

RECOMMENDATION

That the October 21, 2022, Urban Planning and Economy report UPE01493, be received for information.

Requested Council ActionConnectEdmonton's Guiding PrincipleCONNECTEDThis unifies our work to achieve our strategic goals.		Information Only ConnectEdmonton Strategic Goals Urban Places					
				City Plan Values	LIVE		
				City Plan Big City Move	A Rebuildable City	Relationship to Council's Strategic Priorities	Conditions for Service Success
Corporate Business Plan	Serving Edmontonians						
Council Policy, Program or Project Relationships	COE Audit 22502 - Safety Codes Permits & Inspections						
Related Council Discussions	• N/A						

Executive Summary

- The Office of the City Auditor undertook an audit of the Safety Codes Permits and Inspections function and focused on permits and inspections for new single detached homes.
- The objectives of the audit were to determine if:
 - The Safety Codes Permits and Inspections building permits process is effective, efficient, and aligns with regulatory requirements.
 - Safety Codes Permits and Inspections is managing the building permits process to meet stakeholder expectations.

- The Office of the City Auditor identified areas of improvement and provided five recommendations.
- Administration accepts the auditor's findings and recommendations. All recommendations will be implemented by the end of 2023.

REPORT

Permits and licenses are an important part of guiding development and achieving the safe, inclusive, vibrant and walkable city envisioned by The City Plan. People want and need reliable and positive experiences when accessing permit and licensing services from the City. The way Edmontonians interact with the City is changing, and Development Services continues to implement improvements to provide an excellent customer experience.

Edmonton's ability to retain, attract and grow business is impacted by how the City regulates and provides permitting and licensing services to businesses, property owners and potential investors.

An efficient permitting, licensing and regulatory process helps reduce barriers and encourage investment in the city, which is a key goal of both The City Plan and Edmonton's Economic Action Plan. Effective systems are important to enable Edmonton's post-pandemic economic recovery.

The City is streamlining its permitting, licensing and regulatory processes to ensure that the correct regulations, processes and support services are in place for homeowners, developers and businesses. These initiatives include, but are not limited to, the Permit and Licensing Improvement Initiative, Business License Bylaw Renewal, Zoning Bylaw Renewal and the Business Friendly Edmonton Initiative. Service adjustments and improvements are made regularly based on input from clients, industry associations, and administration.

Safety Codes Permits and Inspections

The City's Safety Codes Permits and Inspections team provides compliance monitoring of the design, construction, addition, alteration, demolition or occupancy of any building in accordance with applicable acts, codes, regulations and standards.

The Government of Alberta delegates responsibility for administering the *Safety Codes Act* to municipalities and other entities. The Safety Codes Council supports the Province by accrediting municipalities, training safety codes officers, and approving a quality management plan (QMP) with each municipality. The City's Safety Codes Permits and Inspections team is Provincially accredited to administer Safety Codes services.

The scope and administration of Safety Codes services are outlined in the approved Quality Management Plan. This plan specifies operational and technical specific service delivery standards encompassing the safety codes disciplines of Building (including heating, ventilation and cooling — known as "HVAC"), Electrical, Plumbing and Gas. The City's current Quality Management Plan is approved by both the Administrator of Accreditation (Safety Codes Council)

and the City Manager (City of Edmonton). Within this framework, the City develops processes for conducting permit and inspection services.

Building permit inspections are a required function of all construction projects in Edmonton. These inspections allow for proactive and reactive adjustments during construction projects and help ensure that what is being built is safe and meets minimum code requirements.

The City does it's best to proactively identify deficiencies early in the process by conducting preliminary plans examinations and interim inspections, but ultimately the *Safety Codes Act* places the onus on the permit holder and their contractors (designer, builder, engineers, etc) to ensure that what is built meets code regulations.

As a result of the audit, the Office of the City Auditor made five recommendations to improve the Safety Codes permit and inspection processes. Administration accepts these recommendations, outlined below, and implementation is scheduled to be completed by Q3 2023.

Recommendation 1

The Office of the City Auditor recommends that Safety Codes Permits and Inspections review and re-set minimum inspection requirements so that service expectations are clear and consistent.

Response from Administration

- Administration will update the existing Quality Management Plan, establishing clarity on the minimum number of mandatory and elective inspections.
- Updates to standard operating procedures and technologies will be completed with service expectations published for clarity and consistency.
- Assessing and prioritizing inspection processes will assist in focusing on higher risk functions to more consistently meet the needs and expectations of customers.
- Administration will clearly publish required inspections through the City of Edmonton website, and the customer self-serve portal and ensure these align and integrate with internal standard operating procedures (SOP's).

Implementation date of Recommendation 1 - September 30, 2023.

Recommendation 2

The Office of the City Auditor recommends that Safety Codes Permits and Inspections expand its use of their risk-based model to determine the actual inspections needed for new single-detached homes.

Response from Administration

- Edmonton is a demonstrated leader in using innovation to improve municipal services and is the first city in Canada to use artificial intelligence in a risk based predictive model to increase the efficiency of safety codes inspections.
- The existing risk based model has been in operation for 24 months monitoring four separate inspection processes (plumbing stacks, plumbing groundworks, HVAC stack and HVAC concealed

duct). The program utilizes historical data in conjunction with real time entries to provide current state decision making functions.

- The team reviews impacts and effectiveness of this program through a combination of weekly statistics analysis and random field audits for confirmation.
- Inspections deemed low risk through the risk based model are passed automatically, eliminating unnecessary delays in builder timelines. Valuable inspector resources are able to focus on higher risk or more complicated inspections.
- The approach for this work empowered employees and required thoughtful change management (i.e. vision, methodology, benefits, employee participation, communication) within the section to implement. Implementation of this recommendation will require additional change management.
- Additional elective inspection processes will be vetted through an aligning risk matrix to evaluate opportunity for inclusion within the risk based model with recognition that the scope and complexities of projects are ever increasing. In addition, multiple national updates to codes and standards are to be considered including customer expectations.
- Further expansion of the model will be dependent on technology implementation priorities and resources to complete.

Implementation date of Recommendation 2 to create an action plan - September 30, 2023.

Recommendation 3

The Office of the City Auditor recommends that the Development Services Branch update its procedures and checklists for application intake, and develop operating procedures and checklists to improve consistency of safety codes officers' site inspections.

Response from Administration

Permit application processes

- Application intake is the process of pre-screening permit applications for completeness.
- A standard operating procedure exists for the residential permit application intake process and is under review for accuracy and completeness. All standard operating procedures, and any other procedural documentation is housed within the City's Knowledge Library, an internal documentation hub. This hub has regularly scheduled reviews and updates.
- A number of application and inspection checklists, including minimum submission requirements, are present on the City of Edmonton website. These are used by the intake staff and Safety Codes Officers to review application completeness. A review will be completed to ensure content, accuracy and completeness of the checklists aligns through internal and external communications.
- A Home Improvement Permit process improvement project is currently underway, with anticipated completion in December 2022. Expanded staff procedures/checklists will improve the consistency of intake reviews. To support applicants in submitting complete (review-ready) applications for processing, additional online resources will be made available.
- Administration will evaluate and update the current house permit intake process for effectiveness and efficiency.
 - Data was collected to examine 'More Information Required' statistics at both the intake and plan exam review stages, which will be utilized to review opportunities for refinement of

procedures, training, communication and educational material for both staff and applicants.

• Work is underway with industry to review customer responsibility and accountability in relation to the application completeness and inspection functions.

Inspection processes

- A number of application and inspection checklists, including minimum inspection requirements, are present on the City of Edmonton website. These are used by Safety Codes Officers to conduct site inspections.
- Supervisory audits are conducted to ensure consistency and inform areas of improvement. Frequency of audits and work delegations of Safety Codes Officers to be reviewed to support effective and efficient operations.
- Administration will review and update the standard operating procedures, checklists and job aids contained in the Knowledge Library for completeness and accuracy. Administration will also develop an action plan for adding missing procedures or updating old procedures.
- Scheduled training and professional development will be coordinated with all staff.

Implementation date of Recommendation 3 - June 30, 2023.

Recommendation 4

The Office of the City Auditor recommends that Safety Codes Permits and Inspections review the permit application and inspection processes and implement a plan to improve efficiency.

Response from Administration

Safety Codes Permits and Inspections is involved in ongoing process improvements with a number of projects aimed at improving permit and inspections customer experience and efficiency. Relevant completed and in-progress initiatives are listed below.

Permit application processes

- House permits To reduce the impact of permit review timelines on construction activities, builders can obtain a footing and foundation partial permit which is granted immediately following zoning approval. This allows the first phase of construction to start while the new house building permit is in review.
- Home improvement permits In-progress efficiency improvements include:
 - o an online process to make revisions to permits after they are issued to the applicant,
 - o expanded operational procedures to improve consistency,
 - an interactive guidance tool to assist applicants with determining correct permits for their project and
 - updated application guides assisting customers in preparing a complete application.
- Commercial building permits There are in-process improvements to reduce timelines and increase consistency, integration with business licensing services, and enhancements to customer experience.

- Creating an integrated application process across Business Licences, Development Permits, and Building Permits.
- Shifting to more concurrent activities by review teams will reduce overall timelines.
- Enhancing the process for receiving professional schedules during construction will reduce administrative effort.
- Exploring artificial intelligence technology to complete limited aspects of permit application screening, targeting commonly missed requirements by applicants. Proof of concept underway.
- Safety Codes Permits and Inspections queue times are published on the City of Edmonton external webpage. Construction activity does fluctuate, resulting in varied service demand each month. Providing regularly updated queue times help to inform permit applicants when their permit will be processed and reduce the need to contact the City.
- Administration will update webpage language and content and establish minimum submission requirements for an application to be accepted.
- Administration will review, refine and expand permit application checklists and guides to provide further clarity on application requirements for differing project types.
- Ongoing work to review 'More Information Required' data sets is also helping to guide changes to procedures, manuals, and customer feedback.
- Administration will streamline zoning and safety code feedback to the applicant during the application process to reduce time-consuming requests for more information.
- Administration will explore concurrent development and building permit reviews, enhancing service timelines to permit issuance.

Inspection processes

- Changes to how occupancy permits are issued to allow for more timely inspection scheduling, launched in September 2022 for house permits.
- A tool to utilize an automated capacity based inspection system to provide predictability and consistency for customers was launchedin 2022 with ongoing refinements underway.
- Changes to how inspections are assigned to field inspectors, utilizing an automated system that routes the inspector's daily schedule for efficiency.
- Administration will use an Inspection Contractor to assist in periods of high demand.

Implementation date of Recommendation 4 - September 30, 2023.

Recommendation 5

The Office of the City Auditor recommends that the Development Services Branch enhance its performance measures so they are reliable, understandable, comparable and include measurable targets.

Response from Administration

- Permit Service Levels and measurements were established in 2022 and published on edmonton.ca.
- Reporting to monitor performance against the service levels is expected to be completed by the end of Q4 2022.

- Documentation and governance of measures and targets will be finalized in 2023 to improve reliability and comparability. Also in 2023, historical reporting on approval timelines through the Quarterly Activity Report on edmonton.ca will be rationalized to align with new Service Level definitions to improve consistency.
- Permit and Licencing Initiative Setting Service Levels project has completed phase one; the next phase includes reviewing actual performance against the initial performance levels for further refinement.
- The Development Services Quarterly Activity Report will be updated to reflect performance measures that are reliable, understandable, comparable and include measurable targets.

Implementation date of Recommendation 5 - September 30, 2023.

COMMUNITY INSIGHT

The safety codes system is a regulatory function to assist in ensuring the built environment is safe for citizens and the public. Any improvements made will balance the need to provide reliable and timely services with ensuring that what is built is safe, meets appropriate regulatory standards, fits in with the surrounding neighborhood and respects community interests.

Administration continues to listen to Edmontonians throughout different forms of engagement and research in creating processes that are understandable, predictable and efficient. This feedback helps guide future updates to ensure alignment with the needs and expectations of residents and customers. In 2021, staff and industry generated improvement ideas to inform the Permit and Licencing Initiative Roadmap and other improvements to respond to emerging customer needs such as building on unregistered land.

A 'Red Tape roundtable' discussion was held (April 6 and June 24, 2022), with participants from a variety of organizations representing businesses in Edmonton, industry advocacy groups, Business Improvement Areas (BIAs), and individuals who had previously contacted the City looking to discuss a frustrating service experience. The groups engaged were diverse and spanned industries that included residential development, construction, hospitality, design, commercial real estate and retail. The feedback shared by participants will help to identify emerging opportunities for continuous service improvement.

A Customer Satisfaction Survey was launched earlier in 2022 for Home Improvement Applications. Administration heard that 95 per cent of customers were satisfied with their home improvement permit inspections experience and 75 per cent were satisfied with the permit experience. The data can then be incorporated in performance measures used to improve service delivery. The survey will be expanded to more permit, licence and inspection services this year. Customers will automatically be sent an online survey via email when their permit or licence application is approved and when their final inspection is complete. Through the short survey, Administration hears about how satisfied the customer was with the service, learns about why they were very satisfied or dissatisfied, and has an opportunity to hear comments and suggestions.

GBA+

The scope of this audit focused on the building permit process being effective, efficient, aligning with regulatory requirements and meeting customer expectations. Throughout the process of planning, designing, and delivering safety codes services, there are increasing efforts to integrate GBA+ into the engagement, communications, and service delivery of all related functions in order to enhance accessibility and inclusion.