



LOGISTICS INNOVATION ZONE FEASIBILITY STUDY

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BRAMPTON'S LOGISTICS INNOVATION ZONE (LIZ)

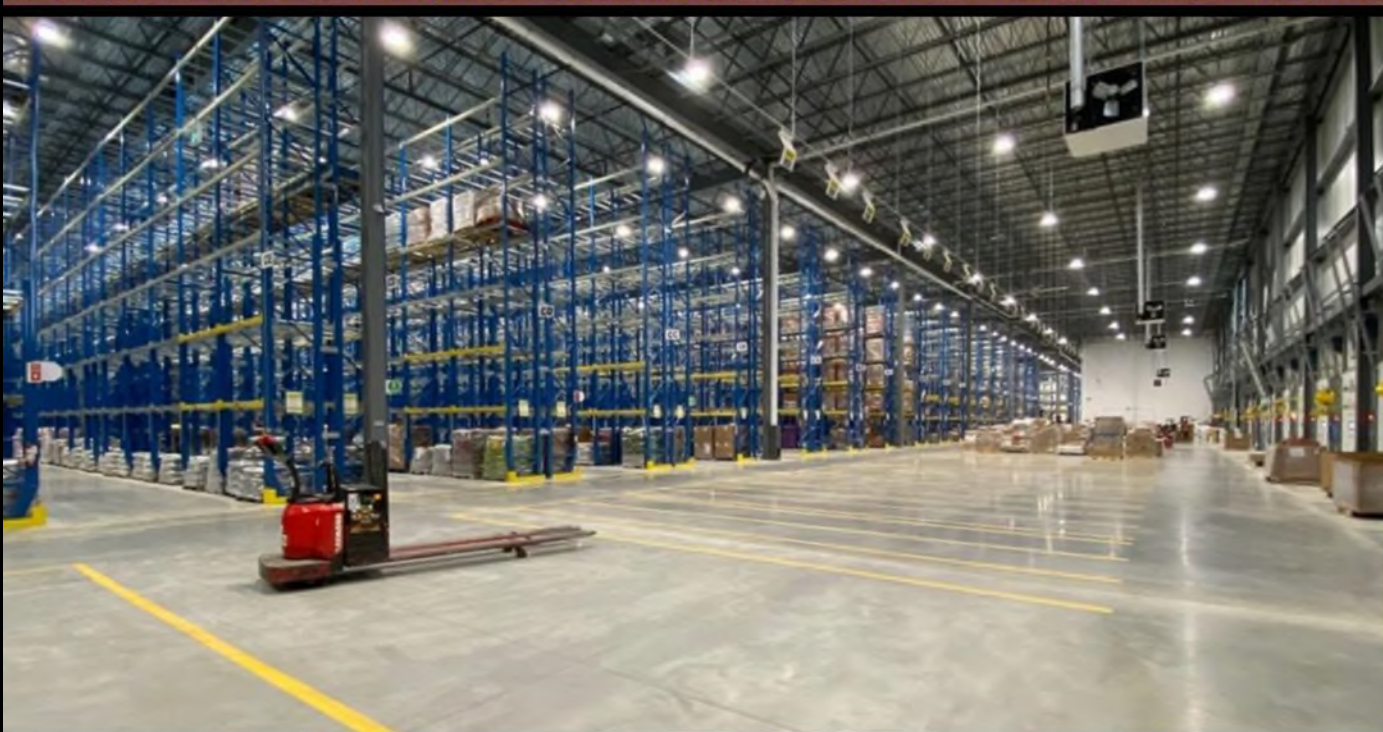


- An innovative project propelling the city to the forefront of logistics + transportation technology.
- Equipped with cutting-edge tech to support the digital transformation of cities.
- The latest in electric + hydrogen powered vehicles, autonomous vehicle testing, delivery drones, micro-mobility robots.
- Connected through 5G communication and supported a real-time digital twin solution.



BRAMPTON'S LOGISTICS INNOVATION ZONE (LIZ)

- Brampton's CN intermodal facility is Canada's largest rail intermodal terminal.
- The facility is a crucial node in CN's distribution network, with nearly 60% of the railway's business passing through the City of Brampton.
- Pet Valu's new 670,000 sq ft distribution centre in Brampton is the largest in Canada, features cutting-edge robotics automation, and is set to create 500 skilled jobs.
- Lululemon's new 1M sq ft office and distribution centre is the largest in North America and will bring 1,500 new jobs to Brampton.
- These state-of-the-art industrial facilities advance the "Brampton is a Green City" Term of Council Priority through sustainable systems that offer gHg emission reductions, an overall reduction of Brampton's carbon footprint, and low energy consumption (e.g. LED lighting, geothermal heating and cooling, etc.)



BRAMPTON'S LOGISTICS INNOVATION ZONE (LIZ)

PHASE 1

Branding + Conceptualization

CITY OF BRAMPTON OWNS THE BRAND!

- Define vision, scope, + key deliverables aligned with Brampton's goals.
- Create a compelling brand identity including a distinctive name, logo, + marketing materials.
- Review current + emerging logistics technologies for alignment with the LIZ's innovation + sustainability goals.
- Set selection criteria for pilot projects - showcasing cutting-edge, sustainable logistics.
- Develop an engagement strategy, refine branding and conceptualization.

PHASE 2

Materializing the Vision

FROM CONCEPT TO REALITY

- Collaboration space - a pivotal component of Brampton's Innovation District, acting as a hub within a hub-and-spoke model of innovation acceleration.
- Conduct detailed studies to forecast the LIZ's influence on job creations, local business empowerment, + contributions to Brampton's economy.
- Seek sustainability certifications for the LIZ to set a benchmark for eco-friendly development in design + operations.
- Ensure regulatory compliance, including environmental, safety, + transportation standards at all levels of government.

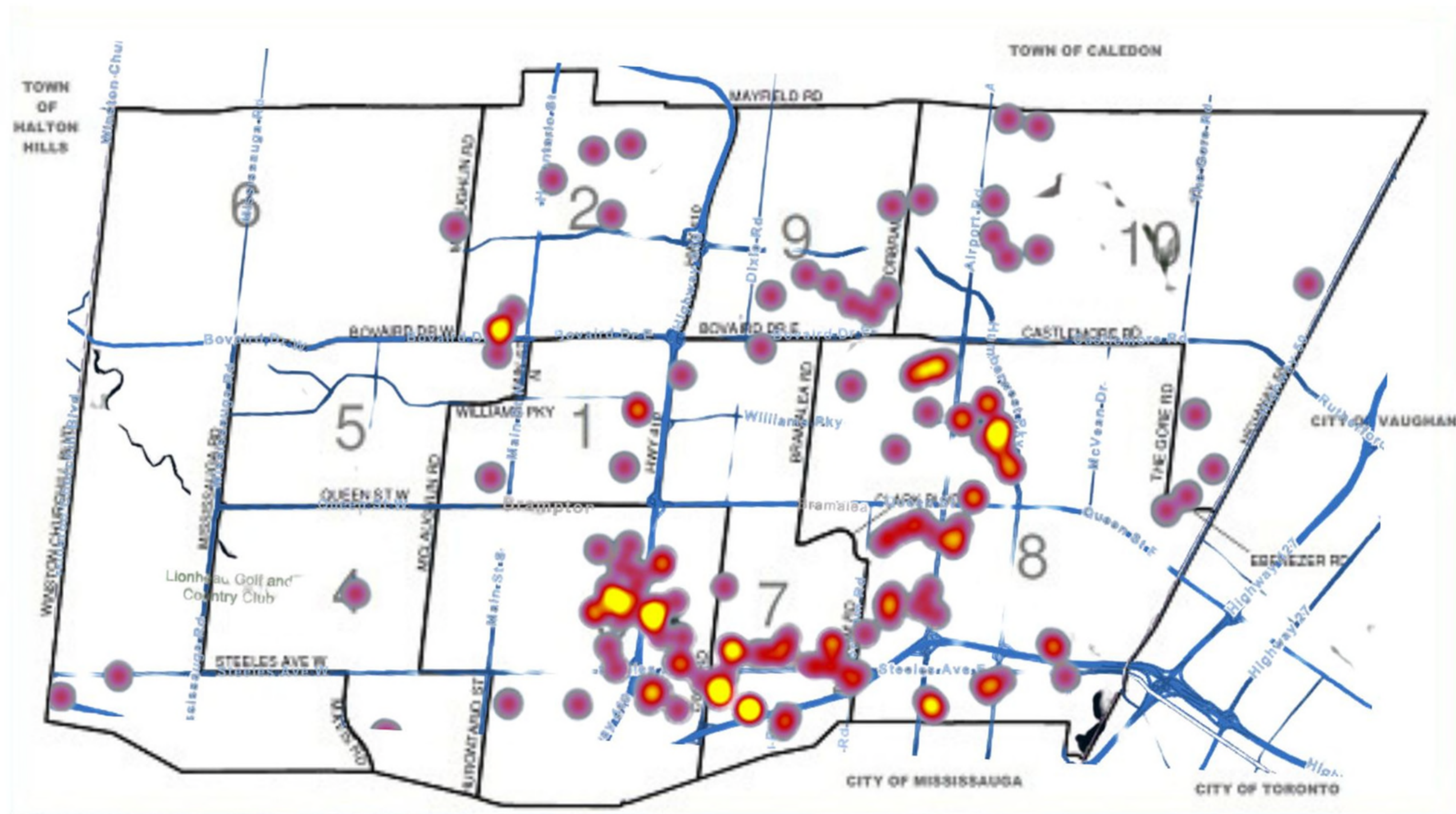
PHASE 3

Culmination + Construction

BUILDING THE BEACON OF INNOVATION

- Present detailed budget + project plan for direction + budget approval.
- Highlight the support + collaboration of Provincial and Federal government.
- Private sector collaboration, directly or indirectly linked to the advancement of technologies, logistics, and transportation for cities.
- Develop an infrastructure that integrates renewable energy solutions.
- Enable global collaboration, knowledge exchange, + joint initiatives in technology development and sustainability.

LOGISTICS + TRANSPORTATION HEAT MAP



PILOT PROJECTS: Tech Assessments



Drones (passenger + Goods) delivery

One of the latest innovations in transportation technology. eVTOLs, or electric take-off and landing aircraft lift off and land vertically. Typically accommodates two to six passengers.



Autonomous Heavy-Duty Trucks

The LIZ will lead the charge in pioneering autonomous heavy-duty vehicle technologies, establishing Brampton as a forerunner in the global logistics industry.



Cybersecurity (Operational Technology)

The LIZ's operational technology will focus on safeguarding its industrial control systems + critical infrastructure from potential cyber threats.

PILOT PROJECTS: Tech Assessments



Real-Time digital twin

A virtual representation of a physical system or asset that is continuously updated with live data from sensors (placed around the LIZ) and other sources. This allows for detailed analysis for optimization.



EV Wireless Charging

The City of Brampton is inviting proposals for the development of innovative charging solutions for personal electric vehicles. The pilot intends to foster increased adoption of electric vehicles among residents, thereby reducing carbon emissions.



Heavy Duty EV Wireless Charging

In collaboration with the Provincial and Federal Governments, the LIZ will lead the charge in pioneering electric heavy-duty vehicle EV charging technologies, establishing Brampton as a forerunner in the global logistics industry.

PROJECT PIPELINE



Expression of Interest - EV Charging

The City of Brampton seeks innovative proposals for personal electric vehicle (EV) charging solutions to support its sustainability goals and increase EV adoption among residents, reduce carbon emissions, and improve air quality. The project also aims to stimulate economic development while emphasizing Brampton's commitment to sustainable transportation and environmental stewardship.



Drone Delivery

The Drone Food & Goods Delivery solution revolutionizes the way people access essential items by offering a seamless and efficient delivery service.

BENCHMARKING



1. **Detroit Smart Parking Lab:** The State of Michigan is teaming up with Ford, Bedrock and Bosch to launch the nation's first-of-its-kind, real-world test site for emerging parking technology – called the **Detroit Smart Parking Lab**. The lab will allow mobility and smart infrastructure pioneers and real-estate innovators and startups to test parking-related mobility, logistics and electric vehicle charging technologies. Led by Enterprise, the collaboration also aims to test more seamless and efficient rental car returns.

2. **Zaragoza Logistics Center, Spain:** A research institute partnered with MIT, focusing on logistics and supply chain management, offering innovative solutions in logistics education and research.

3. **Dubai Logistics City:** Part of Dubai World Central, this is the world's first truly integrated logistics platform with all transport modes, logistics, and value-added services, including cold chain, in one free economic zone.

THANK YOU

