

REPORT SUMMARY

SAFETY CODES PERMISSION & INSPECTION

JUNE 2019 | PROGRAM AND SERVICE REVIEW

Edmonton

WHAT IS PROGRAM & SERVICE REVIEW?

Program and Service Review (PSR) is composed of an internal team dedicated to evaluating the services offered by the City of Edmonton. The objective is to help City Council achieve its strategic goals and determine how our organization can improve the services that matter to Edmontonians in ways that maximize citizen tax dollars.

SUMMARY OF SERVICE AREA

The City of Edmonton is legislated and accredited to provide Safety Codes Permission and Inspection Services for the purpose of monitoring the activity of all commercial, industrial, institutional, and residential development within the City of Edmonton for the safety of residents.

Safety Codes Permission and Inspections Public Service

The Safety Codes Permission and Inspection Service, often referred to as the Building Permit Process, has four primary functions including: application/fee collection, plans examination, permit issuance, and inspections with life safety as the principal objective.

Building activities that require these services range from small to large scale projects such as deck renovations to hotel construction.

Who is impacted? Everyone

Any person living, visiting, or building in the City of Edmonton.

RESEARCH METHODOLOGY

Each Program and Service Review (PSR) typically begins with a review and a Challenge Panel including: community, academia, industry and peer subject matter experts who help provide focus to the analysis, challenge the recommendations, and provide guidance. *Please note: each service area has a tailored approach for engagement and analysis.*

	INTERNAL
ENGAGEMENT	Employee interviews. Job shadowing, ride-alongs with service area.
ANALYSIS	Review of key branch documents (e.g., business plans), High level analysis (e.g., finance, human resources, etc.), City Council reports and presentations.

EXTERNAL
Stakeholder organizations, citizen surveys, challenge panel.
Review of academia and other secondary research, benchmarking against other municipalities.

IMPORTANT INFORMATION & TERMINOLOGY

Safety Codes Council (SCC):

“The Safety Codes Council is a statutory corporation for the Government of Alberta. . . working [with] industry partners to help make Alberta a safe place to live, work, and play.” (*Safety Codes Council, 2019*)

Quality Management Plan (QMP):

The Quality Management Plan (QMP) is an agreement between Safety Codes Council (SCC) and the City of Edmonton for the minimum required services provided during the building process.

Safety Codes Act (SCA):

Centralized administration of ten safety disciplines to monitor public safety.

National Energy Codes for Buildings (NECB):

The National Energy Code of Canada for Buildings (NECB) is one of several model codes published by the National Research Council of Canada (NRC). The NECB replaces the Model National Energy Code of Canada for Buildings 1997 (MNECB) (*NRC Canada, 2019*).

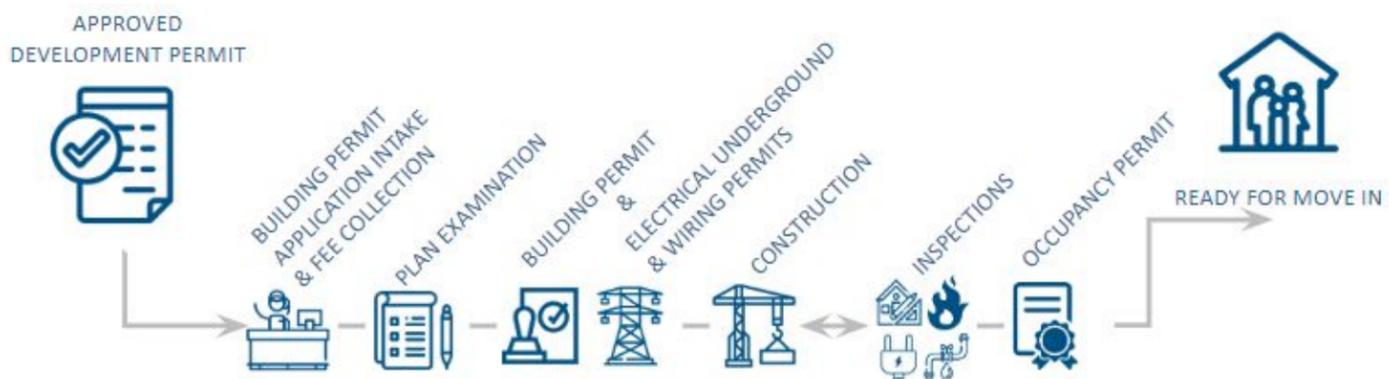
Predictive Business Model:

A process that uses multiple indicators, such as historical and current data to understand and forecast and/or predict future results. As data is collected, statistics are analyzed and applied.

Safety Codes Officer:

Employee responsible for conducting plans examinations for permit issuance or inspecting construction activity covered under a permit.

Building Permit Process example (residential):



RECOMMENDATIONS WHY & IMPACT

RECOMMENDATION	WHY	IMPACT
<p>1</p> <p>Internal Efficiency</p> <p><i>Simplify website content, language, and navigation.</i></p> <p><i>Focus On The Customer Experience</i></p>	<p>Current State (What we found): Citizens currently have three ways to retrieve building permit information: the Edmonton Service Centre, 311, and the City of Edmonton website.</p> <p>Demand for online service options is increasing..</p> <p>Future State (What we will do): Improve the online user experience.</p>	<p>Impact: Ease of access to online information and step-by-step instruction will improve the customer experience. Reduction in the number of incomplete online applications submitted. This will allow the service area to reallocate resources to higher priority items.</p> <ul style="list-style-type: none"> - Complete applications reduce the need for staff follow-up and resubmissions, reducing the length of time to complete the Building Permit Process. <p>Website improvement is relatively low cost and high impact for customers and staff.</p>
<p>2</p> <p>QMP</p> <p><i>Update the Quality Management Plan (QMP) & operations manual</i></p>	<p>Current State (What we found): The QMP does not accurately reflect an achievable number of minimum inspections by discipline. A discrepancy exists between what the City and the QMP require for construction to proceed.</p> <ul style="list-style-type: none"> - Current City process includes mandatory and non-mandatory inspections being completed. <p>Future State (What we will do): The QMP should outline an achievable minimum number of inspections that a typical project type requires and should align with how the inspections are required to be performed.</p>	<p>Impact: Determining a base-line for required minimum inspections will trigger an assessment of which inspections should be considered optional.</p> <p>With implementation of this recommendation the following decreases are expected:</p> <ul style="list-style-type: none"> - Cost of inspections. - Construction completion time-lines.

	<p>The operating manual(s) should be the link between the QMP and how the QMP is implemented by the City of Edmonton.</p> <p>Conditions:</p> <ul style="list-style-type: none"> - Document rationale for deviations of inspections for the SCC website - Mirror the application guides for ease of updates, with details of what needs to be reviewed from each element requested from the applicant. - Optional inspections must maintain focus on compliance monitoring to the Alberta Building Code for elements of assessed risk. 	
<p>3 Plans Examination <i>Conduct plans examinations based on assessed risk with a focus on compliance monitoring and life safety</i></p>	<p>Current State (What we found): Customers are frustrated that building permit times are slow and unpredictable.</p> <p>The PSR team reviewed application timelines from 2014 to 2017 and discovered that processing times are increasing and the variance in number of days to complete the process is widening.</p> <ul style="list-style-type: none"> - increased wait times can have adverse financial impacts on applicants including construction and occupancy delays. <p>The Safety Codes Council does not explicitly state what to review in a plans examination.</p> <ul style="list-style-type: none"> - It is left to the municipality to determine a framework for review, based on understanding the needs of the municipality and how best to deliver service. <p>Future State (What we will do): Develop a plans examination framework and operating guidelines which are based on safety and trends in inspection deficiencies. This would support the implementation of the Quality Management Plan and be in compliance with the Alberta Building Code and Safety Codes Act.</p>	<p>Impact: Completion of plans examinations based on assessed risk and with a focus on compliance monitoring and life safety will improve building permit timelines.</p> <p>Impact to Citizens: Reduced cost to industry and homeowners resulting from construction and occupancy delays.</p>
<p>4 Inspections <i>Reduce non-mandatory inspections through use of data and analytics</i></p>	<p>Current State (What we found): Current City practice is to perform all mandatory and optional inspections listed in the QMP, well above the minimum requirement. For example:</p> <ul style="list-style-type: none"> - The city performs 13 inspections for a Single Detached House permit, however, only eight are required by the QMP. <p>In addition, despite a normalization of annual inspections (approximately 150,000/year) since a peak in 2015, personnel costs have continued to rise and use of external contracts has remained relatively unchanged.</p> <p>In 2014, the Office of the City Auditor recommended that a risk-based inspection strategy be adopted to enable the business area to focus resources on activities that pose the highest risk to public safety.</p> <p>Future State (What we will do): Predictive modeling/data analytics will be used for all optional inspections to understand when an inspection may fail and to develop the business rules around when to conduct that inspection type.</p> <p>A risk-based inspection strategy should be implemented to focus resources on activities that address the highest potential risks to public safety.</p> <p>Conditions: The City of Edmonton must comply with the QMP and ensure mandatory inspections are still being conducted.</p> <p>A risk based inspection framework should be based on historical evidence of inspection pass rates combined with risk tolerance and other factors.</p> <p>Inspection pass rates should continue to be monitored once a risk-based approach is implemented.</p> <ul style="list-style-type: none"> - If issues arise with certain inspection types, the instances of inspection data will inform evidence based decision making to implement future changes. 	<p>Impact: The City will be able to fully understand the performance of each inspection type.</p> <p>Focus resources on inspection types with the highest failure rates and those that have the highest potential risk to public safety.</p> <p>The City's inspection strategy remains quality focused, while decreasing costs and processing time for both the City and customers.</p>

<p>5 Predictive Business Model <i>In-depth review of internal staff vs. contracted staff.</i></p>	<p>Current State (What we found): The volume of inspections is forecasted using a predictive business model, based on historic and current trends.</p> <p>The City has the option of using internal employees or an external contractor to complete inspections.</p> <p>Based on a cost-of-service-study, internal inspections are of lower initial cost than external inspections. Due to fluctuations in work volumes, such as seasonal demand for inspections, costs, level of service, and workforce flexibility are considered when determining the staffing strategy.</p> <p>Future State (What we will do): Perform an in-depth review of staffing requirements, dependent on target service levels set per plans examination and inspection type, using a predictive model to better understand the balance needed to optimize resources..</p>	<p>Impact: An in-depth analysis provides clarity on future staffing needs and requirements and the City will be able to:</p> <ul style="list-style-type: none"> - Determine the optimal mix of internal and external inspectors based on historical and forecasted work volumes, allowing for flexibility in staffing requirements. - An optimal mix will eliminate the potential of overstaffing during low volume periods and overtime costs during high volume periods. 								
<p>6 Accountability <i>Confirm accountability for implementation of Safety Code recommendations</i></p>	<p>Current State (What we found): City <u>Policy C610</u>, Fiscal Policy for Planning and Development, defines responsibilities for inspection services, service levels, managing the budget, approving fees and maintaining documentation.</p> <p>The responsibility to complete the Safety Code recommendations can be with many individuals, however, accountability needs to be with one individual to ensure implementation success.</p> <p>Future State (What we will do): A more detailed approach to assigning accountability will support implementation success. There are two branches involved in the recommendations: Corporate Strategy and Development Services.</p> <table border="1" data-bbox="459 1445 1306 2184"> <thead> <tr> <th colspan="2">Accountable For:</th> </tr> </thead> <tbody> <tr> <td>Branch Manager, Development Services</td> <td> <ul style="list-style-type: none"> - Plans examination efficiencies - Inspection efficiencies - Manage resources to the budget - Improved service levels </td> </tr> <tr> <td>Branch Manager, Corporate Strategy (UFBT)</td> <td> Accountable for UFBT project delivery including: <ul style="list-style-type: none"> - Identification and deployment of safety codes inspection efficiencies - Development of safety codes website improvements </td> </tr> <tr> <td>Director, Safety Codes</td> <td>Implementation of Safety Code plans examination and inspection efficiencies</td> </tr> </tbody> </table>	Accountable For:		Branch Manager, Development Services	<ul style="list-style-type: none"> - Plans examination efficiencies - Inspection efficiencies - Manage resources to the budget - Improved service levels 	Branch Manager, Corporate Strategy (UFBT)	Accountable for UFBT project delivery including: <ul style="list-style-type: none"> - Identification and deployment of safety codes inspection efficiencies - Development of safety codes website improvements 	Director, Safety Codes	Implementation of Safety Code plans examination and inspection efficiencies	<p>Impact: Accountability based on the below matrix will ensure implementation of recommendations and implementation monitoring for service efficiencies gained and improved service levels.</p>
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