

TOWN OF WHITBY

Intelligent Cities ACTION PLAN

2026-2027



Land Acknowledgment

We acknowledge that the Town of Whitby is located on the Treaty & Traditional Territory of the Mississaugas of Scugog Island First Nation, who are part of the Williams Treaties First Nations. We also recognize the Chippewa Nations of Georgina Island, Beausoleil, and Rama, as well as the other Mississaugas and Anishinaabeg who call this area home. We honour their longstanding relationship with this land and their continuing presence, and we commit to learning from their knowledge as we work towards truth and reconciliation.



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A Message from Mayor Roy



Thank you to everyone who contributed to the development of Whitby's 2026-2027 Intelligent Cities Action Plan.

This Action Plan is a direct reflection of the priorities our community shared through the development of Whitby's Community Strategic Plan. It demonstrates how those voices are shaping real, tangible actions as we continue to bring Your Plan in Action to life.

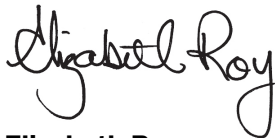
Built through strong collaboration across Town departments and informed by Council's strategic direction, the Intelligent Cities Action Plan focuses on using innovation, data, and technology in practical and meaningful ways that deliver real value for residents and businesses.

By advancing thoughtful, results-driven initiatives, the Plan supports improved service delivery, greater transparency, and more informed decision-making; outcomes that align squarely with the community's vision for a connected, inclusive, and future-ready Whitby.

The Intelligent Cities Action Plan also reinforces Council's commitment to implementing the Community Strategic Plan and Economic Development Strategy by translating long-term priorities into actionable projects that respond to the needs and expectations of our community.

I am proud of the work reflected in this Plan and look forward to seeing how these initiatives continue to advance our shared goals and help make Whitby an even better place to live, work, and do business—today and into the future.

Sincerely,



Elizabeth Roy
Mayor

A Message from CAO Gaskell



The 2026-2027 Intelligent Cities Action Plan provides a clear and achievable roadmap for how Town staff will continue to modernize services, strengthen data-driven planning, and deliver meaningful outcomes for residents and businesses.

Developed through a collaborative, cross-departmental process, this Action Plan focuses on practical projects that improve how we plan, operate, and respond to the needs of a growing and evolving community.

By emphasizing pilot projects, clear evaluation measures, and shared accountability, the plan allows us to test innovative ideas while ensuring initiatives remain realistic, affordable, and aligned with approved budgets and community priorities.

The Intelligent Cities Action Plan demonstrates our commitment to using technology and data responsibly—to enhance transparency, support economic competitiveness, and improve the overall customer experience.

I look forward to working with Council, staff, and partners as we implement these initiatives and continue building a connected, responsive, and future-ready Town of Whitby.

Sincerely,

A handwritten signature in black ink that reads "Matt Gaskell". The signature is fluid and cursive.

Matt Gaskell
Chief Administrative Officer





Acknowledgments

Town of Whitby Council:

Mayor Elizabeth Roy
Regional Councillor Chris Leahy
Regional Councillor Maleeha Shahid
Regional Councillor Rhonda Mulcahy
Regional Councillor Steve Yamada
Councillor Steve Lee
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Introduction

An Intelligent City Action Plan applies data, technology, and innovation to enhance municipal operations and service delivery. Unlike traditional “Smart City” approaches, which often prioritize large-scale, technology-driven initiatives, Whitby’s Intelligent Cities framework focuses on practical, results-driven outcomes that deliver clear value for residents, businesses, and staff.

The Town of Whitby’s Intelligent Cities Action Plan supports the Town’s commitment to being a connected, responsive, and future-ready community, while ensuring initiatives are realistic, affordable, and aligned with community needs. Identified through the 2022–2026 Economic Development Strategy and the 2023–2026 Community Strategic Plan, the Action Plan advances municipal innovation by strengthening service delivery, transparency, and economic competitiveness.

Strategy	Pillar	Action Item
2022-2026 Economic Development Strategy	Strategic Pillar 4: Foster Municipal Innovation 	4.7 Develop and implement intelligent city strategy and action plan that leverages collaboration and technology to support innovative solutions
2023-2026 Community Strategic Plan	Strategic Pillar 3: Whitby’s Economy 	3.3.1 Develop and implement Intelligent City Strategy and Action Plan that leverages collaboration and technology to support innovative solution

The 2026-2027 Intelligent Cities Action Plan includes five priority projects endorsed by a cross-departmental Intelligent Cities Working Group. These projects will be implemented throughout 2026 and 2027.



Strategic Framework

Whitby's Intelligent Cities approach is guided by existing municipal strategies and focuses on applying technology in ways that support clear municipal outcomes. The Action Plan advances the following strategic objectives:

- Improve service delivery for residents and businesses
- Increase operational efficiency and reduce manual processes
- Strengthen data-informed planning and decision-making
- Support economic growth and investment readiness
- Enhance transparency, accessibility, and public trust

The framework is organized around two complementary focus areas:

- **Built Environment:** Strengthening the systems, infrastructure, and data needed to support growth, planning, and asset management.
- **Innovative Partnerships:** Leveraging collaboration with businesses, post-secondary institutions, and regional partners to advance innovation and economic development.



A winning community, built together.

In 2025, Durham Region was named Intelligent Community of the Year. Whitby's Intelligent Cities Action Plan builds on this regional momentum, advancing local initiatives grounded in globally recognized best practices.



Action Plan Development Process

The Intelligent Cities Action Plan was developed through a collaborative, cross-departmental process beginning in the second quarter of 2025. An Intelligent Cities Working Group was established, with representatives from Creative Communities, Sustainability and Climate Change, Service Whitby, Technology and Information Services, Facilities, Asset Management, and Economic Development. The Working Group met between June and September 2025 to identify, evaluate, prioritize potential projects and focus on the following guiding question:

“How might we use data, technology, and innovation to improve Whitby’s built environment, making it more connected and better aligned with current and future needs?”

An initial list of 30 project ideas was developed. Each project was assessed using an evaluation framework that considered strategic alignment, operational impact, benefits to residents and businesses, transparency, equity and inclusion, data value, feasibility, and funding considerations. The list was refined to the highest-scoring projects and further assessed using best-fit criteria to confirm readiness for implementation in 2026.

The Working Group reached unanimous agreement on five priority projects that deliver broad municipal benefit across various departments in the Town of Whitby, allowing teams to better serve Whitby’s residents, visitors, and business community:

- 1. WhitBEE - AI Virtual Agent**
- 2. People Counters**
- 3. Sustainability Dashboard**
- 4. 3D Building Inventory & Analysis Tool**
- 5. Smart Growth Transit Planning Project**



Project Introduction

The five projects included in the Intelligent Cities Action Plan represent a balanced and achievable program of work. Collectively, they support service modernization, strengthen planning and data capabilities, and enhance Whitby's ability to attract and retain investment.

Each project includes a defined scope, clear outcomes, and an implementation timeline. Projects identified are expected to be completed within 12-18 months (i.e. the Action Plan is expected to reach completion by Q3 2027). Some projects will be delivered as pilots, allowing the Town to test and evaluate benefits before considering future expansion. Evaluation criteria will vary by initiative and are outlined in the project descriptions.





WhitBEE - AI Virtual Agent

The AI Virtual Agent project builds on the Town’s existing website chatbot, WhitBEE, and represents a future phase of Whitby’s AI journey. Currently, WhitBEE is designed to respond to questions and guide users to relevant information. As the Town’s digital systems continue to mature, this project explores opportunities to enhance those capabilities over time.

Once the Dynamics 365 Customer Relationship Management (CRM) platform and Service Whitby are fully implemented, the Town will assess the potential to integrate the existing chatbot with the Dynamics suite of virtual agent tools, in alignment with the goals and objectives of the CRM. Any future enhancements would focus on improving how users access information, submit requests, and navigate municipal services through connected digital systems.

As Whitby’s website, knowledge base, and digital services evolve, the chatbot’s functionality and responses may be expanded incrementally. Staff will work collaboratively across departments to support accurate, consistent information related to both general municipal services and business-focused inquiries.

All work under this project will align with the Town’s AI Acceptable Use Policy to support responsible, transparent, and unbiased use of AI technologies.

Focus Area	Implementation Timeline	Output/Outcome	Evaluation
Built Environment	Q3 2027	<p>Output: Expansion of the existing Whitbee chatbot into a full AI virtual agent with enhanced capabilities.</p> <p>Outcome: Increased service efficiency and improved customer experience.</p>	Success will be measured through improved response times, higher self-service resolution rates, and increased resident satisfaction with Town services.





People Counters

The People Counters project introduces automated sensors that collect real-time data on pedestrian and cyclist activity. These sensors will provide continuous information on visitation levels, peak periods, and seasonal trends.

People counters will be installed at six key intersections in Downtown Whitby, replacing the annual manual pedestrian counts currently conducted by staff. In addition, they will be installed in Downtown Brooklin and at the Fieldgate Sports Complex. The data will support economic development by helping quantify foot traffic, measure the impact of public spaces, and support business attraction and retention efforts. It will also inform active transportation planning and accessibility assessments. At the Fieldgate Sports Complex, year-round visitation data will support the Town’s growing sponsorship and advertising portfolio by improving the sales proposition and increasing sponsorship and advertising sales, resulting in additional municipal revenue. The data would also support hotel and conference centre attraction by demonstrating consistent year-round visitation.

The project will be delivered as a one-year pilot.

Focus Area	Implementation Timeline	Output/Outcome	Evaluation
Built Environment	Q3 2026 (Downtown Whitby and Downtown Brooklin) Q4 2026 (Fieldgate Sports Complex)	Output: Installation of automated people counters at identified locations to collect real-time pedestrian and cyclist activity data as a one-year pilot. Outcome: Improved data-driven decision-making to support economic development, sponsorship and advertising sales, active transportation planning, and assessment of public space usage.	Success will be evaluated by the reliability and completeness of year-round data collected, reduced reliance on manual counts, and demonstrated use of the data to inform planning and economic development decisions.



Sustainability Dashboard

The Sustainability Dashboard will display energy performance and utility savings data for the Fieldgate Sports Complex, a facility that has received Canada Green Building Council’s LEED® Gold and Zero Carbon Building (ZCB) certifications. Information from the facility’s sub-metering system will be translated into clear, visual content for display within the sports complex, increasing transparency around energy use and building performance.

Designed to achieve net-zero operational carbon, the Fieldgate Sports Complex eliminates fossil fuel use for heating, incorporates renewable energy, and reduces the use of high global warming potential refrigerants. The dashboard supports the Town’s Zero Carbon Whitby Plan by highlighting how municipal facilities contribute to corporate greenhouse gas reduction targets and broader climate goals. For Economic Development, it provides a valuable tool for showcasing Whitby’s leadership in sustainable, high-performance infrastructure to investors, partners, and sponsors, strengthening the marketability of the facility and supporting business attraction efforts.

Focus Area	Implementation Timeline	Output/Outcome	Evaluation
Built Environment	Q4 2026	<p>Output: Public Sustainability Dashboard displaying energy performance and utility savings at the Fieldgate Sports Complex.</p> <p>Outcome: Improved transparency and awareness of Whitby’s climate leadership through a high-performance, net-zero municipal facility.</p>	Success will be measured through the implementation and operation of on-site digital screens at the Fieldgate Sports Complex, displaying clear energy performance data aligned with Zero Carbon Whitby targets.



3D Building Inventory and Analysis Tool

The 3D Building Inventory and Analysis Tool provides a high-resolution digital model of Whitby’s buildings and visible infrastructure. Developed using aerial imagery and advanced mapping technology, the dataset offers a detailed snapshot of Whitby’s built environment.

The tool supports Economic Development by helping visualize development patterns, identify opportunity areas, and support investor discussions. It also provides value to Planning, Asset Management, and Engineering by improving growth monitoring and infrastructure planning.

The initial dataset has been provided through a partnership with Ecopia AI and Sustainable Development Technology Canada at no cost to the Town.

This project will be delivered as a one-year pilot.

Focus Area	Implementation Timeline	Output/Outcome	Evaluation
Innovative Partnerships	Q1 2026	<p>Output: High-resolution 3D digital model of Whitby’s buildings and infrastructure in Whitby’s ESRI GIS platform.</p> <p>Outcome: Improved visualization of development patterns and infrastructure, supporting economic development, planning, and investment decisions.</p>	Success will be measured through completion of the pilot, delivery of a usable dataset accessible across Town departments, and demonstrated use of the data to respond to investment leads and inform development opportunities, infrastructure planning, and key built form and corridor analysis test cases.



Smart Growth Transit Planning Project

The Smart Growth Transit Planning Project will be delivered through CityStudio, a partnership between the Region of Durham and local post-secondary institutions. Economic Development staff will work with a student from Durham College’s AI program to analyze existing business and building data in relation to current transit service across Whitby’s major employment areas.

The project will generate clear, visual, data-informed insights for Durham Region Transit to support its 2026–2030 Five-Year Service Strategy, with a focus on identifying where transit may be under serviced today and where future constraints may emerge as vacant and pipeline industrial buildings are occupied. From an economic development perspective, this work supports employment lands planning, workforce access, and long-term investment readiness.

By aligning transit planning with growth and investment strategies, the project supports sustainable development and enhances Whitby’s competitiveness.

Focus Area	Implementation Timeline	Output/Outcome	Evaluation
Innovative Partnerships	Q2 2026	<p>Output: Data-informed, visual insights for Durham Region Transit that identify current transit service gaps and emerging future pressure areas around major employment locations in Whitby.</p> <p>Outcome: Improved alignment of transit service planning with employment growth, investment patterns, and workforce access to support sustainable development.</p>	Success will be measured through completion of the CityStudio project, presentation of findings at the 2026 CityStudio Hubhub, and delivery of a recommendation report to Durham Region Transit to support data-driven infrastructure planning.



Conclusion

The 2026–2027 Intelligent Cities Action Plan provides a clear, practical roadmap for advancing municipal innovation in Whitby by applying data, technology, and collaboration to real-world challenges. The five priority projects identified in this Action Plan focus on improving service delivery, strengthening data and planning tools, and supporting economic growth and investment readiness, while remaining achievable within existing capacity and approved budgets.

Collectively, these projects demonstrate Whitby’s intentional approach to innovation by prioritizing initiatives that deliver measurable outcomes, enhance transparency, and improve how residents, businesses, and staff interact with municipal services. By emphasizing pilot projects, clear evaluation criteria, and cross-departmental collaboration, the Action Plan allows the Town to test new ideas, assess value, and make informed decisions about future expansion.

Through strong alignment with the Community Strategic Plan, the Economic Development Strategy, and other municipal priorities, the Intelligent Cities Action Plan positions Whitby to make thoughtful, responsible use of technology that supports sustainable growth, operational efficiency, and public trust. As the projects are implemented over the 2026–2027 period, the Action Plan will serve as both a guiding framework and a foundation for ongoing innovation, ensuring Whitby remains a connected, competitive, and future-ready community.