

User Research Report

The City of Dallas

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Executive Summary

[The City of Dallas website](#) (COD) exhibits poor information architecture and a problematic website design that can lead to end-user confusion. There is an opportunity to learn about COD's users and potential users to ensure our final site recommendations are supported by the real needs of users.

Our team set out to learn about users' and potential users' behaviors, attributes, goals, and challenges through research. We strategically crafted, designed, administrated, and analyzed results from a user survey and several user interviews to accomplish research goals and answer the question of: who are the users and what do they care about?

Our research brought several **notable points to our attention**:

- Most users visit the site rarely
- Users' expectations of a government site are mostly high
- Users rated trust as the second most important factor in a government site
- Low points on user journey were information architecture related
- Persona's actions, feelings, and mindset affect information needs and search behavior

To gain more insight, our team developed the following **artifacts to support further observation**:

- User survey (28)
 - User interviews (4)
-
- 2 Personas
 - Affinity diagram
 - Journey map
 - Empathy map

Introduction

The City of Dallas (COD) website is a federal site and a hub for Dallas residents, visitors, and other affiliates of the city to find important information and complete important tasks. It serves the purpose of effectively equipping users with accessible, relevant, and useful information.

This report presents our formative findings from user research regarding the City of Dallas website, including the summary of methods used, research conducted, data collected, and insights gathered. The purpose of this user-testing study is to explore what is most optimal and usable for COD's user scope and inform later usability testing.

User Research Goals

- Discover the types of users who use this site through research
- Develop at least 2 personas that represent these user groups
- Understand user behavior, attributes, goals, and challenges through research
- Present at least 4 complete user findings or pain points to address

Methodology

To better understand the users of the City of Dallas website, we gathered user survey and user interview data. This methodology allows us to fully understand the site's users, their needs, their behaviors, and their expectations. With this information, we will create deliverables that will assist with the testing of the website itself such as personas, empathy maps, journey maps, and an affinity map.

User Survey

To collect feedback from users and potential users, our team developed a survey to gather a wide range of numerical data about the users, their attitudes, and their behaviors. A user survey helped us to gather fast, yet rich results in a short time frame and have both quantitative and qualitative user feedback to synthesize for persona creation.

Participant Profiles

Respondents were not based on any criteria. We gathered a total of 28 survey respondents.

Materials & Procedures

Using Qualtrics, we developed, designed, and distributed our survey of 23 questions which consisted of open-ended, closed-ended, and Likert scale questions. To distribute the survey, we made posts on Reddit, LinkedIn, Facebook, and shared it with people who are known to use the website. The survey was active for a total of two weeks.

To analyze the data, our team conducted a collaborative affinity mapping exercise to synthesize data and discover themes.

User Interview

We conducted user interviews to collect a wide range of qualitative and quantitative data regarding the users, their attitudes, and their behaviors. User interviews allow us to get information that otherwise would not be possible to obtain through surveys. Participants feel more comfortable sharing their experiences on the website during an interview; therefore, we get more accurate information.

Participant Profiles

Participants interviewed are COD users or potential users. We gathered a total of 4 interviews.

Materials & Procedures

We conducted 4 user interviews that consisted of approximately 23 questions, give or take some follow-up questions. To conduct these interviews, we either met with the participants in person or used video-conferencing software such as Zoom or Microsoft Teams. Additionally, we took notes and/or recorded the interviews using voice-recording software.

Our team then conducted a collaborative affinity mapping exercise to synthesize data and discover themes.

Findings

Affinity Map

In a remote collaborative session using Miro, our team recorded ideas, observations, and quotes from survey and interview results using virtual sticky notes. We categorized sticky notes by themes to draw out notable insights and analyzed records for patterns as they relate to potential user archetypes (see appendices)

We developed the following themes to categorize our data by:

- User attributes & characteristics
- User behavior
- User opinion
- Navigation & finding information
- Trust & reliability
- User Interface

Most users visit the site rarely

Most users use the site only rarely, reassuring the fact that this site needs to be more efficient and usable. A total of 43% of users say they visit the site rarely (this data is only from the survey). It should also be noted that every survey participant may not have been a Dallas resident. We also recruited visitors and other Texas residents.

Users' expectations of a government site are mostly high

Users' expectations of a government site like the City of Dallas are mostly high because it is federally run. The information from a government website must be accurate since the intended audiences are mostly required to use it. From our survey, 43% of users say their expectations are high.

Users rated trust as the second most important factor in a government site

Users align trust with government, and believe trust is second most important in a federal site behind accurate and relevant content. Since users need to use personal information on some of the site's features, they expect that information to be protected. Our survey showed that 64% of users voted trust as the second most important factor in a government site.

Quote: *"Government sites should be secure"*

– Interview participant 3

Quote: *"Government sites should be of highest quality so I can trust that I can rely on the site"*


– Survey participant

Personas

To inform subsequent site testing and provide user targeted insights, our team developed two personas, a primary persona, and a secondary persona, to represent COD's audiences. These personas focus on users' goals, behaviors, and pain points. These personas will be referenced throughout the remainder of our project as they strictly define and narrow the COD user scope.

Our primary persona, Sandra Brown, is a new homeowner in Dallas and is motivated to learn more about her community and use her community's resources. She knows the city website must fulfil any of her information needs regarding her residency. Her career and family keep her busy, so she uses the city site with the expectation that information will be quick to find, access, use, and read.

Primary Persona



Sandra Brown
34, Systems Analyst

ENTHUSIASTIC DRIVEN CONFIDENT INTELLIGENT

“As a new resident it is important for me to keep up with what is going on in the city, and the website is the perfect place to do that”

ABOUT

Sandra is a new homeowner and is motivated to learn more about her community. She knows the city website must have what she needs since it's a government website.

Her career and family keeps her busy so she uses the city website for easy access to information for making payments and getting involved in local elections.

GOALS

- Quickly and easily find accurate information, especially about requesting services
- Pay monthly bills online
- Keep up with who represents her in her area
- Regularly vote in elections

FRUSTRATIONS

- When it takes too long to find the information she is looking for
- Having to reach out to customer service to get questions answered
- Not having enough time to focus on her goals

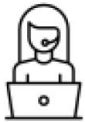




Figure 1: Persona 1

Our secondary persona, Trevor Stanley, is a freshman at the University of North Texas and a regular visitor to Dallas. Trevor keeps busy with school, socializing, and volunteering. He wants to gain experience and connections that can boost his future career and make sure his time in North Texas is memorable.

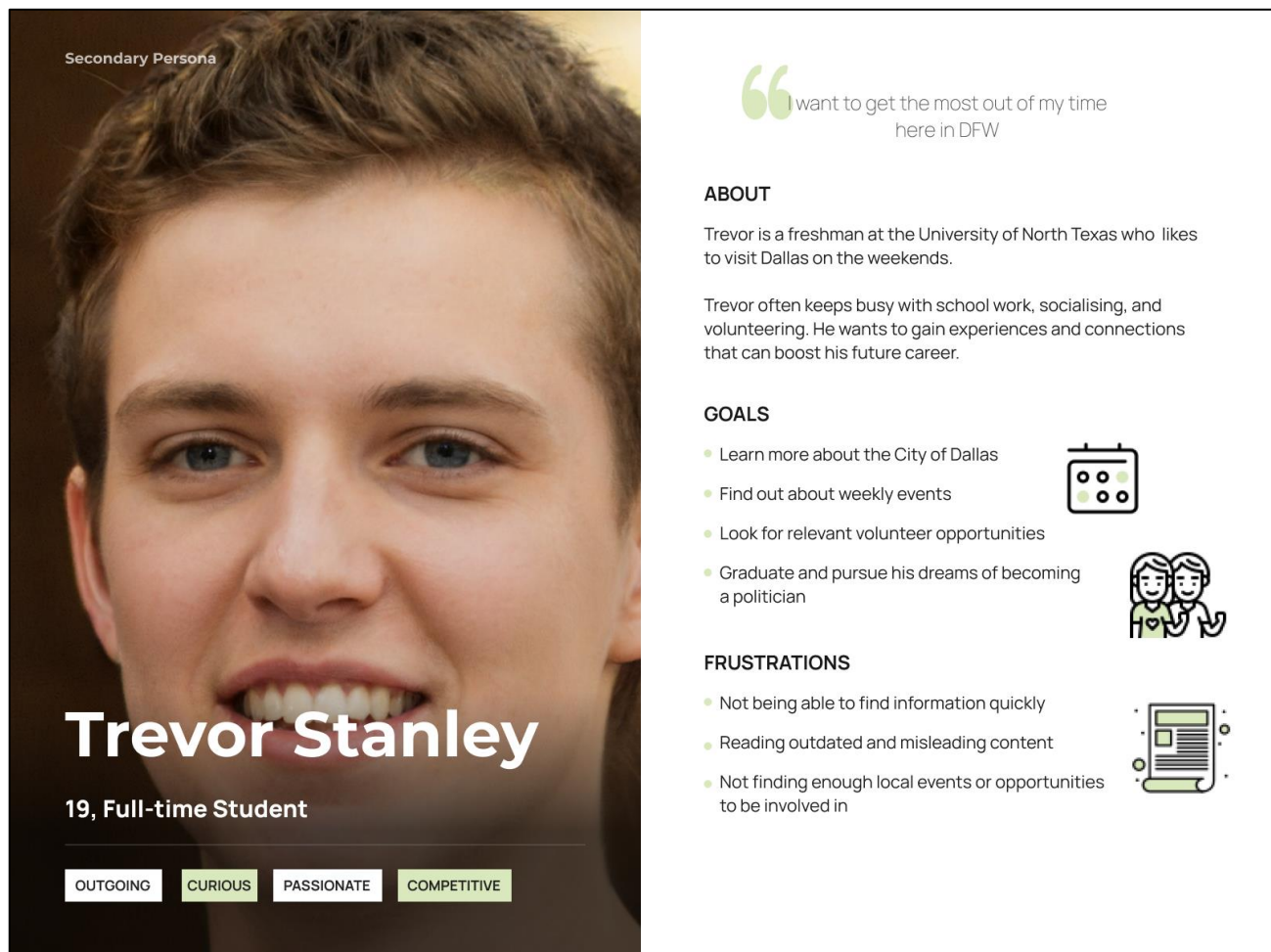


Figure 2: Persona 2

To make these personas, we used demographic data from our user surveys, such as age and employment status:

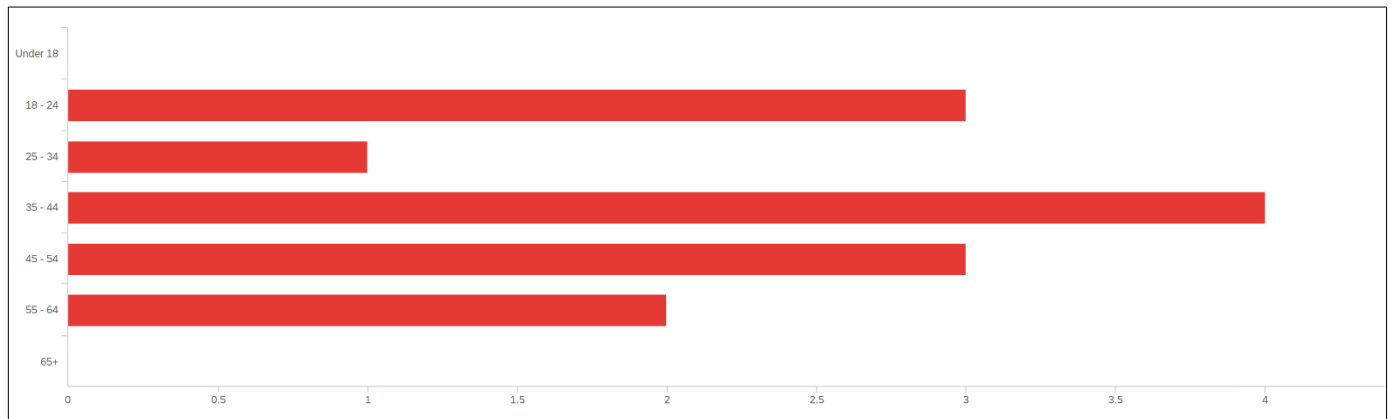


Figure 3: Age Demographics

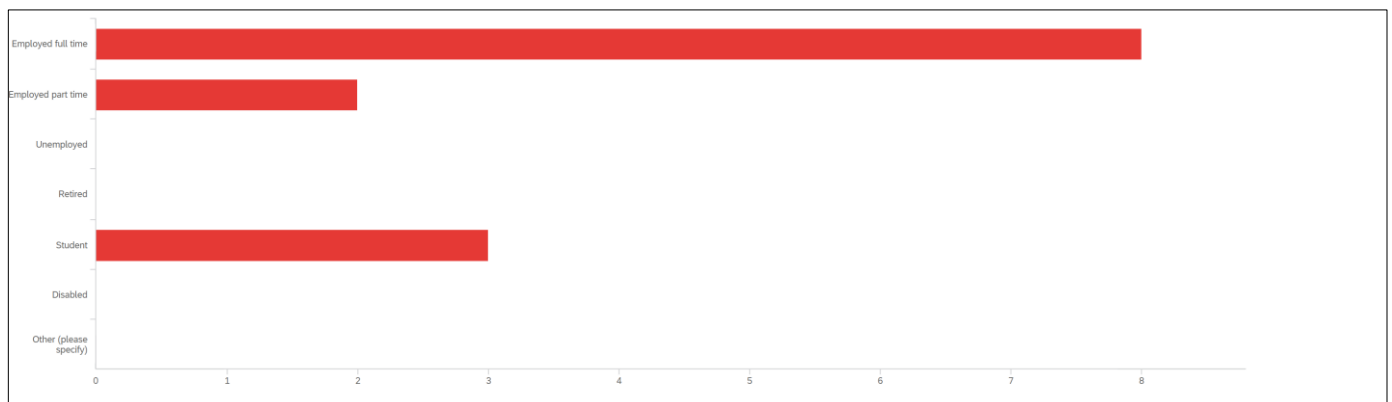


Figure 53: Employment Status

User Journey Map

To visualize our target audiences' interactions with the site, we developed a user journey map based on our primary persona, Sandra Brown. The map depicts a sequential view of her interactions from the "Identifies Information Need" stage to "Takes Action," along with the complexities that would shape her user experience (mindset and feelings). Opportunities for improvement within each touchpoint are noted as well.

The map follows the digital journey Sandra takes to file a noise complaint on her neighbors (*see Appendix C*).

Low points on user journey were IA related

One of Sandra's low points on her journey was when she was looking for information about services by clicking on "Resident" then "Services." Her overall journey depicts the process of her finding out how to submit a noise complaint via the city. While filing a noise complaint is a service provided by the City of Dallas, it is not something the user can get to through the global navigation menu, even under "Services."

This is a frustration for Sandra because she came to the website with a problem, is not expecting to spend time on this issue, and ends up having to put effort into looking for this service in a different place. The pain point here lies within how content can be hard to find, which takes away from usability. Overall, this low point reveals an information architecture flaw in the global navigation system and how content within it is grouped and displayed.

Empathy Map

An empathy map was created to gain a deeper, empathetic understanding of our target audience. The map articulates what we know about our target audience by capturing knowledge about their feelings, actions, and thoughts in relation to COD. As empathy is a critical part of human-centered design, this map will help our team truly "step in the shoes" of COD's target users.

The map captures the thoughts, feelings, quotes, and actions made by Sandra while looking for family services (*see Appendix D*).

Persona's actions, feelings, and mindset affect information needs and search behavior

While browsing through the "Services" tab under "Residents," Sandra is looking for activities, events, or resources for her children to partake in. All her thoughts, feelings, actions, and

sayings are all regarding how she might take her children to an event or what she needs for them.

Some of her thoughts include finding information on resources such as bus passes, bus schedules, price of events, and library card registration for her family. As Sandra is our main persona and user type, we need to consider her wants and needs when applying this information to the website itself.

Conclusion

After conducting user interviews and surveys, we compiled our data in an affinity diagram to better understand the users, their behavior, attributes, goals, and challenges. With our findings, we then created two personas, a journey map, and an empathy map. This report examines our collected data and explains our main findings for users.

From our affinity diagram, we found that the majority of users rarely use the City of Dallas website, but when they do, they use it to find information, pay bills, and browse important news and events. We also found that most users have high expectations for a government website like this one for trust, privacy, and security purposes. Users align the trust with the government and seem to expect it out of this website too. When asked what is most important to users in a government website, trust places second after accurate content.

The journey map allows us to better understand user needs and major pain points in finding information that they need. We found that one major pain point was related to the IA of the website because the user does not want to waste time looking for information that is not readily available.

Our empathy map explained a few user behaviors and needs regarding specific services and resources of the website for the website's main user type, residential homeowners. As residential homeowners go on this website more often than other users, it's important to consider their thoughts, feelings, and actions when they look for information.

Using the data and findings collected from researching the users of the City of Dallas website, we were able to conduct more focused research into the website itself which can be found in our Usability Report.

Appendix A: Interview Script

Introduction

Hello, my name is_____, and I will be leading our interview today. As explained earlier, our team is studying the City of Dallas Website to find out how their website can be improved and better serve its users. With your help, we hope to gain enough valuable insight to turn into actionable solutions for the website. **During this interview, I will ask you questions about yourself and your experiences with the site. If you have not used the site, think of a time you used any federal/government website.**

Please be aware that there are no wrong answers. We are doing this to improve the site, so we want your honesty!

Questions

To start, I'd like to learn a little about you.

- What is your age?
- What is your highest level of education?
- How are you affiliated with the Dallas/North Texas?
- Do you typically use mobile or desktop when browsing these websites?

Thank you. Now, I'd like to ask you some questions about the website.

- Can you please discuss what you use this website for *(and if they do not use COD specifically, just any .gov site can be used?)*
 - o What goals are you trying to accomplish from your visit?
- How often would you say you use this website?
- What are your expectations like for a government website?
 - o If low – ask why and if they can pull from personal experience.
 - o If high – ask why and if they can pull from personal experience.

I am going to say a few features of a site like this. Please respond with a number between 1 and 5 on how important these features are to you for a government site, 1 being not important and 5 being very important:

- Trust (including privacy and security)
- Accessibility
- Accurate and relevant content
- Scannable and readable content

- Site navigation
- Customer service, help, support
- Site design

Thank you! Is there anything else you would like to add?

Now I am going to say a few statements regarding this site. Please respond with a number between 1 and 5 on how much you agree or disagree with these statements, 1 being strongly disagree and 5 being strongly agree:

- The website is clear in terms of purpose and services offered
- It is easy for me to find the information I am searching for
- It is easy for me to navigate through the website
- My goals are achieved, and my questions are answered when using this site
- The design of the website is user-friendly and enjoyable

Thank you. Is there anything else you would like to add?

Last few questions here.

- Explain what you think this site does well.
- Explain what you think could be improved on this site.

Thank you! That was very helpful. This concludes our interview, thank you again.

Do you have any questions?

[illegible]

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View here: <https://drive.google.com/file/d/1DdXDORLGtuoKxfxRxPI9I5DDWUm5-X4o/view?usp=sharing>

Appendix C: User Journey Map

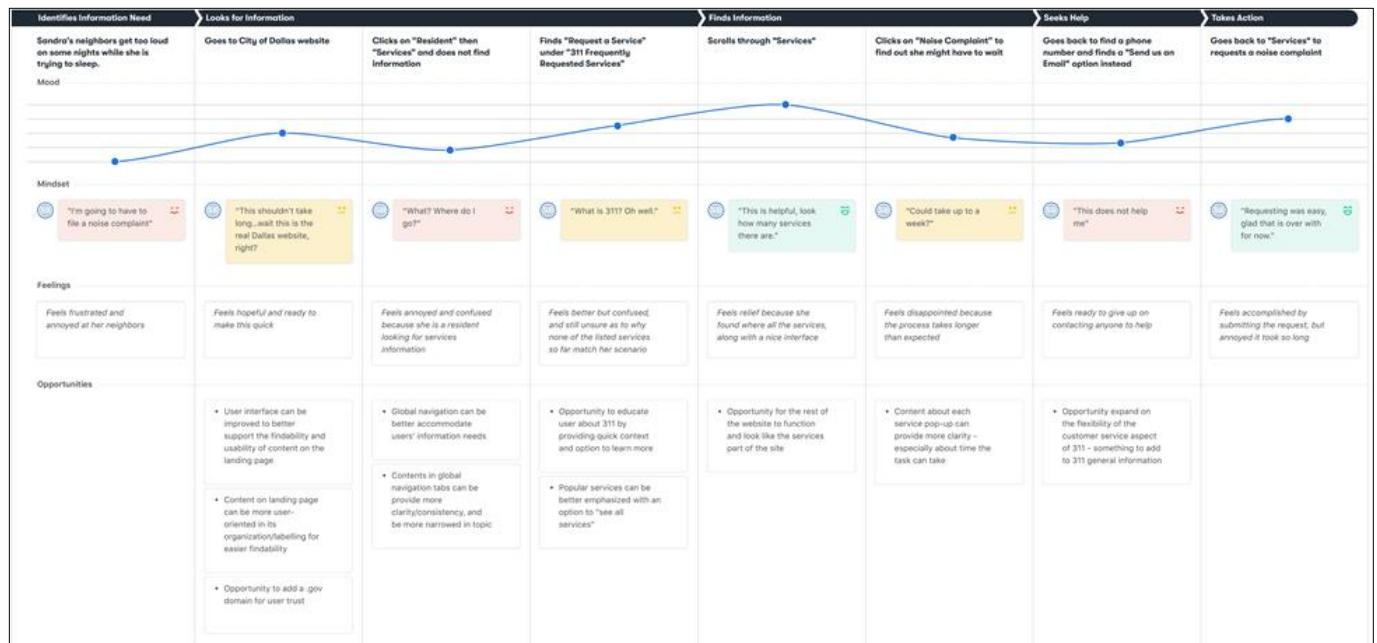


Figure 5: User Journey for Persona 1 filing a noise complaint

View here: <https://drive.google.com/file/d/1Wk7oLQ--XykQezUHBziWxMyMC1SGXQ46/view?usp=sharing>

Appendix D: Empathy Map

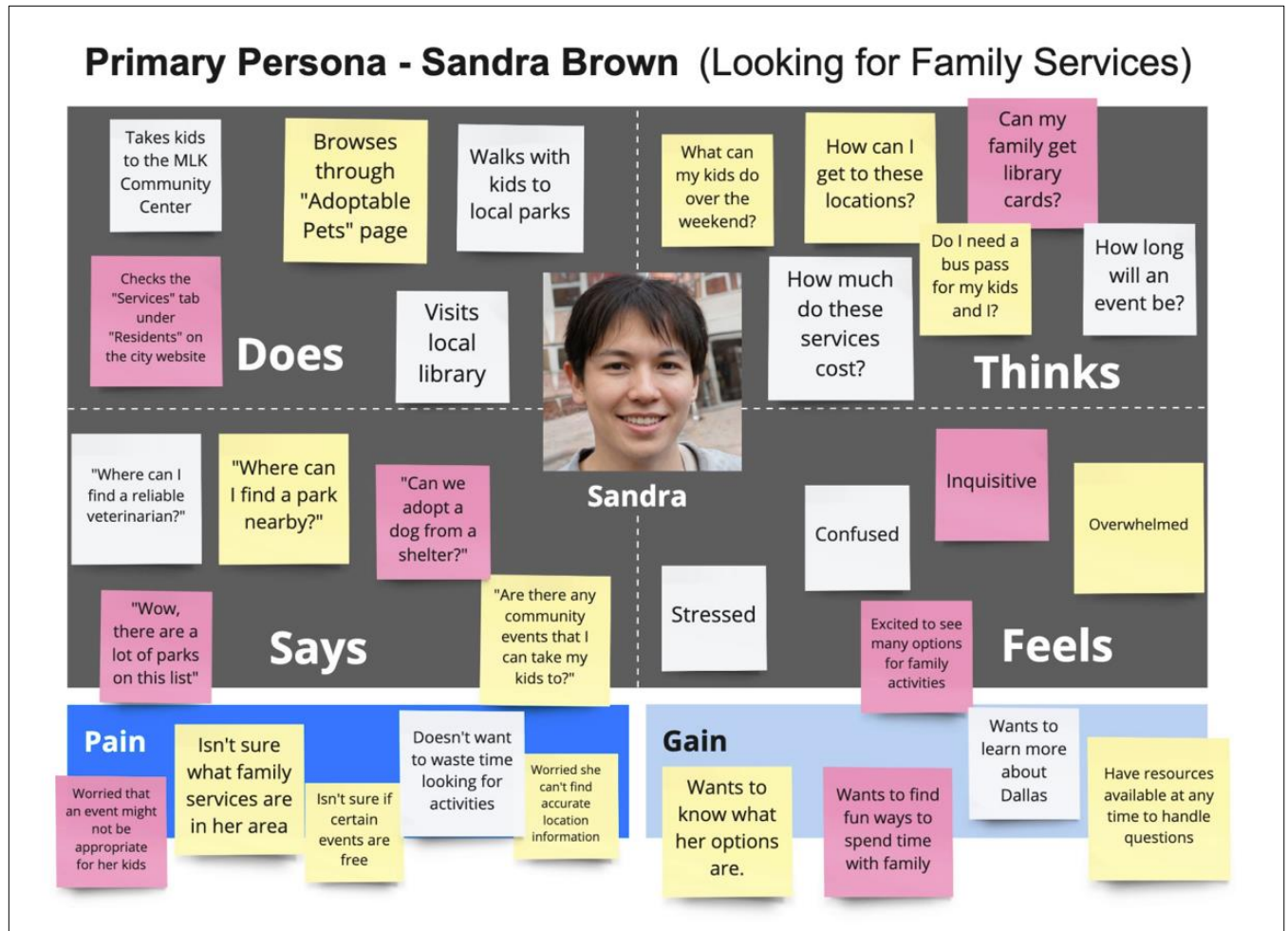


Figure 6: Empathy map for Persona 1 looking for family services