smart City platform.

City Collaboration – locally and internationally:

A Smart City is about collaboration, being innovative, efficient and resourceful. This means learning and sharing with municipalities locally and globally. A Smart City is about connecting ideas and moving forward efficiently. It is important to share resources and collaborate with local municipalities as this will bring more benefits to citizens.

Sustainable Model: There must be a sustainable model in order for Smart City projects and initiatives to be successful. Smart City projects are not one-time initiatives. There needs to be an ecosystem and model in place to promote buy in from the community and citizens. Partners are an important part of the ecosystem and they need to contribute to the Smart City platform.

Sense of Urgency: A sense of urgency must be created for Smart City initiatives to move forward. This is not a 'nice to have'. There needs to be a sense of urgency, we are creating a city that can react quickly.

Communication: It is important to communicate to both staff and citizens. Smart City initiatives need to be included in Vaughan's strategic plan so this can be top of mind for all staff. Smart City initiatives must be communicated in a way that is understood by citizens and staff. Benefits of a Smart City need to be conveyed clearly to citizens in order to obtain their buy in. Vaughan's Smart City journey is being captured and disseminated to citizens through the website Vaughan.ca/SmartCity

Risk Averse Culture of Cities: Governments are traditionally risk averse and are not willing to try new processes because they are afraid to fail. Leadership should take some risks and if the direction is set by leadership, staff are more willing to take on risks.

Must be Measurable: The progress and success of projects and initiatives must be measurable. It is important to assess which projects will

bring the biggest results and impacts. Citizens will not measure success by going through Vaughan's strategic plan, but citizens will measure by their experience.

Infrastructure is Important: The right infrastructure needs to be in place to provide a supportive environment for Smart City initiatives. It was recommended that when speaking of infrastructure, other forms of infrastructure need to be included, not just roads, bridges and transit. It should also include technological infrastructure, such as broadband, which is important for Smart City initiatives and social infrastructure, such as community services and public facilities.

Data Governance, Intellectual Property and Privacy Issues

Big data and sensors are synonymous with Smart Cities and therefore data governance and intellectual property, resulting from Smart City initiatives, need to be examined and taken into consideration. Smart City technology and initiatives should be implemented for the greater good of citizens, and therefore data and intellectual property need to be protected to ensure this happens and to prevent misuse. Lessons should be taken from the Toronto Waterfront and Sidewalk labs experience with regards to data governance and privacy issues.

Continuation of the Smart City Advisory Task Force

The City of Vaughan is in the midst of an important transformation and there is a strong sense of urgency for Vaughan to adopt a Smart City approach and implement Smart City initiatives. In order to maintain this momentum, it is important for the Mayor and Council to continue to take on a leadership role in driving this transformation. It is vital that the Mayor's Smart City Advisory Task Force continue into the next term of Council in order to continue moving the Smart Cities movement forward in Vaughan.

RECOMMENDATIONS AND NEXT STEPS

Based on the findings and results from the citizen engagement and consultation process, the Smart City Advisory Task Force recommends the following:

- 1** The City of Vaughan recognize and incorporate Smart City as a priority in the 2019-2023 Term of Council Service Excellence Map;
- 2** A Smart City citizen engagement plan be developed;
- 3** Continuation of the Mayor's Smart City Advisory Task Force for the next term of Council;
- 4** The Economic and Cultural Development department be identified in the Corporation's Organizational Structure as the lead for all Smart City initiatives; and
- 5** Staff in the Economic and Cultural Development prepare, a multi-year business plan, strategic roadmap and budget for inclusion in the 2019 Budget process.

The Business plan should include the following priority action items:

- Conduct a survey and mapping of existing Smart City initiatives that are already underway within the various city departments and divisions to identify strengths and gaps. This mapping will help form a basis for the development of a Smart City roadmap.
- Identify best practices from cities around the world that have implemented successful Smart City initiative to solve challenges based on citizen priorities.
- Consider and actively pursue alternative funding models and opportunities for Smart City initiatives, such as crowdsourcing and fundraising. Options could include the creation of a Smart City fund, which would include contributions from businesses, community partners, City of Vaughan, York Region and other government sources. Another option may be to include dedicated Smart City funding in the City's annual budget.
- Examine and investigate policies around data governance and intellectual property of Smart City developments.
- Create an innovation platform for businesses, entrepreneurs, community partners, and cities to provide input and feed into the City of Vaughan's Smart City roadmap.
- Vaughan to create its own "Supercluster" for innovation.
- Establish a start up/scale up ecosystem to support Vaughan entrepreneurs.
- Establish Vaughan sponsored co-working/incubator space, that can also be an event space for people to collaborate in the sharing of ideas.
- Investigate the demand and need for expanded communication infrastructure network investments required to support Smart City developments.
- Develop a "One Vaughan Portal" and App with real-time information on traffic, events and other services.
- Create a Vaughan Smart City 3D model to communicate to citizens what a Smart City would look like and the potential benefits.
- Consider Smart City pilot projects in the Vaughan Metropolitan Centre, in order to capture unique opportunities for seamless integration while the City's new downtown is still at the development stage.

MAYOR MAURIZIO BEVILACQUA SMART CITY ADVISORY TASK FORCE MEMBERS

SCATF Chair

Hon. Maurizio Bevilacqua P.C., Mayor

SCATF Vice Chair

Sandra Yeung Racco, Ward 4 Councillor

ARTS, CULTURE + MEDIA

Fawn Annan
Peter Lyman
Ana Serrano
Kathleen Webb

CITY INFRASTRUCTURE

John Campbell
Lucy Casacia
Dr. Judy Farvolden
Johanne Mullen
David Ticoll

CONSTRUCTION & DEVELOPMENT

Peter Cortellucci
Ted Maulucci

EDUCATION

Dr. Rick Huijbregts
Margie Singleton

ENVIRONMENTAL SUSTAINABILITY

Edward Graham
Glenn MacMillan

FINANCIAL SERVICES

William Mougayar

HEALTHCARE + MEDICAL

Dr. Wendy Cukier
Richard Tam

INFORMATION + TECHNOLOGY

Suparno Banerjee
Tony Di Benedetto
Ross DiStefano
Paul Gortana
Steve Lu
Julie Morin
Jessica Rawlley
Regan Watts
Benjamin Junmin Xiao

INNOVATION + RESEARCH

Dr. Andrew Maxwell
Dr. Mark Roseman
Dr. David A. Wolfe

MANUFACTURING

Mark Falbo
John Frangella
Rocky Stefano

SOCIAL ISSUES INCLUSION, DIVERSITY + WELFARE

Todd Hofley
Jane Wedlock

CITIZEN REPRESENTATIVES

Pina D'Agostino
Victoria Iacovazzi
Teresa Moore
Sandy Palombo
Hiten Patel
Yuliya Sukharyeva
Steve Yanofsky



City of Vaughan

Office of the Chief Corporate Initiatives
and Intergovernmental Relations

905.832.2264 x8427

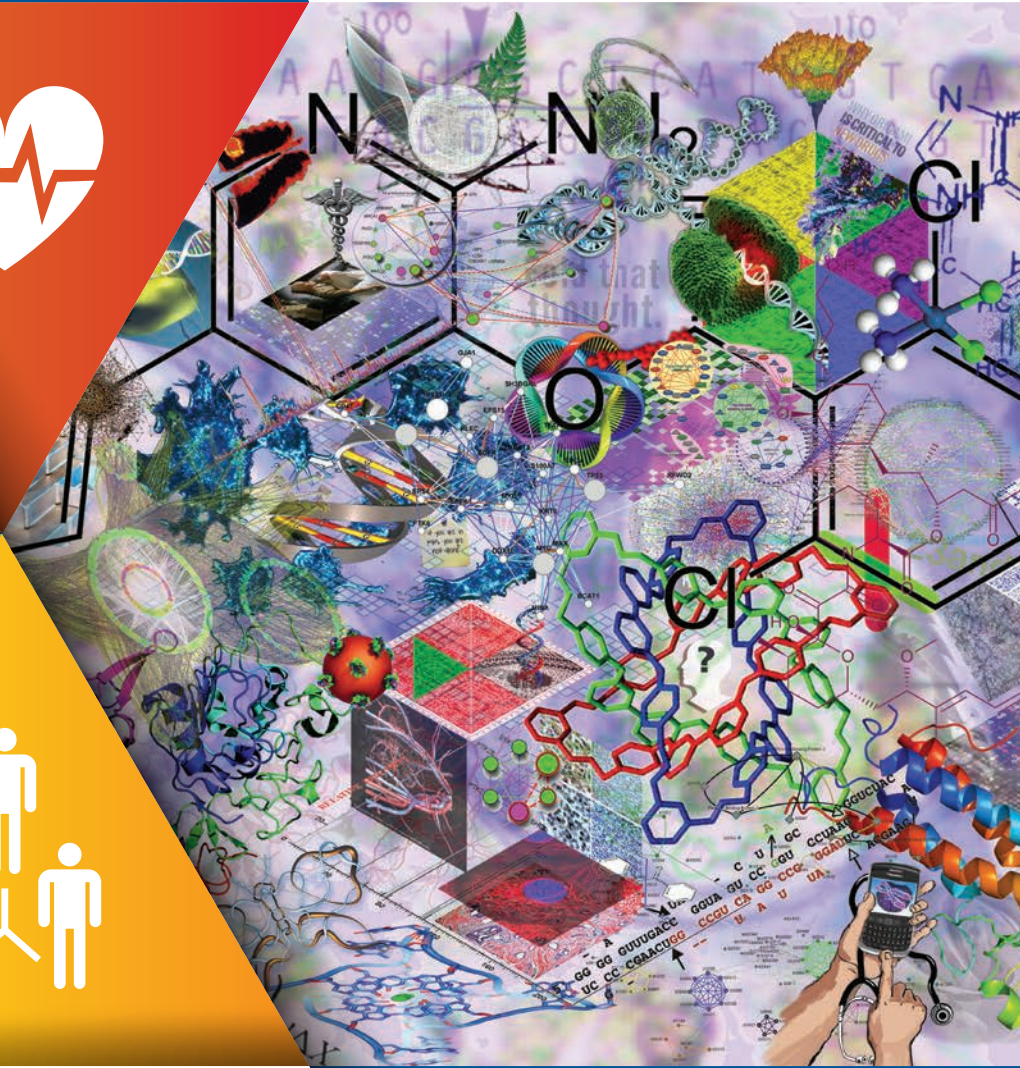
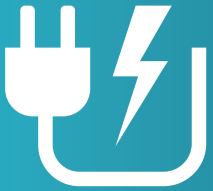
2141 Major Mackenzie Drive
Vaughan, Ontario
L6A 4Y1



Mayor Maurizio Bevilacqua

ATTACHMENT 2

Smart City Advisory Task Force



Facilitator
+ Stakeholders



vaughan.ca

Message from the Mayor



Hon. Maurizio Bevilacqua P.C., Mayor
Chair, Smart City Advisory Task Force

Vaughan is in the midst of a historic transformation. As we continue to move forward, it is important to empower the community to think about the future. Working to become a smart city is a chance to encourage civic engagement, accelerate economic growth and generate efficiencies. It puts Vaughan on the leading edge of innovation to adapt to a growing community that values sustainability and creativity.

With the population expected to surpass 400,000 in the next 10 years, establishing a Smart City Advisory Task Force is vital to find new ways to adapt to change, improve the citizen experience and enhance our quality of life. This important group will work to advance a culture of knowledge and pursue continuous improvement.

My vision for Vaughan has always been clear — to build a place where people can live happy, healthy and fulfilling lives. I championed the creation of this task force to continue to make a significant impact on every aspect of citizen life. From improving infrastructure and roads to recreation and healthcare, investing in smart city initiatives is a step in the right direction.

This task force reflects a commitment to building a world-class city that uses technology, data and social intelligence to improve the community's standard of living. Together, we are making a positive contribution to the well-being of our great city. With teamwork and strong values, we will get to the next level and continue to make Vaughan the place to be.

Sincerely,

A handwritten signature in blue ink that reads "Maurizio Bevilacqua". The signature is fluid and cursive.

Hon. Maurizio Bevilacqua, P.C.
Mayor



A smart city uses technology and data to improve livability and opportunities for the City and its citizens.

BACKGROUNDER

Mayor Maurizio Bevilacqua, Chair of the Vaughan Metropolitan Centre Sub-Committee, requested that the Chief Corporate Initiatives and Intergovernmental Relations report back to the May 18, 2016, (Item 3, Report No. 2) that lays out a Terms of Reference for the creation of a Smart City Advisory Task Force to explore, study, recommend and advance actions necessary to further Vaughan's growth as a Smart City.

Establishing a Smart City Advisory Task Force (SCATF) will better enable staff to meet the challenges and opportunities of the growing digital and urban society, where leading municipalities are embracing "smart city" principles and technologies. The community perspectives in the development of a smart city initiative will provide recommendations of smart city technologies for Council's ultimate consideration.

PURPOSE

The Task Force's primary objective will be to provide advice to Council and the City administration, including high-level political and community perspectives into the development of a smart city initiative.

Bill Hutchison has been appointed the Facilitator of the Mayor's Smart City Advisory Task Force supporting the chairs and co-chair to lead a series of workshops of citizen-focused priority areas from which stakeholders have been selected.

The citizen workshops and working groups will provide citizen engagement and input towards future strategies and ideas.

TASK FORCE MEMBERS

Members of the Task Force include citizens and stakeholders with leadership roles in sectors of importance to Vaughan although they may not live in Vaughan. Stakeholders represent the following areas: education, social issues of inclusion, diversity and welfare, media, arts and culture, health care and medical; innovation and research, information and technology, city infrastructure, construction and development; environmental sustainability and financial services.

SCATF Vice Chair



Sandra Yeung Racco, Ward 4 Councillor

SCATF Vice Chair

During her four terms on Vaughan council, Councillor Sandra Yeung Racco has been a driving force in bringing new parks, community centres and other vital services to her constituents. She has played an integral role in arts and cultural initiatives, addressed the needs of youth and seniors, and collaborated with various levels of government to get much needed infrastructure in place, including the opening of the subway into the City of Vaughan.

Over the years, Sandra has participated and led a number of trade missions to Asia to develop international business relationships and bring forward mutually beneficial and positive economic growth. Sandra's background and experience blend business relations, the arts, family and a complex understanding of the priorities of residents and stakeholders to deliver positive results and to build a vibrant Vaughan.

Facilitator + Consultant



Bill Hutchison, P.Eng., FCIPS, FWAPS

Smart City Consultant

Bill Hutchison has been a leader in the creation, development and assessment of Smart/Intelligent/Sustainable/Resilient Cities for more than 20 years. Bill is Co-Founder and Chair of the i-CANADA Alliance of 70 Canadian Cities working to become global smart city leaders, and he is a Distinguished Research Fellow of the Innovation Policy Lab in the Munk School, University of Toronto. He is a member of three university technology and innovation research advisory boards at the University of Toronto and was the founding Co-Chair and now continuing member of the Toronto Region Board of Trade's Smart Cities Working Group.

In 1994-97 he was Vice Chair and Co-Founder of Smart Toronto, one of the world's first Smart City initiatives. His subsequent award-winning urban transformation relationships have included Singapore's Intelligent Island, Hong Kong's CyberPort, named the 2015 Top Innovation District in China, and Malaysia's Multimedia Super Corridor. Bill directed the Waterfront Toronto Intelligent Community initiative from 2005 to 2011. Among his Waterfront Toronto innovations was the creation of the world's pioneering all fibre-to-the-home community gigabit broadband infrastructure in 2010. With Bill's input, the City of Toronto has won the Intelligent Community Forum's global Intelligent Community awards; Top 7 in 2010 and 2013 and #1 in 2014. Bill has been advising cities around the world including Moscow and Astana, the capital city of Kazakhstan, which have each been recognized with Smart 21 or Smart 7 awards in the Intelligent Community Forum's 15-year annual global competition for Intelligent Community of the Year.

ARTS, CULTURE + MEDIA



Kathleen Webb

President, CRS Technology Corporation, New Media Business Alliance

Kathleen Webb's specialty is forming partnerships and collaborations between academic institutions, non-profit associations, government agencies, content producers and technology suppliers. Clients have included DeTeBerkom/Deutsche Telekom AG, Communications and Information Technology Ontario, Sheridan College, George Brown College, the Ontario Media Development Corporation, Information Technology Association of Canada, Interactive Ontario (formerly the New Media Business Alliance), New Media BC, Alliance Numeriq, Greater Toronto Marketing Alliance, Canadian eLearning Enterprise Alliance, FITC Design and Technology Events, Toronto Flash Users Group, Computer Animation Studios of Ontario, Communitech, Ryerson University, OCAD University, Algoma University, Nordicity, CANARIE and the Mobile Experience Innovation Centre.



Ana Serrano

Chief Digital Officer of the CFC & Founder of CFC Media Lab

Ana Serrano is the Chief Digital Officer of the Canadian Film Centre and Founder of CFC Media Lab, the world-renowned institute for interactive storytelling created in 1997. Ana Serrano is driving the digital transformation of the CFC into a unique blend of talent, product and company accelerator and creative production house. Most recently, she launched Canada's first digital entertainment accelerator IDEABOOST and serves as its Managing Director. To date, Serrano has directed the development of over 130 digital media projects, mentored over 50 start-ups, and has received numerous awards from the digital media, film and theatre industries in both Canada and the U.S., including a Digital Media Trailblazing Award in 2015 from the Academy of Canadian Cinema & Television.

ARTS, CULTURE + MEDIA



Fawn Annan

President & Chief Marketing Officer, IT World Canada

Fawn Annan is the President and Group Publisher of IT World Canada/IDG Canada, the largest global IT media company located in 87 countries. Its global brands such as CIO and ComputerWorld are written with local views for global IT issues. As a female leader she represents one of three women presidents within the 87 IDG countries, allowing her to place emphasis on the role of women in IT. As Canada's number one IT publisher, Fawn also works on two strategic committees for the IAB (Interactive Advertising Bureau) helping to shape Canada's recommendations for digital policies. Fawn attended York University for Business Communications, with a minor in Political Science.



Peter Lyman

**Adjunct Professor at Schulich School of Business, York University,
& Senior Partner, Nordicity**

Peter Lyman is an internationally recognized expert in the arts, media and communications industry with almost 30 years of consulting experience. He has participated in all facets of the regulatory, policy development, program evaluation, economic analysis and business strategy formulation in the digital and traditional media and communications sectors in Canada and abroad. He has broad cross-creative sector expertise, involving multiple creative sectors in terms of common issues and solutions (e.g., skills development, financing and R&D/design). Peter has deep knowledge of the arts and cultural industries, including the film/TV production sector, in particular through its transmedia incarnation through multiple platforms.

CITY INFRASTRUCTURE



John Campbell

CEO & Principal, Renovo Advisory Services Ltd

John Campbell provides advisory services to public- and private-sector clients on real estate matters. Current and recent clients include government agency UrbanGrowth, NSW in Australia — next phase of Sydney Harbour revitalization; Metrolinx — real estate organization and Land Value Capture (LVC) opportunities; World Expo Bid Corporation — Toronto 2025 feasibility study; University of Saskatchewan — land development; City of Hamilton — Pier 8 land development and Stelco lands. He is contracted to Waterfront Toronto to December 2015 through a consulting arrangement (approx. 80 per cent) to execute responsibilities of President and CEO.



Dr. Judy Farvolden

Director, iCity Research, University of Toronto

Dr. Judy Farvolden is the founding program director of the Transportation Research Institute at the University of Toronto. This appointment brings her back full circle to transportation research after two decades in financial risk management and banking technology. In that time she held senior management roles in professional services, research management, communications, business development and software development. Graduate studies in both urban planning and transportation and operations research have prepared her to collaborate effectively with large multidisciplinary teams.



David Ticoll

Distinguished Senior Fellow, Innovation Policy Lab,
Munk School of Global Affairs, University of Toronto

David Ticoll is a Canadian and international authority on the policy, business and social implications of technology innovation and an accomplished private-sector and social entrepreneur. David now focuses on helping organizations and governments design strategies to maximize the benefits of vehicle automation. David is the author of *Driving Changes: Automated Vehicles in Toronto*. In 2009 David initiated and led the creation of Business Technology Management, a professional education program now in place/in development at over 50 college, university undergraduate, MBA and continuing education institutions across Canada. He is co-author of *The Naked Corporation: How the Age of Transparency Will Revolutionize Business* and *Digital Capital: Harnessing the Power of Business Webs*.

CITY INFRASTRUCTURE



Johanne Mullen

Partner, National Leader of Capital Projects & Infrastructure Group, PwC

Johanne Mullen has over 20 years of experience in the areas of capital project advisory, complex procurement advisory, project finance and public-private partnerships. She has worked with both the public and private sectors in structuring large projects in the transportation, health and urban infrastructure sectors. Johanne is a director and past president of the Institut pour les partenariats public-privé du Québec and a Director of the Canadian Council for Public Private Partnerships.

Prior to joining PricewaterhouseCoopers Financial Advisory Services Practice in February 2000, Johanne was with the Export Development Corporation ("EDC") where she served in several roles related to finance and lending. From 1995 to 2000, she focused on the transportation industry, structuring and arranging international financing in the rail and aerospace sectors.



Lucy Casacia

VP Cities and Infrastructure Projects, Siemens Canada
Specialty in Digital Cities, Smarter Cities and Intelligent Infrastructure

As the VP of Cities and Infrastructure Projects, Lucy Casacia is responsible for all related activities for Siemens in Canada related to Smart Cities, Intelligent Infrastructure and Sustainable City Solutions. Specifically, she is responsible for providing support, strategic input for city-building, resiliency and best practice sharing for Siemens' Urban Technology portfolio. Lucy is a well-known speaker in the realm of smart infrastructure solutions, CO2 mitigation strategies, resiliency and future ready critical infrastructure. She is part of a global team based in London, UK, Atlanta, USA and works directly with Siemens cities specialists to bring best practices from Siemens' experience around the globe.

CONSTRUCTION & DEVELOPMENT



Peter Cortellucci

Vice President, Cortel Group

Peter Cortellucci B. MOS is an accomplished and visionary real estate developer with over nine years of experience and a knack for strategic management and creative thinking. Peter has a proven track record of assessing key real estate markets, analyzing relevant demographic data, securing complex government approvals, expediting development and construction processes, and ensuring profitable and successful development efforts. Outside of his professional activities he has dedicated his time and resources to numerous charitable organizations including the Luminato Arts Festival and The Children's Aid Foundation.



Ted Maulucci

Chief Information Officer, SmartONE Solutions Inc

Ted Maulucci is the President of SmartONE solutions, a company committed to enhancing the living experience in communities through technology. Ted is a leader in the smart and connected building space, pioneering some of Canada's most advanced digital communities. He is passionate about contributing and advancing innovation across Canada. He was named the Private Sector Canadian CIO of the Year in 2016, and has been awarded several local and national awards for his volunteer activities and contribution to Canadian Innovation.

EDUCATION



Margie Singleton

Chief Executive Officer, Vaughan Public Libraries

Margie Singleton is the Chief Executive Officer of Vaughan Public Libraries. Under Margie's leadership, Vaughan Public Libraries has become recognized as an award-winning, innovative, empowering employer that facilitates community engagement, inspires creation and stimulates learning. Vibrant marketplaces showcase library materials, digital technologies encourage exploration and connections to the natural environment are maximized in Vaughan Public Libraries' facilities earning the newest location, the Civic Centre Resource Library, the accolade of "one of Canada's coolest libraries." Margie is active within the library profession currently on the Board of Directors of the Federation of Ontario Public Libraries as Past Chair, having acted as Chair of the Board of Directors for two years. Margie is a frequent guest speaker at library conferences and training opportunities, and an enthusiastic mentor for newer librarians. Margie is a graduate of Queen's University, Dalhousie University and York University.



Dr. Rick Huijbregts

Vice President, Strategy and Innovation, George Brown College

Dr. Rick Huijbregts is a thought leader, public speaker, innovator and advisor on so many things that shape our digital future. As Vice President & Strategy and Innovation and member of the corporate leadership team at George Brown College, Rick is responsible for the College's vision and strategy for 2030, applied research, entrepreneurship, and partnerships with industry and community stakeholders. Rick is also Faculty at the Harvard Graduate School of Design Executive Education program. Here he leads courses on "Future Cities" and "Digital Buildings", and is also a lecturer for the "Leading and Design Thinking" and prestigious AMDP Alumni Executive Program. Rick holds a Bachelor's degree in construction management from the Tilburg Polytechnic University in the Netherlands; an honorary Bachelor's degree in technology in construction management from George Brown College; a Master's degree in real estate development and project management from Delft University in the Netherlands; and a Doctorate from Harvard University with a specialization in real estate technology and investment management.

ENVIRONMENTAL SUSTAINABILITY



Glenn MacMillan

Senior Manager, Water & Energy, Toronto Region Conservation Authority

Glenn MacMillan is the Senior Manager of Water and Energy with the Toronto Region Conservation Authority. He is responsible for leading the planning, development and implementation of the Sustainable Technologies Evaluation Program and The Living City Campus: Canada's Innovation Park, which is part of the Building Research Establishment (BRE) International Innovation Parks Global Network. The Campus provides technology evaluations, performance verifications and professional training events. Canada's Innovation Park will be a seven-building campus in Kleinburg used to test and monitor innovative and green building products, materials and technologies, many of which have not been released into the commercial market.



Edward Graham

President, Civica Infrastructure Inc

Edward Graham (M.A.Sc.Eng., P.Eng.) is the founder and President of Civica Infrastructure Inc., and leads a team of dedicated professionals providing services to public- and private-sector clients in Ontario, as well as developing specialized software products for the water resources sector. Civica specializes in the optimization of municipal drainage system capacity, including inflow and infiltration reduction, water balance modelling, basement flood remediation, floodplain mapping, etc. They provide consulting and contracting services, and develop and support products such as DataCurrent, Visual OTTHYMO and SWMSOft.

FINANCIAL SERVICES



William Mougayar

Author, *The Business Blockchain*

William Mougayar is a widely respected blockchain thought leader, an investor, researcher, blogger and best-selling author of *The Business Blockchain* (Wiley, 2016). He is a direct participant in the crypto-technology market, working alongside startups, entrepreneurs, pioneers, leaders, innovators, creators, enterprise executives, CEOs and practitioners.

William is the General Partner at Virtual Capital Ventures, an early stage venture capital fund, and currently on the Board of Directors of OB1, the OpenBazaar open source protocol that is pioneering decentralized peer-to-peer commerce, a former Board Advisor to the Ethereum Foundation, board member at Stratum, a member of OMERS Ventures Board of Advisors, an Advisory Board member to Coin Center, Cofoundit, Bloq and other leading blockchain organizations.

The City of Vaughan has adopted a citizen-centric approach to defining its priorities as it moves forward to global Smart City status. The SCATF comprised of industry professionals, academia and community members will contribute their experience and perspectives into the development of a Smart City initiative, and endorse/recommend Smart City technologies for Council's consideration. A significant function of the Smart City Advisory Task Force's role will be an engaging workshop series led by Bill Hutchison to provide citizen input to future Smart City strategies and ideas that will focus on different areas of importance to Vaughan.

The SCATF will explore, study, recommend and advance actions necessary to further Vaughan's growth as a global Smart City and to embrace "SMART" principles and technologies.

The need for a Smart City... "Communities and nations who devise how to keep pace with this ever advancing frontier while managing the associated business, societal and technology risks, will enjoy the fruits of economic and competitive leadership. They will provide the societal prosperity for their citizens in terms of education, jobs, healthcare, entertainment and digital democracies; and prosperity that will help to finance their ever evolving creative institutions."

- William (Bill) Hutchison, Chair i-CANADA Alliance and Distinguished Research Fellow, Munk School, University of Toronto

HEALTHCARE + MEDICAL



Richard Tam

Executive Vice President & Chief Administrative Officer, Mackenzie Health
and Chief Financial Officer of Mackenzie Innovation Institute

Richard Tam is the Executive Vice President & Chief Administrative Officer at Mackenzie Health and Chief Financial Officer of Mackenzie Innovation Institute. He has been in the healthcare industry for more than 20 years and has played a pivotal role in implementing financial best practices and developing new business models with a focus on innovation and technology-enabled healthcare delivery. Richard actively participates in various committees in the health and technology sectors and the local community.



Dr. Wendy Cukier

Chair, Women's College Hospital,
Professor, Information Technology, School of ITM, Ryerson University

Dr. Wendy Cukier is a Professor of Information Technology Management and founder of the Diversity Institute at the Ted Rogers School of Management. She recently completed a successful five-year term as the Vice President of Research and Innovation during which she increased research funding by 60 per cent and helped build the innovation ecosystem. Previously, she was the Associate Dean of the Ted Rogers School of Management, Canada's largest business school. Wendy has written more than 200 papers on technology, innovation and management, and is coauthor of the bestseller *Innovation Nation: Canadian Leadership from Java to Jurassic Park*.

INFORMATION + TECHNOLOGY



Steve Lu

President, Huawei Canada

Steve Lu is the President of Huawei Technologies (Canada). He is responsible for building Huawei's business and corporate presence in Canada. Prior to his appointment as President in 2017, Mr. Lu was the Vice President of Marketing and Solutions Sales and the President of Enterprise and Channel Sales at Huawei Canada.

Mr. Lu has held a number of leadership roles for Huawei in markets around the world. He was the Deputy General Manager of Solution Sales at Huawei Egypt, the General Manager for Huawei Cyprus and the Key Account Director for Huawei North Africa Region. Mr. Lu graduated from Ocean University of China and is now based at the Huawei Canada headquarters in York Region.



Suparno Banerjee

Vice President, Hewlett Packard Enterprise's (HPE) Worldwide Public Sector, Healthcare and Life Sciences (HLS)

Suparno Banerjee is Vice President of Hewlett Packard Enterprise's (HPE) Worldwide Public Sector, and Healthcare and Life Sciences (HLS) industry verticals. He also leads HPE's Future City initiative. Suparno's mandate is to drive innovation, profitable and strategic new market growth, expand go-to-market channels, and develop internal capacity and capabilities in Public Sector, Future City and HLS markets. These markets account for over a fifth of HPE's business. Suparno holds a Bachelor's degree in Mechanical Engineering and a Master's in Business Administration.



Tony Di Benedetto

CEO, Drone Delivery Canada

Tony Di Benedetto has been actively involved in the Canadian technology services sectors since the early 1990s and has built a number of tech companies including internet hosting providers, managed service providers, wireless broadband networks and data centre facilities. Tony is active in a number of other ventures including Data Centre Realty, Di Benedetto Group and MS Transactions. Tony brings over 17 years of IT entrepreneurship, technology M&A, and capital markets experience to Drone Delivery Canada's management team. He received his degree at York University and is actively involved in the Rotman School of Business mentorship program.

INFORMATION + TECHNOLOGY



Ross DiStefano

Founder & CEO, QuoteThisProject

Ross DiStefano has been in the technology field for over 22 years spearheading new technology start-ups from the Silicon Valley region. In the past, Ross has brought new technologies to Canada as Canadian Country Manager for seven new emerging and disruptive technologies. He has also helped various US tech start-ups break ground in Canada with sales & marketing positions.

Ross created two apps in 2016/2017: Lasteek and QuoteThisProject. The Lasteek app is an event networking app that connects colleagues, partners and prospects at large industry-specific conferences. The QuoteThisProject app connects homeowners to available and nearby trades & contractors that are willing and interested to bid on posted homeowner repairs and renovations.



Jessica Rawlley

Co-Founder & CMO, MaaS Pros

Jessica Rawlley is the Co-Founder & CMO of MaaS Pros, a company that specializes in creating industry-specific applications, including a loyalty management platform for real estate agents, an auto dealer management app, carpool web and mobile applications and, more recently, a powerful business management & marketing platform called the TieIT App — a carefully crafted application that combines modules to help businesses reduce from having to use and pay for five or more different applications.



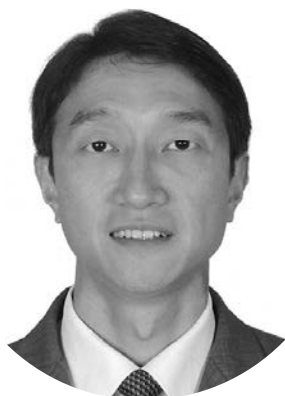
Regan Watts

Head of Innovation, Corporate and Government Affairs, IBM Canada

Regan Watts is a skilled cross-functional executive with more than 14 years of public- and private-sector experience in strategy, marketing, communications and public/corporate/regulatory affairs across a variety of sectors including information technology, financial services, capital markets, healthcare, infrastructure, transportation, construction and industrial manufacturing.

Regan leads IBM Canada's Innovation, Corporate and Government Affairs team, and was appointed to this role in 2017. He first joined IBM Canada in 2016 to lead IBM Canada's government and regulatory affairs activities at the federal, provincial and municipal levels. A resident of Toronto, Regan holds an MBA from the Ivey Business School at Western.

INFORMATION + TECHNOLOGY



Benjamin Junmin Xiao

General Manager, Business Solutions, CIK Telecom

Benjamin Jumin Xiao is a Senior Management Executive with more than 15 years experience directing operations of growth-oriented firms in the Canadian telecom & IoT industry. As well, Benjamin has worked in R&D as the Senior Architecture System Engineer and as the Senior Marketing Director in countries across Europe, Asia and America.

CIK Telecom is a telecommunications and multi-media services company founded in 2003 in Toronto. CIK employs more than 400 staff with offices located in Canada, United States, China, Vietnam, India and Morocco.



Julie Morin

Canadian City IoT and Smart City Technology Lead, Microsoft

Julie Morin is part of the Microsoft Internet of Things (IoT), Global Black Belt team tasked in helping public- and private-sector customers accelerate their digital business transformation through IOT and Smart City initiatives.

She brings experience in driving technology initiatives with Canadian organizations and finding innovative solutions to address high-value digital transformation projects. Julie is in line with the industry's fast-changing requirements for enterprises looking for guidance with Internet of Things, predictive analytics, and machine data strategy while ensuring compliance and security.



Paul Gortana

Director of Sales, Ontario Public Sector, Bell Business Markets

As Director of Sales at Bell Business Markets, Paul Gortana leads Bell's Ontario Public Sector team. With more than 20 years of telecommunications and technology experience, Paul is recognized for developing innovative go-to-market strategies that support transformation, modernization and forward-thinking solutions in the manufacturing, finance and service industries, in addition to the public sector. As a proud resident of Vaughan, Paul has a unique perspective on how technology can be used as an enabler providing positive change within society.

INNOVATION + RESEARCH



David A. Wolfe

Professor of Political Science, University of Toronto; Co-Director of the Innovation Policy Lab at the Munk School of Global Affairs

Dr. David A. Wolfe is Professor of Political Science at the University of Toronto Mississauga and Co-Director of the Innovation Policy Lab at the Munk School of Global Affairs. From 2009 to 2014, he was the Royal Bank Chair in Public and Economic Policy at the University of Toronto. He has been the Principal Investigator on two Major Collaborative Research Initiatives funded by the Social Sciences and Humanities Research Council. He is currently leading a five-year SSHRC-funded Partnership Grant on Creating Digital Opportunity for Canada. Prof. Wolfe has published extensively on cluster dynamics, innovation policy and related knowledge-based economic development. He is the editor or co-editor of ten books and numerous scholarly articles. His most recent book, co-edited with Meric Gertler, is *Growing Urban Economies: Innovation, Creativity and Governance in Canadian City-Regions*.



Dr. Andrew Maxwell

Director, Bergeron Entrepreneurs in Science and Technology, Lassonde School of Engineering, York University

As Director of Bergeron Entrepreneurs in Science and Technology (BEST), Dr. Maxwell teaches technology entrepreneurship and commercialization, based on his extensive research in this area. At Lassonde, Dr. Maxwell constantly innovates the BEST experience, by enhancing students' educational experience, supporting entrepreneurial ventures and working at the interface of technology and business (both as an academic and practitioner).



Dr. Mark Roseman

Director, Strategic and Institutional Research Initiatives at Office of Research Services, York University

Dr. Mark Roseman leads a high-performing team that works closely with senior university leadership to advance the institution's large-scale and strategic research initiatives. Previously, Mark served as Director of the Ontario Strategy for Patient-Oriented Research SUPPORT Unit, where he oversaw the launch and operations of the \$100-million federal-provincial initiative. Prior to that, Mark served in the Ontario government in progressive roles, including Manager of the Ontario Network of Excellence, Policy Advisor in the Cabinet Office, and Special Policy Advisor to the Chair of the Ontario Research and Innovation Council.

MANUFACTURING



John Frangella

CEO & Co-Founder, Proto3000 3D Engineering

John Frangella has been in the manufacturing and lean process environments for over 28 years. Looking for a better way is part of his DNA. Being a Managing Director for several companies in the food, high-tech, hardware communication, additive manufacturing and metrology, John is always ready to listen and give guidance to those who are ready to take the next steps in their organization. John and his team connect companies and individuals to the tools they need in order to achieve greater capability, scalability and efficiency.



Mark Falbo

President, Mircom Group of Companies

Mark Falbo has spent greater than 20 years as an Executive Manager and entrepreneur possessing global legal, financial and strategic management skills and experience. Mark also has a long history of community and civic leadership and involvement.

As the President of the Mircom Group of Companies, Mark is responsible for all facets, geographies and markets of the business. With over 20 offices, Mircom is a global technology company providing sophisticated Fire Detection and Alarm, Security and Communications and Smart Building Systems Technologies to clients in over 100 countries. Mircom has been named a Canada's Best Managed Company – Gold Standard Member, a Branham300/ICT250 Company, a *Profit Magazine* Canada's Fastest Growing 500 company, a US Edison Award Gold Medalist, 2015 Ontario Exporter of the Year and a Vaughan Chamber of Commerce Lifetime Achievement winner.



Rocky Stefano

Chief Executive Officer, Identita Inc.

Rocky Stefano is the CEO of Identita, a boutique security firm specializing in access control solutions that is committed to the development of excellence in biometrics, access control and mobile security. Identita consults to business, academia and central government organizations on topics as diverse as Radio Frequency Identification (RFID) technologies, and data protection awareness and biometrics, especially identity cards. Rocky has worked with biometric access control, privacy and information security management for the past 22 years in roles that cover technology, management and consultancy.

SOCIAL ISSUES

INCLUSION, DIVERSITY & WELFARE



Jane Wedlock

Manager, Public Affairs, United Way Toronto

Prior to joining United Way in 2011, Jane Wedlock was Executive Director/Community Strategist with York Region Alliance to End Homelessness leading efforts to raise awareness and develop collaborative responses to the challenges facing people living on low income in York Region. In a unique partnership between United Way and York University, she provided community-based knowledge mobilization services in York Region building relationships and brokering partnerships between community organizations and faculty/students to enhance the impact of university research on public policy and professional practice. She has been involved in a number of major collaborative research projects. She was a member of the Vaughan Community Wellbeing Coalition, which produced the Measuring What Matters: The Vaughan Community Well-Being Report (2015); and is a former Chair of the Community Legal Clinic of York Region.



Todd Hofley

CEO Communityfy

Todd Hofley is a member of the Airbnb public policy team and the CEO of Communityfy, a community building consultancy. He fiercely believes in the power of social cohesion, the sharing economy and bridging online/offline communication to create hyper-local, massively engaged and connected communities. In an era of increasing vertical density and social isolation, Todd founded the Liberty Village Residents' Association to address this human-to-human disconnect and, in six years, it has become one of the largest residents' associations in the world with more than 9,500 residents regularly participating in online and offline activities. For his city-building leadership, Todd was named a Civic Action Diverse City Fellow. He consults with many other communities in Toronto, Montreal and Europe.

CITIZEN REPRESENTATIVES



Hiten Patel

Hiten, a Thornhill-Vaughan resident for 35 years, uses his background in quantitative disciplines such as statistical analysis and financial reporting to support diverse organizations in various industries to become more effective for stakeholders and run efficient and more profitable operations. As a father of three children ages 12 to 16, he is also an avid supporter of socially and physically active lifestyle through involvement as coach, instructor and administrator with youth team sports club in hockey and baseball for over ten years.



Pina D'Agostino

Pina has been a Vaughan resident for over 31 years, she is a law professor, lawyer and legal scholar at Osgoode Hall Law School specializing in intellectual property, technology and innovation law and policy. Prof D'Agostino is regularly called by the Canadian and Provincial governments for advice, is a widely published author and a cited authority at the Supreme Court of Canada and in various media. She is the Founder and Director of IP Osgoode, the IP Intensive, and the Innovation Clinic, the first legal clinic of its kind helping start-ups. Prof D'Agostino has a Masters and Doctorate in Law (University of Oxford), an LLB (Osgoode Hall Law School) and is a member of the Law Society of Ontario since 2001.



Victoria Iacovazzi

Victoria has been a Vaughan resident for over 30 years. She is a lawyer with over 20 years of experience providing strategic legal and business counsel on a broad range of matters in diverse industries locally and internationally. She has represented public, Fortune 500 and start up technology companies both as In-House Counsel and as an International Associate at global law firms. She has received awards of distinction for identifying, leading and implementing multi-stakeholder privacy-related compliance projects. Victoria is also a member of the Technology and Innovation Committee of the Vaughan Chamber of Commerce.



Sandy Palombo

Sandy is a passionate citizen of Vaughan for more than 24 years and she has over 27 years of experience in executive educational administration and complete business operations. She is the founder and Head of School for a private International Baccalaureate elementary school, Delano Academy. Sandy has spent her career developing and designing educational curriculum, designing and customizing curriculum and therapeutic treatment programs for children. As an active Vaughan resident, Sandy has and currently sits on a variety of boards related to education, soccer, community causes and disabilities in her local community.



Steve Yanofsky

Steve Yanofsky is a senior marketing and business development professional with over 15 year's experience working in Canada's consumer electronics industry. He has spearheaded a broad range of corporate innovation projects over the span of his career. Recent highlights include the development of a world-class retail and interactive product environment located in Western Canada as well as a Corporate Incubator located in Ontario's Tech Corridor.



Teresa Moore

Teresa has been a Vaughan resident for more than 20 years. Teresa is a chartered professional accountant and Partner at Collins Barrow here in Vaughan. She also has extensive experience sitting on numerous community Boards - she was a Board member for Opera York and formerly the Board Treasurer for the Community Home Assistance to Seniors, High School Advisory Council and Sports Alliance Ontario. She is currently on the Board and Audit and Governance Committees for Alectra Utilities.



Yuliya Sukharyeva

Yuliya originally came from Ukraine and she has made Vaughan her home for the past 11 years. She is a dedicated Real Estate professional here in Vaughan and is a member of the Vaughan Chamber of Commerce. Yuliya is an economist by trade, demographic trends and urbanization has been a passion of hers. Yuliya is not only an active member of our community but also internationally, you can find her teaching students in Nairobi, Kenya or supporting York Regional Police with an anti-bullying campaign.



The need for a smart city... “Communities and nations who devise how to keep pace with this ever-advancing frontier while managing the associated business, societal and technology risks, will enjoy the fruits of economic and competitive leadership. They will provide the societal prosperity for their citizens in terms of education, jobs, health care, entertainment and digital democracies; and prosperity that will help to finance their ever-evolving creative institutions.”

- William (Bill) Hutchison

The City of Vaughan has adopted a citizen-centric approach to defining its priorities as it moves forward to global smart city status. The Mayor’s Smart City Advisory Task Force (SCATF) is comprised of industry professionals, academics and community members who will contribute their experience and perspectives into the development of a smart city initiative, and endorse and recommend smart city technologies for Council’s consideration.

A significant function of the Mayor’s Smart City Advisory Task Force’s role will be an engaging workshop series led by Bill Hutchison to provide citizen input to future smart city strategies and insights that will focus on different areas of importance to Vaughan.

Broad city-wide engagement activities will include feedback on the different smart city themes and priorities, while collecting innovative ‘Big Ideas’. The SCATF will explore, study, recommend and advance actions necessary to further Vaughan’s growth, based on the findings of this engagement process.



We want your Smart City **BIG IDEAS!**

ATTACHMENT 3

The City of Vaughan is participating in the Smart City Challenge - and we need your input!

This is your opportunity to identify the priorities for your community and share **BIG IDEAS** that will shape Vaughan's future.



Get Involved! vaughan.ca/SmartCity



City of Vaughan Smart City Challenge



We want your
BIG IDEAS!

Get involved to
shape Vaughan's
future smart city...

We want your Smart City **BIG IDEAS!**



vaughan.ca/SmartCity

Smart City Workshops

We want your **BIG IDEAS!**



vaughan.ca/SmartCity

We want your Smart City BIG IDEAS!

The City of Vaughan is participating in the Smart City Challenge - and we need your input!

This is your opportunity to identify the priorities for your community and share BIG IDEAS that will shape Vaughan's future.

There are many opportunities to get involved:

- Focused Workshops
- Open Community Forums
- Survey + Comments Online



Register and tell us your ideas at: vaughan.ca/SmartCity



City of Vaughan

Smart City Challenge