

**Calgary**



# **Customer-Oriented Services:**

Segmentation Analysis for  
Planning & Development

**Calgary Building Services  
Zero-Based Review**  
Steering Committee Meeting  
April 1, 2016





## Background





## Opportunity identification

**Between September and December 2015, nine potential opportunities for improvement were identified for Calgary Building Services. The Steering Committee agreed to pursue three of these opportunities in the ZBR.**

### Customer-oriented services

Improve understanding of Planning & Development's customers, including their needs and preferences.

### Business model

Review and simplify the products and services offered to customers.

### Portfolio management

Review the portfolio of improvement initiatives underway to optimize the return on investment.



## Customer-oriented services

**There is an opportunity to better understand the different customer groups served by Planning & Development to ensure services are oriented towards their needs and expectations.**

- The specific objectives of this work are to:
  - Identify customer segments served by Planning & Development; and
  - Develop profiles for key customer segments using existing customer data and research.
- The scope includes all direct customers of Planning & Development (i.e. not restricted to Calgary Building Services), given the integrated nature of service delivery in this department.





## What is the current gap?

Forrester defines the customer understanding discipline as:  
“a set of practices that create a **consistent shared understanding** of who customers are, what they want and need, and how they perceive interactions they are having with your company.”

Customer Experience Maturity Assessment, 2012

- A significant amount of work has been completed and is underway within Planning & Development to understand customers and their preferences, especially for the eServices program.
- However, there is no single document that clearly defines customer segments and describes their specific needs.
- Employee interviews during the ZBR Opportunity Identification found that many people are working on different aspects of the customer experience, but it has not been combined into a comprehensive view.



## Understanding customers through segmentation

- One common method for understanding customers is customer segmentation.
- A customer segment is a subgroup of customers that have shared characteristics.
- Segmentation allows organizations to tailor services to customers' unique needs, without the excessive burden of trying to tailor to each individual customer.

“...treating everyone the same is more likely to reduce, not improve, customer satisfaction. Customers – whether public or private – typically have very different needs and preferences. By clustering users into like-minded groups, organizations avoid trying to create a one-size-fits-all solution.”

Deloitte, One Size Fits Few, 2008



## Resourcing for this opportunity

The Steering Committee agreed to undertake this work using internal resources (rather than an external consultant), given the amount of existing knowledge and expertise available in house.



Key project resources:

- **Corporate Initiatives** (coordinate and lead the work)
- **Planning & Development** (provide subject matter expertise and knowledge of customers)
- **Customer Service & Communications** (provide advice and ensure alignment with the corporate Customer Service Program)

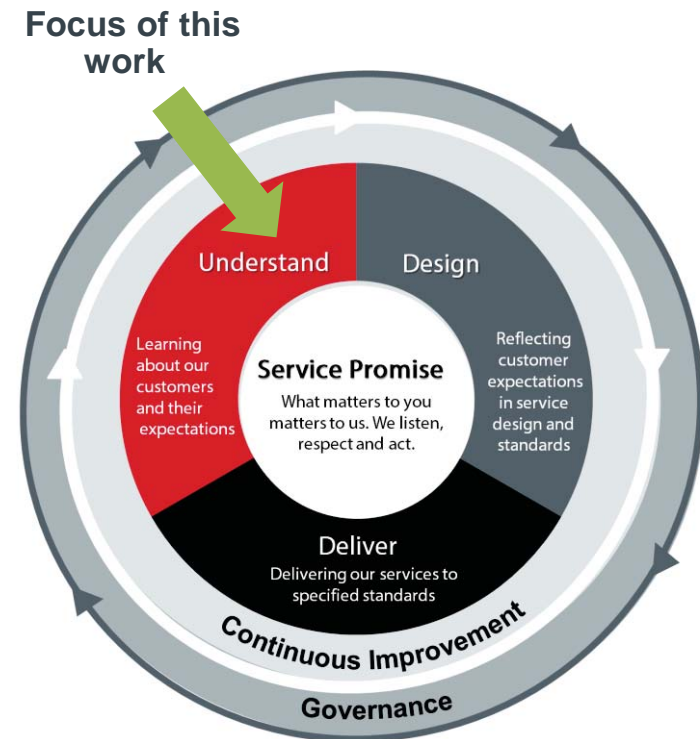
The Steering Committee will receive the final results of this work.



## Alignment with The City's Customer Service Approach

It is critical to understand customers to ensure the design and delivery of services are oriented towards what customers truly want and need.

- While many front-line employees already have a strong understanding of the customers that they interact with on a regular basis, the customer understanding discipline ensures that **all employees have a shared understanding of customers** and that all initiatives are oriented towards that knowledge.



*The City of Calgary's Customer Service Approach  
(Customer Service & Communications)*



## Benefits of customer segmentation

**Understanding customers and their preferences is a foundational piece of work. While it does not deliver specific benefits on its own, it is critical to maximizing the benefits of customer improvements in the “Design” and “Delivery” stages.**

- The key benefits of customer segmentation are:
  - ✓ Increase customer satisfaction by giving customers more of what they need
  - ✓ Increase cost efficiency by giving customers less of what they do not need
  - ✓ Better prioritize investments to improve customer service
  - ✓ Improve the effectiveness of communication, marketing and education
  - ✓ Identify opportunities to bundle services for specific customer segments
  - ✓ Enhance partnerships with other groups that serve the same segments





## Benefits for Planning & Development

**For Planning & Development, the benefits of customer segmentation will be particularly salient for two reasons:**

- 1** Customer service is of central importance to Planning & Development and is a top concern among Councillors – improving service through segmentation will **build trust with customers and Council.**
- 2** Planning & Development has a large volume of initiatives underway to improve the customer experience – customer segmentation will allow the business to better prioritize these initiatives and **maximize return on investment.**



## Segmentation Approach





## Guiding principles

Based on best practice research, the following guiding principles were used to inform the segmentation approach:

- ✓ **Customer Focused:** The segments should reflect the customer's perspective, not the organization's perspective.
- ✓ **Meaningful:** The segments should resonate with Planning & Development employees and be useful for informing business decisions.
- ✓ **Simple:** The segmentation approach should be easy to understand, replicate and maintain.
- ✓ **Adaptable:** The segments and profiles are an evolving picture that can be updated as circumstances change or as new information becomes available.

**"Segmentation is not a one-off event,** but rather a recurring exercise done at regular intervals to keep pace with changing customer populations and evolving needs and preferences."

Deloitte, One Size Fits Few, 2008

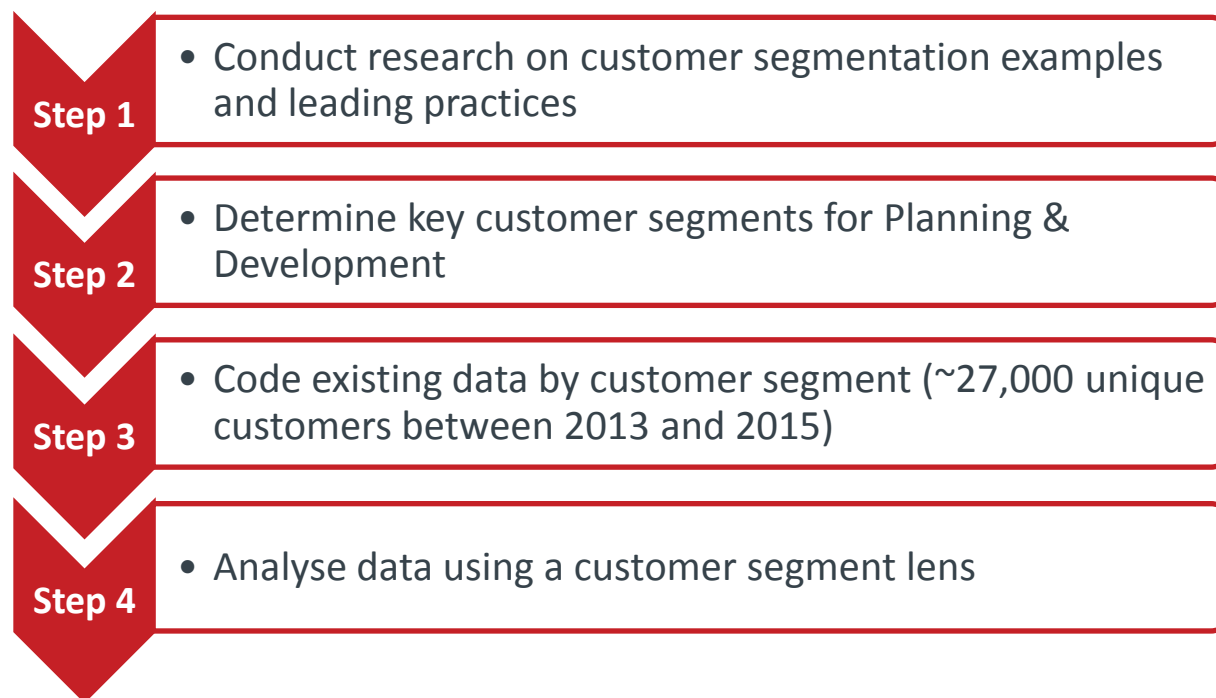
**"Public bodies should create a simple segmentation that makes sense to their business** and resist the urge to overanalyse data."

Deloitte, Choosing Channels, 2007



## Customer segmentation approach

The segmentation analysis is informed by leading practices and utilizes Planning & Development's existing customer data.



**Note:** Leading practices suggest that customer segmentation is an art and a science, and public organizations should resist the urge to overanalyse data. The data is primarily useful as an **order of magnitude** and to identify high level trends.



## Potential dimensions for segmentation

There are many different lenses that could be used to segment Planning & Development's customers.

Dimension	Examples
Who are they?	Homeowner, developer, builder
What type of permit do they need?	Land use, building permit, development permit
What type of structure are they building?	Residential, commercial, industrial
How often do they need a permit?	High frequency, low frequency
How complex is their application?	High complexity, low complexity
Where are they building?	Inner city, greenfield

- Selected the “Who are they?” dimension for the following reasons:
  - ✓ Puts the customer front and centre
  - ✓ Reflects how customers view themselves
  - ✓ Results in the most meaningful distinctions in terms of customer needs
  - ✓ Simple and plain language
  - ✓ Resonates with employees





## Findings





## Planning & Development's customer segments

Seven key customer segments were identified for Planning & Development.

Key Customer Segments	Typical Description
<b>1. Home Owners</b>	Individual homeowners who are undertaking home improvement projects.
<b>2. Business Owners</b>	Individual business owners who are undertaking projects to enhance their commercial property, such as new signage, renovations, or expansions.
<b>3. Land Developers</b>	Individuals or companies that buy and service land for future development.
<b>4. Builders</b>	Individuals or companies that purchase land, build new units, and sell the units to future occupants. They oversee the design and construction of the build.
<b>5. Contractors</b>	Individuals or companies hired on a contract to coordinate and/or undertake construction work and renovations.
<b>6. Trades</b>	Individuals and companies that specialize in a particular aspect of construction, such as electrical and plumbing, who are hired to complete a portion of a project.
<b>7. Supporting Professionals</b>	Firms hired by applicants to take on a portion of the approvals process, such as engineers, architects, planners, and lawyers.

**Note:** These are direct customers only – additional stakeholders and indirect customers (e.g. Community Associations) were identified but are not reflected in the customer transaction data.



## Customer segment 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.

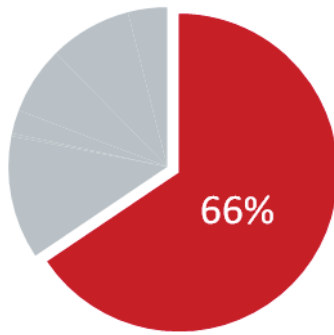
**Note:** These numbers do not include business licenses as this data is stored in a separate warehouse and is not readily available at this depth. However, a future project could integrate the license data for a more fulsome view. A full list of products included in this data is included in Appendix B.



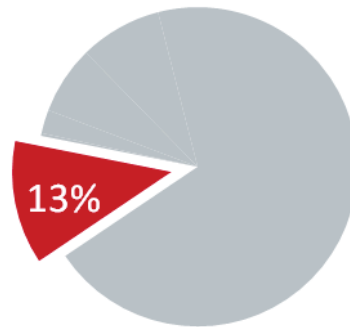
## Customer segments: % of customer base

~27,000 unique customers (Source: POSSE data, 2013-2015)

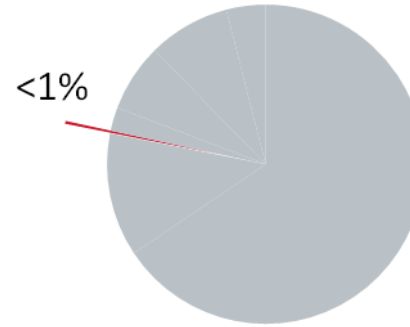
Home Owners



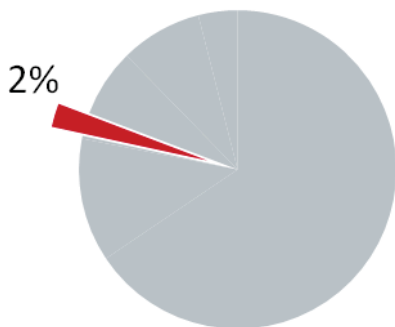
Business Owners



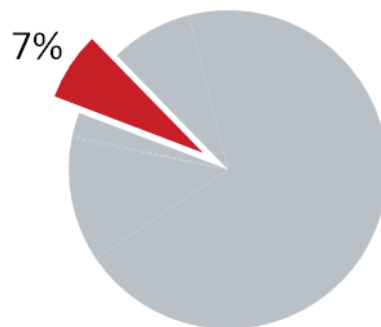
Land Developers



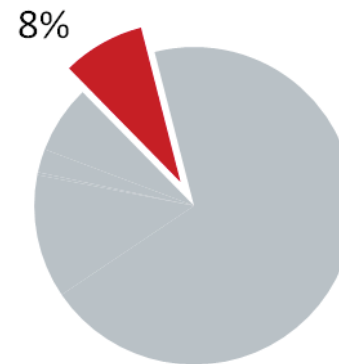
Builders



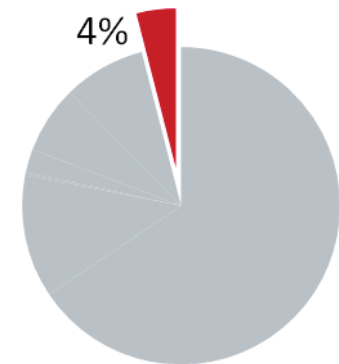
Contractors



Trades



Supporting Professionals

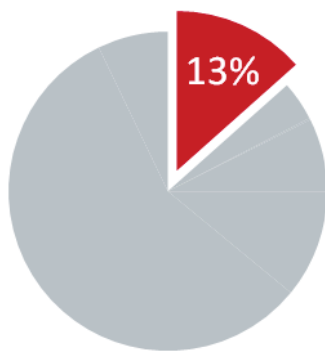




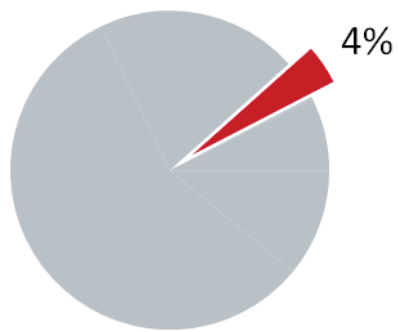
## Customer segments: % of permit volume

~250,000 permits (Source: POSSE data, 2013-2015)

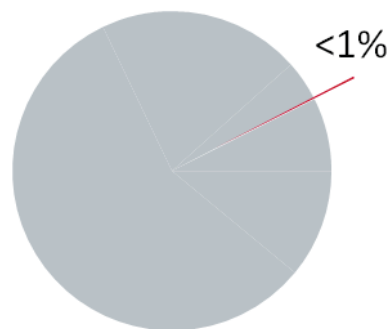
Home Owners



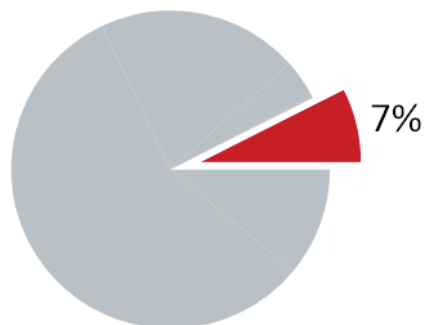
Business Owners



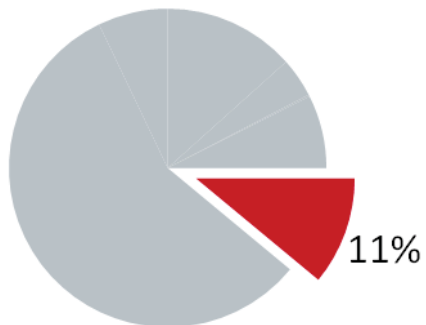
Land Developers



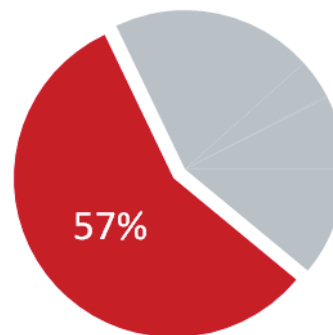
Builders



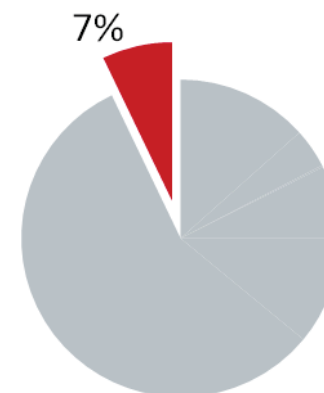
Contractors



Trades



Supporting Professionals



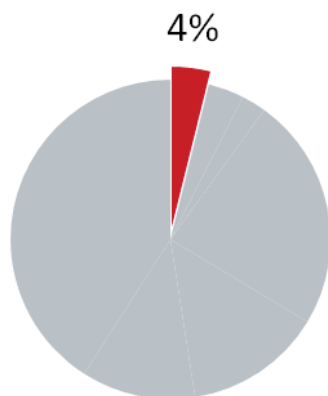




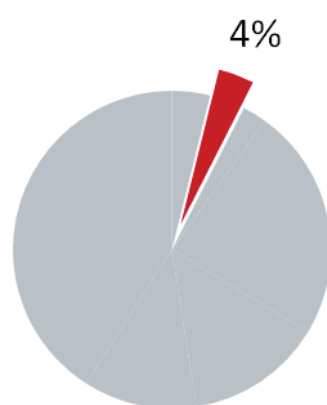
## Customer segments: % of permit fees

~\$280 million in permit fees (Source: POSSE data, 2013-2015)

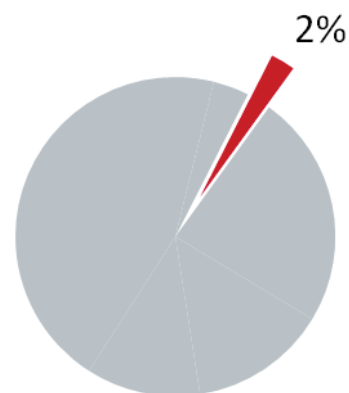
Home Owners



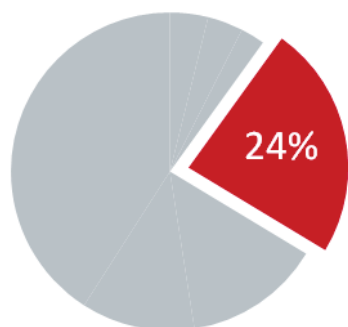
Business Owners



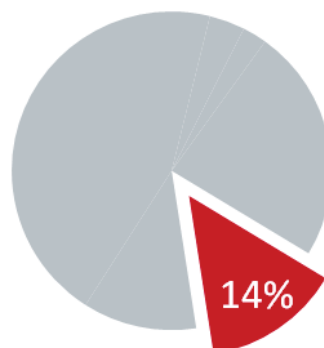
Land Developers



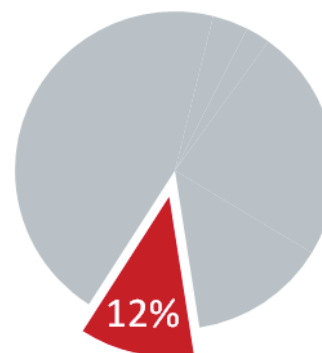
Builders



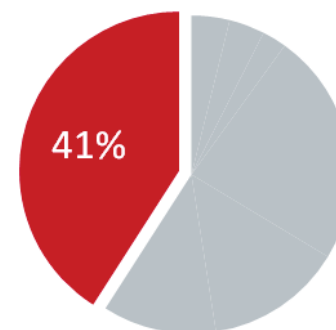
Contractors



Trades

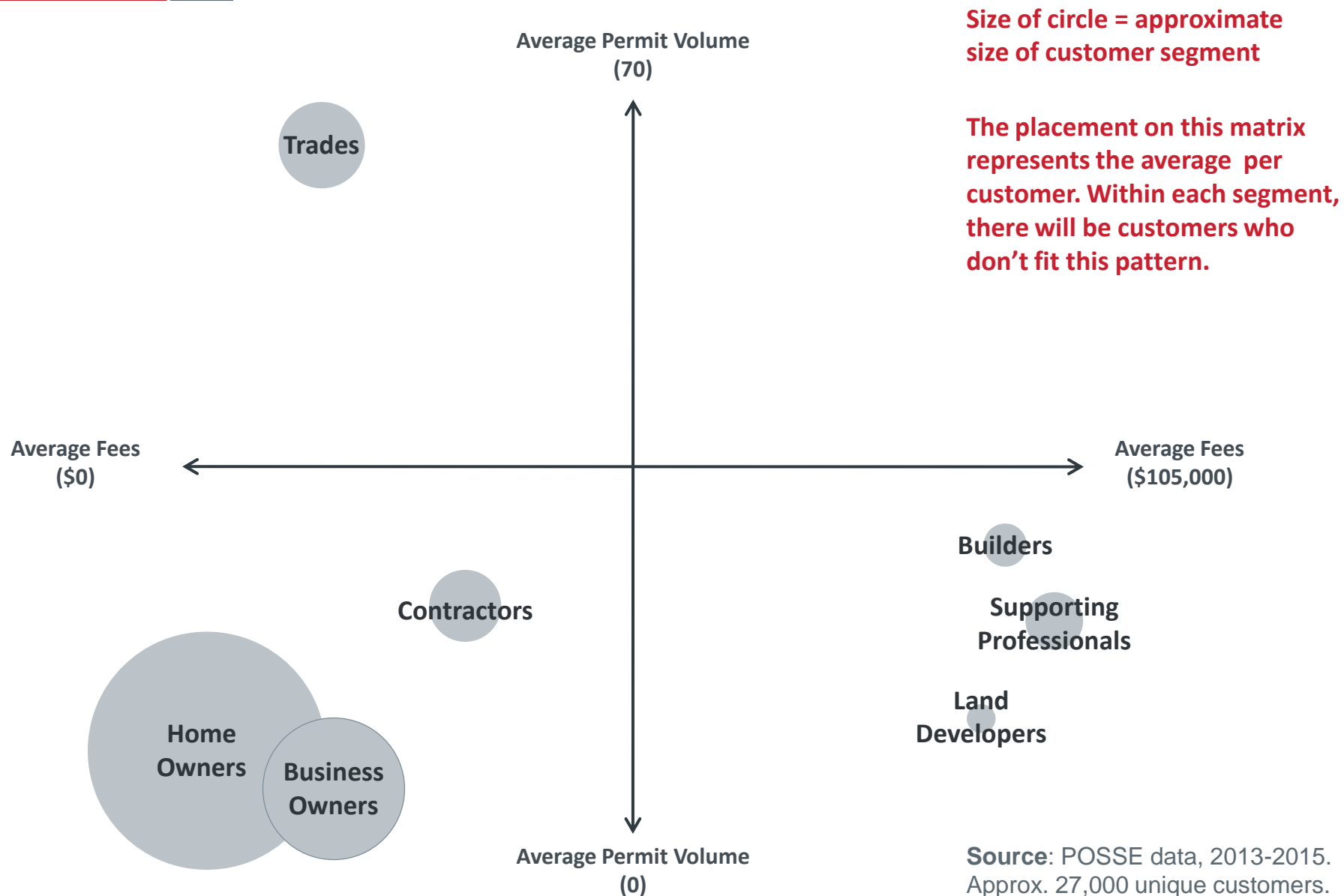


Supporting Professionals





## Customer segment matrix



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



## Top customers by permit volume

### Top 100 Customers

(0.4% of all customers)

obtained 36%  
of all permits

26% of total permits were obtained  
by 74 trades people  
5% by 6 contractors  
4% by 13 builders  
1% by 4 supporting professionals  
1% by 2 business owners

36%

### Top 500 Customers

(1.8% of all customers)

obtained 58%  
of all permits

43% of total permits were obtained  
by 387 trades people  
6% by 34 contractors  
5% by 39 builders  
3% by 30 supporting professionals  
1% by 11 business owners

58%

The #1 customer by permit volume was Somerville Co. Ltd.  
They obtained 9115 permits between 2013 and 2015.



## Top customers by permit fees

### Top 100 Customers

(0.4% of all customers)

paid 63%  
of all permit fees

31% of total permit fees were paid  
by 36 supporting professionals  
17% by 26 builders  
8% by 17 contractors  
3% by 8 land developers  
2% by 9 trades people  
1% by 4 business owners



### Top 500 Customers

(1.8% of all customers)

paid 82%  
of all permit fees

38% of total permit fees were paid  
by 157 supporting professionals  
21% by 101 builders  
11% by 66 contractors  
7% by 123 trades people  
4% by 24 land developers  
2% by 18 business owners

The #1 customer by permit fees was Norr Architect Planners.

They paid \$12M in permit fees between 2013 and 2015.

**Note:** While supporting professionals have their name on the application, they are acting on behalf of their clients (e.g. land developers, builders). A current limitation in the customer data is knowing who the professional firm is representing on a given application. This information is currently tracked to some degree but is difficult to extract.



## Next Steps

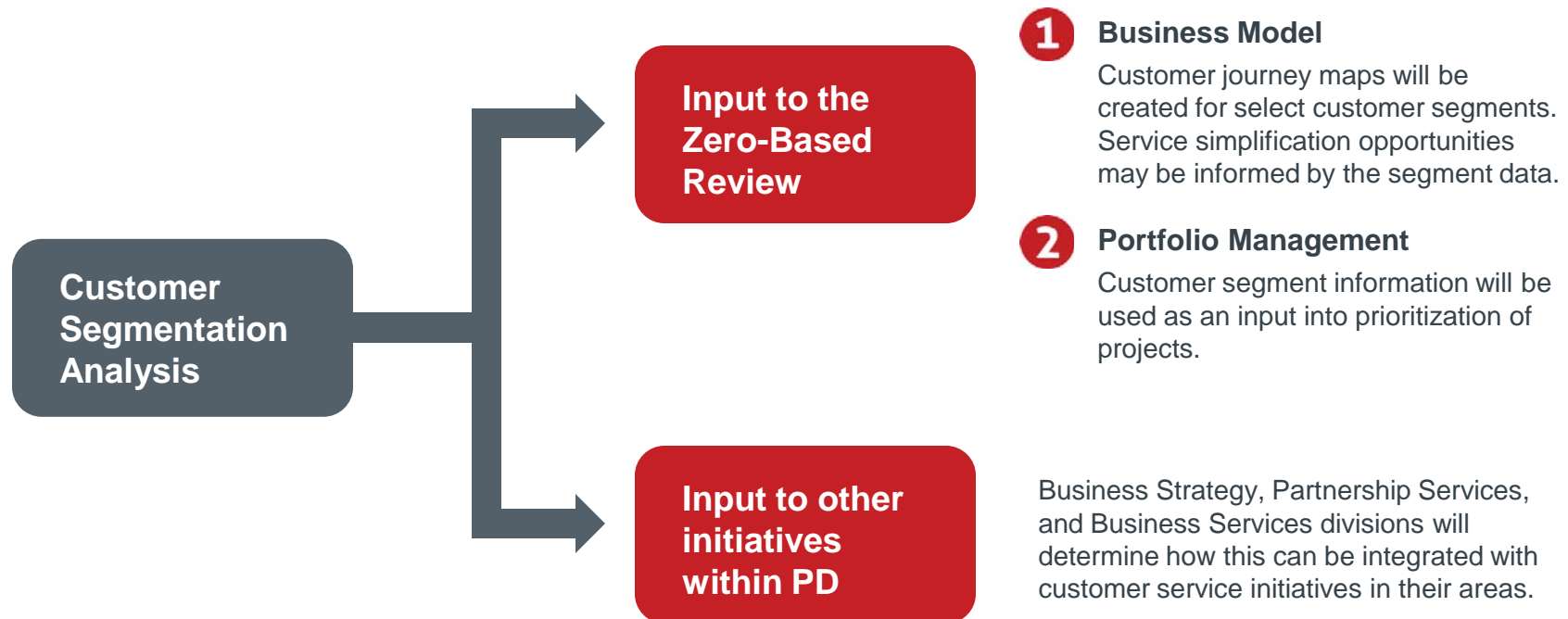






## What are the next steps?

The results of the customer segmentation analysis will be used as an input for the remainder of the Zero-Based Review and can also be used to inform other projects within Planning & Development.





## Customer Journey Mapping

**The immediate next step for the ZBR is to map customer journeys for the home owner and business owner segments.**

- The journey maps will be completed by early May so they can be used by the external consultant to identify opportunities to simplify services.
- Customer journey maps show the end-to-end customer experience and describe the steps customers take to achieve their desired task (current state).
- Journey mapping is not the same as process mapping – journey maps reflect the customer point of view, not the organization's point of view.

### **For Discussion: Business Licensing**

There is an emerging question about the business owner customer journey when opening and licensing a new business.

Should the scope include other areas of The City (outside of Planning & Development) that support this service, e.g. Calgary Community Standards?



## How can Planning & Development use this information?

Throughout the course of this work, several ideas have been generated about how Planning & Development could use customer segmentation analysis to improve services beyond the Zero-Based Review process.

Top Customers	Risk Management	Communications & Marketing	Training	Service Levels
<ul style="list-style-type: none"> <li>Consider a different approach for top customers</li> <li>For example, account management model or streamlined processes for “preferred customers”</li> </ul>	<ul style="list-style-type: none"> <li>Integrate with the risk management model currently under development</li> <li>Develop targeted education campaigns to manage expectations and risk tolerance</li> </ul>	<ul style="list-style-type: none"> <li>Develop targeted communications and marketing materials and tactics for different customer segments</li> </ul>	<ul style="list-style-type: none"> <li>Incorporate information about customer segments and their specific needs and preferences into employee training materials</li> </ul>	<ul style="list-style-type: none"> <li>Develop service level agreements for different customer segments based on needs and expectations</li> </ul>

**Note:** These ideas are presented for Planning & Development’s consideration. Additional work would be required to determine the value and feasibility of these options.



## Future data development opportunities

**This work was completed using only *existing* customer data. There may be opportunities to improve and expand on this data through future initiatives.**

- Consider tracking customer segments in POSSE
- Align customer research (e.g. surveys and focus groups) with customer segments to gain more insight from this work
- Improve tracking of property owners on applications to better understand permit applications by Supporting Professionals
- Improve integration with business license data to get a more fulsome view of the Business Owner segment
- Continue current efforts to improve data quality and integration of systems



## Appendix A: Customer Segment Profiles





## Customer segment profiles

**A profile was developed for each customer segment to build a story around the data. These profiles pull together existing knowledge and research about Planning & Development's customers.**

- The profiles include the following information (where available):
  - Description of the segment
  - Typical characteristics
  - Drivers of satisfaction
  - Typical products and services accessed
  - Preferred service channels
- The profiles were populated using existing research, such as customer transaction data (POSSE), surveys, focus groups, and workshops with Planning & Development staff.
- Three profiles were also developed for key stakeholder groups, including community associations, occupants, and citizens.





## Direct Customers





# HOME OWNERS

## Description:

Individual homeowners who are undertaking home improvement projects such as decks, garages, fences, renovations, or basement developments.

% of Customers	% of Permits	% of Fees
66%	13%	4%

## Typical Characteristics:

- Getting a permit from The City is a rare occurrence for them.
- They may not be very familiar with the permit process and need a lot of guidance from staff to understand the steps and requirements.
- They have high expectations of the service and often expect The City to provide construction advice.
- They may potentially avoid or give up on the permit process if it feels like too much of a hassle.

## Typical Products and Services Accessed:

- Development permits (relaxations)
- Building permits (Residential Improvement Project)
- Trade permits
- Inspections

Permit Volume ● ○ ○ ○ ○

Fees ● ○ ○ ○ ○

## Drivers of Satisfaction:

I am satisfied when...

- I know exactly what The City needs from me for my application.
- The process is easy and straightforward and “how-to” guides are available.
- City staff are patient with me and walk me through the process.

I get frustrated when...

- I need to take time off work to come to the Municipal Building for a permit or to wait for an inspection.
- I have to wait in line at the permit counter.
- Information is presented using terminology that I don’t understand.
- The requirements seem to be different for my application than for my friends, family and neighbours.

## Preferred Service Channels:

- They want interactions to be customized to their needs.
- Channel preferences vary based on knowledge level and demographic – phone, self-serve, online, print, and in person.



# BUSINESS OWNERS

## Description:

Individual business owners who are undertaking projects to enhance their commercial property, such as new signage, renovations, or expansions. Their space may be owned, leased, or home-based.

% of Customers	% of Permits	% of Fees
13%	4%*	4%

## Typical Characteristics:

- Small business owners may not be very familiar with the permit process and need a lot of guidance from staff to understand the steps and requirements. Large business owners or franchisees often hire experts to help them with the process.
- They often have personal savings invested in their business and therefore have a strong emotional attachment to the approvals process.
- Timelines can be very tight – permit and licensing approvals are often tied to important decisions such as purchasing or leasing property.

**\*Note: In addition to permits, business owners get approx. 38,000 business licenses per year.**

## Typical Products and Services Accessed:

- Business license (new and renewal)
- Building permits (commercial)
- Development permits (signage, change of use)
- Trade permits
- Inspections

Permit Volume ● ○ ○ ○ ○

Fees ● ○ ○ ○ ○

## Drivers of Satisfaction:

I am satisfied when...

- I receive a business license, which provides me with a sense of legitimacy and certainty for my business.
- City staff are patient with me and walk me through the process.

I get frustrated when...

- The rules and terminology are inconsistent between different City departments.
- I have to pay application fees – this can impact my bottom line, even if it seems nominal.
- Information is presented using terminology that I don't understand.
- I get surprised by requirements that result in unexpected costs or time delays.

## Preferred Service Channels:

- New businesses tend to need more assistance – they like to be served over the phone or in person.
- Established businesses prefer automated processes that limit the time they need to spend on the process.



# LAND DEVELOPERS

## Description:

Individuals or companies that buy and service land for future development.

% of Customers	% of Permits	% of Fees
<1%	<1%	2%*

## Typical Characteristics:

- They are undertaking complex, high risk projects.
- They have significant financial investments tied to The City's planning approvals process.
- They are familiar with the process and have established relationships with City staff.
- They may ask Councillors and/or senior management to step in if they feel the process is unfair.
- Time is money – the sooner they can get a decision from The City, the better.
- They want certainty from The City so they can make smart business decisions and investments.

**\*Note: On top of permit fees, developers pay ~\$100M per year in off-site levies.**

## Typical Products and Services Accessed:

- Development Agreements
- Indemnification Agreements
- Securities
- Endeavours
- Subdivision permits
- Infrastructure inspections

Permit Volume ●●○○○

Fees ●●●●●

## Drivers of Satisfaction:

I am satisfied when...

- The City is open and transparent with me about their decisions.
- I have certainty on how developable my land is and how long it will take for my investment to generate a return.
- Policies and requirements are applied fairly and consistently.
- The City collaborates with me to improve processes.

I get frustrated when...

- I don't get a clear answer on why a decision has been made.
- I'm expected to navigate through conflicting policies and requirements from different departments within The City.
- The City doesn't acknowledge or understand the pressure I am under.

## Preferred Service Channels:

- They want the opportunity to have face-to-face conversations with City staff and collectively reach agreement.





# BUILDERS

## Description:

Individuals or companies that purchase land, build new units and sell them to occupants. They oversee the design and construction of the build, from start to finish.

% of Customers	% of Permits	% of Fees
2%	7%	24%

## Typical Characteristics:

- They are often undertaking complex, high risk projects.
- They have significant financial investments tied to The City's planning and building approvals process.
- They want certainty from The City so they can make smart business decisions and investments.
- Their familiarity with the process varies depending on how frequently they build in Calgary.
- Timing is critical – The City's approvals are often tied to getting financing from a bank or whether they will have to wait until the next construction season to start building.

## Typical Products and Services Accessed:

- Development permits
- Building permits (Single Construction Permits)
- Development Site Servicing Plans
- Inspections

Permit Volume

Fees

## Drivers of Satisfaction:

I am satisfied when...

- The City is open and transparent with me about their decisions.
- Policies and regulations are applied fairly and consistently, but some flexibility is afforded for my unique circumstances.
- The approval process is fast, consistent and predictable.

I get frustrated when...

- I need to provide The City with too much detail up front that inevitably changes later on, resulting in rework and added time and costs.
- The City doesn't acknowledge or understand the pressure I am under, especially at the occupancy stage.
- I'm expected to navigate through conflicting policies and requirements from different departments within The City.

## Preferred Service Channels:

- During up front design and at occupancy, they want personal interaction to collectively resolve issues.
- They like automated and online options for routine processes and submissions.



# CONTRACTORS

## Description:

Individuals or companies hired by clients to coordinate and/or undertake construction work or renovations.

% of Customers	% of Permits	% of Fees
7%	11%	14%

## Typical Characteristics:

- Their primary focus is delivering projects on time and on budget for their clients.
- They are often coordinating multiple aspects of a construction project and overseeing multiple trades.
- Time is money – their contracts may stipulate that they don't get paid until the project is complete, which means any delays in the process can impact their cash flow.
- There is a wide range of customers within this segment, from individual contractors who do all of the work themselves to large construction management companies.

## Typical Products and Services Accessed:

- Development permits
- Building permits
- Trade permits
- Inspections

Permit Volume ●●●○○

Fees ●●●○○

## Drivers of Satisfaction:

I am satisfied when...

- The City provides me with regular updates and information so I can plan ahead and keep my client informed.
- The City answers my questions in a timely manner and provides quick turnaround on my requests for inspections.
- The process is fast, consistent and predictable.

I get frustrated when...

- I have to spend time waiting on site for an inspection.
- I can't find all of the relevant information about my project and my subcontractors in one place.
- I get different results depending on which inspector I'm dealing with.

## Preferred Service Channels:

- They like to have face-to-face interactions and build relationships with inspectors
- They would like a central online system where they can see all information related to their project



# TRADES

## Description:

Individuals and companies that specialize in a particular aspect of construction, such as electrical or plumbing, who are hired to complete a portion of project.

% of Customers	% of Permits	% of Fees
8%	57%	12%

## Typical Characteristics:

- They typically work on multiple jobs and may obtain hundreds of trade permits within a year.
- They range from individuals to large companies and they work on a wide range of projects (from small residential jobs to big commercial projects).
- Time is money – their contracts may stipulate that they don't get paid until the project is complete, which means any delays in the process can impact their cash flow.
- Their interactions with The City predominantly happen on site through the inspections process.

## Typical Products and Services Accessed:

- Trade permits
- Inspections

## Drivers of Satisfaction:

I am satisfied when...

- The City answers my questions in a timely manner and provides quick turnaround on my requests for inspections.
- I can get the permits I need as quickly and painlessly as possible.
- The process is fast, consistent and predictable.

I get frustrated when...

- I have to spend time waiting on site for an inspection or completing permit applications.
- The City changes the permit process or safety compliance processes and I have to adapt to new requirements or systems.
- I get different results depending on which inspector I'm dealing with.

## Preferred Service Channels:

- They are almost entirely online for the trade permit process
- They are frequent users of the Technical Assistance Centre (call centre)







# SUPPORTING PROFESSIONALS

## Description:

Firms hired by applicants to take on a portion of the approvals process, such as engineers, architects, planners, and lawyers.

% of Customers	% of Permits	% of Fees
4%	7%	41%*

## Typical Characteristics:

**\*Note: These fees are paid on behalf of their clients (typically builders or developers).**

- They can represent a variety of clients (from land developers to individual home owners) but are most often hired to work on large, complex projects.
- Their primary focus is delivering projects on time and on budget to their clients.
- Some firms have worked on many projects with The City – they are familiar with the process and have established relationships with City staff.

## Typical Products and Services Accessed:

- Subdivision permits
- Development permits
- Building permits
- Certificates of compliance

## Drivers of Satisfaction:

I am satisfied when...

- I can demonstrate the value I added for my client.
- The process is fast, consistent and predictable.
- The City provides me with regular updates and information so I can keep my client informed and demonstrate my knowledge of the process.

I get frustrated when...

- I'm expected to navigate through conflicting policies and requirements from different departments within The City.
- The City contacts my client without going through me first.
- There are unforeseen requirements that result in additional time or cost for my client.

## Preferred Service Channels:

- They are technologically advanced
- They like developing personal relationships with City staff
- They use the 5311 call centre frequently to get information





## Indirect Customers / Stakeholders





# COMMUNITY ASSOCIATIONS

## Description:

Members of Community Associations who are circulated on planning and development applications and provide comments to The City on behalf of their community.

## Typical Characteristics:

- They are volunteers and often have limited time and resources.
- High turnover means they are typically new to their role in the Community Association.
- They may not be very familiar with The City's planning and development processes or what their role is in the process.
- There is a range of interest among community associations – some are very engaged and active in the process, whereas others are not.

## Typical Products and Services Accessed:

- Provide comments on applications
- Participate in community planning projects
- Participate in the Partners in Planning program

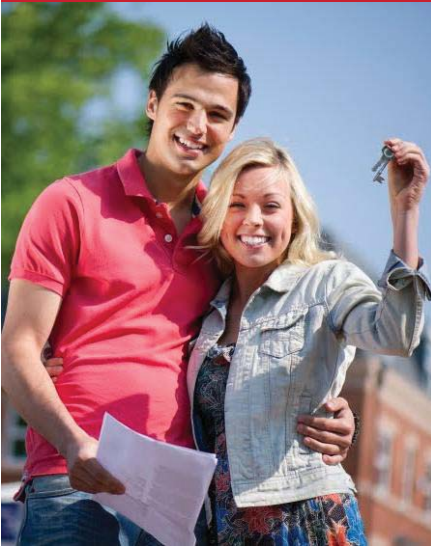
## Drivers of Satisfaction:

I am satisfied when...

- I feel I have been given many opportunities and ample time to comment on an application.
- City staff work to build a relationship with me – they attend our community association meetings and proactively provide information about new applications.

I get frustrated when...

- I feel like my concerns with an application are not taken seriously.
- I can't find information about the process, timelines or final outcome of an application.
- I don't have enough time to collect and submit comments before the deadline.
- Information is presented using terminology that I don't understand.



# OCCUPANTS

## Description:

People who will be occupying a newly constructed or renovated building after the project is completed. This could include new home buyers or people who will be working in a new commercial, industrial or institutional space.

## Typical Characteristics:

- They may have invested personal savings into the new property.
- They have high expectations in terms of building quality and safety, and they expect The City to play a role in protecting them as consumers.
- Timing is critical – if they are delayed moving into a new space, this can impact financing, living situations, or ability to run their business.

## Typical Products and Services Accessed:

- They don't access services directly – they are indirectly impacted through the experience of contractors, builders, etc.
- They may seek information about their property or the process by calling The City or searching Calgary.ca

## Drivers of Satisfaction:

I am satisfied when...

- I get to move in to the new space on schedule.
- The quality and safety of the building meets my expectations.
- I receive frequent updates on how far along the project is and when I can expect to move in.
- I feel like The City is looking out for my interests.

I get frustrated when...

- The project is not completed on schedule so I need to significantly change my plans.
- The quality of workmanship in my new property does not meet my expectations.
- Information is presented using terminology that I don't understand.



# CITIZENS

## Description:

The current and future residents of Calgary. They have aspirations about how their community should look and feel and they want to have a say in the future growth of the city. They also want assurance that the buildings where they live and work are safe.

## Typical Characteristics:

- They are passionate about how new developments might impact their quality of life, including the look and feel of their neighbourhood and their property value.
- They are typically unfamiliar with The City's planning and building approvals process.

## Typical Products and Services Accessed:

- Provide comments on applications
- Participate in open houses
- Participate in public hearings
- Submit complaints about construction sites

## Drivers of Satisfaction:

I am satisfied when...

- I feel I have been given many opportunities to hear about and comment on an application or policy.
- I am given opportunities to provide feedback through various channels.
- I feel like The City is looking out for my interests and making sure buildings in Calgary are safe to occupy.

I get frustrated when...

- I feel like my concerns with an application are not taken seriously.
- I can't find information about the process, timelines or final outcome of an application.
- An application is approved that I don't agree with.
- Information is presented using terminology that I don't understand.





## Appendix B: Methodology Details





## Coding customer transaction data

- Planning & Development's customer transaction data (from POSSE) does not currently segment customers
- This project coded customers (using the "Applicant Name" field) into segments in order to analyze the data by segment
- Coding methodology:
  - Coded ~27,000 unique customers (2013-2015 data)
  - Auto-coded customers using key words (captured 85% of 27,000)
  - Manually coded a sample of the remaining 15% of the data set (accurate within +/- 5%)
- Coding is useful for getting an **order of magnitude** for each segment; however, it should not be relied upon as being 100% accurate.





## Auto coding examples and accuracy testing

Segment	Example Key Words	# of Matches Using Key Words	Example Matches	Accuracy
Home Owners	"Last Name, First Name" format	~18,000	ROY, STEPHANIE BOYD, IAN	N/A
Builders	"Homes" "Builder"	~600	HOMES BY AVI SHANE HOMES WESTVIEW BUILDERS	93%
Contractors	"Construction" "Contractor"	~1500	PCL CONSTRUCTION COUGAR CONTRACTORS	96%
Trades	"Electric" "Plumb" "Gas"	~2000	CANYON PLUMBING & HEATING PETE THE PLUMBER	91%
Supporting Professionals	"Architect" "Engineer" "Associates"	~1000	S2 ARCHITECTURE ISL ENGINEERING BROWN & ASSOCIATES	83%

**Note:** The accuracy of auto coding was tested by randomly sampling ~5% of auto-coded customers within each segment, manually coding this sample, and comparing results. The percentage represents the percentage of the sample that was coded accurately through auto coding with key words.



## Complete list of auto coding key words

Segment	Key Words Used for Auto Coding
Home Owners	Entries that follow the “Last Name, First Name” format
Business Owners	<i>Manually coded</i>
Land Developers	<i>Manually coded</i>
Builders	homes, builder
Contractors	construct, contract, interiors, reno, demoli, handy
Trades	electric, plumb, gas, heat, furnac, air, refrigeration, mechanical, HVAC, ventilat, cabinet, floor, drywall, wood, carpent, window, concret, metal, excavat, fenc, landscap
Supporting Professionals	archite, plann, barrist, engineer, LLP, law, permit, legal, consult, associate, survey, design

**Note:** Business owners and land developers don’t follow a predictable naming pattern. These customers were captured through sampling and manual coding of the remaining 15% of customers that were not matched through key words.



## Full product list included in this analysis

### POSSE Job Type

- Commercial / Multi Family Project
- Single Construction Permit
- Electrical Permit
- Residential Improvement Project
- Gas Permit
- Plumbing Permit
- HVAC (Mechanical) Permit
- Demolition
- Environmental Restoration Permit
- Gas Fireplace Installers Permit
- Non Permit Enquiry

### Use Code Group

- Commercial
- Single Family
- Apartment
- N/A
- Institutional
- Townhouse
- Two Family
- Industrial
- HVAC Job
- Government
- Garage
- General
- Special Function Tent
- Retaining Wall
- Secondary Suites
- Additional Dwelling
- Swimming Pool

### Development Related Products

- Development Permit
- Subdivision by Instrument/Plan
- LU / OP / Closure (LOC)
- Legal Plan
- Revised Plans - Development Permit
- Pre-Application / Enquiry
- Policy Job
- EXPLORE
- Development Completion Permit
- Development Site Servicing Plan
- Construction Drawings Project
- Construction Drawings Submission
- Tenancy Change Job
- Circulation
- Complaint - Land Use Bylaw
- Securities
- UD Agreement
- Stream 2
- Stream 3
- Stream 4
- Fast Track