

# Hamilton Life Sciences

SECTOR STRATEGY

Council Presentation | February 16, 2022

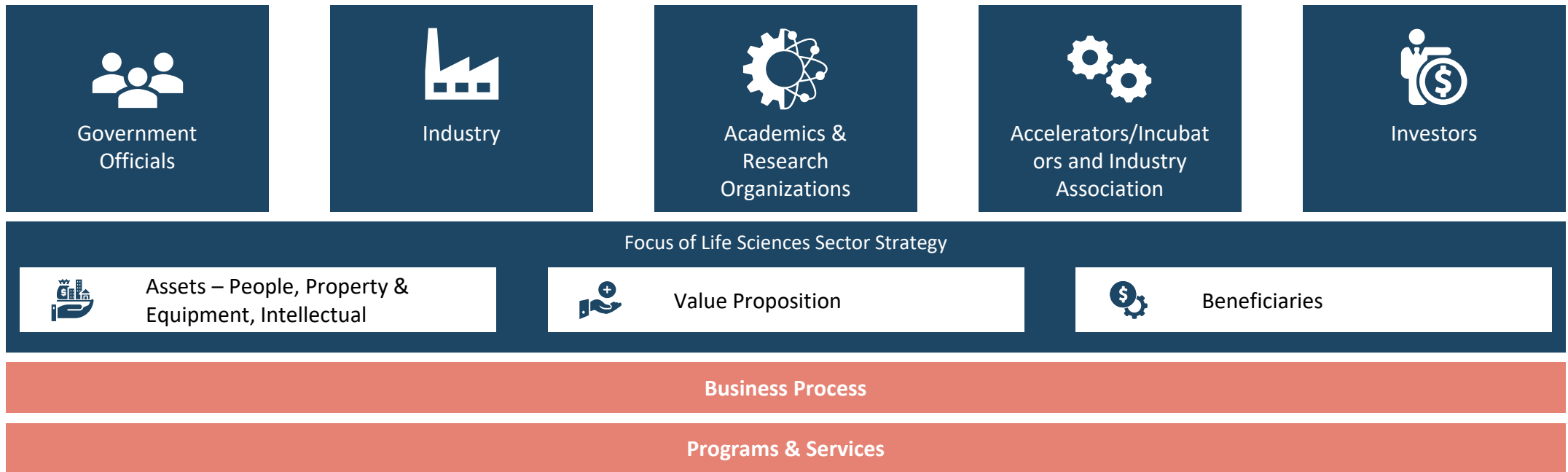


# Project overview

A sector strategy is a call to action — a framework for the sector’s participants to link public investments with private sector expertise and innovation. Done right, it inspires further collaboration and alignment to attract domestic and international investment.

Strategies also seek to address key challenges and focus on opportunities for growth. For Hamilton, this includes addressing local roadblocks preventing local expansion (i.e. scaling-up), and raising investor awareness. To address both challenges and opportunities to grow the sector, we focused on the following areas:

## Hamilton Life Sciences



# Focusing on life sciences



## Global growth opportunity

Hamilton is one of Canada's fastest growing life sciences clusters. With more than 30,000 employees, and CAD \$5.7 billion in annual economic activity, the life sciences sector is one of the city's largest industry.

**Hamilton possesses the potential to lead Canada's national life sciences ecosystem and attract increased national and international.**

Hamilton's life sciences sector further presents an opportunity to support innovation, economic growth, equity, diversity, and inclusion in the region.

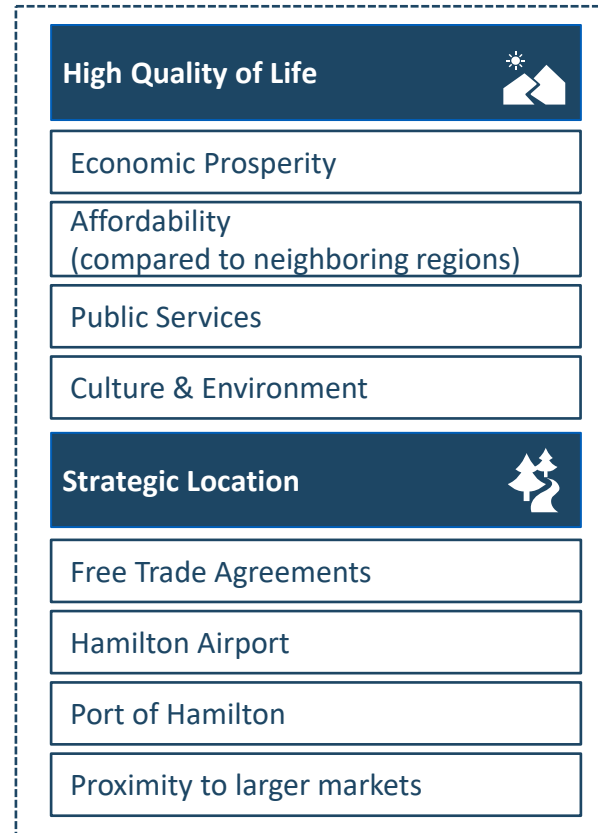
# Hamilton's advantages and strengths

Leveraging the City's advantages and sector strengths will help grow Hamilton's life sciences sector and attract investment.

## Sector Strengths



## City Advantages



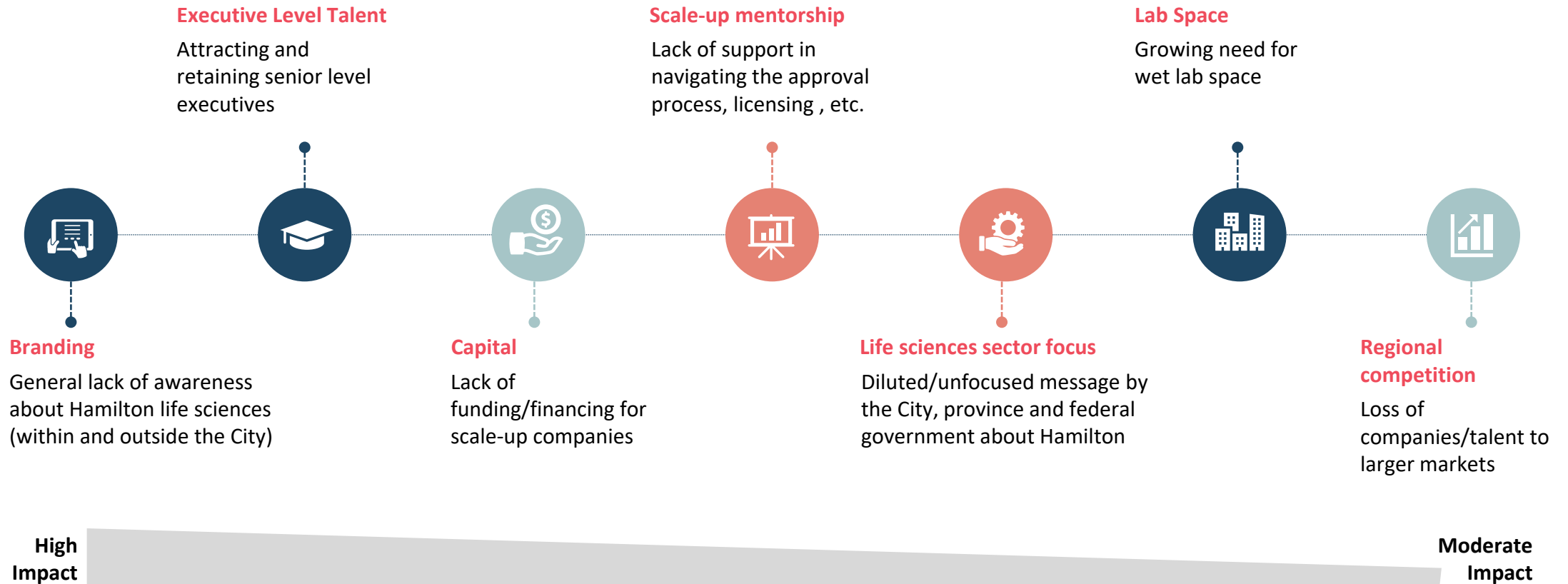
# Focusing on key subsectors

To help ensure differentiation, Hamilton should focusing on the subsectors where the region has a competitive advantage and where national and international growth opportunities exist in the near and long-term. Based on research, consultation with stakeholders, and analysis, the key subsectors in Hamilton include:



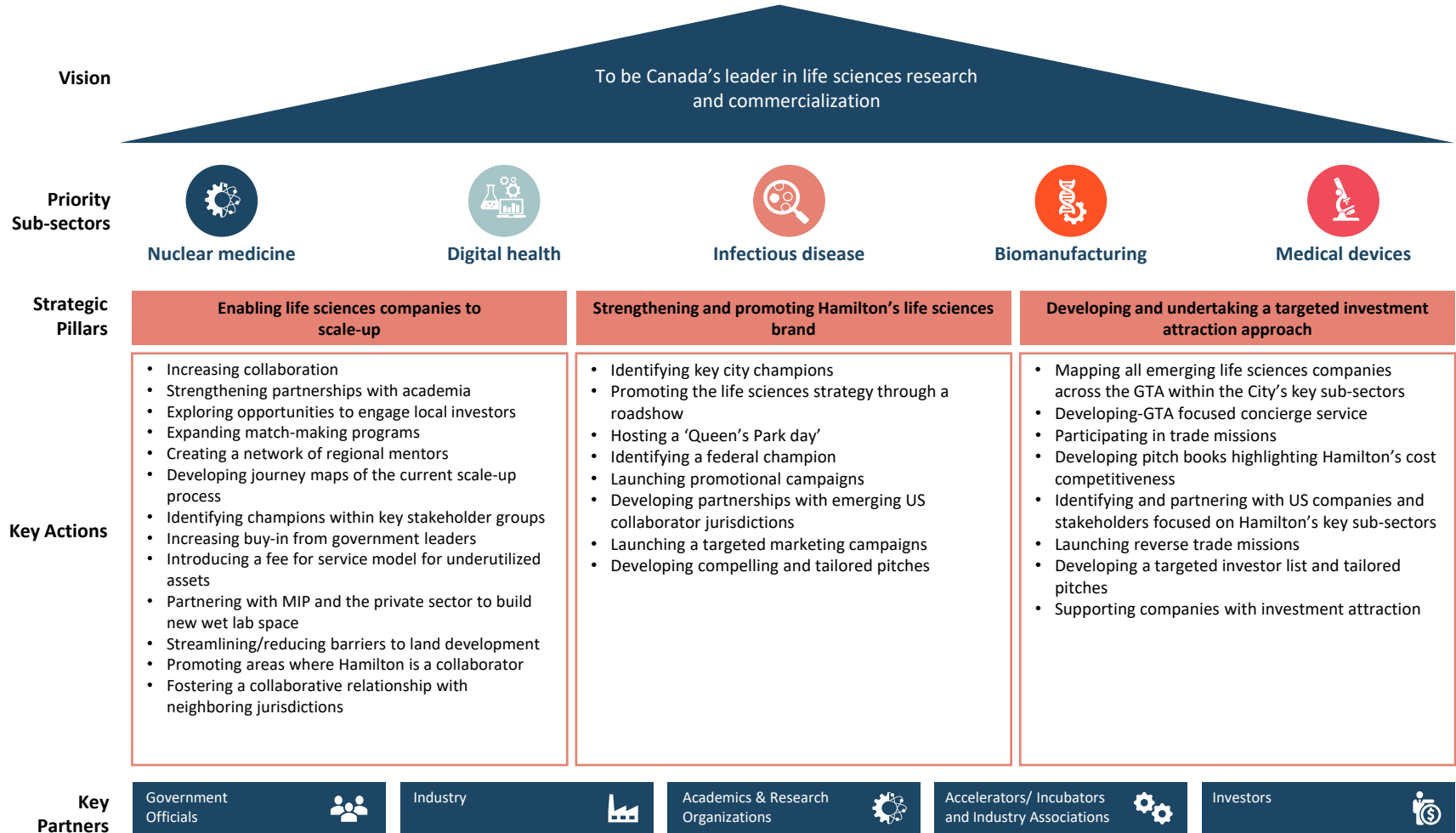
# Barriers for accelerated growth

Based on a current state assessment of the life sciences sector that included extensive stakeholder consultation and in-depth research and analysis to identify challenges impacting its ability to grow.



# Strategy for growing Hamilton's life sciences sector

Successful strategies start with a clear vision for the future. For Hamilton, this vision is to be Canada's leader in life sciences research and commercialization – with a focus on key subsectors such as nuclear medicine, digital health, infectious diseases, biomanufacturing, and medical devices.



# Key performance indicators will determine success and the path forward

To support the city in measuring the success of the life sciences strategy, a total of 11 key performance indicators (KPIs) relevant to Hamilton’s life science sector have been identified. These indicators are intended to monitor local sector performance.

Performance Indicator	Attribute Measured
Total revenue from local entities in the Hamilton life sciences ecosystem.	Economic activity
Venture capital investment in Hamilton’s life sciences sector (book value).	Funding / financing
Number of life sciences companies with a physical presence in the Greater Hamilton Area.	Industry presence / growth (Y/Y)
Life sciences facility space in square feet.	Infrastructure
Annual investment (capex, opex, payroll) by Hamilton life sciences sector organization companies (\$).	Investment
Number of Hamilton full-time employees employed by international companies operating in the sector (Y/Y).	Labour / talent
Number of annual undergraduate / graduate / postgraduates in STEM at Hamilton Universities/Colleges.	Labour / talent
Median income for life sciences jobs in Hamilton.	Labour / talent
Number of life sciences jobs in Hamilton.	Labour / talent
Number of patents created by Hamilton life sciences companies per calendar year as a result of research in Hamilton area.	R&D activity
Total spending on R&D (% of operating budget) from life sciences organizations in Hamilton.	R&D activity





## Appendix

# Stakeholder consultations



As part of the project, discussions were held with key stakeholder groups to help provide insights related to Hamilton's strengths, weaknesses, opportunities and challenges, as it relates to the life sciences sector.

These insights provided the basis of the sector strategy and informed the development of the final list of KPIs to be assessed and tracked by the City of Hamilton and its partners.



**Synapse Consortium\***

(11 stakeholders engaged)



**Government Officials**

(6 stakeholders engaged)



**Industry**

(8 stakeholders engaged)



**Academia & Research Organizations**

(3 stakeholders engaged)



**Accelerators/ Incubators and Industry Associations**

(3 stakeholders engaged)

\*Note: Synapse Consortium includes academic & research organizations, government officials, accelerators/incubators and industry associations.

# Key Challenges (1/3)

The key challenges identified through stakeholder discussions and analysis limiting accelerated sector growth include:



## Strengthening Hamilton's life sciences brand

- Stakeholders highlighted a general lack of awareness about Hamilton's life sciences sector (within and outside the city).
- This includes a lack of knowledge about key assets, opportunities for growth and recent wins across the sector.
- While McMaster University is well known across the region, other assets or recent wins tend to fall under the radar for anyone not directly involved in Hamilton's life sciences sector.
- This is in part attributed to the persistent association of Hamilton as a 'steel town', and not a city with a growing life sciences sector.



## Attracting executive level talent

- While Hamilton was observed to have a strong supply of life sciences talent, gaps were identified in the availability of executives and individuals with 5-8 years of experience.
- This includes individuals with a successful track record and skillsets required to grow start-ups into multi-million-dollar corporations.
- companies look to scale-up, experience and executive skillsets are critical to help companies reach the next stage.
- Hamilton has excelled at attracting top tier talent within the STEM categories and needs to apply the same focus on creating a business environment conducive to attracting future business executives.



## Increasing access to capital

- Entrepreneurs identified access to scale-up capital as a primary barrier to growth for start-ups.
- While not unique to jurisdictions across Canada, start-ups pointed to challenges in accessing capital within the city and Canada more broadly.
- Entrepreneurs across the city perceived Canadian investors to be more risk averse in their valuations of new companies and innovative products, impeding the ability of Canadian start-ups to raise the required investment for growth.
- Combined with lower amounts of capital available across the country, start-ups oftentimes look to the US when raising capital.
- This challenge is further compounded by US investors' lack of awareness regarding life sciences opportunities across Hamilton.

# Key Challenges (2/3)

The key challenges identified through stakeholder discussions and analysis limiting accelerated sector growth include:



## Addressing the scale-up mentorship gap

- As noted by stakeholders, Hamilton lacks a robust pool of mentors with entrepreneurial expertise in the life sciences sector.
- This gap is largely the result of a growing ecosystem that has yet to reach a critical mass of successful scale-up companies.
- To compensate for a lack of experience, entrepreneurs often look to mentors to help them along the commercialization journey and beyond.
- With longer product development and licensing timelines in the life sciences sector, knowledgeable mentors that provide meaningful guidance in navigating the process can be the difference between success and failure.



## Increasing focus on life sciences sector

- Stakeholders noted limited showcasing of the life sciences sector from elected officials at all levels of government when profiling Hamilton.
- While a few recent wins and success stories (including the recent IPO of Fusion Pharmaceuticals) were identified, Hamilton continues to be closely linked to its industrial history despite life sciences organizations collectively constituting the largest employers in the city.
- While the city has been working on profiling the life sciences sector— including through partnerships with Invest in Canada – opportunities exist to further profile the sector.
- This includes the opportunity to focus efforts on promoting the life sciences sector to key government officials within the provincial and federal governments.



## Improving access to wet lab space

- Through stakeholder discussions, the availability of infrastructure, particularly access to wet lab space was noted.
- While advancements are being made in artificial intelligence and virtual reality which could help address some of these challenges by providing new methods to test innovative research, in the short and near-term these barriers to access key infrastructure assets present a roadblock to innovation and commercialization.
- While an opportunity exists for the private sector to help fill in life science asset infrastructure gaps, inefficiencies within the city's development process were highlighted.
- Unique requirements associated with the development of life sciences assets, such as regulations surrounding laboratories, lead to additional barriers in approvals.

# Key Challenges (3/3)

The key challenges identified through stakeholder discussions and analysis limiting accelerated sector growth include:



## Mitigating regional competition

- While Hamilton's geographic location presents opportunities for growth, including access to larger markets, it also presents challenges. Hamilton is located within the innovation corridor, neighboring Mississauga's 'pill hill' (pharmaceutical companies located in the Mississauga), and Canada's largest city, Toronto.
- The city faces competition from larger and more well-known cities, all within a 75km radius.
- As Hamilton looks to grow its life sciences sector, it needs to distinguish itself against its regional peers to attract investment, while retaining scaling-up companies considering relocation to the neighboring larger market in Toronto.

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