Corporate Report



Date: March 8, 2021

To: Chair and Members of General Committee

From: Paul Mitcham, P.Eng, MBA, City Manager and Chief Administrative Officer

Originator's files:

Meeting date: March 31, 2021

Subject

Mississauga Life Sciences: Sector Update

Recommendation

That the Corporate Report dated March 8, 2021 from the City Manager & Chief Administrative Officer regarding updates in Mississauga's Life Sciences sector be received for information.

Report Highlights

- In 2017, the City of Mississauga endorsed the Life Sciences Cluster Strategy 2017-2021 ('Strategy'), to establish it as a leading, world-class life sciences hub. Mississauga is the only Canadian municipality with a Life Sciences Cluster Strategy.
- Key outcomes since the implementation of the Strategy include:
 - Established the Mississauga Life Sciences Consortium: A distinguished group
 of sector leaders from world-renowned companies that acts as a collective voice to
 provide the City with advice and direction to grow the local cluster.
 - Led Business-to-Business (B2B) and Business-to-Government (B2G)
 Connections and Policy Changes:
 - Virtual business roundtables solved critical personal protective equipment (PPE) procurement issues for Canadian companies during the pandemic.
 - In collaboration with the Mayor's Office, meetings with elected officials including Minister Victor Fedeli and Mississauga MPs increased awareness of the importance of the life sciences sector and facilitated valuable interactions between our businesses and higher-level government.
 - Facilitated New Program Development to Address Regional Talent Skills Gaps:
 A Consortium meeting provided the impetus for UTM to launch a new Executive
 Certificate Program to address the knowledge and skills gaps identified as critical yet lacking in the local talent pool.

General Committee 2021/03/08

 Attracted New Investment: Mississauga has seen significant growth in the number of life sciences companies and employment in the sector. New investments in the industry supported by the Economic Development Office (EDO) represent over \$1.3 million in new and retained annual tax assessment and \$173 million in direct Gross Domestic Product (GDP).

- Mississauga is the second-largest life sciences hub nationally, with over 470 life sciences companies employing more than 25,000 people.
- Local life sciences companies have made significant contributions to COVID-19 public health responses (Appendix 1).
- Preserving established businesses and securing the next generation of growth from life sciences is vital to our economic recovery. The City will continue to strengthen its position as a leading life sciences hub, supporting Mississauga's economic recovery and economic growth over the long-term.

Background

Life Sciences is the science of all living organisms. The life sciences sector includes companies that use technology to deliver commercially-viable products and services and companies that directly support these activities (supply chain). Common examples include pharmaceutical, biotechnology, and medical technology companies.

The economic contribution of the life sciences sector to Ontario is significant. According to Life Sciences Ontario's (LSO) conservative estimates, the life sciences sector produces \$27 billion of economic output¹. In Mississauga, life sciences businesses account for \$2.7 billion or 6.3 percent of the City's GDP and employ more than 25,000 people, representing over 27 percent share of Ontario's total life sciences employment². People in the life sciences sector typically have a greater earning capacity, where wages are 24 percent higher than the provincial average³.

In 2017, Council endorsed the Life Sciences Cluster Strategy 2017-2021 ('Strategy'), recognizing the sector's significant contribution and future potential to the City's economic growth and prosperity. Mississauga is the only Canadian municipality with a Life Sciences Strategy. This five-year strategy was developed through extensive stakeholder consultation and identified opportunities to strengthen Mississauga's life sciences sector.

¹ Accelerating Prosperity: The Life Sciences Sector, Life Sciences Ontario (2019)

² It should be noted that this is most likely an understatement. Mississauga's definition of the life sciences sector uses a more refined list of sub-sectors.

³ Accelerating Prosperity: The Life Sciences Sector, Life Sciences Ontario (2019)

3

The Strategy's primary goal is to establish Mississauga as a leading Canadian life sciences hub, where companies choose to commercialize their technologies, products and services – 'A proven destination where diverse companies and exceptional talent grow, succeed and prosper.' The strategy outlined four guiding principles:

- Create Inclusive Business-Driven Networks
- Enhance Global & Regional Cluster Connectivity
- Cultivate the Innovation Ecosystem
- Attract & Grow

Comments

Mississauga remains the second-largest life sciences hub nationally, with over 470 life sciences companies employing more than 25,000 people.

Since 2017, the Strategy has guided a series of strategic initiatives resulting in meaningful outcomes for Mississauga. These outcomes include:

Creative Inclusive Business Driven Networks

Key Strategic Outcomes:

- Establish Local Life Sciences Sector Champions as the Formal Sector Governing
 Structure and Advisory Body: In 2018, following a recommendation in the Strategy, a
 formal governing body was established called the 'Mississauga Life Sciences
 Consortium.' The Mississauga Life Sciences Consortium consists of a distinguished
 group of executive leaders from the life sciences business community. They provide the
 City with advice and guidance to facilitate the growth and development of the local
 sector. The Consortium includes world-leading life sciences companies, such as:
 - Novo Nordisk
 - Bayer
 - AstraZeneca
 - Boston Scientific
 - Jazz Pharmaceuticals

The Consortium plays a unique and essential contributing role to the Mississauga Life Sciences sector.

 Coordinate Business-to-Business (B2B) Networking Initiatives to Connect the Life Sciences Ecosystem: In addition to several consortium meetings, the Economic Development Office (EDO) has facilitated meaningful connections by hosting various events. These include Business-to-Business (B2B) and Business-to-Government (B2G) networking events, talent-related events and business roundtables. A recent example is a series of COVID-19 Business Roundtables delivered to local life sciences companies and other key sectors on the impacts of COVID-19. Key outcomes from these roundtables included: General Committee 2021/03/08

 Solving critical business challenges: EDO helped address personal protective equipment (PPE) procurement issues for companies during the pandemic.

- Delivering COVID-19 support webinars: EDO hosted webinars with key subject matter experts to share resources and best practices on topics that local companies identified as pressing. Topics included, 'Working Together 6 Feet Apart: Planning a Return to the Office,' and 'How to Respond to COVID-19 in the Workplace.'
- Establishing a new business communication platform: COVID-19 has restricted in-person engagement. With support from the City's IT Division, EDO quickly implemented a business communication and collaboration platform that allows Mississauga businesses to engage virtually, during a time of physical distancing.

Cultivate the Innovation Ecosystem

Key Strategic Outcomes:

Enhance and Develop Training/Workforce Development Programs and Talent
Connections: The City has connected companies, post-secondary, research institutions
and workforce development groups to ensure that the local labour market meets the
industry's needs. During a 2018 Mississauga Life Sciences Consortium meeting,
business leaders spoke directly to post-secondary institutions and provided insights on
existing skills gaps. Attendees concluded that sector stakeholders (post-secondary
institutions and companies) need to collaborate more, to ensure better labour market
development alignment.

In response to this feedback, EDO held a half-day working session with close to 100 cross-functional representatives from the Ontario life sciences community. The purpose of the event was to facilitate networking and engagement and influence post-secondary institutions to develop new academic programming, to address the industry's needs. The breadth and quality of attendees at the event demonstrated that stakeholders valued this initiative and the City's work. One third of industry participants were executives, and over ten colleges and universities attended from across the province.

The skills gaps highlighted during the 2018 Consortium meeting also provided an impetus for new program development. In fall 2020, the University of Toronto Mississauga's Institute of Management and Innovation launched a new Executive Certificate in Pharmaceutical Challenges and Opportunities. The program, developed in collaboration with Mississauga life science business leaders, delivers the curriculum that CEOs identified as critical yet lacking in the existing labour market. In the first cohort, three quarters of program participants included employees from Mississauga-based businesses. High initial enrollment in the program suggests its importance and value.

Lead the Development of a Mississauga Life Sciences Innovation District: The Lakeview Innovation District is a strategic city-building opportunity. EDO is leading an activation assessment to build a roadmap for a fully operational site. Preliminary discussions identified life sciences as a priority sector in the site's development. Several life sciences companies have communicated interest in the Lakeview site with an expressed demand for laboratory space. An opportunity exists to establish Mississauga as the region's commercialization hub. Providing infrastructure and resources allows high-

General Committee 2021/03/08 5

growth companies to turn early-stage concepts commercially viable. EDO intends to bring this development to market through a Symposium (tentatively Q3/Q4 2021), where the life sciences sector represents a key sector prospect.

Enhance Global & Regional Cluster Connectivity

Key Strategic Outcomes:

- Empower Local Life Sciences Leaders: For years, the Provincial life sciences sector has called on the Government of Ontario to implement a coordinated Provincial Life Sciences Strategy. In August 2019, newly appointed Minister of Economic Development, Job Creation and Trade, Victor Fedeli, attended a Mississauga Life Sciences Consortium meeting to learn about the Ontario Life Sciences Sector (press release). This meeting was an instrumental first step in raising the new Minister's awareness of the importance of the life sciences sector to the Ontario economy and the need for a provincial strategy. Following this meeting, the Government of Ontario announced its intentions to develop a life sciences sector strategy for Ontario.
- Develop International Linkages with Globally Significant Life Sciences Hubs: Marketing
 efforts have elevated Mississauga's prominence nationally and internationally. Before
 the COVID-19 pandemic, EDO attended international conferences alongside the Mayor
 for investment promotion purposes. Attendance at these conferences helped establish
 and nurture valuable relationships that led to new investments, including the Brazilian
 pharmaceutical company, Biolab, in 2018. Due to COVID restrictions, EDO launched a
 digital advertising campaign targeting life sciences companies, resulting in a five-fold
 increase in website traffic and strengthening Mississauga's identity as a booming life
 sciences sector.
- Collaborate with Local Partners to Create a Cohesive Local Life Sciences Support
 Ecosystem: By maintaining strong relationships with local stakeholders and staying
 apprised of their priorities, the City finds new ways to positively impact the region.
 Mississauga's commitment to combating Type 2 Diabetes fosters an environment for
 partnership and collaboration in the community. Novo Nordisk, a multinational
 pharmaceutical company, made a transformative investment of \$20 million, establishing
 the Novo Nordisk Network for Healthy Populations (NNHP) at the University of Toronto –
 Mississauga. Its vision is to drive research insights and support the City's efforts to
 prevent chronic diseases, including Type 2 Diabetes. This investment aligns with the
 City's Economic Development Strategy (2020-2025), promoting collaboration between
 the public and private sectors, post-secondary institutions, developers and other
 stakeholders.

Attract & Grow

Key Strategic Outcomes:

Facilitate an Open, Welcoming and Supportive Business Environment: EDO has
continuously championed business interests by being client-centric and monitoring the
pulse of the local economy. This support sometimes comes in the form of advocacy.
Over the past few years, the industry has raised concern over impending regulatory
changes governed by the Patented Medicine Pharmaceutical Review Board (PMPRB).

General Committee 2021/03/08

Implementation of the proposed federal changes will negatively impact businesses and Canadian patients' access to innovative medicines. In collaboration with the Mayor's Office and stakeholders, including the Mississauga Board of Trade (MBOT), EDO helped organize meetings with elected officials to increase awareness concerning the proposed changes. Also, Mayor Crombie has written letters to Federal Ministers expressing her concern over the coming regulatory changes and their possible effect on our life sciences sector. Implementation of the PMPRB regulations has been delayed twice, to July 1, 2021.

- Attract, Retain and Expand Life Sciences Companies: A focus on supporting local companies and creating a customer service-centric and pro-business environment, coupled with enhanced sales and marketing efforts, has led to new investments and expansions of existing Mississauga-based businesses. The year 2020 brought two notable investments to Mississauga:
 - A Taiwanese contract development and manufacturing company, Bora Pharmaceuticals, opened its North American flagship facility in Mississauga.
 - Roche Pharmaceuticals made a \$500 million investment to establish their Global Pharma Technical (PT) Operations site at its Canadian Pharmaceutical headquarters in Mississauga. This investment will lead to the creation of 500 new jobs over the next five years.

Key Performance Metrics

Since delivering the Strategy, Mississauga has seen an influx of new investment. They include:

- 10.5% increase in the number of life sciences companies
- 12.6% growth in life sciences employment⁴
- The largest employment growth in the Medtech sub-sector over the last five years in comparison to top Canadian Medtech hubs⁵
- EDO-supported life sciences investments representing over \$1.3 million in new and retained annual tax assessment and \$173 million in direct GDP⁶
- Additional significant Life Sciences investments: see Appendix 2.

Strategic Plan

The Life Sciences Cluster Strategy aligns with the priorities outlined in the City's Economic Development Strategy (2020-2025) and the City of Mississauga's Strategic Plan (2009). Most notably, the Life Sciences Cluster Strategy closely aligns with the City's strategic pillar for change, "Prosper," supporting Mississauga as a City that values global business, fostering a prosperous and sustainable economy that attracts and grows talent.

⁴ Source: City of Mississauga, 2016-2019 Employment Database

⁵ Source: Statistics Canada, 2015-2020 Business Counts Data

⁶ Mississauga EDO calculation based on Statistics Canada, Provincial Input-Output Multipliers

2021/03/08 7

General Committee 2021/03/08 7

Financial Impact

Actions to support the Life Sciences Cluster Strategy can be accommodated in the 2021 Approved Operating Budget in cost centre 21231.

Conclusion

To date, the City's Life Sciences Cluster Strategy has successfully strengthened Mississauga's position as a leading life sciences hub in Canada. Mississauga has demonstrated leadership, elevated the City on the global stage and supported local economic growth and prosperity.

COVID-19 has presented many challenges to our public health system and economy. The pandemic has emphasized the importance of a vibrant and strong life sciences sector that can provide COVID-19 vaccines, therapies, tests and PPE to help society return to work and get the economy back on track. Mississauga's Economic Recovery Plan for Broader Industry highlights the importance of maintaining established businesses and securing the next generation of growth from existing sector strengths. Continued strategic support for the life sciences sector will continue to be important for Mississauga's economic recovery and growth.

Mississauga is well positioned to capitalize on opportunities resulting from the heightened interest in the sector due to the global COVID-19 pandemic. With continued support from Mayor and Council, the City will continue to strengthen its position as a leading life sciences hub.

Attachments

Appendix 1: Mississauga-based Life Sciences Companies' COVID-19 Response

Appendix 2: Additional Significant Life Sciences Investments



Paul Mitcham, P.Eng, MBA, City Manager and Chief Administrative Officer

Prepared by: Jackie O'Connor,

Life Sciences Business Consultant