



SUBJECT: Enhancing the building permit and application process with technology

TO: Committee of the Whole

FROM: Digital Services

Report Number: BDS-04-24

Wards Affected: All

Date to Committee: September 9, 2024

Date to Council: September 17, 2024

Recommendation:

Approve the sole source procurement of the eCheck Automated Compliance solution as our fast-tracking online building permit assessment platform to Archistar Pty Ltd. ("Archistar") for an initial term of up to five (5) years at total cost of \$1,680,944 before HST for acquisition and ongoing licensing; and

After the initial term, authorize the Chief Information Officer to deem the software legacy should they see fit; and

Authorize the Manager of Procurement Services to approve change orders to the original contract value for necessary license or software expansion, pending such change orders are within budget; and

Authorize the Chief Financial Officer to incorporate the ongoing maintenance cost of this software into the multi-year budget simulation for 2026, and

Authorize the Manager of Procurement Services to execute any required agreement(s), with content satisfactory to the Commissioner, Legal & Legislative Services/City Solicitor and issue any required Purchase Order(s).

PURPOSE:

Vision to Focus Alignment:

- Designing and delivering complete communities
 - Providing the best services and experiences
 - Protecting and improving the natural environment and taking action on climate change
 - Driving organizational performance
-

Executive Summary:

The City of Burlington is implementing transformative changes to enhance the building permitting and application process through strategic technological advancements. In response to the Ontario Government's 2023 mandate to build 1.5 million new homes by 2031, and the resulting pressure on the City's permitting system, Burlington has secured funding from the Housing Accelerator Fund (HAF) to streamline its processes. Initiatives like the Streamlined Development Application Fund (SDAF) and MyFiles, an online self-service tool, have already demonstrated considerable success, reducing the average pre-building approval process from 17 weeks to 5.5 weeks.

To further these efforts, staff have identified key strategies for 2024, including digitizing and integrating development planning and building permit workflows and automating repetitive tasks. A notable initiative is the Request for Information (RFI) - Call for Innovation (CFI), which attempted to gather market information from the vendor community that can help enhance the zoning review process.

Staff are proposing the sole-source procurement of the eCheck Automated Compliance solution from Archistar, deemed the only suitable solution for immediate implementation. This initiative aims to reduce review times, increase consistency, and empower applicants, ultimately contributing to Burlington's goal of adding 29,000 new homes by 2031.

Background and Discussion:

Similar to other municipalities in Ontario, the City is facing significant pressure in its permitting system. The Ontario Government released a report in 2023 which identified the need to build 1.5 million new homes by 2031 (<https://www.ontario.ca/page/housing-innovation#section-0>). In addition, the Province of Ontario has developed an action plan which includes various programs and incentives to encourage and accelerate development. One of those programs, the Building Faster Fund, has assigned a 10-year

housing target (<https://www.ontario.ca/page/tracking-housing-supply-progress#section-0>) to each municipality to reach this ambitious 1.5M target by 2031. Burlington's population is growing rapidly (est. 260,000 by 2031 from 190,000 in 2023), and these numbers highlight the ongoing and persistent housing gaps in Burlington, as well as reflect the general housing pressures facing the region. For this reason, urgent action is needed to increase the housing stock for one of Ontario's rapidly growing cities.

Burlington City Council unanimously approved endorsing the City of Burlington 2031 Municipal Housing Target Pledge in support of our commitment to meet the Province of Ontario's 2031 housing target for our city of 29,000 homes.

The City continues to be a destination for investment in housing and processes a high volume of building permit applications each year. In 2023, through the permitting process, 648 dwelling units were created to house Burlington's growing community. Burlington currently has 40,793 units under review (as of October 2023) in planning approval processes.

On January 15, 2024, the City of Burlington secured over \$21 million from the Housing Accelerator Fund (HAF) to encourage more affordable homes for Burlington, built faster. These funds will support the implementation of some of the key actions in the City's Housing Strategy, including expanding housing opportunities for Burlington residents by cutting red tape and implementing updated zoning. The City's HAF Action Plan includes 7 initiatives and ties directly to this CFI. Specifically initiative #1 Streamlining planning and building approval process.

In support of our goals, the City has to date executed and successfully delivered several strategic initiatives related to planning and building.

These initiatives included:

- Streamlined Development Application Fund (SDAF)

The SDAF project has led to a number of positive organizational and process outcomes. Most important are the cultural changes in how we conduct our work. The concept of continuous improvement and integration of Lean principles has been embraced by staff. It has strengthened staff morale and empowered them to execute changes in business processes that improve overall efficiency, customer experience, and sustainability of workloads.

SDAF also included the launch of MyFiles, a new online self-service tool designed to modernize and expedite the building permit application process. Available to residents applying for Pre-Building Approval. MyFiles allows applicants to track the status of their applications in real time through each step of the review process. This tool supports applications for various projects, including decks, accessory buildings, renovations, and new constructions, and it

offers users the ability to access necessary information independently, reducing the need for direct interactions with city staff.

Before the implementation of continuous improvement measures and MyFiles, the Pre-Building Approval process in Burlington, encompassing Zoning, Engineering, and Forestry reviews, required an average of 17 weeks from the receipt of an application until a building permit could be applied for. The time to process complete applications had been reduced to an average of 5.5 weeks, and 30% of these applications, including those involving complex new constructions and additions, were processed in two weeks or less.

- Land Management Database Platform (LMDPR)

The key deliverable was an Art of the Possible vision of the City's services as enabled by information technology that is currently available in the market. The vision included a list of the opportunities for that will result in cost savings and efficiencies for the Development Approval, Permitting, Licensing and the other application services.

Part of the vision was the identification of opportunities in managing the LMDPR and how those opportunities could provide direct and indirect cost savings and efficiencies. These management efficiencies could lead to shortening the time to benefit resulting from each improvement in the platform destined to support the business services.

- Compliance Artificial Intelligence Proof of Concept

Utilizing a unique compliance platform that fast tracks the planning and building permit assessment process, the proof of concept demonstrated sample eCheck reports for the City of Burlington's Zoning By-law relating to industrial buildings in zones BC1, GE1 and GE2. The POC successfully measured if a technology enabled solution would help streamline and shorten the planning and permitting process and thus reduce holding costs, which benefits the supply of new housing stock and increases overall affordability.

- Data Analytics and Insights

The Ontario Government has prioritized enhancing housing availability and affordability throughout the province. In alignment with this objective, staff have introduced an automated reporting system to comply with provincial regulations. Throughout this transition, it became clear that there was a significant emphasis on data quality to facilitate informed decision-making. A crucial instrument in conveying Burlington's advancements in housing commitments is the pipeline report. Initially crafted manually, this report will be transitioned to an automated system, emphasizing the importance of data collection and its quality.

- Enterprise Web Architecture Review

The Enterprise Web Architecture Review provided several options and recommendations for the City to consider in order to improve the online customer experience and achieve efficiencies with technology and resources. This included services for customers related to planning and building.

- Burlington Digital Business Strategy

The Burlington Digital Business Strategy accelerates Vision 2040 by serving as an actionable strategic planning framework and roadmap for using digital technologies, staff empowerment, and culture change to fuel business outcomes and increase agility to keep pace with rapidly changing resident expectations and broader external environment. Two strategic digital business opportunities identified were streamline permit application workflows and automate repetitive/low-value permit application and/or inspection processes.

PROGRESS IN 2024

For 2024, City leadership and staff have identified the need to scale up on the successes of 2023 and continue to enhance its development application and inspection processes to achieve greater efficiency, transparency, and user satisfaction with the vital goal of meeting our housing pledge. Two primary strategies have emerged: the digitization and end-to-end integration of development planning and building permit application workflows and the automation of repetitive and lower value/risk tasks in planning and permit applications and inspection processes.

At the conclusion of Q2, staff completed the following initiatives supporting these strategies:

- Request for Information (RFI) - Call for Innovation (CFI)

The City of Burlington undertook a significant initiative to engage the vendor community in improving the efficiency of the planning and zoning application review processes. This effort was focused on automating portions of the plan review process to enhance the understanding and compliance with zoning by-laws for various types of developments, including single-family, multi-residential, and industrial/commercial/institutional (ICI) development.

In this pursuit, the City issued a RFI - Call for Innovation (CFI) inviting service providers offering relevant technological solutions to participate. The process included interviews, presentations, and demonstrations, potentially leading to a proof-of-concept exercise. It was clearly stated that this CFI was not a call for tender or a request for proposals but rather a market information gathering activity that would shape future procurement actions.

The main objective of this initiative was to gather information and insights from interested parties on technology solutions that could expedite zoning and planning applications.

Respondents included a diverse group of stakeholders from the technology sector. A few other municipalities in Ontario attended the presentations from select Respondents. These participants contributed to a rich exchange of ideas throughout interviews, presentations, and demonstrations.

The CFI has accomplished its objective by providing the City with a wide range of solutions for many areas of the planning and development process. Staff are now evaluating several concurrent paths we will be able to undertake to assist in accomplishing our goals across the broad and complex process, some of which are described below as next steps.

- Data Insights and Informed Decision Making

We are making significant strides in enhancing our data collection and visualization capabilities within the planning and building services of our municipality. A cross-functional team has developed a comprehensive dashboard that is accessible to municipal staff, council members, and the public. This dashboard provides real-time dynamic visualization of development applications and building permits, facilitating more informed decision-making and greater transparency.

In addition to the dashboard, we have implemented automated reporting systems that assist our Building Department staff in evaluating their performance against operational excellence goals. These reports focus on monitoring staff workload and reviewing the timelines of permit processing, enabling us to identify and address efficiency bottlenecks effectively.

Furthermore, we have streamlined our compliance with provincial regulations by automating the reporting processes for planning applications. This automation ensures accuracy and timeliness in meeting our legislative reporting requirements.

Lastly, we have enabled a self-service reporting capability for specific permits related to pools and decks. This enhancement allows staff to generate reports independently, fostering a more responsive and flexible reporting environment.

These advancements collectively contribute to a more efficient, transparent, and accountable planning and building process within our municipality.

- **Ontario Building Code (OBC) Proof of Concept**
City of Burlington, conducted in collaboration with our technology partner, a pilot project aimed at further streamlining the application assessment process for building permits. This solution automated assessments of compliance against the Ontario Building Code, which applies uniformly across all municipalities in Ontario. The project was highly successful, demonstrating the capability of the system to generate efficient pre-check assessment reports for various types of building permit applications. This success promises significant time and cost savings, as well as enhanced quality in submissions and an improved customer experience.

The pilot covered assessments for three different types of buildings—single-family houses, medium-rise apartments, and high-rise commercial buildings—across key sections of the building code. These assessments were digitized and presented through an interactive interface, allowing easy navigation and understanding of compliance.

Moving forward, the next steps include transitioning from the pilot phase to a fully operational production environment. This will involve customizing the technology to meet the City's specific needs and expanding the scope to handle a wider range of permit categories, further optimizing the building permit application process across the municipality.

The financial implications of expanding the pilot project or transitioning to a fully operational production environment might be substantial for the City to bear independently. In light of this, our team intends to explore partnerships with other municipalities and the provincial government. This collaborative approach is deemed practical and beneficial, as the solution offers wide applicability and potential enhancements to municipal operations across the region. This strategy will be essential in mitigating financial constraints while maximizing the project's reach and effectiveness.

Strategy/process/risk

BENEFITS AND OBJECTIVES

Through the Permit and Application Streamlining Program, the City seeks to improve and/or automate aspects of its development review processes in concert with the

creation of a new Zoning By-law. The initial focus will be for the major transit station areas, followed by other areas/zones within the city as the new Zoning By-law initiative progresses, with the following objectives:

- **Streamline Plan Reviews:** Streamline and/or automate evaluating a set of plans for compliance with the City's Zoning By-law, particularly by identifying potential conflicts and deficiencies related to City regulations such as, but not limited to building heights, lot coverage, density, parking, landscape buffers, and building setbacks.
- **Reduce Review Efforts:** Increase plan review processing capacity by reducing effort needed to review regulatory compliance, leveraging computer vision, and/or artificial intelligence where appropriate.
- **Increase Consistency of Reviews:** Improve the consistency of plan reviews and the relationships between the Zoning By-law, business rules and site conditions (e.g., corner lot).
- **Empower Applicants:** Through the adoption of a digital front-end platform, inclusive of conversational and generative AI, applicants will be provided with real-time guidance, ensuring they navigate the process effortlessly and submit applications that meet all requisite criteria.
- **Reduce wait-time and re-submissions:** Reduce the time that applicants wait to receive initial zoning compliance check and contact from plan reviewers, preferably with options for applicants to pre-assess their drawings prior to application submission.
- **Process Digital Files:** Provide a user-friendly and intuitive interface for the zoning compliance review of digital plans, focusing on vector-based PDF format, with options to leverage best practices across the industry.
- **Promote User Adoption:** Design the Solution with functionalities and an interface that encourages easy adoption and ongoing use by both City staff and external applicants.
- **Promote Ease of Understanding:** Allow any user (public, council, staff, etc.) to understand how the City's regulations, policies, and business rules apply to their proposed situation or project with an intuitive, accessible, and data-driven digital platform.
- **Continuous Process Improvement:** Surfacing relationships between various regulations and business processes, in an easy and concise digital way, enabling the identification of potential overlaps, conflicts, dependencies and downstream impacts to related City services or City objectives to identify areas of improvement.
- **Utilize Emerging Technologies:** Adoption of emerging technologies to address modern challenges such as digital rules and decision engine services, decision

model and notation (DMN), artificial intelligence (AI), deep neural networks (DNN) and machine learning (ML).

- **Integrate with Existing Platforms:** Integrate with and leverage data on an ongoing basis from City platforms including internal and external Identity and Access Management system, Land Management System (AMANDA), [MyFiles](#) (Applicant Portal), Bluebeam, GIS/ESRI Mapping, and the City's Zoning By-law.
- **Built-In Cybersecurity Controls:** In the age of increasing cyber threats, prioritize the embedding of robust cybersecurity controls from the inception of the digital platform. Ensure that every facet of the system, from data storage to user interfaces, is fortified against potential breaches. Regularly update and test these controls to combat evolving cyber threats, safeguarding both the City's operations and the privacy of its residents.
- **Minimize Operating Costs:** Utilize existing City technology or integrate one or more of the above elements together in a cohesive, digital platform, or ecosystem.
- **Resource Redeployment:** By eliminating manual interventions in lower value tasks, the City's staff can be redeployed to areas where their expertise can be better utilized, leading to more value-added contributions and a higher degree of job satisfaction.
- **Informed Decision-Making:** Harness the generated data to pinpoint common challenges, bottlenecks, and opportunities for system refinement. Empower decision-makers with data-backed insights for creating impactful policies and improvements.
- **Predictive Analytics:** Implement advanced analytical tools to predict future trends, allowing proactive measures against potential challenges and the optimal allocation of resources.

IMMEDIATE DELIVERY FOCUS AND BENEFITS

Continuing to support the two primary strategies, staff have identified the following initiatives for completion in 2024-2025.

- **Automation and Enhancement of Planning Applications**

Reducing the total time required in which an application is processed has been cited as a key contributor in our ability to meet our housing targets and improve the customer experience. In addition, extended deadlines also have a significant impact on costs for the City, developers and the community at large. A 2022 Building Industry and Land Development Association report (<https://www.bildgta.ca/wp-content/uploads/2022/09/Municipal-Benchmarking-Study-2022.pdf>) found that for a typical high-density development, each month of delay cost from \$2,600 to \$3,300 in additional construction costs per unit. These

costs not only contribute to development's financial viability, but also contribute to the final costs of the housing units.

During the SDAF project as well as prior and subsequent initiatives, three challenges emerged which impact the total time required to process applications:

- Quality of submissions,
- Number of times an application required additional cycles, and
- Clarity and timeliness of information and communications between the City and applicants.

In an effort to tackle these challenges, the City delivered on a Proof of Concept (PoC) to streamline the zoning assessment process using a unique compliance platform. This initiative was specifically tailored for Burlington's Zoning By-law for industrial buildings in zones BC1, GE1, and GE2. The PoC was structured into four phases, starting with the review of up to 10 industrial design submissions to understand code complexities and develop a standardized assessment template. This template formed the basis for automating the assessment process using the compliance engine, and produced compliance reports for three selected submissions. The initiative was able to automate significant zoning features such as setbacks, heights, and parking ratios to enhance the permitting process's efficiency. This process innovation is expected to reduce costs and contribute to the city's attractiveness for investment and liveability. Based on the POC, the team believe that similar ratio of reduction of timelines experienced during the SDAF project are possible as well as significant savings in costs and better customer service ultimately contributing to achieving our goal of housing units.

As discussed above, the City issued a Call for Innovation (CFI) specifically requesting partners with interest and solutions to further address our business objectives. Through this process we received several interested parties and engaged with each of the selected Respondents that offered solutions that may be suitable for our needs to better understand their solution, experience and applicability to our objectives. Upon completion of this open process, only one vendor demonstrated the experience, solution maturity and ability to deliver in a reasonable timeframe. In fact, two competing vendors suggested this company to address the specific need we described, as they offered complimentary tools to other sections of our process.

In our ongoing efforts to stay ahead of technological advancements, our partnership with leading industry analysts at Gartner and InfoTech has provided us with valuable insights into the evolving landscape of Artificial Intelligence (AI), particularly generative AI. The current surge in interest and expectations surrounding AI in various sectors signifies that we are at the peak of what Gartner identifies as the "wave of inflated expectations." This phase is characterized by heightened anticipation and often, ambitious promises from numerous vendors venturing into the AI domain. However, the practical delivery and the actual value of many of these AI solutions remain under scrutiny, as many fail to meet the lofty expectations set during their initial hype.

Despite this backdrop of uncertainty, certain AI applications are beginning to show real promise and utility, particularly in fields requiring stringent compliance measures. One such application is the compliance-based assessment tool, which has been gaining traction and demonstrating tangible benefits. This tool leverages AI to streamline complex regulatory and compliance processes, thereby ensuring more accurate, efficient, and cost-effective outcomes. It stands out as a practical application of AI, distinguishing itself from the myriad of AI solutions whose effectiveness and long-term viability are yet to be proven.

In our recent market scan conducted as part of the research phase, the platform we utilized was identified as leading-edge in its domain. The scan revealed that while several other tools available in the market are primarily based on chatbot technologies, they did not offer comprehensive solutions comparable to our chosen platform.

Surrey, British Columbia undertook a similar Request for Information (RFI) exercise following our own engagement. They reached the same conclusion, identifying the platform as the leading, market-ready solution. Consequently, Surrey awarded a contract for this platform in July 2024 (https://www.surrey.ca/sites/default/files/corporate-reports/CR_2024-R117.pdf).

Internationally, the City of Austin, Texas, presents a relevant comparison to Burlington, sharing the same backend processing software and experiencing rapid growth as a burgeoning technology hub. This growth has intensified pressure on housing needs, necessitating prompt and efficient actions. In mid-2023, Austin engaged McKinsey & Company to conduct a review of their site plan process (<https://services.austintexas.gov/edims/document.cfm?id=413802&ref=austinpolit>

[ics.net](#)). The review highlighted challenges similar to those faced by Burlington. Specifically, the process involves 1,470 steps for approval, requires input from 20 staff members per approval, with 78% of submissions taking over one year to complete, and 81% requiring three or more resubmissions.

From a financial perspective, these delays have significant impacts: each month of delay costs \$10,000 for a single-family home, \$37,000 for greenfield development, and \$545,000 for multi-residential developments. Furthermore, these delays exacerbate the housing shortage by slowing the addition of new inventory to the market.

In response to these findings, Austin has initiated a proof of concept with Archistar, a solution McKinsey anticipates will lead to higher-quality submissions, faster processing times, greater transparency, and an increased housing supply. We have engaged with the City of Austin to exchange knowledge and insights from our respective experiences.

Importantly, no other real alternatives currently in use by other municipalities, either within Ontario, across Canada, or internationally, matched the sophistication and integrative capabilities of our platform. This distinct lack of comparable alternatives underscores the innovative potential of our choice, positioning it as a unique and valuable tool for enhancing compliance and regulatory assessments.

Burlington will initially procure the Explore and Certify components of the platform.

- Explore serves as the platform's landing zone and provides comprehensive mapping of the entire city. This tool enables citizens, developers, investors, and architects to rapidly identify suitable sites and understand property potential more quickly, proving to be 20 times faster than traditional manual processes. The increased speed in identifying viable properties results in a larger project pipeline, allowing for faster project completion. Leveraging AI and big data, Explore visually and instantly indicates what can and cannot be developed on a site, while offering filtering and pipeline management tools that enhance collaboration between the City and applicants, thereby accelerating the application process.

- Certify assists government agencies, developers, home builders, and households in conducting quick pre-checks to identify necessary corrections or areas that require discussion with City staff, thereby reducing time spent in lengthy planning processes. By facilitating higher quality submissions, Certify minimizes rework and the time-consuming back-and-forth often associated with planning approvals. This is achieved through the use of 3D generative AI and big data, which instantly checks compliance against all relevant clauses and delivers an eCheck certificate along with a visual representation of compliance.
- Streamline Development Application Process (SDAP)

The Streamlined Development Application Process project is an ambitious initiative designed to expand the success and efficiency gains achieved in the previous Streamlined Development Application Fund (SDAF) project. This new project aims to enhance the entire application process, ensuring more efficient and customer-centric service delivery. By building on the improvements identified in the consolidated Pre-Building Permit (PBP) process, the project will streamline interactions and approvals across the entire planning and building processes. This effort aligns with our commitment to increase economic prosperity and promote community-responsive city growth.

The Streamlined Development Application Process will integrate new legislative or by-law requirements to further reduce processing times and improve overall efficiency. Applicants will benefit from a more transparent and coordinated approach, with clear sequencing of necessary clearances and a consolidated application form. The project also includes enhancements to the online visibility tool MyFiles, facilitating better communication and tracking of application status. This holistic approach aims to minimize risks, enhance compliance with relevant by-laws, and ultimately support the city's strategic vision for sustainable and efficient development.

- Digital Twin Proof Of Concept

We are exploring the potential of a digital twin proof of concept that will revolutionize how we assess and understand the impacts of planning applications on our community. A digital twin, in this context, is a dynamic virtual model that replicates real-world elements of the urban landscape, allowing us to simulate and analyze the effects of proposed developments comprehensively.

This digital twin will integrate data from various sectors to model the environmental, financial, economic, and infrastructural impacts of new developments. By including factors such as tax income projections, potential job creation, and necessary adjustments to local infrastructure like roads and water supply, the model will provide a holistic view of how a development shapes the community. Additionally, it will detail the housing units by type, offering insights into how different residential options affect local demographics and housing markets.

One of the most significant advantages of using a digital twin is its ability to simulate "what if" scenarios. This capability will be particularly useful for long-term projects, which often evolve over several years and can have changing impacts on the community and environment. By adjusting parameters and forecasts, planners and decision-makers can visualize various outcomes based on different development paths, enabling more informed decision-making.

This proof of concept will serve as a critical tool in planning and development, allowing us to preemptively address potential issues and optimize positive outcomes for the community. As we move forward with this initiative, we will engage with technology experts, planners, and community stakeholders to refine our approach and ensure that the digital twin effectively meets the needs of our city's dynamic landscape and our objective of building complete communities.

- **Community Engagement**

In the coming months, we plan to embark on a comprehensive community engagement initiative to refine and enhance our planning and building processes. Our approach will center on human-centered design practices, which prioritize the needs, experiences, and feedback of end-users at every stage of the development process. By placing a strong emphasis on understanding the community's perspectives and challenges, we aim to create solutions that are not only effective but also empathetically aligned with the needs of those they serve.

To ensure broad and inclusive input, we will engage with a diverse group of stakeholders, including local developers, residents, business owners, and other community members. This engagement will be structured around a series of workshops, surveys, and public forums designed to facilitate open dialogue and gather actionable insights. These interactions will provide us with valuable feedback on existing processes and pinpoint areas where improvements can be made.

Moreover, we plan to utilize various platforms and communication channels to reach as wide an audience as possible, ensuring that all community segments can contribute. Our goal is to harness the collective expertise and experiences of the community to foster innovations that streamline and enhance the efficiency of our planning and building processes. This collaborative approach not only enhances project outcomes but also strengthens community trust and support for development initiatives.

Justification for Sole Source

After a complete review of the options available, staff have concluded that the eCheck solution offered by Archistar is the only suitable solution that meets City requirements and is available for implementation on an immediate basis. Staff are in discussion with Archistar regarding pricing and form of agreement. Based on information available to date, there is no other known solution that can meet City requirements in terms of functionalities, timelines, and deliverables.

Options Considered

In the process of determining the most effective approach for advancing our planning and development processes, we considered several alternatives before deciding on our current strategy. Each option was evaluated based on its potential to deliver enhancements and efficiencies swiftly and effectively.

One such option was issuing a Request for Proposals (RFP) to solicit potential solutions from various vendors. However, after careful consideration, we concluded that based on the extensive work by the team in research and the Call for Innovation (CFI) an RFP will lead us to a similar conclusion as our Call for Innovation (CFI), with a high degree of certainty. With this in mind, an RFP would result in a significant delay in the realization of the needed enhancements and efficiencies due to the time involved in the solicitation, selection, and implementation processes. This delay would be counterproductive to our goal of quickly improving our planning capabilities.

Another alternative was conducting additional proofs of concept (PoCs) with different technologies or vendors. While this approach would allow us to explore a wider range of solutions, it also presents similar drawbacks in terms of time and resource expenditure, without a guaranteed increase in value over our chosen path. Extending the exploration phase could fragment our efforts and dilute the focus from implementing a solution that is already showing promise.

Upon review, these options were deemed less attractive compared to continuing with our recommended direction, which leverages established partnerships and technologies that are already demonstrating potential. Our recommended approach not only aligns with our strategic goals but also ensures a more streamlined and efficient integration into our existing processes, thereby accelerating the benefits of enhanced planning and development practices.

Financial Matters:

Total Financial Impact

Below is a breakdown of required funding for SDAP, rules automation and additional Proof of Concept (PoC). These amounts are before taxes.

Implementation and Acquisition

Item	
Software	210,000
Professional Services	400,000
Total	610,000

Operational Costs

Item	2025/26	2026/27	2027/28	2028/29
Software	240,000	241,800	243,636	245,508
Professional Services	25,000	25,000	25,000	25,000
Total	265,000	266,800	268,636	270,508

Source of Funding

Existing capital projects Permit and Application Streamlining (ST-SU-X005) and Digital Platforming and Application Rationalization (CA0083) have sufficient funding to support these initiatives implementation. Ongoing licensing in future years, beginning in 2026/27, will be incorporated into the multi-year budget simulation.

Other Resource Impacts

Not applicable.

Climate Implications:

1. Increased Paper Consumption

Relying on manual, paper-based processes inevitably leads to a higher consumption of paper. This not only means more trees are cut down, but the associated processes of paper production, including water use, chemical treatments, and transportation, all contribute to a larger carbon footprint.

2. Waste Production

Paper-based systems, especially when errors occur or updates are needed, result in considerable waste. Discarded applications, outdated forms, and redundant documents end up in landfills, contributing to environmental degradation.

3. Energy Consumption

Manual processes often involve physical storage, transportation of documents, and other energy-intensive activities. While digital systems also consume energy, cloud storage solutions and energy-efficient servers can be optimized for reduced energy consumption in comparison to traditional methods.

4. Emissions from Physical Commute

Without a digital platform, applicants might need to physically visit city offices multiple times, leading to increased vehicular emissions. Implementing digital solutions can reduce or eliminate the need for such visits, thus reducing associated emissions.

5. Limitations in Environmental Monitoring

A digital system can be integrated with environmental monitoring tools, offering real-time data on environmental impacts, compliance, and potential issues. Without such integration, the City misses out on a valuable tool for proactive environmental management.

Engagement Matters:

Several City departments and industry experts have been engaged and will continue to be engaged in defining the scope of the Permit and Application Streamlining program.

Other external partners, such as City of Mississauga, Town of Oakville, City of Markham, as well as private sector partners such as Gartner and Info-tech, have been consulted.

Conclusion:

Staff is seeking to update Council on these initiatives and obtain approval to sole source the procurement of the eCheck Automated Compliance solution to Archistar. This solution will serve as our fast-tracking online zoning and building permit assessment platform to assist in delivering on our commitment to provide a more efficient, cost effective and user-friendly application process which ultimately contributes to our goal of 29,000 new units by 2031.

Respectfully submitted,

Chad MacDonald
Chief Information Officer
905-335-7777 ext. 7776

Jamie Tellier
Director, Community Planning
905-335-7777 ext. 7892

Nick Anastasopoulos
Chief Building Official
905-225-7731 ext. 7619

Report Approval:

All reports are reviewed and/or approved by Department Director, the Chief Financial Officer and the Executive Director of Legal Services & Corporation Counsel.