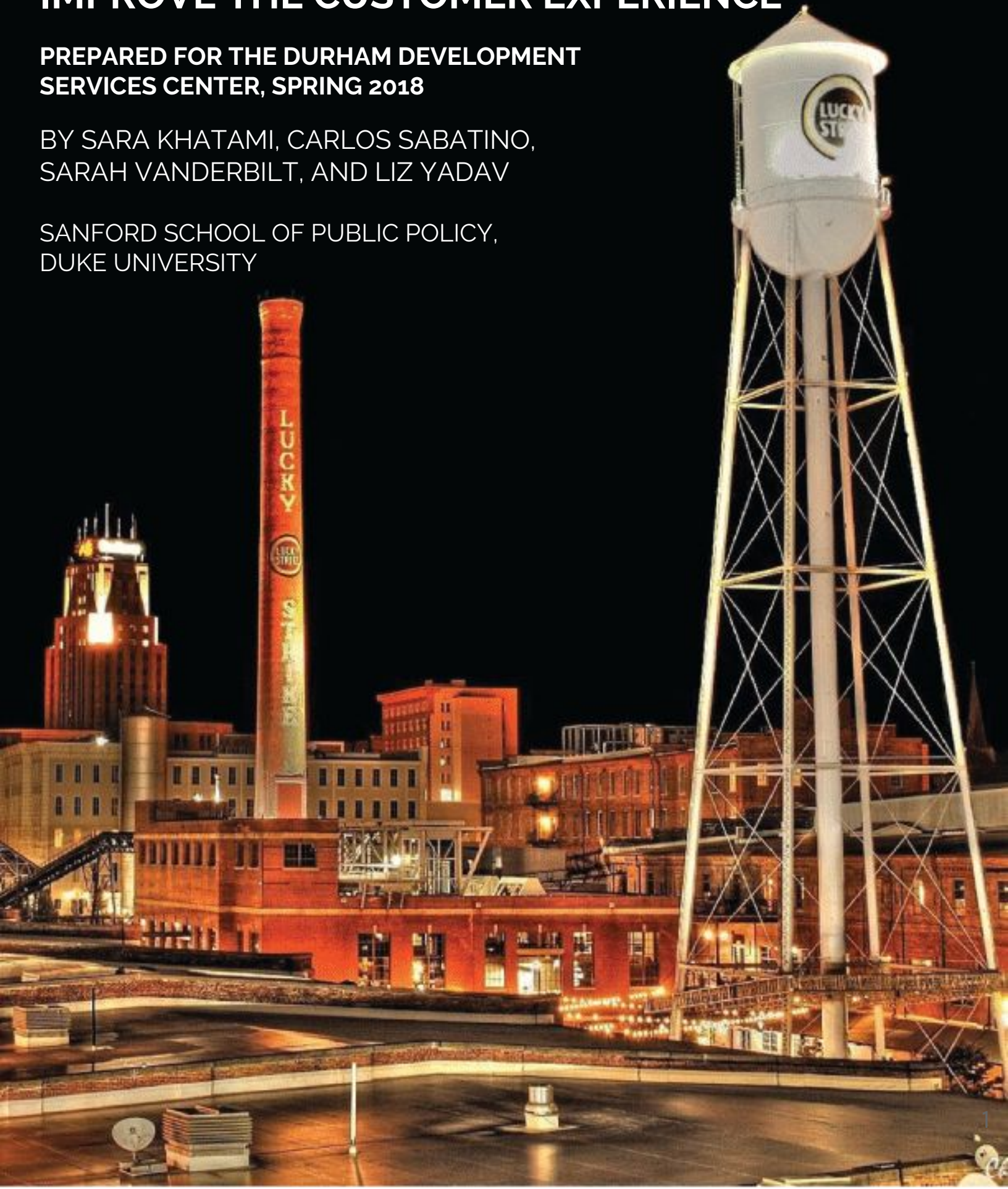


# USING HUMAN-CENTERED DESIGN TO IMPROVE THE CUSTOMER EXPERIENCE


PREPARED FOR THE DURHAM DEVELOPMENT  
SERVICES CENTER, SPRING 2018

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DUKE UNIVERSITY



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# WHAT IS HUMAN-CENTERED DESIGN?

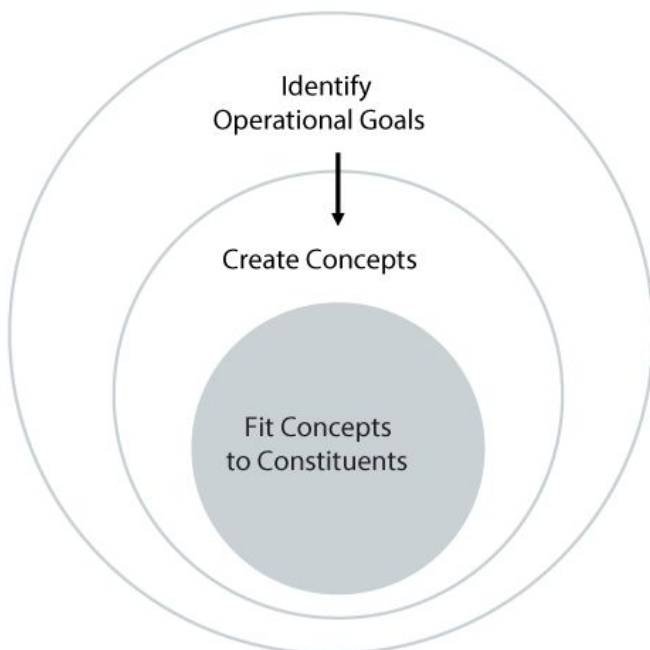
**“Human-centered design** is a creative approach to problem solving. It's a process that starts with the **people you're designing for** and ends with new solutions that are tailor made to suit their needs.”  
-IDEO.org

**Human-centered design (HCD) is an approach to problem solving that puts people first.**

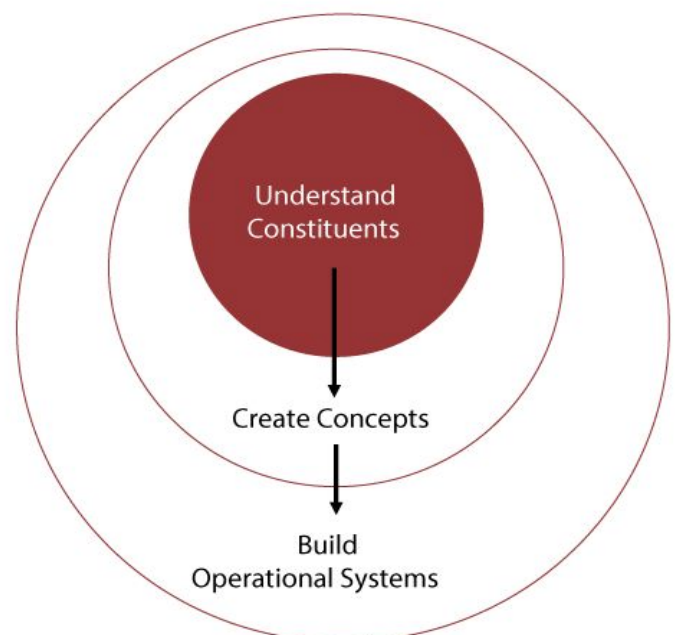
HCD flips the model from a traditional problem solving approach that jumps right into proposing solutions based on management's existing goals and assumptions. Instead, HCD seeks to really understand a problem from the perspective of the person who is facing it before developing solutions.

The process relies on gathering feedback and constantly testing assumptions. In HCD, users are active participants in coming up with solutions tailored directly to their needs.

## Traditional Approach



## Human-Centered Design



# EXECUTIVE SUMMARY

## RESEARCH PROCESS

We worked with the Durham Development Services Center (DSC) from January to April 2018, using a human-centered design (HCD) approach to better understand the challenges DSC customers face while developing in Durham. We then used an iterative process to design solutions to fit customer needs.

Our process was an ongoing loop of learning, creation, documentation and reporting back. Each phase generated insights, tools, and materials that we have compiled in this report along with some additional ideas for how DSC might continue to use HCD principles going forward.

## FRAMING THE PROBLEM

To be successful given the short timeframe of this project, we needed to narrow and frame our work around a specific problem. Our project aimed to address the following question:

- ▶ **How might DSC improve the development review processes for small businesses?**

## DISCOVERY

Once we re-framed our problem, we engaged in series of interviews and observations to understand the concerns of small business owners navigating the development process.

We then sorted and synthesized what we heard from DSC customers and employees. The result was a five-stage journey map. During these stages, we captured what customers and employees were feeling, thinking, and doing as they navigated the process, highlighting bright spots and pain points.

We also identified “moments that matter” that are especially important in the customer journey. When allocating limited resources towards improved customer experience, DSC can focus on these moments to maximize impact.



# EXECUTIVE SUMMARY

## KEY INSIGHTS

Our discovery phase led to three customer-centered insights. These insights offer actionable ways for DSC to improve the customer experience.

- ▶ Insight 1: A new office hasn't made the process easier.
- ▶ Insight 2: It falls to the customer to resolve conflicting directions.
- ▶ Insight 3: Limited information creates barriers to success.

## THE DESIGN SOLUTION

We propose a series of design improvements that will better equip employees to support low-information customers during the development review process.

Our suggested approach is three-pronged: in addition to a kick-off meeting, employees will also guide customers with relevant physical and web resources.

## PHASED IMPLEMENTATION

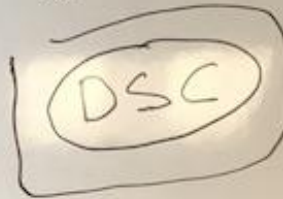
To implement this solution successfully, DSC should roll out these design improvements in discrete phases. The goal of the implementation process will be to test and iterate these tools so that they are as effective as possible at improving the customer experience.

## DON'T STOP HERE

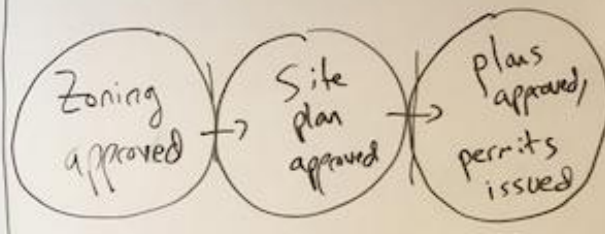
For a toolkit on how DSC can apply human-centered design beyond the small business journey, see the Appendix starting on page A-44.

Before

Planning



Field

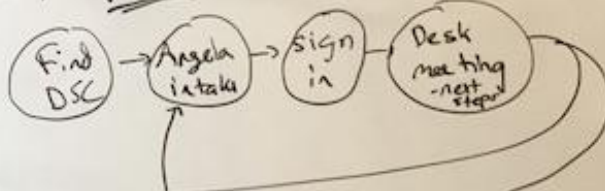


inspections passed

Planning

\* :-

→ Visit



→ Call

→ Email

Sarah considers an early sketch of the small business journey map.

DSC

# DISCOVERY: THE SMALL BUSINESS EXPERIENCE

Professional

Hard to find

Relatively Fast

30-min Parking

Bureaucratic  
DMV-like

Friendly Staff

Ordered,  
organized

Limited  
access  
to staff

Uncertainty

# THE **DISCOVERY** PROCESS

## WHAT WE DID

Our team engaged in a series of interviews and on-site observations to better understand the experiences and needs of DSC customers and employees.

Given our time constraints, we focused our project on the experience of small business owners developing in Durham. We targeted business owners who had been through the development process recently. We approached these conversations with no assumptions and asked open-ended questions to get at the customer's deeper thoughts, feelings, and motivations.

These interviews and intercepts allowed us to detect pain points, locate bright spots, identify moments that matter, and ultimately generate actionable insights.

## WHO WE TALKED TO



### **Interviews:**

Four customers and five employees



### **Short conversations:**

E-mails, phone chats, and intercepts



### **Types of interviewees:**

Established and first-time small business owners, on-site customers, and DSC staff (planners, inspectors, and coordinators)



# THE SMALL BUSINESS JOURNEY

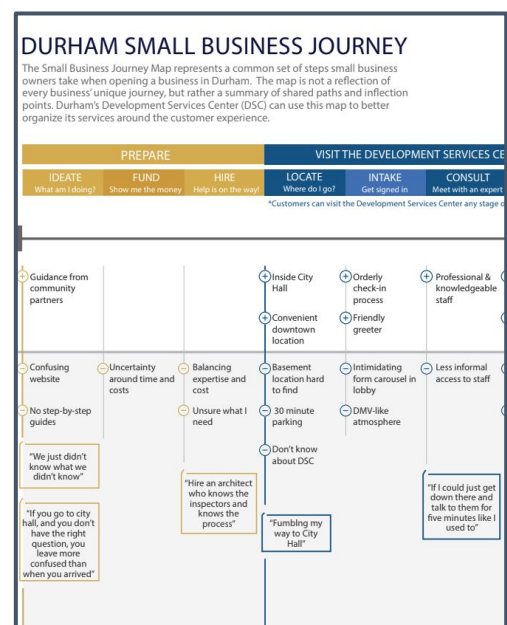
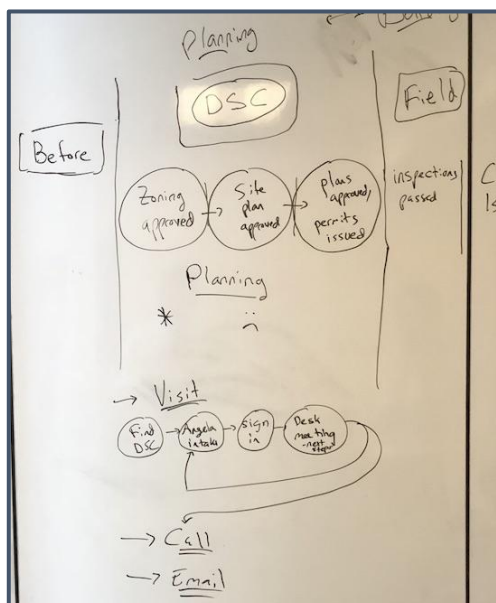
Every project is different, yet most DSC customers share a **common set of experiences**.

After conducting our interviews, we built a journey map to capture common customer and employee experiences during the development review process. The **journey map on pages 10 and 11** presents a more detailed, aggregated view of the process, starting with the preparation stage and ending with the Certificate of Occupancy.

From our interviews and observations, we identified key moments that matter most to customers and key insights that inform the small business journey across all stages. The **moments that matter on page 12** offer key opportunities for DSC to play a helpful role in a customer's journey. The **key insights on pages 13 to 15** offer a deeper understanding of the customer experience, and serve as a springboard for developing actionable products and processes to improve the customer experience.

## ITERATING THE JOURNEY MAP

We created over ten versions of the journey map. Starting with a low-fidelity sketch, we focused on making sure we had the steps right and in the proper order. We then weaved in bright spots, pain points, and customer quotations at each stage.



# JOURNEY MAP



\*Customers can visit the Development Services Center any stage of the journey.

## CUSTOMER

### BRIGHT SPOTS (+)

- + Guidance from community partners
- + Inside City Hall
- + Convenient downtown location
- + Orderly check-in process
- + Friendly greeter
- + Professional & knowledgeable staff
- + Guidance on next steps
- + Multiple channels of communication

### PAIN POINTS (-)

- Confusing website
- Uncertainty around time and costs
- Balancing expertise and cost
- Basement location hard to find
- Intimidating form carousel in lobby
- Less informal access to staff
- Piecemeal meetings
- No step-by-step guides
- Unsure what I need
- 30 minute parking
- DMV-like atmosphere
- No formal guide or advocate

### WHAT WE HEARD

"We just didn't know what we didn't know"

"If you go to city hall, and you don't have the right question, you leave more confused than when you arrived"

"Hire an architect who knows the inspectors and knows the process"

"Fumbling my way to City Hall"

"If I could just get down there and talk to them for five minutes like I used to"

## EMPLOYEE

### WHO'S INVOLVED

Planning, Inspections, Public Works

### BRIGHT SPOTS (+)

- + Experienced contractors know the system
- + Departments located in the same space
- + Efficient triaging of cases
- + Fewer interruptions
- + Sense of mission in helping customers

### PAIN POINTS (-)

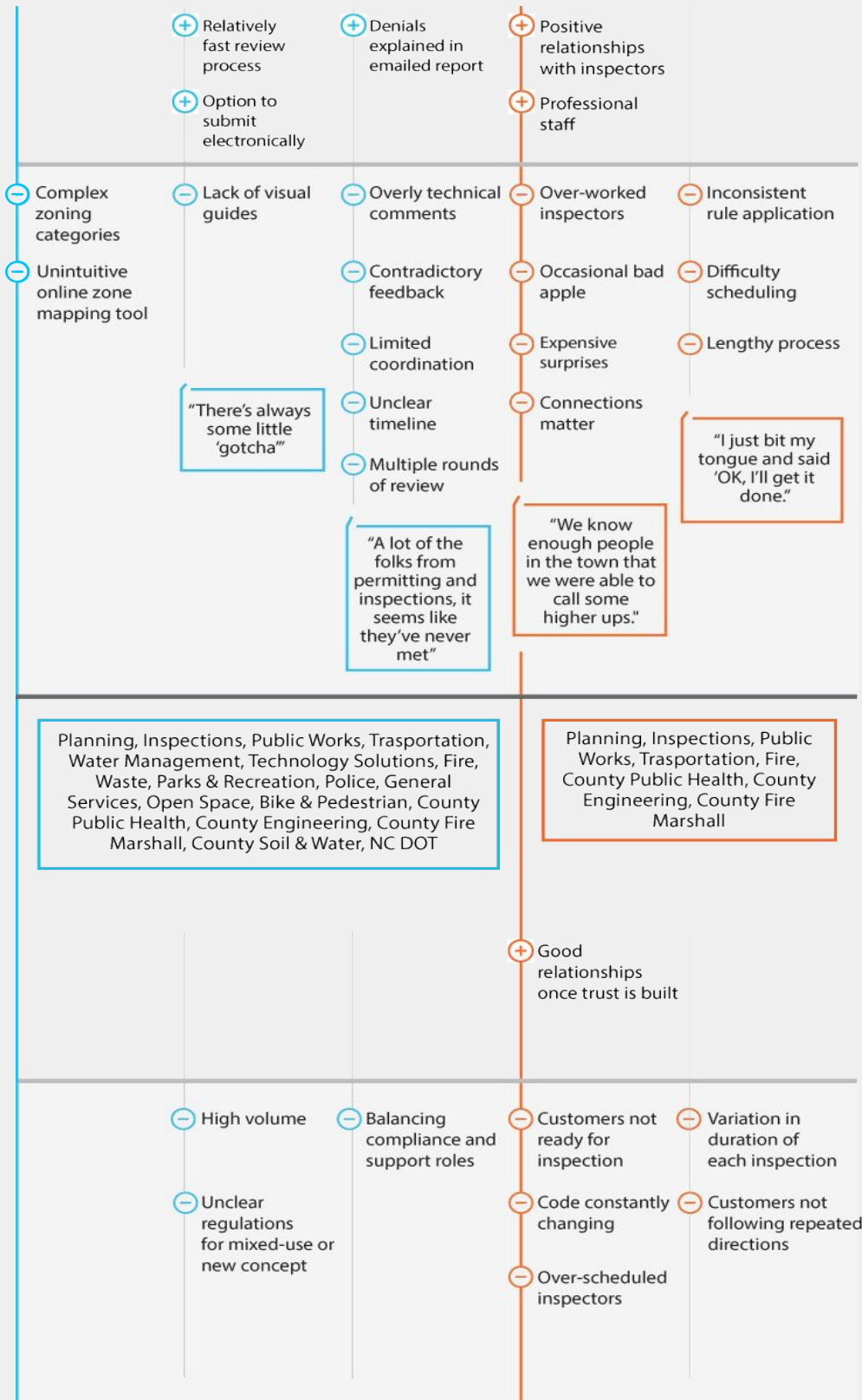
- Not legal to make hiring recommendation
- Balancing depth and breadth of service
- No visual aids to show customers
- Imperfect information
- High volume during busy times
- Unprepared customers
- "Time suck" of phone calls
- Customer communication not integrated across modes

PLANS AND PERMITS			BUILD
ZONING APPROVED	SITE PLAN APPROVED	PERMITS ISSUED	PASS FIELD INSPECTIONS Certificate of Occupancy Issued



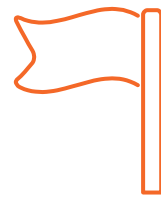
## Key

Journey	<input type="text"/>
Phase	<input type="text"/>
Steps	<input type="text"/>
Customer	<input type="text"/>
Quote	<input type="text"/>
Bright Spot	+
Pain Point	-



# MOMENTS THAT MATTER

Across the journey, we identified three key “moments that matter” to customers. Though each moment along the journey is important, these moments have heightened significance in the development process. DSC can and should play a significant or enhanced role during these moments.



## EXPLORATION

During this moment, the customer seeks out information about what is required to get their development approved.

**This moment matters because....**

People who are better prepared open businesses faster with fewer expensive surprises.

## FOLLOW-UP

During this moment, the customer interacts with one of the individual DSC departments and determines next steps to take on their own.

**This moment matters because....**

Customers benefit when subject area experts collaborate.

## INSPECTIONS

During this moment, the customer engages with representatives from DSC divisions and partner agencies as they complete final inspections.

**This moment matters because....**

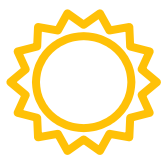
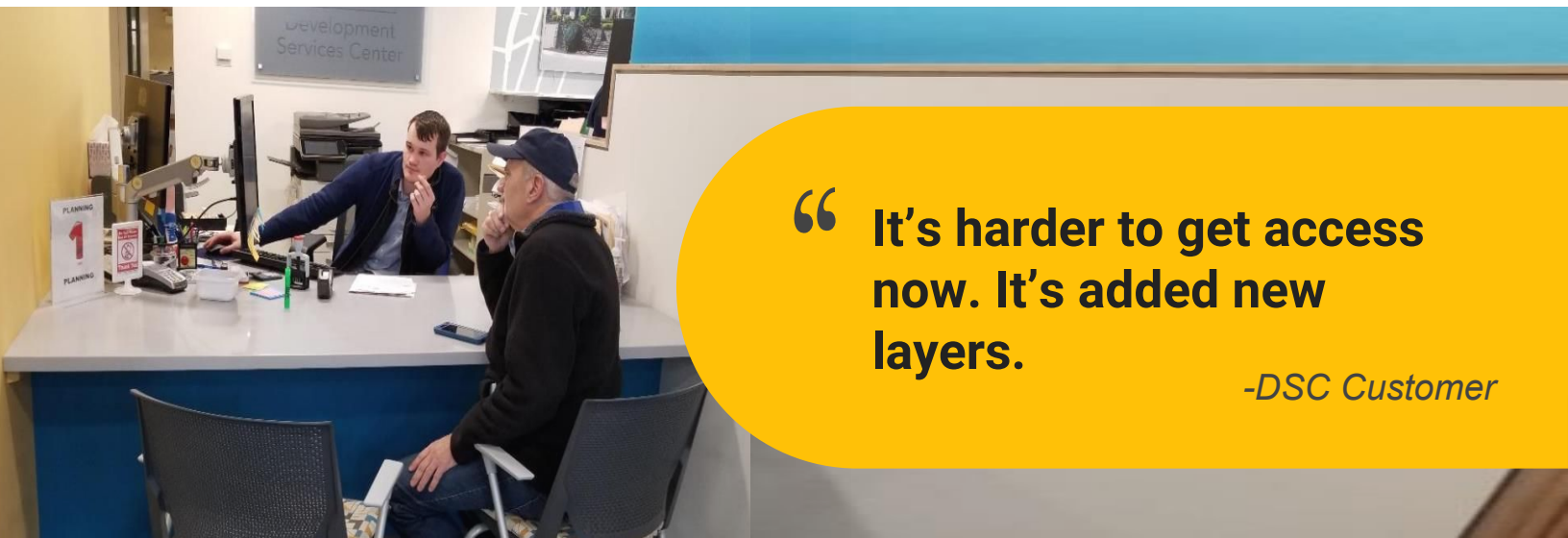
Inconsistent guidance reduces customer trust and causes frustration.



## KEY INSIGHT 1: A new office **hasn't made the process easier.**

Customers see the DSC's "One Stop Shop" as **more of a front-end physical change than a back-end process change**, as departments continue to operate independently.

There is a mismatch between how staff and customers understand the new process, with many customers feeling alienated by a new level of bureaucracy and reduced access to staff.



### BRIGHT SPOTS



Orderly check-in process



Multiple channels of communication



### PAIN POINTS



Less informal access to staff



DMV-like atmosphere



Limited Coordination

## KEY INSIGHT 2: It falls to the customer to **resolve conflicting directions.**

Customers often receive conflicting messages from different departments, **reducing trust and increasing frustration.**

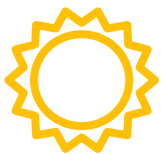
Customers also feel that they are penalized for being honest.

The complexity and ambiguity of the regulations leave much of the interpretation to individual staff members, which continues reliance on personal relationships.



“ A lot of the folks from Permitting and Inspections, it seems like they’ve never met.

-DSC Customer



### BRIGHT SPOTS



Professional Staff



### PAIN POINTS



Inconsistent rule application



Expensive surprises



Connections matter

## KEY INSIGHT 3: **Limited information** creates barriers to success.

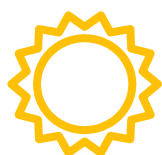
Customers who know the process or do a lot of research on their own have an easier time than those who don't.

New customers are **navigating a process they don't fully understand**, and without a formal advocate. They are unsure what questions they should be asking.

Available information can be too technical for customers. No single employee has all the information about what the customer should expect.

“**We just didn't know what we didn't know.**”

*-DSC Customer*



### BRIGHT SPOTS



Guidance from community partners



### PAIN POINTS



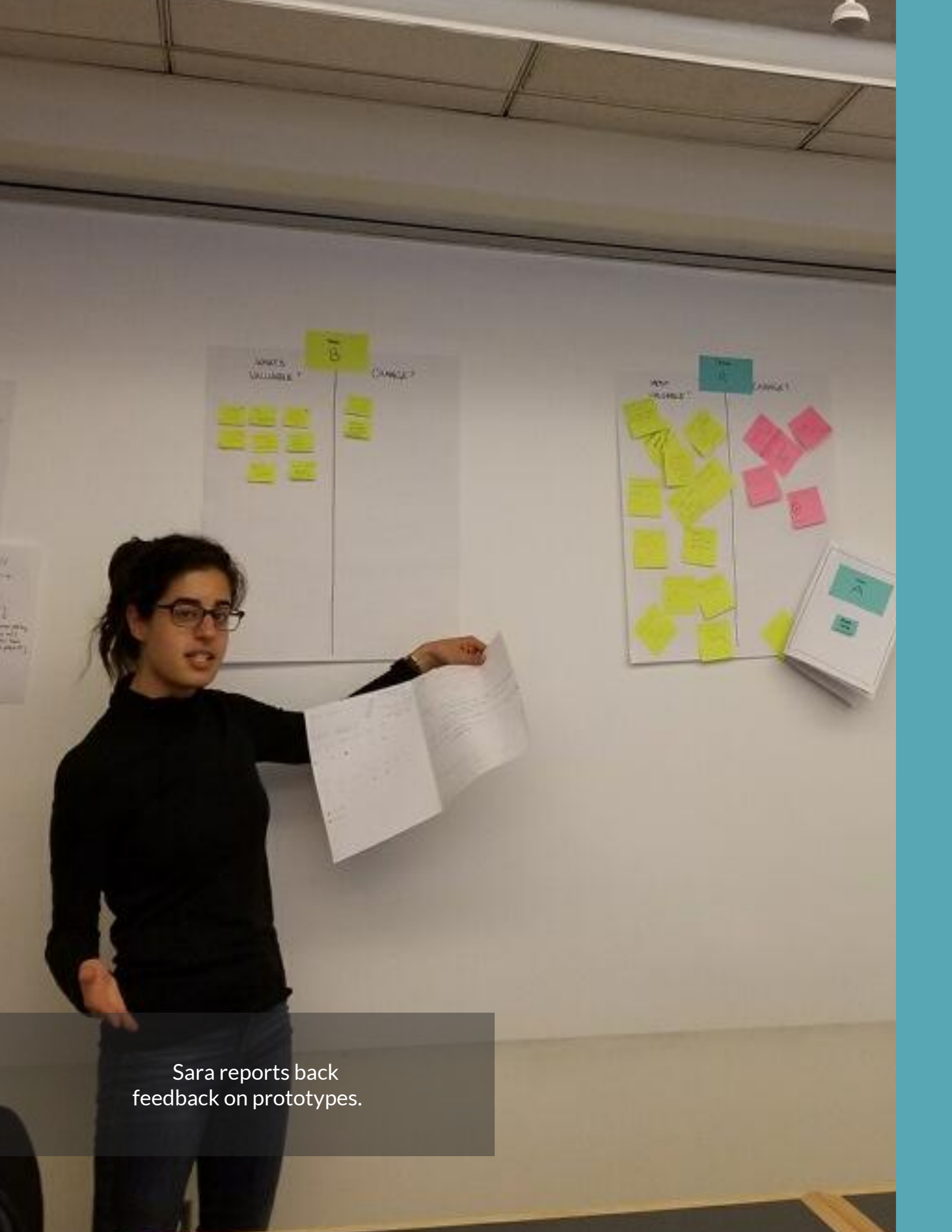
Uncertainty around time and costs



Overly technical comments



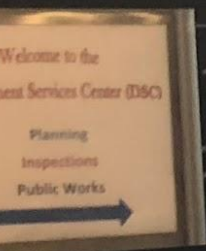
No step-by-step or visual guides



Sara reports back feedback on prototypes.



# DESIGNING SOLUTIONS: A NEW “FRONT DOOR”



# THE DESIGN CHALLENGE

As we turned from Discovery to Design, we focused on a single design challenge to address within our limited time frame.

Many of the customer pain points we identified in the Discovery phase centered around the siloed nature of DSC departments and the conflicting information customers often receive.

However, given the significant structural and communications changes it will take to address these issues, we felt our time would be better spent focused on redesigning the experience of low-information customers new to the development process.

Before starting to brainstorm solutions, we framed our design challenge by focusing on one moment that matters to customers, restating the relevant key insight, and identifying the target user we were designing for.



## MOMENT THAT MATTERS

During the **exploration phase**, the customer seeks out information about what is required to get their development approved.



## KEY INSIGHT

**Limited information** creates barriers to success.



## TARGET USER

**Low-information** customers who do not know where to start.

## THE CHALLENGE

How might we **bridge the experience gap** between DSC users who know the development process and those who don't?

# THE DESIGN SOLUTION



## THE BIG IDEA

Redesign DSC's "front door" to **increase accessibility** of information.



## DESIRED OUTCOME

Customers will have **easy access** to the resources and employee guidance they need to complete their developments on a predictable timeline and budget.



## WHAT DOES "ACCESSIBLE" LOOK LIKE?

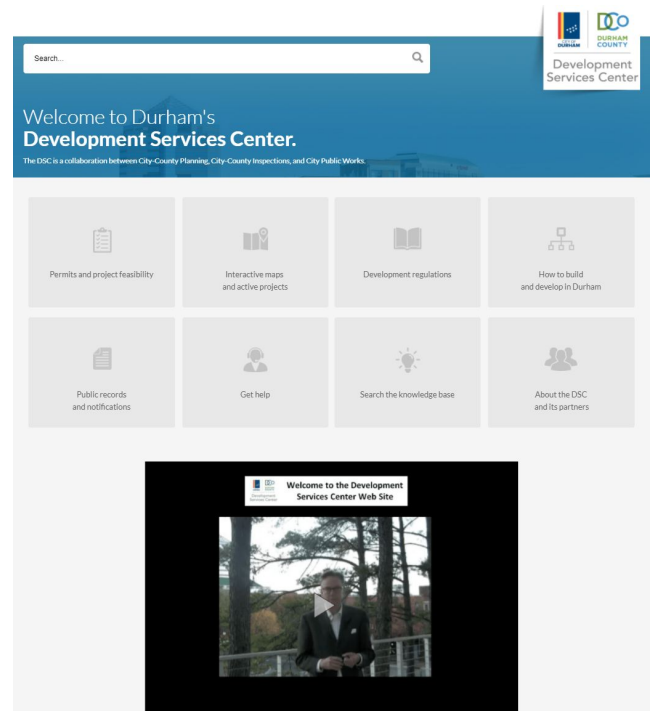
- ▶ Easy to **discover**
- ▶ Easy to **understand**

While brainstorming ideas for our prototyping phase, we kept in mind that customers can first encounter the DSC through two main channels:

## LITERAL FRONT DOOR



## DIGITAL FRONT DOOR



# THE PROTOTYPING PROCESS



## WHAT DID WE HOPE TO LEARN?

As we got ready to test our first prototypes, we made a list of questions we wanted to answer through the prototyping process. These included:

- ▶ What elements of the existing “front door” are most confusing to a low-information customer?
- ▶ How do customers currently get the information they need to start the development process?
- ▶ What information would have been most helpful to know sooner in the development process?
- ▶ What types of materials would help employees effectively introduce customers to the development process?



## HOW DID WE TEST OUR PROTOTYPES?

We first walked customers through the existing website to see what they liked and didn’t like about the current digital “front door”. We also asked about their experience visiting DSC for the first time.

We then showed customers low-fidelity mockups of a one-page welcome guide and a restructured landing page outlining the development process.

After refining our mockups to incorporate customer and employee feedback, we re-tested with customers and employees using higher-fidelity mockups of our designs.

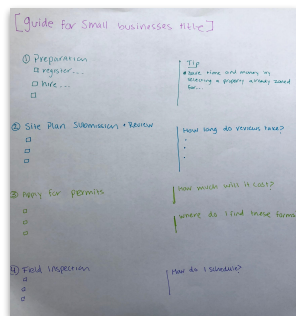
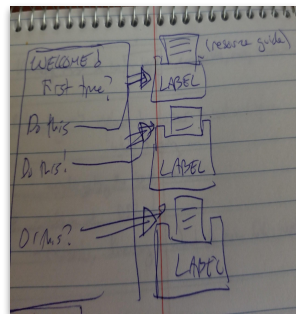
Finally, we aggregated everything we heard from customers and employees to create the refined solutions that follow in this section.



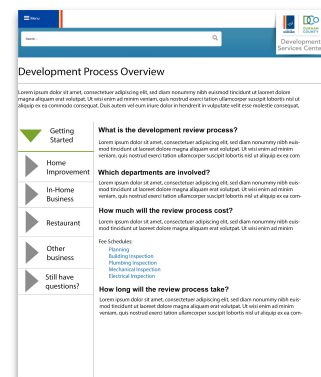
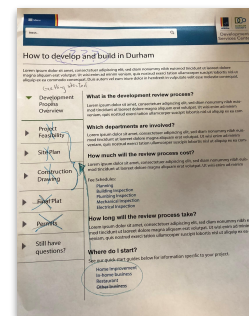
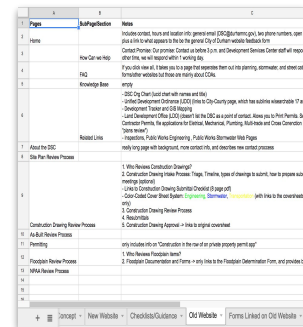
# PROTOTYPE ITERATIONS

Starting with low-fidelity versions, we tested prototypes in the field. As we integrated feedback from customers and employees, we developed higher-fidelity mockups. See pages A-46 to A-48 in the appendix for other design ideas that we brainstormed but did not test with customers.

## ONE PAGE WELCOME GUIDE



## WEB LANDING PAGE



# THE REFINED SOLUTION

## THREE-PRONGED APPROACH

Based on customer and employee feedback, we recommend implementing a three-pronged approach to provide low-information customers with more accessible information and support.

This approach consists of:

**ONE PAGE  
START-UP  
GUIDE**

**PROCESS  
OVERVIEW  
WEBPAGE**

**15 MINUTE  
KICK-OFF  
MEETING**

## WHAT WOULD SUCCESS LOOK LIKE?

- ▶ **Increased access** to information for low-information users starting the development process.
- ▶ **Customers are empowered** to effectively navigate the development process.
- ▶ **Employees have the tools they need** to successfully set customer expectations for the development process.



### WHAT THE DESIGN IS

A framework for effectively communicating existing content



### WHAT THE DESIGN ISN'T

A website redesign, content overhaul, or comprehensive process guide

# THE REFINED SOLUTION

## PART 1: One-Page Getting Started Guide

The Getting Started Guide is a resource to help orient customers new to DSC and the development review process.

The front page would introduce the three main departments and partner agencies and provide contact information. The back page would walk the customer through the major milestones of the development review process for their specific project type. Finally, customers would see tips about common issues they may run into, along with where they can find more information online.

Welcome to the Development Services Center

# Getting started



Development Services Center

### About the DSC

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#### Planning

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#### Inspections

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#### Public Works

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### How can you reach us?



**Visit us**  
Location: Durham City Hall, 101 City Hall Plaza, Ground Floor  
Hours: From 8 a.m. to 5 p.m., on non-holiday weekdays



**Schedule a meeting**  
Submit a ticket using Mojo Ticketing System

Welcome to the Durham Development Center

# Starter Guide for Restaurants



Development Services Center

## 1 Preparation

- ☐ **Register** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.
- ☐ **Hire** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.
- ☐ **Find a location** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

**Tips**

- Save time and money by selecting a property already zoned for your business. Learn more at: <https://durhamnc.gov/423/Zoning-Atlas>

## 2 Planning Phase

- ☐ **Zoning** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.
- ☐ **Site Plan** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.
- ☐ **Parking** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

**Tips**

- Up to X departments may have to review your plan depending on your business. Learn more at: <https://durhamnc.gov/>
- For planning application fees, visit: <https://durhamnc.gov/DocumentCenter/View/1050>

## 3 Permits & Inspections

- ☐ **Building Permits** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.
- ☐ **Other permits** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.
- ☐ **Field Inspection** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

**Tips**

- You may need multiple rounds of inspection to complete your project.
- You can find permit application forms on our website. Find them at: <http://durhamnc.gov/381/Development-Services-Center---Planning>

## 4 Public Works & Health

- ☐ **Public Works** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.
- ☐ **Health Inspection** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

**Tips**

- Learn more at: <https://durhamnc.gov/423/Zoning-Atlas>

# THE REFINED SOLUTION

## PART 2: Process Overview Landing Page

Many customers look for the information they need online before ever coming to visit the DSC in person. As we walked through the existing DSC website with customers, we heard that it would be helpful to separate guidance on the process from links to resources like application forms and fee schedules.

This process overview page would be prominently linked on the homepage. Just like the paper guide, this landing page would be organized by project type, with information about that project’s key process steps outlined under each menu item. The web format would allow more detail and definitions of key terms, while still keeping content accessible and jargon-free.



### Development Process Overview

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	Getting Started	<b>What is the development review process?</b> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea com</p>
	Home Improvement	<b>Which departments are involved?</b> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea com-</p>
	In-Home Business	<b>How much will the review process cost?</b> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim</p>
	Restaurant	Fee Schedules: <a href="#">Planning</a> <a href="#">Building Inspection</a> <a href="#">Plumbing Inspection</a> <a href="#">Mechanical Inspection</a> <a href="#">Electrical Inspection</a>
	Other business	<b>How long will the review process take?</b> <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea com-</p>
	Still have questions?	

# THE REFINED SOLUTION

## PART 3: 15-Minute Kickoff Meeting

We heard from customers that new process guides alone wouldn't be very helpful without someone to walk the customer through this information and explain how it applies to their individual project.

The third prong of our approach is a 15-minute kickoff meeting for customers new to the development process. The customer would meet with an employee at the first available desk, and the employee would use the appropriate paper one-page guide to walk through the basics of the development process, and answer any initial questions.

### Sample Kick Off Meeting Protocol

**Goal:** Orient new customers unfamiliar with development to the development process and answer initial questions

#### When does this meeting happen?

When an employee identifies a customer who would benefit. This could be when:

- The customer walks into the DSC
- The customer calls DSC
- The customer submits a MOJO ticket

#### Where does the meeting take place?

Meetings are held with the first available desk tech on duty. Employees will need some cross-training to make these meetings as helpful as possible.

#### What happens during the meeting?

- Review Getting Started Guide: introduce the three DSC departments, partner agencies, and the main steps of the development process for the customer's specific project type
- Show customer where to find key forms and information online
- Answer initial questions and give customer clear next steps for follow-up with other departments about any unanswered questions.



# FUTURE CUSTOMER EXPERIENCE

Our three-pronged approach seeks to improve the small business owner's experience during the key **exploration** phase of the customer journey by providing a holistic, non-technical view of the development process.

Customers will move away **from the pain points** they encountered **to enjoying easy access** to the resources and employee guidance they need to complete their developments on a predictable timeline and budget.

## FROM

Overwhelmed by the process:  
not sure where to start or what  
questions to ask

Visits the DSC multiple times

Frustrated by difficulty of  
finding forms they need

Receives technical, confusing  
information

Stresses over the uncertain  
time and costs involved in  
completing the project

## TO

Understands what the different  
departments do and how the  
development review process works

Limits follow-ups by understanding  
the process and independently  
finding resources online

Finds information quickly

Easily digests jargon-free,  
non-condescending information

Understands the average time and  
cost for each step, along with what  
might cause a step to take longer or  
shorter than usual

# FUTURE EMPLOYEE EXPERIENCE

Our three-pronged approach seeks to provide employees with a starting point to **orient** new small business owners and other low-information users to the development process.

Employees will move away **from their pain points** and overly technical information, **to having the tools they need** to successfully and consistently assist customers new to the development process.

## FROM

No official protocol to help customers understand the big picture

Delays and frustration when customers make easily avoidable mistakes

Exhausting to enforce code and regulations above all else

Resources for customers contain overly-technical information

## TO

15 minute kick-off meeting is built into workflow to help guide customers

Customers have a clearer understanding of what is required up front and require less assistance during the process

Balances enforcing code with supporting customers' navigation of the development process

Access to a range of succinct and clear tools to explain the development process to a nontechnical audience

## CHALLENGE

USER:

ation small business owners and other  
who do not know where to start.

LEM

ve bridge the experience gap between DSC  
who know the development process and those

13

Liz briefs DSC staff on the  
team's design process.





# IMPLEMENTATION PLAN

# THE IMPLEMENTATION PROCESS

To implement the three-pronged approach successfully, we recommend a phased approach that allows DSC to validate and refine value to customers at every step.

The **goal** of the implementation process will be to test and iterate the “getting started” meeting and process guides so that they are as effective as possible. Testing and iteration will help DSC progress towards the ideal future customer and employee experiences outlined in the previous section.

By soliciting and incorporating customer and employee feedback at each stage of implementation, DSC can **continuously improve and refine** these new processes and materials.

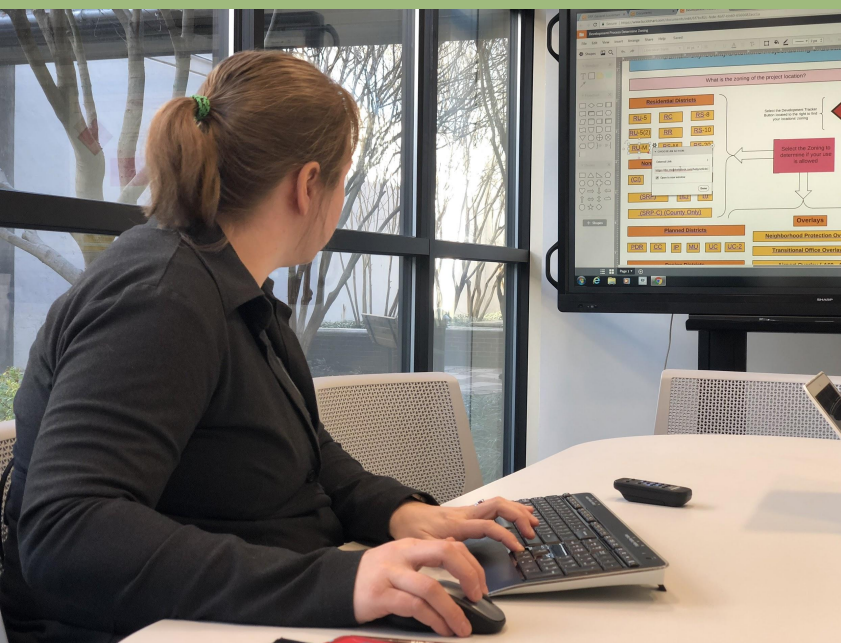
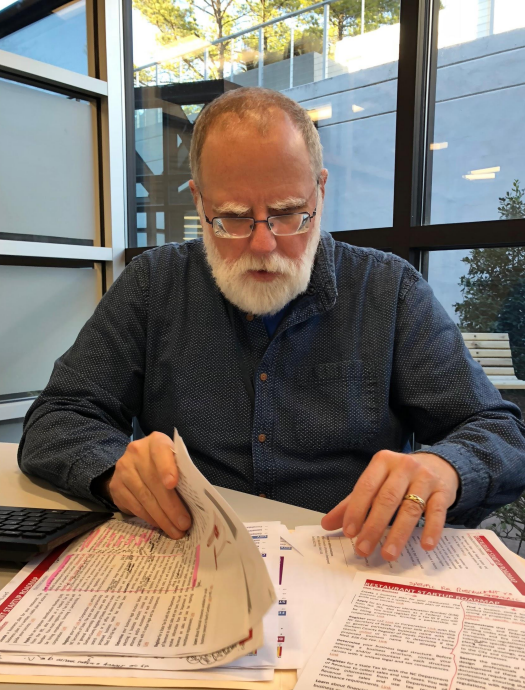


## REMAINING UNCERTAINTIES

The pilot phase, along with DSC employee expertise, will help answer some remaining questions, including:

- What specific information would be most helpful to customers at the start of the development process?
- How can the employees holding the kickoff meetings adapt their communication styles to effectively meet customers where they are?
- How much training is needed for employees from individual departments to effectively prepare the customer for all phases of the development process?
- Will these changes better prepare customers for the development process, saving both customers and employees time down the road?
- Who will be responsible for leading the implementation phase and ensuring that measurement and review occur on a regular basis?





Some of the many DSC staff who  
generously shared their time with  
us throughout this process.

Thank you all!

# PILOT PHASES

By testing out initial designs and protocols with customers, DSC can iterate towards materials and processes that set customers up for **success** and greater **self-sufficiency**.

Below is a progression of phases that starts with an exploratory “skateboard”, and works up to a more sophisticated “car”. Each stage adds new features while drawing on customer and employee feedback from the previous rounds.

## PHASE 1: THE SKATEBOARD



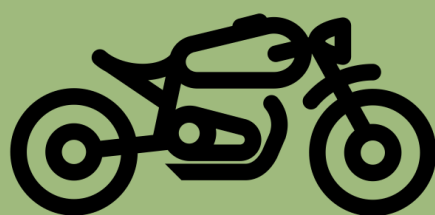
DSC meets with employees to discuss and finalize the initial kick-off meeting protocol. Employees begin holding kick-off meetings with customers and compiling frequently asked questions that will drive future content improvements. To measure whether the new protocol meets customers’ needs, DSC implements a survey for kick-off meeting customers.

## PHASE 2: THE BICYCLE



DSC completes a “getting started” one-pager that introduces the customer to DSC departments and the development process flow. The one-pager should incorporate questions commonly asked during kick-off meetings. DSC updates the kick-off meeting protocol to include use of the one-pager to guide the conversation.

## PHASE 3: THE MOTORCYCLE



Building off the one-pager from Phase 2, DSC develops separate one-pagers for common project types such as restaurant, in-home business, other business, and home improvement. To reach a broader audience, DSC also launches the more detailed, web-based version of the one-pagers and prominently features it on the home page.

# PHASE FUTURE: THE CAR



DSC should maintain a clear vision of what success looks like in the long term.


We recommend eventually working towards an online experience that gives customers a customized guide to the development process based on their answers to an interactive decision tree. While employees will still provide support as needed, this tool will allow customers to be much more self-sufficient as they navigate the review process.

## EXAMPLE: THE NYC MODEL


**NYC** Business

### Get a customized list of requirements for your business.


Answer the questions on the following pages to get a list of the City, State, and Federal licenses and permits you need, as well as additional information that you may want to know.



**It takes 10 minutes.**  
You will be asked basic questions about your business.



**Can't finish everything at once?**  
Log in to save your work and come back later.



**Get your custom list.**  
Find the requirements that matter to your business.  
[VIEW SAMPLE RESULTS](#)

[Start a New Scenario](#)






**Want a closer look?**

Visit: <https://www1.nyc.gov/nycbusiness/wizard>



# IMPLEMENTATION **TIMELINE**

Below is a suggested timeline for implementing the 15-minute kick-off meeting and the associated guiding materials. DSC should adjust these milestones based on capacity.

	June	July
<div><div>PHASE 1</div><div></div></div>	<div>PREPARE</div> <div><div>► Finalize kick-off meeting protocol</div><div>► Conduct initial cross-training and review protocol with employees</div><div>► Create customer feedback survey</div></div>	<div>LAUNCH</div> <div><div>► Begin holding kick-off meetings with walk-ins</div><div>► Document customer FAQs</div><div>► Iterate protocol and training based on employee experience</div><div>► Set up process for delivering customer survey</div></div>
<div><div>PHASE 2</div><div></div></div>		
<div><div>PHASE 3</div><div></div></div>		

See pages 38-41 for more details on how DSC can use a feedback survey and internal dashboard to measure customer experience as these new processes are implemented.

August	September	October
<b>MEASURE</b> <ul style="list-style-type: none"> <li>▶ Launch customer feedback survey</li> <li>▶ Iterate kick-off meeting protocol based on customer feedback</li> </ul>	<b>MEASURE</b> <ul style="list-style-type: none"> <li>▶ Develop internal dashboard for reviewing customer feedback</li> <li>▶ Share out insights with staff and management</li> </ul>	<b>MEASURE</b> <ul style="list-style-type: none"> <li>▶ Iterate survey questions based on customer and employee experience</li> </ul>
<b>PREPARE</b> <ul style="list-style-type: none"> <li>▶ Draft one-page Getting Started Guide. Use FAQs and employee experience from Phase 1 to guide content.</li> <li>▶ Update kick-off meeting protocol to include Getting Started Guide.</li> </ul>	<b>LAUNCH</b> <ul style="list-style-type: none"> <li>▶ Begin using Getting Started Guide in kick-off meetings</li> </ul>	
	<b>PREPARE</b> <ul style="list-style-type: none"> <li>▶ Draft project-specific getting started guides.</li> <li>▶ Create process overview landing page based on content from one-page guides</li> </ul>	<b>LAUNCH</b> <ul style="list-style-type: none"> <li>▶ Begin using project-specific guides and landing page in kick-off meeting</li> <li>▶ Continue to iterate materials based on customer and employee experiences</li> </ul>





Carlos provides DSC staff with an overview of human-centered design.





# MEASURING SUCCESS

Lorem ipsum

# WHAT TO MEASURE?

Implementation and measurement go hand in hand. As DSC implements the kick-off meeting process and associated materials, it should solicit feedback from customers to better understand and improve their experience.

The statements in quotations are examples of questions DSC might ask customers to better understand their experience of the kick-off meeting. Customers would rate each statement on a 1-5 scale from “strongly disagree” to “strongly agree” and provide written feedback in an accompanying text box.

Questions should be simple, intuitive, and drawn from what we know is important to customers based on the discovery phase. Questions should be structured around the “three E’s” of customer experience: Effectiveness, Ease, and Emotion.

## EFFECTIVENESS

**Did the customer get the service they needed?**



“I got the support I was looking for during my visit to the Development Services Center.”

## EASE

**Was it easy for the customer to get the service they needed?**



“It was easy for me to get the information I needed during my visit to the Development Services Center.”

## EMOTION

**Did the customer have a good emotional experience?**



“After my visit to the Development Services Center, I feel closer to reaching my goals.”



# WHEN TO MEASURE?

To ensure that customer feedback is **timely** and **actionable**, DSC should solicit immediate reactions to the kick-off meeting using a short email survey sent out the day after each meeting.

DSC can use the MOJO system to track these appointments and determine when these emails should be sent. A sample email is included below.

## SAMPLE EMAIL

To: Jane Doe  
From: Pete Sullivan, Durham Development Services Center  
Subject: Tell us about your experience



Dear Jane,

Please take a moment to tell us about your recent experience visiting the Development Services Center:  
<https://www.surveylink.com/1234>

The survey should only take a few minutes to complete. Your feedback will help us improve services for customers like you.

Sincerely,



Pete Sullivan  
Development Services Center Manager  
City of Durham





# HOW TO MEASURE?

By methodically **collecting feedback** and tracking indicators through a survey, DSC will be able to understand the impact of the kick-off meeting and adjust it to better fit customer needs.

Keeping the survey short and easy to comprehend will encourage participation and improve response rates.

Data from these surveys will help create a baseline of outcomes, track progress, inspire new services, and identify common challenges faced by customers.

## SAMPLE SURVEY



Development  
Services Center

Thanks for visiting the Durham Development Services Center!  
Please tell us about your experience so we can serve you better.

1 → I got the support I was looking for during my visit to the Development Services Center.

1	2	3	4	5
---	---	---	---	---

Strongly disagree Strongly agree

2 → Please explain your rating below:

---

3 → It was easy for me to get the information I needed during my visit to the Development Services Center.

1	2	3	4	5
---	---	---	---	---

Strongly disagree Strongly agree

4 → Please explain your rating below:

---

5 → After my visit to the Development Services Center, I feel closer to reaching my goals.

1	2	3	4	5
---	---	---	---	---

Strongly disagree Strongly agree

6 → Please explain your rating below:

---

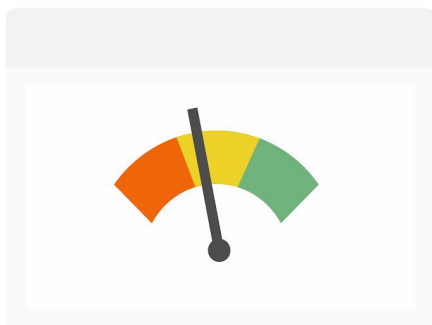
# HOW TO MONITOR?

Data is only useful to the degree that it can be used to improve decisions. A visual dashboard of survey responses will allow DSC to view real time feedback, share metrics easily among departments, and take action to address customer needs.

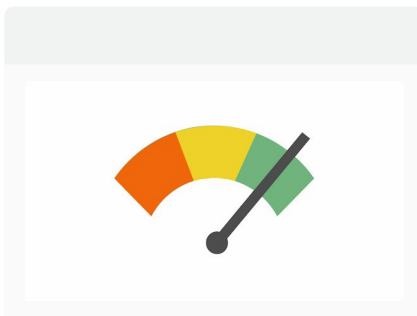
Below is an example of how DSC might visually represent survey responses. An effective dashboard should allow users to understand key metrics at a glance.

Tracking the 1-5 performance scores will help monitor progress, but DSC is likely to gain even more insight by reviewing customers' text box explanations and digging into which topics are most correlated with high or low customer satisfaction.

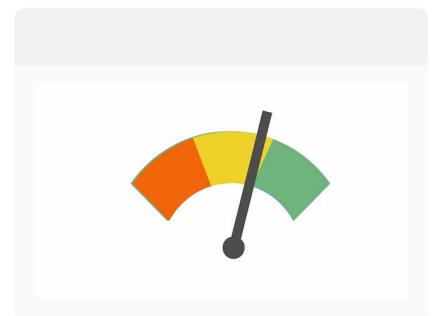
## SAMPLE PERFORMANCE DASHBOARD



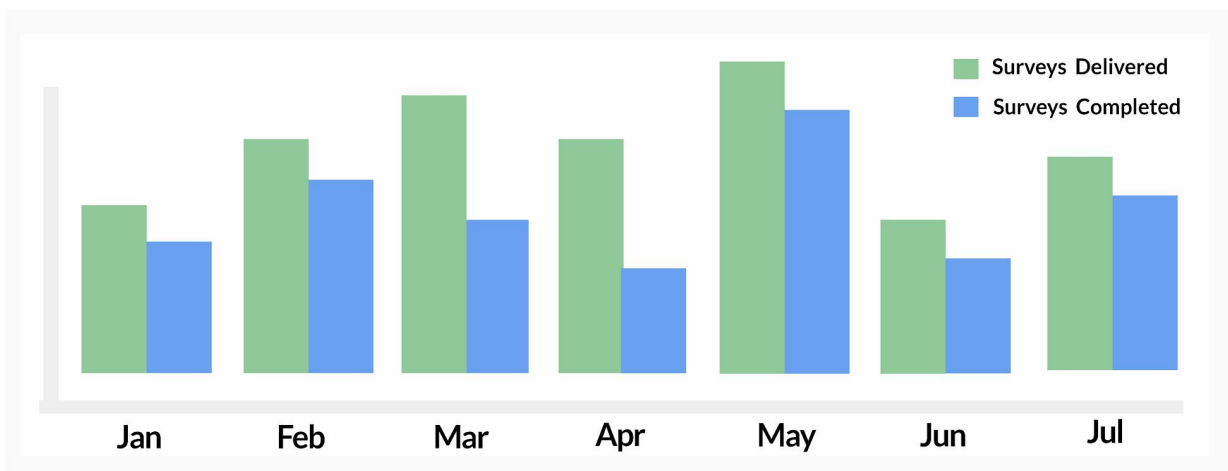
Q1. "I got the support I was looking for"



Q2. "It was easy for me to get the information I needed"



Q3. "I feel closer to reaching my goals"





Top: Carlos and Sara during a brainstorming session.

### **Team members in action.**

Bottom: Liz and Sarah review the journey map with DSC Staff.







# APPENDIX AND ADDITIONAL RESOURCES



# RUNNING YOUR OWN DESIGN SPRINT

Now it's your turn! We encourage DSC to use the principles of human-centered design to improve the customer experience beyond this project's focus on the needs of inexperienced small business owners.

A "design sprint" is a collaborative session intended to rapidly generate actionable solutions. To illustrate the following steps for how DSC might run a design sprint, we've used the example of the **MOJO communication system** throughout, though we encourage you to apply this style of problem solving to a wide range of customer experiences at the DSC.

## IDENTIFY BRIGHT SPOTS AND PAIN POINTS

Ask customers and employees about their experience. Jot down positives and negatives on post-it notes and place them along the customer journey map.

### **Sample Bright Spot**

Employee: "MOJO makes it easier to share information across departments."

### **Sample Pain Point**

Customer: "I feel like my question is going into a black hole."

## IDENTIFY MOMENTS THAT MATTER

Determine key takeaways from the customer interviews. What are the moments that matter most in this process, and why?

### **Sample "Moment"**

Customer has a question during the development process.

### **Sample "This moment matters because..."**

Customers want to know their question will be heard and answered in a timely manner.

## DEFINE OPPORTUNITIES

Reframe your "moments that matter" as "How might we?" statements. Each statement should present an opportunity to design towards an improvement in customer experience.

### **Sample Opportunity**

"How might we ensure that customers feel heard and respected in all of their communications with the DSC?"

## BRAINSTORM CONCEPTS

As you brainstorm:

- Defer judgement
- Encourage wild ideas
- Stay focused
- Be visual
- Go for quantity over quality
- Name your concepts
- Build on someone else's idea.

### Sample Concept

“Acknowledgement system”:

Respond to every customer question within 24 hours with an expected timeframe for addressing their needs

## BUILD PROTOTYPES

Identify one of your most promising ideas and sketch out a visual representation of what it would look like.

The goal should be to create something basic enough to produce quickly, while representing enough of a fully formed concept that customers can react to it.

### Sample Prototype

Mock up what an acknowledgement email would look like and what information it would include.

## TEST AND COLLECT FEEDBACK

Meet with customers and employees to review the prototypes, explain concepts, and gather feedback. Bring a pen and paper to co-create new ideas with participants.

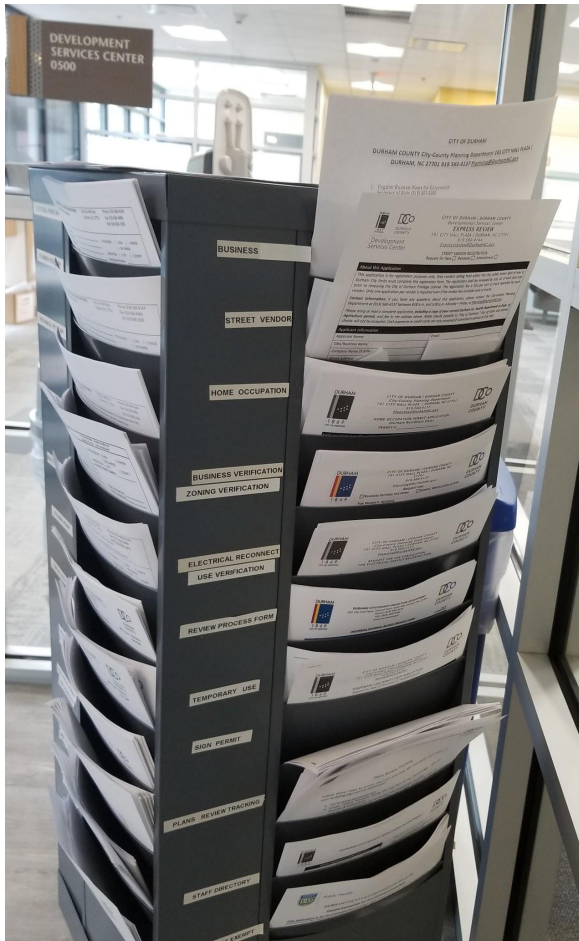
### Sample Questions

- What is most valuable about this idea?
- What would you change? Why?
- Which of these approaches would be most helpful? Why?

## WANT TO LEARN MORE?

Check out [DesignKit.org](https://www.designkit.org/) by IDEO for more resources on design thinking and creative problem solving, including a free downloadable human-centered design field guide.

# ADDITIONAL IDEAS FOR APPLYING HCD



## RETHINK THE FORM CAROUSEL

The form carousel is the very first thing customers see when entering the DSC.

Intercept interviews and conversations with intake staff made clear that while customers regularly use the carousel to get the forms they need, it is not the most accessible or easy to navigate.

***“It always takes me at least four tries to find the document I need”***

-DSC Customer

## HOW MIGHT WE...

Make the form carousel a more useful resource for customers?

## IDEAS TO GET YOU STARTED

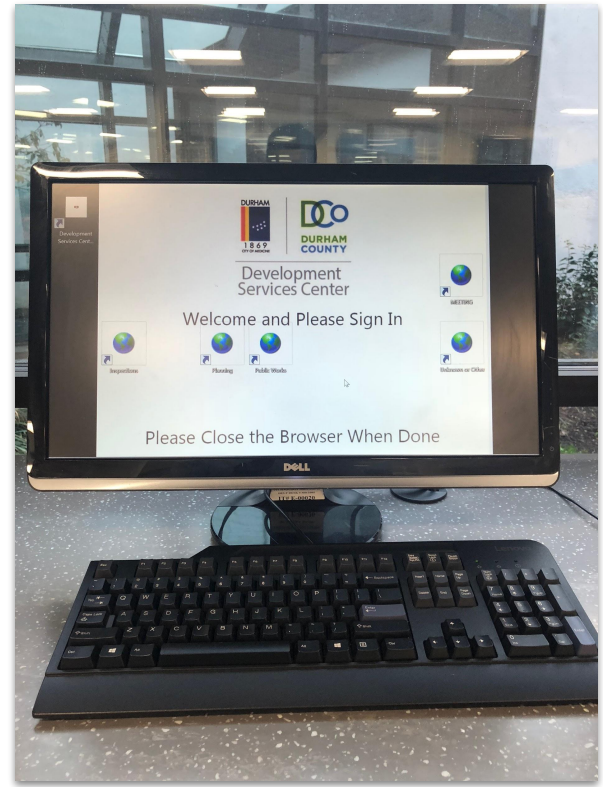
- ▶ **Separate** process guides and checklists from applications so customers know where to go for information and where to go for forms.
- ▶ **Color code** by department so it's easy to find the right form faster.
- ▶ **Add a sign** to the top of the carousel explaining how it is organized and who to ask for help navigating it.

# ADDITIONAL IDEAS FOR APPLYING HCD

## STREAMLINE THE MOJO SELF CHECK-IN PROCESS

The MOJO self check-in system is the first step customers take to access the DSC resources they need on-site.

Site visits to the DSC and conversations with intake staff revealed that the process is not fully set up for self-service. New or low-information users at the DSC typically required assistance from the greeter to find where they needed to click.



### HOW MIGHT WE ....

Make the customer self-check in process easier to navigate?

### IDEAS TO GET YOU STARTED

- ▶ **Simplify** to three steps: select department, add name, hit enter.
- ▶ **Assign icons** by department so it's easy to find the service the customer is looking for. These icons should be consistent with other forms and services.
- ▶ **Add a sign** with visual instructions on the self check-in steps that includes the department icons.
- ▶ **Remove** all information not related to check-in from computers to avoid clicking by mistake.



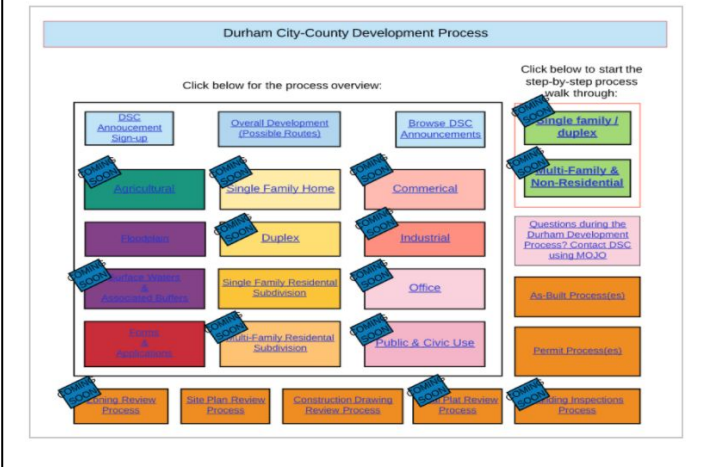
# ADDITIONAL IDEAS FOR APPLYING HCD

## WEBSITE IMPROVEMENTS

Many customers will interact with the DSC website before ever visiting the office.

The process overview landing page we propose in the Design section of this report is just a starting point for matching web content and structure to customer needs.

Click the image below to learn how to navigate Durham's development process. The diagram includes links to a series of other diagrams summarizing the workflow for common types of development and construction.



As DSC continues to refine the new website, we encourage a human-centered approach that considers what structure and content will be most useful to customers.

## HOW MIGHT WE...

Better empower customers to easily find what they need on the website?

## IDEAS TO GET YOU STARTED

- ▶ **Include** a one-sentence description for every form or other resource link on the website so the customer can more easily find what they are looking for.
- ▶ **Rename** sections of the website to be more clear. For example, "Permits and Project Feasibility" could become "Forms and Applications".
- ▶ **Ensure** all resources are readable on most mobile devices. This would require embedding any Lucidchart diagrams as images directly on DSC webpages.
- ▶ **Clearly separate** information and guidance from applications and forms.



**Thank you, and best of luck!**

