

KOGAWA CONSULTING

The City of Calgary

Final Report for Calgary Building Services Zero-Based Review

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1 Executive Summary

The purpose of this report is to provide the findings and recommendations of the Zero-Based Review (ZBR) for Calgary Building Services (CBS) and Planning & Development (PD). CBS performs a central customer service role in PD within The City of Calgary. CBS works with citizens and businesses to coordinate and manage approvals of development permits, building permits and business licences. They manage the permitting process for both new buildings and renovations through plan reviews, permit issuance, inspections, and enforcement of applicable codes and bylaws to ensure public safety, and environmental stewardship in Calgary. As the single point of contact for PD customer transactions, CBS operates a mixture of front counter, online, call centre, publication, and information services. CBS also promotes excellence in construction site safety through industry engagement, education and enforcement. They have staff representation on numerous Provincial and Federal committees.

On-boarded April 29th 2016, Kogawa was asked to focus on Business Model Service Simplification and Portfolio Management. The scope in terms of the customer journeys was defined as home and small business owners. Until Corporate Initiatives identified the customer segments and profiles as part of an earlier phase of this ZBR, these customer segments were a “silent” majority for PD. Customer segmentation analysis completed by Corporate Initiatives determined that while home and business owners comprise the majority of PD’s customer base (79%), combined they generate only 8% of permit fees (**Appendix A**). This makes any interactions with these customer segments proportionately costly compared to other customer segments. In addition, providing good customer service to these users is essential to overall customer service/satisfaction.

The two major gaps identified are:

1. Minimal attention has been given to providing customer-centric content and electronic permit applications for home owners
2. Lack of discipline around decision-making in performing and adhering to prioritization of the CBS Workplan and PD Business Plan

Key Recommendations

Focus Area: Business Model Service Simplification		Focus Area: Portfolio Management
Recommendation #1: Self-directed home/small business owner journey <i>Provide new services to home/small business owners that allow them to be self-directed. As a result, both The City and customers are more efficient and effective in building and maintaining a safe city</i>	Recommendation #2: Improved processes & business rules using a risk based approach <i>Improve home/small business owner processes and supporting business rules by using a risk based approach. Rationalize business rules based on bylaws and safety codes, and eliminate legacy rules</i>	Recommendation #3: PD business portfolio prioritization & commitment <i>Adopt a business portfolio management framework to improve the governance, management and monitoring of projects required to meet Council priorities and action plans</i>

The first two recommendations support the Business Model Service Simplification for home/small business owners and the third, Business Portfolio Prioritization and Commitment enables the successful implementation of the recommendations in alignment with other projects within Planning & Development.

All the recommendations **together** provide service improvements and cost savings key to a successful journey for home owners and small business owners.

The recommendations **lay the foundation** for service improvements for other customer segments. If implemented individually, the detailed recommendations provide limited gains and may in fact increase costs to the Calgary Building Services Business Unit.

Key Recommendation	Detailed Recommendation
Recommendation #1: Provide services to home/small business owners that enable customers to be self-directed. As a result, both The City and customers are more efficient and effective in building and maintaining a safe city	<ul style="list-style-type: none"> ◆ Develop and implement a formal customer contact/education strategy that supports a proactive approach in the community ◆ Create a home/small business owner relationship role responsible for the education and sustainment of customer information ◆ Develop partnership programs with stakeholders who provide services to home/small business owners ◆ Simplify and guide the customer journey by creating online navigable content where the needs, wants and limitations of the customers are taken into account ◆ Roadmap, design, and pilot online chat channel ◆ Accept digital documents from home owners ◆ Provide electronic submission and processing of home owner applications and payments ◆ Issue home owner permits at City multi-use locations as per Council mandate (LAS201536) ◆ Upgrade & complete the technology solution to enable small business owners to pay online through registered access
Recommendation #2: Improve home/small business owner processes and supporting business rules by using a risk based approach. Rationalize business rules based on bylaws and safety codes, and eliminate legacy rules	<ul style="list-style-type: none"> ◆ Apply a risk-based approach and remove discretionary business rules not supported by bylaws and standards ◆ Review citizen complaints and move rules to the appropriate bylaw for enforcement ◆ Complete inspection business process redesign and then implement a workforce management tool ◆ Formalize risk-based decision-making for Inspectors ◆ Capture operational data for meaningful performance measurement ◆ Use the small business owner customer journey to create a holistic sequence of compliance requirements across all stakeholder agencies
Recommendation #3: Adopt a business portfolio management framework to improve the governance, management, and monitoring of projects required to meet Council priorities and action plans	<ul style="list-style-type: none"> ◆ Establish clear terms of reference for strategic vs. execution portfolio governance ◆ Include and prioritize all business planning, operations, and portfolio projects ◆ Adopt corporate project management and governance standards across all projects ◆ Develop performance measurement strategy and discipline for identifying, gathering, and reporting on key metrics ◆ Develop portfolio management roles and responsibilities that support the PD Business Portfolio Management Framework

The recommendations are integrated into the actual stories of a home owner (Section 3.2) and a small business owner (Section 3.3) to highlight how they will benefit the customers. If CBS does nothing, they will see a 20% increase in cost per contact after 5 years.

Efficiency and Effectiveness Gains from the Three Key Recommendations

By year 5, 60% adoption – self-directed home/small business owners

23% drop in cost per customer contact – from \$65 to \$50

Annual \$3.5M/yr avoided – CBS Business Model Service Simplification

Annual \$1.14M/yr saved – PD Portfolio Management

\$2.7M/yr annual avoided costs for self-directed home/small business owners

\$800K yearly reduction in inspection costs

4% CBS efficiency gains for home/small business owner services

Gaps in business licensing service resolved

Annual \$4.6M/yr total avoided after year 5

\$13.2 total cumulative avoided costs over 5 years

\$12.9M total investment – 6 to 7 year payback

Quality of Service Improvements to Home/Small Business Owners

Reduced time & cost to the customer with navigable online content

Faster, easier, more consistent

Clarity in business licensing service

Optional to come to City Hall

The recommendations provide a holistic view of interrelated recommendations for CBS. Effectively prioritized and implemented through the PD Business Portfolio Management Framework, many of the recommendations will benefit all customer segments, not just home/small business owners. While there are cost savings to be realized, the primary benefits are cost avoidance or redirected costs and significant service improvements. The ZBR prioritization scoring results are provided in section 6 as well as the overall priority within the PD business plan. As well, CBS has been provided with Implementation and Change Management considerations to support CBS during the detailed planning of the approved recommendations.

A significant cultural change is required within CBS and PD as a whole to become customer centric for all of the customer segments including home/small business owners.

In summary, Kogawa identified three key recommendations to gain efficiencies (cost avoidance) and effectiveness (service improvements) in the Calgary Building Services business unit and the Planning & Development department. To ***effectively achieve*** the benefits and outcomes:

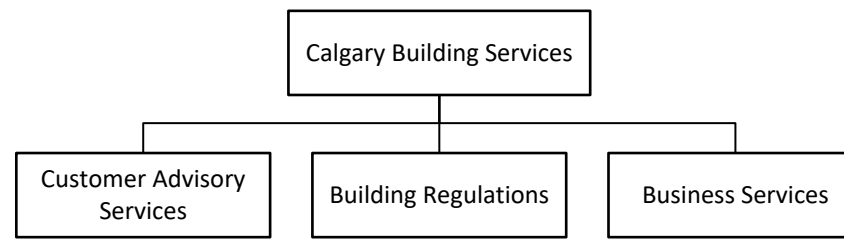
- ♦ Implement the recommendations as outlined -- do all of them
- ♦ Significant cultural change is needed and will require significant effort
- ♦ Adopt a culture of continuous improvement through the discipline and rigour of business portfolio management

In addition to this report, a placemat for each customer journey is provided to guide you through the document.

2 Background and Scope

2.1 Calgary Building Services

The role of CBS is to *educate, support, inspect, and enforce* the development and building of Calgary. CBS is the primary point of contact for customers who require services including applications, permits, business licenses, and inspections. CBS also promotes excellence in construction site safety through industry engagement, education, and enforcement. Customer Advisory Services, Building Regulations, and Business Services are the functional areas that were in scope for the in-depth analysis.



CBS is primarily funded through fee revenue. All business units at the City of Calgary are funded in one of three ways: Mill Rate, Recoveries, or Revenues. The mill rate is budget dollars provided to a business unit through tax revenue. Recoveries are dollars a business unit receives by charging another business unit in The City (chargeback). Revenue is funding received through a fee charged to external parties.

During the Opportunity Identification phase of the ZBR, Corporate Initiatives identified the following strengths within CBS:

- ✓ Well below the median on cost per \$1000 construction activity
- ✓ Knowledgeable, friendly, and professional workforce
- ✓ Proud ambassadors of The City of Calgary
- ✓ Viewed as best practice in Alberta – support provincial efforts to improve the Safety Code
- ✓ Open and transparent relationship with industry
- ✓ Continuous improvement culture

2.2 ZBR Project Focus

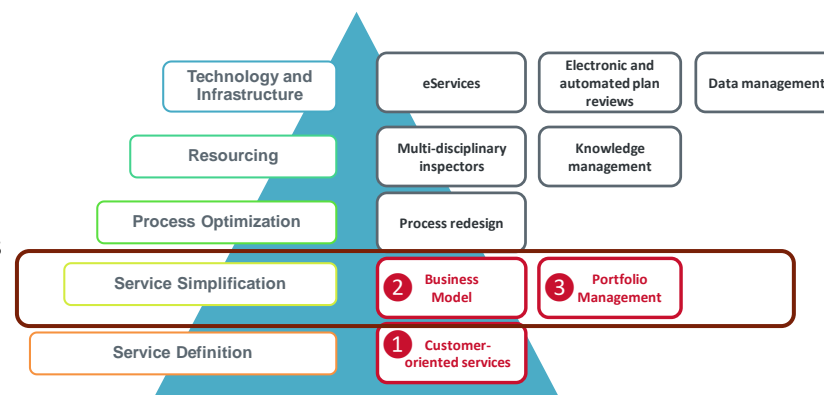
The Opportunity Identification phase uncovered some external challenges to improving service delivery for customers, including:

- ♦ A perceived lack of capacity, due in part to the volume of improvement initiatives underway
- ♦ Challenges moving services online due to exceedingly complex services and processes
- ♦ Repeated reviews and audits that distract from implementation of changes

Corporate Initiatives, through the opportunity identification process, identified three focus areas related to the provision of products and services within Calgary Building Services:

- 1) Customer-oriented services (analysis of customer segments and understanding of their distinct needs and preferences). This was completed by Corporate Initiatives in May 2016
- 2) Business Model Service Simplification (to gain efficiencies and service improvements)
- 3) Portfolio Management (assessment of improvement projects currently underway to prioritize and sequence them)

This report provides the recommendations for the Business Model Service Simplification and Portfolio Management.



2.3 Customers Segments

2.3.1 ZBR Customers in Scope

The customer scope for the review was defined as CBS services for home and small business owners. The home owners are individuals undertaking home improvement projects such as:

- ♦ Outdoor Yard Projects (e.g. Garage)
- ♦ Home Accessories (e.g. Hot Tub)
- ♦ Major Renovations (e.g. Basement Development)

The small business owners are:

- ◆ Starting a new business (commercial or home based)
- ◆ Renewing their licence

CBS's current systems do not capture reliable and consistent data about home/small business owners. For clarity and consistency, Kogawa used Statistics Canada's definition of a small business owner as one with 1-49 employees. Home owners are grouped according to permit types. Customer segmentation analysis completed by Corporate Initiatives determined that while home and business owners comprise the majority of PD's customer base (79%), combined they generate only 8% of permit fees. This makes any interactions with these customer segments very costly compared to other customer segments.

2.3.2 ZBR Customers Out of Scope

Customer segments out of scope for this review are:

- ◆ Land Developers
- ◆ Builders
- ◆ Contractors
- ◆ Trades
- ◆ Supporting Professionals (e.g. Engineers, Architects, Planners and Lawyers)

PD has other projects underway focusing on improvements for these customer segments.

2.4 ZBR Deliverables

The main ZBR deliverable (this final report) contains the following sections:

- ◆ Business Model Service Simplification
 - Analysis and Recommendations for home/small business owners based on a customer journey
 - Business Case including cost/benefit analysis
- ◆ Portfolio Management
 - Analysis and Recommendations for improving current portfolio management practices
 - Business Case including cost/benefit analysis
- ◆ Change Management Recommendations
- ◆ ZBR Prioritized Recommendations

Other deliverables created to support Planning & Development in the implementation of the ZBR recommendations include:

- ♦ High Level Implementation Plan to support the Service Model Simplification recommendations
- ♦ Detailed Analysis Documents that support the Recommendations
- ♦ Prioritized PD Business Plan List of Projects
- ♦ Business Portfolio Management Framework

2.5 CBS Budget

As of June 2016, the CBS budget breakdown is shown below. It makes up approximately 69% or \$76.3M of the \$110.5M of the PD Department budget. The ZBR review focused on 34% (\$24.8M, highlighted by the blue sections below) of the CBS overall budget.

The business process savings and service improvement areas specific to home/small business owners are identified in the chart below. Expected service improvement areas and annual avoided costs expected (once the ZBR recommendations are implemented) are shown against the budget line item and the associated business process.

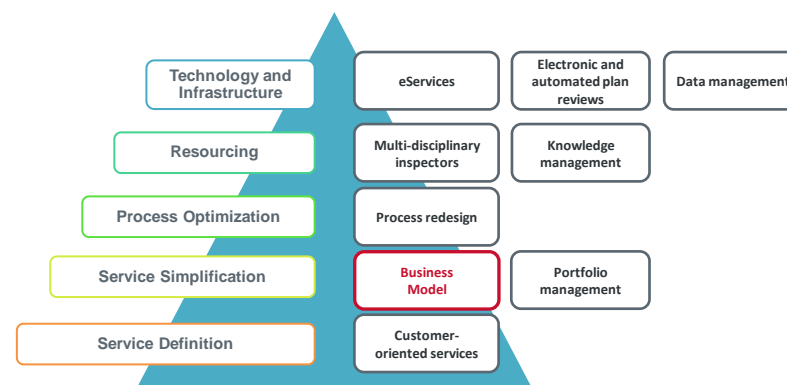
Business Processes	Calgary Building Services						Annual Avoided Costs
	Land Use Management	Land Development	Building Approvals	Business Licencing	Total	% of total	
Answer Customer Inquiries	\$ 94	\$ 378	\$ 1,357	\$ 94	\$ 1,923	3%	\$ 2,651,692
Accept & Circulate Applications	\$ 281	\$ 1,263	\$ 983	\$ 281	\$ 2,807	4%	
Process Payments & Manage Fees	\$ 596	\$ 596	\$ 596	\$ 199	\$ 1,985	3%	
Conduct Plan Reviews/ Approve Applications	\$ 1,893	\$ 3,460	\$ 3,918	\$ -	\$ 9,271	12%	
Perform Inspections/ Approve Occupancy		\$ 2,098	\$ 12,874		\$ 14,973	20%	\$ 816,936
Enforcement & Safety Response			\$ 1,751		\$ 1,751	2%	
Manage Records & Information	\$ 323	\$ 573	\$ 838	\$ 1,445	\$ 3,179	4%	\$ 10,787
Community Industry Engagement			\$ 1,670		\$ 1,670	2%	
Supports all PD Business Units	\$ 12,521	\$ 9,673	\$ 16,166	\$ 406	\$ 38,765	51%	
in 1000's	\$ 15,708	\$ 18,040	\$ 40,153	\$ 2,424	\$ 76,326		\$ 3,479,415

NOTE: In March 2016, the department realignment resulted in the transition of 2 divisions into CBS, an increase of \$37M since the ZBR opportunity phase. These 2 divisions provide support across all of PD

3 Business Model Service Simplification

Typically, home owner and small business owners are either first-time customers or infrequent customers of Calgary Building Services. These customers have a limited understanding of City processes and just want to know what they need to do. They have three basic questions when they come to The City:

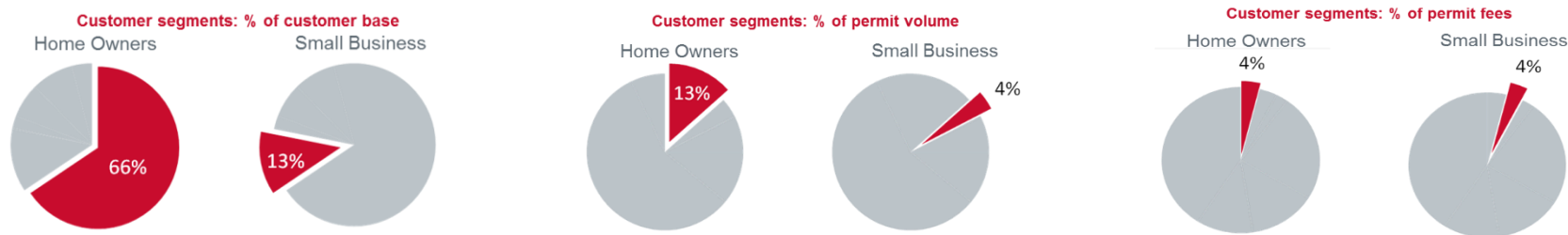
1. Do I need to do anything?
I.e. Do I need a permit? A licence?
2. What do I need to do?
I.e. What am I required to do before I am finished my project?
Do I need a plan?
3. What order do I need to do it in?
I.e. What is the sequence and timing for when I need to do things including inspections?



Building on the already completed customer segmentation and customer journeys, the Business Model Service Simplification recommendations focus on improving the customer's ability to answer these questions quickly, consistently, and at any time. The recommendations support simplifying the current business model that consists of many complex requirements necessitating a robust and extensive knowledge management system and complicated business processes.

Appendix E provides a breakdown of the customer segmentation analysis performed by the Corporate Initiatives ZBR Team.

The breakdown for the two customer segments under review are:



3.1 Strategic Process Framework™

Kogawa's Strategic Process Framework™ in Figure 1 represents a customer-centric, integrated view of CBS's business model and the processes/services that it provides. Although CBS has undergone significant organizational change, the core business processes have remained relatively stable. The model illustrates the linkages between the targeted customer journeys for the in-scope segments, the CBS value chain, and the overall services that CBS provides to its customers.

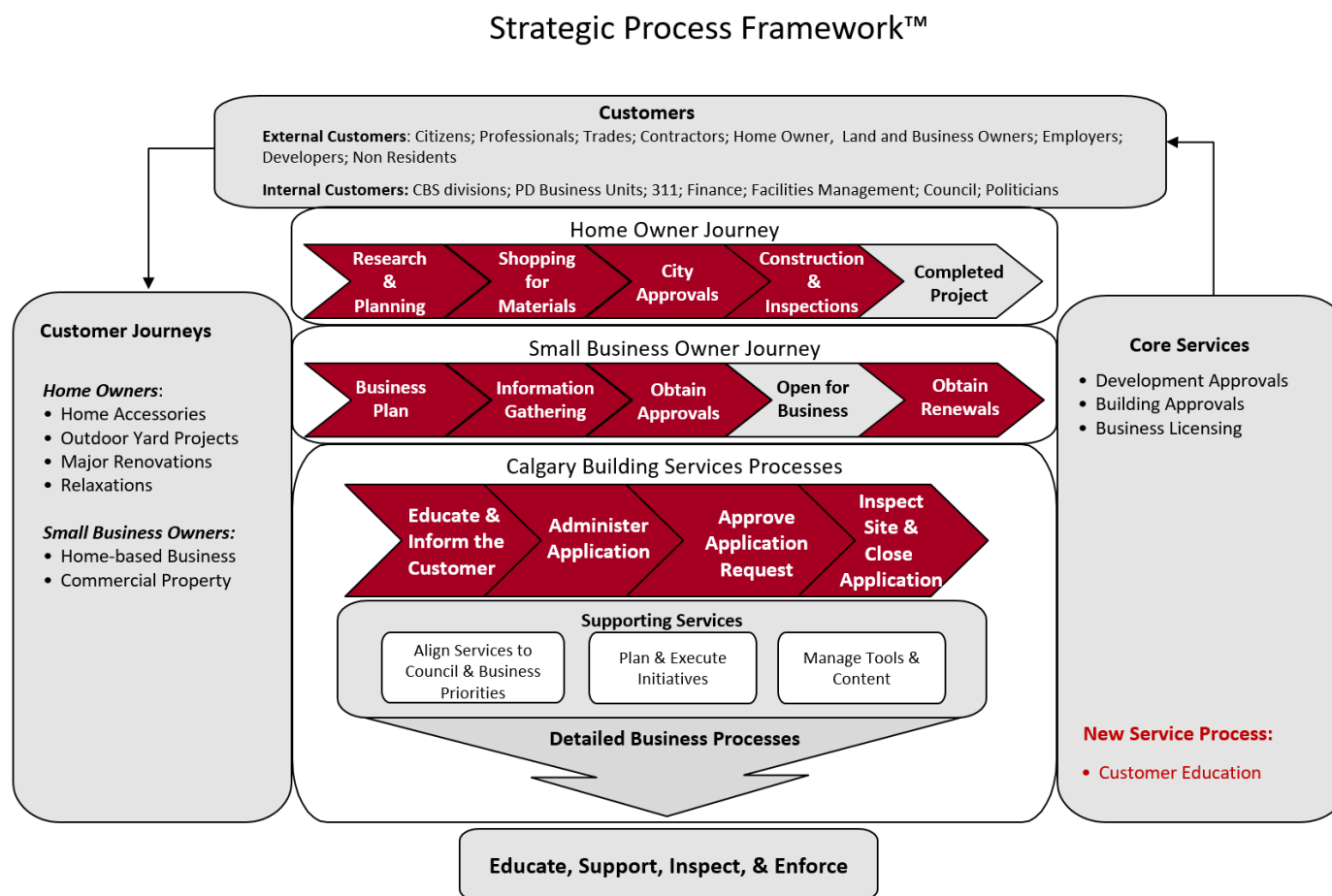


Figure 1 – Strategic Process Framework

3.2 The Home Owner Story and Recommendations

Next we follow the story of a customer who completed a basement renovation. Names have been changed to protect their privacy.



Figure 2

“Flintstones! Meet the Flintstones!”

It’s February. Fred and Wilma are thinking about renovating the basement of their townhouse. They have visited Rona and Lowes looking for ideas and have decided to add a bathroom and create a media room. At this point, permit requirements never come up as a topic of discussion with the salespeople they talk to about their renovation plans.

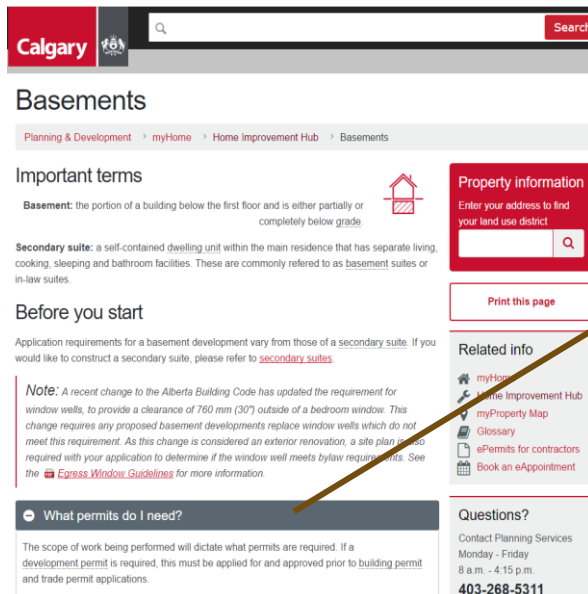
ROADBLOCK: Information on permits is not readily available early in the customer journey



Customer education has to be available at the very beginning of the customer journey!

Recommendation	Service Improvement
Develop and implement a formal customer contact/education strategy that supports a proactive approach in the community	<ul style="list-style-type: none"> Information the customer needs is available, consistent, timely and up-to-date Home and small business owners are recognized as a customer segment of value
Create a home/small business owner relationship role responsible for the education and sustainment of customer information	<ul style="list-style-type: none"> Home/small business owners have a designated advocate at The City who makes sure their needs are represented
Develop partnership programs with stakeholders who provide services to home/small business owners	<ul style="list-style-type: none"> Resources are available for forums, workshops and education sessions offered throughout the city Additional channel provided for home/small business owners to learn permit/licence requirements and the value they provide Timely and relevant resolution for all permit and licensing requirements as they relate to home/small business owners Allows stakeholders (Retailers, Commercial Realtors, etc.) to provide more complete service to their customers

Fred and Wilma decide to look online at Calgary.ca to figure out what permits they need. It takes a while but they finally find some information about permits. They are frustrated though because it doesn't answer their questions, “What permits do I need?”, “How do I get the permits?”, “Once I get the permits, what do I do next?” It also creates another question, “What is the difference between a Building Permit and a Development Permit?”



Fred knows that their neighbors, the Rubbles, built a covered deck and installed a hot tub without getting permits and thinks they should just start on the basement. “After all, how will The City know?”

ROADBLOCK: Customer can't easily find or understand information on Calgary.ca

Recommendation	Service Improvement
Simplify and guide the customer journey by creating online navigable content where the needs, wants and limitations of the customer are taken into account	<ul style="list-style-type: none"> ♦ Information is available at the beginning of the customer journey ♦ Plain language, simple visuals, step-by-step questions that walk the customer through permit requirements; and increase the customer's satisfaction by providing information that is easy to understand and access ♦ Customer can independently determine what they need to do and when to meet their permit/licence requirements ♦ Online information is available anytime, anywhere



Current City Project:

Calgary.ca\Home Improvement Hub: The City has made progress towards a user-friendly research site with *The Home Improvement Hub*, a set of web pages on Calgary.ca specifically designed for the home owner.

The main page of the Home Improvement Hub has plenty of white space, makes excellent use of visuals, and asks simple questions. When a user selects a project, there is more information about the requirements. Unfortunately, much of the information is not provided from the perspective of the home owner. For example, it tells the home owner that a Development Permit is required if they are within six meters of the floodway but does not tell them how to determine whether they live in the floodway or not. The Home Improvement Hub does not take into account the end to end customer journey so the connection between a permit and an inspection is not clear. Refining the information on the hub to make it customer-centric would significantly improve its usability.



Now back to our story...

Wilma is nervous because she wants to make sure the renovations are safe (Fred is not really the handyman he fancies himself to be). She perseveres on Calgary.ca and makes a few assumptions. She thinks she knows what

permits they need but isn't sure, so she calls 311 who put her through to Planning & Development. After a few minutes, Wilma finds out they need to apply for three permits (Building, Plumbing and Electrical).

ROADBLOCK: Again, the customer can't easily find or understand information on Calgary.ca.

Recommendation	Service Improvement
Roadmap, design, and pilot online chat channel	<ul style="list-style-type: none"> Provides a digital communication channel to support customers who prefer to use online services Benefits all customer segments Additional channel for customer service
Benefits to the City	
<ul style="list-style-type: none"> Increased efficiency as City staff can handle multiple customers at the same time Improved wait times at counter as there are fewer in-person customers Reduction in number of calls to 311 and 5311 	

Wilma spends the evening printing the application, filling it out, and getting the supporting documents required for the application.

ROADBLOCK: Customer has to provide paper copies of documents (forms, drawings, etc.)

Recommendation	Service Improvement
Accept digital documents from home owners	<ul style="list-style-type: none"> Convenient for customers to fill out information online Customer's application and attached documents are filed quicker and is more accessible

Unfortunately, Wilma needs to apply and pay for the permits in person. She asks her boss for a half day off and heads downtown on March 10. She knows parking is expensive and she doesn't like driving downtown so she decides to use transit. Living in a new development in the south, it takes her 1 hour and 15 minutes to travel downtown. Her wait to get to the counter is 15 minutes. The person serving her at the counter is friendly, helpful, and efficient but it still takes half hour to an hour to make sure her application is complete. The

counter person tells her that when her permit is ready to be picked up, the City will give her a call. Wilma heads out to wait for the bus. Her trip back to work takes an hour.

On March 14, Wilma gets a call that their permits are ready to be picked up. Time is tight so she convinces Fred to drive her downtown during an extra long lunch. Since they don't know how long it will take, they pay for 3 hours in short term parking (\$16.75). They are in and out of the Municipal Building within an hour.

ROADBLOCK: Customer has to travel downtown to apply, pay for, and pick up permits

Recommendation	Service Improvement
Provide electronic submission & processing of home owner applications and payments	<ul style="list-style-type: none"> Customer can request permits online More convenient for the customer Eliminates travel & parking costs for the customer
Issue home owner permits at City multi-use locations as per Council mandate	<ul style="list-style-type: none"> Increases convenience for home owners Reduces cost to home owners (time and parking)

Fred and Wilma's costs and time for the permits



Permit Costs	
Building Permit	\$305.20
Home Owner's Plumbing Permit	\$132.56
Home Owner's Electrical Permit	\$116.50
TOTAL PERMIT FEES	\$554.26
Incidental Costs	
Transit	\$12.60
Mileage	\$21.06
Parking	\$16.75
Cost of Time (8 Hours)	varies
INCIDENTAL COSTS	\$50.41



Permit Research & Application	
Online Research	1 Hour
Completing Applications	3 Hours
Travel Time to Apply	2.25 Hours
Submit Application	0.75 Hours
Pick up Permits	1 Hour
TOTAL TIME	8 HOURS

Based on the above scenario, the total annual incidental cost to home owners (17,000) is approximately \$900K. In addition, the value of the customer's time based on the "cut red tape" initiative, is more than \$1,000,000 per year.



Now back to our story...

Since obtaining their permits, Fred and Wilma have been working steadily on their basement. They are now ready for their framing inspection. Wilma calls 311 to book the inspections for May 19, 2016. Since the Flintstones have 3 separate permits (Plumbing, Electrical, and Building), they need 3 separate inspections.

The Building Inspector arrives at their home before 9:00 am. As they take him downstairs, he points out that they must have a hand railing for safety. Fred explains that he has taken the hand railing off so that he can move materials down the stairs easily. The inspector acknowledges that makes sense and reminds Fred to make sure to put it back when he's done.


Unfortunately, the Inspector finds a number of concerns. In addition to the railing, Fred has made the door to the mechanical room too narrow. The fan in the bathroom isn't venting outside and worst of all, Fred has cut into the wall to install electrical outlets. This has compromised the firewall between Fred and Wilma and their neighbors.



The Inspector patiently explains the reasons he is failing their inspection and spends time with Fred explaining how to repair his mistakes. He even emails them some materials from The City’s website ([Home Owner Electrical Wiring Guide](#)) that Fred and Wilma hadn’t found when they were researching permits. Altogether, the Inspector spends over half an hour explaining things to Fred. At the end of the inspection, Wilma asks if the Building Inspector knows what time they can expect the other Inspectors. The Inspector checks and unfortunately, Wilma only booked one inspection. When she called 311, she only gave the Building Permit number and didn’t know she had to provide all three permit numbers. The Inspector explains what to do next time she calls and even looks up all the permit numbers for her.



Customer-centric information online would have helped Wilma understand the process to book an inspection

 The City of Calgary PLANNING, DEVELOPMENT & ASSESSMENT	
Project Description: Alteration – Basement Dev	Permit Number: BP2016-02085
Address: 301 Cobblestone Way, SE	Date: May 19, 2016 9:36 am
FRED FLINTSTONE	Phone#: (403) 600-0190
301 Cobblestone Way, SE	
CALGARY, AB, T3M 2C9	Email: Fred@gmail.com
Current Deficiencies: Do Building Framing Inspection NOT ACCEPTABLE 1. Correct and recall inspection 2. 9.10.9 Fire separations to be continuous, all holes must be repaired with 5/8 type x and must land on solid backing. 3. *9.8.7.4 Handrail to be 865 mm to 965 mm above the nosing on stairs. 4. 9.5.5.1 Door to mechanical room must be min 2’8”. 5. Bath exhaust fan must be completed to exterior	

ROADBLOCK: Customer has been told to call for inspection by 2 pm the day before she wants her inspection.

Recommendation	Service Improvement
Complete inspection business process redesign and then implement a Workforce management tool	<ul style="list-style-type: none"> ♦ Allows customers to select date and time (am or pm) for their inspections
Benefits to the City	
<ul style="list-style-type: none"> ♦ Process redesign eliminates non-value adding work ♦ Reduces manual effort to schedule inspections ♦ Allows Senior Inspectors to work in the field ♦ Eliminates overlap in duties 	



Now back to our story...

Wilma goes to work in the afternoon and Fred spends the rest of the day exchanging the door he bought and making the repairs so that they can pass the inspection. Armed with the permit numbers, Wilma calls to book the electrical and plumbing inspections for the next day.

The next day, both Inspectors review Fred’s work. Although they have some concerns, there are no significant safety concerns so the inspections are “Acceptable with Conditions”. This means Fred must fix some items but another inspection is not required at this stage of the project.

By Tuesday May 24, after a second Building Inspection, Fred and Wilma have “Acceptable” inspections on all three permits and can begin to put up the drywall.



Current City Project:

Inspection Service Commitment: Calgary Building Services offers a next day turnaround when a customer calls for an inspection by 2 pm. If the customer calls the morning of the scheduled inspection, they are told whether the inspection is scheduled for the morning or the afternoon. This level of service may be important to small builders or small business owners but is likely not as important to home owners who would prefer the convenience of booking in advance and deciding for themselves whether they want the inspection in the morning or the afternoon. The inspection process redesign and implementation of a workforce management tool for managing the logistics of inspections is part of the Field Service Delivery Program. The tool could offer a service improvement to all customer segments by allowing customers to select inspection times from an online calendar, providing more flexibility for customers and stronger long range planning for inspectors. This tool would help Operational Supervisors forecast workloads, manage inspections and routing, and ensure the right person was at the right job at the right time.



In anticipation of passing their final inspection, the Flintstones invited the Rubbles over to enjoy their newly renovated basement!

Additional Recommendations

Four additional recommendations will improve the customer’s experience during their journey.

CHALLENGE: The rules and processes regarding permits and licences are not easy to understand. Not all of them are reflected in the legislation.

Recommendation	Service Improvement	Benefits to The City
Apply a risk-based approach and remove discretionary business rules not supported by bylaws and standards	<ul style="list-style-type: none"> ◆ Permit processes can be simplified and put online ◆ Consistent process regardless of which channel the customer chooses ◆ Reduces risk of rules being applied inconsistently ◆ Identifies opportunities to challenge existing rules that no longer add value to the business/process/customer 	<ul style="list-style-type: none"> ◆ Clearly documented business rules reduce reliance on “tribal knowledge” ◆ Training new staff is easier

Past City Project:

Customer Advisory Service – OneWay Project: This project was initiated in November 2008 by the Manager of Customer Advisory Services with the intent to streamline the intake business processes for the services that his staff provide to both internal and external customers. During the OneWay project, it was determined that the problem was primarily related to undocumented and outdated business rules, rather than with the business processes themselves. Current business rules had multiple interpretations, various levels of understanding, and many were undocumented and were being passed on by word of mouth. Until business rules are clarified, documented and agreed to, it will be very difficult to provide services online to customers, as manual intervention or interpretation will be required at each stage of the application process. Differentiating between mandatory business rules, legislative business rules, and discretionary business rules will assist in the decision of what services can go online and how far into the process a customer can go before human intervention or decisions are necessary. Due to a lack of rigor around portfolio management, the opportunity to resolve these issues was lost as the OneWay project was never completed. The second focus area, Portfolio Management, will help address these lost opportunities.

CHALLENGE: Customer has to get permits that are not related to safety or land use (E.g. Permit for an air conditioner)

Recommendation	Service Improvement	Benefits to the City
Review citizen complaints and move rules to the appropriate bylaw for enforcement	<ul style="list-style-type: none"> Reduces the number of development permits (DP) and/or relaxation permits required by the customer Reduces costs and time for customer 	<ul style="list-style-type: none"> Allows City to manage the rules that do not apply to land use through Community Standards and other appropriate bylaws Aligns enforcement with the appropriate bylaw

Bylaw Change Considerations

The City of Calgary Land Use Bylaw (LUB) is a discretionary bylaw that allows a customer flexibility in what they want to do, but at the same time creates complexity for understanding the limitations and boundaries of the rules. Staff who are most familiar with the bylaw and the challenges of their customers suggest that consideration be given to removing specific items from the LUB or moving the items to other bylaws:

- Section 134 of the LUB states that Outdoor Speakers are not allowed on outdoor cafes. This rule can be relaxed within the LUB, but it should be managed in **Community Standards** as a noise concern
- Air Conditioning Units are managed by the LUB. If the concern is noise, it belongs in the **Community Standards** bylaw
- Rules regarding Roof Drainage on Accessory Residential Buildings are covered in the **Drainage Bylaw**. This is also covered in the LUB and should be removed as it is redundant
- Rules regarding Window Wells require a free and clear side yard. This is not supported by the Alberta Building Code, and the Calgary Fire Department has alternative measures to gain entry to a property. This rule could be removed from the LUB
- Section 54 of the Traffic Bylaw addresses the Corner Visibility Triangle. (A person shall not build, place, erect or allow to continue in existence a fence, wall or structure, other than a building on private property, within a corner visibility triangle to a height greater than 750 millimetres.) The LUB requires a home owner to apply for a Development Permit if a fence in the corner visibility triangle exceeds the lowest elevation of the street by more than 0.5 m. This is contradictory and should be removed from the LUB

CHALLENGE: The City does not currently capture data based on customer segmentation

Recommendation	Service Improvement	Benefit to the City
Capture operational data for meaningful performance measurement	<ul style="list-style-type: none"> Allows The City to have a better understanding of their customers Provides the ability to identify service improvements 	<ul style="list-style-type: none"> Clear measurement of desired outcomes Reduces amount of manual manipulation to get data Single source of data reporting

During an earlier phase of the ZBR, Corporate Initiatives worked with PD to identify their customer segments and develop customer profiles. Up until this point, PD had not viewed its customers by segments. As a result, very little data is available to inform the Department about each segment. As the City moves to a service based budget model, it will be important to have meaningful data available by customer segment, service and product.

CBS Field Service Delivery Program - Risk Based Inspections

Building Regulations, a division of CBS, has managed safety code inspection services using risk management principles informally for years. As part of the Field Service Delivery program, a formal Risk Management policy with documented guidelines will enable CBS to gain greater efficiency while continually improving the service experience and risk mitigation for The City. The program will develop, document, and implement a Building Regulations risk management policy and framework to provide standards and consistency, more effective workload and risk management, and prepare for field management automation.

The outcome of the policy and framework will provide staff with a clear understanding of what risk management means for the business and how to practically apply risk management principles. This promotes a more level playing field and ensures that limited resources are focused on high value activities.

Recommendation	Service Improvement	Benefits to The City
Formalize risk-based decision-making for the Inspectors	<ul style="list-style-type: none"> ♦ Reduces number of inspections on low risk projects 	<ul style="list-style-type: none"> ♦ Focuses attention of Inspectors on high risk areas ♦ Fewer inspections for low risk projects allows Inspectors to address backlog

3.3 Small Business Owner Story and Recommendations

Below is the actual story of a customer who started a business. Her name has been changed to protect her privacy. In this particular story, the customer did not require construction or development permits.



Figure 3

Georgina Slate is a busy mom of two with sparse eyebrows and doesn't have time to draw them in daily. She decides to get permanent eyebrows. It makes such a difference in her life that she decides she wants to open a business to do the same for others. She takes some courses at Marvel College and BioTouch Alberta, and she is now ready to open up her own business.

She goes online to Calgary.ca, finds BIS (Business Information System) and enters her address, answers a few questions about her business, and determines she needs a Home Occupation Permit 2. In very small print at the bottom of the page, she sees that she is only registering her business, not obtaining a license and that she can't pay online. She calls 311 who transfer her to Calgary Building Services (5311) to pay. As Georgina talks to the Planning Services Technician (PST), she learns that she actually needs a Development Permit (DP) before she can get her Business Licence. A DP means that the City has to advertise Georgina's request to run a business from her home to provide neighbors with an opportunity to express any concerns they may have. Anxious to comply, she decides to head downtown the next day.



Customer-centric information online would have helped Georgina understand the process

ROADBLOCK: Small business owner can't pay for business licence online

Recommendation	Service Improvement
Upgrade & complete the technology solution to enable small business owners to pay online through registered access	<ul style="list-style-type: none"> ♦ Reduced wait time to obtain business license ♦ Clear understanding of expectations and sequence of requirements to start a business

Past City Project:

Business Registration (BIS): BIS is an online tool that helps prospective business owners determine if and what type of business license they require. The user responds to a series of questions or enters basic information and the tool determines what type of business license is required. The business can then be registered online. BIS currently requires a significant upgrade and today, the user has to call The City or travel to City Hall to pay for their licence. Upgrading BIS and allowing online payment is the next step in completing the process for the customer.



Now back to our story...

The next day on January 27, 2016, Georgina drops off the kids with a neighbor and heads downtown. Luckily, she takes the last spot in short-term parking at the Municipal Building. She waits on the third floor and then works with the Planning Services Technician to complete her application for a Development Permit.

At this point, Georgina has to wait for The City's decision. Her application is reviewed internally and The City expresses some concerns. Georgina moves her RV so that customer parking is not a concern, clarifies how much of her home will be devoted to her business, and explains that her company will advertise on social media. There are no concerns from neighbors, the ward councillor, or the community association; and her application is approved at the end of February. Thrilled, she launches her website and opens for business. Unfortunately, she doesn't realize that she still doesn't have a business licence!

ROADBLOCK: Internal City processes are complex and external agencies may be involved as well. It's difficult for a customer to understand how to comply

Recommendation	Service Improvement
Use the small business owner customer journey to create a holistic sequence of compliance requirements across all stakeholder agencies	<ul style="list-style-type: none"> ♦ Cohesive service experience ♦ Eliminates unexpected costs/delays to the small business customer



Anecdotal Roadblocks from City Staff

Depending on the nature of the business and its location, any number of City Departments (such as PD, Fire, Animal Bylaw Services) and external agencies (Alberta Motor Vehicle Industry Council, Alberta Health Services, etc.) may be involved with the approval of a new business. Anecdotal evidence suggests that small business owners are frustrated by the process and numerous hand-offs. There have been cases where the Fire inspection at the end of the customer journey identified issues related to the Building Code that could cost up to \$50,000. This is very frustrating and costly for a customer to hear so late in the process.

In another case, a small business owner wanted to run his car business out of a home office while storing the vehicles at a warehouse. The City approved his application and the customer signed a lease for the warehouse after paying for a \$700 discretionary change of use permit. Later, Alberta Motor Vehicle Industry Council (AMVIC) rejected his application as their business rules dictated the office and warehouse had to be at the same address. In order to be in full compliance with all agencies, the customer had to find another location for his business.

In the past, The City has tried to tackle small business owner issues by addressing the individual products. This has had limited success as it looks at only the symptom of the problem. The reality is that the processes a business owner must follow to comply are varied and complex. The City needs to work with other agencies and look at the process from the small business owner's perspective to address the root cause.



By May, Georgina's (unlicensed) business is doing well enough that she decides to renovate her garage to serve as space for her business. Rather than try to navigate The City's approval process again, she elects to hire contractors who pull the permits on her behalf. This is a common practice with small business owners to avoid dealing with The City.



3.4 Synopsis of Recommendations for Business Model Service Simplification

Key Recommendations:

1. Provide services to home/small business owners that enable customers to be self-directed. As a result, both The City and customers are more efficient and effective in building and maintaining a safe city
2. Improve home/small business owner processes and supporting business rules by using a risk based approach. Rationalize business rules based on bylaws and safety codes, and eliminate legacy rules

Current Issue	Recommendation	Future	Benefits
Home owner visits retailers to do research Business owner looks for retail location with commercial realtor Information is hard to find and is often inconsistent	Develop and implement a formal customer contact/education strategy that supports a proactive approach in the community	<ul style="list-style-type: none"> ♦ Home owner receives information about permit requirements prior to or at the time of materials purchase ♦ Business owner receives information about licence requirements, change of use permits, etc. early in the process and in the right sequence 	<ul style="list-style-type: none"> ♦ Home/small business owner understands where City processes impact their journey ♦ Information is consistent, timely, and up-to-date
	Create a home/small business owner relationship role responsible for the education and sustainment of customer information		
	Develop partnership programs with stakeholders who provide services to home/small business owners		

Current Issue	Recommendation	Future	Benefits
Home owner can't easily find or understand information on Calgary.ca	Simplify and guide the customer journey by creating online navigable content where the needs, wants & limitations of the customers are taken into account	<ul style="list-style-type: none"> ♦ Home owner can independently determine their permit/licence requirements 	<ul style="list-style-type: none"> ♦ Home owner can access information anytime, anywhere ♦ Fewer repeat visits to the counter ♦ Increased accuracy of applications by home/small business owners ♦ Reduced risk of rework and cost of revising drawings (home/small business owner costs) ♦ Calls to Technical Assistance Centre (TAC) are more effective as the focus is on specific content and not general information ♦ Fewer calls to 311/5311 ♦ Fewer follow up inspections required as customers are better informed before they begin ♦ Reduced non-compliance relaxations
Home/small business owner is required to come downtown or call 311/5311 for assistance	Roadmap, design and pilot online chat channel	<ul style="list-style-type: none"> ♦ Home/small business owner has options to choose from – in person/ by phone /online chat 	<ul style="list-style-type: none"> ♦ Home/small business owner has choice of channels and can use according to their preference ♦ Increased efficiency as online chat allows Planning Service Technicians (PST) to handle multiple calls at one time
Home owner is required to supply paper copies of documents (forms, drawings, etc.)	Accept digital documents from home owners	<ul style="list-style-type: none"> ♦ Home owner can provide digital documents (USB, email, etc.) 	<ul style="list-style-type: none"> ♦ Eliminates scanning of documents when request is complete ♦ Increases file management efficiency

Current Issue	Recommendation	Future	Benefits
Home owner is required to print off and complete application form	Provide electronic submission and processing of home owner applications and payments	<ul style="list-style-type: none"> ♦ Home owner fills out information online ♦ Application is validated for complete requirements at time of submission 	<ul style="list-style-type: none"> ♦ Home owner avoids travel costs and parking fees ♦ Reduces costs of investigating old files as PD staff can search online ♦ Reduces the effort/cost to track down paper files ♦ Online permits reduce annual corporate costs for Iron Mountain by reducing paper files ♦ Intake to approval of application is faster
Home owner is required to come to the Municipal Building to apply, pay for & pick up permits	Issue home owner permits at City multi-use locations as per Council mandate	<ul style="list-style-type: none"> ♦ Home owner can go to a more convenient location 	<ul style="list-style-type: none"> ♦ Home owner saves travel time and parking costs
Difficult for City staff to communicate requirements to customers as rules are not well documented, understood or consistently applied	Apply a risk-based approach and remove discretionary business rules not supported by bylaws and standards	<ul style="list-style-type: none"> ♦ Less reliance on 'Tribal' knowledge ♦ Identifies opportunities to challenge existing rules that no longer add value to the business/process/customer 	<ul style="list-style-type: none"> ♦ Consistent process regardless of which channel home owner chooses ♦ Easier for staff to challenge business rules that no longer add value ♦ Removes business rules that are no longer valid ♦ Fewer business rules for staff to manage
Home owner is required to get permits that appear to have no relation to safety or land use	Review citizen complaints and move rules to appropriate bylaw for enforcement	<ul style="list-style-type: none"> ♦ Nuisance issues are managed in the appropriate bylaw ♦ No duplication of rules in different bylaws 	<ul style="list-style-type: none"> ♦ Reduces the number of Development Permits a customer has to get ♦ Saves the home/small business owner time and money
Home/small business owner calls the day before to schedule an inspection	Complete inspection business process redesign and then implement a workforce management tool	<ul style="list-style-type: none"> ♦ Home/small business owner can call or go online to schedule the date and time of day they want an inspection 	<ul style="list-style-type: none"> ♦ More convenient for the home/small business owner ♦ Reduces manual effort to schedule inspections

Current Issue	Recommendation	Future	Benefits
Inspectors may apply same level of rigor to all inspections (even low risk projects)	Formalize risk-based decision-making for Inspectors	<ul style="list-style-type: none"> Inspectors apply consistent professional judgement to inspections based on standards and safety rules 	<ul style="list-style-type: none"> Inspectors are focused on high risk areas City can address inspection back log
Meaningful data not available or has to be extrapolated	Capture operational data for meaningful performance measurement	<ul style="list-style-type: none"> City has data available by customer segment, process, service, product 	<ul style="list-style-type: none"> Clear measurements of desired outcomes Reduces manipulation of data to get meaningful measurement
Small business owner can't apply or pay for business licence online	Upgrade and complete the technology for small business owners to enable online payment through registered access	<ul style="list-style-type: none"> Small business owner applies for and receives business licence online Small business owner renews licence online 	<ul style="list-style-type: none"> More convenient for the small business owner Small business owner can complete the process online
Small business owner doesn't know who all the approving stakeholders are, the sequence and the requirements	Use the small business owner customer journey to create a holistic sequence of compliance requirements across all stakeholder agencies	<ul style="list-style-type: none"> Small business owner has a seamless process 	<ul style="list-style-type: none"> Small business owner gets necessary approvals from the right governing body in the right order

3.5 Additional Projects that Align to the Recommendations

City of Calgary Digital Strategy

In July 2014, City Council approved the Digital Strategy and the ZBR recommendations align directly to it. One of the Digital Strategies major objectives is to have accessible services which includes “an obligation to understand the customer and provide a useful interaction.”ⁱ

CBS Field Service Delivery Program

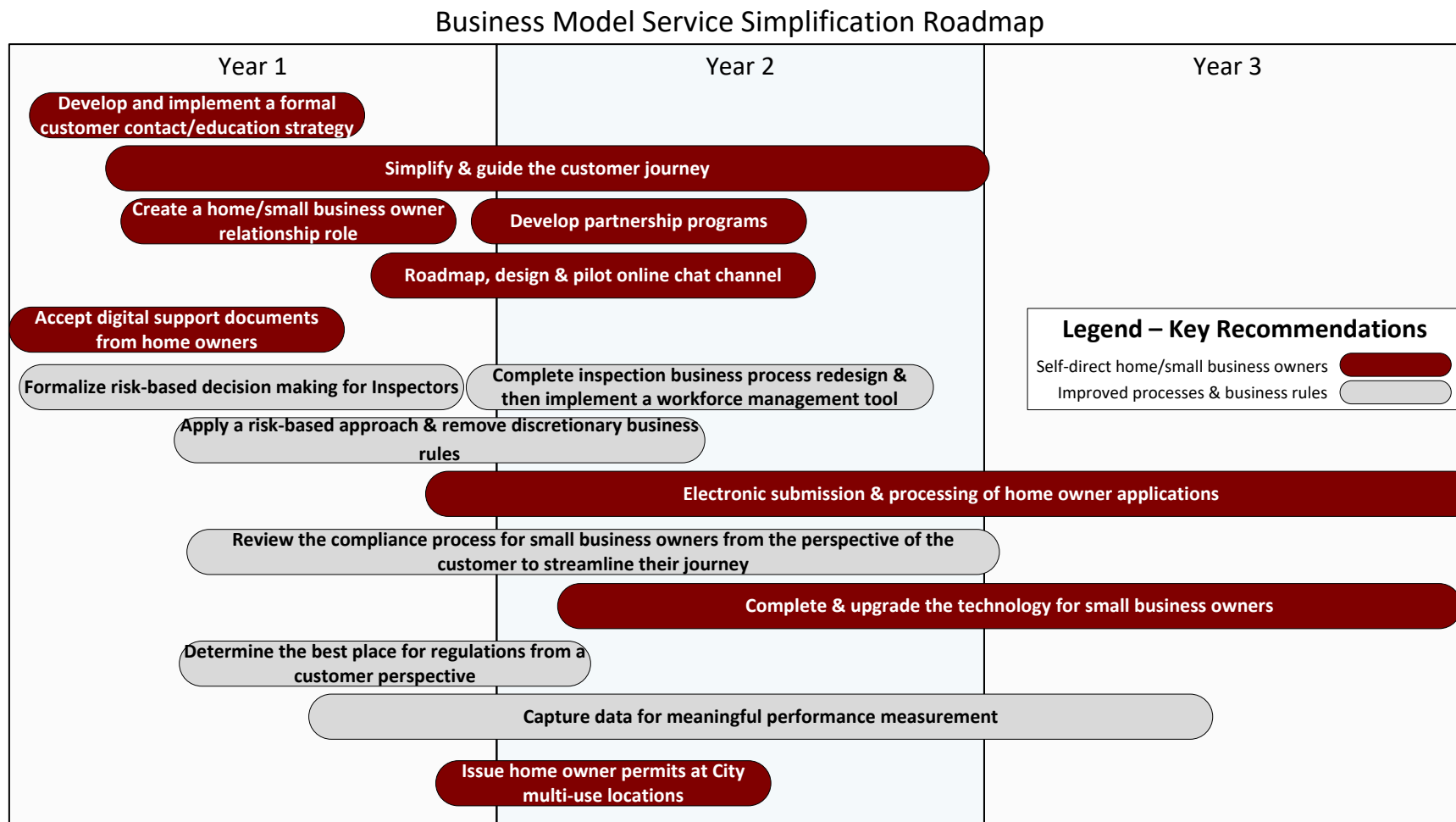
This program has been inflight for several years. The program was put on hold 2014-2016 and is now in full flight. The recommendations specifically related to inspections and the Safety Codes Officers/Development Officers (Inspectors) are well underway with this program.

eServices

In 2010, the eServices program was started to put permit applications online. Since that time, CBS has focused on digital services for trades, large developers, and most recently, commercial home builders. Online services for home owners is currently identified as a future project and the eServices team has been working closely with IT to enable “MyID” to support the home owner customer segment. Their efforts to provide online services for builders were publicly recognized.

3.6 The Business Model Service Simplification Roadmap

A roadmap of the recommendation was produced to support the inherent need for all recommendations to be completed in order to support the efficiencies and service level improvements.



3.7 Corporate Alignment

The recommendations enable key outcomes that directly align to Council priorities, PD business plan outcomes, and reflect the corporate culture.

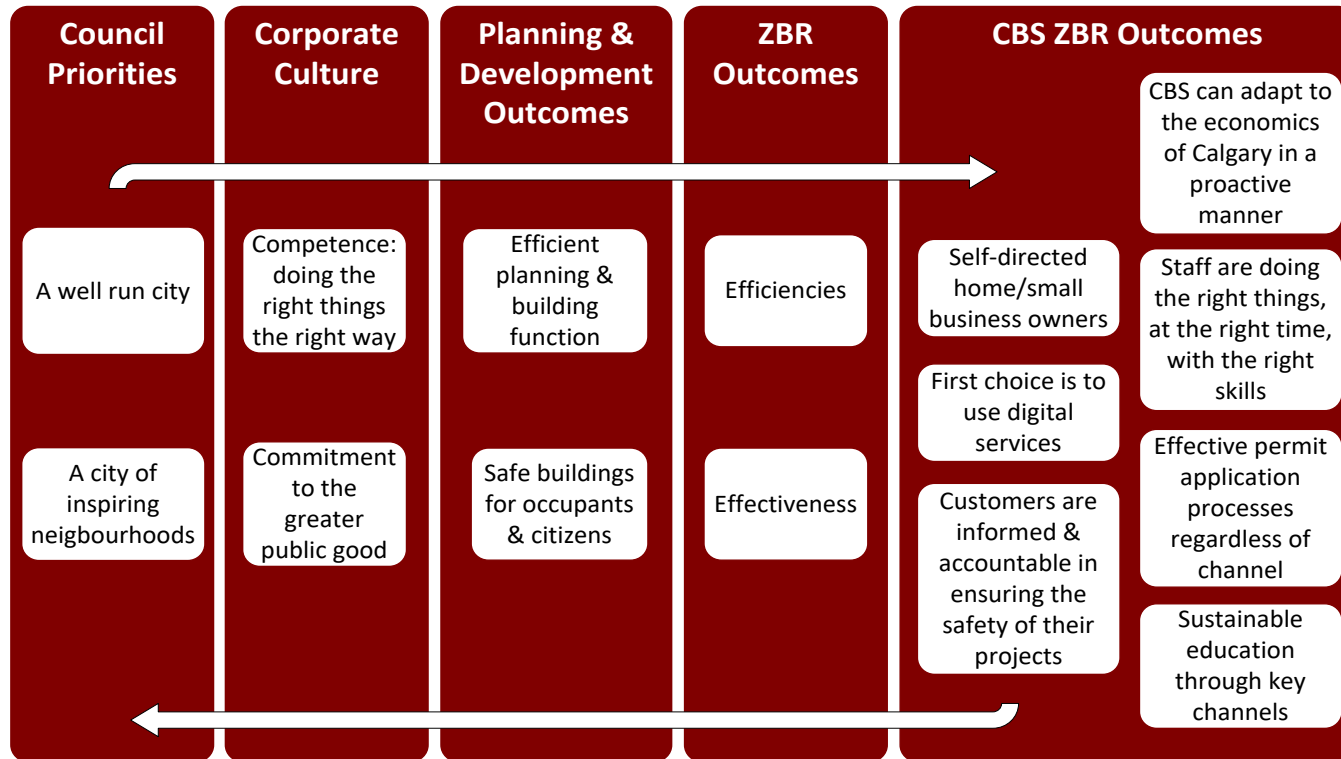


Figure 4 – Business Model Service Simplification directly aligns to outcomes at all levels

3.8 Business Case – Business Model Service Simplification

The business case supports the ZBR objective to simplify the CBS service model for home/small business owners. A single business case has been developed to align and integrate the recommendations, as no single recommendation implemented by itself can produce the desired cost savings, cost avoidance, or service improvements.

A significant cultural change is required within CBS and PD as a whole to become customer centric for all of the customer segments including home/small business owners.

3.8.1 Improving the Customer Journeys

Creating self-directed home/small business owners is about providing improved services to CBS customers. Improving the journey will enable customers to find information when they need it and in a way they can easily understand. This requires CBS to proactively reach out to customers using a variety of channels rather than reacting to customers who reach out to CBS. It reduces the overload of choices by identifying where a home owner or small business owner journey starts, and clearly identifies expectations for complying with bylaws and codes when completing their permit or license application.

According to the Organization for Economic Cooperation & Development (OECD), the uptake of government e-services in Canada (2010) was over 45%.ⁱⁱ A 60% adoption of online permit and business license processing within two years of all recommendations being implemented is reasonable to expect.

3.8.2 CBS Business Environment

Home owners currently make up 66% of the customer base in PD but a mere 4% of permit fees, making each interaction with this customer group cost-prohibitive and unsustainable. Business owners represent 13% of the customer base, yet are only responsible for another 4% of the fees. Both of these customer segments require a high degree of support from CBS as they are not typically repeat customers who, over time, will become familiar with the process. Customer Advisory Services, including the Front Counter and Business Unit call centres, provides the initial contact with all customer segments. In 2015, 202K customer contacts occurred at a cost of \$65/contact. Implementing the recommendations will provide higher levels of service to all customer segments by offering additional channels for service. Ultimately, this will improve customer service and reduce the cost per contact with this customer segment. The cost per contact is expected to drop by 23% after year five (\$50) when all recommendations are implemented. This equates to a 24% service improvement in customer contact and experience with The City.

A balance between uncovering cost savings and maintaining or improving services levels is an important driver in the analysis and recommendations. Key drivers include:

- ♦ Enable the customer experience to be faster, easier, and more consistent
- ♦ Simplify the services and products, in order to move them online as part of eServices
- ♦ Reduce administrative burden from complex processes and business rules

3.8.3 Case for Change – Gap Analysis

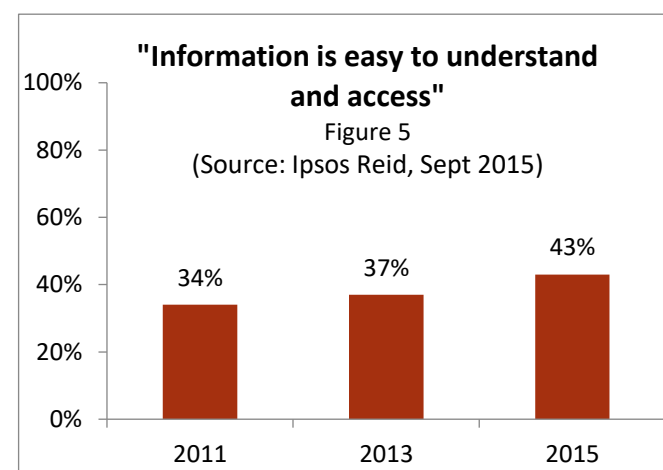
Ipsos Reid published a customer satisfaction survey in 2015. 43% of PD's customers felt the information provided by PD was easy to understand and access.

Based on the assumption that 79% of PD's customers (home/business owners) will not typically do business with PD regularly (as opposed to Developers, Builders, Trades and Contractors), it is important to design information from the customer's point of view. Otherwise, this customer segment will continue to require costly support.

During the week of May 30 to June 3, 2016, Customer Advisory Services kept a tally of the count of customers at the third floor.

- ♦ 67% of customers had accessed Calgary.ca before coming downtown
- ♦ 10% had come to the counter at least twice for the same application

A customer-centric design of permit information will improve these measures.



Citizen Expectations

In an earlier phase of the ZBR, Corporate Initiatives identified the following themes related to customer expectations:

- ♦ A predictable, consistent experience
- ♦ Simpler processes and a clear understanding of what's required in their application
- ♦ More convenient access to services (e.g. online, expanded hours)
- ♦ Flexible processes that meet their specific needs and situations
- ♦ A seamless experience

Statistics Canada's Internet Use Survey 2012ⁱⁱⁱ identified that almost ninety-two percent (91.8%) of Calgary households have access to the internet at home. The internet is now used for purchases, banking, education, research, news, and entertainment. When family and friends are included in the customer journey as touchpoints, the number is likely closer to 100%. Customers expect to have the ability to access services on-line.

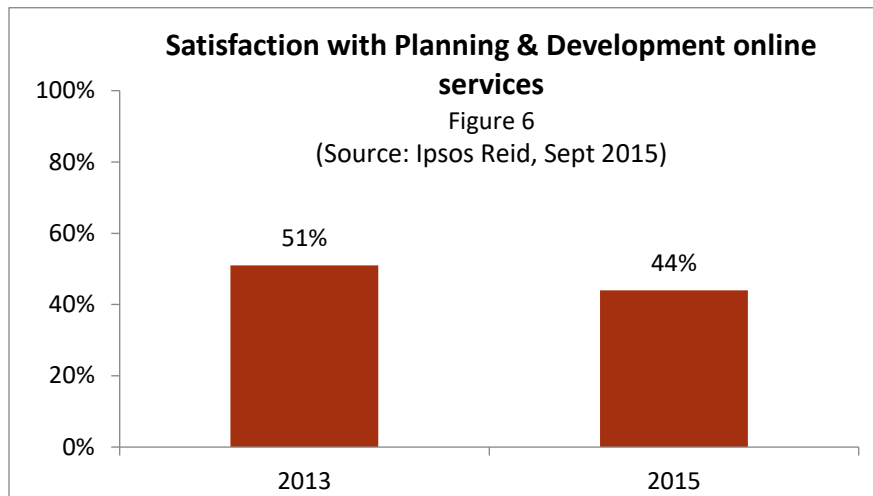


Figure 6: Customer satisfaction with PD's ability to provide online services is trending downward

3.8.4 Benchmarking - Other Municipalities

According to Impact Information, “experts recommend writing documents intended for the general public at the 9th-grade level, and health and safety information at the 5th-grade level.^{iv}” Much of what Inspectors are concerned about when doing inspections of home renovations is the safety component. Therefore, The City should aim for a grade five reading level for online information.

The benefits of using Plain Language have been shown by other organizations. A Plain Language revision of 200 forms used by Alberta Agriculture, Food, and Rural Development saved the Department a total of \$3.4 million per year.^v

In May 2016, a number of city websites were compared. From the appropriate government homepage, the ease of navigation was tested by searching on the word ‘permit’ and determining how many ‘clicks’ it took to get to information on how to submit a permit application to build a garage. Scoring was:

- Excellent – 1 to 2 clicks
- Good – 3 to 5 clicks
- Moderate – 6 to 8 clicks
- Poor – Couldn’t find the appropriate information on the first try or took more than 8 clicks

After the correct page was arrived at, the information was scored for Plain Language by applying the Flesch-Kincaid formula. This formula identifies the grade level of the language used. Another measure of usability was whether the site contained effective visuals like diagrams or pictures that helped the user understand.

Site	Navigation	Plain Language Score	Visuals
Calgary.ca	Poor	8	Yes
Edmonton.ca	Good	12	No
Oshawa.ca	Excellent	9	No
Vancouver.ca	Good	9	No
San Antonio.gov	Good	6	Yes
Planningportal.co.uk	Excellent	16	Yes (interactive)

Calgary rated well with a grade eight level for Plain Language. San Antonio has the lowest grade score for their new online tool for customers called, “Homebase” (user centric design).

Additional research was conducted on comparable cities. The focus of the comparable study was whether or not these cities had similar problems, and if so, how had they addressed them.

Assumptions are as follows:

- ♦ All Cities viewed except for Calgary have a zoning land use bylaw. Calgary has a discretionary land use bylaw
- ♦ Applies only to home owner or small business owner processes and applications
- ♦ If services for other customer journeys are online (i.e. trade permits), then they are not counted in the stats below
- ♦ Online means a system built specifically to intake and approve the permit application. Email or fillable PDF is not considered online

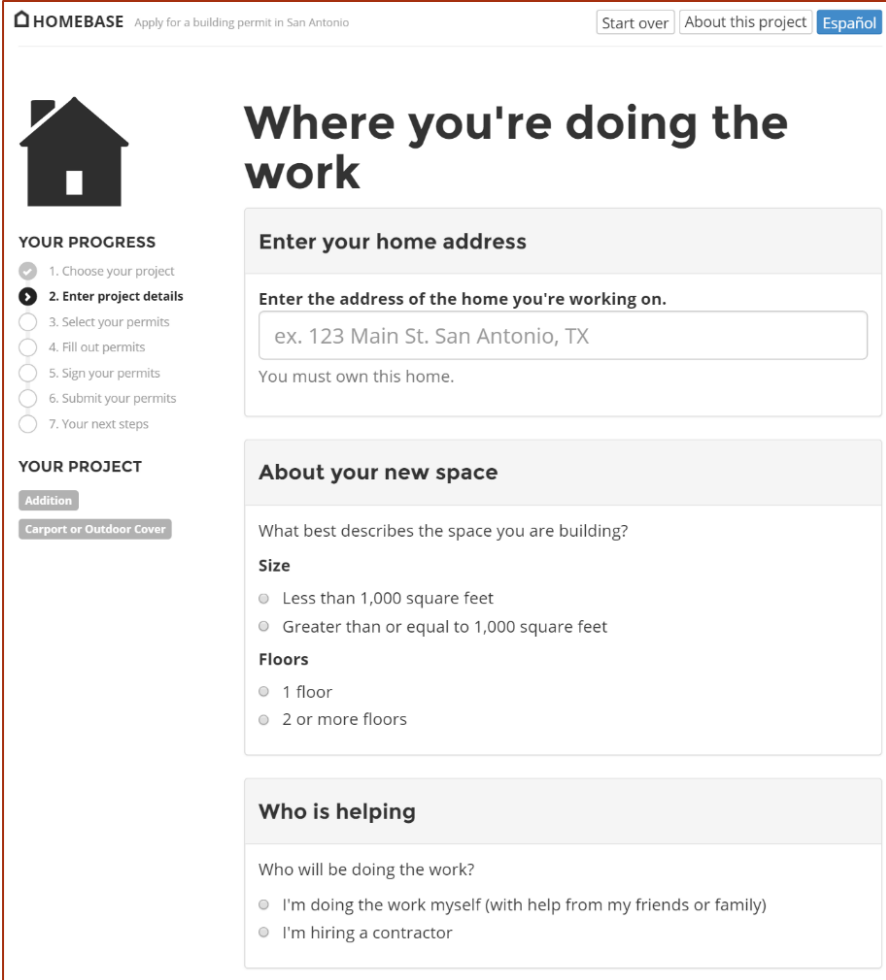
	Calgary	Edmonton	Vancouver	Oshawa	San Antonio	United Kingdom
Rationale for selecting as a comparative city	N/A	Peer city	Peer city	Canadian - customer-centric design	North American – customer-centric design	Early adopter – customer-centric design
Land Use Bylaw	Discretionary	Primarily Zone	Zone	Zone	Zone	Zone
Plain Language (grade level)	8	12	9	9	6	16
Home owner Online Services	No	No	No	No	Yes	Yes
Small business Online Services	No	No	Renewals only	No	Renewals & limited other	N/A
Home owner secure login	No	Yes	Yes	No	Yes	Yes

Customer Centric Online Sites


The United Kingdom has provided planning and permitting online since 2002. As part of their Citizen First initiative, the UK Government established the Planning Portal to provide an entry point to online planning information and allow for planning/permitting applications in England and Wales to be submitted electronically. Their first electronic application was available in 2003 and in 2004. They launched their Interactive House, a simple and visual route into planning guidance and advice. In 2006, the Planning Portal won the Central Government Website award for its originality and easy to use navigation and features to aid users. The project was completed in 2008 and reduced the number of form variations

from 12,000 to one. In 2010, the website was part of the UK Governments initiative to collaborate with the public sector. In 2011, 50% of all planning applications were submitted through the portal. By 2014, 80% were submitted online, which is 12 years after inception. The Planning Portal became a private entity in 2015.

The city of **San Antonio**, partnered with Code for America^{vi}, is a non-profit organization “on a mission to make government services simple, effective, and easy to use”. They designed Homebase^{vii}, an online tool that allows home owners to apply for permits required to make home improvements. The left side of the page informs the home owner where they are in the process. The main part of the page asks questions from the home owner’s perspective and makes it simple and easy to use. The application is built based on the principles of user-centered design. Plain language, simple visuals and step-by-step questions walk the home owner through the process. The home owner selects the product (Deck, Fence, Addition, etc.) and enters a few details (by answering questions) that determine the types of permit(s) required. The home owner then fills out and signs the permit application, submits it, and is ready to go.



HOMEBASE Apply for a building permit in San Antonio [Start over](#) [About this project](#) [Español](#)



YOUR PROGRESS

1. Choose your project
2. Enter project details
3. Select your permits
4. Fill out permits
5. Sign your permits
6. Submit your permits
7. Your next steps

YOUR PROJECT

[Addition](#)

[Carport or Outdoor Cover](#)

Where you're doing the work

Enter your home address

Enter the address of the home you're working on.

ex. 123 Main St. San Antonio, TX

You must own this home.

About your new space

What best describes the space you are building?

Size

- ☐ Less than 1,000 square feet
- ☐ Greater than or equal to 1,000 square feet

Floors

- ☐ 1 floor
- ☐ 2 or more floors

Who is helping

Who will be doing the work?

- ☐ I'm doing the work myself (with help from my friends or family)
- ☐ I'm hiring a contractor

In September 2014, Robert Rivard interviewed Maya Benari from Code for America¹ about their work with San Antonio. The following statement describes why San Antonio applied and was selected to be a 2014 Code for America partner.

“After speaking with homeowners who face significant challenges when improving their home, we felt there was a need to build a resource that’s easy to access, navigate, and understand. We made a simple step-by-step guide using plain language and cleaner, more intuitive design to help San Antonians get started improving their homes. The work of fixing up your house is hard enough without struggling through a complicated government form, getting your permit to do your work legally should be easy to do.”

¹ Code for America is a national non-profit that believes government can work for the people, by the people, in the 21st century (excerpt from their website).

3.8.5 Impact Analysis

Kogawa proposes implementing all the recommendations identified for service model simplification. This is the best option for return on investment, and achieves the efficiencies and effectiveness improvements The City is expecting to realize. Historically, there have been several projects within CBS that have started and not completed due to conflicting and reassessed priorities. Implementing all the recommendations will take time, money, and perseverance to achieve the identified service improvements and avoided costs. Kogawa considered a variety of partial recommendation combinations as options, but there were no significant service improvements to warrant the financial investment.

A status quo option has an adverse effect and will increase the customer contact cost to \$78/contact. This is a 20% increase in costs for CBS after five years with a 4% growth. Similarly, if customer contact volumes drop, the cost per contact will increase.

Proposed Option	Pro	Con
Implement all the recommendations identified for service simplification	<ul style="list-style-type: none"> Delivers the biggest benefits to the customer segments Aligns to the Digital Strategy Collectively provides the highest cost savings/avoidance to CBS Meets customer expectations for online services Creates self-directed customers for a high volume segment Lowers cost per customer Increases accessibility of information for home and small business owners Reduces wait times for application approvals Reduces volumes of calls to 311/5311 Reduces counter visits Saves the customer time and money Gains customer and user centred service improvements 	<ul style="list-style-type: none"> Is the most expensive and time-consuming option to implement Requires a high degree of change in CBS May have HR impacts if significant change in roles and responsibilities results in new JEQs/pay levels Benefits won't be realized in the short term This is a 3-5 year implementation Requires extensive and long term commitment by PD leadership team Requires alignment to service improvements for other customer segments

3.8.6 Cost/Benefit Analysis

Based on market trends, industry baselines, and the current adoption rates of eServices; the cost benefit analysis assumes a moderate adoption rate of online services by home/small business owners. The one-time capital investment estimates are based on current knowledge and expectations, and are subject to review during detailed planning of the projects. A detailed breakdown and supporting analysis has been provided to the CBS business unit.

Summary of Efficiencies & Service Improvements	5 Year Cumulative Efficiency Gains	Implementation Estimate
Implementing online services for home owners - self-directed customers	\$ 2,041,882	\$ 8,120,000
Accepting electronic files from home owners for major renovations	\$ 40,451	\$ 50,000
Implementing online services for small business owners	\$ 1,075,620	\$ 3,000,000
Redirected cost of plans examination from the 3rd floor counter	\$ 252,000	
Implementing tools to support Inspections for home/small business owners	\$ 2,838,000	\$ 1,629,030
Improvement by moving to formal risk based inspections for home owners	\$ 1,246,680	
5 Year Cumulative Total	\$ 7,494,633	\$ 12,799,030
Yearly Average	\$ 1,498,927	

3.8.6.1 Financial Analysis

Supporting Key ZBR Recommendation	Cost Savings or Avoided Costs	One Time Investment
Self directed home/small business owner journey	Implementing online services for home owners Accepting electronic files from home owners for major renovations Redirected costs of plans examination from the 3 rd floor counter	<ul style="list-style-type: none"> ♦ One-time cost for online chat ♦ One-time cost for home owner online permit applications ♦ One-time cost for Calgary.ca user centric content & technology ♦ One-time cost to support digital submission of files

Supporting Key ZBR Recommendation	Cost Savings or Avoided Costs	One Time Investment
Self directed small business owner journey	Implementing online services for small business owners	♦ One-time cost for business license online
Improved processes & business rules using a risk based approach	Implementing tools to support inspections for home/small business owners Improvement by moving to formal risk based inspections for home owners	♦ One-time cost for new tools for field staff and inspection processes

A five-year period was used for the cost/benefit analysis.

- ♦ One time investments are the project cost to support the implementation of the recommendations, for a total of \$12.8M. Explanation of these costs and further details were provided to the CBS business unit
- ♦ Benefits, both costs savings and costs avoided/redirected, as a result of the projects, for an annual savings of \$3.5M after year 5
- ♦ All projects are expected to be completed during year three resulting in full benefits realized by year 5

ZBR Recommendations Cost/Benefit Analysis - Business Model Simplification							
Business Unit: Calgary Building Services							
Description	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total Investment
ONE TIME INVESTMENT							
One time cost for online chat	\$ -	\$ 260,000	\$ 260,000	\$ -	\$ -	\$ -	\$ 520,000
One time cost for home owner online permit applications	\$ -	\$ 1,600,000	\$ 2,000,000	\$ 2,000,000	\$ -	\$ -	\$ 5,600,000
One time cost for calgary.ca user centric content & technology	\$ -	\$ 500,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 2,000,000
One time cost for new tools for field staff and inspection processes	\$ -	\$ 814,830	\$ 814,200	\$ -	\$ -	\$ -	\$ 1,629,030
One time cost to support digital submission of files	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
One time cost for business license online	\$ -	\$ 1,500,000	\$ 1,500,000	\$ -	\$ -	\$ -	\$ 3,000,000
Total Costs	\$ -	\$ 4,724,830	\$ 6,074,200	\$ 2,000,000	\$ -	\$ -	\$ 12,799,030
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Annual After Year 5
BENEFITS							
Cost Savings							
Implementing tools to support Inspections for home/small business owners	\$ -	\$ 567,600	\$ 567,600	\$ 567,600	\$ 567,600	\$ 567,600	\$ 567,600
Improvement by moving to formal risk based inspections for home owners		\$ 249,336	\$ 249,336	\$ 249,336	\$ 249,336	\$ 249,336	\$ 249,336
Yearly Total Savings	\$ -	\$ 816,936	\$ 816,936	\$ 816,936	\$ 816,936	\$ 816,936	\$ 816,936
Cost Avoided or Redirected Costs							
Implementing online services for home owners - self-directed customers	\$ -	\$ 366,166	\$ (138,694)	\$ 431,553	\$ 759,488	\$ 623,368	\$ 2,041,882
Accepting electronic files from home owners for major renovations	\$ -	\$ 3,596	\$ 7,191	\$ 8,989	\$ 9,888	\$ 10,787	\$ 10,787
Redirected cost of plans examination from the 3rd floor counter	\$ -	\$ 18,000	\$ 36,000	\$ 60,000	\$ 66,000	\$ 72,000	\$ 72,000
Implementing online services for small business owners	\$ -	\$ -	\$ -	\$ 215,124	\$ 322,686	\$ 537,810	\$ 537,810
Total Cost Avoided or Redirected	\$ -	\$ 387,762	\$ (95,502)	\$ 715,666	\$ 1,158,062	\$ 1,243,965	\$ 2,662,479
Yearly Financial Benefits	\$ -	\$ 1,204,698	\$ 721,434	\$ 1,532,602	\$ 1,974,998	\$ 2,060,901	\$ 3,479,415
Cumulative Financial Benefits		\$ 1,204,698	\$ 1,926,132	\$ 3,458,734	\$ 5,433,732	\$ 7,494,633	

The above analysis is based on adoption reaching 60% by year 5. If adoption by home/small business owners occurs more rapidly, the return on investment will take a shorter period of time. In addition, several of the recommendations apply to other customer segments and further efficiencies can be gained. This will improve the current 6-7 year payback period when benefits are fully realized.

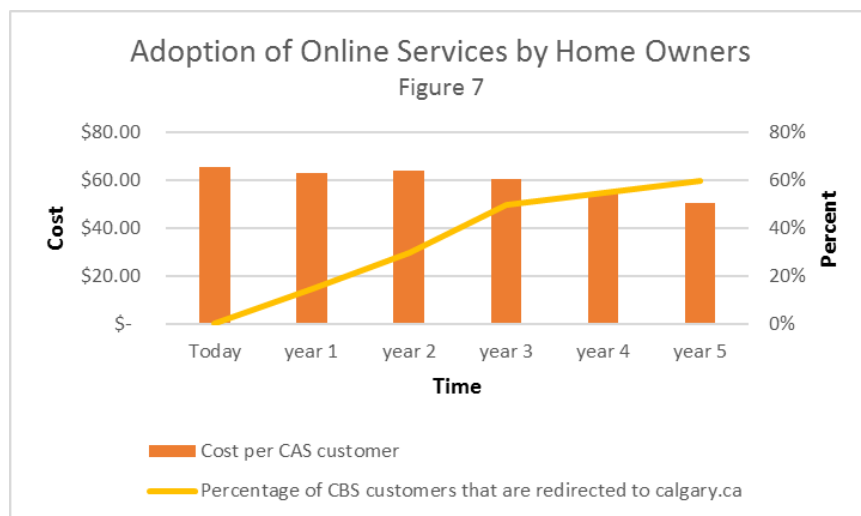
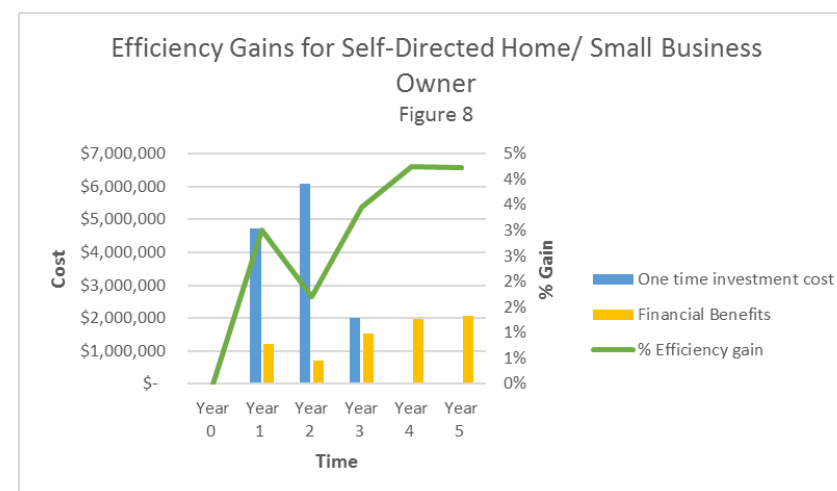


Figure 7: The enablement of a self-directed customer through the online channel is anticipated to reach 60% adoption at year 5, creating a 23% drop in cost per customer contact to \$50

Figure 8: Efficiency gains for CBS services that support home/small business owners is 4% overall. The avoided costs (financial benefits) are an average of \$1.5M per year.



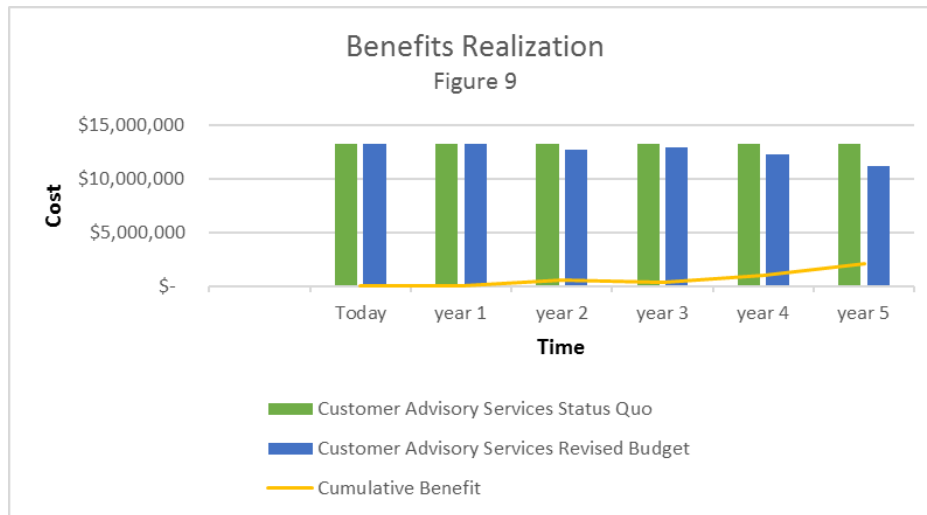


Figure 9: Benefits realized over a 5-year period, will result in improved services

3.8.6.2 Service and Product Analysis

The City has invested resources on several projects over the past ten years to support what citizens of Calgary want from their municipal government. The clear message from customers is that they want to have multiple options for communication, interaction and support. The ability to use the services anytime, anywhere and through the channels that they are comfortable with is a core expectation. The ZBR recommendations enable or enhance the customer experience as The City moves towards a service-based organization.

Affected Services

Service	ZBR Recommendation Impact	Affected Customer
Customer Education	New service for PD	Home owners Small business owners
Customer project compliance and application acceptance	Enhancement to existing service Future cost avoidance – City and customer	Home owners Small business owners
Development and Building Inspections	Enhancement to existing service	Home owners Small business owners

Product Analysis

The role of PD is to ensure that development and building results in safe projects (i.e. meets the Alberta Building Code) within a viable community (i.e. aligns to the Land Use Bylaw). Kogawa conducted an analysis of the products (e.g. permits, certificates, etc.) that CBS provides to their customers. Rather than look for opportunities to eliminate products/permits, Kogawa recommends CBS regard their products for the home/small business owner customer segments as steps in the journey. For example, the Development Completion Certificate (currently a product) is actually a type of inspection (service). It needs to continue to ensure a safe project. Another example is the Change of Use product which is a step a business owner may require to ensure that the selected location of their business meets all regulatory requirements (e.g. The City, Alberta Health Services, Motor Vehicle Association, etc.)

3.8.7 Implementation Considerations

Overall Implementation Considerations

- ♦ **As the City moves to a service-based model and budget process, it is critical the Management Team of PD establish a common definition and language around processes, services, and products**
- ♦ **Create a program with dedicated resources to support the overall scope, identified benefits and service improvements ensuring that focus is maintained**

PD had success with eServices due to organizing and managing the implementation of online services through a structured program with measurable and tracked outcomes. Adopting a similar methodology for all projects will increase the success of the self- directed customer and the efficiency gains outlined in this report. Continue to use an agile or iterative approach; and define the overall vision, solution, and change that is expected to occur. Key will be keeping focused on the customer segment and on the outcomes/service improvements trying to be achieved.

- ♦ **Implement policies to support business rules and standards with regular renewals instead of bylaws**

CBS has been successful in implementing a policy of standards that meet the safety codes act for inspections. The Quality Management Plan (QMP) guides inspectors and the business unit in determining the minimum inspections required to meet code. It is an excellent example of how to meet standards without additional bylaws.

Specific Implementation Considerations by Recommendation

RECOMMENDATION: Provide electronic submission and processing of home owner applications and payments

Provide online registered access for home owners at time of fee payment. Allow home owners to explore options and costs for permits by increasing or decreasing the scope of their project. Once the home owner has made their final decision on the scope of work and are ready to pay for their online permit(s), The City can prompt for online registration.

RECOMMENDATION: Simplify and guide the customer journey by creating online navigable content where the needs, wants, & limitations of the customers are taken into account

There is an opportunity to bring in “real” customers as Calgary Building Services develops online navigable content. Observing customers as they attempt to find their way, in addition to soliciting their feedback will ensure CBS stays on the right track as they move services online.

Align counter staff training to customer journeys with progressive complexity. The current training of Planning Service Technicians (PST) is comprehensive and takes 12 weeks to complete. One major challenge that PSTs face is information overload as a result of time constraints. Confidence and exposure is the second major challenge. The decisions that are made on the counter and in the call center are fast and on the spot. These decisions can make a substantial impact on the outcome or direction of various projects that customers are involved in. Individuals responsible for staff development estimate that it can take 8-12 months before a PST feels confident in the majority of their decision making. This is due to the vast amount of information which allows limited exposure to situations.

Aligning PST training to customer journeys ensures the PST speaks the language of the customer. They also receive early training for low risk customer projects and further training later on for larger projects or customer segments as they get more experience. Training provided in more consumable chunks improves retention of training, and is less overwhelming for the PST.

RECOMMENDATION: Roadmap, design, & pilot online chat channel

While determining the roadmap, consider whether the preferred channel to implement is an online chat tool (as being considered by Information Technology) or Skype for Business (as proposed by the Field Service Delivery initiative)

Implement best practices for online chat:

- ◆ Capture the inquiry topic to identify trends. Provide drop-down menus to help categorize the conversations
- ◆ Cross-utilize agents by having them work on email responses between chat session
- ◆ Use a standard closing to sign off the chat and to reinforce City branding

- ♦ Design a Quality Assurance form that is specific to Web chat. Include components such as assessment, solution, communication (grammar, spelling, politeness)
- ♦ Offer customers a transcript of their sessions
- ♦ Use timestamps to show each back-and-forth interaction

The City has rolled out Skype for Business across the organization. This creates an opportunity to use Skype for Business in Customer Advisory Services with some customers, saving them from having to travel downtown.

RECOMMENDATION: Formalize risk-based decision-making for the Inspectors

After risk-based decision-making is in place for inspections, investigate the opportunity to apply a similar risk-based approach to issuing permits immediately at time of application.

RECOMMENDATION: Issue home owner permits at City multi-use locations as per Council mandate

As part of Tomorrow's Workplace, Facility Management (FM) drafted an implementation plan for multi-use facilities. There is an opportunity for Customer Advisory Services to use the expertise of FM and Tomorrow's Workplace to issue home owner permits at multi-use locations. In October 2016, meetings were underway to determine the feasibility of a pilot. It is suggested that Customer Advisory Services participate in this pilot to determine the feasibility of having support for home owners outside of City Hall.

RECOMMENDATION: Apply a risk-based approach and remove discretionary business rules not supported by bylaws and standards

At the beginning of the implementation, differentiate between mandatory business rules, legislative business rules, and discretionary business rules. This will provide The City with a repository of current business rules to be reviewed regularly.

RECOMMENDATION: Capture operational data for meaningful performance measurement

Customer Advisory Services (5311) and the Technical Assistance Centre provide a higher tier of assistance to citizens calling 311 with PD-related questions. Consideration should be given to using consistent tools.

A final consideration is for Planning & Development to use the same customer-centric approach with other customer segments for the CBS business unit. Using the customer journey as the focus of uncovering problems and identifying solutions provides a consistent view of customers and aligns with several recommendations that could apply across all customers of PD.

3.8.8 Implementation Risks

Risk	Impact	Probability	Mitigation
A resistance to using plain language to describe the rules related to the Land Use Bylaws	High	High	<ul style="list-style-type: none"> ♦ Enforce the Plain Language Policy ♦ Ensure support for the project is in place at all levels of the organization including other department stakeholders (e.g. Law)
Expertise in designing and maintaining customer-centric material is not available at the City	High	High	<ul style="list-style-type: none"> ♦ Seek external expertise to assist in initial development of content and to coach and mentor internal staff ♦ Develop additional expertise internally ♦ Add user experience competency to recruitment requirements
Technology solution is implemented before process/content clean-up is completed & benefits of “complete” package of recommendations is not realized	High	Medium	<ul style="list-style-type: none"> ♦ Identify critical dependencies for all supporting recommendations and implement accordingly ♦ Create a self-directed customer program with a holistic approach focusing on the customer first then on the solution
The time to realize the ROI (estimated 3-5 years) is too long and other projects prevent PD from completing the work	High	Medium	<ul style="list-style-type: none"> ♦ Combine all recommendations into one initiative with a clear focus on the customer segment acknowledging in PD’s business plan & action plan the long term commitment ♦ Create regular reporting against the measures to demonstrate progress and efficiencies gained

3.8.9 Culture Change

Until Corporate Initiatives identified the customer segments and profiles as part of an earlier phase of this ZBR, home/small business owners were a “silent” majority for PD. Many of the recommendations will benefit all of PD’s customers but there are a few that benefit only home or small business owners. Traditionally, attention has been focused on other customer segments that pay much higher fees and are repeat customers in PD. Focusing on customers by segments is a new concept in PD. Until recently, community liaison was viewed as a “value add” service. If PD decides to implement all of the recommendations (including the recommendation to develop a customer contact/education strategy and create a home/small business owner relationship role), the department will have to recognize that community liaison is a core service.

An additional change within the department is the move to focus on information and the maintenance of it as a core function of their services. The push to online services creates a need for core competencies to support the development of customer centric content that is maintained, simple to understand, and key to the value of the experience.

All recommendations that support the business service model simplification for CBS require a strong change management plan and a commitment from CBS managers to support it for its entirety.

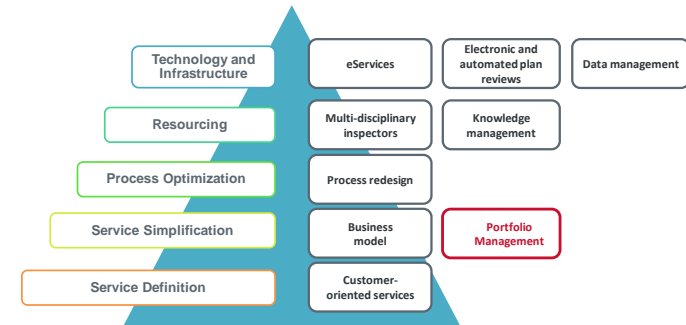
*To shift the culture, walk the journey with
the customer*



4 Portfolio Management

Planning & Development (PD) fills a key service for citizens of Calgary and as such, require a robust continuous improvement culture. They work with all customer segments to meet their needs and to ensure that Calgarians live in a city of inspiring neighborhoods that are safe, functional, and effective. The business transformation currently underway in CBS, together with the outputs of various audits and reviews, has created a substantial portfolio of business improvement projects. These projects are not (in all cases) prioritized with respect to their potential value, nor have they been assessed to determine optimal sequence and timing. Pro-actively anticipating the priority of projects is a difficult task. PD tries to predict what the needs of various segments are and anticipate where Council will direct the department because of the Action Plan, an issue, or changed mandate. During the opportunity identification phase of the ZBR, this focus area was identified as having opportunities for both effectiveness and efficiency gains.

Developing rigor around portfolio management would increase efficiency and effectiveness of projects in CBS. It would also increase the value for money obtained from capital and operating investments, and provide proficient resource allocation. An optimized portfolio of prioritized projects and opportunities to improve the Portfolio Management focus area (including opportunities to improve the efficiency and effectiveness of Portfolio Management practices), were investigated and recommendations were identified. The recommendations support a department with a high volume of project work and limited resources, to ensure the right projects are resourced and completed.



4.1 Portfolio Management Recommendations

Key Recommendation: Adopt a business portfolio management framework to improve the governance, management, and monitoring of projects required to meet Council priorities and action plans

The detailed recommendations are:

- ♦ Establish clear terms of reference for strategic vs. execution portfolio governance
- ♦ Include and prioritize all business planning, operations and portfolio projects
- ♦ Adopt corporate project management and governance standards across all projects
- ♦ Develop performance measurement strategy and discipline for identifying, gathering and reporting on key metrics
- ♦ Develop portfolio management roles and responsibilities that support the PD Business Portfolio Management Framework

Current Issues	Recommendation	Future	Benefits
Operational projects are done “off the side of the desk” without formal support and possibly without rigor The list of projects is too long	Adopt a business portfolio management framework	<ul style="list-style-type: none"> ♦ A framework for intake, prioritization and funding of projects is part of business planning and execution within PD 	<ul style="list-style-type: none"> ♦ Well managed projects ♦ Alignment of projects to outcomes and services ♦ Better, more timely decision making
Uncertainty by staff on what the top priorities are Uncertainty on who the decision makers are	Establish clear terms of reference for strategic vs. execution portfolio governance	<ul style="list-style-type: none"> ♦ Alignment of priorities to the department (strategic) based on outcomes and Council directives ♦ When executed, projects will be prioritized and aligned based on resourcing and dependences ♦ Clear line of sight for all staff 	<ul style="list-style-type: none"> ♦ Clear line of sight on department and business unit priorities ♦ Staff know what is expected ♦ Clear accountability of Directors and Managers
No consistent agreement on PD project priorities	Include and prioritize all business planning, operations and portfolio projects	<ul style="list-style-type: none"> ♦ A prioritization tool that can be used regularly to align the intake of new requests and business cases ♦ Clear understanding of a project’s business objective and importance to PD 	<ul style="list-style-type: none"> ♦ The list of projects becomes more manageable ♦ Communication to staff, external stakeholders, and Council is improved

Current Issues	Recommendation	Future	Benefits
Project management standards vary across PD	Adopt corporate project management and governance standards across all projects	♦ Alignment to corporate standards	♦ Consistent standards for project management across the corporation
Lack of metrics on project success make it difficult to demonstrate value of projects	Develop performance measurement strategy and discipline for identifying, gathering and reporting on key metrics	♦ Ability to identify, track and report on benefits using standard approach and reporting	♦ Able to see progress clearly and course correct sooner ♦ Show how projects are reaching the desired outcomes
No resource is responsible for the ongoing monitoring and coordinating of the list of PD projects	Develop portfolio management roles and responsibilities that support the PD Business Portfolio Management Framework	♦ A role within the department facilitates the PD business plan projects intake and prioritization throughout the business cycle	♦ New projects – Council motions and bylaw changes – that occur outside of business planning are identified, prioritized and resourced appropriately

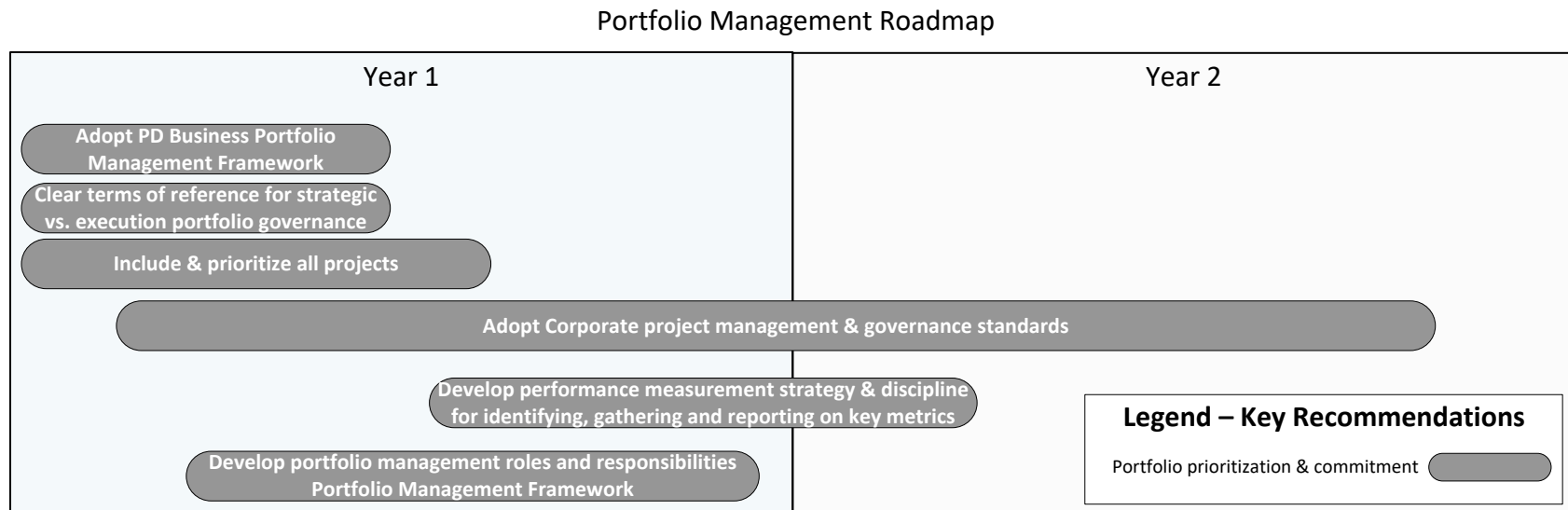
The Corporate Project Management Centre (CPMC) and Information Technology (IT) are taking a strong lead in developing best practices around project, program and portfolio management. Research identified opportunities to leverage and/or align with other City of Calgary portfolio management projects to resolve current gaps for CBS and to prioritize the current portfolio of projects, including recommendations from this ZBR. Several of the recommendations align directly with corporate direction.

A long standing gap is PD's ability to resource and meet requirements in a timely fashion. This includes managing the portfolio of work required through Council Projects, the department workplan, and ad hoc situational requests. At the beginning of this review (May 2016), PD had 65 "projects". Ten were technology projects inflight, with two technology projects waiting to be started in order to meet their 2015-2018 Business Plan objectives. This does not include work that is not formerly classified as a project, but is added to operational responsibilities (approximately 20).

During this review, PD was compiling their mid-cycle adjustments for Council review in November 2016. Kogawa collaborated with the PD Department to prioritize projects in their revised business plan.

4.2 PD Portfolio Roadmap

The majority of the recommendations can be implemented immediately. Together, they provide the efficiencies and service improvements expected. The roadmap identifies the relative relationship and implementation sequence for Portfolio Management. Kogawa suggests that the timing is opportune in PD to implement all the portfolio management recommendations in the next 6 to 18 months. While writing the final report, Kogawa collaborated with PD resources to start implementing several of the recommendations.



4.3 Corporate Alignment

The recommendations are intended to support the essential behaviour changes in PD. It creates an environment of effectively managed and funded projects that have clear line of sight to Council priorities. Executing well-run projects will deliver the expected output that external partners, citizens, Council, and staff expect.

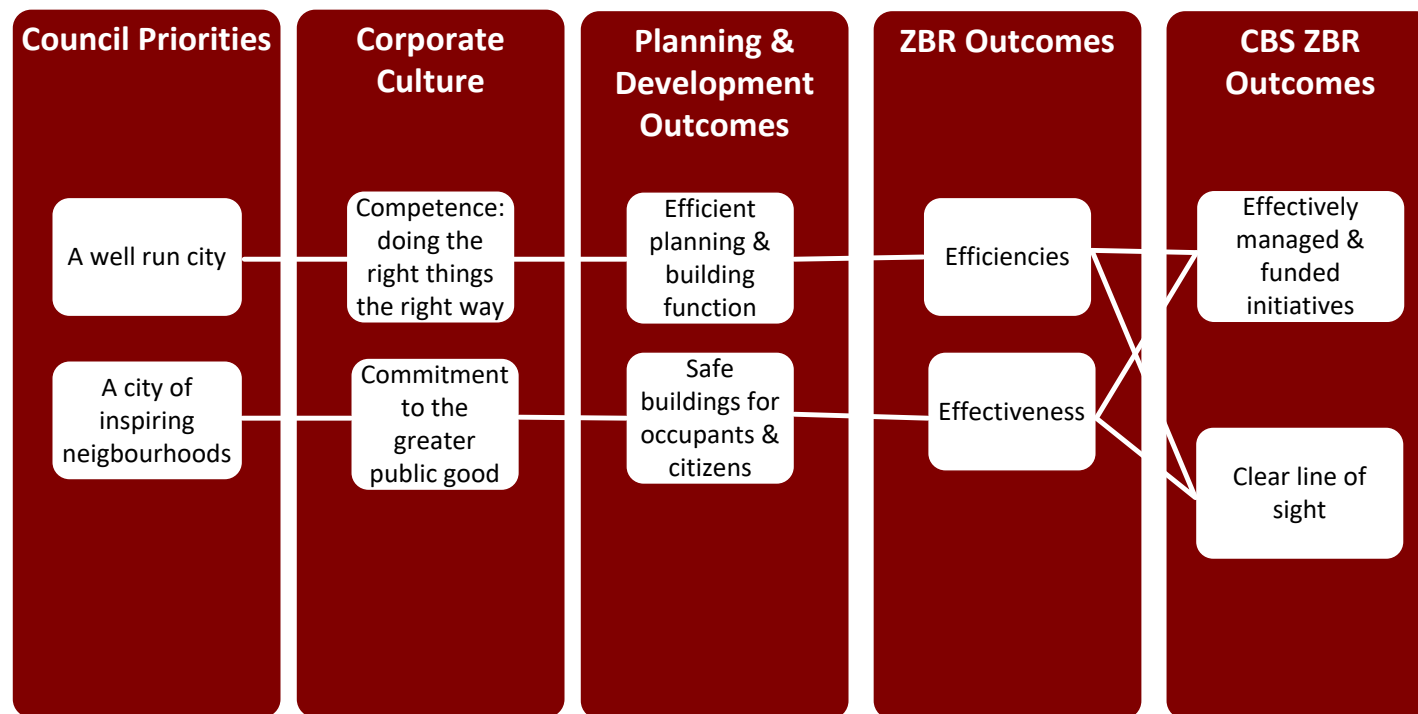


Figure 10 - Portfolio Management directly aligns to outcomes at all levels

4.4 ZBR Portfolio Management In-Depth Analysis

The in-depth analysis and PD's commitment to the ZBR recommendations has been unique in that it has occurred in parallel with the development of this report. At the time of the ZBR, discussions were also beginning within the Department and with IT on technology capital project governance. As well, Infrastructure Calgary has been developing standards and guidelines for capital investment and the Corporate Project Management Centre has issued a number of corporate project management standards and guidelines.

Current state findings in PD with specific highlights related to CBS:

Current State: Project Prioritization

This business unit has a long history of significant amounts of work to complete their yearly workplan, Council priorities, and requests from Council, Administration, and the public. Many operational enhancements are done as side work, never adequately funded, and often lack visibility and support to finish what is necessary to meet the overall goals. The current inflight list of projects is close to 50 with another 15+ undocumented, in addition to ten technology projects.

The ten technology projects fall under the Tech Committee's governance and were prioritized based on technology criteria, and the ability to resource and complete the work. These projects are managed by the Project Management Advisory Services group where the CBS project management office resides.

Current State: Governance

Governance of projects and the portfolio of projects is not currently done within PD for non-technology projects. This has been acknowledged by the General Manager and assigned to the Director of CBS.

The Tech Committee, under the guidance of the Director of CBS, has matured over the past two years and has a strong committee of managers and key resources from Business Services. They govern the management of technology projects through agreed to Terms of Reference.

Within the rest of PD, business initiated projects are not monitored by a governing body where structured decision making could support the realization of benefits.

Current State: Project Performance

Gathering relevant data has been a difficult task for the ZBR team. PD has an abundance of data stored related to the lifecycle of an application permit, but not by customer segments. Lack of consistent and systemic performance management information makes it difficult to assess the organization's success and areas for improvement. It adds complexity for decision making and governance.

Current State: Project Management Discipline

Project management within PD is mostly used for technology projects. The Project Management Office falls under the Manager, Business Services, a section within the CBS business unit. This office was established for the purpose of eServices and has evolved to support all projects within PD. The challenge this team encounters is the perception that project management discipline is overhead and only important to technology projects. This team's management of technology projects over the past 12 to 18 months has matured, and they have competencies to offer other projects within PD. They are in the process of adopting Corporate Project Management Framework (CPMF) standards for new projects. A strong commitment and level of rigor around Project Management ensures priorities are met and the staff of PD are focused on the right work at the right time.

A detailed assessment of the Portfolio recommendations is shown in **Appendix B**.

4.5 PD Business Portfolio Management Framework

The primary recommendation is to support portfolio management through the implementation of the business portfolio management framework. The framework is broken down into two distinct components: 1) The *PD Business Strategic Portfolio Management* and 2) The *PD Business Execution Portfolio Management*. Each has a clear purpose, function and set of processes to deliver on the overall PD Business Plan and Corporate Action Plan. **Appendix C** provides more details on the proposed framework.

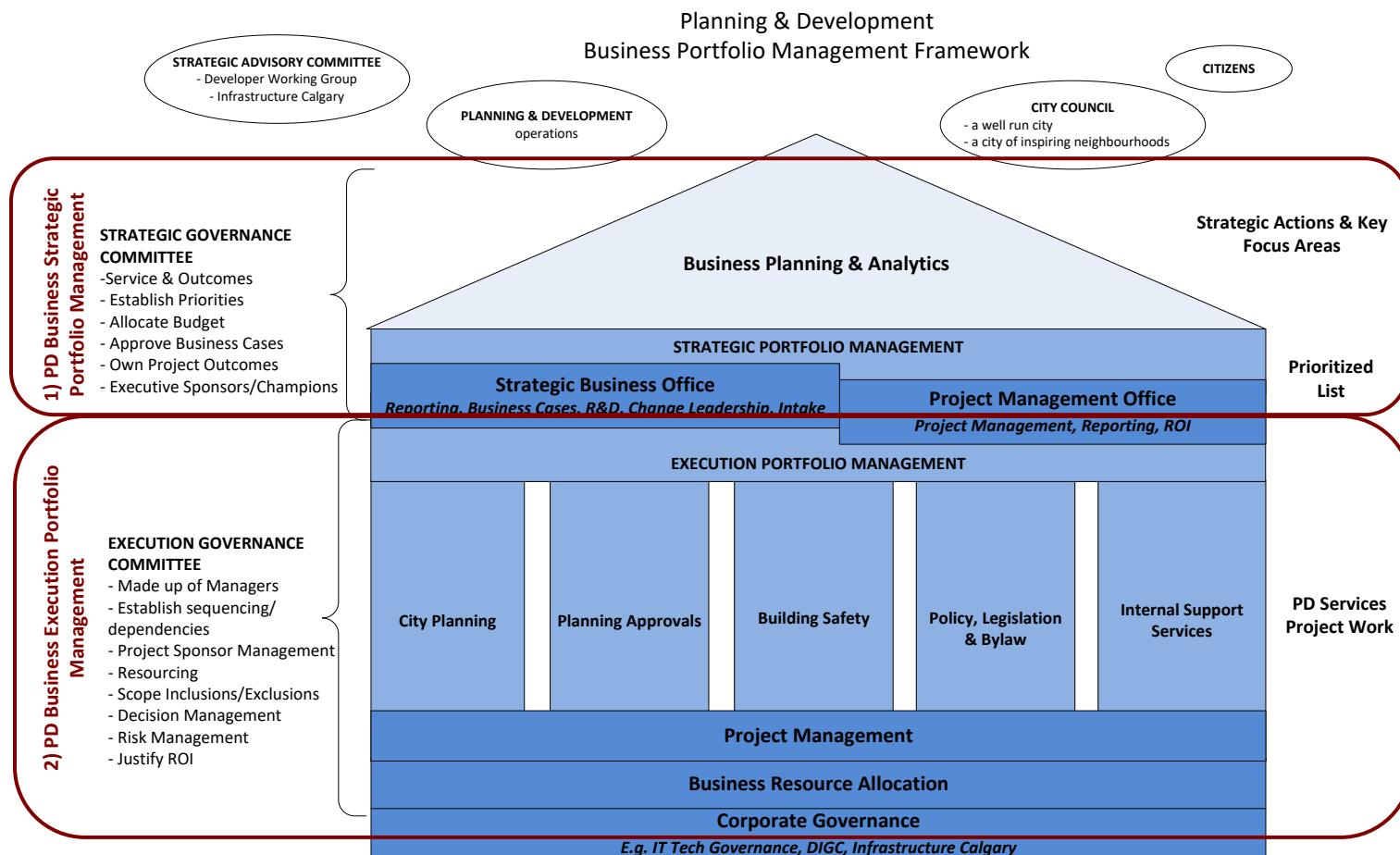


Figure 11 – Business Portfolio Management Framework

4.6 Business Case - Portfolio Management

This section provides the supporting analysis for the portfolio prioritization and commitment recommendations. It is expected that PD will reduce the capital cost of implementing projects by 2% annually. It is also expected that project schedules will be reduced by 10%. Similarly, the 1% of PD's operating budget spent on unapproved work will be redirected to approved, prioritized projects.

Implementing the recommendations in 2016-2017 will realize a cost savings of \$1.14M yearly. A one-time investment cost of \$100K is estimated to support the project.

According to Project Management Institute's 2015 *Pulse of the Profession*: *Capturing the Value of Project Management* report, 35% of high-performing organizations have high portfolio management maturity, compared to just 8% of low-performing organizations. Likewise, 76% of projects executed with a high level of portfolio management maturity are successful, compared to 56% of projects executed without.

The definition of Portfolio Management varies across organizations depending on their maturity, their business value, and staff.

“Portfolio management is simply a way of implementing our organization's strategic goals within our risk tolerances and constraints.”

—Diondria Clarke-Holliman, PMP, PfMP, Medtronic, Memphis, Tennessee, USA. The above quote taken from PMI's 2015 Pulse of the Profession

4.6.1 PD Business Environment

Planning & Development, and more specifically Calgary Building Services, has a long list of projects that are both formal capital projects and operational improvements. The General Manager of the department has recognized the need to get discipline in place to complete all the work required. Not only will the ZBR initiative identify recommendations that require significant effort, resources and capital; but the current work with the City/Industry Workplan, a major set of projects, will impact all areas of PD (particularly in the Business Services area). Planning & Development has identified key results and enablers that their work is driving towards:

- ◆ Municipal Development Plan and Calgary Transportation Plan is advanced
- ◆ Development is realized
- ◆ Buildings are safe
- ◆ Effective tools – bylaw, regulation, policy – to support our outcomes for Calgary
- ◆ Efficient planning & building function

These results and enabler outcomes, in alignment with the department services, are fundamental to PD's success over the remainder of this business cycle and into the next. Critical to keeping line of sight for staff, administration, Council, and citizens; is the prioritization of the projects, commitment to project completion, and realization of the benefits.

4.6.2 Case for Change – Gap Analysis

Planning & Development is in the midst of significant change. A new General Manager took on the leadership role in March 2016. An operation re-organization, the initiation of a major set of projects (The City/Industry Workplan) to support large developers, ZBR recommendations, and the continuation of eServices resulted. All place intense demands on the PD leadership team, supporting staff, and the resulting changes to both citizens and internal resources.

Symptoms of a lack of rigor and framework to support the intake planning and execution of projects are:

- ◆ Managing the capacity of the resources - many projects are run by individuals who also have day to day operational responsibilities
- ◆ In June 2016, PD had 65 projects on their business plan - the mid cycle adjustment plan under development started with just as many on its "list" (not including the unsanctioned projects)
- ◆ The Tech Committee has developed maturity in managing the portfolio of technical projects, however other "portfolios" of work are not as disciplined and are developing their own methodology. The Tech Committee is starting to see the benefits of quicker to market, better definition, and costing of the work. They have adopted CPMF standards as the basis for their project management practice
- ◆ The priority within the Department and Business Unit varies depending on who you talk to. There is no clear alignment to Council priorities and action plan items

The PD leadership team recognizes the need to move towards portfolio management. An activity is underway to embrace the Tech Committee's terms of reference across PD. This will align the governance, but needs to go further in describing roles and responsibilities for the functions within the framework.

It is critical for PD to be successful in the major projects underway to ensure that everyone knows what they are working towards, what resources are available, and how decisions are made.

4.6.3 Impact Analysis

Options have been identified to support the overall recommendation to enable portfolio prioritization and commitment. Option 1, “implementing the full set of recommendations” is proposed.

Options	Pros	Cons
1. Implement the full set of recommendations with a strong change management plan to facilitate staff adoption	<ul style="list-style-type: none"> Identifies the boundaries and scope of portfolio management within PD Identifies roles and responsibilities for all aspects Supports clear understanding by staff and stakeholders on priorities, processes, & expectations 	<ul style="list-style-type: none"> Readiness of the department to change culture and behaviors to a more disciplined approach Perception of “time” it takes to follow processes and rigour
2. Implement the Tech Committee terms of reference for BUs that are interested	<ul style="list-style-type: none"> Already in place and functioning well for technology projects Resources are aware of expectations and role Less anticipated resistance 	<ul style="list-style-type: none"> Limited to technology projects only and may be hard to adapt to other types of projects May not be interested in following the terms of reference Lack of overall buy-in
3. Wait for corporate best practices, processes, and policies to be mandatory	<ul style="list-style-type: none"> Allows for PD to become more stable under the new organization structure before taking on new practices Clearer understanding of corporate policies as they mature Manages department change better 	<ul style="list-style-type: none"> Waiting may not gain any further insight or improvements in corporate approach Does not enable the management of the volume of decisions and projects that PD is required to complete over the business cycle No efficiencies gained with a single view of the workplan No improvements to internal processes
4. Maintain status quo	<ul style="list-style-type: none"> Easier to stay the same No change to existing work or practices 	<ul style="list-style-type: none"> Does not enable efficient decision making with the high volume of projects underway No efficiencies can be gained without a single view of the workplan No improvements to internal processes

4.6.4 Cost/ Benefit Analysis

The ZBR analysis identified three key opportunities for efficiencies that drove the analysis and cost savings for Planning & Development.

- ♦ Project teams spend upwards of two months determining scope and objectives of projects prior to developing the project charter and detailed plans. This overhead is a potential cost avoidance if the work were to be done as part of the portfolio intake and prioritization
- ♦ Typically, business planning has identified “lists” of work to be accomplished with minimal consideration to dependencies, alignment to other projects or expected resourcing. Early discussions during prioritization will allow for Directors and Managers to better understand the benefits of the project and manage their resources more effectively
- ♦ Historically, PD business units had resources working on projects that are not part of the overall department business plan. This has created situations where overlaps in effort, unrecognized benefits, and incomplete projects have incurred costs that may have been avoided through business portfolio management. Clarity of priorities and associated benefits, as well as including all projects in prioritization will eliminate unapproved work

The table identifies the cost savings by implementing the recommendations through better project planning and managing the priority of project work within PD. The cumulative savings (\$5.7M) represents approximately 10% of PD’s project spend over five years with a minimal investment (\$100k) to attain the benefits. The implementation of the recommendations can be accomplished with existing resources, and adopted during the current business planning cycle.

ZBR Recommendations Cost/Benefit Analysis - Portfolio Management							
Planning & Development							
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total Investment
ONE TIME INVESTMENT							
Total Cost		\$ 100,000					\$ 100,000
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Cumulative Savings
BENEFITS							
Cost Savings							
Improvements in project planning - capital	\$ -	\$ 240,000	\$ 240,000	\$ 240,000	\$ 240,000	\$ 240,000	\$ 1,200,000
Improvements in prioritization of workplan and avoiding unsupported work - operating	\$ -	\$ 900,000	\$ 900,000	\$ 900,000	\$ 900,000	\$ 900,000	\$ 4,500,000
Total Savings	\$ -	\$ 1,140,000	\$ 1,140,000	\$ 1,140,000	\$ 1,140,000	\$ 1,140,000	\$ 5,700,000

Full implementation of the recommendations will realize the expected cost reductions and are supported by:

Efficiency Gains

- ◆ Improves the return on investment
- ◆ Improves project management performance and cost management
- ◆ Reduces costs for projects that are not receiving the visibility needed to meet deadlines
- ◆ Ensures the right projects are doing the right things
- ◆ Avoids project delays and resulting costs through efficient and timely decision making
- ◆ Reduces duplicate work effort due to lack of clear direction on scope and mandate
- ◆ Avoids costs for unplanned projects that are not driving towards PD outcomes
- ◆ Avoids costs on projects that are off track with early warning

Effectiveness Gains

- ◆ Clear process, roles and responsibility for portfolio management and project execution
- ◆ Aligns governance between the strategic planning process and the execution of projects
- ◆ Clear understanding of staff on purpose and intent of portfolio governance
- ◆ A complete view of all work with better aligned resources
- ◆ A complete prioritized list of projects allows for consistent reporting and monitoring of progress
- ◆ Department wide understanding of priorities and expectations
- ◆ Improves transparency and accountability to the management of capital projects
- ◆ Processes and tools that demonstrate that The City is a good steward of public funds invested in projects
- ◆ Value from projects is realized for the benefit of citizens
- ◆ Improves decision making by CBS/PD
- ◆ Improves collective understanding of what is important by CBS/PD
- ◆ Improves service to all customer segments with timely and effective delivery of projects as a result of Council and citizen requests

4.6.5 Implementation Considerations

Though several of the recommendations are well underway, the following are other opportunities to consider during implementation. This will help to ensure a successful transition of staff to the new Business Portfolio Management Framework.

PD Strategic Portfolio Management Implementation Considerations

- ♦ The close tie between the Strategic Business Office and the Project Management Office (PMO) is critical to understand the priorities and service improvements PD is attempting to achieve. A cohesive set of principles, processes, and deliverables that specifically articulate each office's function and purpose improves PD's chances of success
- ♦ Transition current portfolio management competencies (Coordinator Project Management) into Business Strategy. This will support the change effort required to move PD to the Business Portfolio Management Framework, and increase adoption success
- ♦ Consider defining projects based on what you are doing for the customer and business requirements, rather than technology
- ♦ Consider using *Expert Choice* for prioritization of projects once PD has matured in portfolio management
- ♦ Assess current competencies against the framework and identify gaps. Establish competencies in business analysis, business architecture, and facilitation to support intake, business case development, and prioritization

PD Execution Portfolio Management Implementation Considerations

- ♦ Co-engage Corporate Project Management Centre (CPMC) and CBS Project Management Advisory Services to provide training/coaching on the CPMF for the in-flight projects to understand the value and purpose of the City Standards
- ♦ Use the CPMC project assessment tool to determine the project level, and for all level 2 and 3 projects to follow the standard
- ♦ Leverage the work done by the Tech Committee to enable business project manager to attain competencies already achieved with technology projects
- ♦ For large, high profile projects, create a supporting project management office to assist the team and ensure that projects are well managed. Leverage internal CBS and CPMC expertise to assist in building and supporting a PMO

4.6.6 Implementation Risks

Risk	Impact	Probability	Mitigation
Lack of support and commitment by all directors and managers in PD	High	High	<ul style="list-style-type: none"> ♦ Develop a change management plan and have a dedicated resource to implement the plan
The effort is perceived as too difficult and cumbersome	High	Medium	<ul style="list-style-type: none"> ♦ Start slow and build the expectations of resources as the competency increases ♦ Review the lessons learned from the implementation of the CPMF as there will be ideas and options for assisting with the recommendations
Existing practices in BUs supersedes the new approach	Medium	Medium	<ul style="list-style-type: none"> ♦ Similar to above, resources need to understand the benefits to them and to the achievement of department outcomes ♦ Obtain commitment from Directors as collective owners of the Strategic Governance ♦ Obtain commitment from Managers as collective owners of the Execution Governance
Staff are not trained appropriately or do not understand reasons for the changes	Medium	Low	<ul style="list-style-type: none"> ♦ Engage CPMC for assistance in development of a training program ♦ Monitor performance measures and embrace continuous improvement ♦ Dedicate a resource to own the overall business portfolio management framework and become the advocate ♦ Directors and managers champion the changes

4.6.7 Culture Change

Introducing the discipline of business portfolio management has significant long term benefits but requires strong change management and discipline at the leadership table. The commitment to decisions, priority of work, and the avoidance of “shiny objects” will take time and effort to get all PD resources aligned with the direction of the organization.

Assigning ownership of the Business Portfolio Management Framework, and strong accountability to the processes will provide the leadership for staff to follow, and facilitate the right discussions and the appropriate decisions.

4.6.8 Current Status of the Recommendations

Planning & Development completed their 2016-2017 Business Plan on August 31, 2016.

Discussions continue with the Manager of Business Strategy and the Coordinator of Project Management to develop the recommendations for portfolio management in alignment with tasks they have been assigned. A value add deliverable of the ZBR project is a PD Business Portfolio Management Framework document that outlines the core of the recommendations (**Appendix C**).

Recommendations	Status of Implementation
Adopt PD Business Portfolio Management Framework	<ul style="list-style-type: none">◆ During the ZBR project, the framework was socialized and agreed to by CBS. It is expected to be adopted by PD by the time this report is presented to the Priorities and Finance committee in November 2016
Establish clear terms of reference for strategic vs. execution portfolio governance	<ul style="list-style-type: none">◆ PD will have an agreed to Terms of Reference for the two governing bodies, and processes in place by the time this report is presented to the Priorities and Finance Committee in November 2016
Include and prioritize all business planning, operations and portfolio projects	<ul style="list-style-type: none">◆ By prioritizing all work within PD and CBS, a clearer portrait of what is going on, what needs to occur, and where the funds (either capital or operational) need to be spent will emerge. It provides a truer understanding of resource availability and constraints◆ In August 2016, the PD Directors prioritized all projects included in the Business Plan based on a similar tool used for the ZBR recommendations
Adopt corporate project management and governance standards across all projects	<ul style="list-style-type: none">◆ Corporate standards for capital project management are in place for technology projects managed by CBS. The timing is opportune to adopt the standards with all business projects in PD◆ This is a change in culture for most resources in PD. It will take time, a strong change management plan, and Director/ Manager commitment◆ There were early discussions in August 2016 but no progress to date

Recommendations	Status of Implementation
Develop performance measurement strategy and discipline for identifying, gathering and reporting on key metrics	<ul style="list-style-type: none"> ♦ No progress to date on this recommendation
Develop portfolio management roles and responsibilities that support the PD Business Portfolio Management Framework	<ul style="list-style-type: none"> ♦ Role has been defined and discussions are underway to assign accountability

5 Change Management Considerations

The recommendations of the ZBR require a significant cultural change for PD. There are three major changes and each of them requires a comprehensive change management plan:

1. Applying rigor to portfolio management and the execution of projects
2. Changing to a customer-centric service delivery model
3. Making online service delivery the primary channel

Critical to the success of the implementations is recognizing the extent of the change and putting a change management team in place very early in the implementations.

5.1 Change Management Considerations - Service Model Simplification

“A number of fundamental shifts in recent years have caused companies to rethink how they invest in and deploy customer service...They treat their customers like human beings, respect their intelligence, value their time and ideas, and solve their problems rather than simply funneling them through a process.”^{viii}

5.1.1 Service Model - Defining the Change

The implemented recommendations changes CBS from a front-facing customer service organization to one where the primary service channel is online. The table summarizes the major changes:

Today	Future
Customer comes to the counter	Customer is online
Staff can get customer feedback directly from the customer	Customer feedback is sought through a variety of channels (online survey, phone survey, etc.)
Customer has to call or visit City Hall	Customer has access to self-help

Today	Future
Customer has to pick up permits/licence from City Hall	Customer has choice of locations
Customer can't get permit/licence online	Customer has access to self-serve
Online information may not be maintained	Online information must be maintained

5.1.2 Service Model - Staff Impacted by the Change

Staff in Customer Advisory Services and Building Regulations will be impacted directly, but all PD staff will be impacted to a degree. There is a good understanding today of the customer who comes to the counter, but CBS should identify what customer service looks like when the primary channel is online. PD must recognize that customer service for online customers means empowering them to work independently. Spending time with the customer through formal engagement, observation, interviews, and other techniques will help CBS truly understand what both home owners and small business owners really need. These customers are different from developers and other customer segments who are industry professionals. The home and small business owners are often one time visitors and they have the choice to comply or not.

“Eighty percent of the more than 2,000 Americans ages 18 to 65 surveyed said calling traditional customer service phone lines is inconvenient. Using the phone for customer service is especially unpopular with millennials: 26 percent say they never look forward to it, compared to the 19 percent of Gen X-ers and 18 percent of Boomers who say the same. And 41 percent of survey respondents turn to the FAQ section of a company's website before doing anything else.”^{ix}

Understanding the customer's entire journey is fundamental. User experience and customer centric skills may not be in place currently in the organization so CBS may have to look outside the organization for additional support to help define and support staff in the transition to new skills and competencies.

5.1.3 Service Model - Implementation Timeframe

The timeframe for implementation of the recommendations is not determined yet, but the corporation is moving to a service based model. There may be opportunities to lead or align with the rest of the organization. As the corporation moves to a new model, PD should reach out to other areas for support.

5.1.4 Service Model - The Role of PD Leadership

Early in the implementation, PD and CBS leaders need to come together to establish a shared vision of the organization of the future. This shared vision, together with a coalition of sponsors, will lead staff through the changes. It takes years to fully implement all of the recommendations and realize the benefits. Consistent and frequent messaging about the benefits of the change from the leaders are necessary as staff struggle through the change. For information to be heard and understood by everyone, the message must be delivered **seven times, seven ways** (but not seven months apart!)

5.1.5 Resistance Management

One of the keys to successfully leading an organization through change is recognizing that resistance is normal and should be expected. Identifying potential resistance early in the implementations allows the change management resources to develop strategies to address resistance. Anticipating where and what form the resistance takes will prepare the leaders to address the resistance and respond to employee concerns.

5.2 Change Management Considerations - Portfolio Management

5.2.1 Portfolio Management - Defining the Change

There is a long history in PD of taking on multiple projects at one time and not seeing them through to full completion. Once the Portfolio Management recommendations are implemented, there will be new rigor around the execution of projects across PD. Ranking projects may mean that some “pet” projects are delayed or cancelled. Transparency with staff on the priority of the project, the rationale for the ranking, and the benefits to be realized will support staff in understanding the change.

5.2.2 Portfolio Management - Staff Impacted by the Change

Although all staff are impacted to some degree, the leaders of PD is responsible for leading the changes and determining which projects get prioritized and executed. As leaders, they may also see their projects not get implemented. Leaders may be in the position of struggling with the change themselves while having to support their employees during the change. They need to model the behavior they expect to see from staff. Business Portfolio Management is a long term change and requires diligence by the leaders to stay the course. Lessons learned from other Departments or Business Units who have undergone a similar change will be valuable to the Department.

5.2.3 Portfolio Management - Implementation Timeline

Many of the recommendations for Portfolio Management are already in flight. As PD moves forward, the challenge will be maintaining the momentum of the change. The timing is opportune for PD as the ZBR project aligned with the development of the PD Business Plan and has enabled several of the recommendation implementations to be started.

5.2.4 Portfolio Management – The Role of PD Leadership

Staff have not received formal communication about the ZBR recommendations (October 2016) yet and some of them are already being implemented. The discipline around project management needs to be communicated to all staff across PD. The PD Business Portfolio Management Framework is essential to formal communication. It provides staff with the key components of the framework and the role of the PD leadership team as well as expectations going forward. Management must lead by example.

5.2.5 Portfolio Management – Resistance Management

In the past, PD staff were able to tackle projects “off the corner of the desk” with the knowledge of managers, but not necessarily formal approval or funding. For PD to really practice portfolio management, leaders will have to halt projects that have not been prioritized and approved. Considerable communication to all staff is required as some employees will resent not being allowed to work on projects they deem valuable.

Some staff currently view project management rigor as administrative “busy work” and are reluctant to follow good project management practices. PD has a history of not being able to complete projects and needs to practice project management rigor until it becomes an embedded discipline. Accessing resources currently in the CBS Project Management Office for their expertise as well as that of the CPMC, and leveraging their competencies will help mitigate the negative view of project management.

6 Prioritized Recommendations

A deliverable of this CBS ZBR phase is a prioritized list of recommendations aligned back into Planning & Development's portfolio with an emphasis on Calgary Building Services. The ZBR recommendations are prioritized in the first table below and the second table shows the overall alignment back into the PD prioritized business portfolio of work in the department. The Kogawa team worked in collaboration with the department as they revised their business plan to ensure a comprehensive portfolio of prioritized projects.

6.1 ZBR Prioritized Recommendations

The ZBR recommendations were prioritized and scored based on the following weighted criteria:

- ♦ Strategic Alignment
- ♦ Customer Value
- ♦ Risk
- ♦ Feasibility
- ♦ Dependencies

Scores for each of these factors are provided in **Appendix D**.

Calgary Building Services - ZBR Recommendations	Score
Simplify & guide the customer journey	4.85
Provide electronic submission & processing of home owner applications & payments	4.80
Formalize risk-based decision-making for Inspectors	4.65
Use the small business owner customer journey to create a holistic sequence of compliance requirements across all stakeholder agencies	4.65
Complete inspection business process redesign & implement a workforce mgmt tool	4.35
Roadmap, design & pilot online chat channel	4.25
Apply risk based approach & remove discretionary business rules not supported by bylaws & standards	4.15
Adopt PD business portfolio management framework	4.05
Create a home/small business owner relationship role responsible for the education & sustainment of customer information	3.85
Review citizen complaints & move rules to the appropriate bylaw for enforcement	3.75
Develop and implement a formal customer contact/education strategy	3.70
Upgrade & complete the technology solution to enable small business owners to pay online	3.65
Issue home owner permits at City multi-use locations	3.55
Accept digital documents from home owners	3.50
Include & prioritize all business planning, operations & portfolio projects	3.45
Adopt Corporate project management & governance standards	3.35
Develop portfolio management roles & responsibilities	3.30
Develop partnership programs with stakeholders	3.20
Establish clear terms of reference for strategic vs. execution portfolio governance	3.00
Develop performance measurement strategy & discipline for identifying, gathering and reporting on key metrics	2.35
Capture operational data for meaningful performance measurement	2.25

Planning & Development Prioritized Business Portfolio of Work

Planning & Development Business Improvement Work - 2016-2017		
Business Plan Themes	PD Work As at Oct 13, 2016	Score
Customer Service - Effective and Transparent Connections with Homeowners	CBS ZBR - Self Directed Customer on calgary.ca	5.80
	CBS ZBR - Home Owner Online Permits	5.75
	Inspection Workforce Redesign and Automation	5.60
	CBS ZBR - Online Chat Tool	4.95
Customer Service - Efficient and Transparent Connections with Small Business Owners	Residential ePermit - phase 4	5.65
	Risk Management Approach to Inspections	5.50
	CBS ZBR - Small Business Owner Online Permits	5.55
Customer Service - Facilitate Growth & Development	Process Improvement Strategy	6.20
	Established Area Strategy	6.05
	Phasing Growth - Land Supply Strategy	5.80
	Industrial Strategy	5.80
	Funding Growth Strategy	5.65
	Urban Development Online	5.35
	Finance Data & Workflow Migration	5.25
	PD Map - Phase 3	4.90
	Document Management Scanning	4.70
Relationship & Culture	PD People and Culture Strategy	6.10
	Planner Training	5.90
	Safety Codes Officer Career Series	5.00
	ZBR Review: Portfolio Prioritization	5.00
	Our Space	4.00

October 31, 2016 Status: The PD Directors as part of the business plan discussions have prioritized all business improvement work planned to be completed through 2017

6.2 Performance Measurements

Performance measurement should be based upon the customer service improvements. Currently, PD has measures that are statistical in nature. Identified are potential measures and the metrics that could be used to support the expected changes as a result of the ZBR recommendations. The City's move to services and service-based budgeting will identify and facilitate a methodology for performance measurement.

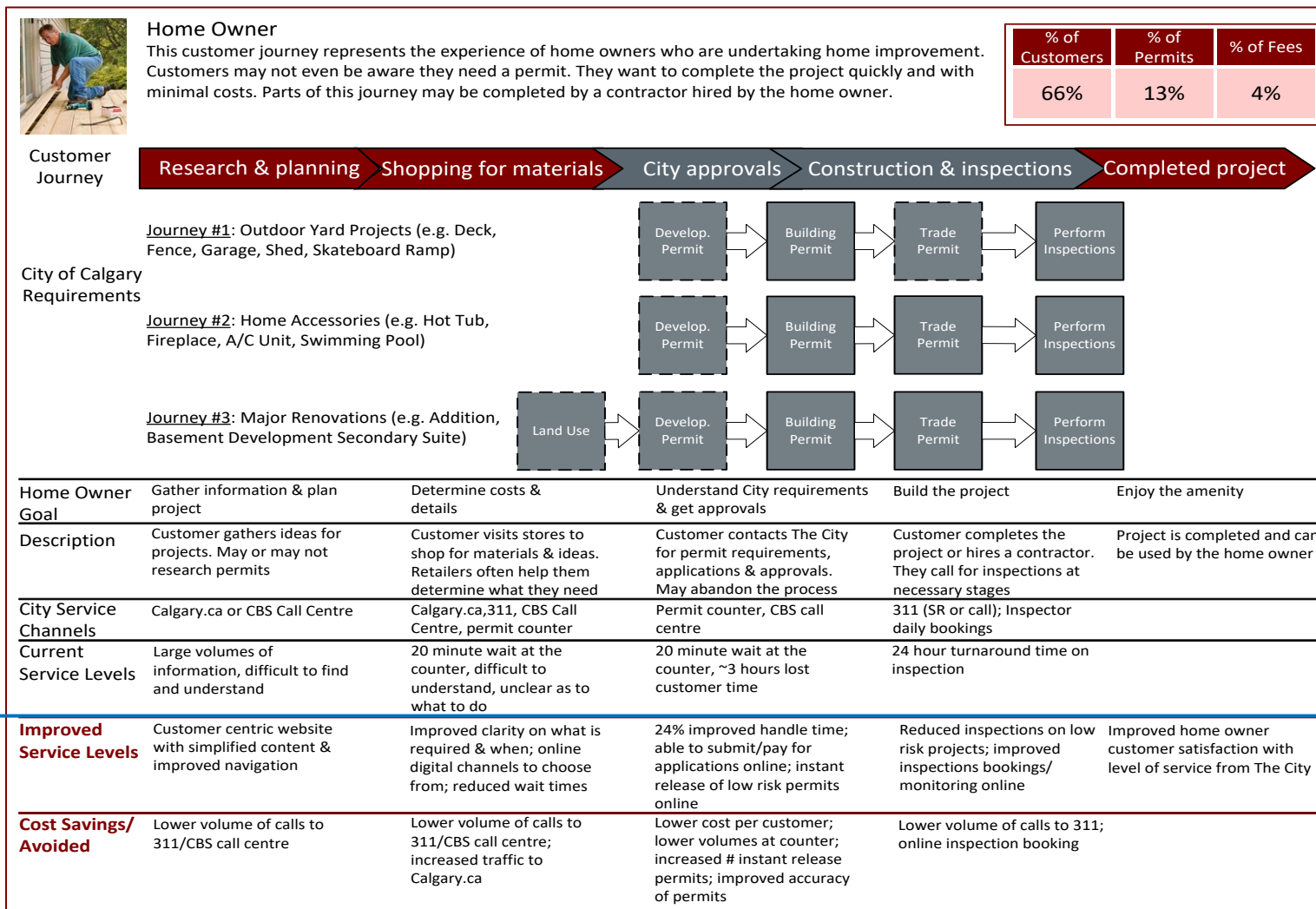
Measure after full implementation	Change	Possible Metrics
Contact cost per customer: Today = \$65/contact Future = \$50/contact	25% Service Improvement	<ul style="list-style-type: none"> ♦ Change in volume of customers at the counter ♦ Change in volume of customers using 311/531 ♦ Increased usage of online chat ♦ Reduced contact cost/customer ♦ Reduced wait times
Home owners using online services	60% Adoption	<ul style="list-style-type: none"> ♦ Volume of customers completing applications online by customer segment vs counter visits
Home/small business owner Inspections	14% Service Improvement	<ul style="list-style-type: none"> ♦ Volume of home /small business owner inspections meeting QMP ♦ Change in volume of re-inspections
CBS/PD project delivery	10% Improvement	<ul style="list-style-type: none"> ♦ Percentage of projects on-time and on-budget ♦ Successful intake of new projects with supporting business cases

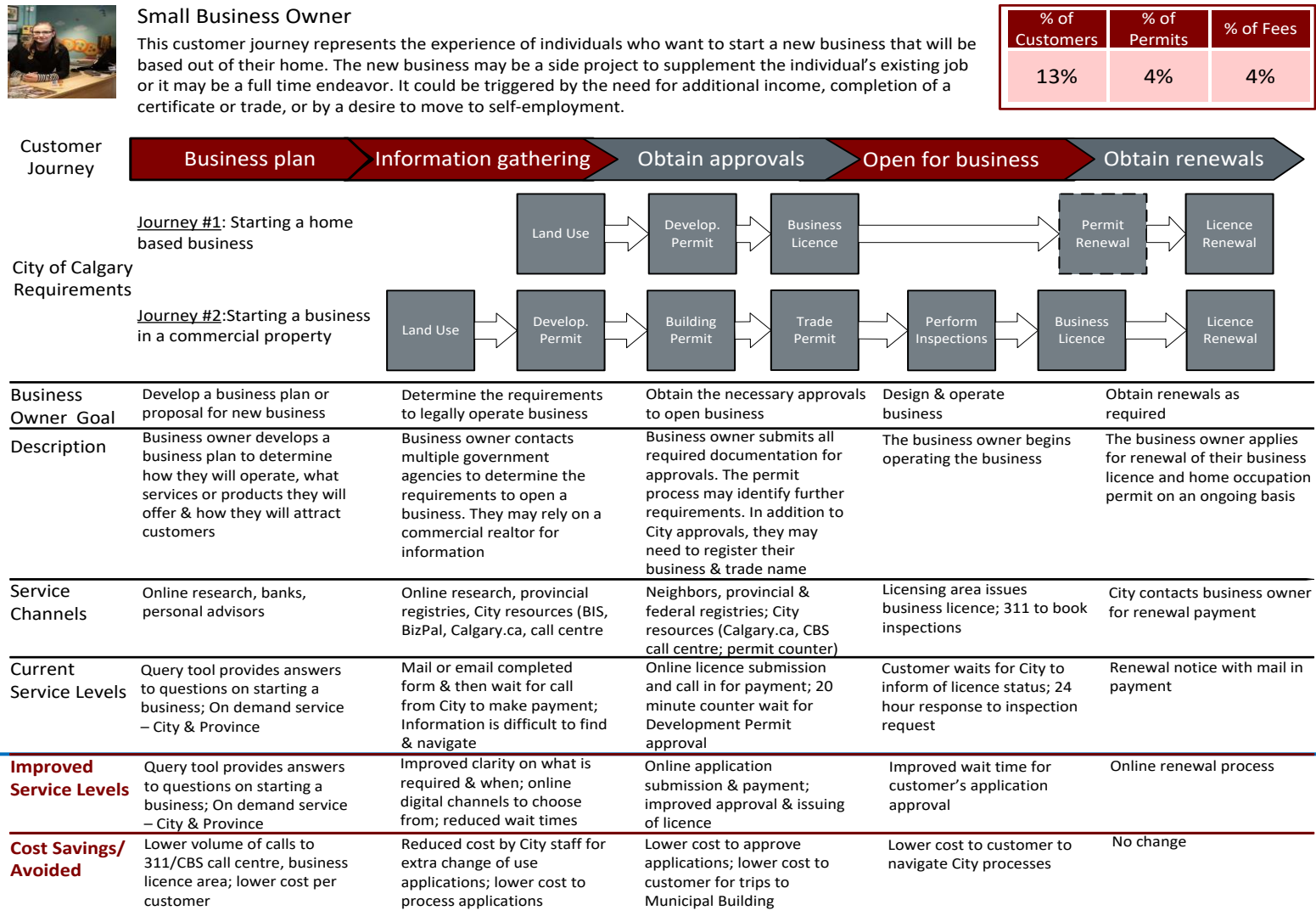
Customer Segmentation Measures

Significant effort was put in by Corporate Initiatives and CBS to determine customer segmentation for home owners and small business owners. There are potentially other measures that could show operational improvements for these two segments, but further analysis and data will need to be defined. The related recommendations for performance measurement and data capture will help support further identification of performance measures.

Appendix A: Customer Journeys

Corporate Initiatives prepared the original home owner and small business customer journeys. Supporting improvements are indicated below.





Appendix B: Assessment of Portfolio Recommendations

Detailed Recommendations	Potential Impacts	Cost Avoidance	Service Improvement	Risk of Not Doing	Potential Obstacles
Adopt PD Business Portfolio Management Framework	<ul style="list-style-type: none"> Supports the department and business units in alignment to services and outcomes The framework will define and coordinate the decision making in allocating funds, resources and mitigating departmental risk Becomes an operational protocol as PD is frequently mandated to implement directives by Council Clearly delineates function of business planning from execution of projects 	Medium	High	<ul style="list-style-type: none"> Continue to have unclear priorities Department will continue to have lists of work to do, not a set of priorities Fall behind while other Departments embrace the changes 	<ul style="list-style-type: none"> The significance of the change Lack of ownership of the framework
Establish clear terms of reference for strategic vs. execution portfolio governance	<ul style="list-style-type: none"> Differentiates the responsibilities between the two proposed governing bodies establishing processes, expectations and protocols 	Low	High	<ul style="list-style-type: none"> Decision making is eroded with no clear understanding of who makes the decisions 	<ul style="list-style-type: none"> Lack of consensus by all Directors/ Managers
Include and prioritize all business planning, operations and portfolio projects	<ul style="list-style-type: none"> Creates a more comprehensive plan of where resources are allocated Identifies opportunities for alignment or shared effort Clarifies scope Ensures resources are working on projects that are prioritized and aligned to department outcomes 	Low	High	<ul style="list-style-type: none"> Resources will continue to be diverted to BU/section's priority of work rather than the department Wasted resources/funds on work not deemed or know to be a priority 	<ul style="list-style-type: none"> Lack of agreement on what to include Clarity and agreement on language/ terminology for projects

Detailed Recommendations	Potential Impacts	Cost Avoidance	Service Improvement	Risk of Not Doing	Potential Obstacles
Adopt corporate project management and governance standards across all projects	<ul style="list-style-type: none"> Builds competency across the business unit in project management methodology that is aligned to corporate direction Adheres to project management policies and practices promoted by Corporate Project Management Centre (CPMC) In alignment with infrastructure Calgary future processes and practices 	Low	High	<ul style="list-style-type: none"> Non-compliant for capital projects PM standards Finance work already completed by CPMC to develop standards Lose ability to leverage best practice and experience of CPMC 	<ul style="list-style-type: none"> Acceptance and adherence to the CPMF standard Significant culture change
Develop performance measurement strategy and discipline for identifying, gathering and reporting on key metrics	<ul style="list-style-type: none"> Better alignment of how projects are doing against Council outcome performance measures Increases awareness by project resources and Subject Matter Experts on benefits realization 	Low	Low	<ul style="list-style-type: none"> Inability to know if successful or not May be measuring the wrong thing 	<ul style="list-style-type: none"> Understanding what the right things to measure are Current culture of fear to measure
Develop portfolio management roles and responsibilities that support the PD Business Portfolio Management Framework	<ul style="list-style-type: none"> Successful integration, prioritization and completion of PD Department action plan Clear roles and responsibilities for portfolio/project management Projects related to the business plan are completed Business/technology projects, programs and projects within PD are part of a cohesive portfolio 	Medium	High	<ul style="list-style-type: none"> Lack of ownership of the process will create: Duplication of efforts <ul style="list-style-type: none"> Competing projects that continue to reduce overall effectiveness Multiple projects competing for resources and management support 	<ul style="list-style-type: none"> Support and buy in for the new role Need to differentiate between current Coordinator Project Management Advisory Services and the new role

Appendix C: Proposed PD Business Portfolio Management Framework

This appendix outlines the proposed PD business portfolio management framework. This was provided to support PD in its execution of the recommendation.

PD Business Strategic Portfolio Management

The purpose of the PD Business Strategic Portfolio Management approach is to identify the time, resources, skills, and budgets necessary to accomplish all PD projects that comprise the Department Business Plan and Corporate Action Plan. It provides a framework for prioritizing the action items, identifying the benefits and service improvements, and understanding the alignment and dependencies. As well, it provides the centralized visibility to help planning and resourcing to identify the fastest, cheapest, or most suitable approach to deliver to the outcomes. It is what needs to be accomplished during the business cycle and supports ongoing prioritization of changes and new issues that occur. The key process areas that support the strategic components of the proposed framework are similar to the model being adopted by Infrastructure Calgary.

- ◆ The PD Business Strategic Portfolio is governed by the **Strategic Governance Committee** whose focus is on Planning & Development's services. Comprised of the GM and Directors, they will establish strategically aligned priorities and approve the prioritized list of projects
- ◆ The PD Business Strategic Portfolio is coordinated by the **Strategic Business Office** whose focus is on the management, reporting and processes for the prioritized list of work. This team works closely with the project management office in supporting the handover of the business plan projects to the teams responsible for the execution of the assigned business areas
- ◆ The **Project Management Office** supports the strategic business office during business case development, ROI analysis, leads project classification assessments and participates in strategic prioritization discussions

PD Business Execution Portfolio Management

The purpose of the PD Business Execution Portfolio Management approach is to execute the projects on time, with the identified resources and skills, and on budget, realizing the identified benefits and service improvements. It provides a framework for taking the prioritized strategic projects and applying a method to align dependencies and ensure capacity to complete the work the fastest, cheapest, or most suitable approach to delivering to the outcomes. The primary focus is on how to meet benefits and service improvements through the delivery of projects.

- ◆ PD Execution Portfolio is governed by the **Execution Governance Committee** whose focus is on the delivery of initiative benefits to meet the strategic outcomes. This committee ensures that timely decisions are made, resources are available, and benefits are realized

- ♦ The **Project Management Office** supplies the expertise and skills to coordinate and manage the administration of completing the execution of projects. Working closely with the accountable business lead, an assigned PM develops and manages the full lifecycle of the project according to Corporate Project Management Framework (CPMF) standards. Working with the Execution Governance Committee, the Project Management Office facilitates the prioritization of work based on execution needs such as resourcing, dependency, and alignment to strategic prioritization
- ♦ The **PD Business Services** are the individually managed areas of projects that have a common outcome, and set of business drivers. They have specific service improvement or benefit objectives to be realized and are specifically identified in the PD Business Plan or Corporate Action Plan. They may be sponsored by a member of the management team or within the business unit

The Project Management Institute (PMI) is the de-facto standard for project management best practices. Over the last several years, portfolio management has gained importance for organizations to manage and support their strategic objectives. As such, a portfolio management practice has started to develop. Critical to this is the understanding and definition of terminology.

PD is encouraged to use PMI standard definitions to support change within the department.

What is a portfolio?

A portfolio is a collection of programs, projects and/or operations managed as a group. The components of a portfolio may not necessarily be interdependent or even related—but they are managed together as a group to achieve strategic objectives.

What is portfolio management?

Portfolio management is the centralized management of one or more portfolios, which includes identifying, prioritizing, authorizing, managing, and controlling projects, programs and other related work to achieve specific strategic business objectives.

How does portfolio management differ from project management and program management?

Portfolio, program and project management are all aligned and driven by organizational strategies. However, each one contributes differently to the achievement of strategic goals.

Why is portfolio management important?

It supports the organization's strategic goals and, ultimately, its bottom line. Portfolio management is critical to organizing and prioritizing projects and programs and ensuring that the appropriate financial support is being allocated in support of those goals

Appendix D: Detailed ZBR Prioritization Score

Below is the ranking for each of the recommendations and the weighting of the criteria.

ZBR Recommendations - October 2016	Strategic Alignment			Value	Risk	Feasibility	
Projects	Alignment with Council Priorities	ZBR Mandate	PD Outcomes	Customer value	Overall Risk	Resources - Financial	Resources - People
Weighting	10%	20%	15%	25%	10%	10%	10%
Simplify & guide the customer journey	6	7	5	6	4	5	5
Develop and implement a formal customer contact/education strategy	5	5	4	6	6	4	3
Create a home/small business owner relationship role responsible for the education & sustainment of customer information	5	5	4	5	6	6	5
Develop partnership programs with stakeholders	4	4	4	4	5	4	5
Issue home owner permits at City multi-use locations	4	5	3	6	5	3	4
Accept digital documents from home owners	4	6	1	5	5	5	5
Provide electronic submission & processing of home owner applications & payments	5	6	5	7	2	4	4
Upgrade & complete the technology solution to enable small business owners to pay online	3	5	3	6	4	4	4
Roadmap, design & pilot online chat channel	4	6	3	6	3	6	4
Apply risk based approach & remove discretionary business rules not supported by bylaws & standards	4	6	4	5	4	6	5
Use the small business owner customer journey to create a holistic sequence of compliance requirements across all stakeholder agencies	4	6	4	7	4	6	5
Capture operational data for meaningful performance measurement	4	5	4	1	6	3	3
Complete inspection business process redesign & implement a workforce mgmt tool	4	6	5	6	4	5	4
Review citizen complaints & move rules to the appropriate bylaw for enforcement	3	5	2	5	1	5	5
Formalize risk-based decision-making for Inspectors	5	6	5	6	4	6	5
Develop portfolio management roles & responsibilities	5	5	3	3	5	6	5
Adopt PD business portfolio management framework	5	6	5	4	5	6	5
Establish clear terms of reference for strategic vs. execution portfolio governance	5	5	5	1	6	6	5
Include & prioritize all business planning, operations & portfolio projects	4	6	5	2	5	6	5
Adopt Corporate project management & governance standards	5	6	5	2	6	5	5
Develop performance measurement strategy & discipline for identifying, gathering and reporting on key metrics	3	4	4	1	4	4	4

Appendix E: Customer Segmentation Analysis

Home and business owners comprise the majority of PD's customer base, but they are a small share of the total permit volume and revenue. The reverse is true for developers, builders, and supporting professionals.

Key Customer Segments	% of Customer Base	% of Permit Volume	% of Permit Fees	Approx. Average # of Permits per Customer	Approx. Average Fees Paid per Customer
1. Home Owners	66%	13%	4%	2	\$600
2. Business Owners	13%	4%	4%	3	\$3000
3. Land Developers	<1%	<1%	2%	6	\$90,000
4. Builders	2%	7%	24%	28	\$100,000
5. Contractors	7%	11%	14%	14	\$20,000
6. Trades	8%	57%	12%	61	\$14,000
7. Supporting Professionals	4%	7%	41%	16	\$104,000

Source: POSSE data, 2013-2015. Approx. 27,000 unique customers.

Permit & Inspection Volumes:

Volume data - home owner	2014	2015
#Electrical Permits	3,206	3,192
#Electrical Inspections	5,600	6,381
#Gas Fireplace Installation permits	12	16
#Gas Fireplace Installation inspections	11	17
#Plumbing Permits	1,873	1,906
#Plumbing Inspections	2,879	3,414
Development permits	6,465	5,807

Volume Data - Business License	2014	2015
New Business Licenses	6,837	7,081
Business License Renewals	30,733	31,116
Volume Data - Specific Business Permits	2014	2015
Home Occupation class 1	3805	4059
Business Change of Use	3061	3368
Volume Totals	44,436	45,624

Total Volumes - home owners	2014	2015
Total Permits	11,556	10,921
Total Inspections	8,490	9,812

Total contacts with customers by CAS	2014	2015
Total answered 5311	115,249	113,177
Total answered TAC	32,335	30,438
Total customers served at counter	41,928	39,128
Total customers served at reception	20,174	19,920
	209,686	202,663

Year: 2015	Home Owner	Small Business Owner
Customer Segment %	66%	13%
Contacts by Segment	133,758	26,346
Permit/license Volumes by Segment	10,921	45,624

Appendix F: About Kogawa and Our Approach

Kogawa is an Alberta based consulting group with a core team of 15 long-term consultants. Kogawa has 31 years of business process management experience with municipal, provincial, and federal governments; and within the private sector. Our municipal experience includes over 100 similar projects with The City of Calgary and the Regional Municipality of Wood Buffalo. We developed the business process methodology that is utilized by The City of Calgary, and delivered training on this methodology to City staff. Last year, Kogawa also developed and delivered a customized business process management course for City staff involved with Zero-Based Reviews.

Kogawa Consulting has completed many related projects in CBS and its' three divisions: Customer Advisory Services, Building Regulations, and Business Services over the years; and has a good knowledge/appreciation and understanding of the services provided by these areas.

Kogawa's Approach to the ZBR

Kogawa's methodology supports and aligns to the ZBR approach and program standards. The City ZBR includes five phases: 1) Data Collection, 2) Opportunity Identification, 3) In-Depth Analysis, 4) Recommendations, and 5) Implementation. Kogawa's scope included phases three and four only. Kogawa consultants onboarded on April 29, 2016 and the final report was completed on October 21, 2016.

Kogawa's approach involves facilitating and building on the knowledge and experience of staff, customers, other municipalities, and several stakeholders. Kogawa utilized the data provided from the Data Collection and Opportunity Identification phases provided by Corporate Initiatives and CBS, in addition to the data analysis and research completed during the In-Depth Analysis phase.

The approach stressed the need to uncover the root problems, and not just the symptoms. With the support of the PD General Manager, Kogawa used a ***customer-centric focus*** to identify the recommendations and to tell the customer story.

ⁱ The City's Digital Strategy <http://www.calgary.ca/cfod/it/Pages/Digital-strategy.aspx>

ⁱⁱ OECD (2011), "Uptake of e-government services", in *Government at a Glance 2011*, OECD Publishing. http://dx.doi.org/10.1787/gov_glance-2011-55-en

ⁱⁱⁱ Canadian Internet Use Survey, 2012 (2013 November 26), Retrieved from <http://www.statcan.gc.ca/daily-quotidien/131126/dq131126d-eng.pdf>

^{iv} Plain Language at Work – Know Your Readers (2013) Retrieved from <http://www.impact-information.com/impactinfo/literacy.htm>

^v Working with Plain Language, William H. Dubay (6 June 2008), <http://www.impact-information.com/Resources/working.pdf>

^{vi} Code for America <https://www.codeforamerica.org/>

^{vii} Homebase Online Tool <http://www.homebasefix.com/>

^{viii} Forbes, Richard White (December 18, 2012) <http://www.forbes.com/sites/ciocentral/2012/12/18/the-future-of-customer-service-lessons-from-your-barber/#517a50b7dc0e>

^{ix} CIO, Lauren Brousell, (July 8, 2015) <http://www.cio.com/article/2945372/retail/millennials-skip-traditional-customer-service-for-online-troubleshooting.html>