



VAUGHAN HEALTHCARE CENTRE PRECINCT

Opportunities Assessment

Vaughan, ON

Prepared for the **City of Vaughan, Mackenzie Health, York University & ventureLAB**

August 31, 2021



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August 31, 2021

Mr. Raphael Costa
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Dear Raphael:

RE: Vaughan Healthcare Centre Precinct – Opportunities Assessment (Vaughan, ON)

urbanMetrics inc. (“urbanMetrics”, “uMi”) in cooperation with our project partners for this assignment—LURA Consulting (“LURA”), Sajecki Planning (“Sajecki”) and StrategyCorp (“SC”)—is pleased to submit this opportunities assessment relating to the ongoing implementation of the ambitious vision set out for the Vaughan Healthcare Centre Precinct (“VHCP”).

The primary purpose of this portion of our broader feasibility study has been to build on previous research and analysis completed by our team—per the *Existing Conditions Assessment* report of June 23, 2020—and to ultimately establish the best path forward with respect to achieving the full potential and longer-term opportunities available at the VHCP. Whereas our previous work has focused primarily on establishing past and present conditions, the information contained throughout this document is inherently more forward-looking and intended to explore a more complete range of possibilities for future growth and development at the VHCP.

To this end, we have centred our feasibility and opportunities assessment around two primary demonstrations / land use concepts: (i) a preliminary phase of development capable of achieving immediate **“Intra-Regional Significance”** in the short-term; and (ii) a more comprehensive build-out of the site over the longer-term planning horizon with the potential to solidify widespread and more meaningful **“Extra-Regional Significance”**. Through this phased approach, we have attempted to strike an appropriate balance between prevailing market realities and economic conditions while still harnessing the ambition, aspirational thinking and unique growth potential already associated with the VHCP to date.



We hope that all of the parties involved in this project—including the City of Vaughan, Mackenzie Health, York University and ventureLAB—find this information helpful as input to their ongoing evaluation as to the optimum implementation of the VHCP in the coming years.

Yours truly,

urbanMetrics

A handwritten signature in black ink, appearing to read "Chris White", is positioned below the company name.

Christopher White, PLE
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Preface

This document represents the second and final deliverable presented as part of our broader *Feasibility Study on the Economic Development Opportunities in the Vaughan Healthcare Centre Precinct (VHCP)*.

This second element of reporting has been informed directly by the various earlier research, analyses, recommendations, and other observations presented in our previous document of June 23, 2020, titled *Vaughan Healthcare Centre Precinct – Existing Conditions Assessment* and available under separate cover. We recommend that all information contained herein be reviewed in conjunction with this previous reporting and all associated summary materials.

It is also important to note at the outset of this report that—due to recent and persisting conditions relating to COVID-19—it is difficult to accurately and / or reliably determine the longer-term impacts of the pandemic on potential future investment and economic development opportunities at the VHCP.

While the uncertainty around the longer-term impacts of COVID-19 apply to more general economic conditions throughout the community of Vaughan and indeed across the Greater Toronto Area, Canada and beyond, we note that it will be of particular relevance at the VHCP given the central presence of a major healthcare institution in the Cortellucci Vaughan Hospital.

In reviewing this report, it is important to note that virtually all of the background and supporting research, as well as the resulting analyses, observations and evaluations have continued to be developed in the midst of the COVID-19 pandemic in Canada. As such, the information presented herein does not necessarily reflect the project consulting team’s observations with respect to the potential “new normal” that may be established in the coming months / years, but rather reflects the latest available research on relevant historical patterns and best practices, in addition to our professional judgement as to the potential outcomes and opportunities that could present themselves in due course.

Moving forward, it will undoubtedly be important to take these new economic and societal conditions into direct consideration as part of any ongoing and subsequent decisions relating to implementing the evolving vision for the VHCP.

Executive Summary

Introduction

- urbanMetrics and their project partners for this assignment—LURA Consulting, Sajecki Planning and StrategyCorp—have been retained as part of a multi-disciplinary project consulting team tasked with preparing a *Feasibility Study on the Economic Development Opportunities in the Vaughan Healthcare Centre Precinct* (VHCP).
- This *Opportunities Assessment* represents the second and final report prepared for this Study and builds on the previous research and analysis presented under separate cover as part of our *Existing Conditions* report of June 2020.

Opportunity & Vision

Overview

- Recent planning efforts for the VHCP have been driven by an innovative partnership—comprised of the City of Vaughan, Mackenzie Health, York University, and ventureLAB—who collectively are attempting to advance a unique and ambitious vision for a new healthcare-focused innovation and commercialization district centred around the Cortellucci Vaughan Hospital. Based on a review of other comparable employment nodes across the globe, this partnership is truly unprecedented and will serve as a critical launch pad for concept implementation.
- The VHCP offers a unique value proposition that reflects the ongoing evolution of the City of Vaughan into a major urban centre, leverages the establishment of new transportation and institutional infrastructure in York Region, as well as capitalizes on recent trends and opportunities in the economy relating to healthcare innovation and delivery; particularly in a post-COVID-19 environment.

Demonstrations & Phasing

- As part of this exercise, preliminary demonstration plans and land use concepts have been prepared for the VHCP, including two distinct phases of development beyond the existing and potential future expanded footprint of the new Cortellucci Vaughan Hospital:
 - A preliminary phase of development and necessary “first step” towards achieving **Intra-Regional Significance**—becoming a significant and influential node for healthcare innovation, commercialization, education and research within the GTA. This stage would include a York University campus presence, the introduction of a central innovation space and community

hub operated by ventureLAB in partnership with YorkU and Mackenzie Health, a flexible event venue space, supporting retail / service commercial amenities and a range of other accompanying medical and private office users.

- A longer-term and more aspirational expansion of the precinct with the potential to secure **Extra-Regional Significance** on a broader provincial or national scale, once proof-of-concept has been established and demand warrants growth in the YorkU campus and the development of a more meaningful supply of office-based employment uses. The VHCP would be recognized as an integrated, research-focused precinct with a focus on healthcare education and commercialization. Each member of the Partnership would contribute recognized expertise in research, implementation and commercialization.

Cost-Benefit Relationship

Capital Investment Requirements & Funding Options

- The functions proposed for the VHCP are uniquely aligned and well-timed with an increased societal understanding of the importance of providing high-quality health care to all and supporting related healthcare research and innovation. Emerging from this pandemic, Canadians will have a renewed sense of the value and centrality of the healthcare system. Investing in enhancing quality of care, research, education and commercialization of innovative healthcare technologies will undoubtedly be a core priority of government moving forward and could help to further secure Canada's position as a global leader in these fields.
- The VHCP will require significant external funding to support the scale of development and range of activities contemplated. The one-time capital investments required to support construction of new buildings and other remaining site-specific infrastructure (e.g., parking) could involve spending of more than \$700 million alone.
- Possible funding sources to off-set these significant one-time costs include: programs at all three levels of government, private sector participants, land disposition, direct contributions from within the VHCP Partnership, philanthropy, among other alternative cost-reduction scenarios.

Operational Considerations

- Based on the land use concepts prepared under this Study, the VHCP has the potential to be comprised of a range of users and tenants paying a combination of market and non-market lease rates. Subject to more detailed negotiations upon implementation of this vision, a large portion—if not all—of the day-to-day operating expenses can be offset by these lease

revenues and other sources of income (e.g., event venue rental, etc.). As such, it is possible that the ongoing operation of the Non-Hospital components of the VHCP could be largely self-sufficient, or reliant on minimal external financial support, once established.

Return on Investment

- The more widespread spin-off benefits and legacy economic impacts of the VHCP also form an important part of the overall business case for the significant one-time and ongoing operational investments required to implement the vision for the precinct. To this end, implementation and operation of the VHCP land use concepts is expected to generate:
 - **One-Time Impacts** – More than \$755 million in value added to the Canadian economy, opportunities for some 6,300 full-time equivalent employment positions and upwards of \$276 million in government revenues; the vast majority of which would accrue directly within the City of Vaughan and surrounding GTA Region.
 - **Recurring Impacts** – Support for a total permanent, on-site employment base of some 1,800 jobs, yielding over \$350 million in operational output each year (excluding the hospital).
 - **Other Benefits** – Opportunities to enhance the municipal profile of the City of Vaughan, attract major anchor institutions, foster a culture of entrepreneurship and innovation, as well as optimize recent and ongoing spending infrastructure, among other intangible benefits.

Implementation & Next Steps

Based on the range of financial and strategic analysis presented throughout this Study, the VHCP clearly represents a unique opportunity that merits additional pursuit, investigation and testing. To this end, the following summarizes a number of strategic recommendations and next steps resulting from this Study.

Implementation Models

- A **preferred implementation model** should be identified with respect to executing a more detailed plan for the future construction and operation of new facilities at the VHCP.
 - Our research suggests that some variation of a Municipal Development Corporation likely represents the most effective governance structure in advancing the physical development and ongoing management of the precinct, on the City's behalf.
 - This option strikes an appropriate balance between maintaining municipal ownership of the lands, allowing the flexibility to achieve similar nimbleness and responsiveness to that of a private sector organization, while also ensuring appropriate public

accountability, transparency and stakeholder input in decision-making (including ongoing advisory support from Mackenzie Health, YorkU and ventureLAB).

- Its primary shortcomings relate to the relatively high start-up costs, which could—at least in part—be mitigated as part of a number of preventative strategies, including: the establishment of a mandate for the corporation that extends beyond the VHCP lands or exploring opportunities to leverage existing internal capacities of the partnership, such as the York University Development Corporation, or Vaughan’s existing familiarity with MDC’s through the previous creation of one to collect Accommodation Tax revenues.
- Notwithstanding the above rationale, our assessment also highlights the fact that the identification of an effective implementation model or governance structure for the VHCP is highly dependent on the primary strategy outcomes identified by the City and / or the rest of the Partnership. For example, a possible **Public-Private Partnership** or a model predicated on some form of **In-House Development** within the City’s existing bureaucracy present their own unique merits and benefits to implementation. It will be incumbent upon the City and the specific users already identified for the VHCP to determine which of these outcomes should be in fact be prioritized.

Other Strategic Recommendations

- Based on a review of previous agreements and the obvious anchoring effects of the Cortellucci Vaughan Hospital, the VHCP should **protect and maintain a “hospital-first” approach** in guiding all future decision-making at the precinct.
- The City of Vaughan and its partners should **adopt a phased approach to vertical development** at the VHCP, which maintains sufficient flexibility and responds to the needs of both the Hospital and Non-Hospital portions of the precinct on an ongoing, real-time basis.
- The core stakeholders within the VHCP Partnership should **establish an agreement articulating and clarifying the individual roles, responsibilities, and obligations of each organization** as part of their commitment to realizing the precinct’s unified vision.
- The City of Vaughan—as the sole landowner and key decision-maker at the VHCP—should **additionally establish separate agreements with each individual stakeholder in the Partnership** outlining a relationship of land provision, resources, and other expectations.
- The stakeholder group should **determine internal funding capacities** and outline the outstanding resources required to deliver the first phases of development at the VHCP.

- The Partnership should enter into discussion with various government partners to explore opportunities to immediately and tangibly advance the VHCP vision.

1.0 Introduction

1.1 Background

urbanMetrics has been retained as part of a multi-disciplinary project consulting team—also including LURA Consulting, Sajecki Planning and StrategyCorp—to prepare a *Feasibility Study on the Economic Development Opportunities in the Vaughan Healthcare Centre Precinct* (“the Study”).

The findings of this Study have ultimately been presented over two distinct but related deliverables. Our previous *Vaughan Healthcare Centre Precinct Existing Conditions Assessment* was presented to the client group earlier this year in June 2020. This initial stage of reporting offered an analysis of the underlying market opportunity and feasibility of developing a new major healthcare-focused employment cluster in Vaughan. The report established an important baseline understanding of relevant demographic and employment activity in Vaughan, prevailing market conditions for various real estate asset classes, global precedent research, as well as an evaluation of potential candidate uses to be accommodated at the VHCP. As a foundational document to this Study, it continues to establish the range of potential options that could reasonably support the guiding vision set out for the VHCP.

Having completed this earlier “ground-truthing” exercise, our engagement has now shifted towards exploring potential implementation strategies, feasible land use concepts, and cost/ / revenue opportunities for the VHCP. To support this Study process, our project team has engaged in extensive stakeholder consultation, considered land use planning/ / design factors, prepared economic/ / financial modelling of the concepts ultimately proposed at the VHCP, as well as explored potential implementation options in terms of governance structure and business models.

This new report constitutes the next stage of the broader Study process. The primary purpose of this report has been to:

- identify realistic and feasible **conceptual development plans** which could be implemented on the VHCP lands;
- present a first-cut analysis of the **financial implications and potential economic benefits** associated with the visions identified; and,
- explore a range of **implementation models and governance structures** which may be most appropriate given the unique needs outlined for the VHCP.

It is anticipated that the two reports prepared as part of this engagement form a strong foundation from which the core stakeholder group can advance towards construction and ultimately the creation of a vibrant, research focused innovation district at the Healthcare Centre Precinct.

This document presents a vision for the VHCP, in addition to analysis and advice to guide next steps, identify critical economic, health and social benefits, and chart a strategic direction forward. Significant work is still required on behalf of the stakeholder group to codify detailed arrangements necessary to realizing the vision as outlined in this document. However, each stakeholder maintains a strong commitment and dedication to the broad vision outlined, and a desire to work collaboratively and be a part of the ground-breaking opportunity at the VHCP.

VHCP Partnership

The VHCP is being driven by an innovative partnership advancing a uniquely collaborative vision for the subject lands. This group (“The Partnership”) is comprised of **The City of Vaughan, Mackenzie Health, York University, and ventureLAB.**



Collectively, the expertise and physical co-location of each member organization in the Partnership provides an opportunity to leverage cross-disciplinary expertise and have the VHCP emerge as a leading medical-innovation node.

VHCP Lands

As shown in the figure below, the broader VHCP includes both the hospital and nearby non-hospital lands. We understand that Blocks 2 and 3—as defined in more detail herein and as part of our previous reporting—are reserved for the core day-to-day functions of the Mackenzie Vaughan Hospital and other potential existing and future related healthcare-focused functions (including future expansions of the hospital). By comparison, the balance of the lands within the VHCP are more likely suited for supporting a range of other associated innovation, office, research and post-secondary type uses that could further advance the underlying vision for this precinct.

While it will undoubtedly be important to undertake a holistic and all-encompassing review of the entirety of the VHCP lands, the primary focus of this Study has continued to be on evaluating opportunities on the non-hospital lands identified. This will seek to distinguish between these two types of property (i.e., hospital vs. non-hospital lands), where applicable.



Figure 1-1: Map of VHCP Lands



SOURCE: urbanMetrics. The “Hospital Lands” shown here include the Mackenzie Vaughan Hospital, as well as other lands that could potentially support additional existing and potential future hospital-adjacent healthcare-related functions and / or expansion opportunities. “Non-Hospital Lands” include the balance of remaining lands located within the broader VHCP and represent the primary focus of this study.

1.2 Process

The purpose of this *Opportunities Assessment* has been to offer a demonstrative development vision for the VHCP lands, and a corresponding analysis of the potential financial and socioeconomic implications of that vision. Furthermore, to most effectively realize the concepts identified, the project team has analyzed various implementation structures and potential business models for consideration by the VHCP Partnership.

This document builds upon the *Existing Conditions Analysis* prepared as part of earlier components of this engagement. Our earlier reporting reviewed a series of market factors, case studies and policy conditions, all of which are important inputs in understanding the regional market opportunity, policy environment and precedent developments that can be learned from in planning for the future of the VHCP.

This new *Opportunities Assessment Report* draws from this reporting to present a vision for the VHCP, a financial analysis of the costs and impacts of realizing that vision, and an assessment of numerous potential implementation strategies. As presented in more detail herein, this *Opportunities Assessment Report* addresses the following core elements:

- a **profile of each core stakeholder within the Partnership**, as well as their planned intentions for investment and activity at the VHCP, plus areas potentially requiring further clarification and coordination;
- a **review of the baseline market conditions, best practices and case studies** analyzed in previous portions of the Study;
- the **presentation of two conceptual development visions** for the VHCP for demonstration purposes, including a build-out timeline, development space yields, employment estimates and proposed land use allocations by location;
- a **high-level assessment of the financial cost implications and potential revenue opportunities** of realizing the proposed visions at the VHCP;
- an analysis of the direct, indirect and induced **economic benefits that will accrue from the one-time capital investment and ongoing employment activity** anticipated to occur under each development scenario or phase (including several unique reporting metrics: spin-off employment benefits, government revenues, and “knock-on” spending, etc.);

- discussion of the additional **socio-economic impacts** of establishing a new healthcare-focused innovation cluster at the VHCP that could further offset the initial spending required to initiate and maintain the project;
- an analysis of **potential business management and implementation structures** to best advance the vision identified, based on the unique nature of the stakeholder Partnership and needs required to develop the VHCP as currently proposed.

1.3 Baseline Conditions

The following presents a brief overview of the current conditions pertaining to the VHCP, based on the key findings from our previous *Existing Conditions* report. It sets the stage for informing the subsequent land use concepts, feasibility testing, and implementation option considerations provided herein.

Policy Context

- Existing land use planning policies at the Provincial, Regional and Municipal levels are all supportive of the general vision set out for the VHCP. In particular, these policies generally allow for the intensification of the subject lands with a mix of predominantly office, institutional and community type facilities to achieve broader growth objectives across the community of Vaughan and beyond. Official Plan Policy section 16.6.3 outlines the range of uses contemplated at this location, which support realizing the vision for a health research, commercialization and education cluster on the VHCP lands.
- The 2013 Vaughan Healthcare Centre Precinct Plan has established the foundation for the area's ultimate buildout and development. The Plan establishes nine distinct development blocks which support a range of hospital, healthcare and natural / open green space type uses.
- The demonstration plans presented throughout this report have been prepared with direct consideration for these policies, including as it relates to development blocks, building types and heights, permitted uses, densities (i.e., floor space indices), etc.

Market Context

The project team prepared an overview of the baseline real estate market conditions as they relate to various asset classes that could potentially occupy space at the VHCP. The following contains high-level findings from this analysis.

It is important to emphasize that this earlier analysis has been conducted during the COVID-19 pandemic. This exercise therefore assumes that there will be a longer-term return to status quo development patterns in the Greater Toronto Area, as the ultimate impacts of the pandemic specifically on real estate patterns are not yet understood.

General Development Conditions

- The City of Vaughan has recently experienced a significant wave of intensification pressures for new residential and commercial office development. This pattern has served to drive an important evolution within the community from the predominantly consistent, low-density development patterns that have historically characterized Vaughan.
- Intensification and new development activity have been realized at the Vaughan Metropolitan Centre (“VMC”), heavily influenced by the recent opening of the Toronto Transit Commission (“TTC”)’s Line 1 extension north into York Region. Intensified growth is also occurring at several other areas in Vaughan, including Thornhill Centre, the Weston / Highway 7 Secondary Plan Area, and the area around Yonge Street and Steeles Avenue. Development interest is also occurring at a range of underutilized retail-based properties and on major arterial corridors now being upgraded to provide higher-order (e.g., Bus Rapid Transit) public transportation service options.

Office Market

- Vacancy in Vaughan’s office market has tightened in recent years, even as supply has moderately increased, indicating strong and healthy market demand.
- Although Downtown Toronto is anticipated to continue to account for the overwhelming majority of major office space growth in the GTA Region, Vaughan is likely to continue to experience supply growth pressures in the immediate future and longer-term planning horizon.
- The focus of most future office supply growth in Vaughan is expected to be concentrated within the City’s planned new Downtown at the VMC. However, the VHCP’s value proposition will be attractive to specific organizations and industry groups interested in co-locating with the new hospital and potential post-secondary academic presence and innovation hub.
- Although the outlook for office related uses in a post-COVID environment is yet to crystalize, it appears as though most employers will opt to accommodate increasingly flexible work arrangements. Over time, a clearer understanding of office demand will emerge, however it is our view that office space will not experience the dramatic declines previously contemplated earlier in the pandemic. If anything, the lower density office uses currently in Vaughan and

other non-core employment areas across the GTA may become more attractive, as employees look for more ground-related spaces.

Residential Market

NOTE: Based on previous engagement activities with the key stakeholders, the inclusion of market residential uses of any kind (i.e., market ownership, market rental, etc.) is not being contemplated for the VHCP at this time.

To develop a more comprehensive picture of current market conditions and opportunities in Vaughan, however, the project team has nonetheless included selected commentary on housing opportunities at the VHCP throughout this report, should these uses be contemplated as the project is advanced longer-term. As highlighted above, we have predominantly focused our efforts on evaluating the core institutional and supporting commercial employment uses envisioned for the VHCP, but we felt that it is nonetheless important to consider the obvious benefits associated with the inclusion of housing and its ability to contribute directly to the advancement of the project through improved cash flows and off-setting initial capital investment requirements.

- Vaughan has experienced robust interest in new high-density residential construction, primarily in condominiums located at the VMC and other transit-accessible nodes.
- Changing market preferences, cost pressures and improved transit access are expected to continue to drive demand for higher-density forms of housing throughout the City of Vaughan; particularly as a function of continued in-migration and population / employment growth across the entirety of the GTA Region.
- Nodes and corridors in Vaughan are realizing higher densities than previously contemplated. The provision of high-density market rate housing is being provided in areas adjacent to the VHCP and is not necessarily being contemplated as an eligible land use at the VHCP.
- Long-term demographic trends will necessitate increased supports for an aging population, including long-term care homes. The VHCP is approved to supply approximately 160 beds. However, in light of the COVID-19 pandemic, sustained long-term demand, and likely renewed emphasis on dedicated provincial and federal funding supports, opportunities to expand the long-term care presence could be contemplated.
- Notwithstanding the more institutional focus of the VHCP and current land use planning policy framework, residential development—under many circumstances—represents among the strongest opportunities for financial return in real estate.

Innovation Context

The project team conducted review of several nationally and internationally recognized health-innovation clusters. The purpose of this review has been to identify strategies and processes that have proven instrumental in delivering best-in-class nodes of this type. The following summarizes a number of the key takeaways from this research:

- The VHCP is unparalleled in the level of upfront collaboration associated with the Partnership that has been formed between the City, Mackenzie Health, York University and ventureLAB. Although the project team has identified clusters which contain a mix of medical facilities, post secondary institutions and innovation / research hubs, these elements were not in place from the outset, able to scale and shape development from the ground up.
- The research identified several key themes as important elements of success. The VHCP offers several of these from the outset, however there are additional opportunities to further bolster some of these themes to advance stronger outcomes. The themes identified are as follows:
 - An active and **dedicated development proponent**;
 - Ensuring strong, open **institutional collaboration**;
 - Municipal, Provincial and Federal **government support**;
 - **Public-private engagement**; and,
 - Leveraging **location and geographic benefits**.

1.4 Summary

The VHCP offers a unique value proposition that reflects the ongoing evolution of the City of Vaughan into a major urban centre, leverages the establishment of new transportation and institutional infrastructure in York Region, as well as capitalizes on recent trends and opportunities in the economy relating to healthcare innovation and delivery.

The global coronavirus pandemic, local real estate market trends, demographic realities and increasing technological innovations all make this an ideal moment in time to advance the VHCP concept. The simple opportunity to co-locate with a leading innovation hub, growing post-secondary institution and state-of-the-art new medical facility presents a desirable and unique opportunity from the outset. The prospect of working in an environment defined by cross-collaboration between

dedicated members of these anchor institutions truly elevates the VHCP to a near unprecedented level.

However, there are several important details which still need to be worked out and coordinated to achieve such an elevated level of collaboration. This will be important in understanding the effectiveness and ultimate value of the Partnership, which will continue to extend well beyond the scope of this Study. Data and information sharing, collaborative research and laboratory / technology access, as well as the level of supported employee collaboration represent fundamental details which will be confirmed through ongoing discussions between relevant stakeholders and refined over time. The following seeks to explore these and other related themes to establish a strategic roadmap for implementation of the VHCP.

2.0 VHCP Vision

Establishing profiles for each stakeholder organization that comprise the VHCP Partnership has been an important first step in identifying the underlying motivations, interests and requirements of each participant while also recognizing their unique contributions in supporting the underlying vision for the precinct.

Ensuring that these baseline requirements and expectations are well-documented has been central to identifying synergistic opportunities, potential areas of conflict / overlap, as well as associated remedies to maximize the likelihood of success at the VHCP. This initial step has provided valuable insights as to the establishment of a common, consolidated vision statement for the VHCP, as well as the development of demonstrative land use concepts for further testing and evaluation.

In this regard, the project consulting team has engaged with each stakeholder organization—both individually and in group settings—to better understand their intentions, perspectives and goals as it relates to making additional physical and financial investments at the VHCP.

The following section of this report presents the over-arching vision and potential direction for the precinct, based in large part on the individual profiles for the **City of Vaughan, Mackenzie Health, York University** and **ventureLAB**.

2.1 Vision Statement

The project team has first prepared a guiding vision statement intended to capture the planned function and essence of the ambitious expectations for the VHCP. This vision statement has been informed by a range of stakeholder engagement sessions throughout this Study process, as well as an understanding of the specific goals, intentions and ultimate positioning of each core project stakeholder that comprise the Partnership. Similarly, the project team has also reviewed a range of documentation to inform this statement, including the *Vaughan Healthcare Centre Precinct Plan (2013)* and *A Vision for the Vaughan Healthcare Centre Precinct's Innovation and Entrepreneurship Studio*, as prepared by ventureLAB and the City of Vaughan.

It is also important to note that this vision statement is largely consistent with the initial Study Principles set out upon initiating this research program and opportunities assessment, as follows:

- Consider **health, well-being, community wellness and patient care** as the core functions of the Precinct;
- Leverage and advance **smart hospital technologies** employed at Mackenzie Vaughan Hospital;

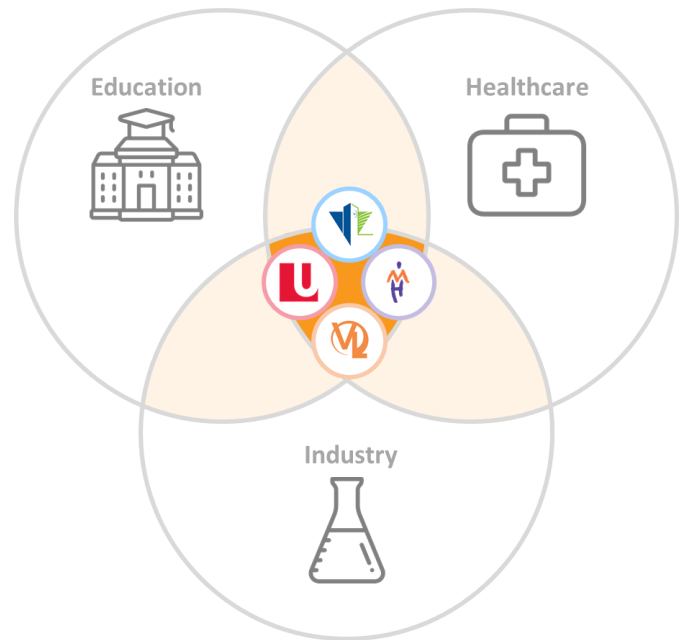
- Promote a **culture of innovation, commercialization and entrepreneurship**, attracting tenants, users and partners from the full business lifecycle (from startup, to scale-up and mature establishments or industries);
- Create a **blend of functions and industries** that are complementary to the existing on-site hospital and adjacent neighbourhoods (including use, building typology, traffic demand, etc.);
- Support industry-leading **research and education** that facilitates **innovation and commercialization** to develop and implement solutions that redefine healthcare and medical practice;
- Leverage **technology-led economic development opportunities** that are emerging in the marketplace;
- Support and promote **local and regional talent and workforce development**; and
- Create **realistic and achievable action plans** taking into consideration budget, staffing and partnership constraints.

VHCP Vision Statement

The Vaughan Healthcare Centre Precinct will be an ambitious healthcare-focused innovation district, with a broad mandate encompassing community health innovation in the social, technological and business spheres. A collaborative partnership between The City of Vaughan, Mackenzie Health, ventureLAB and York University, the VHCP will be a leading hub for research, innovation, commercialization and services in healthcare delivery, informatics and wellness.

The Cortellucci Vaughan Hospital, a York University campus—including a plan to establish a new School of Medicine—and ventureLAB innovation studio will bring together hospital clinicians and allied practitioners / professionals, academic researchers and innovative start-ups in an environment catered to developing innovative, practical and equitable solutions to healthcare challenges. It will also be a place to test and grow ambitious ideas that reimagine all aspects of healthcare. This unprecedented collaboration will serve as a draw for established, high profile organizations, researchers and students.

Supported by the forward-thinking implementation efforts by the City of Vaughan, the site will contain a mixture of primary and complementary uses to create the conditions necessary for an attractive and vibrant public realm. Continued investments in transit and roadway improvements will further enhance access for students, employees, and researchers from across Vaughan and beyond. Access to parks, cafes and restaurants will create an attractive environment for a young, educated demographic. These conditions are fundamental to creating the active public environment that is a prerequisite for building successful, knowledge-driven hubs in the 21st century.



The VHCP will be an ecosystem where researchers and students discuss cutting edge innovations over lunch, and network with industry professionals at evening events. It will be an exciting district with greenspace, cafes and restaurants. A place where collaborating with a colleague, a doctor, or a researcher involves a walk down the street, rather than a trip across town. The VHCP will be a leading research and innovation cluster for start-ups and established organizations developing technologies, services and techniques in the field of healthcare innovation.

2.2 York University



Profile

York University (“YorkU”) is one of Canada’s largest post-secondary institutions, with its primary campus located at the edge of the City of Toronto and the City of Vaughan.

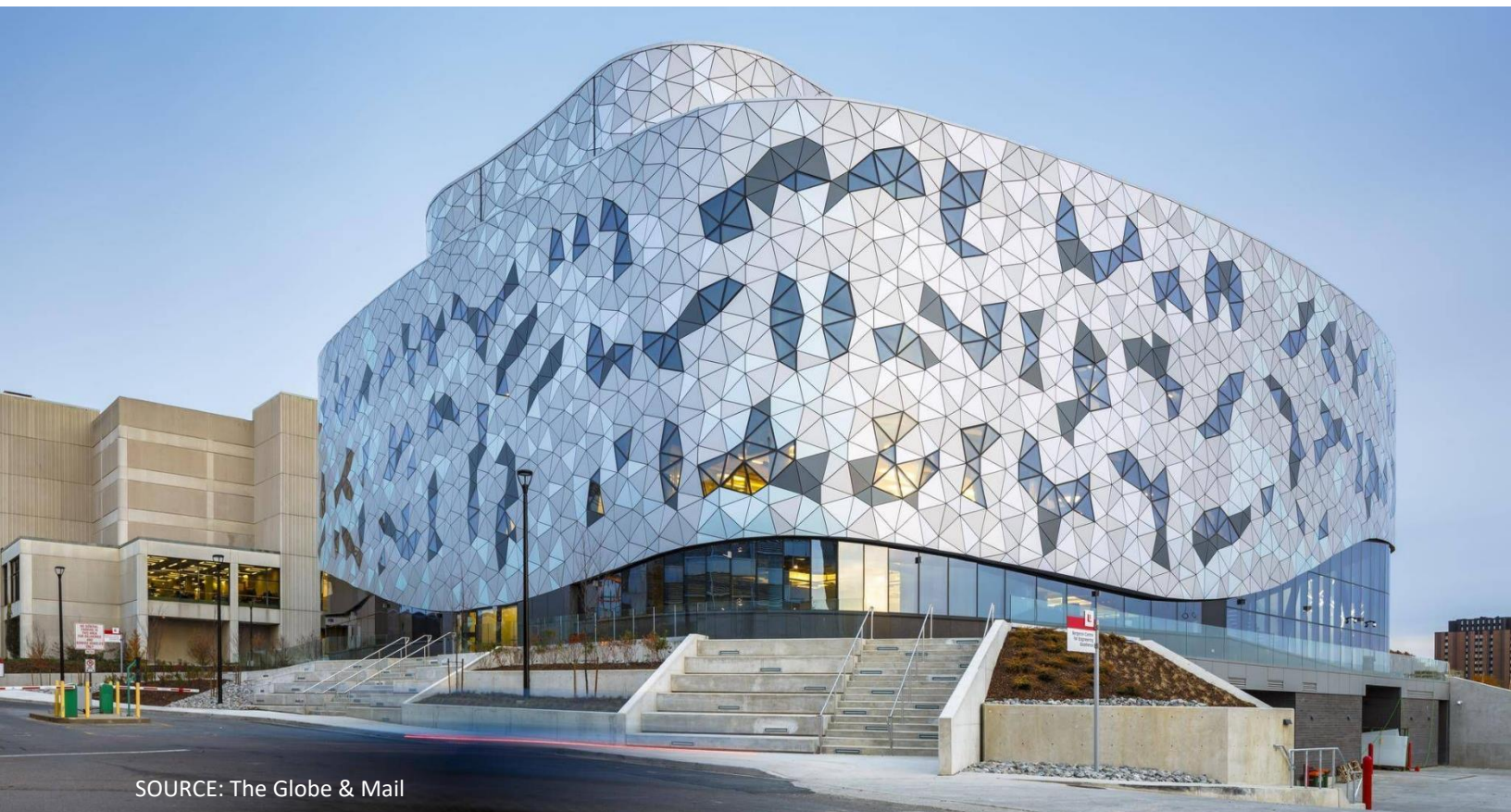
YorkU has a reputation for collaborative and community engaged research and for cross-disciplinary programming to approach practical challenges. York is a leading force in continuing studies to meet emerging labour market needs and has rapidly grown its entrepreneurship and innovation footprint to support economic development in York Region. The University is frequently recognized as one of the top academic institutions in Canada and is known internationally for its leadership in advancing the United Nations Sustainable Development Goals.

YorkU’s progressive research and teaching programs are aligned with the Provincial direction towards a more integrated and preventive model for health, which promotes care beyond the walls of hospital facilities, resulting in cost savings and efficiencies in service delivery, as well as greater health equity for diverse communities like York Region.

YorkU’s Faculty of Health currently offers one of Canada’s largest Nursing and Nurse Practitioner programs, as well as outstanding bachelor and graduate degrees in psychology, kinesiology and health sciences, health studies, health policy and management, health informatics, critical disability studies, global health and neuroscience. The Faculty also offers a suite of professional and continuing education programs, as well as specialized clinics in adult and child psychology and neuropsychology. York’s Schulich School of Business offers Masters- level programming in health industries management, business analytics, and management of AI. Additional relevant program strengths include areas such as data science, social work, engineering for health technologies, and more. This range of programs informs an integrated understanding of healthcare and wellbeing that extends beyond the traditional acute medical care education delivered by many other traditional university programs.

As a research-intensive university, York is home to centres of research excellence in human and computer vision, global health, healthy aging, muscle health, anti-microbial resistance, disease modelling, data visualization, advanced robotics, and disaster and emergency management, among others. IP Osgoode provides thought leadership on the ownership, use and governance of data, including personal health data. These strengths in basic and applied health research are fuelling successful innovation and commercialization partnerships through initiatives such as the federal government and industry-funded Health EcoSphere project, among others.

YorkU currently maintains two campuses in the Greater Toronto Area: the primary Keele campus is located at the northern edge of the City of Toronto, offering the majority of the university’s current programming, whereas the Glendon Campus is a distinctive bilingual campus located in uptown Toronto. York is currently working with the City of Markham to open a new campus in fall 2023, to accommodate approximately 4,200 students by 2030. This campus will be focussed on a range of programs preparing graduates to meet future labour market needs related to technology and entrepreneurship. YorkU also supports entrepreneurs and start up enterprises in York Region through its YSpace innovation hub and offers undergraduate business programming in a unique learning space embedded within IBM Canada’s corporate headquarters in Markham.



SOURCE: The Globe & Mail

VHCP Context

The VHCP provides YorkU with a unique opportunity to further enhance its role in building York Region by establishing a new physical campus presence that leverages immediate proximity and collaborative opportunities with a state-of-the-art new healthcare facility in the Cortellucci Vaughan Hospital. Opportunities for collaborative initiatives by co-locating with public agencies, businesses, and community organizations, could result in a truly unique ecosystem of research, innovation, learning, and service. This essential cooperation creates favourable conditions to support the development of an increasingly influential and innovative post-secondary institution and thereby increasing the scale and impact of York's many programs that contribute to the supply of future health professionals, the well-being and resilience of surrounding communities, and the dynamism of the regional economy.

To this end, YorkU requires an understanding of the functional opportunities and limitations of access and collaboration available with both Cortellucci Vaughan Hospital and ventureLAB. The nature of these relationships would be an important indicator for the access offered to students, researchers and collaborators, and ultimate value of physical proximity to these other institutions. Having unique opportunities to embed learning, research and innovation into spaces where health professionals are

working, policy impacting health is developed, and care is being delivered is the single greatest factor which will define YorkU’s presence on the site versus potential development opportunities elsewhere (including intensification of their existing campuses).

In realizing this ultimate vision, YorkU has expressed an interest in maintaining a dedicated facility to provide research, teaching, innovation, community engagement and administrative space at the VHCP. This facility in phase 1 would likely be in the range of 150,000-200,000 square feet in size, to accommodate faculty, students and staff, and partners, and all related programming. Shared facilities such as library, meeting, data storage, labs, ancillary spaces, and clinical space, ancillary spaces for activities such as collaborative projects and innovation, are possible. While maintaining a direct connection to the Keele Campus and other YorkU locations, this would also minimize required transportation between different locations, and generally allow for specific programs to be offered at the VHCP campus with the benefit of additional collaborative opportunities with external stakeholders. In addition to this preliminary phase of development, YorkU will further benefit from preservation of space and / or lands at the VHCP for future expansion opportunities, including their proposed School of Medicine, that could approximately double the YorkU footprint. As the profile of the VHCP—and York’s presence within it—may evolve and grow over time, it would undoubtedly be prudent to recognize that there is significant benefit in preserving space to accommodate increased academic and research activities on the site as a core driver of this underlying project vision.

2.3 ventureLAB



Profile

ventureLAB is a leading global founder community for hardware technology and enterprise software companies in Canada.

ventureLAB is led by seasoned entrepreneurs and business leaders with decades of industry experience in building IP-rich start-ups, scale-ups, and global multinationals to help businesses scale. Located at the heart of Ontario’s innovation corridor in York Region, ventureLAB is part of one of the biggest and most diverse tech communities in Canada. At ventureLAB, we grow globally competitive tech titans that build-to-scale from Canada, for global markets.

Since 2011, ventureLAB has enabled over 2,000 tech ventures to create over 4,000 jobs and raise more than \$200 million in investment capital through our initiatives focused on raising capital, talent retention, technology and IP commercialization, and customer acquisition. Together with our community of entrepreneurs, innovators, investors, and partners, we enable technology startups to accelerate the commercialization of transformational products on a global scale. ventureLAB is home



to the Hardware Catalyst Initiative — Canada’s only lab and incubator for hardware and semiconductor-focused companies.

In 2019 ventureLAB launched the Hardware Catalyst Initiative, Canada’s only lab and incubator for founders building hardware and semiconductor-focused products, enabling the creation of transformative technologies that will power our products of tomorrow—including healthcare technology, consumer electronics, telecommunications, smart energy, connected transportation, and more. Funded in part by the Government of Canada, through almost \$10 million in funding from the Federal Economic Development Agency for Southern Ontario (FedDev Ontario), the Hardware Catalyst helps tech companies accelerate their time to market in a sector that normally incurs lengthy entry and scale times, enabling Canadian hardware and semiconductor companies to grow and scale locally, and compete globally.



VHCP Context

ventureLAB is looking to expand its presence across York Region, leveraging the region's strengths in health and deep tech. Building on the success of the Hardware Catalyst Initiative and its state-of-the-art prototyping and testing lab for founders building breakthrough products, this new location at the VHCP will enable founders to commercialize new medical technologies at an accelerated pace, and represents an evolution of ventureLAB’s physical presence in Vaughan, which began with the July

2021 launch of an innovation space in the Pierre Burton Public Library. ventureLAB's vision for the VHCP also provides the framework to establish a global destination to attract multinational corporations, leading researchers and innovative start-up enterprises from across the globe, thereby fostering a world class health innovation cluster in York Region. ventureLAB is looking to provide 40,000 square feet of dedicated innovation space and lab at the VHCP with the flexibility to hold networking events, meetings and professional engagements, serving as a key hub of activity. The organization's physical presence at the VHCP gives ventureLAB the opportunity to continue to more directly engage and serve the Vaughan technology ecosystem.

2.4 Mackenzie Health



Profile

Mackenzie Health is an integrated public healthcare system responsible for providing services to residents of York Region, and beyond. The organization currently operates the Mackenzie Richmond Hill Hospital and will operate the new Cortellucci Vaughan Hospital at the VHCP. Upon opening in 2021, the Mackenzie Vaughan Hospital will be known as Canada's first smart hospital. The hospital will leverage new technologies to facilitate efficient information transfer, communication and ultimately improved patient care.

As Canada's first smart hospital, the experience at the new Cortellucci Vaughan Hospital has the potential to establish a new direction for hospital service, care and delivery across Canada and beyond.

In tandem with the innovative new district being pursued at the VHCP, the approach to delivery pioneered at Mackenzie Health can indeed become an anchoring draw for small businesses, academic and medical researchers, as well as office users alike.

Mackenzie Health's absolute priority is the delivery of enhanced and superior patient services at the hospital. Furthermore, given the aging Canadian population, and current and anticipated high population growth in York Region and beyond, it is important for the health network to identify and preserve necessary expansion opportunities in order to meet this anticipated and inevitable longer term need.

VHCP Context

In addition to preserving delivery of its core day-to-day hospital functions, Mackenzie Health has expressed a desire to maintain flexibility and capacity to accommodate additional revenue generating uses on the designated Hospital Lands within the VHCP. It is anticipated that off-street parking



facilities, medical office-related uses, pharmacies, food and beverage retailers, and other potential hospital-related uses could be accommodated on lands maintained by Mackenzie Health. Tenants of this nature would leverage proximity to the hospital and would represent an important revenue source for Mackenzie Health, in addition to serving as basic amenities and convenience-oriented facilities for patients, visitors and staff. As part of this arrangement, baseline uses of this nature would generally not be prioritized within the balance of the VHCP lands. The ultimate determination of this specific arrangement, however, would need to be established through further discussion and consensus across the VHCP partnership.

Mackenzie Health also maintains robust academic and community relationships. The organization is committed to an expanded academic and community partnership that supports academic research, medical training and innovation, which could ultimately enhance its own patient care delivery. It is important to recognize, however, that these expanded relationships must be complementary to the primary function of providing leading quality patient care. Therein, these partnerships must not compromise or impede the hospital's core functions and day-to-day activities.



SOURCE: Mackenzie Health

2.5 City of Vaughan



Profile

The City of Vaughan is one of the largest and fastest-growing municipalities in the Greater Toronto Area, and an important driver of economic activity across York Region and Ontario.

The City of Vaughan is a core partner in the VHCP and the strategic investments and vision being advanced by the City are the underlying driver of the project. The City is a forward-looking organization, focused on making foundational investments in transit, infrastructure development and strategic planning to facilitate and advance economic opportunities at the VHCP and across the City. With a clear vision to expand and diversify economic opportunities in Vaughan, the Economic Development Department is advancing several strategic planning initiatives to specifically grow and support the innovation sector. These initiatives will lay the foundation for diversification in York Region's largest economy and ensure that the City is well positioned to capture the jobs and people that will drive future growth.

The City is experiencing rapid growth and in the midst of an evolution. The realization of key public investments, including the Vaughan Metropolitan Centre (VMC) subway, the Cortellucci Vaughan Hospital—Canada's first smart Hospital—and Vaughan's first university, Niagara University, have ignited opportunities for further growth and innovation. Primary corridors and nodes across the City are attracting significant investments along key intersections and major corridors, producing a shift towards higher commercial and residential density, as well as employment growth.

Vaughan is a City in demand. Despite the challenges of COVID-19, Vaughan's economy is showing signs of resilience. During the first quarter of 2020, the City issued 656 permits valued at over \$128 million. More than 12,300 inspections have taken place over the past three months – well exceeding 2019, 2018 and 2017 during that same period. Vaughan is a city that people are confident investing in.

Vaughan is realizing the creation of its new downtown, the VMC, which is the largest and most ambitious project in the city's history. With a transit system anchored by the subway that offers seamless connectivity throughout the GTA, the VMC is in high demand by office tenants. The first two office buildings – comprising over 390,000 square feet of office space – are 100 per cent leased by nationally-recognized tenants.

From 2015 to 2020, the VMC attracted more than \$9 billion in economic activity, with much of this rooted in unprecedented construction projects that are building a growing skyline with new business and residential developments. Vaughan Council has approved the development of more than 10,817 new residential units.

In addition to the recently completed subway and bus rapid transit projects, investments in urbanized community spaces, streetscape and other public realm improvements, and detailed secondary plan policy development have proven to be successful at attracting high density residential and employment uses.

These examples have emerged as a symbol of Vaughan’s ongoing transformation. The City of Vaughan is monitoring development of the VMC and intensification patterns across the City on an ongoing basis and continually looking for opportunities to encourage sustainable development patterns.



SOURCE: City of Vaughan

VHCP Context

Hospitals are magnets for innovation, education and investment that can lead to the transformation of a community. These opportunities must be seized to maximize positive outcomes. This is certainly true for the lands surrounding the Cortellucci Vaughan Hospital, called the Vaughan Healthcare Centre Precinct (VHCP), which is a first-of-its-kind initiative in Canada.

The City of Vaughan has made significant financial investments in establishing the infrastructure, planning policy context and administrative co-ordination required to realize the unique vision identified for the VHCP.

These investments support a broader pattern of maturation as the city further evolves to provide greater educational opportunities and the development of new economic clusters of specialization that are aligned with its talented, diverse and well-educated workforce.

The City of Vaughan's investment in the VHCP aligns with the transformation taking place across the municipality. The innovation precinct—centred around the Cortellucci Vaughan Hospital—is being primed to become a significant employment node that would further establish a new healthcare, technology and innovation cluster in the City. Given its differentiation and specialized industry focus, it complements parallel plans for the continued growth being pursued at the VMC as the City's downtown core. The VHCP will be an important employment, education and innovation hub with the potential to attract significant business and employment opportunities while maintaining a key presence within the city over the longer-term planning horizon.

3.0 Development Scenarios

3.1 Approach to Demonstrations

For the purposes of further investigation and testing of potential implementation options at the VHCP, including management of the physical build-out of the precinct, we have identified preliminary land use concepts and development scenarios for consideration by the Partnership. These scenarios have been informed in large part by the primary market research, development trends analysis, stakeholder engagement activities, as well as key development context and planning policy considerations identified by our project team as part of the previous *Existing Conditions* reporting completed earlier in 2020. Insights and lessons learned from our case study research and best practices review have also been important at this stage of our Study process.

Relying on these various inputs, we have sought to provide a holistic and integrated vision for the VHCP that takes into consideration a variety of factors beyond purely market demand and financial feasibility. As such, we note that the purpose of this portion of our assignment has been to provide a relatively high-level scoping and identification of possible development concepts for the VHCP which we believe represents the optimum or “highest and best” use of the lands, based on the various parameters and conditions for development set out by the City of Vaughan, the broader Partnership, as well as the various independent research and analysis prepared throughout our Study¹.

Guiding Principles

The physical build-out and development of the VHCP will be led by a series of guiding principles relating primarily to: **Placemaking; Innovation; Partnerships; and Implementation**. Interpreted as a whole, these principles will support the creation for a world-class health innovation community and regional hub.

The table in Figure 3-1 provides a brief summary of the various sub-components and themes that have emerged within the context of these pillars, whereas the full details of the specific guiding principles established for the VHCP have been included in the appendix of this report.

See **Appendix B** for a more detailed overview of Guiding Principles.

¹ As planning efforts for the VHCP progress, we would of course recommend that a more detailed, comprehensive and targeted market demand and financial analysis of the specific uses selected for the site be undertaken in advance of any actual build-out of the subject lands. Similarly, this type of more detailed research and analysis would be required to determine the precise tenanting / programming of any new spaces constructed (e.g., determining exact square footages, specific building features, tenants, etc.), as well as appropriate development phasing and market entry.

Figure 3-1: Summary of Guiding Principles

Placemaking	Innovation	Partnerships	Implementation
Balanced Mix of Uses (with focus areas)	Leverage Synergies Between Healthcare, Education, Research, Commercialization and Innovation	One Dedicated Team	Phased-Growth Strategy
Compact and Pedestrian-Oriented Built Form	Environmental Sustainability	Public-Private Partnerships	Parking
Inclusive, Safe and Multi-modal Accessibility	“Smart City” Focus	Support from Other Levels of Government	Retail Strategy
Visual and Physical Connectivity			Focused Employment
			Public Transit

SOURCE: Sajecki Planning

Opportunities & Constraints

As input to the development of the VHCP land use concepts, the project consulting team also completed a review of key opportunities and constraints at the site.

Led by members of Sajecki Planning, this process involved a review of the current land use planning policy framework applicable to the hospital and non-hospital lands at the VHCP and in particular what type and extent of development can be supported with respect to permitted densities, building types and other factors.

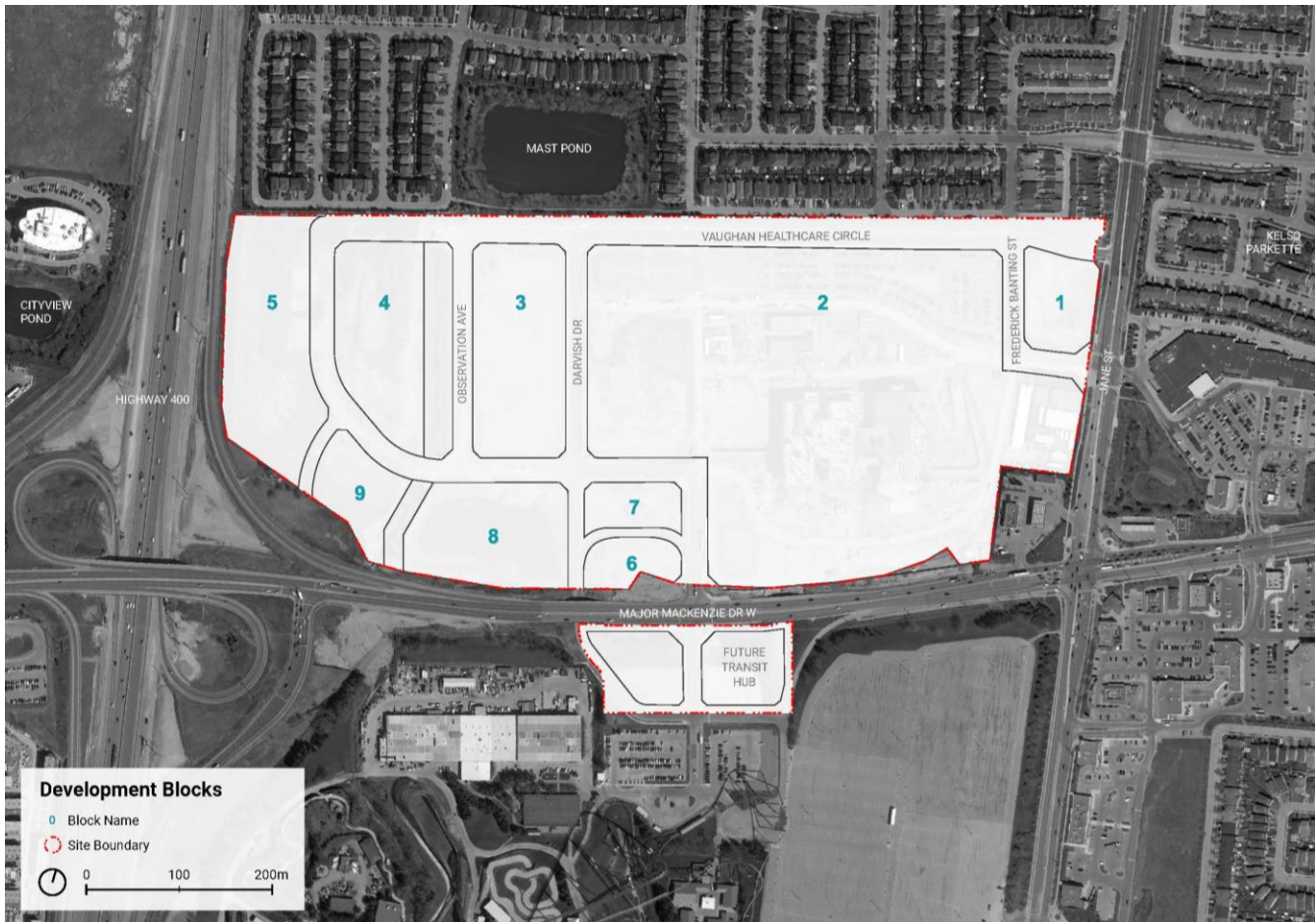
Our assessment has uncovered a number of specific factors and influences that present a combination of unique challenges and opportunities to development; particularly in the context of achieving the pre-defined vision for the VHCP. A detailed overview of these factors has been provided in the appendix of this report, whereas the following highlights a few of those identified:

- Relationship with—and potential sensitivities to—**surrounding land uses**;
- Presence of an existing **major anchor institution** (Cortellucci Vaughan Hospital);

- Opportunities for **partnerships**—both among / between the core stakeholder organizations involved to date, but also other public and private sector interests, including secondary partnerships with other businesses in Vaughan and York Region (e.g. advanced manufacturing, distribution, or logistics);
- The City of Vaughan’s involvement and land ownership brings opportunities to **leverage funding or initiatives that may not necessarily be accessible with traditional privately-led development projects**;
- Visibility, **exposure** and the relationship of the site with Highway 400;
- Transit **connectivity and access**, including current and potential future infrastructure elements;
- **Development and investment readiness and flexibility**;
- General **location** relative to retail serving uses to support the local employment and residential population, as well possible collaborative businesses located outside of the immediate VHCP node; and,
- The nature of employment contemplated at the VHCP and its **relationship with the VMC**.

Similarly, with respect to the physical layout of the precinct and the various development blocks identified (per the map in Figure 3-2), it is also important to recognize a number of other unique conditions that will continue to inform future development patterns and user locations at the VHCP.

Figure 3-2: VHCP Development Blocks



SOURCE: Sajecki Planning

The following provides an assessment of each block, as well as preliminary commentary as to *potential* uses which could be most appropriately accommodated at each of these locations. It is important to note, however, that **this assessment is preliminary only and that the ultimate determination of the optimal use(s) on each site will be established collaboratively by the Partnership**. Recognizing the unique nature of the organizations comprising the Partnership, some parcels may ultimately be left undeveloped or perhaps developed for temporary use, while remaining available to accommodate any future need by individual Partners (e.g., additional hospital expansion or post-secondary spaces longer-term).

- With the majority of non-hospital lands situated on the western portions of the VHCP, there is a single isolated parcel of land (**Block 1**) that presents a distinct opportunity to deviate from the rest of the planning for the precinct. That is, there is less of an immediate need for this development block to maintain a close-knit or direct relationship with the rest of the VHCP

and could potentially be considered as an opportunity to generate revenues to offset the significant capital investments required to support development (e.g., by other non-institutional, private / market development). Similarly, this site could also serve as a potential location to integrate housing type uses, including affordable residential uses or student housing (i.e., if ultimately contemplated as a permitted use at the VHCP).

- Beyond the core development blocks reserved for the day-to-day operations of the hospital and those reserved for potential future expansion by Mackenzie Health (i.e., **Blocks 2 and 3**, respectively), decisions will need to be made with respect to leveraging the co-location benefits of new building spaces on blocks immediately adjacent to the hospital. It is likely that one block in particular (**Block 4**) could function as a key gathering place and anchor for the on-site community of employees, students and other visitors. Subject to the factors above and preferences of YorkU with respect to the location of their own potential campus presence, this internal development block is also likely to serve as the main “middle-ground” connecting the two largest anchor institutions likely to occupy space at the VHCP (i.e., the hospital and the university). Given the nature of this dynamic and the physical parameters of the site (i.e., land area), this could be an ideal location to accommodate a co-branded ventureLAB and Innovation York / YSpace facility as well as other related users within the innovation hub planned for the site (e.g., supplementary office spaces, event spaces, retail / service commercial amenities, etc.).

Recognizing the potential flexibility of uses contemplated for this site, ensuring flexibility and adaptability as space needs evolve over time should be prioritized. Designing buildings this way upfront would allow spaces to be adapted to an updated and more relevant function in a cost, time and material-efficient manner.

- At the western edge of the site, there is a unique opportunity for development immediately adjacent to the Highway 400 corridor on **Block 5** of the VHCP. Although somewhat further removed from the hospital itself, this site presents notable benefits with high visibility and exposure (e.g., prominence and profile to significant pass-by traffic), and also represents one of the single largest non-hospital development blocks across the precinct. As such, it presents an ideal growth-oriented opportunity for a major institution like YorkU, which has a desire to expand into the VHCP over time with additional health and related programming, potentially with the presence of a School of Medicine.
- With limited development potential at **Block 6** and the relatively small land area of **Block 7**, it is likely that these parcels can be reserved as residual space for future expansion of the VHCP. Although these lands would ideally be developed earlier given their location closest to the future improved bus terminal to the south of Major Mackenzie Drive, they likely will not appropriately accommodate any of the key organizations already looking to maintain a physical presence at the VHCP in the short-term. Nonetheless, it will be important to recognize

the potential for these lands to serve as an important gateway and connection to the VHCP longer-term.

- **Blocks 8 and 9** have been exclusively ear-marked for necessary stormwater management infrastructure (i.e., ponds). Given their proximity to the central and internal Block 4 uses described above, however, these could be well-integrated as part of the improved public realm and open spaces that could characterize the VHCP longer-term.
- Providing convenient and accessible underground **parking** is always important for urban districts like the VHCP, yet pose fundamental challenges to financial feasibility; particularly with the relative lack of more significant revenue-generating uses at the VHCP to offset these initial capital investments (i.e., in the absence of market residential and / or other private market uses). As such, it will be important to consider creative solutions, such as temporary or interim parking structures that maintain the flexibility to be converted to other land uses or spaces longer-term. Recognizing ongoing trends in electrifying vehicles, provision of charging hubs—particularly close to retail facilities—should be considered.
- Notwithstanding the current geographic extent of the VHCP, there is the prospect of additional private development occurring on the parcel of land at the north-west corner of Jane Street and Major Mackenzie Drive (i.e., the **existing gas station** site). Subject to further engagement and consultation with the existing owners of this property as to their longer-term expectations and plans for the site, there will undoubtedly be a need to consider its relationship with the hospital and the rest of the VHCP (including relevant land use planning policy amendments that may be desired, or required).

See **Appendix B** for a detailed overview of Opportunities & Constraints Assessment.

Phased Approach

The project team has developed two visions for the VHCP, a preliminary phase of development achieving immediate **Intra-Regional Significance**, and a more aspirational, longer-term build-out of the entire precinct with the potential to secure **Extra-Regional Significance** in due course.

The two visions presented for the VHCP should not be considered in isolation from one another as mutually exclusive, nor separate and distinct scenarios. Rather, the *Intra-Regional* demonstrations should be viewed as an initial phase to test market response and iterate on the mechanics of the proposed vision. This initial project vision—in our opinion—represents a feasible and reasonable scale

of development that meets the immediate needs of the core stakeholders in the Partnership and establishes a scale of activity sufficient to evaluate a corresponding market response. Based on market and stakeholder experiences within this concept, a later evaluation should be made regarding potential additional investment in an expanded presence for various stakeholders, as well as the introduction of additional office, laboratory, and research space to support innovation and longer-term needs based on available market demand.

It is the project team's opinion that this phased approach represents a reasonably conservative yet distinctly optimistic path forward in realizing the full extent of the underlying potential established through the VHCP Partnership. The following provides a summary as to the expected timeline and milestones required to advance between the two phases:

- By establishing the constituent components outlined within the demonstration of ***Intra-Regional Significance***, the VHCP will emerge as **an important node for education, research, healthcare service and growing a small business in the GTA**. This level of achievement and scale of development will allow for each stakeholder to better understand and iterate on the details of the Partnership, including access to data / information, cross-organizational collaboration, among a range of other important factors.
- Once these arrangements are implemented in practice, the stakeholder members will have the ability to collectively re-evaluate the relationship and gauge how to best advance the VHCP to the second phase of its maturity into a health-innovation cluster of ***Extra-Regional Significance, recognized across Ontario, Canada and potentially globally***.

The following subsections outline a conceptual development vision for the VHCP consistent with these two phases. The purpose of these concepts is to outline the scale, uses and overall scope of the two phases in order to support additional testing and options evaluations, as presented throughout the balance of the report.

Community Planning Permit System

The development concepts and master planned vision contemplated herein for the VHCP provides an opportunity for the City of Vaughan to pilot a **Community Planning Permit System (CPPS)**, previously known as a Development Permit System (DPS). The CPPS is a land use planning tool that provides an alternative system to the existing planning approval process. Established by the Province of Ontario in 2007, the legislation allows individual municipalities to apply a CPPS to their entire municipality or within certain neighbourhoods/areas. In practice, a CPPS seeks to streamline development approvals by combining Zoning, Site Plan and Minor Variance application processes into a single approval process. Given the clearly defined boundary, and coordinated, master-planned process being undertaken at the VHCP, it presents a particularly compelling site to pilot a CPPS.

The following provides a **brief summary of the benefits of implementing a CPPS at the VHCP:**

Streamlined Process

- Provides a streamlined and expedited development approval process (45 days vs 90 days for traditional zoning).
- Once the CPPS is established, only the applicant can appeal a municipality's decision regarding a development application within the CPPS area (third-party appeals are prevented).

Owner and Community Certainty

- Provides additional certainty for landowners and the community at large, as all parameters for approval are outlined at the onset and appeals on a site-by-site basis are limited. The CPPS By-law's parameters for development also include minimum and maximum standard, evaluation criteria, exceptions and permitted variances.
- Allows the City of Vaughan to address infrastructure needs / community benefits on a comprehensive basis, as the CPPS By-law would only apply to the VHCP (i.e., area-based).

Flexibility

- In comparison to the conventional zoning by-law, the CPPS may provide additional flexibility as it can include use requirements in tandem with a form-based approach.
- Site specific flexibility is built into the Official Plan and community permit by-law by, for example, allowing maximum building heights in a specific area (i.e., flexibility for individual constrained sites). This flexibility also reduces the need to amend the community planning permit by-law.

It is the opinion of the project consulting team that a CPPS should be considered at the VHCP, as it potentially offers a streamlined process and clearly defined development parameters to landowners, stakeholders, and the broader community. Determining the ultimate implementation mechanisms would be subject to additional study. Although generally a CPPS requires additional upfront efforts to establish all development parameters ahead of time, it could be a valuable mechanism to implement the ultimate vision identified as part of this study, subject to further consultation between the core stakeholders. A CPPS at the VHCP would create planning certainty around achieving the development parameters agreed to by the Partnership.

In order to apply a CPPS at the VHCP, the City of Vaughan would need to:

- (1) Adopt an Official Plan Amendment for the CPPS area (VHCP Study Area);
- (2) Pass a community planning permit by-law; and
- (3) Issue community planning permits once the system is in place (as long as the proposed development meets the standards outlined in the community planning permit by-law).

3.2 Phase 1: Intra-Regional Significance

Development Vision

The *Intra-Regional* vision has been developed based on the established planning framework, total order of magnitude assessments of available development potential, market feasibility testing, engagement sessions and proposed space intentions identified by each individual stakeholder within the VHCP Partnership. It is envisioned as a realistic and immediately implementable plan that will yield tangible results.

This regionally significant vision represents a critical “first step” towards a more influential vision for the VHCP over the longer-term planning horizon.

If developed as proposed, this concept would maintain a physical campus presence for YorkU, introduce a new ventureLAB studio in partnership with YorkU, protect the day-to-day operations of Mackenzie Health, as well as allow for a series of complementing private commercial spaces and amenities. It would facilitate cutting edge innovation, driven by start up businesses collaborating with academia and medical and allied health professionals. Ultimately, this partnership should realize the commercialization of research as an underlying goal.

This phase accommodates approximately 1.9 million square feet of gross floor area, in alignment with the permissions identified by the site-specific zoning by-law. Of this, slightly over three quarters of the overall space in this vision is comprised of the Vaughan Cortellucci Hospital and related ancillary functions. The ultimate timing and use of this space (beyond the existing hospital) would ultimately be dictated by Mackenzie Health, based on evolving healthcare needs.

The *Intra-Regional* development concept is imagined as a go-to destination for local entrepreneurs, innovators, health professionals and students looking to pilot new ideas, gain practical skills in the health care field, and research applied health practices and technologies to improve outcomes. Upon completion of this phase of development, the VHCP will firmly establish itself as an influential knowledge hub, producing highly skilled practitioners, future-focused businesses, and cutting-edge research within the GTA. The VHCP will emerge as one of Vaughan’s primary employment nodes and invite skilled labour from across York Region. It will serve as an important launching pad for local businesses, innovations and practitioners that will reinforce Vaughan’s evolution into a major city, with a particular expertise in healthcare innovation.

Overview of Key Elements

- Maintain exclusive focus of Blocks 2/3 as Hospital Lands (current structures and surface parking ear-marked for future expansion by **Mackenzie Health**)
- Opportunity for preliminary physical space presence of **YorkU** (e.g., research labs, classrooms and teaching labs for Nursing and other academic programming, community facing clinics, and a future Medical School)
- Introduction of central innovation space and community hub, which leverages commercialization, healthcare technology and innovation initiatives pioneered by both **ventureLAB** and Innovation York / YSpace
- Preservation of temporary or flexible space which could be reallocated to future uses as stakeholder needs evolve (e.g., Mackenzie Health or YorkU)
- Provision of **research spaces and facilities in proximity to commercialization spaces**
- Central and flexible **event venue** space offering opportunity for community-building and added revenue-generation
- Basic supporting **retail / service commercial facilities** (e.g., café, daycare facility, etc.) intended to serve as a basic on-site amenity
- **Medical office** type uses that support the day-to-day functions of Cortellucci Vaughan Hospital and the physicians and specialists who work at the facility

- Moderate preliminary amounts of **private office space** for lease (e.g., healthcare-focused enterprises, healthcare practitioners, successful start-ups graduating from the innovation community, etc.)
- Open **green spaces and landscaped areas** for gathering, connectivity among / between development blocks and circulation to / from future improved transit terminal

3.3 Phase 2: Extra-Regional Significance

Development Vision

The *Extra-Regional* vision builds directly on the concepts introduced above. In effect, this second phase of development imagines a highly successful initial implementation of the VHCP in which the three non-municipal stakeholders (Mackenzie Health, YorkU and ventureLAB) have effectively collaborated to support innovative and scaling start-up organizations, a robust academic-medical research pipeline, best-in-class healthcare services, as well as a burgeoning academic campus.

This phase would be realized as YorkU, Mackenzie Health and ventureLAB have developed widespread attention for the degree of collaboration and commercialization being produced at the VHCP. As a result, these institutions may be pursuing expansion opportunities—in physical presence or programming. However, the vast majority of increased physical presence in the Extra-Regional vision is expected to come from private office growth. As the commercialization pipeline matures, demand for office space from small and large businesses is expected to emerge, leveraging proximity to the research, education, implementation and commercialization supports offered by the institutional actors at the VHCP.

The Extra-Regional vision contemplates approximately 2.5 million square feet of gross floor area at the Vaughan Healthcare Centre Precinct, with almost 60% of the total space planned for existing and potential new Mackenzie Health functions.

Development Permissions:

It is important to note that in order to realize this vision, an update to the approved site-specific zoning by-law would be necessary. Recognizing the potential implications that increased activity at the VHCP may have on traffic, and access to the Vaughan Cortellucci Hospital, it is recommended that the update includes a traffic and transportation study, review of site access under Phase 1, and a review of parking and existing and contemplated public transit projects (including a potential subway extension).

The Extra-Regional development vision for the VHCP represents a logical next step and continuation of growth, once proof-of-concept has been established with a successful implementation of a new healthcare precinct of Intra-Regional Significance.

In effect, this second phase of **development** imagines a future VHCP that serves as a national pillar of healthcare-oriented research and innovation, featuring a robust research to commercialization pipeline as a core feature. The VHCP forms one of a smaller selection of innovation clusters across Canada with increasing national and international profile in this field. Under this type of scenario, the VHCP receives a constant flow of national and international researchers, students, and innovators taking advantage of unprecedented levels of collaboration and access to applied research, and a fully supportive ecosystem. ventureLAB's services and support are in high demand, as industry clients, practitioners, and students and practitioners pursue products and ideas that tangibly address challenges experienced next door at Cortellucci Vaughan Hospital and in the communities beyond.

Overview of Key Elements

- Maintain exclusive focus of Blocks 2/3 as Hospital Lands, including opportunity for future expansion of **Mackenzie Health** to meet needs of growing populations in the communities of Vaughan and York Region longer-term
- Allowance for future expansion of **YorkU** campus, including potential introduction or further integration of a newly established Medical School
- Majority of additional development focused on growth in **private office space** if / when market conditions allow and sufficient interest is available (e.g., attraction of major healthcare business interests and research organizations, plus “graduation” of successful startups from innovation space)
- Marginal increase in **retail / service commercial amenities**, as needed and generally intended to provide additional ground floor animation and place-making at the precinct
- Flexibility to accommodate some additional growth through un-assigned or “**residual**” floor areas (e.g., growth in space operated by ventureLAB, future requirements for City of Vaughan facilities, surplus office space demands, etc.)

3.4 Development Triggers

In contemplating the shift from Intra-Regional to Extra-Regional significance, the project team has identified several potential thresholds, investments, milestones or other key indicators that could “unlock” demands for realizing this increased scale.

The build out and ongoing activity of the uses and functions identified in Phase 1 will require commitment from each member organization, in addition to funding, coordination and collaboration between the stakeholders. Once these elements are established and the ongoing operations of the Partnership can be gauged or evaluated, individual partners will make decisions on maintaining, or expanding their presence at the VHCP. The following identifies several key thresholds, or metrics that could indicate a shift from the Intra-Regional to realizing the Extra-Regional vision.

Although these factors may not necessarily be pre-requisites to initiate the shift to secondary phases of development, it is our view that proven momentum towards any or all of these positive outcomes would enhance the local, national and indeed global appeal of the VHCP and allow for additional expansion.

- A planned, financed, or under construction **extension of the TTC’s Line 1** to the VHCP would undoubtedly increase the connectivity and accessibility of the precinct. The transit terminal currently under construction adjacent to the VHCP will offer much enhanced local and regional connections, however, a higher-order transit extension to the site would provide increased capacity and rail-based connections to the broader regional transit network, ultimately putting the site on an equal competitive base with other primary and regional employment clusters in the GTA.
- **York University securing funding and initiating construction or planning for a second phase of development at the VHCP.** Recent steps taken by YorkU to advance plans to establish a new School of Medicine in Vaughan could be one initiative that influences this expansion. The location of a Medical School at the VHCP would be highly integrated with other academic programs and public institutions and serve local needs, placing a unique emphasis on prevention and rehabilitation, and training local physicians alongside other health professionals. Through this mandate and broader stakeholder consultation, it has been made clear that YorkU’s plans for the VHCP will be influenced by the collaborative outcomes with the other stakeholders. Therefore, an expanded commitment to the VHCP and health-based programming will not only be an important indicator for the expansion of the precinct towards Extra-Regional significance, but also a major draw for researchers, students and businesses looking for opportunities to collaborate and pursue new business opportunities.

- The **attraction of major multi-national enterprises** (“MNEs”) to establish a local presence at the VHCP. The variety of opportunities or level of participation from these MNEs is wide, and could range from a permanent office space presence to providing seed funding and technical support to local start-ups, to a fully integrated research and innovation laboratory. Regardless, the presence of such an organization(s) would immediately draw national and international attention.
- The **growth and expansion of local start-ups and businesses** supported by ventureLAB and Innovation York. As these businesses evolve and expand within the VHCP ecosystem, demands for larger and additional office, lab and testing spaces will result in pressures to expand. To successfully continue to maintain and support this budding ecosystem within Vaughan, it will be important to—within permissible planning frameworks—respond to potential demand for space as it emerges.
- A strong, **consistent demand for additional leasable space**. If market metrics demonstrate a sustained decline in space availability, increasing rental rates, and challenges to accommodate scaling organizations, the expansion of existing facilities or construction of new facilities may be required at the VHCP.

3.5 Summary

Based on the phased land use visions for the VHCP presented above, we have developed a series of corresponding assumptions relating to the future **potential** build-out of the various development blocks identified. These assumptions have been **prepared for demonstration purposes only**, using a simple “bottom-up” approach and based on a combination of the total land area of each block, the total developable land area throughout the VHCP, application of reasonable densities or floor space indices (“FSI”) to determine potential gross floor area estimates, and finally establishing possible building footprints and heights. Once these key metrics were established, potential floor area allocations were prepared by development block consistent with the visions above and reflecting individual space needs of each organization within the Partnership.

This process also involved allocating space to other specific users, tenants and potential supporting amenities at the node. A preliminary visual demonstration of the end results of this exercise are included in Figure 3-3. The figure clearly illustrates the preservation of the Cortellucci Vaughan Hospital lands for ongoing, and future hospital-related expansion. The nature and timing of any expansion into these lands will ultimately be determined by Mackenzie Health.

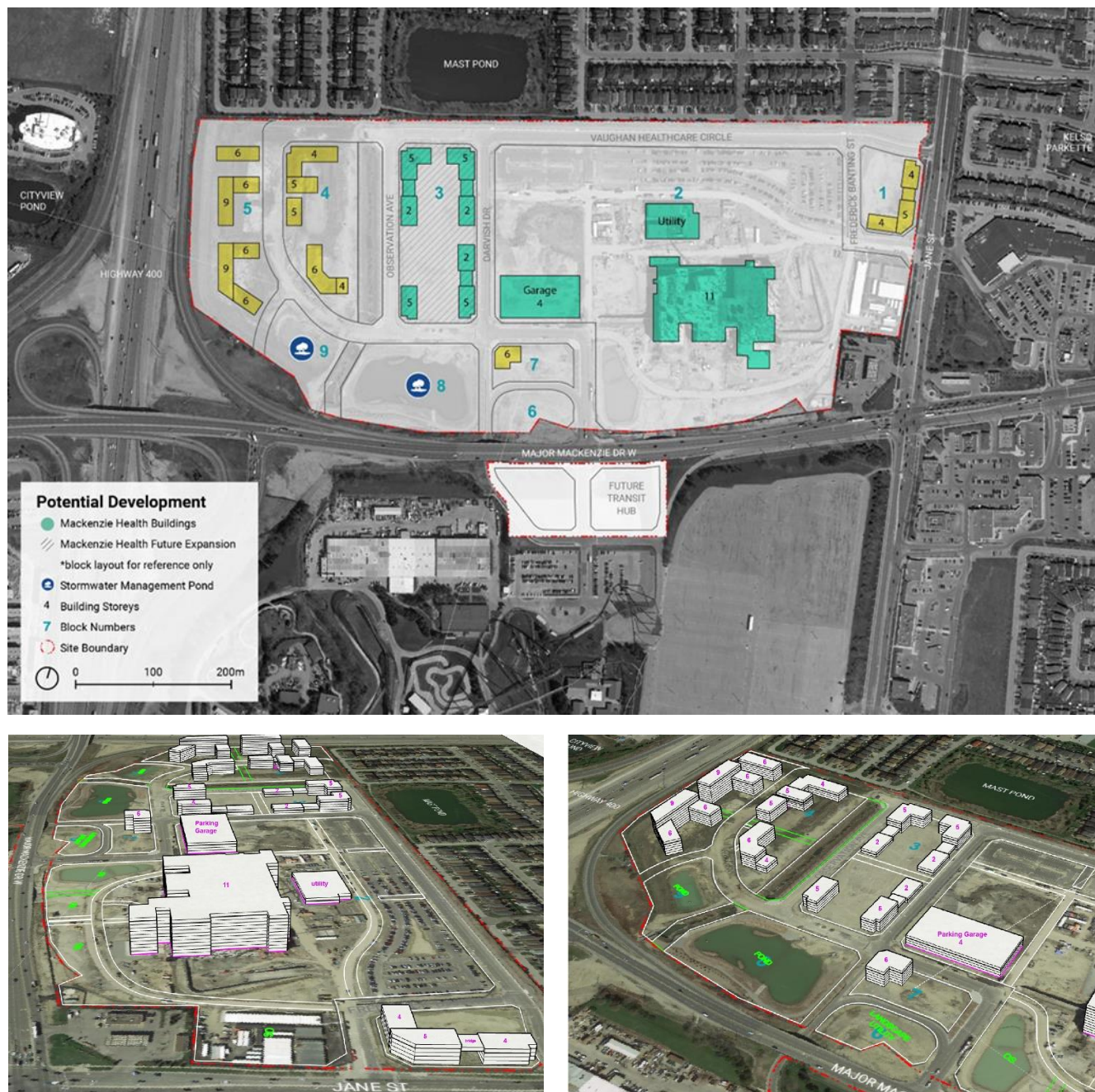
Preliminary Estimates:

It is important to emphasize that the ultimate allocation of space at the VHCP is subject to detailed negotiations between the partner organizations, the City of Vaughan, York Region, and the Government of Ontario’s Ministry of Health. The high-level and preliminary space figures estimated as part of this assignment are merely intended to provide an order of magnitude understanding of possible next steps to realizing the underlying vision for the VHCP, including pending financial considerations and possible return on investment opportunities. These space allocations should be reassessed as estimates evolve through detailed negotiations between the aforementioned parties.

Our assessment suggests that—across the entirety of the area and including the Hospital Lands—the VHCP could support the development of almost 2.5 million square feet of gross floor area (“GFA”)². With regard to the Non-Hospital Lands in particular—which continue to represent the primary focus of our Study—a total of approximately 1.0 million square feet GFA can likely be accommodated at full build-out, or the equivalent of **over 850,000 square feet of gross leasable area (“GLA”) available to individual users and tenants outside of the hospital**. Figure 3-4 below demonstrates the *possible* proportionate breakdown of that space.

² As previously noted, the total GFA identified exceeds what is currently permitted under the Zoning By-Law. Accommodating this total space will be dependent upon agreement amongst and between the core stakeholders, as well as updated analysis of the implications on traffic, parking and accessibility to the VHCP, especially to the hospital.

Figure 3-3: Preliminary VHCP Building Footprints & Massing

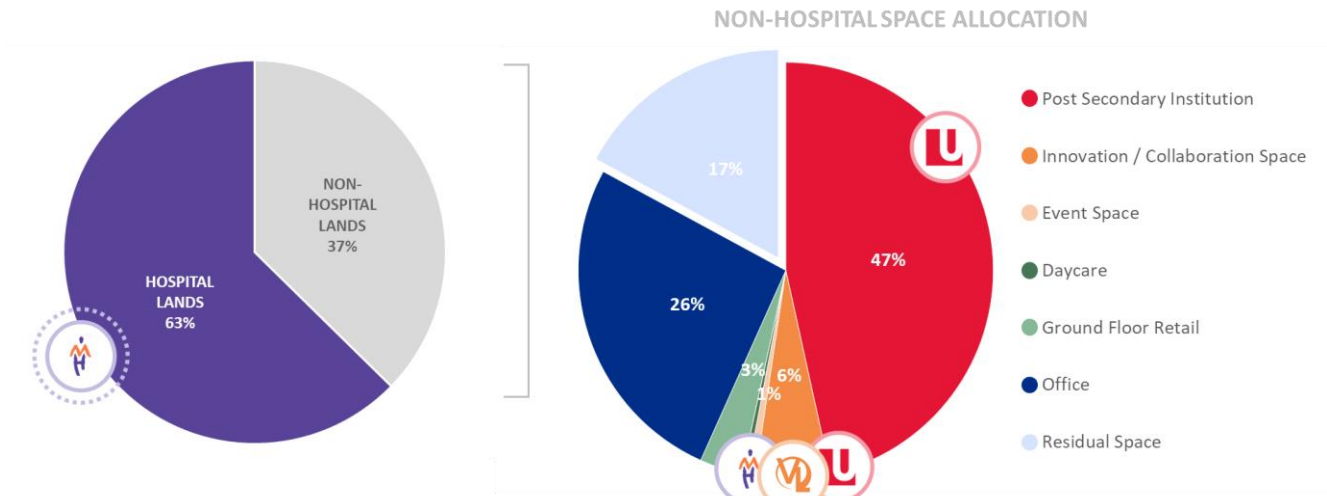


SOURCE: Sajecki Planning

See **Appendix B** for full collection of Land Use Schedules.

As further illustrated in Figure 3-4, the majority of the space at the VHCP—both now and into the future throughout both phases of development—will continue to be focused on the Hospital Lands, collectively accounting for approximately two thirds (63%) of the available GLA. Beyond these core development blocks, the post-secondary campus would represent the next single largest user at approximately half of the remaining space.

Figure 3-4: Preliminary VHCP Allocation of Space by Type (Percentage of GLA)



SOURCE: urbanMetrics / Sajecki Planning

4.0 Financial Considerations

Key Findings

- The VHCP will require significant external funding to support the scale of development and range of activities contemplated. However, these functions fortunately align with increased societal understanding of the importance of providing high-quality health care and supporting related research and innovation. Supporting these types of activities at the VHCP should be a high priority and could help to secure Canada’s position as a global leader in this regard.
- The one-time construction and implementation costs of the VHCP will require significant capital injection to be properly realized. Based on preliminary estimates, this cost could be greater than \$700 million. In conjunction with the above business case and investment rationale, a range of potential sources of this funding have been identified, including support from higher levels of government, the private sector and possible land disposition.
- Based on the land use concepts identified, the VHCP has the potential to be comprised of a range of users and tenants paying both market and non-market lease rates for spaces in yet-to-be-constructed new buildings. Subject to more detailed negotiation as to these exact rates and users, it is the project team’s expectation that a large portion—if not all—of the day-to-day operating expenses can be offset by these lease revenues and other sources of income (e.g., event venue rental, etc.). Therefore, on an ongoing basis, the operation of the VHCP could be largely self-sufficient, or reliant on minimal external financial support once established.

The following section presents a range of financial considerations for the implementation of the vision and associated phasing identified for the VHCP. This analysis includes high-level discussion as to financial feasibility, capital and operating considerations, as well as potential sources of one-time and ongoing funding.

It is important to note that funding opportunities and other financial considerations will vary based on several factors. Many of these factors are generally understood to be external to the VHCP, and are primarily a function of the priorities, direction and capacities of various government institutions, private sector actors and other third parties. As such, today’s revenue opportunities may not necessarily be those available when the VHCP project requires them. Likewise, new funds or opportunities may be announced, which are yet unknown. Therein, the findings of this analysis are focused less on specific opportunities available today, rather a broader discussion of likely funding priorities and how the VHCP may benefit from—or indeed require access to—such opportunities.

Furthermore, as of the preparation of this report and all associated research / analysis, governments around the world are securing vaccinations against the COVID-19 virus, and planning for the roll-out of a widespread immunization campaign. This globally significant disruption to the status quo has likely reinforced amongst the federal and provincial government a basic reality that economic and social progress is founded on a bedrock of medical excellence and health. Absent this underlying

stabilizer, there are severe constraints to maximizing the economic and social potential of a given community.

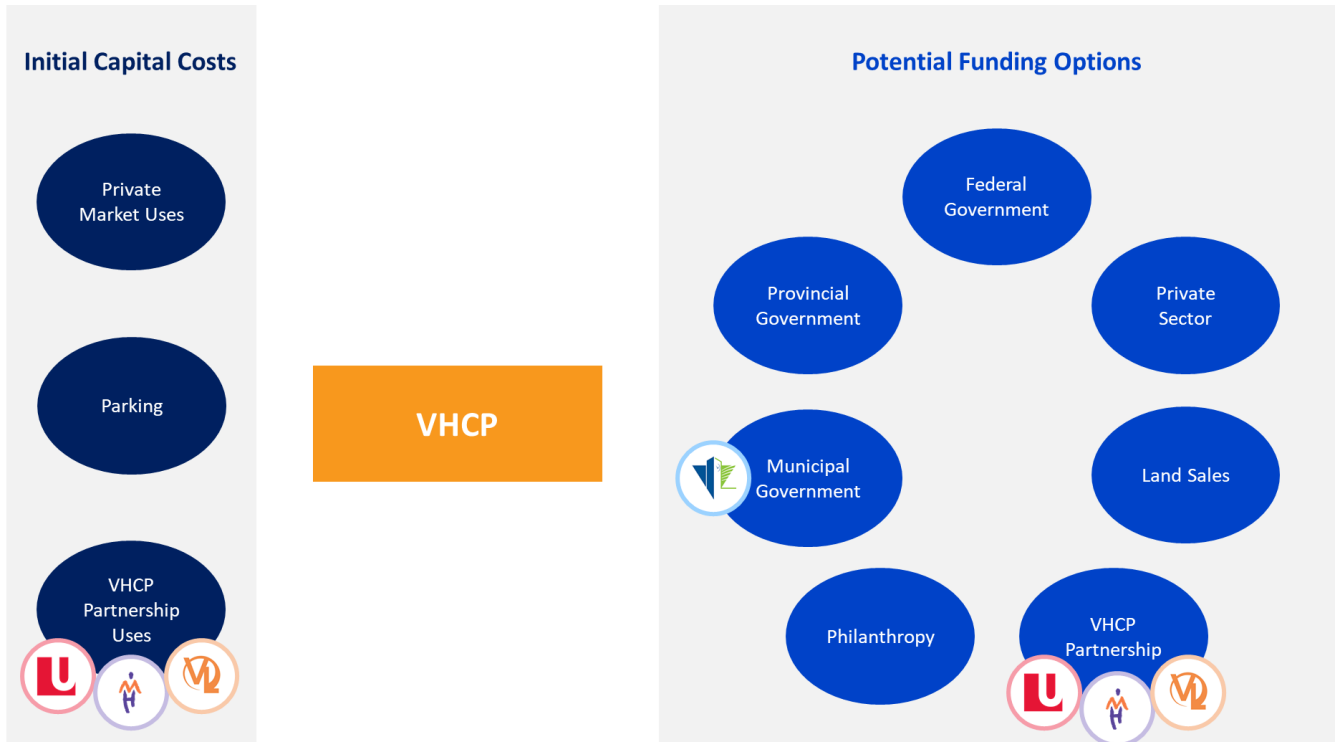
As such, innovative, healthcare-forward research, employment and innovation hubs now have an opportunity to secure funding and support from higher levels of government, perhaps more than ever. Expanded funding of this nature will demonstrate government’s understanding and commitment to the underlying centrality of innovation in healthcare service and delivery to all other aspects of economic activity, including medical industry-specific research and innovation.

The COVID-19 pandemic has reinforced the centrality of healthcare to all other aspects of Canadian society, including economic growth, social well-being, and general community stability and security. Investments in ground-breaking initiatives like the VHCP will demonstrate government’s commitment to global leadership in health, safety and economic prosperity for all Canadians.

4.1 Capital Considerations

As explored in more detail and further articulated in Section 5.0, the one-time capital costs associated with the development of the VHCP include the actual construction of the associated buildings in the precinct, as well as other anticipated costs relating to parking requirements; both above and below grade. To date, a significant capital program has been completed—or is currently underway—including public roadways, water and wastewater infrastructure, the adjacent bus transit facility, and the construction of the Cortellucci Vaughan Hospital itself.

Figure 4-1 provides a high-level summary of the main one-time costs required to realize additional activity at the VHCP, as well as a series of possible sources of revenue to help offset or fund these costs. The purpose of this graphic is illustrative in nature and has been provided only to present a series of possible revenue tools that could be leveraged by the Partnership as a means of implementation. It is important to note that the City of Vaughan will be directly contributing the land assets to support realizing the vision. Although not necessarily a direct financial contribution, the financial value of the land and opportunity cost associated with this dedication is significant.

Figure 4-1: Capital Costs and Potential Funding Opportunities

SOURCE: urbanMetrics inc.

Capital Costs

The total construction program contemplated for the VHCP—based on the preliminary high level concepts developed earlier—identifies a significant one-time spending requirement which is estimated to amount to over \$600 million when considering activities on the Non-Hospital Lands only. It is important to note that at this early stage, the allocation of these costs has not been determined and are subject to a range of conditions. These conditions include determination of the ultimate ownership of lands, capital funding opportunities and whether the implementation structure is coordinated through a public or private entity.

It is also important to note that these capital costs represent a rough, order-of-magnitude estimate of the **total costs of building out the entire VHCP vision**. It incorporates several assumptions which have informed the overall cost structure of realizing the ambitious vision outlined for the VHCP. As negotiations between the partnership evolve and detailed block plan and building parameters are established, more refined construction costs will undoubtedly be determined.

In this regard, the project team has identified a number of opportunities to reduce these costs; particularly as it relates to possible variations to the automobile parking component identified. It is

our view that these alternative approaches to parking delivery do not undermine the vision of the VHCP and instead represent reasonable considerations which could reduce the overall financial burden.

The project team has estimated that the total cost of providing underground parking on the Non-Hospital Lands at the VHCP could total over \$190 million. This cost estimate amounts to slightly more than one quarter of the total capital costs required and therefore represents a significant portion of the initial spending necessary to initiate development at the precinct. As the costs associated with the various other building components are relatively inflexible, the project consulting team has identified two opportunities to reduce the parking-related capital requirement, as follows:

- **Reduce Parking Requirement**

Municipalities across Canada are evaluating their by-laws mandating minimum parking requirements for new development. In many cases, municipal parking requirements have not evolved as public transit and active transportation usage has increased. This has resulted in many parking facilities becoming underutilized. Likewise, the City of Vaughan is currently contemplating a new city-wide Zoning By-law, which may result in adjustments to city-wide parking requirements, or even the realization of site-specific parking standards, unique to the VHCP.

At the VHCP, parking will continue to be an important component for several reasons, including access for York University students and staff moving between campuses, and space to support workers and visitors to the Cortellucci Vaughan Hospital, ventureLAB facility and other services at the VHCP. Ensuring that accessibility is not a barrier and generating fee revenue are core considerations. However, given that the City of Vaughan and York Region are investing significant resources in an improved Bus Rapid Transit network, including the construction of a transit hub that serves the Precinct, revisiting the parking requirements on-site may be justified.

Example:

In 2020, the **City of Edmonton** voted to remove mandatory off-street parking minimums on residential and commercial businesses. This allows property owners to determine the appropriate parking complement, reduce costs, and allow the market to dictate the appropriate supply-demand balance for expensive parking stalls.

- **Consider Providing Structured / Underground Parking in a Phased or Flexible Manner**

The conceptual land use vision identified for the VHCP outlines a phased approach to developing the Non-Hospital Lands at the precinct. As such, it is anticipated that there will be a significant supply of undeveloped and underutilized lands as the precinct continues to grow and mature into itself. Rather than delivering the full required parking component in expensive underground formats during the preliminary phases of development, the ultimate operator of the site could utilize these lands as surface parking until they are replaced with growth-related development.

This approach offers two potential benefits:

- First, it potentially **reduces the initial capital costs at the precinct**. In particular, it allows for the realization of core elements of the VHCP development program in a more cost-effective manner over the short-term and in a manner that does not necessarily hinder any accessibility concerns at the site. This allows the precinct to generate momentum, demonstrate proof of concept and galvanize market interest prior to considering the construction of more expensive, structured forms of parking.
- Second, it **offers an opportunity to evaluate actual site-specific demand for parking, rather than based on municipal-wide guidelines**. By developing a data-driven understanding of the actual demand for parking, the site operators can move forward with further phases of development at the VHCP with a supply and format of parking that is directly informed by the early experiences at the VHCP. Monitoring the usage of automobile stalls, active transportation, and public transportation usage will ensure that any contemplated parking complement is based on market need. Similarly, this approach appropriately reflects the potential—and likely—transition to alternative modes of transportation into the future (e.g., autonomous vehicles, increased transit usage, etc.). The City of Vaughan does not currently have a dedicated parking agency to conduct this ongoing monitoring, however proposals such as the VHCP may provide an impetus to establishing such an entity.

Beyond these factors, further consideration and effort will be required amongst the Partnership to determine how capital costs are ultimately borne, and by whom. These decisions must include detailed discussions around land ownership and facility operations, which could additionally necessitate formalization within a legal agreement that clarifies the costs, responsibilities and functions of each stakeholder with respect to building, operation and ownership of facilities at the VHCP (i.e., particularly if other than the City of Vaughan, the current and likely future sole landowner of the subject lands).

Capital Funding

As identified earlier in this section, analyses pertaining to capital funding opportunities and sources is contingent on a range of internal and external factors. Of particular note, the accessibility and availability of funding from public partners is generally contingent on the priorities of the government in power, financial capacities, and the state of the broader economy. It is the project team's view that the nature of the Partnership, as well as the underlying mandate and healthcare-innovation focus of the VHCP aligns closely with a range of government priorities and represents an excellent opportunity for all levels of government to demonstrate a commitment to Canada, Ontario and Vaughan's direction towards taking a leadership position in innovation, education, healthcare and economic expansion.

As such, this section provides a preliminary commentary on the range of potential sources of revenue introduced earlier. Overall, however, identifying specific grants, funding applications or programs is likely premature, at least until such time as a more definitive land use concept and governance structure has been established.

- **Federal Government**

The Government of Canada provides an ongoing stream of funds, grants and opportunities—both directly and indirectly—which support healthcare, innovation and other economic activities. Many of these grants, including the *Strategic Innovation Fund*, the *Post Secondary Institutions Strategic Investment Fund* and the *Canadian Foundation for Innovation*, provide funds which are explicitly tied to selected criteria. Although these funding streams fluctuate, based on a high-level review, the cross-disciplinary and multi-organizational structure of the VHCP positions it strongly to advance a range of federal priorities, and access various funding opportunities.

Alternative Government Funding Opportunity:

In 2017, the Government of Canada created the **Canada Infrastructure Bank ("CIB")**, with a mandate to advise and support projects executed through a public-private partnership that advance the public interest. As it currently stands, the Bank is focused on five key sectors: green infrastructure, clean power, public transit, trade and transportation, and broadband infrastructure. Although not necessarily currently aligned with the principles of the VHCP, subject to the ultimate direction of the VHCP, as well as future alignment with the Bank's general direction, there may be opportunity to secure a partnership with the CIB.

- **Provincial Government**

The Province of Ontario shares the Federal Government’s focus on economic prosperity, healthcare innovation and education. Through the Ministry of Infrastructure, the Province has already demonstrated commitment to the VHCP, by advancing the Cortellucci Vaughan Hospital, the core building block of the precinct. Funding opportunities that leverage this initial multi-billion dollar investment with an economically significant cluster is an efficient way to advance Ontario’s economy. Supporting the unique vision at the VHCP further demonstrates Ontario’s leadership in innovation and maximizes the utility of surrounding infrastructure investments.

- **Regional Government**

York Region shares a commitment to attracting leading public institutions and innovative private businesses to improve the quality of life and employment opportunities for its residents. The Region has previously demonstrated this commitment through funding York University’s expansion into Markham.

- **Municipal Government**

The City of Vaughan has—to date—invested a significant amount of money and staff resources into planning and implementation of baseline infrastructure at the VHCP. As the owner of the VHCP lands, the City of Vaughan has the ability to dictate the direction of the vision, as well as the resulting ownership and governance structure for the lands. The municipality and its citizens benefit directly from investing in the project and the economic, social and infrastructure benefits that it can further offer the community.

- **Private Sector**

Subject to the decided implementation vehicle selected for realizing the development of the VHCP as envisioned, there may be opportunities to generate one-time revenues from private partners on the site. This could come through a series of opportunities, including joint ventures, building sales, and longer-term operational revenues generated from private tenants.

- **Land Sales**

The project team has identified select parcels within the VHCP that are geographically isolated from the core focus area for investment. In particular, Block 1 maintains a Jane Street frontage and is largely isolated from the core development program at the VHCP, which is anticipated to be closer to the western edge of the precinct along the Highway 400 corridor. As such, the City of Vaughan could contemplate the sale of this—and / or potential other—parcel(s) to private interests to fund a small portion of the upfront costs required at the precinct.

As explored in more detail herein, however, we note that this generally is not expected to represent an overly significant source of revenue, nor a “silver-bullet” solution, to the major capital costs associated with building out the precinct.

- **Primary VHCP Stakeholder Group**

Subject to yet-to-be-agreed upon and more detailed understandings of the specific roles and responsibilities of each member of the VHCP Partnership in advancing the vision for the precinct, it is possible that each organization may be responsible for a reasonable component or share of the capital requirements identified. This funding may be subsequently generated independently by each organization through a range of different sources, including those identified throughout this report. However, this assignment of funding responsibility could shift some of the overall burden from the City of Vaughan. The nature of these arrangements should be discussed amongst and between the core partnership group and other potential funding partners. To date, discussions of this nature have not occurred.

- **Philanthropy**

Similar to the recent donation by the Cortellucci Family to the new hospital, it is possible that private philanthropic donations provide a small portion of revenues to allow for the initiation of the project. Certain public organizations have extensive donor relationships, which may see value in supporting the vision outlined for the VHCP.

Land Sale Opportunity:

Market Residential Uses

A high-level review of comparable private land sale transactions throughout this part of Vaughan and the surrounding community, suggests that property is currently selling for somewhere in the order of \$40 to \$60 per buildable square foot of development floor area. Based on this rough estimate and the level of density contemplated at the site, the project team has estimated that—were Block 1 permitted to accommodate market rate residential uses—the sale of this particular development could generate a one-time revenue of some \$4.0 to \$7.5 million. More realistically, however, a significant increase in density could be contemplated, thereby substantially increasing the value of this property.

Non-Market Residential Uses

Similar to above, Block 1 also presents a distinct opportunity to deliver a meaningful amount of non-market housing at the VHCP. This strategy could include the provision of student housing to support York U, workforce housing, or below market seniors or rental housing. Although not directly identified as part of the broader vision for the VHCP, non-market housing may be an important supporting factor in realizing the vision, and merits consideration. In fact, we note that this has become an increasingly common practice, as evidenced by the University Health Network (UHN)'s recent announcement of a partnership with the City of Toronto and United Way that involves setting aside a parcel of land valued at some \$10 million for a new affordable housing project in the Parkdale neighbourhood.

However, even in the absence of basic financial pro forma modelling for this type of development—and based on our own professional experience in evaluating the financial feasibility of this type of housing across the GTA and beyond—we can determine with certainty that the inclusion of non-market housing—either in whole or in part—would inherently reduce the revenue-generating capabilities of the site relative to market rates (i.e., as a function of the below-market rental rates achieved by targeting lower and moderate-income residents). As such, it is important to emphasize that this would not represent an ideal financial strategy but rather an option for consideration by the City and the broader VHCP Partnership, should this be an identified priority or preferred outcome.

4.2 Operating Considerations

The nature of the investments being contemplated at the VHCP unlock a range of funding sources and opportunities to advance the public and institutional-focused facilities at the precinct. Along with traditional capital grant opportunities for municipal investments, post-secondary institutions and employment training centres, the ongoing activities and collaboration / innovation focus of the precinct may allow it to qualify for sustained support as well. Obviously, it is important to note that the key Partnership stakeholders (i.e., Mackenzie Health, York University and ventureLAB) are also currently recipients of their own ongoing funding, due to the unique positive social, economic and technical impacts they offer. These funds will continue to be important inputs to support the activities of each respective organization, including at the VHCP.

In addition, funding for the entity responsible for executing, managing, leasing and maintaining the structures and facilities at the VHCP may also be necessary. It is important to note that—at a high level—the project team expects substantial portions of the real estate developments located on the Non-Hospital Lands to be provided to private, for-profit tenants at full market rates. Further arrangements may also be negotiated with other tenants of the space, including small start-up organizations, ventureLAB, York University and any other presence at the precinct. At this stage, it would be premature to speculate as to how exactly the rental arrangements reached between the City of Vaughan and these core groups would be established. It is our understanding that—to date—these conversations have yet to be initiated. However, it can generally be assumed that these arrangements would be negotiated independently with each organization, and likely comprise a mixture of market and subsidized rates.

Given such uncertainty in these ongoing financial arrangements, offering any commentary with respect to detailed, or even high-level financial assumptions is premature and risks influencing the nature of discussions among and between the primary stakeholders within the Partnership. However, the project team's general view and experience is that from an operational perspective, the revenues likely to be generated on an annual basis from a project of this nature could—subject to future negotiations—be financially self-sustaining.

As such, it would not be an unreasonable goal to maintain operational self-sufficiency and sustainability throughout the longer-term execution and management of the VHCP.

Ongoing Operating Expenses

In addition to the one-time construction costs, ongoing expenses associated with the maintenance and operations of any new development at the precinct will also be important considerations.

Typically, these fees fluctuate significantly depending on the ultimate users of the space, usage and occupancy patterns, as well as the intensity of development on any given block. Regardless, the costs associated with operations and maintenance will likely be borne by the entity responsible for managing the VHCP (see proposed options identified and discussed in more detail in Section 6.0). Under typical lease arrangements, however, it is common for some ongoing operation and maintenance costs to be passed on to tenants within a development.

Due to the high-level nature of this assignment, estimating the ongoing operating costs with any reasonable degree of accuracy is a challenging proposition. In particular, while we note that operating costs will generally scale in accordance with the amount of development contemplated on the site under each option (i.e., exhibiting a similar cost relationship and comparison to the initial capital investments shown above), this could be significantly altered based on the nature and type of tenants considered. Regardless, this will continue to be an important consideration that has implications on the ongoing financial burden assigned to either a public or private operator.

These costs, and the orientation of the operator (i.e., private, profit-seeking organization, or public organization with objectives beyond purely financial returns) will have significant bearing on the nature of tenants pursued at the site.

Ongoing Operating Revenues

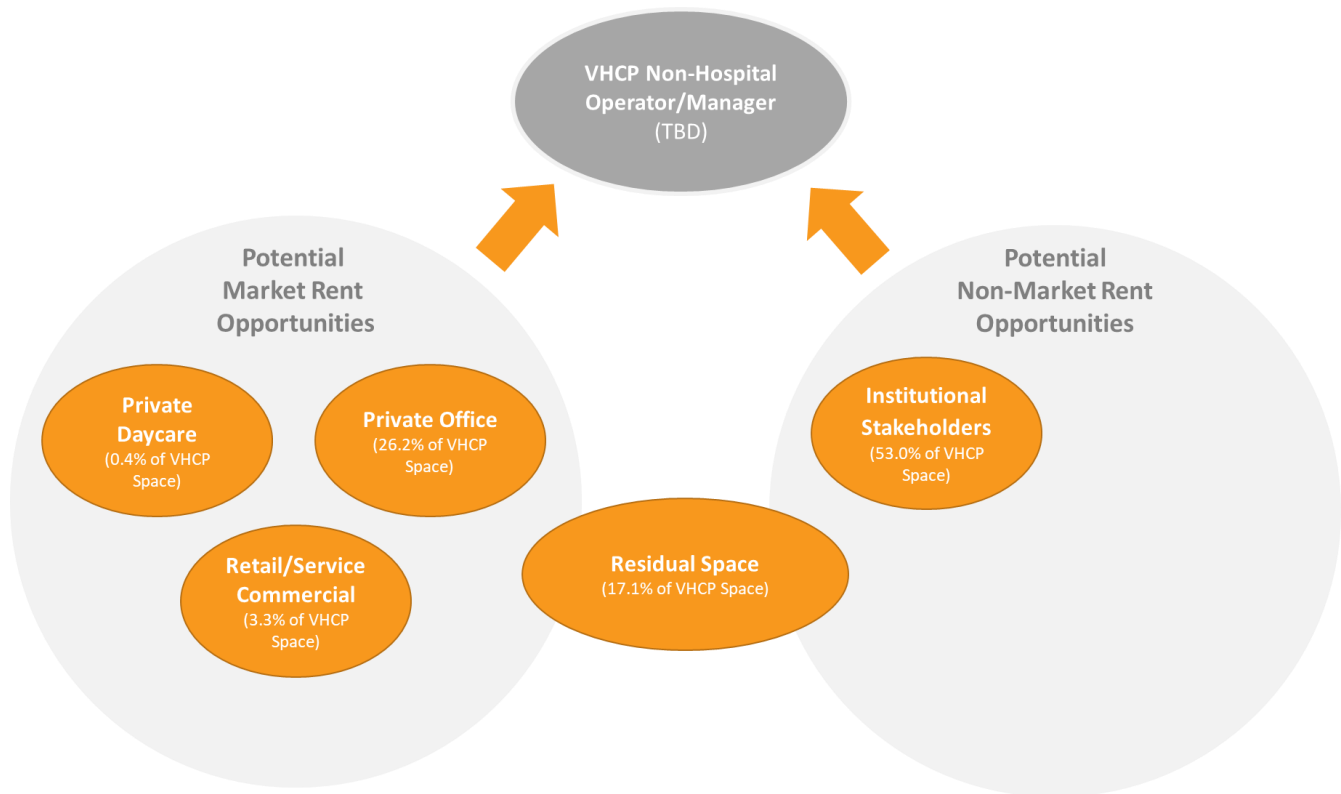
Based on the use mix identified in Section 3.0, it is generally anticipated that new building space at the VHCP will be leased to a mixture of private, market-based users, local start-ups, and civic and institutional organizations such as ventureLAB. Subject to the ultimate arrangements made and agreements reached between each of these individual organizations, the operator of the VHCP could generate an ongoing revenue stream that could offset some of the initial capital investments and much of the ongoing operational costs associated with the new facilities proposed.

Similar to the challenges associated with estimating ongoing operating costs noted above, the nature of these tenant agreements will likely be subject to a detailed negotiation process with the operator, in addition to the ultimate tenant mix identified for the site. At a high-level, the following is intended to identify some of the potential sources of revenue available to the operator under the assumed tenant mix and land use concepts presented as part of this Study.

Figure 4-2 illustrates a number of potential rental revenue opportunities based on preliminary considerations as to whether each tenant would likely provide market rental rates, or non-market compensation. It is important to note that the allocations illustrated are speculative in nature and based solely on the perspectives and speculation of the project consulting team. These arrangements are ultimately subject to negotiations between the owner / operator of the Non-Hospital Lands at the

VHCP, and individual tenants at the precinct. As shown, based on the categorization illustrated, the project team anticipates that slightly over half of the space at the VHCP would be occupied by public, or quasi-public entities, which could significantly reduce the revenue-generating potential of the precinct relative to other comparable private sector employment-based facilities. We do note, however, that some common elements—such as the central event space envisioned as part of the innovation community—could offer additional opportunities for financial benefit.

Figure 4-2: Potential Sources of Operating Revenues



SOURCE: urbanMetrics inc.

Allocations shown are speculative in nature and not necessarily indicative of the ultimate financial relationships that emerge at the VHCP. These arrangements are subject to negotiations between the identified operator / manager of the Non-Hospital Lands at the precinct and each individual user entity. Percentages shown represent the share of total leasable space proposed as part of the land use concepts (excluding the existing and potential future footprint of the Cortellucci Vaughan Hospital).

5.0 Return on Investment

Key Findings

- The widespread legacy financial and employment-related impacts of the VHCP form an important part of the overall business case for the significant one-time and ongoing operational investments required to implement the vision.
- Based on estimated development parameters, full build-out of the Non-Hospital Lands at the VHCP and full realization of the Extra-Regional land use scenario for the precinct, one-time capital investments will result in more than \$755 Million in value added to the Canadian economy, opportunities for some 6,300 full-time equivalent employment positions and upwards of \$270 million in government revenues; the vast majority of which would accrue directly within the City of Vaughan and surrounding GTA Region.
- Additional and even more significant economic impacts will also be realized on a recurring, annual basis upon full occupancy and activation of the VHCP, including:
 - Accommodating total permanent, on-site employment at the VHCP is estimated at some **1,800 jobs** associated with high value industry sectors and over **\$350 million in operational output** each year; and,
 - Recurring benefits in the order of \$402 million in value added GDP, 3,200 full-time equivalent positions and over \$120 million in government revenues for jurisdictions across Canada.
- Although difficult to quantify, the VHCP could also yield important opportunities to enhance the municipal profile for the City of Vaughan, attract major anchor institutions to the community, foster entrepreneurship and innovation, as well as optimize recent and ongoing spending on infrastructure, among a range of other more qualitative and intangible benefits.

In addition to the site-specific financial considerations necessary to ensure project feasibility, the more widespread economic impacts associated with the implementation of the VHCP will form an important part of the overall business case in support of the significant one-time and ongoing operational investments required to achieve the Partnership's vision for the precinct.

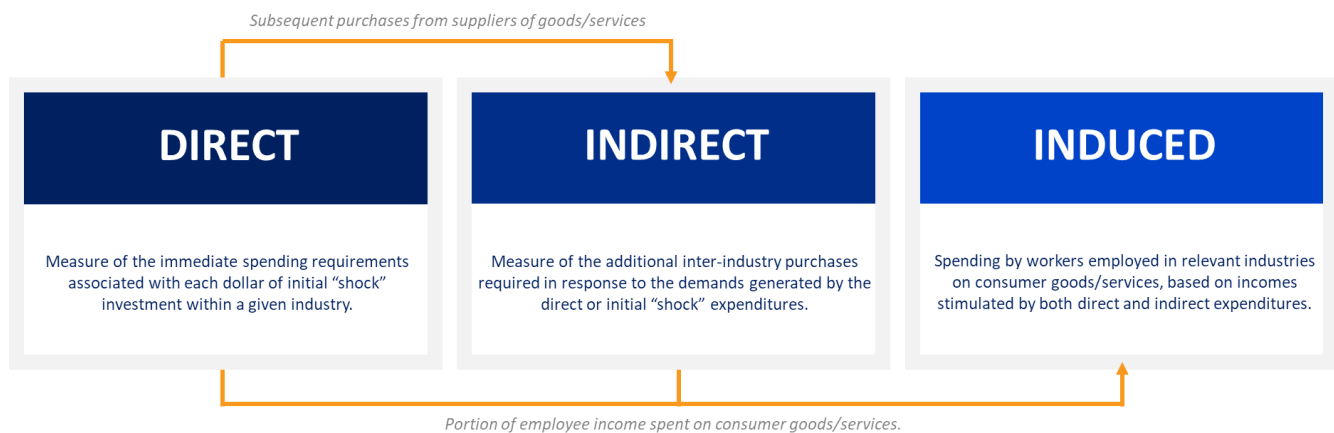
Based on the land use concepts and associated financial considerations presented in Sections 3.0 and 4.0, respectively, the following identifies the potential scale of impact or related spin-off benefit to the economies of Vaughan, Ontario and Canada that could be realized upon full build-out of the VHCP as a successful new employment precinct.

5.1 Approach

The following provides a brief introduction to the basic underlying structure of the economic impact analysis undertaken by urbanMetrics. In particular, the following is intended to provide an overview of the following:

- the different types of one-time investment and recurring economic activities that have been modelled (i.e., the “**inputs**” or initial “**shock**” spending); as well as,
- the specific economic variables and metrics that have ultimately been reported (i.e., the “**outputs**”).

Similar to other assessments of this nature, the majority of the key economic impacts identified throughout this report have been calculated through the use of an econometric model that simulates the flow of expenditures throughout the economy. The underlying principle of this type of modelling is that each dollar of expenditure on goods and / or services purchased from a given industry sector circulates and re-circulates within the economy, thereby multiplying the impact of the initial expenditure. This concept is referred to as the “**multiplier effect**”, and has three main components: **direct impacts**, **indirect impacts** and **induced impacts**.



The custom-built models utilized by urbanMetrics are based on input-output tables produced by Statistics Canada and are designed to provide a reliable measure of the impact of a given initial or “shock” investment on a range of different economic metrics. For simplicity, we have generally focused on the following key metrics: **employment generation**, **value added to the economy**, and **government revenues**, which we believe are most important and relevant for this type of investment decision. Unless specifically indicated otherwise, these types of impacts have generally been expressed at the National, Provincial and local (i.e., City of Vaughan) levels.



Economic Value Added
(Gross Domestic Product)



Employment / Jobs
(Full-Time Equivalents)



Government Revenues
(Municipal + Provincial + Federal)

In order to capture the full extent of the unique impacts likely to be generated by the VHCP, we have tested two main types of source spending and ongoing / operational expenditures. The following provides a brief introduction as to some of the specific types of investments and business activities that have been evaluated using the aforementioned input-output modelling:



CAPITAL INVESTMENTS
(ONE-TIME IMPACTS)

Similar to other major institutional infrastructure and real estate developments, the full build-out of various portions of the VHCP will involve substantial one-time capital investments to construct the various new buildings proposed. These investments are expected to include the introduction of a range of new healthcare, post-secondary, innovation and other employment related uses across the subject lands.



OPERATIONS
(ONGOING IMPACTS)

With respect to recurring operational impacts, the VHCP is expected to stimulate significant additional economic activity by way of the total operating output associated with a range of new employees introduced on the site. A significant portion of this employment activity will be driven by the primary anchor institutions planned for the subject lands, including the post-secondary presence, as well as the innovation studio and related private office spaces. Albeit much smaller in scale, additional benefits will also be derived through the operation of various other supporting businesses, including the retail / service commercial amenities and other smaller local-serving office-based businesses (e.g., healthcare practitioners, etc.).

See **Appendix C** for a more detailed overview of our Economic Impact Approach.

5.2 Capital Impacts

One-Time Capital Investments

As detailed earlier in this report, the proposed build-out of the VHCP will involve the construction of approximately 1.0 million square feet of GFA above and beyond the main building footprint(s) of the Cortellucci Vaughan Hospital. This will undoubtedly require an extensive upfront capital investment program. Based on the scale of development contemplated and other preliminary, high-level development assumptions developed by the project consulting team, we have estimated the likely building parameters (e.g., building efficiencies, parking requirements, etc.) and associated project costing, which has included both hard and soft construction cost components.

Based on these estimates, the various VHCP building elements identified for the complete development of the Non-Hospital Lands could require an initial capital investment of over **±\$700 million³**. Approximately half (49%) of this total would be required to support the first phase of development proposed at the VHCP in supporting the *Intra-Regional* vision.

One-Time Capital Impacts

Based on the results of our economic impact modelling, the aforementioned one-time estimated capital investments associated with the construction of new buildings on the Non-Hospital components of the Extra-Regional vision are expected to result in:

- **±\$755 million in total GDP value-added** to the Canadian economy;
- **±6,300 full-time equivalent employment** positions across Canada; and
- **±\$276 million in government revenues** across Canada⁴.

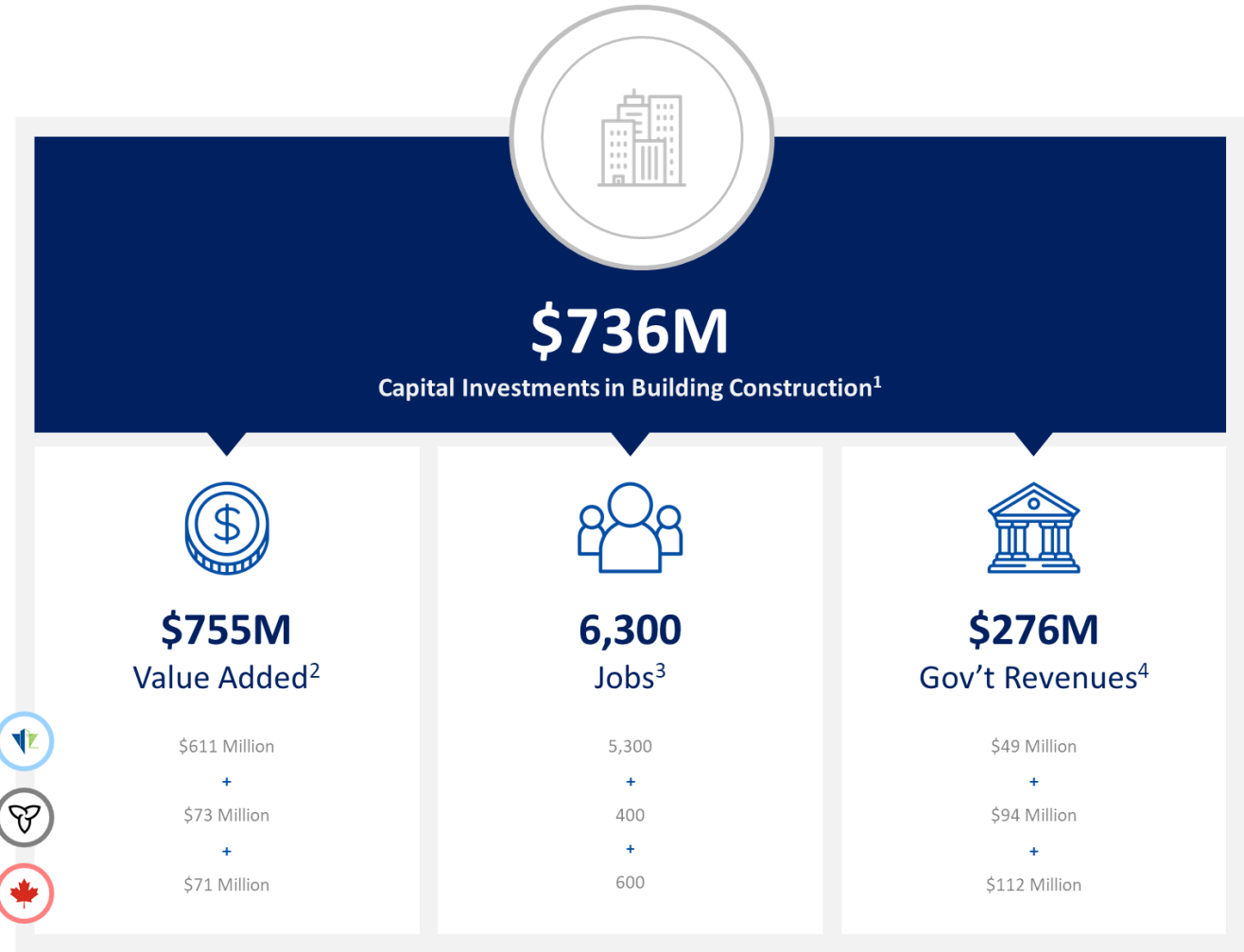
³ urbanMetrics' estimate based on derived development square footage yield by use type and industry standard construction cost per square foot factors. Includes hard and soft cost components, as well as provisions for both above and below grade development (i.e., including parking). Estimates represent a preliminary, order of magnitude calculation only, and will evolve as the ultimate vision for the VHCP is realized and detailed, building specific construction costing is prepared.

⁴ Includes revenues generated at all three levels of government (municipal, provincial, federal). Totals also include revenues generated within municipal and provincial jurisdictions beyond Vaughan and Ontario, respectively.

It is also worth noting that more than 80% of the value-add and nearly 84% of the jobs identified above are expected to occur within the City of Vaughan. A similar proportion of all related labour income generation and other economic benefits would also accrue directly within the community.

See **Appendix C** for detailed Economic Impact Summary Tables for the Intra-Regional and Extra-Regional phases.

Figure 5-1: One-time Capital Investment Impacts, Extra-Regional VHCP Vision (Non-Hospital Lands)



SOURCE: urbanMetrics inc., based on the Statistics Canada Input-Output model. Some figures may not add due to rounding.

¹ Represents the one-time capital investment in building construction, including above and below grade components.

² Value added represent the total GDP value-added at the federal level. This includes value added occurring in the City of Vaughan, elsewhere in the Province of Ontario and elsewhere across Canada.

³ Jobs represents the full-time equivalent jobs at the federal level. This includes employment activity occurring on-site, across the City of Vaughan, elsewhere in the Province of Ontario and elsewhere across Canada.

⁴ Total government revenues include the total tax revenues to the City, Province and Federal government, as well as other municipalities and provinces across Canada. Amounts accruing specifically to each of the City of Vaughan, Province of Ontario and Government of Canada also identified here for reference.

Other One-Time Impacts

In addition to the aggregated government revenues calculated as a function of the initial capital spending identified above—which are expected to accrue to all three levels of government and in various other jurisdictions across Canada—the full build-out of the VHCP will also incur a range of more specific charges and fees that are unique to the City of Vaughan.

For example, major construction projects of this size are often eligible for a range of **one-time development charge revenues and other planning application fees**. We have not determined the exact amounts of these potential additional revenue streams at this stage, given the high-level and preliminary nature of the concepts identified. Similarly, recognizing the specific institutional land uses under consideration and the potential governance structure for the precinct, it is possible that some of these municipal charges will not be levied directly in a manner consistent with typical private development.

Once the development advances towards more detailed design and nears actual construction, it will be important to revisit these factors as part of a proper fiscal impact assessment; particularly from the perspective of the City of Vaughan.

5.3 Operating Impacts

Permanent On-Site Employment

Whereas our analyses of the initial capital investments associated with the proposed build-out of the VHCP has determined the total employment supported by these particular one-time economic activities, we have also undertaken a more focused assessment as to the total **permanent on-site employment** that could be accommodated within the new uses established at the precinct. That is, rather than the more widespread job impacts resulting from the specific one-time “shock” investments identified (i.e., capital investments in building construction, etc.), we have estimated the number of permanent jobs that will be accommodated on the subject lands upon full build-out of the Non-Hospital portions of the precinct.

Pinpointing a specific time or date for the realization of the direct and indirect benefits associated with ongoing employment activity is dependent on a variety of factors. These factors include the planning process, availability of sufficient funding to initiate construction, construction timelines, and market strength. However, based on the range of work completed to date, it is conceivable that the Intra-Regional (Phase 1) development could be fully operational within a period of 5 – 10 years.

Notwithstanding the significance of the one-time employment impacts outlined in the previous section, the VHCP could have much more valuable

legacy impacts as a function of the creation of this range of new spaces for new businesses and other economic activities on a recurring, annual basis.

In particular, upon completion and full implementation of the Extra-Regional vision identified, the VHCP *could* involve the introduction of more than 800,000 square feet of new leasable employment-related space on the Non-Hospital Lands alone. Upon the full occupancy and activation of these new spaces, the proposed development concept would accommodate a significant amount of new employment activity across a variety of distinct and inter-related industry sectors.

By considering the total amount and type of leasable space introduced as part of the VHCP, in conjunction with reasonable employment density ratios for each of the expected major users or land uses identified (i.e., “space per worker” factors), we have estimated the potential future permanent on-site employment base that could be accommodated at the precinct.

Upon full realization and completion of the Extra-Regional vision for the VHCP, the precinct could ultimately support nearly **1,800 full-time equivalent employees** on the Non-Hospital Lands alone.

These employment estimates would obviously be far more significant when considering the entirety of the VHCP and specifically including the **substantial on-site employment generated by the hospital, which we understand is estimated at a similar level of some 1,800 employees**. Furthermore, this total hospital-related employment would undoubtedly increase longer-term in the event of any future expansions and build-out of Block 3 of the precinct.

For the purposes of the balance of our analysis, however, we have continued to focus more exclusively on the economic impacts resulting from any “net new” space introduced to the VHCP on the Non-Hospital Lands. It is important to note that—similar to the space allocation estimates presented earlier in this report—the employment yields are subject to change. As the partners engage in more detailed discussions around development opportunities, clarity on anticipated building parameters and timelines will be established, which will undoubtedly influence the overall quantum of employment. Once more a more detailed go-forward building strategy has been established, the estimates, and associated impacts reported herein should be reviewed and adjusted as needed.

Employment Composition

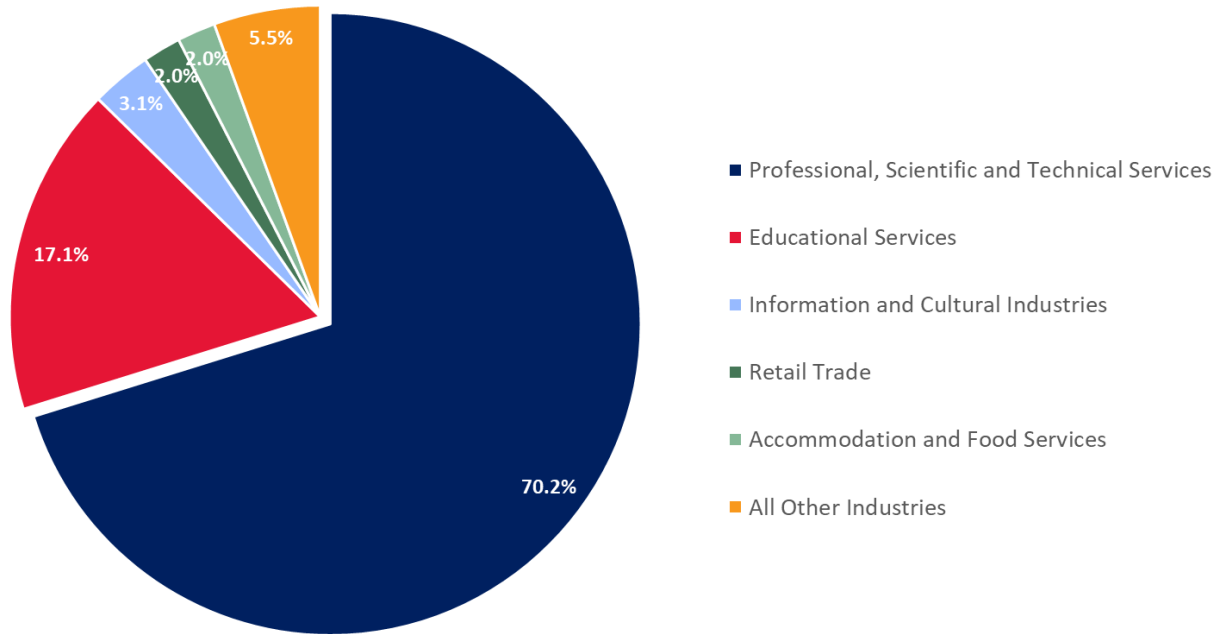
In order to estimate the total annual operating output that could be produced by the new academic facilities, healthcare activities and commercial businesses expected to occupy space at the VHCP, we have considered the likely range of industries accommodating employment within the precinct. While the exact tenant composition and nature of businesses that will occupy space at this location are

obviously yet to be determined and subject to change at this very early stage of the planning process, it is certain that these efforts will **lay the groundwork for accommodating a wide range of new employers and potential economic activities in Vaughan.**

Based on a combination of the land use concepts identified, our own assessment as to the specific type of tenants that could occupy space within the precinct, as well as the existing breakdown of employment by industry across other parts of the City and GTA, we have estimated the breakdown of the total on-site employee estimate above in accordance with standard North American Industry Classification System (“NAICS”). In direct coordination with Statistics Canada, we have then determined an appropriate productivity level per employee (i.e., output per employee) as a means of estimating the total amount of operational output that will occur on the site on an annual basis and upon full occupancy of the new buildings at the VHCP.

With the obvious focus on institutional and professional services type uses at the VHCP, the majority of future employment in the precinct is likely to be associated with relatively high value added and well-paying jobs, from which further indirect economic benefits can be derived.

Specifically, the results of our employment assessment suggest that more than two thirds (70%) of the full-time equivalent employment positions at the VHCP will be represented by jobs within the *Professional, Scientific and Technical Services* industry. Similarly, additional significant employment is forecast for the *Educational Services* sector, among a range of others, including but not limited to: *Information and Cultural Industries, Health Care and Social Assistance, Retail Trade, Accommodation and Food Services.*

Figure 5-2: VHCP Employment Composition (Non-Hospital Lands)

SOURCE: urbanMetrics

Recurring Operational Output (Annual)

Based on the total employment and assumed breakdown by industry category above, as well as relying on Statistics Canada output per employee data by industry, we have determined the total annual operational output associated with the VHCP upon full build-out of the Extra-Regional scenario.

Overall, the nearly 1,800 permanent on-site employees estimated at the VHCP could collectively support some **\$350 million in operational output** each year upon its completion and full occupancy.

Recurring Operational Impacts (Annual)

Similar to the analysis of capital spending impacts earlier in this report, urbanMetrics has relied on the Statistic Canada Input-Output model to estimate and calculate the impacts of this future economic activity at the VHCP. In this portion of our return on investment assessment, we have relied upon the

estimates above with respect to total operating output as the key “inputs” or stimulating economic activity for consideration in our modelling.

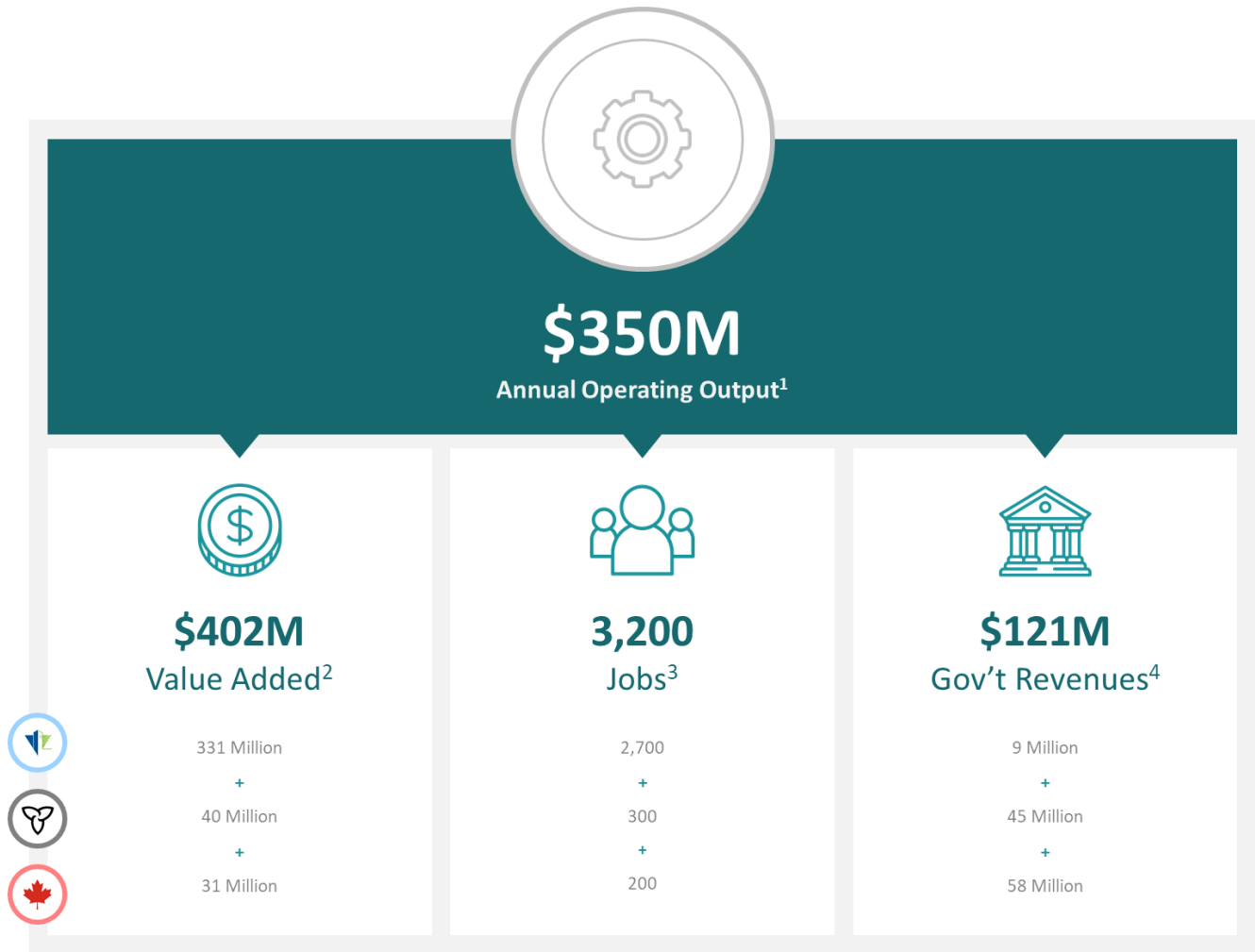
The annual operational economic output associated with this on-site employment is expected to result in the following economic benefits each year after build-out and occupancy of the Non-Hospital Lands at the VHCP:

- **±\$402 million in total GDP value-added** to the Canadian economy;
- **±3,200 full-time equivalent employment positions** across Canada; and
- **±\$121 million in government revenues** across Canada.

Furthermore, in terms of the direct return to the City of Vaughan—the current and likely future owner of most of the properties within the VHCP responsible for advancing development at the site—our estimates suggest that up to 85% of the jobs identified above are expected to accrue within the municipality. A similar share of other national impacts shown here are also expected to be achieved.

See **Appendix C** for detailed Economic Impact Summary Tables.

Figure 5-3: Economic Impacts of Future Operational Output (Non-Hospital Lands)



SOURCE: urbanMetrics inc., based on the Statistics Canada Input-Output model. Some figures may not add due to rounding.

¹ Represent the value of ongoing operations of future tenants and users of new buildings proposed for the VHCP on Non-Hospital Lands.

² Value added represent the total GDP value-added at the federal level. This includes value added occurring in the City of Vaughan, elsewhere in the Province of Ontario and elsewhere across Canada.

³ Jobs represents the full-time equivalent jobs at the federal level. This includes employment activities occurring on-site, across the City of Vaughan, elsewhere in the Province of Ontario and elsewhere across Canada.

⁴ Total government revenues include the total tax revenues to the City, Province and Federal government, as well as other municipalities and provinces across Canada. Amounts accruing specifically to each of the City of Vaughan, Province of Ontario and Government of Canada also identified here for reference.

Other Recurring Benefits

The various new and / or reconstructed real estate assets established at the VHCP can ultimately be expected to generate significant ongoing revenue sources that will accrue directly to the City of Vaughan (e.g., by way of **increased property tax revenues**). Although technically reflected as part of the high-level government revenue estimates provided above as part of the “top-down” approach to economic impact modelling, it will be important to determine the actual site-specific property tax revenue implications available to the municipality upon confirming a development concept, as well as a corresponding ownership, management and governance structure for the VHCP as key outcomes of this Study.

Although difficult to quantify with precision at this early stage, it will continue to be important to take these additional fiscal impacts into consideration when deciding to invest further in implementing the VHCP vision. Similar to follow-up analysis and financial considerations that will be necessary as it relates to capital spending, once development at the precinct advances towards more detailed design and nears actual construction, these factors can—and indeed should—be evaluated as part of a proper fiscal impact assessment.

5.4 Qualitative Impacts

In addition to the significant one-time and ongoing financial / employment-related benefits identified above, the development of the VHCP could have a transformative influence on a range of other more qualitative aspects of the surrounding community in Vaughan.

Figure 5-4 below and the descriptions provided throughout the balance of this section summarize a range of potential legacy impacts achievable through implementing the vision for the VHCP.

Entrepreneurship & Innovation

The unique combination of healthcare, education, and start-up commercialization opportunities, mixed with private sector activity provides a unique set of users within a single location which will undoubtedly drive innovation and growth that is greater than the sum of the individual parts that make up the VHCP. This concept has the potential to create an ecosystem that naturally supports entrepreneurship, but also establishes influence beyond the City of Vaughan’s geographic boundaries, to become a major driver of provincial and national employment and economic activity. A focus on multi-disciplinary skills development of this nature could further create additional opportunities for students, emerging entrepreneurs and growing enterprises.

Figure 5-4: Summary of Qualitative Benefits Associated with VHCP Implementation

SOURCE: urbanMetrics inc.

Enhanced Municipal Profile

The City of Vaughan is evolving from a traditional commuter suburb into a mature major municipality, with a range of distinct employment areas, specializations and industry representation. The emergence of the VHCP as a healthcare-innovation precinct will complement the primary office / residential node at the Vaughan Metropolitan Centre and build upon the growth trajectory elsewhere in the community. These districts and the businesses, residents and other users that occupy them will be the driving force of Vaughan's emerging identity as an urban, innovation-focused municipality that is poised to solidify its position as a key competitor in the GTA landscape long into the future.

Infrastructure Optimization

The City of Vaughan, in coordination with Provincial, Regional and Federal partners, has made tremendous investments in infrastructure and institutions that serve the public. Led by a new BRT network and the Cortellucci Vaughan Hospital, these significant public investments on and near the VHCP lands will significantly improve the quality of life for area employees and residents alike. Clustering public sector investments around these key pieces of infrastructure makes accessing important services more efficient and convenient for residents, and more cost-effective for the municipality to deliver those services. The VHCP would further leverage these recent infrastructure investments by establishing additional critical mass and activity to optimize use of these new facilities.

Attract Major Institutions

Prior to the construction of the Cortellucci Vaughan Hospital, the City of Vaughan was the largest municipality in Canada without a hospital. Similarly, the presence of York University will attract a major Canadian post-secondary presence to Vaughan. These major investments and institutions will undoubtedly draw students, researchers and medical and allied health professionals from across the GTA into Vaughan, where there has previously relatively limited draw for these groups. This inflow will create significant spillover effects supporting local retailers and businesses and will attract complementary support services (e.g., medical offices and student services).

Furthermore, the emphasis on education, training and skills development could contribute to improving the broader regional workforce. These initiatives could be a supporting factor in drawing additional partners to the VHCP, including medical health teams.

Local Industry Cluster

The planned function of the VHCP stands as a unique collaboration amongst major public institutions that has the potential to carve out a local cluster of dedicated professionals, academics and entrepreneurs developing creative, technology-driven solutions to healthcare related challenges. Certainly, in isolation, the results of this effort will create a major employment cluster at Major MacKenzie Drive and Jane Street. However, the investment has the potential to create an ecosystem that attracts small and large enterprises, leading researchers and medical practitioners, driving demand for additional office space expansion within Vaughan and particularly at the VHCP.

Emerging from the COVID-19 Pandemic, there are opportunities to leverage new thinking around interconnections between health and sustainability to strengthen the appeal of the cluster anticipated at the VHCP. Factors including urban space design, activation of public space, air quality, and direct connections to lifestyle amenities are all important considerations in the development of a physical realm attractive to prospective businesses.

Employment Growth

As presented earlier in this section, the full build out of the VHCP could support upwards of 1,800 permanent on-site jobs, excluding the hospital. Including existing and potential future employment at the hospital, the project team has estimated that the VHCP could provide nearly 4,000 total full-time equivalent employment positions upon full realization of the Extra-Regional vision for the precinct. The opportunity to provide this scale of high quality jobs at the VHCP would make the area one of the most significant employment concentrations in York Region. Furthermore, academic, medical and entrepreneurial positions of this nature could result in the recapture of residents from within Vaughan and York Region who traditionally commute to employment opportunities at other business clusters, most notably Downtown Toronto.

Local Collaboration

The efforts undertaken by ventureLAB and the other core stakeholders within the VHCP Partnership are likely to result in increased industry events, exposure and business relationships amongst local Vaughan organizations, among others in related fields across the GTA. It is likely that these events will draw guests from across Vaughan, York Region and the GTA, providing a platform for local entrepreneurs to share their work and find opportunities to collaborate with other local or regional organizations.

6.0 Implementation Options

Key Findings

- As the VHCP enters the vertical planning and development stage, it is important to recognize that several important investments, decisions and policies have already been established to help bring the project to its current standing. Namely, as the current and likely future sole landowner of the precinct, the City of Vaughan has prepared a range of studies and reports to establish planning policy standards, design guidelines, and infrastructure investments necessary to facilitate the construction of the new medical facility and surrounding real estate development on Non-Hospital Lands at the VHCP.
- Based on a review of previous agreements, the principle of a “hospital-first” precinct will continue to guide all future decision-making at the VHCP.
- At this stage, there remain four overarching steps remaining to be completed prior to realizing additional business, learning and research activities at this location: **Policy Making, Policy Application, Construction and Operations**.
- In best achieving these tasks, we have identified three main implementation models for additional consideration, including: a **Municipal Development Corporation** (“MDC”); **Public-Private Partnership** (“P3”) and some form of **In-House Development** internal to the City of Vaughan.
- Upon evaluating each of these potential models against pre-defined criteria—as well as possible sub-options within them—it is our opinion that some variety of the MDC structure is likely the most effective in advancing the physical development and ongoing management of the VHCP, on behalf of the City of Vaughan.
- Our assessment also confirms that the most effective implementation model or governance structure is highly dependent on the primary strategic outcomes identified by the City and the broader VHCP Partnership.

With a general understanding of the cost-benefit relationship and specific financial considerations necessary to realizing the VHCP vision established earlier in this report, the following section provides a more detailed evaluation and consideration of potential implementation strategies for the precinct. In particular, this assessment provides a review and analysis of available implementation models that could be relied upon to ensure an organizational structure is established that best responds to the current conditions and anticipated direction of the VHCP build-out. Based on our findings, the project team has also prepared a series of recommendations regarding optimum implementation methods to maximize financial and organizational efficiency outcomes.

To ensure that the vision identified for the VHCP is successfully and efficiently implemented, it is critical to establish an organizational / business structure that is uniquely suited to the multi-stakeholder, multi-disciplinary requirements of the precinct.

It is important to note from the outset that evaluating and ultimately establishing an implementation structure will require direct collaboration and cooperation from the key stakeholders involved in the VHCP Partnership. Depending on the primary outcomes of this process, it may also entail the commitment of specific financial, staffing, or other resources from each organization. The nature of these arrangements should be subject to further ongoing engagement amongst the Partnership, and the ultimate alignment of their individual goals and outcomes, in addition to confirmation of the appropriate path forward to achieve these outcomes. Due to the potentially sensitive nature of these negotiations, as well as obvious benefits and shortcomings inherent to each model identified herein, the project team has not necessarily identified a singular recommended approach. Rather, the following analysis has **focused on initiating a process of identifying what—in our view—are several particularly appropriate governance structures and possible implementation models worthy of further consideration by the Partnership.**

6.1 Current Conditions

To evaluate possible organizational models for implementing the VHCP vision, it is important to first understand the current status of development at the VHCP.

As the VHCP enters the vertical planning and development stage, several important investments, decisions and policies have already been established to help bring the project to its current standing.

Consequently, the implementation mechanism required to further advance efforts at the VHCP has a somewhat narrower mandate focused more specifically on: policy implementation, land development, construction and leasing. Notwithstanding the potential complexities involved with a multi-stakeholder initiative on lands under public ownership, it is important to recognize that this is somewhat more focused than other comparably-sized master-planned development initiatives, including those across the GTA and beyond. For example, one simplifying condition of note at the VHCP is that all lands currently remain under the control of a single land owner: the City of Vaughan.

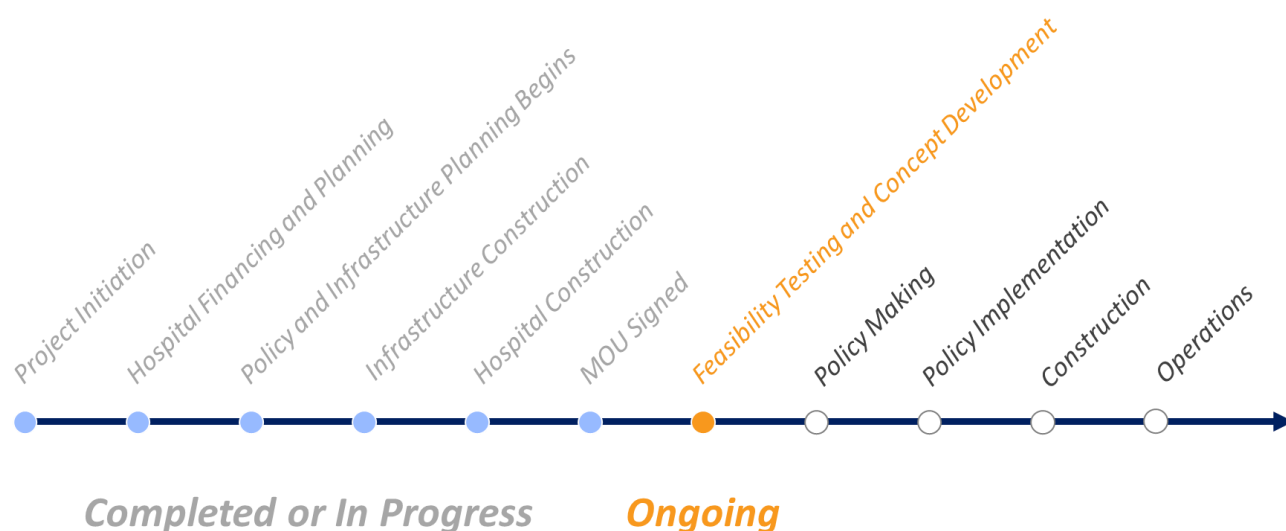
Previous Investments

Figure 6-1 below provides an illustrative timeline of the general tasks already completed, in progress, and still required to realize the VHCP vision. As shown, planning and infrastructure development for the VHCP has been underway since at least 2010, in conjunction with initial planning for the construction of the new hospital.

The City of Vaughan has prepared a range of studies and reports to establish planning policy standards, design guidelines, and infrastructure investments necessary to facilitate the construction of the medical facility and surrounding real estate development at the VHCP.

These investments include the development of the Vaughan Healthcare Centre Precinct Plan, a Landscape Architecture Plan, as well as investments in water and wastewater infrastructure, public transit facilities, roadways and sidewalks, and parks.

Figure 6-1: Development Timeline at VHCP



SOURCE: urbanMetrics inc. Actions shown are for illustrative purposes only and not necessarily a comprehensive accounting of completed and ongoing tasks for the development of the VHCP.

As demonstrated in the figure above, it is important to recognize that—to date—the City of Vaughan has devoted considerable financial and human resource investments to prepare the VHCP for the next stage of development. Moreover, many of the tasks completed could have been undertaken within a dedicated implementation group or structure, other than by the City of Vaughan. As such, the remaining tasks to be completed could represent a reduced scope of work assigned to a newly created entity than what often prevails under other privately led development scenarios. These factors may influence the cost effectiveness, competencies and need for certain implementation mechanisms going forward.

At this stage of planning for the VHCP, the focus has shifted towards undertaking a collaborative process, planning for land uses that accommodate all organizations across the Partnership, as well as in supporting the introduction of new users which advance the innovation-focused mandate of the precinct.

Existing Agreements

The project consulting team has additionally reviewed information provided by the City of Vaughan as it relates to the legal instruments and restrictions already applicable to selected parcels of land or specific development blocks within the VHCP. The nature of these arrangements provides stipulations regarding the flexibility in development available to the City of Vaughan in regard to potential disposition of land holdings within the precinct, as well as eligible permissions for specific land use types and / or users that can ultimately be incorporated at the VHCP.

Based on our review of previous agreements at the VHCP, it is our understanding that—both in legal and strategic terms—the principle of a “hospital-first” precinct will continue to understandably guide all future decision-making.

In light of these pre-existing conditions, all future land uses decisions, disposition strategies and / or leasing agreements must be made through this lens. As these are expected to be fundamental components of the next stages of realizing the VHCP visions previously outlined, the impact on the establishment of an implementation structure are significant. In particular, this direction, as well as legal encumbrances placed upon the site, provide a framework within which all development strategies will operate.

The current status of development at the VHCP, financial investments made to date, outstanding work tasks and the nature of pre-existing land use restrictions are all important considerations to inform appropriate implementation mechanisms for the precinct. These factors—as well as the challenges and opportunities they present—have been explored in further detail throughout the balance of this section of the report.

BASELINE OBSERVATIONS:

- The City of Vaughan has made substantial investments in planning policy and the development of physical infrastructure at the VHCP to date.
- At this stage of the project, realizing the vision of a collaborative space at the VHCP requires the valuable inputs of the three other core members of the Partnership.
- In many scenarios involving multiple stakeholders, decisions and investment responsibilities are assigned to distinct organizations mandated with realizing an initial vision that benefits the collective. Because the City of Vaughan has already completed several of these tasks, the mandate and anticipated duration of a dedicated business structure / unit may ultimately be shorter than for other comparable projects.
- The nature of the agreements / legal restrictions on the VHCP lands contain necessary and constructive limitations on the usage of the land. These must be considered in any disposition strategy.

6.2 Tasks & Decision Points

As shown in the timeline presented earlier, the City of Vaughan has led the development of the VHCP to date – responsible for the land use planning, infrastructure planning and ultimate infrastructure delivery to serve the new precinct.

At this stage, there remain four overarching steps remaining to be completed prior to realizing additional business, learning and research activities at the VHCP: **Policy Making, Policy Application, Construction and Operations.**

As these steps become more outward facing in nature (i.e., incorporating additional external stakeholders and organizations), the complexity of advancing these stages will undoubtedly increase.

Figure 6-2 provides an illustration of the major tasks and remaining critical decision points that will inform implementation of the VHCP moving forward. We have categorized these remaining tasks into two primary categories. Firstly, **Coordination** includes both the development and articulation of appropriate policy, an addition to implementing this policy structure (i.e., *Policy Making* and *Policy Application*). The second stage of tasks have been characterized as the **Implementation** stage, which

involves the actual physical construction and ultimate ongoing operation and management of the lands within the precinct (i.e., *Construction* and *Operations*, as identified herein).

Task 1 – Coordination

The primary purpose of this preliminary and ongoing task is to develop a more detailed understanding of the feasibility and economic development opportunities associated with the implementation of the VHCP, to establish potential development parameters, as well as to identify strategic goals and outcomes.

This Study, as well as ongoing engagement with the core stakeholder group, constitute an important element of the *Policy Making* component of this task. Furthermore, engagement with the core stakeholder within the VHCP Partnership at this stage continues to establish additional clarity as to the common vision for the VHCP, as well as the commitments from each organization with respect to roles and responsibilities in the Precinct.

Once these basic development parameters and policy guidelines are agreed upon and established, the City of Vaughan—in collaboration with the rest of the Partnership—can apply the land use policy mechanisms required and also analyze the most appropriate vehicle(s) to implement that resulting vision. These mechanisms may include an amendment to Vaughan’s Official Plan, the creation of a Secondary Plan, or updates to the Zoning By-Law, among other considerations. However, contemplating the regulatory steps required for implementation will be dependent on the ultimate agreements coordinated amongst and between the core stakeholder group, in addition to various government agencies.

Task 2 – Implementation

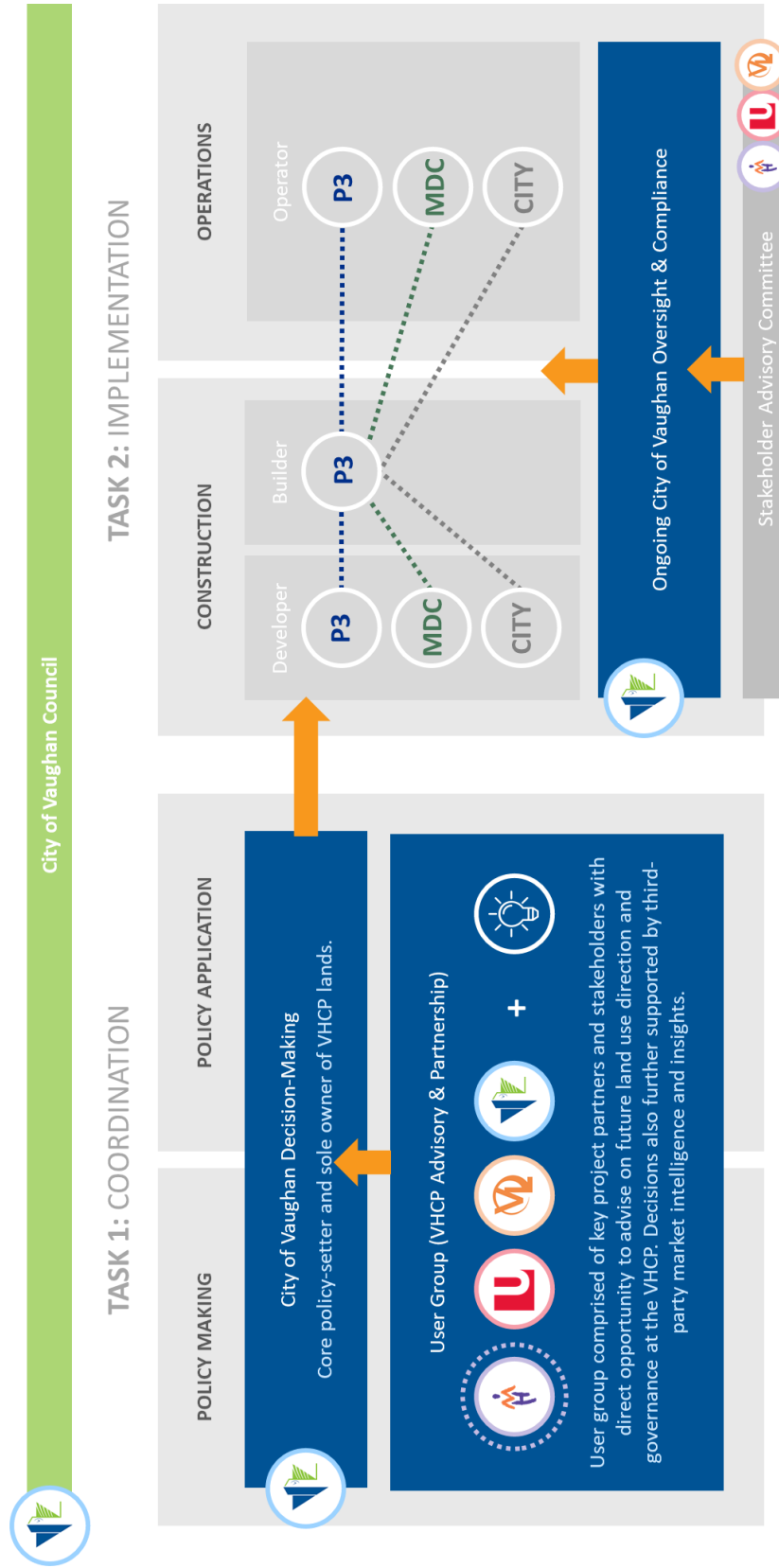
At this stage, the primary responsibility for advancing the VHCP project is generally expected to shift from the City of Vaughan VHCP project staff to the preferred implementation option identified.

As highlighted in the figure above, these implementation options have generally been simplified into three main categories: a **Public-Private Partnership** (“P3”), a **Municipal Development Corporation** (“MDC”) or **In-House Development** within the existing departments of the City of Vaughan (“CITY”). A detailed explanation of each of these concepts and corresponding implementation options has been provided herein.

At this stage, the preferred implementation model adopted would dictate which organization—existing or new—that will be responsible for executing on the tasks outlined for the second half of this process. Namely, the selected entity would be responsible for both the *Construction* and *Operation* of the VHCP, including distinct roles for a Developer, Builder and Operator:

- *Developer / Builder* – It is our expectation that the physical construction of the buildings at the VHCP would necessarily be undertaken by a private consortium rather than undertaken directly by the City or other members of the Partnership (i.e., irrespective of the preferred implementation model utilized). Consequently, the entity identified under the preferred governance or implementation model would maintain responsibility for issuing development parameters, selecting and evaluating potential builders and monitoring progress.
- *Operator* – Lastly, the operations stage of the process will involve the ongoing maintenance, leasing, management and other day-to-day activities in the various new facilities established at the VHCP. Of particular importance in this stage will be the negotiating of new lease agreements with businesses that advance and support the healthcare-innovation mandate at the VHCP, and decisions relating to whether or not the City of Vaughan will maintain ownership of the lands.

Figure 6-2: VHCP Implementation - Key Tasks & Responsibilities



SOURCE: urbanMetrics / StrategyCorp. Developer, Builder and Operator options under Task 2 (Implementation) include: Public-Private Partnership ("P3"), Municipal Development Corporation ("MDC") and In-House or internal to the City of Vaughan ("CITY").

6.3 Implementation Options

Introduction

The primary focus of this engagement has been to explore economic growth opportunities and possible synergies at the VHCP to enhance public service outcomes, support commercialization and research, as well as create a new innovation cluster. To this end, determining the most effective implementation mechanism to facilitate public or private real estate development activity is an essential ‘building block’ to realize these positive outcomes and opportunities.

Based on the decision-making factors identified above, as well as the remaining scope of work required to construct, manage and operate the VHCP, we have identified a series of implementation options for consideration by the Partnership.

Determining the appropriate level of activity for municipal, or public institutions in real estate development can be challenging. The traditional role of a municipality, for example, is one of a regulator able to influence development through land use planning policy and other municipal strategic planning. Typically, if a municipality does develop land, it more often relates to the delivery of a range of common public services, such as libraries, community centres, transit and other related infrastructure. Otherwise, municipalities have historically held land for future planned uses, or divested unnecessary holdings for private sector development.

The traditional approach to development has been challenged recently, as municipalities continue to implement creative approaches to developing their land holdings to generate more widespread—albeit indirect—financial, social and community benefits.

In some cases, municipal governments have adopted a more engaged and active role in land development, functioning in a manner that could draw similarities to a private real estate developer. Municipalities have also established independent corporate entities tasked with a specific mandate, or established arrangements with private-sector interests to advance a given outcome of common interest. The purpose of such interventions can be diverse: to advance a specific development vision, to address market failures, or to maximize financial or non-financial benefit from existing land holdings.

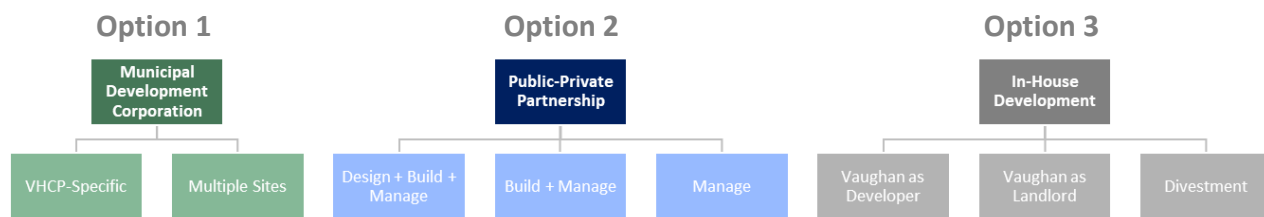
The project consulting team has conducted a literature review and identified a range of different approaches and related sub-options that could be effectively implemented in advancing the VHCP vision. Based on this review, the following section introduces the breadth of reasonable and realistic options available to the Partnership.

Furthermore, in our *Existing Conditions Assessment* report (provided under separate cover), the project team identified a series of global best practices in establishing integrated healthcare, education and commercialization / innovation precincts. The findings of this analysis have informed the nature of the implementation models included, as well as the evaluation criteria presented. A more detailed discussion of these variables has been provided separately, whereas a brief summary has been provided below:

- **Active Proponent** – the establishment of a dedicated team or organization with the mandate to advance a development concept.
- **Strong Institutional Collaboration** – implementation of a model that ensures that all institutions have a strong presence and interest in the outcomes of the broader development, in addition to their own operations.
- **Government Involvement** - direct or indirect government support can offer a sense of certainty, direction and risk mitigation for other partners, particularly private sector actors.
- **Public-Private Engagement** – the development of dynamic and industry leading innovation clusters requires engagement and interaction between public and private actors, particularly in the area of research and commercialization.
- **Leveraging Location / Geographic Benefits** – targeted investments in public realm, transportation and surrounding amenities are often critical differentiating factors for drawing talent and investment within a competitive environment.

Figure 6-3 demonstrates potential options available to implement the vision for the VHCP. The options identified outline the various high-level approaches available to the City and the rest of the Partnership, in addition to sub-variations that could be incorporated based on the unique context of the VHCP. That is, these options do not necessarily need to be considered in isolation and a “hybrid approach which incorporates different elements is indeed possible.

Figure 6-3: Municipal Land Development Options



SOURCE: urbanMetrics inc.

It is also important to note that the range of implementation options available at the VHCP is not necessarily wholly captured in this evaluation. These options depend on the strategic orientation and financial capacity of the City of Vaughan, the collaboration and positioning of the core stakeholders within the Partnership, and the details of the ultimate vision being advanced at the VHCP (e.g., per the potential land use demonstrations presented earlier in this report and / or other subsequent iterations).

The purpose of this particular exercise has not been to identify a prescriptive, all-encompassing roadmap to implementation of the VHCP vision. Rather, it is to provide a critical analysis of a range of potential implementation options worthy of consideration by the Partnership, and a recommended path forward based on our evaluation.

It is the project consulting team’s expectation that this research and the conclusions drawn out herein can serve as a reference point for the Partnership as the vision, funding opportunities, development parameters and ultimate implementation models available continue to be considered and finalized.

Option 1 – Municipal Development Corporation

A Municipal Services Corporation, or Municipal Development Corporation (“MDC”) is a quasi-private corporation which operates at arm’s length from government. Typically, an MSC is structured as an independent corporation, whose sole shareholder is the municipality responsible for its creation. The corporation is generally established with a specific mandate, dedicated revenue or revenue generating capacities, and ownership of lands or other assets. The organization is supervised by a board of directors that can be comprised of a range of public shareholders, including municipal elected officials and relevant subject matter experts.

MDC’s have been created for a variety of purposes in Ontario, including real estate development, the management of hydro services and ongoing oversight of tourist destinations and prominent local sites. MDC’s vary in initial cost of implementation, depending on the nature of the anticipated outcomes and duration required. An MDC generally requires the creation of a brand, organizational structure and hiring of subject matter experts. However, it allows for a dedicated organization that can nimbly respond to market conditions and is solely dedicated to advancing a given mandate. Waterfront Toronto, for example, reflects many characteristics of a traditional MDC in this regard, however its funding structure and mandate (i.e., responsibility to all three levels of government) results in a differentiated function from what would likely be contemplated in Vaughan.

In Ontario, the creation of an MDC is governed under the *Municipal Act*. An MDC is generally permitted to undertake a range of activities related to land development, disposition and acquisition,

on behalf of a municipality. MDC's are not widespread across Ontario, however are in use, or being contemplated for creation in several municipalities including Toronto, Oakville, Burlington and Ottawa.

Examples of Municipal Development Corporations:



CreateTO – Toronto, ON



Calgary Municipal Land Corporation – Calgary, AB



CentreVenture Development Corporation – Winnipeg, MB

Option 2 – “In-House” Development

As owners of extensive holdings of land, municipalities across Canada have established departments or sub-groups to acquire, dispose of and manage their real estate or land holdings. Typically, this role involves the acquisition and divestment of lands, rather than its development and ongoing operational management. Where real estate development is advanced by the municipality itself, it is traditionally for public assets operated by public entities, including libraries, community centres and emergency service facilities. In Vaughan, the Real Estate Department maintains this function.

The In House Development approach would involve the City of Vaughan implementing the planning framework for the VHCP by creating a dedicated business unit or expanding the role of an existing business unit to facilitate the development, leasing and management of space to private entities within a competitive marketplace. This would most likely involve transferring and retaining some staff to this unit and relying on some external support, as needed. This model typically involves the establishment of a Real Estate Services agency within a given municipality, responsible for land disposition, acquisition and development. The City of Vaughan already has an active Real Estate Department, primarily involved in acquisitions and dispositions of City-owned lands. It is possible that with an expansion of responsibilities and resources, the Real Estate Department could ultimately take on responsibility for the development and management of the VHCP.

Examples of Municipalities with In-House Development Arms:



Real Estate Department – Vaughan ON



Facilities & Property Management – Mississauga, ON



Saskatoon Land – Saskatoon, SK



Option 3 – Public Private Partnership

The public-private partnership (“P3”) model engages the private sector to govern some aspect of land development. It is common for public entities to engage private proponents to support large scale real estate development or infrastructure-based construction projects. For example, the Eglinton Crosstown Light Rail Transit is currently being constructed and managed by a private consortium. This process generally involves a municipality providing financial compensation to a private proponent in exchange for specific expertise, resources and assurances around delivery times and quality controls. The arrangement is intended to offer certainty to both parties around an agreed upon scope of work, compensation, quality and delivery timeline. As noted earlier, for the purposes of realizing the VHCP vision in particular, it is anticipated that—regardless of the implementation model utilized—the private sector would almost certainly be engaged to undertake the physical construction of the new buildings on the site.

There are many variations on the P3 model, dependant upon factors such as the strategic orientation of the municipality, the nature of the lands to be developed, the dynamics of a given real estate market, or the timeframe of a project. Because the VHCP vision and concept has been largely established, with some planning policy frameworks already in place, some more comprehensive or extensive P3 models are no longer applicable to the site.

Some examples of a P3 model which could be relevant to the VHCP could include:

- **Design** the architectural expression of the buildings, subject to the parameters agreed to within a purchase agreement, **Build** the concept as agreed to – responsible for engaging trades and contractors and managing associated timelines and risks within an allocated budget, **Manage** the ongoing leasing, operations and maintenance of a building or area, typically on a fixed-term contract under defined parameters.
- **Build**, and **Manage**; or,
- **Manage**.

At a site of the size and complexity of the VHCP, it is highly likely that—irrespective of the chosen implementation structure—private proponents will be contracted to provide construction and design services, at minimum (i.e., “build”). Therefore, for the purposes of this analysis, a P3 will be primarily analyzed for its capacity to provide additional ongoing management capabilities for the VHCP project, above and beyond the physical construction on the subject lands.

Examples of Municipalities Pursuing Public-Private Partnerships:



6.4 Option Evaluation

The project team has evaluated the above implementation models based on a series of criteria which provide important information pertaining to the effectiveness and efficiency of implementing a given approach. The following section offers a summary analysis of the potential benefits, and limitations of each model contemplated. As previously discussed, this analysis does not explicitly offer a recommended model for the VHCP, however provides a critical evaluation of the opportunities and limitations of each option. A detailed explanation of the criteria and analysis undertaken as part of this section is available in more detail in the appendix of this report.

Evaluation Criteria

The following criteria were considered as part of this evaluation:

- **One-Time Implementation Costs** – Refers to the initial start-up costs or capital investments associated with planning for and ultimately establishing or assigning the necessary personnel, capital, office space, and branding (where applicable) so that the relevant organization can effectively begin to execute on their mandate.
- **Ongoing Management Costs** – Ongoing operating and structural costs will be required to ensure the VHCP lands are built out in a manner that is sustainable and well-supported. Furthermore, subject to certain decisions and conditions, there may be a requirement for ongoing leasing or building management functions to be maintained to ensure that space users continue to support the intended mandate for the VHCP.
- **Stakeholder Control & Influence** – Stakeholder input will be a foundational element for realizing the VHCP vision in a manner that maximizes participation from each organization within the Partnership. Understanding how each implementation structure could impact opportunities for stakeholders to exert influence or control could be instrumental in maximizing the benefit of each group's involvement.
- **Transparency & Public Accountability** – Operational transparency and financial efficiency are important factors to build public trust and goodwill. When significant public expenditures are being made or requested, it is important that an implementation vehicle can demonstrate value for money and appropriate openness in decision-making.
- **Market Nimbleness & Responsiveness** – The land development process is one typically led by private sector entities. These organizations are structured and operate in a manner specifically tailored to maximize efficiency, responsiveness to change and accountability to shareholders for this fast-paced industry. This metric evaluates the extent to which each option enables the capacity to function in a comparable manner.

Summary of Findings

Based on the more detailed evaluation of the above criteria, as presented in more detail in the appendix of this report, Figure 6-4 provides a summary of the project team's findings as to the most effective model to advance and realize the vision established for the VHCP.

It is important to note that these findings are dependent on a range of external considerations related to strategic positioning, financial capacity and internal capacities. As such, the findings presented in Figure 6-4 should be reviewed in tandem with the analysis presented throughout the balance of this section, as well as the appendix that follows.

The evaluation framework below presents the project team's assessment of how each implementation vehicle responds to each of the evaluation criteria identified above.

As shown, the evaluation has demonstrated that some variety of the Municipal Development Corporation structure is likely the most effective implementation model to achieve the development and ongoing management of the VHCP, on behalf of the City of Vaughan.

Overall, our assessment suggests that the MDC structure presents a unique opportunity for a purpose-built model that can efficiently allocate resources and respond to the specific conditions and technical requirements at the VHCP; particularly in light of the current and likely ongoing ownership of the lands by the City of Vaughan. Furthermore, this governance model can be established in a manner that is publicly transparent, accountable, and with an explicit mandate of achieving targeted goals and outcomes for the precinct and the various key interests that comprise the Partnership.

Figure 6-4: Implementation Model Evaluation Summary (Relative Ranking)

	Municipal Development Corporation	Public Private Partnership	In-House Development
One-Time Implementation Cost	3	2	1
Ongoing Management Costs	2	1	3
Stakeholder Control & Influence	1	3	2
Transparency & Public Accountability	1	2	3
Market Nimbleness & Responsiveness	1	2	3
Overall Evaluation	1	2	3

SOURCE: urbanMetrics inc. Evaluation against each criteria and overall evaluation based on the more detailed rationale provided in the appendix. Rank ordering expressed as a positioning of “1”, “2” or “3” based on the relative merits of each model (i.e., top choice, second choice, third choice, respectively). These rankings are intended to be expressed on a *relative* basis only (e.g., “good” / “better” / “best”), rather than a more isolated or specific scoring of each model.

See **Appendix D** for detailed Implementation Model Evaluation.

Recommendation

Based on the foregoing evaluation, a municipal development corporation likely represents the most effective overall model through which the VHCP vision can be realized. The MDC is a focused and targeted vehicle that can effectively scale necessary resources to achieve its mandate. The MDC option also strikes an appropriate **balance between maintaining municipal ownership and control**, while also allowing **flexibility to function as a private sector actor**. Furthermore, with an independent budget, public financial reporting requirements and an independent board of directors, the MDC **allows for public accountability and transparency in its decisions**.

However, a municipal development corporation is likely the **costliest model to implement**. Furthermore, the size and scale of the VHCP would potentially result in high initiation costs for a relatively short-term project (i.e. conceivably, the vast majority of work required to construct and lease the Intra-Regional vision for the VHCP could be completed within 10 years.).

In order to mitigate for this initial upfront cost, the City of Vaughan could consider the creation of an MDC with a mandate that extends beyond the VHCP lands.

It is also important to note that the City of Vaughan has experience and familiarity with establishing an MDC as part of the collection process of its accommodation tax. Additionally, project partners may have development expertise and capabilities that can be utilized which may reduce the possible high start up costs associated with this model. The York University Development Corporation, in particular, may have unique expertise or resources which could be leveraged in this regard. Although a possible MDC established for the Healthcare Precinct is differentiated in scope and complexity from these two examples, expertise and resources from both—and other in-house capacities—may be available to mitigate the anticipated initial costs.

Beginning with the mandate established at the VHCP, a Vaughan-owned MDC could ultimately be responsible for the management, development and disposition of a **broader portfolio of City-owned lands**, should that be of interest to the municipality in achieving its longer-term strategic objectives beyond the VHCP.

KEY RECOMMENDATION:

It is the project team’s view that the MDC option represents the most effective model for implementing the VHCP. However, the MDC structure likely comes with the most significant upfront and long-term management costs. To mitigate for this, the City of Vaughan should consider establishing a Municipal Development Corporation to address the VHCP lands initially – with the broader possibility that the MDC becomes a dedicated vehicle for managing municipal lands.

Additional Considerations

Further to the evaluation conducted above, it is important to recognize that the appropriate implementation vehicle for the VHCP may ultimately be influenced by a range of other factors impacting the City of Vaughan.

Funding availability, ongoing strategic initiatives, Council priorities and coordination with other projects could play a primary role in the decision-making process. Naturally and undoubtedly, these other priorities may take precedent over the evaluation matrix and recommendations previously provided.

Furthermore, it is important to note that the project partners may maintain internal expertise or capacity which could influence the identification of a preferred implementation vehicle. For example, the York University Development Corporation is a wholly-owned subsidiary of the institution, mandated with providing property advisory, development and management services to York. Likewise, ventureLAB has a strong history of commercialization and private sector engagement, which could prove beneficial in implementing the model.

Understanding the capacities and expertise that each organization within the VHCP Partnership may be able to bring forward could ultimately influence the preferred implementation model, or the costs and other resources required to advance the vision.

As such, Figure 6-5 provides a summary as to some of the additional opportunities and limitations associated with each type of governance structure or implementation model. Furthermore, where applicable, the team has provided a recommended mitigation strategy that could address some of the identified shortfalls.

Figure 6-5: Implementation Criteria Considerations

Implementation Model	Strategic Goals Accomplished	Opportunities Missed/Limitation	Additional Considerations
Public-Private Partnership	- External Management - Risk Transfer	- Public Ownership - Maximize Revenue Potential - Stakeholder Responsiveness	
In-House Development	- Public Ownership - Revenue Capture - Stakeholder Responsiveness - Non-Financial Benefit/Opportunity	- Perception of Inefficiency - Reallocation of Existing Municipal Resources - Municipality as Landlord - Political Risk	Would require an expanded role within the City (likely Real Estate Services), or creation of a new City department
Municipal Development Corporation	- Public Ownership - Stakeholder Responsiveness - Public Transparency and Accountability - Revenue Capture - Non-Financial Benefit/Opportunity - Functionally Comparable to Private Sector	- High Implementation Costs - High Management Costs - Loss of Direct Municipal Control	The MDC's role could expand beyond the VHCP development, to mitigate for high upfront costs.

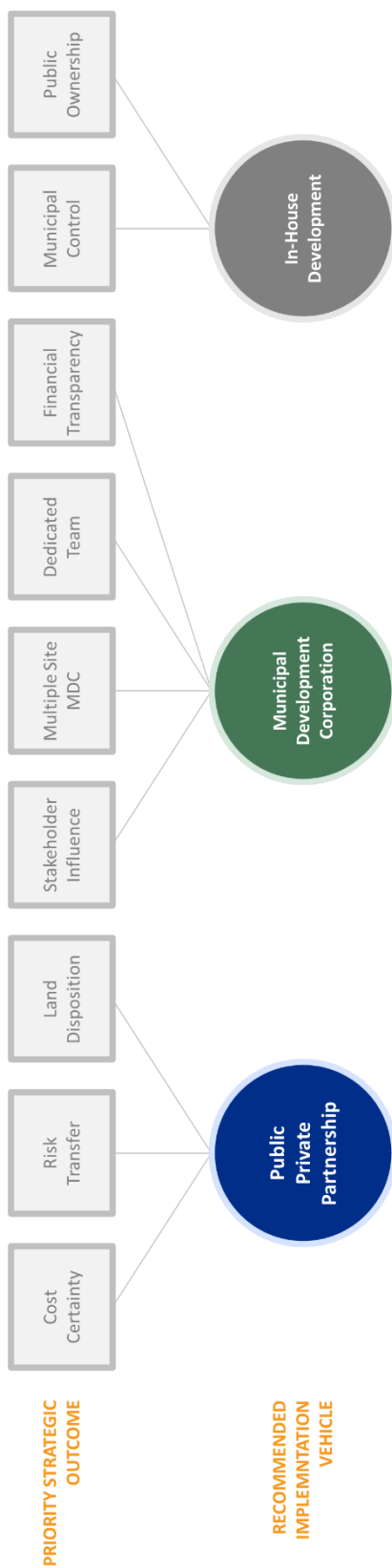
SOURCE: urbanMetrics inc.

Similarly and further to the above summary, the following graphic demonstrates the project team's recommendations as to the most effective implementation structures for achieving a similar subset of primary goals. That is, it is important to note that each governance structure presents its own opportunities and strengths and could represent an effective way of developing the VHCP under different circumstances and depending on the goals of the City and/or the entire Partnership. Furthermore, within each governance model, there are multiple sub-options or alternative structural variations that could maximize opportunities for success.

As shown in Figure 6-6, in our opinion, the **Municipal Development Corporation** structure represents the strongest opportunity to accomplish the greatest number of identified strategic outcomes. However, a **public-private partnership** also represents an effective option if the primary desired outcome is the transfer of risk, or reducing municipal exposure and responsibility for the project. Additionally, advancing the project **in-house** would be the most effective tool for maintaining sole municipal control of the lands, and or specifically accomplishing municipal goals.

Clearly, the analysis indicates that the primary strategic outcomes could—in addition to the factors outlined previously—be an important consideration in determining the most effective governance structure for the VHCP.

Figure 6-6: Implementation Model Priority-Based Flow Chart



SOURCE: urbanMetrics inc.

7.0 Recommendations

Based on the range of financial and strategic analysis presented throughout this report, the VHCP clearly represents a unique opportunity that merits pursuit and additional investigation. However, there remains a significant amount of work to be done by the City of Vaughan and the rest of the Partnership prior to realizing the vision articulated here.

The work prepared as part of this Study represents a baseline reference document that provides strategic direction and recommendations intended to guide future decisions related to the VHCP. Ultimately, advancing the precinct will require additional financial analysis; clarification of roles, responsibilities and commitments made on behalf of core project stakeholders; and establishing other definitive direction moving forward. In this regard, we have identified a series of recommendations and next steps to best advance implementation of the VHCP.

Adopt a Phased Approach to Development

The City of Vaughan should move forward on a two-phase land use concept towards achieving a full build-out of the Non-Hospital Lands at the VHCP.

- A two-phased approach allows for the site to develop a core cluster of initial activity that can test market demand and demonstrate proof-of-concept prior to realizing full build out.
- This approach maximizes flexibility so that a second phase can be developed based on market demand informed by the initial activities at the VHCP, as well as the needs of the Partnership. This approach ensures that resources are appropriately allocated to align with demand.

Solidify Roles & Responsibilities

The core stakeholders within the Partnership should establish an agreement (MOU) articulating the detailed roles, responsibilities and obligations of each organization as part of their commitment to realizing the VHCP vision.

- The project team has presented a vision for the VHCP which is based on our understanding of the unique space requirements and expectations of Mackenzie Health, YorkU and ventureLAB.
- It is important that these expectations are coordinated amongst the stakeholder group so that there is alignment on each organizations' role and contributions to the project moving forward, and to reduce ambiguity pertaining to questions of resource sharing and

collaboration. This clarity will be important in allowing each organization the ability to move forward on planning for their own presence at the VHCP.

The City of Vaughan—as the sole landowner—should additionally establish agreements (MOU’s) with each individual stakeholder in the Partnership outlining a relationship of land provision, resources, etc.

- As the current owner of the lands at the VHCP and notwithstanding current lease agreements with Mackenzie Health, the City of Vaughan will need to work directly with ventureLAB and YorkU to establish more targeted usage and occupancy agreements. These agreements may pertain to a range of issues, including financial considerations and land or lease arrangements.
- This process may be undertaken by the City of Vaughan, or through detailed negotiations with the preferred governance model or body tasked with advancing the VHCP vision.

Implementation and Funding

The City of Vaughan should determine a preferred implementation vehicle tasked with executing the detailed plan for the Precinct.

- The project consulting team has provided a detailed evaluation outlining our recommended directions with respect to possible implementation models, given the parameters provided.
- The City of Vaughan—as the land-owner and ultimate decision-maker—should weigh the considerations provided, and supplement with staff reporting and analysis, as needed, in order to determine the appropriate model moving forward given the priorities of City Council.

The stakeholder group should determine internal funding capacities and outline the outstanding resources required to deliver the first phases of development at the VHCP.

- The VHCP Partnership—led by the City of Vaughan—must identify available internal sources of funding (if any) to advance the first phase of the project.
- At the appropriate time, opportunities to secure funding, grants and other available resources should be explored, particularly to initiate construction and all associated one-time capital costs associated with the project.

Appendix A Engagement Summary



Vaughan Healthcare Centre Precinct Feasibility Study

Engagement Summary Report

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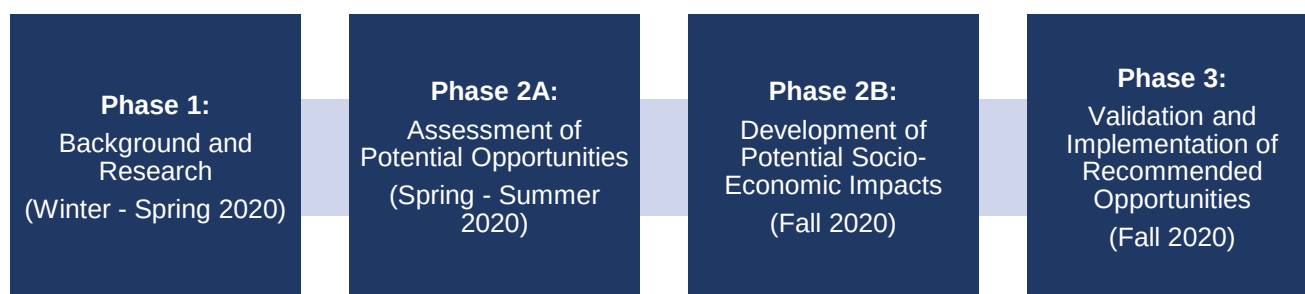
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Introduction

Project Overview

In the winter of 2020, the City of Vaughan, Mackenzie Health, York University and ventureLAB retained a team of consultants to undertake a feasibility study for the Vaughan Healthcare Centre Precinct (VHCP).

The Vaughan Healthcare Centre Precinct Feasibility Study is being undertaken to better understand the economic opportunities related to the development of City of Vaughan lands for a new hospital and other complementary uses to support a potential new health innovation hub in Vaughan. The project timeline is described in the image below.



Engagement Purpose

The engagement process for this project has been developed to compliment the preliminary research deliverables being produced by urbanMetrics and Sajecki Planning, in cooperation with other members of the project consulting team (StrategyCorp).

Key Stakeholders

After initial interviews and conversations with the key project stakeholders, held by urbanMetrics and StrategyCorp in Phase 1, it was determined that the engagement activities for Phases 2 and 3 would focus on targeted engagement with those key stakeholders, described as the Working Group hereafter.

The following table outlines the stakeholder groups that were targeted through this engagement process.

Stakeholder Group	Role in the Project
City of Vaughan*	The City of Vaughan owns the land for the development of the Health Care Precinct. City Council has a vision of supporting local employment and research, and developing an employment node anchored by the Mackenzie Hospital, and other institutional participants. Within the City of Vaughan, the Economic and Cultural Development, Planning and Real Estate divisions will be engaged through this Plan. The City of Vaughan has made significant financial investments in establishing the infrastructure, planning policy context and administrative co-ordination required to realize the unique vision identified for the VHCP.
Mackenzie Health*	Mackenzie Health will be the lease holder and operator of the new hospital on the site. Recognizing rapid population growth across the service area, Mackenzie Health has secured additional lands in the Precinct for hospital expansion, as necessary. In addition to preserving delivery of its core day-to-day hospital functions, Mackenzie Health has expressed a desire to maintain flexibility and capacity to accommodate additional revenue generating uses on the designated Hospital Lands within the VHCP
ventureLAB*	ventureLAB is looking to expand its presence across York Region, leveraging the region's strengths in health and deep tech. Building on the success of the Hardware Catalyst Initiative and its state-of-the-art prototyping and testing lab for founders building breakthrough products, this new location will enable founders to commercialize new medical technologies at an accelerated pace.
York University*	York University is looking to establish a new physical campus presence that leverages immediate proximity and collaborative opportunities with a state-of-the-art new healthcare facility in the Mackenzie Health Vaughan Hospital. York University has expressed an interest in maintaining a dedicated facility to provide research, teaching, community engagement and administrative space at the VHCP.

*Representatives of each of these groups form the project Working Group

Report Contents

This report provides a description of the engagement activities undertaken as part of Phase 2 of the Vaughan Healthcare Centre Precinct Feasibility Study, as well as a high-level summary of feedback received during the engagement process. Next steps in the project process are also outlined.

Engagement Overview

The following engagement activities and objectives were completed during Phase 1 and Phase 2 of the project.

Preliminary Working Group Conversations

urbanMetrics, in collaboration with StrategyCorp, held initial stakeholder interviews in Phase 1 of this project, with representatives from the City of Vaughan, Mackenzie Health, York University and ventureLAB. These interviews were held over the phone. The purpose of these initial interviews was to discuss several topics at a high level. These initial engagements provided an opportunity for the project team to understand and identify the priorities, concerns and needs of each stakeholder group, and opportunities for an initial exploration of those considerations. The general topics discussed as part of this round of engagement included:

- The roles and responsibilities of key stakeholders;
- A vision for the precinct;
- Potential uses on the site and space allocations;
- Relationships; and
- Funding opportunities

Information gathered from these interviews helped to inform the development of the Working Group, preliminary deliverables prepared by the consulting team in Phase 1 (e.g., Existing Conditions reporting) and the engagement process direction for Phase 2.

Working Group Meetings

Two distinct Working Group Meetings were held throughout Phase 1 and 2. Working Group members consisted of representatives from the City of Vaughan, Mackenzie Health, York University and ventureLAB.

These meetings were facilitated by urbanMetrics or LURA Consulting and were held in-person or digitally using the Zoom platform.

Working Group Meeting (February 5, 2020)

The purpose of this in-person meeting was to:

- To share what was heard from the consultant team's preliminary interviews with project partners
- To fill in gaps for the vision, benefits, stakeholders and risks of the study
- To inform the consultant team's next steps for the study and engagement process

urbanMetrics reviewed the site area and presented a summary of the results of the preliminary interviews. LURA Consulting then facilitated a discussion to gather more information on space needs, missing voices, benefits, opportunities and risks.

Information gathered at this meeting helped to inform the background research and existing conditions analysis being developed by urbanMetrics and Sajecki Planning.

Working Group Meeting (June 12, 2020)

Following circulation of a draft Existing Conditions Report, urbanMetrics prepared a presentation of the key findings and takeaways that emerged from this phase 1 reporting. The purpose of this meeting was to:

- Provide an update on the Existing Conditions Report.
- Discuss potential amenities and uses on the site as input to the establishment of proposed land use concepts.
- Review next steps in the engagement process.

urbanMetrics shared a status update of the existing conditions report, how feedback will be integrated and expectations for future deliverables. LURA Consulting then facilitated a discussion on preferences for uses on the site and other ancillary uses.

Information gathered at this meeting helped to inform the development of the proposed land use concepts for the study and informed the next steps of the engagement process.

Stakeholder Interviews

LURA Consulting and selected members of urbanMetrics interviewed key members from the stakeholder groups to inform the development of the land use scenarios/site plans. Interviews were conducted with members from City of Vaughan, Mackenzie Health, ventureLAB and York University. These meetings were held between August and September 2020, using the Zoom platform.

As part of the interview, participants were asked to comment on a draft profile that was developed for their organization. They were also asked to provide more detail on their preferred uses for the site, including layout, footprint and budget. Discussions on ancillary uses and any “dealbreakers” that would prevent stakeholders from being on the site were also facilitated. Participants were also asked to share ideas on elements from existing health innovation sites. Each stakeholder group was also asked their own series of questions on topics that were raised in previous engagement sessions.

Follow up interviews were conducted by urbanMetrics with attendees from ventureLAB and Mackenzie Health who offered to provide more details on specific discussion items but were limited by the timing and structure of the group interview.

What We Heard

The following section provides a high-level summary of the key takeaways that have emerged through the above activities.

Site Uses

A list of ancillary uses was developed from the feedback received from the Working Group. Table 1 below, shows the classification of preferences for uses on the site.

Category of Use	Potential Uses
Ideal primary/core uses and amenities to be included at the VHCP	• Primary Healthcare Functions & Services • Post-Secondary/Academic Functions • Incubation/Accelerator Space • Office Space for MNE's/Anchor Enterprises in the Healthcare Innovation sector (Private Companies) • Research, product testing and Development/Collaborative Space (Health Innovation) • Indoor Gathering/Event Spaces • Small food service, restaurant, café and pubs
Other potential ancillary uses	• Seniors Facilities (e.g., independent living, assisted living, long-term care, other non-housing support functions)? • Hospital-Supporting Office Spaces (e.g., general practitioners, specialists, LifeLabs or other related testing/diagnostics facilities)? • Amenity-Based Retail/Service Commercial (e.g., pharmacies and other health and personal care, other convenience-based uses)? • Other Supporting Uses (e.g., parks/open spaces, parking, reserved future expansion, public sector service windows)?
Not to be included at VHCP	• Market Rental/Ownership Housing • Affordable Rental/Ownership Housing • Traditional Corporate Office Spaces for firms in non-healthcare focused sectors (i.e. financial services, real estate, law etc.) • Large Format or Regional-Serving Retail/Service Commercial Facilities

It was recognized that ancillary uses should be located near primary/core uses in order to be successful and function as amenities to the anchoring institutions at the VHCP. Employees, users and visitors to the primary uses generally will not travel a far distance to these ancillary uses. It was noted that some of these ancillary uses could allow for the synergies and collision spaces that were envisioned for this site. Representatives from stakeholder groups recognized that some ancillary uses will happen naturally on the outward parcels around the hospital site. Given the proximity to the transit station, there are also minor ancillary uses that may occur to the south of the site. Key takeaways from discussions on these uses are summarized below.

Post Secondary/ Academic Functions

It was emphasized that a post-secondary campus at the VHCP should not feel like a satellite campus. A full-range of services on-site including student advisement, assistance in preparing and submitting grants, other academic programs, a library etc. were discussed. In both form and function, the function of an academic presence on the site is expected to provide the range of services and supports that would meet the overwhelming majority of day-to-day student needs.

It was recognized that students value hands on learning and that other agencies on the site could be a part of a collaborative and integrated learning environment as well. Learning spaces on the campus that complement, not replicate, the spaces in the hospital were highlighted as important for allowing for these synergies. Opportunities to invite other agencies on site, for example doctors at the hospital becoming affiliated with the university as researchers, was discussed. A multi-disciplinary approach to research on this campus which involved collaboration with students, researchers and the community was highlighted.

Incubation / Accelerator Space

It was recognized that the incubation/ accelerator lab space would not be traditional lab space, rather testing space for products. As a result, it was noted that the design of in-office spaces should facilitate a flexible and collaborative working environment, with a focus on supporting product testing, particularly for medical devices. Additionally, it was highlighted that the space should also support integration with other companies or partners.

Other accelerator / incubator spaces could serve a complementary role, focused on students and university researchers. Examples of competitors which could support the success of the space are campus-based accelerators. Co-location in terms of lab use was discussed. Duplication of what is in other spaces was discouraged. Instead, the preference is to utilize and leverage testing capabilities for other core uses in the incubation/accelerator spaces. Opportunities to work with other stakeholders on the site were recognized. The focus of this use will be to create a globally recognized hub that attracts global and local entrepreneurs, innovators and top talent, as well as global and local partners to the space.

Non-Market Housing

It was noted that there is a license approved for 160 long term care beds for the hospital. However, development of new beds might not be able to occur on hospital block, as it could prevent hospital expansion

Hospital-Supporting Spaces

Lab space for research and development was recognized as an important ancillary use on the site. Both wet and dry labs were discussed as potential ancillary uses, but none were confirmed.

Ancillary uses such as medical offices in outward parcels were recognized as a natural occurrence in the precinct. Opportunities for a potential clinic space which would allow students and faculty to interact with the community were discussed. Ancillary uses that allow for in-person learning in health-related spaces were recognized as important for collaboration.

Amenity-Based Retail/Service Commercial

A need for amenities like restaurants and coffee shops were discussed as a requirement on the site. Food places become collision spaces and are important in creating a community. It was recognized that these places are important for students, faculty, and other healthcare professionals to interact.

Housing

Overall, the City preference is to support market housing off-site, throughout other planned areas of Vaughan. It was discussed however, that this site could provide an opportunity for a social housing component, due to proximity to services, and municipal ownership of the land parcels. It was noted that the City of Vaughan and York Region lack in affordable rental properties. It was recognized that this site could accommodate and meet a lot of criteria for a social housing location, including access to transit. It was also noted that any community opposition to including social housing in this area would likely be limited, compared to other potential opportunities throughout Vaughan.

Other Supporting Uses

Other supporting uses that were recognized as important to the success of the space are listed below:

- Free parking and access to transit
- Community event spaces that could hold medium to large events
- Proximity to an off-site hotel
- Daycare
- Access to exercise spaces

These uses and considerations have informed the ultimate development concept proposed for the VHCP.

Access and Proximity

Access to the site was recognized as important to the success of the uses. It was noted that a fully-accessible pedestrian connection will be provided from the future transit hub lands south of Major Mackenzie Drive to the hospital site. Nighttime access and proper access from the street is an important consideration that was raised. Safety is a big concern as people need to be able to access the buildings at all times of the day. Safe areas for taxi or other ride sharing services and proper lighting of and access to parking lots were highlighted as considerations for the site.

The importance of a fully-accessible building was recognized, acknowledging that visitors may have physical and other disabilities.

Easy navigation to and through the site for faculty, students and the community was noted. Access to transit and parking was highlighted as key aspects to connecting users to the site. Understanding the movement between spaces, especially in winter, was highlighted as a consideration.

Shared spaces and continuous access to certain spaces in the hospital (i.e. library, simulation suites etc.) were recognized as important to the success of some site uses. Additionally, physical proximity to the hospital was highlighted as essential to ensuring successful collaborations.

Footprint and Space Requirements

Stakeholders noted that footprint estimates for some uses are premature at this stage. Some of the footprint estimates included:

- Satellite Library – 3,000 sq. ft. (included within the Hospital)
- Innovation Hub - 40,000 – 50,000 sq. ft.
- Post-Secondary Campus - 300,000 – 400,000 sq. ft - built out over time in phases
 - Nursing School - 50,000 sq. ft.
 - School of Rehabilitation Science - 20,000 sq. ft.

It was also noted that space requirements for the post-secondary campus will depend on the extent of the ability to share space and facilities with the hospital.

Budget

Several funding opportunities for stakeholders were discussed:

- It was recognized that hospitals are built with funding from the Province. It was noted that Canadian healthcare is predominately publicly-funded and delivery is a mix of public and private delivery agents.
- Funding for the incubation/accelerator space will need to come from a public-private partnership. Partnerships will still need to be secured.
- There are a range of potential options for securing funding, including government grants and public-private partnerships for campus development. York University is currently looking at all options to secure capital dollars and operating dollars.

Land Banking

The VHCP lands were recognized as a valuable asset for the City to retain for future expansion. It was recognized that Vaughan has a greater probability for high-density growth in the future. As such, over the next 10 – 15 years, larger hospitals will need to be built to accommodate the growing population. The development plan does not contemplate non-hospital activity on lands leased to Mackenzie Health – as these lands are slated to accommodate future hospital expansion needs. It is possible that select parcels could be constructed with future use-flexibility in mind. It was recognized that there are ways to preserve space on the site with flexible infrastructure, that does not necessarily require a significant investment.

Specific Infrastructure Needs

Appropriate technology infrastructure including bandwidth and connectivity needs on the site are required. Wireless high-speed internet needs such as data modelling, sensor testing, and running video screens in hybrid meeting spaces were highlighted.

Examples of Other Areas

Stakeholders provided a list of other sites with specific infrastructure and land use requirements that should be considered in the draft plan. The list is provided below:

- Sheba Medical Centre – Israel
- McMaster University - Hamilton, Ontario
- Mt Sinai – New York, New York
- Catalyst HTI – Denver, Colorado
- UPMC Enterprise - University of Pittsburgh Medical Centre – Pittsburgh, Pennsylvania
- PERFORM Centre, Concordia University, Montreal, Quebec

Impacts of COVID-19

Stakeholders noted that the site needs to be flexible enough to accommodate the direction that government/ healthcare will go post-COVID-19. It was noted that hospitals are losing beds as a result of the removal of 3 and 4-bed rooms. Mass investments into long term care beds going forward was highlighted as a change resulting from the pandemic. It was noted that there is a greater desire to integrate more elements of care under an integrated governance and leadership model post-COVID-19. Virtual care was recognized as becoming a more prominent option for patients. It was recognized that hospitals need to function as an integrated system which includes acute, long term care, testing etc.

It was noted that incubator/accelerator space is not changing in size, rather in use and functions. More passive spaces for product testing and hands on development, and less office space were recognized as a change. The need for spaces for hybrid work that could support conference calls with people in the office and working from home were raised. It was noted that collaboration in physical spaces is easier than in an online space, so space for this will still need to be accommodated.

It was noted that COVID-19 has shown, in higher education fields, that in-person interactions are very important. Health fields, need continued in-person learning spaces that cannot be replicated online. It was noted that there are many students who have deferred their learning a year, recognizing the importance of in-person interactive learning. The footprint or planned intention for space for the post-secondary campus has not changed as a result of COVID.

Next Steps

The feedback received as part of the above activities will be used to inform the feasibility study process. This summary will be included as part of the draft deliverable submitted by urbanMetrics to the Working Group. Another meeting will be held to present a draft deliverable and gather feedback from the Working Group.

Appendix B Land Use Concepts Background

GUIDING PRINCIPLES

The development of Vaughan's Healthcare Centre Precinct (VHCP) will be led by a series of guiding principles which include Placemaking, Innovation, Partnerships and Implementation. The guiding principles take direction from the VHCP Plan (2013) and are further informed by the Existing Conditions Review and Best Practices completed for this Study. Interpreted as a whole, the principles support the creation of a world-class, health innovation community and regional hub.

Placemaking

1. Balanced mix of uses with focus areas
 - The VHCP will introduce a mix of land uses to ensure the creation of a vibrant transit-supportive community. Healthcare and complementary related uses (e.g., research, education and training facilities, medical offices, etc.) will remain the dominant focus of the Precinct, with the introduction of retail and commercial uses at-grade.
 - The Precinct will have a distinct character and function. Integrated and concentrated development fronting select corridors will create an urban and welcoming built form.
 - Land uses and densities will be sensitive to the surrounding context, introducing a gradation of heights and ensuring appropriate transitions to the northern residential neighbourhood.
2. Compact and pedestrian-oriented built form
 - A compact, pedestrian-oriented urban built form will be introduced through at-grade active uses to support an urbanized, active streetscape and vibrant public realm.
 - Blocks will provide integrated mid-block connections and walkways for pedestrians and cyclists.
 - Strategically located and well-designed open spaces will provide a vibrant public realm for employees, patients and visitors through privately owned public spaces (POPS), public squares and/or courtyards.
 - The greatest densities will be prioritized in areas in proximity to transit stops, and away from existing low-rise residential communities to the north. These developments will serve as gateway features into the Precinct.
3. Inclusive, safe and multi-modal accessibility
 - A grid-like network of collector and local roads will ensure greater permeability and accessibility for all ages and abilities.
 - Barrier-free accessibility and safe connections to existing and planned transit routes and stops will be prioritized.
 - Decision-making will be based on a multi-modal transportation hierarchy.
 - Emergency and service vehicles;
 - Pedestrian and cyclists;
 - Public transit users; and
 - Private vehicles.

- Active transportation (walking and cycling) will be promoted through wide sidewalks, dedicated cycling facilities, active building frontages, sheltered walkways, lighting features and public furniture.
- 4. Visual and physical connectivity
 - A coherent wayfinding strategy will facilitate pedestrian and vehicular circulation throughout the Precinct while creating a sense of place (e.g., clearly legible signs).
 - Key views and points of entry into the Precinct will be reinforced by gateways such as public art, streetscape improvements, attractive architecture, etc. Such features may be located at significant intersections and/or at the terminus of streets.
 - Views to the Mackenzie Vaughan Hospital and open spaces will be protected through built form and landscape features (e.g., buildings located along the street edge to frame views).

Innovation

1. Leverage synergies between healthcare, education and innovation
 - Opportunities to facilitate collaboration between high-skilled sectors and industries will be accommodated through shared spaces, enabling educational institutions, start-ups, scale-up companies and multi-national enterprises to forge partnerships.
2. Environmental sustainability
 - Development shall be aligned with the goals and objectives of “Green Directions” Vaughan Community Sustainability and Environmental Master Plan, prioritizing healthy environments, economic vitality and vibrant communities.
 - Plans and infrastructure shall promote energy efficiency, climate resiliency and the reduction of waste through green building standards such as Leadership in Energy and Environmental Design (LEED) certified developments.
 - Natural heritage features shall be integrated into the Precinct’s open space and public realm plans to provide functional environmental benefits and passive recreational spaces:
 - Stormwater management practices shall adopt Low Impact Development Standards (LID) to support ecological functions and avoid adverse impacts (e.g., runoff).
 - The buffer adjacent to the re-aligned western drainage channel shall provide a visual amenity (e.g., multi-use pathway).
3. “Smart City” focus
 - In ensuring its long-term vitality, Vaughan’s VHCP will adopt a citizen-centric approach to facilitate collaboration and support continued growth in knowledge-based service industries (e.g., health care, education and white-collar service jobs).
 - As Canada’s first “smart” hospital, the Mackenzie Vaughan Hospital will serve as the Precinct’s anchor in advancing a culture of knowledge and smart technology systems.

Partnerships

1. One dedicated team
 - The Executive Partnership Steering Committee represents a robust partnership well-equipped to advance the innovation-centered vision shaping the VHCP, focused on healthcare, education and industry.
 - The Partnership will collaborate with other stakeholders to ensure the Precinct's long-term sustainability, including transit operators, the development industry, local communities, etc.
2. Public-private partnerships
 - a. Engagement in public-private partnerships and initiatives will facilitate collaboration while attracting clusters of research and innovation organizations, in addition to highly educated and skilled labour force.

Implementation

1. Phased-growth strategy
 - A phased strategy will be implemented to ensure that the level of development is appropriately responsive to the needs of the core stakeholder group and private proponents.
 - This allows for a more financially responsive way of developing the precinct, that grows according to funding and resource availability, the priorities of each core stakeholder, and market demand.
2. Parking
 - Focus on minimizing traffic circulation and environmental impacts.
 - Adopt a minimal approach to parking requirements (e.g. minimize surface parking allocation), while balancing the needs of users in the Precinct.
 - Promote the construction of flexible parking structures that can be repurposed over time to non-parking related uses (e.g. office, retail or institutional space.)
 - Parking facilities should be located away from active street frontages, where possible.
3. Retail Strategy
 - The planned function of the retail space is to serve the needs of the visitors, staff, students and other users at the VHCP.
 - Retail uses are intended to be complementary to the primary function of the VHCP as an innovation district.
 - Retail uses such as restaurants, cafes and personal services will be prioritized on the site.
 - Retail amenities will generally be concentrated along active street frontages.
4. Focused employment
 - Employment at the VHCP will complement existing employment clusters and nodes throughout the City of Vaughan.
 - The focus of the VHCP will be on healthcare research, innovation and delivery. This emphasis will complement the other employment areas in Vaughan, rather than compete (e.g. corporate/financial focus at the Vaughan Metropolitan Centre).

OPPORTUNITIES AND CONSTRAINTS – LAND USE

Opportunities

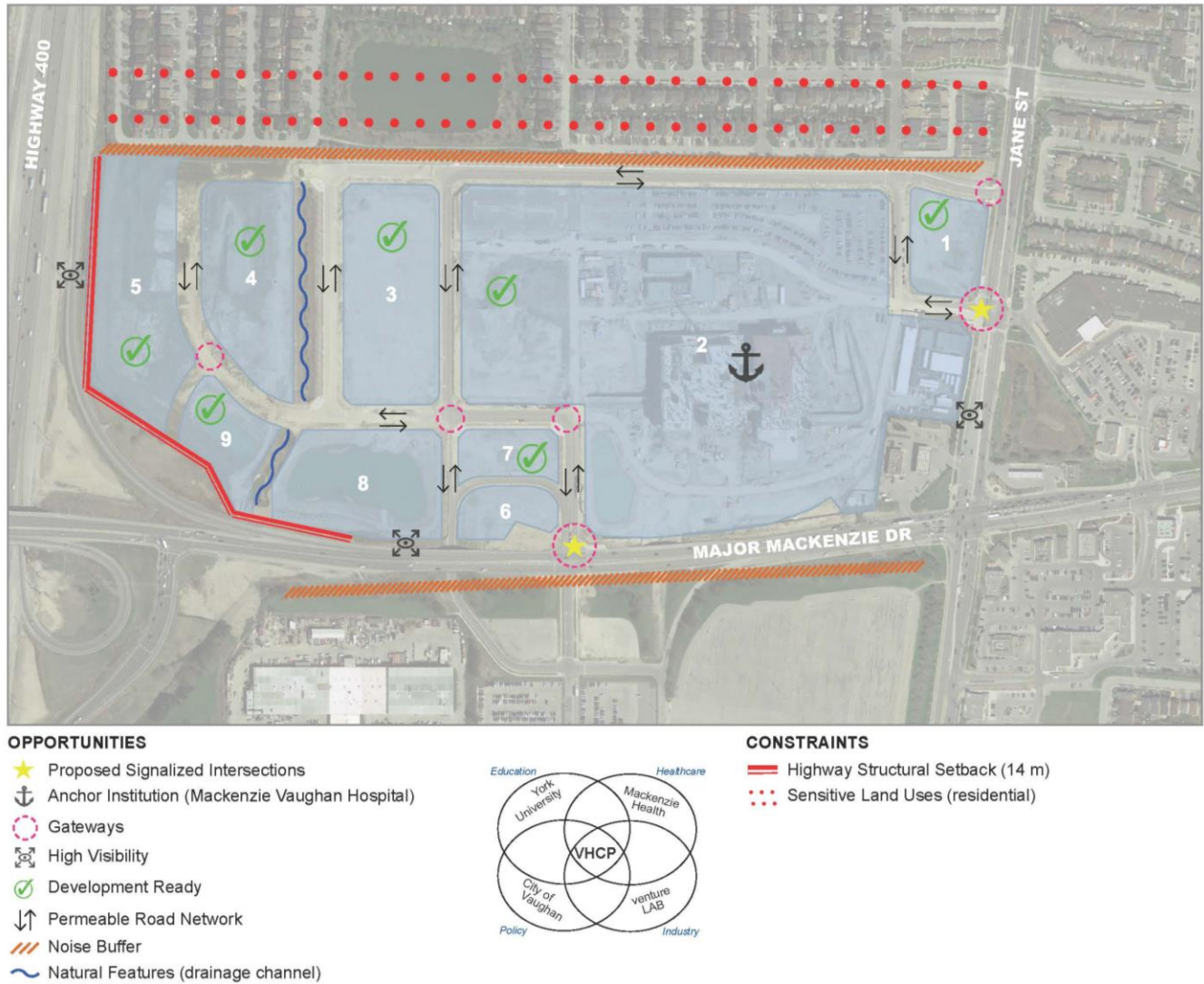
1. Surrounding land uses
 - Sensitive land uses to the north (residential)
 - Mitigate noise from Canada's Wonderland and Highway 400 (carefully consider building locations and heights)
 - VHCP can act as a buffer (noise) between Canada's Wonderland and the low-rise residential neighbourhood to the north
2. Anchor institution (Mackenzie Vaughan Hospital)
3. Partnership with post-secondary institution (York University), ventureLAB (industry), Mackenzie Health (healthcare)
 - Upfront collaboration → three key stakeholders and municipal support
4. High visibility (highways, major streets)
5. Transit connectivity (local and regional)
6. Road network / automobile access
 - Location of existing intersections help shape the road network → intersection (signalized) located at Major Mackenzie, serving as the central access point and gateway into VHCP
 - Following grid-like pattern, provide east-west and north-south streets
 - OPA 715 requires plan to:
 - Protect for a possible future grade separated access from northbound Highway 400
 - Plan for east-west and north-south corridors
 - Explore appropriate connections linking precinct to nearby res communities / businesses
7. Development readiness (undeveloped greenfield property)
8. Leverage geographic benefits
 - Provide pedestrian / active transportation connections to the surrounding community (residential neighbourhood, Canada's Wonderland, shopping mall to the east)
 - Provide improved public realm along two major streets (Jane and Major Mackenzie) → introduce gateways, high-quality urban design and architectural features (pedestrian-oriented streetscape)
 - Natural features and stormwater management on site
 - Low impact development measures (stormwater ponds)
 - Leverage the realignment of the drainage channel as a multi-use trail (amenity)

Constraints

1. Accessibility and connectivity (transit)
 - Higher order public transit / active transportation connectivity is weak
 - Located 6.5 km from VMC / not on subway line (10 min drive, or 25 min by public transit)

2. Setback requirement from Highway 400
 - MTO requirement – 14 metre setback
3. Residential neighbourhood to the north (sensitive land use)
 - Requires appropriate transitions (separation distances, noise, shadow)
4. Commercial isolation

Figure A-1: Opportunities & Constraints Mapping



SOURCE: Sajecki Planning

Figure A-2: Land Use Schedule A - Roads



SOURCE: Sajecki Planning

Figure A-3: Land Use Schedule B – Development Blocks



SOURCE: Sajecki Planning

Figure A-4: Land Use Schedule C – Open Spaces



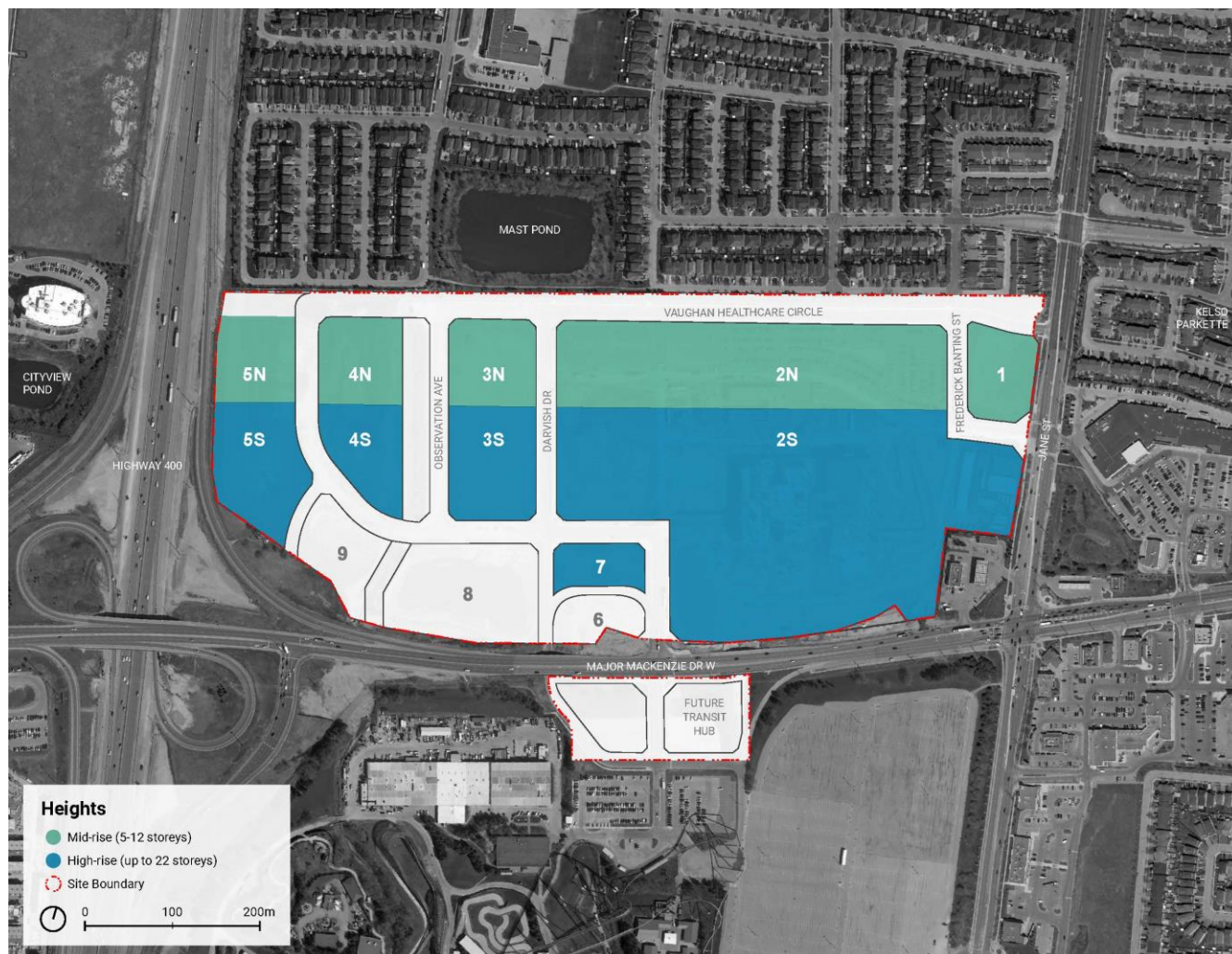
SOURCE: Sajecki Planning

Figure A-5: Land Use Schedule D – Proposed FSI's



SOURCE: Sajecki Planning

Figure A-6: Land Use Schedule E – Heights



SOURCE: Sajecki Planning

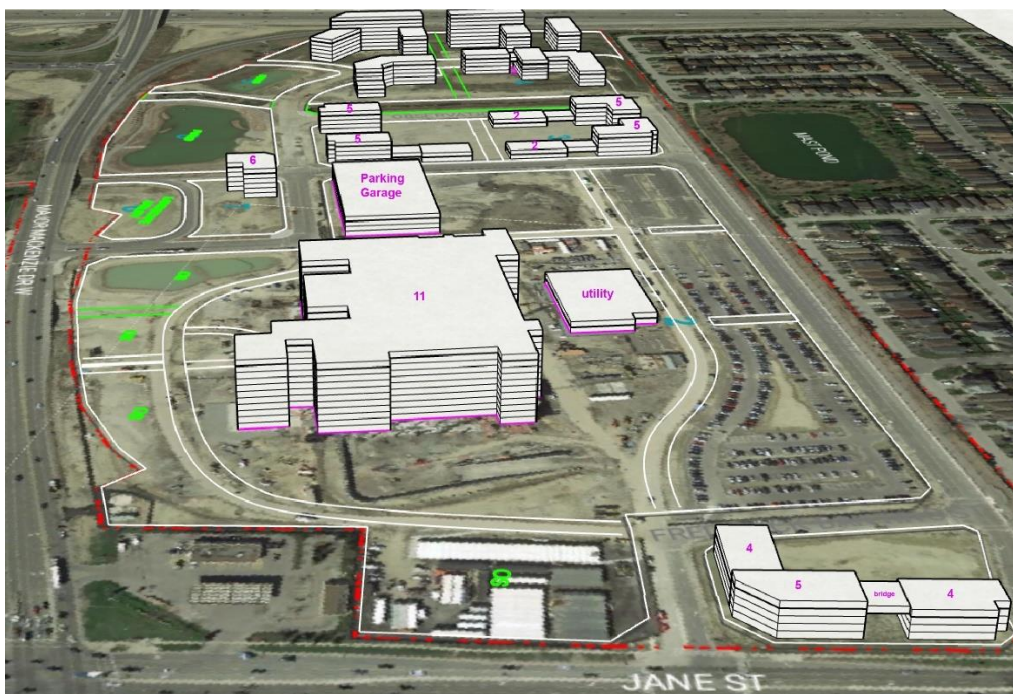
Figure A-7: Land Use Schedule F – Building Footprints



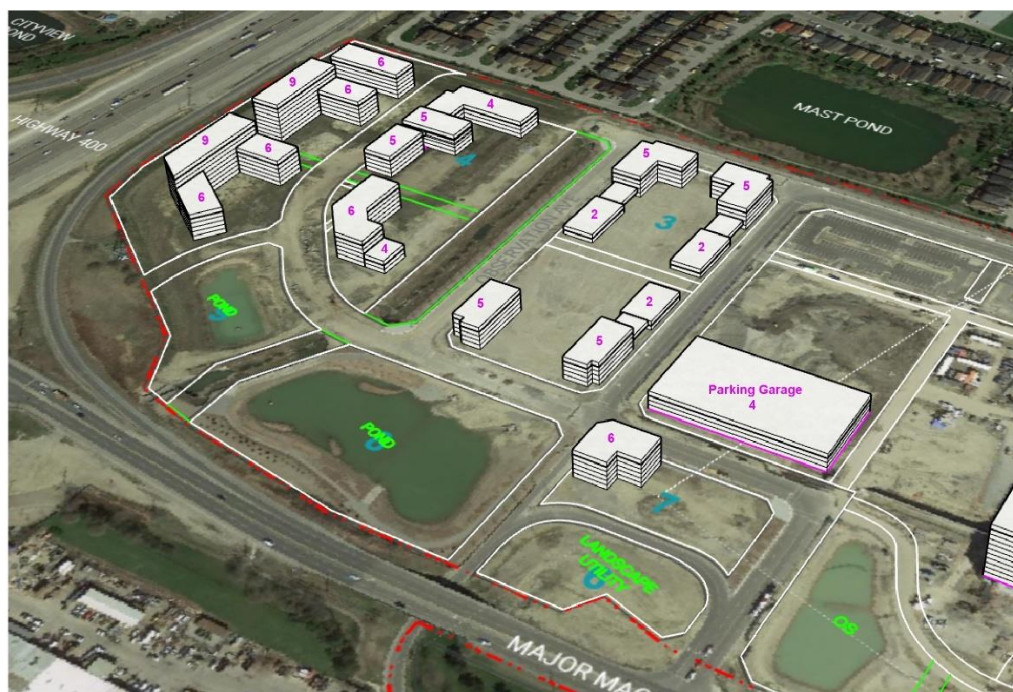
SOURCE: Sajecki Planning

Figure A-8: Land Use Schedule G – Building Massing

View West from Jane Street:



View North-West from Major Mackenzie Drive:



SOURCE: Sajecki Planning

Appendix C Economic Impact Background



Approach

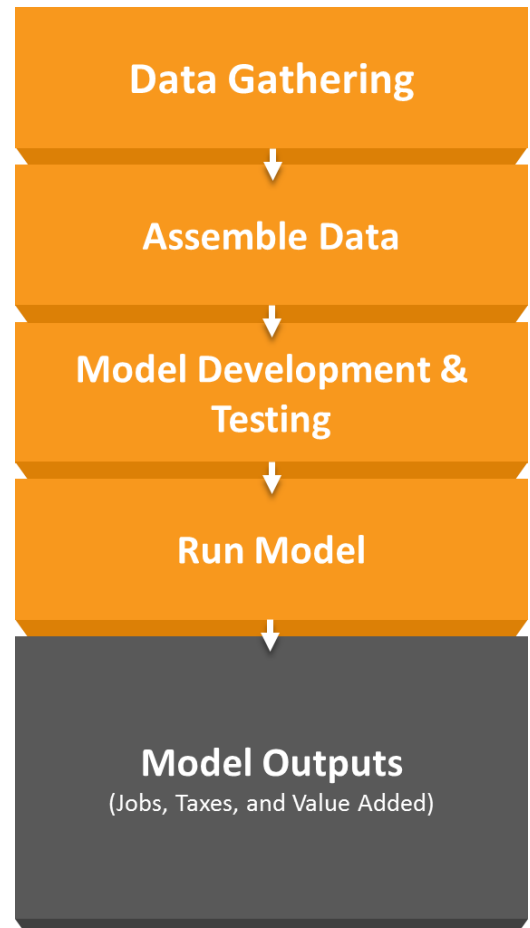
The quantitative economic impacts of developing the VHCP Non-Hospital Lands have been estimated using customized versions of the Statistics Canada Input-Output model, which simulate the flow of expenditures through the Canadian economy. The models provide a reliable measure of the following four key economic impacts:

- **Value Added (GDP)**
- **Employment**
- **Labour Income**
- **Tax Revenues to the Three Levels of Government**

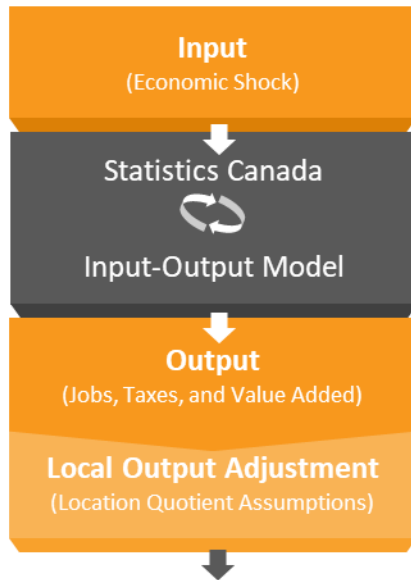
The main steps in running an economic impact model are:

- 1) Compiling the input spending data.
- 2) Assembling the data to ensure all expenses are accounted for and divided into categories to ensure that the individual economic sectors are appropriately represented.
- 3) Calibrating the model to the local economy using employment data.
- 4) Running the finalized version of the model.

ECONOMIC IMPACT MODEL GENERAL APPROACH



INPUT-OUTPUT MODEL



Economic Shock

The capital expenditures and operating outputs associated with the VHCP Non-Hospital Lands are provided to Statistics Canada and are allocated to appropriate industry sectors using the 2007 North American Industry Classification System (NAICS).

National and Provincial Expenditure Relationships

The economic impacts of the initial investments and ongoing operational activities are then measured at the national / provincial levels through the Statistics Canada Input-Output Model, which is based on the Canadian National Input-Output Accounts (2016).

Spending, Tax and Employment Generation

The Statistics Canada model considers the direct, indirect and induced impacts of spending across the Province and Canada as these one-time and ongoing, day-to-day operations filter through the economy.

Local Spending, Tax and Employment Generation

urbanMetrics applies City of Vaughan industry adjustments to determine the share of local impacts relative to Ontario.

Economic Impacts Attributable to Economic Activity In:



The basic principle of the model is the concept that each dollar of expenditure on goods and / or services purchased from a given industry sector circulates and re-circulates within the economy, thereby multiplying the effects of the original expenditure. This process is commonly referred to as the multiplier effect. An estimated multiplier for the one-time capital and ongoing expenditures for the proposed facilities on the subject site has three distinct components:

- **Direct Impacts** represent the initial capital investments made to construct the proposed buildings on the subject lands. These expenditures include the purchase of labour, equipment, other infrastructure and related services.
- **Indirect Impacts** represent the subsequent purchases by suppliers required to produce the goods / services related to the original and ongoing investments in the Danforth and St. Clair Lands.
- **Induced Impacts** result when workers employed in the sectors, stimulated by direct and indirect expenditures, spend portions of their incomes on consumer goods and services.



Direct, indirect and induced impacts are estimated in terms of the following measures:

- **Gross Output** – a measure of total sales throughout the economy in question, as a result of an initial and ongoing expenditures on goods and / or services produced by an industry⁵.
- **Employment** – total full-time, full-year jobs generated by direct, indirect and induced expenditures. For one-time capital and ongoing expenditures, such as those being analyzed, the employment figures produced by the model represent years of full-time employment. For example, one job identified by the model represents the equivalent of one person working full-time for the duration of one year⁶.
- **Labour Income** – total value of wages, salaries and benefits received by employees associated with direct, indirect and induced expenditure.
- **Government Revenues** – revenues accruing to federal, provincial and local jurisdictions as a result of direct, indirect and induced expenditures. Revenue categories include personal and corporate income tax, sales taxes (e.g. HST), property taxes and other miscellaneous taxes, tariffs and fees.
- **Multipliers** are expressed by the ratio of total impacts (direct, indirect and induced) to initial expenditures. For example, the gross output multiplier is calculated by dividing total gross output by the initial expenditure on the bundle of goods and / or services in question. The only exception is that of the employment multiplier, where total employment is divided by millions of dollars of expenditure.

Localized Impacts

In Canada, Statistics Canada calculates input-output accounts at the national, provincial levels only. The economic impacts for the City of Vaughan were calculated by applying “location quotients” to the economic impact results generated for the Province of Ontario. Location quotients represent the share of employment in each industry sector relative to the Province as a whole. This is the most

⁵ For example, with respect to a single construction project, an initial expenditure would be made to pay for the design firm and contractor. The design team would then hire staff, purchase equipment and materials, such as computers, software, paper, etc. The construction company, would also hire labourers, pay for construction equipment and materials. The staff in turn would purchase goods and services from their wages to support their everyday living. The sum of all of these expenditures would be the gross output. We do note that this involves some double counting (e.g., the initial expenditure, in reality covered wages and salaries, equipment, etc. of the contractors it hired).

⁶ These employment figures represent the total full-time, full-year jobs generated by direct expenditures, as well as the indirect and induced impacts that are spread more broadly throughout the regional, provincial and national economies. For one-time capital expenditures, such as those analyzed in this study, these employment figures represent total years of full-time employment (e.g., one job identified represents the equivalent of one person working full-time for the duration of one year).

common and accepted methodology for determining localized impacts when industry and commodity data is not available.

The logic to using location quotients to estimate localized impacts is that the relative share of employment within a given industry should be similar to the share of a purchase within that industry that could be sourced locally. There is the potential for significant cross purchasing between municipalities, regardless of the employment composition, however, this is less likely for the City of Vaughan due to the overall size of the City and its existing industries.

Assumptions

There are a number of underlying and basic assumptions upon which the validity of the economic impact findings presented in this report depend. Based on our considerable and long-term experience in the land use planning and real estate development process, we recognize and appreciate the problems associated with making generalized assumptions about future conditions. Undoubtedly, deviations from historical and current trends will occur in the future, however, basic simplifying assumptions are required regarding the possible extent of such deviations.

The following provides a brief summary as to a number of the key underlying assumptions for this particular economic impact analysis.

- During the forecast period discussed in this report, a **reasonable degree of economic stability will prevail** in the Province of Ontario, and specifically in the context of the City of Vaughan / Greater Toronto Area market. We recognize, in particular, the ongoing and potentially extended effects of the COVID-19 pandemic on both the local real estate market in the GTA and broader economic / business conditions. Given the timeline and anticipated market entry of this project, however, we generally anticipate that market conditions will improve in the coming years and largely return to pre-pandemic terms. Furthermore, we note that the effects of the pandemic have been and will continue to be varied across different asset classes. With the predominantly institutional and healthcare-focused nature of this project, we anticipate that the VHCP will exhibit relative resilience over the mid-term and longer planning horizons (or potentially even gaining an increase in prominence as a result of the pandemic).
- It is our opinion that the significant investments and corresponding construction activities at **the VHCP will not, in and of themselves, cause any meaningful labour imbalances** in the local economies of the Greater Toronto Area (“GTA”). Due to the depth and capacity of the GTA’s skilled labour force, we believe the GTA will be able to provide and attract the skillsets needed to build the project, while maintaining sufficient labour to enable other construction projects elsewhere in the Region are able to move forward. As such, we have not adjusted our analysis

to account for these risks and have generally assumed that a reasonable amount of economic stability will prevail in these areas.

- The various **statistical inputs** relied upon in our analyses—based largely on municipal information, CoStar Realty Information Inc. and other available real estate market data sources—are considered sufficiently accurate for the purposes of this analysis. These statistical sources have ultimately informed a number of the key underlying assumptions and inputs utilized in our analysis.
- The proposed land use concept plans for the subject site outlined in this report are **preliminary and very high-level demonstrations only**. They are intended for reference and illustrative purposes, providing a general indication as to the possible extent of new development on VHCP Non-Hospital Lands. They do not necessarily represent the actual extent nor type of development that could ultimately be advanced by the City of Vaughan and other proponents within the VHCP Partnership. As outlined throughout this report, these concepts have been informed by information obtained directly from the various organizations that comprise the VHCP Partnership, as well as the insights of the broader project consulting team.
- **References to the Canadian dollar in this report, dealing with present and future periods, reflect its 2020 value.** We recognize that fluctuation in the absolute value of the dollar will likely occur during the period covered by this report. We assume, however, that the relationship between the various metrics identified (e.g., current real estate / assessment value, construction costs, etc.) and the value of the dollar will remain more or less constant during the period analyzed. As such, no adjustments for inflation have been included in our analysis.
- Similar to above, given the preliminary and conceptual nature of the development concept considered in this study—as well as the level of statistical detail available at this early stage of the planning process—our economic impact analyses do not necessarily take into account the **time value of money**, nor have we applied a corresponding **discount rate**, as is typical in more traditional development pro forma financial analyses and other feasibility analyses. In the case of an economic impact analysis, such as those presented in this report, the resulting financial benefits are a direct result of an initial “shock” expenditure or investment. The multiplier effect of this initial spending will not change simply because the scale of an investment is reduced or increased, provided the proportion spent within each industry category generally remains the same.

As noted earlier, recognizing that plans for the VHCP remain in the early, conceptual stages of development, the main purpose of this Study has been to provide a rough, order-of-magnitude estimation of some of the key economic impacts likely to be generated by implementing the

ambitious vision for the subject lands. Undoubtedly, the development program and specific plans for the VHCP will change as the project continues to evolve, as will the associated economic impacts. If, for any reason, major changes occur which could influence the basic assumptions stated above—or more likely if / when planning efforts for the VHCP are advanced closer to the detailed design stages of development—the findings and recommendations contained in this report should be reviewed in light of such changed conditions and revised, if necessary.



Figure C-1: Extra-Regional One-Time Capital Investment Impacts (VHCP Non-Hospital Lands)

Capital Investments – Extra Regional Vision (Phase 1 & 2): VHCP Non-Hospital Lands Only

	VAUGHAN	ONTARIO	CANADA
Initial Expenditure	\$ 736,000,000	-	-
Impact: Gross Output			
<i>Direct</i>	\$ 736,000,000	\$ 736,000,000	\$ 736,000,000
<i>Indirect</i>	\$ 333,000,000	\$ 392,000,000	\$ 473,000,000
<i>Induced</i>	\$ 195,000,000	\$ 268,000,000	\$ 330,000,000
Total	\$ 1,264,000,000	\$ 1,396,000,000	\$ 1,539,000,000
Impact: Value Added (GDP)			
<i>Direct</i>	\$ 319,000,000	\$ 319,000,000	\$ 319,000,000
<i>Indirect</i>	\$ 176,000,000	\$ 206,000,000	\$ 245,000,000
<i>Induced</i>	\$ 117,000,000	\$ 159,000,000	\$ 190,000,000
Total	\$ 611,000,000	\$ 684,000,000	\$ 755,000,000
Impact: Employment (Full-Time, Full-Year Employment)			
<i>Direct</i>	2,900	2,900	2,900
<i>Indirect</i>	1,500	1,800	2,100
<i>Induced</i>	900	1,100	1,300
Total	5,300	5,700	6,300
Impact: Labour Income			
<i>Direct</i>	\$ 255,000,000	\$ 255,000,000	\$ 255,000,000
<i>Indirect</i>	\$ 119,000,000	\$ 136,000,000	\$ 159,000,000
<i>Induced</i>	\$ 56,000,000	\$ 73,000,000	\$ 89,000,000
Total	\$ 431,000,000	\$ 464,000,000	\$ 504,000,000
Impact: Government Revenues			
<i>Federal</i>	\$ 92,000,000	\$ 102,000,000	\$ 112,000,000
<i>Provincial</i>	\$ 81,000,000	\$ 94,000,000	\$ 102,000,000
<i>Local</i>	\$ 49,000,000	\$ 60,000,000	\$ 62,000,000
Total	\$ 222,000,000	\$ 256,000,000	\$ 276,000,000

SOURCE: urbanMetrics inc., based on a custom run of the Statistics Canada Interprovincial Input-Output model.

Figure C-2: Intra-Regional One-Time Capital Investment Impacts (VHCP Non-Hospital Lands)

Capital Investments – Intra Regional Vision (Phase 1 Only): VHCP Non-Hospital Lands Only

	VAUGHAN	ONTARIO	CANADA
Initial Expenditure	\$ 359,000,000	-	-
Impact: Gross Output			
<i>Direct</i>	\$ 359,000,000	\$ 359,000,000	\$ 359,000,000
<i>Indirect</i>	\$ 162,000,000	\$ 191,000,000	\$ 230,000,000
<i>Induced</i>	\$ 95,000,000	\$ 131,000,000	\$ 161,000,000
Total	\$ 616,000,000	\$ 681,000,000	\$ 750,000,000
Impact: Value Added (GDP)			
<i>Direct</i>	\$ 156,000,000	\$ 156,000,000	\$ 156,000,000
<i>Indirect</i>	\$ 85,000,000	\$ 101,000,000	\$ 119,000,000
<i>Induced</i>	\$ 57,000,000	\$ 77,000,000	\$ 93,000,000
Total	\$ 299,000,000	\$ 334,000,000	\$ 368,000,000
Impact: Employment (Full-Time, Full-Year Employment)			
<i>Direct</i>	1,400	1,400	1,400
<i>Indirect</i>	700	900	1,000
<i>Induced</i>	400	500	700
Total	2,600	2,800	3,100
Impact: Labour Income			
<i>Direct</i>	\$ 125,000,000	\$ 125,000,000	\$ 125,000,000
<i>Indirect</i>	\$ 58,000,000	\$ 66,000,000	\$ 78,000,000
<i>Induced</i>	\$ 28,000,000	\$ 36,000,000	\$ 43,000,000
Total	\$ 210,000,000	\$ 227,000,000	\$ 246,000,000
Impact: Government Revenues			
<i>Federal</i>	\$ 45,000,000	\$ 50,000,000	\$ 55,000,000
<i>Provincial</i>	\$ 40,000,000	\$ 46,000,000	\$ 50,000,000
<i>Local</i>	\$ 24,000,000	\$ 30,000,000	\$ 31,000,000
Total	\$ 109,000,000	\$ 126,000,000	\$ 136,000,000

SOURCE: urbanMetrics inc., based on a custom run of the Statistics Canada Interprovincial Input-Output model.

Figure C-3: Recurring Operations Impacts (VHCP Non-Hospital Lands)

Operations – VHCP Non-Hospital Lands Only

	VAUGHAN	ONTARIO	CANADA
Initial Expenditure	\$ 350,000,000	-	-
Impact: Gross Output			
<i>Direct</i>	\$ 350,000,000	\$ 350,000,000	\$ 350,000,000
<i>Indirect</i>	\$ 107,000,000	\$ 144,000,000	\$ 174,000,000
<i>Induced</i>	\$ 95,000,000	\$ 131,000,000	\$ 161,000,000
Total	\$ 552,000,000	\$ 626,000,000	\$ 685,000,000
Impact: Value Added (GDP)			
<i>Direct</i>	\$ 212,000,000	\$ 212,000,000	\$ 212,000,000
<i>Indirect</i>	\$ 62,000,000	\$ 81,000,000	\$ 97,000,000
<i>Induced</i>	\$ 57,000,000	\$ 78,000,000	\$ 93,000,000
Total	\$ 331,000,000	\$ 371,000,000	\$ 402,000,000
Impact: Employment (Full-Time, Full-Year Employment)			
<i>Direct</i>	1,800	1,800	1,800
<i>Indirect</i>	500	700	800
<i>Induced</i>	400	500	700
Total	2,700	3,000	3,200
Impact: Labour Income			
<i>Direct</i>	\$ 155,000,000	\$ 155,000,000	\$ 155,000,000
<i>Indirect</i>	\$ 39,000,000	\$ 50,000,000	\$ 59,000,000
<i>Induced</i>	\$ 28,000,000	\$ 36,000,000	\$ 43,000,000
Total	\$ 222,000,000	\$ 240,000,000	\$ 257,000,000
Impact: Government Revenues			
<i>Federal</i>	\$ 48,000,000	\$ 54,000,000	\$ 58,000,000
<i>Provincial</i>	\$ 39,000,000	\$ 45,000,000	\$ 52,000,000
<i>Local</i>	\$ 9,000,000	\$ 11,000,000	\$ 11,000,000
Total	\$ 96,000,000	\$ 109,000,000	\$ 121,000,000

SOURCE: urbanMetrics inc., based on a custom run of the Statistics Canada Interprovincial Input-Output model.

Appendix D Implementation Model Evaluation



Overview

The following provides the details of our evaluation for each implementation model identified for the VHCP based on five distinct criteria:

- **One-Time Implementation Costs;**
- **Ongoing Management Costs;**
- **Stakeholder Control & Influence;**
- **Transparency & Public Accountability;** and
- **Market Nimbleness & Responsiveness.**

These criteria have been applied against each identified implementation model option—**Public Private Partnership, Municipal Development Corporation or In-House Development** within the City of Vaughan—on a relative basis (i.e. each model evaluated against one another rather than a unique scoring of each option in isolation). They have been evaluated based on the project consulting team’s own discretion and professional judgement at a high-level given the general lack of detailed supporting information at this early stage. For the purposes of adding clarity and appropriately scoping the analysis, the evaluation conducted pertains only to a rough judgement of the overall effectiveness of the potential implementation models in achieving the pre-defined criteria.

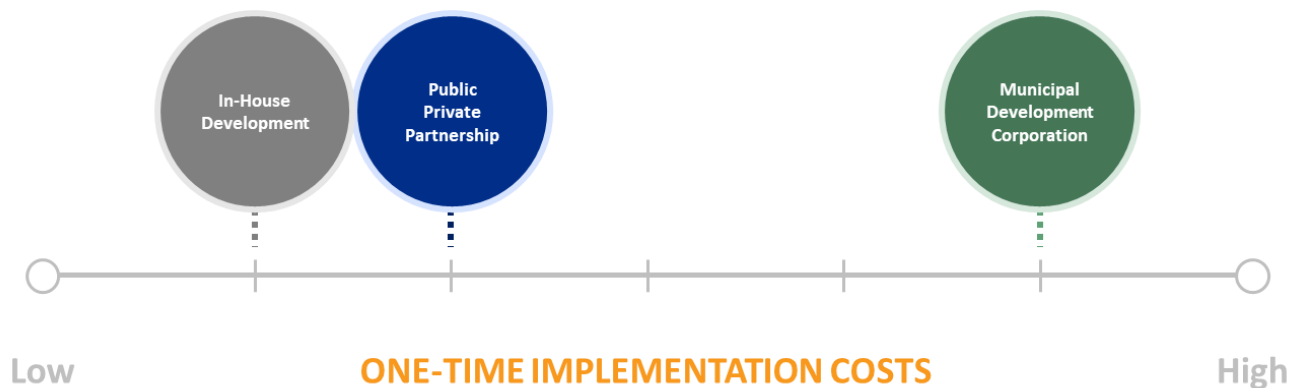
The eventual implementation of the VHCP necessitates additional steps and decision-making, particularly relating to the design, construction and negotiations of detailed parameters informing the full build-out and operation of the precinct. In general, the approach to executing many of these prerequisite work tasks will be similarly achieved via the three organizational structures or implementation models considered (e.g., the construction process will ultimately require issuing of Requests for Proposals, selecting and negotiating with a given proponent, awarding a contract and advancing the construction regardless of which model is selected). Notwithstanding these equivalencies, we have attempted to highlight in our evaluation where there may be more significant opportunities for differentiation or specific potential for value that is attributable to one or more of the options individually.

One-Time Implementation Costs

The cost associated with establishing an effective implementation model is an important consideration in maximizing its financial efficiency without compromising the capacity of the project, nor the resources available.

The figure below demonstrates how each general structure stands from a financial perspective as it relates to the initial stages of implementation and setup.

Figure D-1: One-Time Implementation Costs Evaluation



SOURCE: urbanMetrics inc.

As shown, the initial implementation costs associated with the Municipal Development Corporation is likely the most significant, with the Public-Private Partnership and In-House Development options realizing more financially prudent initial cost structures. The following identifies additional considerations with respect to the one-time implementation costs:

- The **MDC option is likely the most expensive option to first establish**. An MDC requires Provincial approval, and the preparation of supporting documents as part of an application. Additionally, similar to any newly established corporation, the MDC option requires a range of initial structural investments and decisions. These typically include a branding identity, physical work-space and equipment, identification and acquisition of personnel and a board of directors.

With an explicit mandate of implementing the VHCP vision, the one-time implementation costs generally required for an MDC present a potential barrier. However, in many municipalities MDC's function as special-purpose vehicles to manage, develop and / or dispose of municipal real estate assets. As such, **the City of Vaughan could incorporate a Municipal Development Corporation to implement and manage the VHCP as just one component of a broader, longer-term land development portfolio and strategy.** This approach could mitigate concerns about the particularly high one-time implementation costs, relative to the work and time horizon expected to fully realize the VHCP vision.

Example:

The **Calgary Municipal Land Corporation (“CMLC”)** was created with a mandate tied to a relatively small geographic area of City-owned, underutilized land holdings. Over time, the City of Calgary has expanded the mandate of CMLC to include a range of underutilized properties and real estate development initiatives throughout the municipality. CMLC has, in effect, become a default land activation arm for all municipally held lands.

As a second alternative but related option, the City of Vaughan could explore an “MDC-Lite” model. That is, a similar structure which maintains the core elements of a Municipal Development Corporation (e.g., corporate structure, transfer of assets, board of directors, etc.), while limiting other elements (e.g., brand identity, organizational capacity, etc.). It is the project consulting team's general view that—given the scope of ongoing managerial, leasing and engagement efforts anticipated at the VHCP—an MDC-Lite model may not offer sufficient depth of resources to advance the diversity of work required at the precinct.

- A public-private partnership would be a **low-cost implementation option to develop the lands.** Beyond the initial establishment of development parameters and negotiation of contract terms and purchase and sale agreements, the implementation costs would largely be borne by the private proponent. Furthermore, subject to negotiated parameters, the nature of a public-private partnership provides certainty to both parties as to what services are provided, cost of the services, the timeline, and development standards.
- Developing, leasing and managing the site with **in-house, City of Vaughan resources** would not necessarily result in significant upfront costs. The human resources required would generally already be in place within the municipal bureaucracy, and branding / identity,

acquisition of space and equipment largely would not be required if the project were to be executed by the municipality.

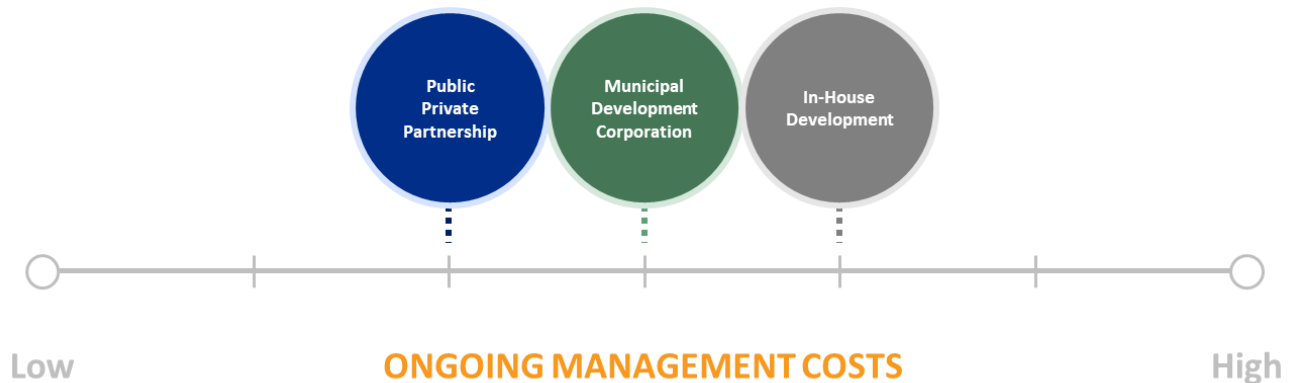
Ongoing Management Costs

In addition to one-time costs for establishing an implementation structure, it is important to consider the ongoing day-to-day operations and management costs associated with the VHCP.

These tasks could include ongoing **maintenance** of facilities, responsibilities for **building management, leasing and operation**, and **coordinating activities** among and between different building users. In addition, as the precinct continues to develop, this level of responsibility may ultimately involve land development, project, and construction management as well (e.g., to fulfill later phases of development and expansion).

- Utilizing **“in-house”** resources (i.e. through the Special Projects or Real Estate departments at the City of Vaughan) would likely represent the costliest option. Given that management of the VHCP is anticipated to require multi-disciplinary input over a medium-long term timeframe, establishing an in-house structure would likely require drawing staff from a range of disciplines to the project, providing input on an “as-needed” basis. This could produce inefficiencies with respect to project continuity (e.g., technical staff may be brought in for isolated contributions, without necessarily understanding the full direction or nature of the work). Furthermore, municipal staff are likely to have several distinct projects, which could put strains on other day-to-day work tasks and the ability to focus more exclusively on the needs of the VHCP.
- A **municipal development corporation** would entail the creation / hiring of a “right-sized” project team with an explicit mandate to advancing the VHCP project. By leveraging an external structure, staffing decisions would be explicitly tied to the needs of the VHCP project, rather than fitting within a broader organizational structure. Furthermore, the ability to hire staff on a term basis, or to pursue third party consultation services provides the MDC model with maximum flexibility to respond to changing and evolving project needs.
- The implementation of a **public-private partnership** to manage the site would provide cost-certainty, and likely result in the most cost-effective structure for managing the long-term development of the precinct, from a public perspective. Decisions around staffing, technical expertise, and development capacity would be made by an external party, based on requirements to fulfill agreed upon parameters.

Figure D-2: Ongoing Management Costs Evaluation



SOURCE: urbanMetrics inc.

Stakeholder Control & Influence

As the realization of the VHCP progresses towards a more vertical, public-facing development phase, the ultimate composition of land uses, users and the relationship between them becomes a more significant consideration.

Particularly the nature of participation, investment, and activity amongst the core stakeholders within the Partnership could—at least to some degree—be influenced by the overall build out of the precinct. As such, the degree to which an implementation structure is responsive to these interests is important in building confidence among all parties involved.

The project team's view is that the Municipal Development Corporation model allows for the most responsive structure to various project stakeholders. An independent corporation governed by a board of directors comprised of subject matter experts from a range of disciplines provides an opportunity to ensure that a diversity of voices are present. Furthermore, advisory committees comprised of team members from the core stakeholder group that comprise the VHCP Partnership (e.g., ventureLAB, Mackenzie Health and York University), in addition to other potential stakeholders, could be formed to ensure that the perspective of these organizations is prioritized throughout the development and management process. The following additional considerations are also of note:

- The creation and structuring of an **MDC** in a deliberate manner from the outset has the potential to create an organizational and governance structure that achieves the preferred level of stakeholder input from the outset. This model would allow for structured and meaningful stakeholder contribution and votes with respect to major decisions being made to

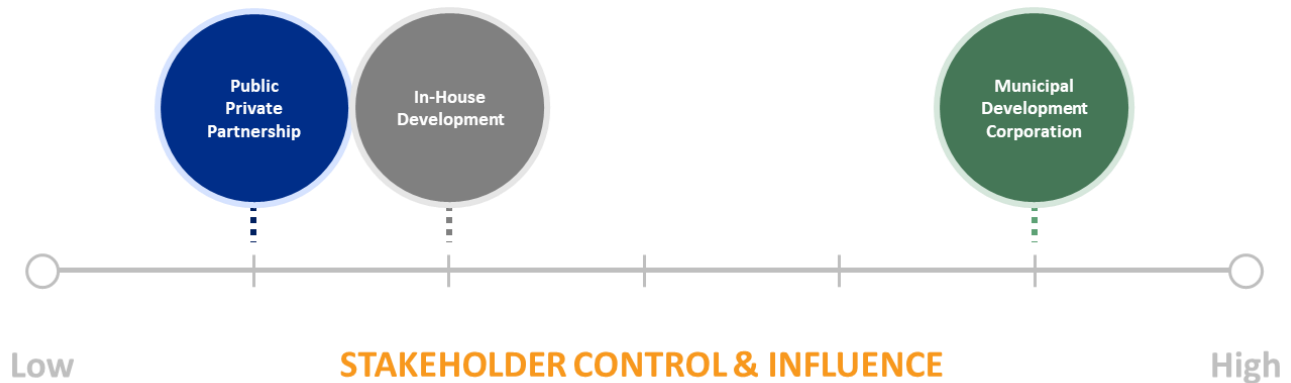
advance the VHCP. As a distinct corporation, the decision-making process is one step removed from any potential changes in governing direction by any of the core stakeholders.

- A **Public-Private Partnership** is likely the least responsive model to stakeholder views. Once an agreement is reached and responsibilities are transferred, the private entity effectively has parameters and direction within which it can advance a profit-oriented mandate. Although the municipality may be able to negotiate certain obligations into a lease agreement, ultimately, securing private sector management of the facility is less likely to allow for meaningful contributions from the core stakeholders as the project evolves over time.
- **In house development** would certainly appropriately capture the interests and attention of the City of Vaughan, as the project would be undertaken at their sole direction. The City of Vaughan would maintain ownership and sole discretion for the direction made under this system, despite any degree of stakeholder engagement made. This model could create conflict—or more accurately the perception of conflict—if decisions are made by the City of Vaughan that do not necessarily align with those of the core stakeholder group.

Example:

Build Toronto was initially established by the City of Toronto to manage, dispose of and develop municipal real estate assets, with the goal of maximizing financial returns to the municipality. In 2017, the City re-branded and re-organized Build Toronto into **CreateTO** – a consolidated organization that maintains control over all of the City of Toronto’s real estate assets. CreateTO’s board of directors is comprised of a range of municipal representatives, and prominent subject matter experts in real estate and land development.

Figure D-3: Stakeholder Control & Influence Evaluation

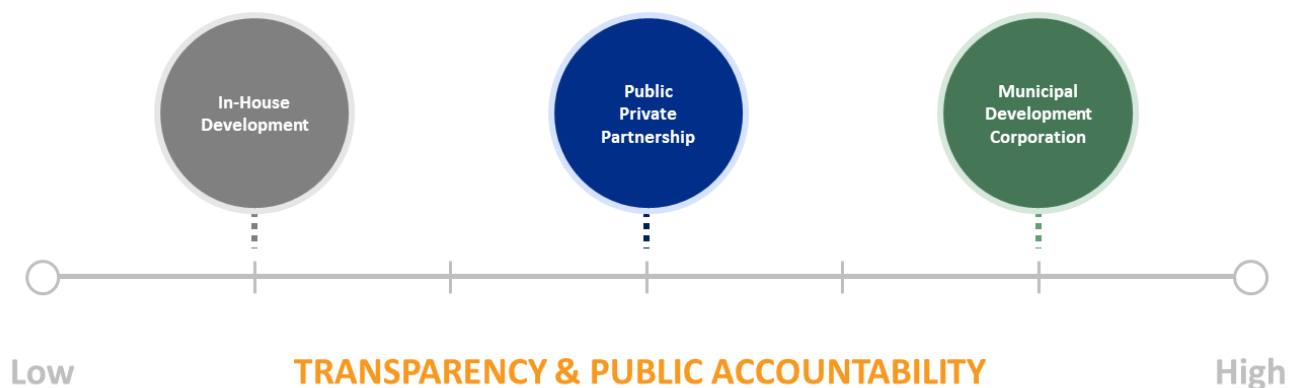


SOURCE: urbanMetrics inc.

Transparency & Public Accountability

As with all significant government expenditures, an important consideration is the demonstration of financial value, operational effectiveness and transparency in reporting. The structure of the entity tasked with executing on a concept of this nature can play a role in earning and public trust and demonstrating accountability.

Figure D-4: Transparency & Public Accountability Evaluation



SOURCE: urbanMetrics inc.

It is the project team's view that a Municipal Development Corporation maximizes opportunity for the buildout of the project to demonstrate a publicly accountable, transparent approach to development. A separate corporate model allows for a clear demarcation of the costs, results and activities of the organization. The incorporation and structure of the facilitates review and oversight by Vaughan City Council, and, the possible release of publicly available reporting.

- An **in-house development model** would be managed internal to the City of Vaughan's existing structure. The nature of this model would entail sharing of resources, space and expenses amongst various projects being undertaken by the City of Vaughan at a given time. As such, it would likely be challenging to holistically account for the costs, activities and resources dedicated specifically to the VHCP versus other municipal activities.

An in-house development model could also be subject to changes in political direction made as a result of external factors (e.g., election changes, evolving City of Vaughan space needs, funding constraints, etc.). These external impacts could alter portions of the City's direction or approach to the VHCP, which may not necessarily reflect the longer-term vision initially established for the precinct and / or the orientation of the core stakeholders within the Partnership. This threat may further create uncertainty amongst potential private sector tenants considering leasing office space in the VHCP.

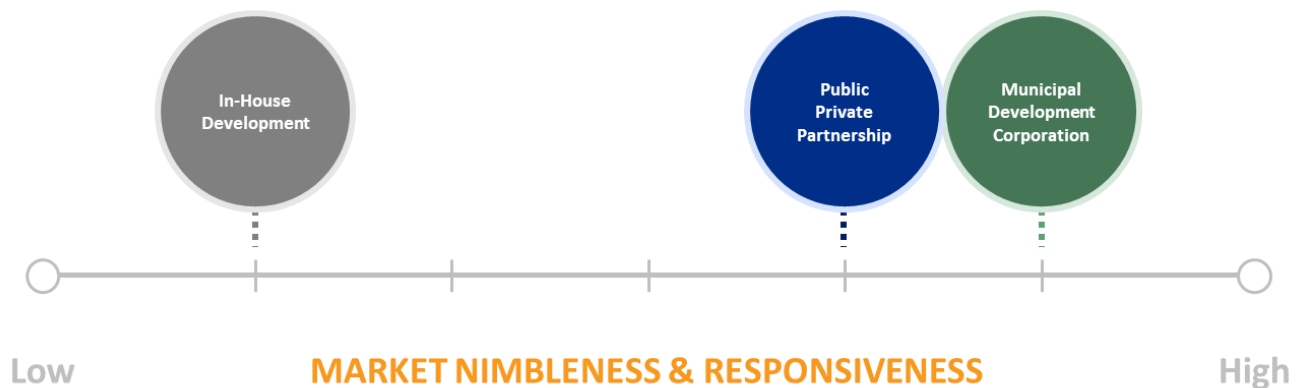
- The nature of a **P3 agreement** establishes transparency with respect to an initial arrangement between a private proponent and the municipality. The nature of the arrangement, responsibilities and compensation can largely be held up to public scrutiny. However, elements of a public-private partnership are largely withheld from public view for a variety of reasons (e.g., proposal confidentiality, competitive or proprietary purposes, etc.). As such, a certain degree of public accountability and scrutiny is realized through a P3, however demanding full public accountability from a private organization is not necessarily a reasonable expectation.
- As a distinct corporate entity, a **municipal development corporation** would be a straightforward model to present and report on from a process and financial management perspective. Because the MDC would operate with a distinct mandate and independent structure, the operations of the entirety of the organization would represent the cost of implementation for the VHCP. Furthermore, annual accounting / reporting protocols could also create a potential situation whereby annual reports and financial statements can be released publicly which allow for open transparency. As these reports are provided to the City of Vaughan, there is a direct reporting relationship and the City and ratepayers can evaluate the effectiveness of the model on an ongoing basis.

Market Nimbleness & Responsiveness

The ability to respond to changes or to private sector business activities in a competitive and reasonably timely manner is an important factor in the real estate sector.

Space leasing, investment decisions, and negotiations frequently require the ability to pivot on strategy / direction, respond to changes quickly and exhibit organizational flexibility in order to remain relevant; particularly when dealing with start-ups and other potentially technology-forward organizations accustomed to a certain pace of decision-making and action. The project team's stakeholder consultations reinforced this notion. In particular, the feedback received from the various municipal and non-municipal members of the Partnership suggested that even the *perception* of organizational sluggishness or unnecessary bureaucracy can serve as a major impediment, which should not be under-estimated.

Figure D-5: Market Nimbleness & Responsiveness Evaluation



SOURCE: urbanMetrics inc.

It is the project team's view that a Municipal Development Corporation would generally be the most effective organizational structure at responding to market changes in an efficient and competitive manner.

- An **in-house development** model would undoubtedly be the least responsive or efficient in responding to sudden market shifts, negotiations or changing external conditions. It is the project team's opinion that day-to-day municipal functions are achieved at a different pace, level of prioritization and reporting structure than traditional private-sector organizations. Adapting this orientation and structure to a model that necessitates engagement with the

private sector is likely to present challenges and barriers as far as replicating a market-oriented organizational structure.

Furthermore, stakeholder engagement exercises revealed that there is a perception amongst start-up organizations that negotiations or navigating a municipal bureaucracy is a time-intensive process, particularly when compared to private sector alternatives. It was expressed that there is a more limited perceived flexibility or sense of urgency when working with public bureaucracies, and there is concern that this may limit the efficiency of the leasing process—a significant factor for fast moving start-up enterprises.

- A **public-private partnership** would be capable of responding efficiently and effectively to market fluctuations and changes. Subject to any limitations or parameters placed on the functioning of a private partner, a P3 would respond effectively to market conditions.

It is important to note that in certain capacities and circumstances, private landlords prefer the certainty and efficiency of negotiating long-term (5-10 year) lease arrangements with large-scale tenants. Depending on the orientation and strategy of the particular landowner and market, certain landlords are less interested in negotiating shorter term leases (i.e. 1-3 years) with smaller tenants: precisely the characteristics that start-up and scaling organizations often seek. Although this condition is evolving, as more and more organizations adapt to evolving leasing conditions, the general structure of the P3 model may result in certain innovation-based start-ups having limited leasing opportunities at the VHCP due to a landlord's strategic orientation.

- A **Municipal Development Corporation** would—in the project team's view—have the potential to be most responsive to market changes, and able to navigate these changes efficiently. A Municipal Development Corporation with a broad mandate to manage properties explicitly to support both scaling start-ups and established organizations alike would be most in-tune with, and responsive to, the needs of these organizations. Additionally, with a specific mandate and organizational structure balanced around several primary goals (which may include profit maximization, fostering start-ups, and supporting innovation), the orientation of an MDC could be specifically geared towards responding to the needs of a prospective tenant promptly.