

CUTgroup Final Report: Open Checkbook Survey & Usability Test

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Acknowledgments

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Executive Summary

The Citizen User Testing Group (CUTGroup) was tasked with assessing the viability of the Open Checkbook tool created by the City of Detroit. This tool aims for the transparent presentation of vendor spending by the City of Detroit in an intuitive and informative way. An assessment was performed by proctoring short, structured interviews and rapid usability tests with six Detroit citizens to uncover technical and content issues within the tool. Users were asked to interact with the Open Checkbook tool and provide feedback regarding three aspects of the application:

- **Mobile Usability** will assess the tool's intuitiveness and ease on a mobile device, with an emphasis on the "Charts" section of the prototype.
- **Government Transparency** will involve understanding users' perceptions of the government, its transparency regarding vendor spending, and their overall trust in the City.
- **Comprehensibility** will evaluate the tool's use of jargon and charts, and how this affects the users' ability to use and understand the tool.

These three objectives were accomplished with a pre-test interview, a usability test, and a post-test interview:

- **Pre-Usability Task Questions** asked some brief exploratory questions to give insight towards potential uses for the tool.
- **Usability Tasks:**
 - **Task 1:** Navigate to the Open Checkbook home page. Starting on the home screen, explore the Open Checkbook however you wish and verbalize your thoughts and actions.
 - **Task 2:** Find out how much the Innovation and Technology department paid the vendor, AT&T. As you do this, tell me what you are thinking, as well as what you learned about the innovation and technology vendor spending.
 - **Task 3:** Find out how much Recreation Department paid the Gethsemane Cemetery Trust. Talk through your process, as well as what you learned, if anything about the innovation and technology vendor spending.
 - **Task 4:** Using the Open Checkbook website, show me how you might find the definition of "Pass through payments".
- **Post-Usability Task Questions** assessed the user's perception of the tool after going through the usability tasks.

From these surveys and tests, CUTGroup uncovered three main technical issues, as well as general feedback for improvements. As a result, the group recommended that improvements to the user interface be made to improve the visual clarity and usability of the tool.

Methodology

Before user-testing, CUTGroup created a protocol (see Appendix A) and proctoring script (see Appendix B) to maintain consistency when performing user research on the test site. Because of a 30 minute/user time constraint, the team recognized that the proctoring script needed to be short and succinct. From discussing how to best meet the research goals given by the City of Detroit, the team recognized that four task usability tests situated in between two short structured interviews would achieve those goals while operating under the time constraint.

When the team arrived on site, user tests were proctored in pairs. One team member was assigned to be a notetaker while the other member would run through the script and directly interact with the user. Data was collected through a QuestionPro form that the notetaker would fill out during the user test using a laptop.

After collecting the data, the group parsed through the responses from users and looked at common trends within the data to inform major findings and future recommendations for content and usability improvements. The raw data can be found in the appendix section of the report (see Appendix C)

Major Findings

Technical Issue #1: Chart Page Experience

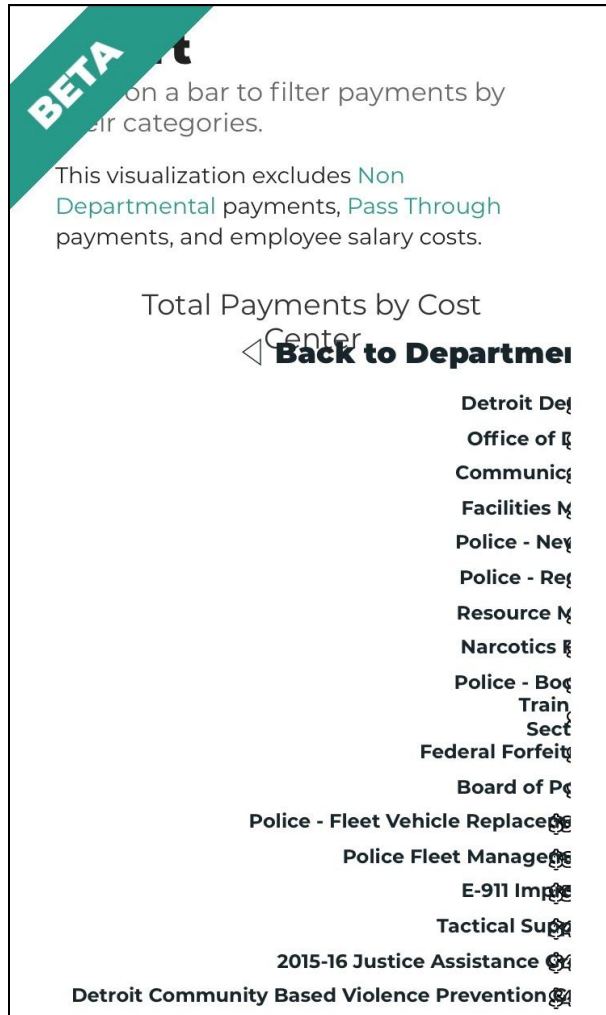


Figure 1. The Chart tab after selecting a department is impossible for users to read and comprehend.

User quote: "Initially it looks very clean, but once you click into it, it's hard to read, doesn't seem to load properly... I did accidentally click on a bar a few times. It's hard to find the right information."

The primary issues that users struggled with during testing were related to their experience with the chart. Problems ranged from not being able to read the information it provided, to struggling to understand that it is clickable. A few participants discovered that if they oriented their phones horizontally, they would be able to read the chart better. The increments at which the monetary

amounts are counted were very large and made it difficult to view and understand the chart. For instance, the increments on one chart were in millions which made \$25,000 not appear at all on the chart, but users still felt that amount was significant and the chart made it look like it was \$0 or that there was nothing there. CUTGroup sees this as a major technical issue because it is directly related to one of our most important usability research questions— “Are users able to interface with the charts in a manner that allows them to help answer questions about city spending?”

Chart Clickability

The clickable area on the chart proved to be both a help and a hindrance to testers. The ability to expand the chart further and open subsections of the data established more credibility with some users. While other test users found they did not understand what areas on the chart were buttons and often accidentally clicked on an area when they were simply trying to scroll to see the totality of the chart. This frustrated participants because it made it more difficult to understand the information presented to them and made them feel like they weren't in control of their experience using the website.

Bar Chart Style

Having the users utilize their mobile devices for this interview was intentional, while it would be ideal for everyone to access this context on a desktop, that is not practical for today's world. The way the chart is designed is counter intuitive to the design and orientation of every user's mobile devices. While some users thought to turn their phone horizontally in order to better read the contents of the graph, not all tests came to that conclusion. Even once the phone was reoriented users still struggled with scrolling through the map. Because there is so much content to scroll through, it is easier to parse through the webpage vertically even if it's easier to read the information when the mobile device is horizontally oriented.

Technical Issue #2: About Tab and Glossary Experience

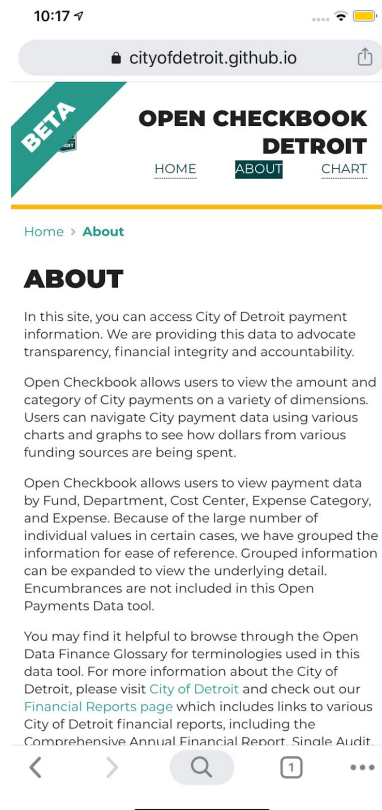


Figure 2. The “About” page.

User quote: “There is no way I would have gone to “about” to find a glossary of terms”

Users were frequently confused when trying to find a definition for “pass through payments.” Some issues that they had were:

- They did not know that there was a glossary
- They did not know to look under the About tab because they expected the About tab to be like a history of the information on the tool, not to host FAQs and a glossary (they would expect these things under a “help” tab)
- They missed the whole navigation line because it is small and right above the long, dark introductory text

The users took a couple different paths to try to find the definition of “pass through payments” The most popular way was to go to the page that was dedicated to “pass through payments” and try to find the definition there. They expected and wanted the definition to be right near the phrase on that page. Another path that was taken was to enter “pass through payments”

definition into the search bar, that did not result in any responses or feedback. All of this may suggest that the glossary is in a confusing spot on the website and that if people need a definition they will not know where to find it or that there is a place to find it.

Technical Issue #3: Homepage Search Experience

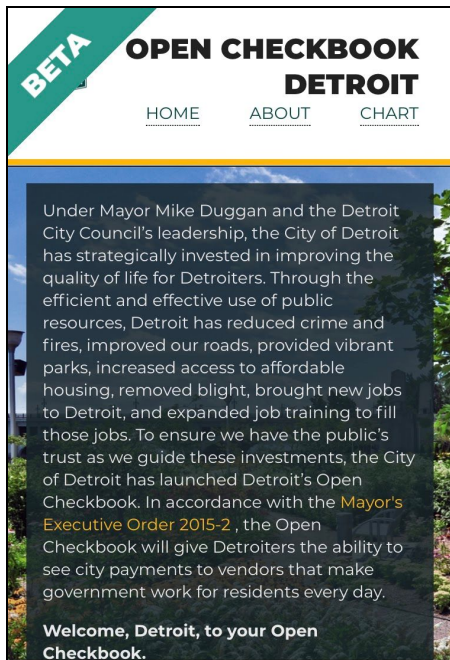


Figure 3. Homepage when first accessed

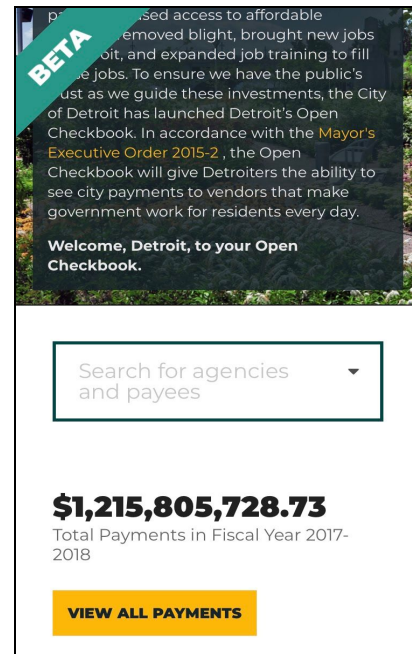


Figure 4. Homepage when scrolled down to find Search Bar

User quotes: "The search bar was hard to find." "Will this search bar bring me to the definition?"

Users struggled with the homepage search bar for the following reasons:

- The search bar was buried in the homepage.
- The users assumed the search bar had a much larger search function.

As shown in Figure 3, when the homepage on the mobile website is first accessed by the user, the opening message takes up the entire screen. Only through scrolling (Figure 4) does the search bar appear. Our users consistently suggested placing the search bar at the top of the homepage or otherwise making the search bar more visible.

Users also frequently assumed the search bar could search beyond the list of agencies and payees. Some users thought they could search for the definitions of words they didn't know. In addition, when users typed in the wrong spelling, they could not find the right information.

CUTGroup sees this as a major technical issue because it is directly related to two of our usability research questions— 'How do they interact when they are searching for a specific kind of information?' and 'What design elements (purposeful or otherwise) of the mobile interface facilitate or hinder users?'

Content Feedback

Data Content

Users were told about the tool briefly then were asked for what purposes they might use the tool for. Below is the breakdown of the common categories that users mentioned:

- **Cost of removing blight** : 1 out of 6 users
- **Where Tax money goes**: 3 out of 6 users
- **The kind of vendors**: 2 out of 6 users

To understand some of the user's habits and literacy on the internet, users were asked about the last time they browsed the internet to look for information about Detroit

- Most of the user's were literate and using the internet as a source to look for information.

After performing the four usability tasks, users were asked:

What did they like about the tool?

- Most of the users agree that they like the transparency of the City of Detroit.
- The detailed breakdown of the expenses
- Some jargons was hard to understand

What did they dislike about the tool?

- It is hard to find glossary section
- The issue with the chart section
- Some of the text (the numbers) is hard to read
- Search bar not user friendly

If they learn anything new about the City of Detroit's vendor spending?

- How the city prioritize their spending
- Education is priority

Tool credibility?

- Most of the users think it is credible. Using City of Detroit logo and its link to the website, the design similarity with City of Detroit website and the information mentioned on the homepage and numbers seems reasonable.

Observed User Journeys

Persona 1 - Expert



Carl is a Detroit resident in his thirties. Born and raised in Detroit, he frequently looks up information about his city out of curiosity. A Millennial, he's addicted to his iPhone, and likes to have the most recent model on the market.

Scenario 1 - Expert

Carl has some time to kill while waiting for his lunch order at his favorite taco place. He whips out his phone and decides to explore a new website he heard about from one of his friends who works in the mayor's office: Open Checkbook. He skims the note at the top and then scrolls quickly through the homepage, clicking the search bar, the top agencies and payees. He's impressed by the fact that the number given for total payments in the fiscal year is down to the specific cent. He clicks the About tab, though he bores easily and does not scroll down far enough to see the Glossary. He's most drawn towards the Charts tab, being more of a visual guy, and at first, he's impressed by the bar chart that populates his screen. Being tech-savvy, he tries clicking on the first bar, and likes that this takes him deeper. However, he's surprised to see that the next bar chart does not properly load--the department name overlaps with the dollar amount. He clicks back and forth to try to get the page to load properly. When this doesn't work, he sees the note that the charts are best viewed on a desktop computer. A little frustrated that the most interesting part of the website isn't available to him on his phone, Carl exits the tool.

Persona 2 - Novice

Angela is 47 and works two jobs so she can afford her house and car payments. She also cares for her aging mother who tripped on an icy sidewalk this past winter and broke her hip. She doesn't bother spending money on the latest technology and has a cell phone model that's 4 years old. She doesn't own a personal laptop as she uses desktops at work and doesn't have a need for one, at least that she thinks warrants her purchasing one. But she did buy a ChromeBook for her eldest child who's in high school.

Angela's two children are in school full time and can mostly look after themselves but she still worries about them. She's not the best with technology but her children help her stay current on the basics. She would like to have more time to dedicate to local government and what's going on with the city, but if it isn't on the 11pm news, then she probably doesn't know.



Scenario 2 - Novice

Angela's child Will shows her a website that he has to use as part of an assignment for his politics and government class in school. "Did you know there's a website that shows every payment the city spends on different vendors it's using?" He asks Angela, "no, I had no idea," Angela replies. Angela takes her phone out and asks for the website address. "Just google 'Open checkbook Detroit,'" Will tells her. She fishes her phone out of her purse and pulls the website up on her phone and starts to read the interface on the screen. She glazes over the initial chunk of text and scrolls down to see the list that says "Top Payees" and that Detroit Public Schools is listed at the top. She's surprised it's listed as number one since she doesn't feel like the public school system is well funded and students have lower test scores compared to the rest of the state. On the Detroit Public Schools page she sees they use the phrase "pass through payments" but she doesn't quite understand what that means, she tries to click on the term to see if that will do anything but nothing happens. She continues scrolling down the page and then back up to the top, she notices the "About" button once she hits the top of the webpage's scroll and clicks the button. She sees it's more text explaining the website and doesn't scroll further down to see there's a glossary of terms underneath the 'About' text block. Glancing at the time on her phone she remembers she needs to check in on her mother to make sure she's eaten dinner before it gets too late and shuts off her phone before putting it back in her purse.

Recommendations

1. While completing the tasks related to finding specific departments, users were frustrated because bars and texts overlapped, causing users difficulty to read the information. CUTGroup recommends optimizing the style and format of texts and bars. Additionally, users were confused about which part of the contents was clickable. They noticed that texts were clickable on the Home page, while only green arrows were clickable on other pages. CUTGroup suggests to make such feature consistent across all pages.
2. Another common interaction was when users scrolled up and down the charts, they could accidentally click on the bars. CUTGroup recommends to reduce the click target areas so users can scroll through a chart on a mobile device.
3. To address the issue with tab experience, users had a hard time to find the definition of a glossary, it's due to the fact that they don't know where the glossary is located. CUTGroup recommends a separate "Help" tab be created aligned with the other "Home," "Chart," and "About" tabs on the top of the screen. This "Help" tab will hold FAQs and a glossary. Ideally, users will navigate to that tab to search for explanations of a glossary and answers to frequent questions or concerns. Moreover, the navigation bar needs to be obvious and be able to catch users' attention right away.
4. Some users mentioned that they wanted the definitions of Pass Through Payments on the payments page (pictured on the right). CUTGroup suggests putting the definition under the phrase on this page, or as clickable question mark icons situated next to the phrase. This way users can find the definition on the page without navigating to a new page.
5. Regarding the issue users had with the search bar, they didn't perceive it existed immediately because it was buried under the main paragraph. Taking advice from users, CUTGroup suggests making it a drop down menu of available vendors and departments since the searchability of this tool is very limited. Then we would suggest adding a general search bar into the navigation section so that users can search for definitions among other words. Users expected the search bar to have more abilities such as auto-correcting their spelling.
6. In addition, users were having issues finding the navigation bar on mobile since it is so small and disappears upon scrolling further down the page to read the rest of the



introductory text for example. Our recommendation is to make the navigation bar sticky on the mobile website, meaning it does not disappear once the user scrolls down the page. This way users can always go back to the navigation bar no matter where they have scrolled to on the page.

Appendix A: CUTgroup Protocol

Parameters:

- **Testing platform:** Mobile Device
- **Time Limitation:** up to 30 min per person
- **Location:** Wilder Branch of the Public Library
- **Testers:** Detroit citizens recruited by Data Driven Detroit
- **Materials:** Users should bring their own mobile devices

Description:

The current CFO prizes using new technology to share information about the city's vendor spending with Detroit's citizens. The Mayor's office has created a searchable database that summarizes top vendors and departments which includes an interactive chart. As part of the city's goal to make data more transparent, the IET team hopes to display this data in an informative and intuitive way for the citizens of Detroit to use. Ultimately, the Open Checkbook will provide access to meaningful data that citizens of Detroit will want to know and will easily understand.

Format:

1. Pre-Usability Task Interview: ~5 minutes
2. Usability Task: ~20 minutes
3. Post-Usability Task Interview: ~5 minutes

Objectives & Research Questions:

There are three main objectives in the user testing of the Open Checkbook mobile prototype:

- **Mobile Usability** will assess the tool's intuitiveness and ease on a mobile device, with an emphasis on the "Charts" section of the prototype. This will be accomplished through a usability test that give users a set of tasks to complete. This test will answer:
 - How do users interact with the interface when exploring?
 - How do they interact when they are searching for a specific kind of information?
 - How do users interact with the graphs in Charts?
 - What design elements (purposeful or otherwise) of the mobile interface facilitate or hinder users?
- **Government Transparency** will involve understanding users' perceptions of the government, its transparency regarding vendor spending, and their overall trust in the City. The government wants to show good faith by sharing its vendor spending. Discovery of the level of trust citizens have in the city of Detroit will mainly be accomplished through a one-on-one interviews with users that will answer:
 - What information about vendor spending can users learn from the city?
 - What opinions do users have about the city's vendor spending before using the tool, and after?
 - Does sharing the vendor spending information help people have faith in how money is being spent by the city?

- **Comprehensibility** will evaluate the tool’s use of jargon and charts/graphs, and how this affects the users’ ability to use and understand the tool. This will be accomplished through observations during the usability test. The observations will focus on:
 - Does jargon prevent the users’ ability to understand and therefore utilize the tool?
 - How do users react when faced with jargon that is incomprehensible?
 - How do users interpret the information presented in the charts/graphs?

Content & Value Interview Questions

Pre-Usability Task Questions:

1. What might you use this tool for and what questions would you like to answer with this tool?
2. Can you tell me about the last time you browsed the internet to look for information concerning your city?

Post-Usability Task Questions:

1. Overall, what did you like about the tool? Why?
2. What did you find confusing or dislike about this tool?
3. After using this tool, did you learn anything new about the City of Detroit’s vendor spending? Please explain.
4. Do you feel the vendor spending data provided by this tool is credible? Why?
5. Can you identify a situation where this tool might be useful to you?
6. Do you have any other thoughts about this tool that we have not addressed?

Usability Tasks

Listed below are the four tasks:

- **Task 1:** Navigate to the Open Checkbook home page. Starting on the home screen, explore the Open Checkbook however you wish and verbalize your thoughts and actions.
 - Prompts and probes:
 - What (else) can you do on this page?
 - Where do the links take you?
 - Why did you select that option?
 - What did you learn on this page?

Background: When coming up with this task, we were considering how users organically interact with a new website on their phone.

Goal: The goal of this task is to observe users interacting for the first time with Open Checkbook and to understand what information users naturally gravitate towards.

Purpose: This task will prepare users for the subsequent tasks.

- **Task 2:** Find out how much the Innovation and Technology department paid the vendor, AT&T. As you do this, tell me what you are thinking, as well as what you learned about the innovation and technology vendor spending.

Background: After users orient themselves to the application, we will place them in a situation where they will use the tool.

Goal: Test the mobile website's ability to communicate information effectively to the user. This also tests if users are able to navigate to a department through both the chart and search tools.

Purpose: To make sure each aspect of the tool is being utilized and test the usability and discoverability of the tool. We are testing which tool the user will use first then we are testing if both of the tools are able to convey information to the user effectively.

- **Task 3: [Depending on if the user chose to use the search bar or the Charts tab for Task 2, have them try the same task on the tool not used]** Find out how much Recreation Department paid the Gethsemane Cemetery Trust. Talk through your process, as well as what you learned, if anything about the innovation and technology vendor spending.

Background: After users orient themselves to the application, we will place them in a situation where they will use the tool.

Goal: Test the mobile website's ability to communicate information effectively to the user. This also tests if users are able to navigate to a department through both the chart and search tools.

Purpose: To make sure each aspect of the tool is being utilized and test the usability and discoverability of the tool. We are testing which tool the user will use first then we are testing if both of the tools are able to convey information to the user effectively.

- **Task 4:** Using the Open Checkbook website, show me how you might find the definition of "Pass through payments".
 - Prompts and probes
 - There is a glossary on the website. (If they cannot find the glossary, take note, and prompt them to it)

Background: After users orient themselves to the application, we will place them in a situation where they will use the tool.

Goal: Test to see if the glossary is findable. If it is not we will prompt them and either way we are testing the glossary's ability to give the user a clear definition of jargon.

Purpose: Since Open Checkbook is meant to help the city be more transparent with its citizens and create trust, we are ensuring that users are able to define things that are confusing to them using the tools of the website.

Appendix B: Proctoring Script

Introduction:

- Hi, my name is **[NAME]**, and this is my partner, **[NAME]**. During today's session we'll be testing a tool, built by the City of Detroit, that gives citizens easier access to data and information about vendor spending in Detroit. Vendor spending is how much money the city spends on different vendors to achieve goals in different city departments. Please note that during this session we are testing the tool and not you. If the open checkbook tool doesn't work for you, then it doesn't work for other users.
- The session will begin with some brief questions that will help us understand more about you as a potential user of the open checkbook tool. Then, we will spend about 20 minutes trying to accomplish a list of tasks with the tool. I'll describe the task, which you will carry out, while my partner records notes during our session. We will end with follow-up questions about your experience using the open checkbook.
- Please try to speak out loud so that my partner can record your thoughts as well as your actions. This gives us a better sense of where the tool is working and failing. I might ask some questions along the way as well.
- You can quit at any time. You can ask any questions about anything. You can take a break. You can skip a task, even in the middle of it. You don't have to complete every task.
- After we complete all the sessions, our team will analyze and summarize the information collected about the the Open Checkbook tool in a report to city staff. We will not identify you in that report. Your personal information will not be shared or connected with the feedback you offer during this session.
- Do you have any questions about this session, your role, or anything else before we get started?
- Again, Open checkbook is a website where citizens can view "what checks have been written" showing city vendor spending.
- URL: <https://cityofdetroit.github.io/open-checkbook/>

Pre-Task Questions:

1. What might you use this tool for and what questions would you like to answer with this tool?
2. Can you tell me about the last time you browsed the internet to look for information concerning your city?

Usability Tasks:

1. **Task 1:** Navigate to the Open Checkbook home page (URL is above). Starting on the home screen, explore the Open Checkbook however you wish and verbalize your thoughts and actions.
 - a. Prompts and probes:
 - i. What (else) can you do on this page?
 - ii. Where do the links take you?
 - iii. Why did you select that option?
 - iv. What did you learn on this page?
2. **Task 2:** Find out how much the Innovation and Technology department paid the vendor, AT&T. As you do this, tell me what you are thinking, as well as what you learned about the innovation and technology vendor spending.
3. **Task 3: [Depending on if the user chose to use the search bar or the Charts tab for Task 2, have them try the same task on the tool not used]** Find out how much Recreation Department paid the Gethsemane Cemetery Trust. Talk through your process, as well as what you learned, if anything about the innovation and technology vendor spending.
4. **Task 4:** Using the Open Checkbook website, show me how you might find the definition of "Pass through payments".
 - a. Prompts and probes
 - i. There is a glossary on the website. (If they cannot find the glossary, take note, and prompt them to it)

Post-Task Questions:

1. Overall, what did you like about the tool? Why?
2. What did you find confusing or dislike about this tool?
3. After using this tool, did you learn anything new about the City of Detroit's vendor spending? Please explain.
4. Do you feel the vendor spending data provided by this tool is credible? Why?
5. Can you identify a situation where this tool might be useful to you?
6. Do you have any other thoughts about this tool that we have not addressed?

Conclusion:

Thank you for taking the time to share your experience with us today. Before we end, do you have any final questions? **[Wait for response and answer questions]**. Please feel free to contact askd3@datadrivendetroit.org, if you have further questions. Otherwise, I hope you have a nice day.

Appendix C: Raw Data

What might you use this tool for and what questions would you like to answer with this tool?

P1	<ul style="list-style-type: none"> • She wanted to know how much the city paying to tear down condemned homes
P2	<ul style="list-style-type: none"> • What kind of vendors? • Does it only apply to certain vendors? • What kind of payments? Tax? • How can my neighborhood association use this tool to get more business traffic
P3	<ul style="list-style-type: none"> • If he were a community activist and felt the government was misusing funds, he could use it to see if an exorbitant amount was spent on one vendor over another. • If he were a contractor, he could see where he could put his bid in, or when to bid in next round if there's a renewal • He could see where his taxes were going in general. • When he was in school, he could use that data for projects.
P4	<ul style="list-style-type: none"> • She's involved in her neighborhood and says people ask her questions about what's going on with the city often. She described them as creating their own theories about things when they can't find answers to their queries • She hopes that she can dispel some myths with this tool.
P5	<ul style="list-style-type: none"> • How well the vendors paid • Know about other vendors and competitors
P6	<ul style="list-style-type: none"> • She is not sure she would use it, she would maybe use it for information about the city of Detroit • She is a first time user.

Can you tell me about the last time you browsed the internet to look for information concerning your city?

P1	<ul style="list-style-type: none"> • She saw things pertaining to jobs on Facebook
P2	<ul style="list-style-type: none"> • Yesterday • looking at ppl who are on city council.
P3	<ul style="list-style-type: none"> • He recently moved back into the area and was looking for housing in Detroit online.
P4	<ul style="list-style-type: none"> • "Last weekend I looked up information to go to Park-tober fest." • She has not looked up information in a long time.
P5	<ul style="list-style-type: none"> • Last month • Checked water department about programs that help elderly for payment
P6	<ul style="list-style-type: none"> • It has been awhile • Lives in Detroit • Looks up events in Detroit

Task 1: Starting on the home screen, explore the tool.

P1	<ul style="list-style-type: none"> • She explored the Housing & Revitalization Department first. • She tried to click on the names to get more information but didn't work. • She was told to click on the green arrows.
P2	<ul style="list-style-type: none"> • Wondering about payments from 2018 or 2019? • don't know why this number is highlighted at the top of the page.

	<ul style="list-style-type: none"> ● thought when it said vendor, thought it would include other business, like family dollar ● don't know the difference between top agencies and top payees ● What's a pass through payment? I ● Want more visibility into big corporations finances. ● Want language to be more consistent. ● User feels like she is lacks the context to understand numbers/information.
P3	<ul style="list-style-type: none"> ● Read the notice at the top first. ● Clicked on the About tab next, skimming to see if there was any additional information, but didn't scroll past the first few FAQ's (missing Glossary entirely). ● Clicked on Chart next and was surprised he could drill down to sub-departments, but didn't like that he couldn't see what department he'd clicked on once he'd been brought to the sub-department page. ● He also couldn't read the labels/total payments for the sub-departments because the words on this chart didn't load properly and were jumbled together. ● He also didn't like that he had to scroll down to see all the parts of the later bar charts ("There's only three things, so it would be good to see them all on one screen.") ● He also had a hard time reading the labels that were truncated (ex; "Central Servi...")
P4	<ul style="list-style-type: none"> ● She used Google Chrome on an iPhone 6s Plus. ● Started by reading the text on the home page and then scrolled down to total payments for the fiscal year ● Clicking on Pass through payments to discover what that is. Trying to figure out if its money the city received that's really for someone else. ● She said it might be helpful to know what the definition of pass through payments is here. ● Going back to main menu to look at other agencies. Seeing if I understand what non departmental means. I clicked on mike moore law firm to see how payment was split up because it looked like a lot of money. ● I think this information will raise more questions than provide answers. For people who have something to search for will find this helpful, people who are just browsing, it might be harmful because they don't understand what they're looking at and they could get angry about things they don't fully understand. ● Scrolling through I can see spending a lot of time here just looking at things.
P5	<ul style="list-style-type: none"> ● Start by scrolling homepage ● Public school data grab the user attention ● Looked at Wayne County numbers ● Amazed by the Transparency ● Check About page and found FAQ and glossary
P6	<ul style="list-style-type: none"> ● First paragraph is good with positive information ● It is easy to locate where payments are listed per department and companies affiliated with them ● Interested in Detroit public schools - if resources are available to improve test scores ● Curious to know how much money is being spent on the downtown development authority because it is definitely developing and looks good ● Wondering if blue cross blue shield is affiliated with the city through city employe benefits ● Thinks the FAQs are straight forward ● On chart, she can see what department payments are paid towards ● Clicked a bar on the chart and it is not readable and then click again and it works

Task 2: Find out how much the Innovation and Technology department paid the vendor, AT&T.

P1	<ul style="list-style-type: none"> ● She didn't notice the search bar, just scrolling on the home page. ● She went to pass through payments and scrolled through there ● She was told to use the search bar ● She made a typo when she typed, so the search bar didn't work ● After a lot of proctoring, she got the answer
P2	<ul style="list-style-type: none"> ● Clicked on home>to search for agencies and payees ● Clicked on drop down ● Scrolled down to> Innovation and Technology> ● Found A&T. ● Felt the process was simple. ● Wants to see more than just top payees
P3	<ul style="list-style-type: none"> ● He clicked on the search bar and typed AT&T because it was the easiest thing to type. ● He clicked on the first thing that popped up and scrolled down, hoping that the information would show the

	<p>departments that paid AT&T broken out.</p> <ul style="list-style-type: none"> • When he didn't see the Innovation and Technology, he clicked on Charts and clicked the Innovation and Technology bar, but couldn't find AT&T. • From the bar chart, he tried clicking on network services, web branch ("Because it has web in it."), and operating service. • At this point, the website suddenly glitched and returned him to the homepage. • "I really thought I would get this one. I'm a pretty smart guy. I'm a little frustrated."
P4	<ul style="list-style-type: none"> • She found the vendor via search bar. Found department, scrolled through to AT&T. The answer is 1,331,924.36
P5	<ul style="list-style-type: none"> • Scrolled homepage then spot the search bar • Searched for AT&T but didn't find Innovation and Technology • Scrolled through categories • Issue with font overlapping • confused about the written language 'Through the general fund' • Looked for arrow to go back, used the phone arrow • Struggling with navigation
P6	<ul style="list-style-type: none"> • Looked directly for AT&T on the homepage • Could not find the innovation and technology department on the homepage • Then found the search bar and searched for the innovation and technology department • Found AT&T under top payees

Task 3: Find out how much Recreation Department paid the Gethsemane Cemetery Trust.

P1	<ul style="list-style-type: none"> • She scrolled all the way the chart and back up • She clicked on the recreation and it didn't work at all because the graphs and texts showed half of the page. She had trouble reading. • She turned her phone sideways and she was able to read it better
P2	<ul style="list-style-type: none"> • Used chart. • User didn't know what the length of the bars means in a greater context. • The page is not responsive. • numbers are hard to read, wants solid colors. • texts runs over and is cut off. • Had to scroll up and down to find Gethsemane Cemetery Trust payment. • Thought decimals (19k.0 was weird, should just say 19k)
P3	<ul style="list-style-type: none"> • He tried spelling "Gethsemane Cemetery" in the search bar, but nothing came up. • Next, he clicked on charts, found Recreation Department, clicked on the bar, and found the cemetery ("I've never been so excited to see 'cemetery'.")
P4	<ul style="list-style-type: none"> • She scrolled through charts tab to find the right section. She struggled to find the vendors via the chart. "The way I'm touching the browser is making it malfunction." • "This browser and phone make it very difficult to read." She also struggled interfacing with the chart because it was hard to read, though she did think to orient the webpage horizontally. • She noted that some categories looked like no money was there, but in fact it was meant to represent thousands of dollars which was misleading. "It seems like a silly way to show these figures if most of the things don't even rate in this color."
P5	<ul style="list-style-type: none"> • Went back to homepage • Navigate to chart page • Spot the recreation and found it immediately • Chart overlapping • Tried to lookup her own business • Went back to homepage and scrolled down and noticed the search bar
P6	<ul style="list-style-type: none"> • Found the recreation department off of the homepage, clicked on that and could not find the vendor from scrolling on that page • She was directed to the chart • Chart was again unreadable once she clicked on recreation department • She tried to scroll over the page to read it but cannot scroll over, she was unsuccessful in finishing this task.

Task 4: Using the Open Checkbook website, show me how you might find the definition of “Pass through payments”.

P1	<ul style="list-style-type: none"> • She tried scrolling down on the homepage • She tried using the search bar for denitions, but she found the category there instead of definitions • She was told to look at the top navigation bar, the header text was so large and hard to go back up to the navigation bar. • She found it eventually
P2	<ul style="list-style-type: none"> • Scrolling on the homepage to see where to click, • clicked on pass through payments, • looked at summary of all payments. what pass through payments are! • Went back to homepage • clicked on about thinks it will tell her about the entity, • saw FAQ ('should be its own page'), • (thinks no way would have gone to about to find a glossary of terms). Thinks about page will tell about history of website, • User suggests to make a 'Help page' and put FAQ and glossary there
P3	<ul style="list-style-type: none"> • He clicked on the About tab, remembering the FAQ's were housed there, and thinking the definition was a FAQ. • He scrolled all the way to the bottom and stumbled upon the glossary.
P4	<ul style="list-style-type: none"> • She looked through the list of vendors to get a better understanding of pass through payments. • She thought “summary” categories were clickable, but it's not. It's hard to tell what is clickable. • Her knowledge of the jargon was limited and she needed easier access to definitions • Surprised to discover About section had a glossary of terms. “Maybe a FAQ tab would be better suited.”
P5	<ul style="list-style-type: none"> • Went back to homepage • Remembered she came across the glossary during first task • Went to About page and found the glossary
P6	<ul style="list-style-type: none"> • She had already gone to the about page for task 1 • Went to the about page and found it right away, no prompts needed

Overall, what did you like about this tool?

P1	<ul style="list-style-type: none"> • It gave specific costs that she was looking for (breakdown of payments going out and how much)
P2	<ul style="list-style-type: none"> • Transparency of the finances of the city.
P3	<ul style="list-style-type: none"> • He was pleasantly surprised by the number of data points and the quality of data, which seemed “legit.” • He found the Charts section to be intuitive and felt this was the “meat and potatoes” of the website. • He liked seeing the information about how often the data is updated. • The FAQ housed questions that he could see himself having, and the glossary definitions used simple language. • He liked the inclusion of the feedback section, which he thought he would provide, especially if he used the website on a regular basis. • The overview note on the homepage was easy, simple, and hit all the points.
P4	<ul style="list-style-type: none"> • Highly prized the transparency of the tool • She found it difficult to analyze without some prior knowledge. • Also difficult to understand if a vendor is responsible for the service it provided consistently throughout the city. I.e. Is a concrete vendor responsible for all the concrete, or Detroit only used them for one specific job. • “I'm thinking about how I might use this information to answer questions people have who are vocal and upset.” • Thinks she would benefit from more information in the summary section.
P5	<ul style="list-style-type: none"> • Not difficult to look and find information
P6	<ul style="list-style-type: none"> • Titles and headings are great • Easy to locate things if you know what you are looking for

What did you find confusing or dislike about this tool?

P1	<ul style="list-style-type: none"> • She wouldn't think to go to "About" for glossary • She was not be able to search definitions using the search bar • The page was very divided
P2	<ul style="list-style-type: none"> • Location of search box (think it should be at the top) • Text not so readable (change it to something with high contrast) • Numbers should not have '.0' at the number. • Improve navigation to the glossary of terms.
P3	<ul style="list-style-type: none"> • While the chart initially looked very clean, once you clicked into it, it was hard to read (certain bar graphs wouldn't load properly). • He also accidentally clicked on a bar a few times when he didn't mean to.
P4	<ul style="list-style-type: none"> • Does not like the about tab • Does not like using the chart on her phone, she doesn't think it's a valuable part of the website, especially if you're looking for something specific. • Thinks this tool has a lot of potential to help citizens understand how money is being spent.
P5	<ul style="list-style-type: none"> • Confusing to look for AT&T
P6	<ul style="list-style-type: none"> • Thinks the search bar could be better/more clear because it is hard to see, this would be helpful when people are looking for things • If you don't know what you are looking for it is not as user-friendly as it could be • Pictures would be good and pull people in

After using this tool, did you learn anything new about the City of Detroit's vendor spending?

P1	<ul style="list-style-type: none"> • She never looked at how much they spent before. • She could look up vendors now
P2	<ul style="list-style-type: none"> • Liked seeing how much money places she had affiliation with received from the city. • Like learning about how community orgs are funded.
P3	<ul style="list-style-type: none"> • He wasn't trying to learn anything, but he saw that Detroit spent "a crapload on public works." • He wasn't sure exactly what the "Health" department meant. • He could see where the money went from a high level (ie; total payments, total budget)
P4	<ul style="list-style-type: none"> • Did not know the school district is the top payee • Confirms her understanding that concrete is expensive.
P5	<ul style="list-style-type: none"> • How city spend and prioritized spending
P6	<ul style="list-style-type: none"> • She did not realize that all of this information was available online • She is glad that the school system is on there and improving health care • Did not have a lot of time to read the page but is very happy with city improvements

Do you feel the vendor spending data provided by this tool is credible?

P1	<ul style="list-style-type: none"> • She was unsure because the city could give any numbers
P2	<ul style="list-style-type: none"> • Yes, because city officials are mentioned on the site. • The logo. • The entities mentions on the site. • The formal titles of the entities, somebody from the city of Detroit actually created this.
P3	<ul style="list-style-type: none"> • He does, partially because the opening note "references the mayor like eight times...and the executive order seems very credible." • He also found the data credible because the payments were specific down to the cent.

P4	<ul style="list-style-type: none"> • She doesn't feel like she knows enough about city budgets and city spending to assess if the numbers are reasonable. • The detail with which the payments are listed and broken down, and she also said "breaking payments out into cost centers makes it more credible."
P5	<ul style="list-style-type: none"> • Yes, It shows transparency
P6	<ul style="list-style-type: none"> • She thinks that it is credible

Can you identify a situation where this tool might be useful to you?

P1	<ul style="list-style-type: none"> • If she wanted to know what vendors were using and spending
P2	<ul style="list-style-type: none"> • Wants to keep the city accountable.
P3	<ul style="list-style-type: none"> • If he were on the school board, and wanted to fight for more money, he could say, 'Hey, why are we getting less than this random department when the money is better spent on us?' • He is working on a similar tool for a different city, so he could use this tool for examples and best practices.
P4	<ul style="list-style-type: none"> • As the VP of her community association she thinks anything dealing with how the neighborhood services mesh with the city is helpful information for her role • "This tool might be the first place to start with answering their [members of the neighborhood's] concerns." • They think it helps raise awareness of programs in the city.
P5	<ul style="list-style-type: none"> • More useful for vendors • To learn where the city spending the money
P6	<ul style="list-style-type: none"> • Will recommend it when people are looking for schools for their children • Hard for her to come up with an answer to this question

Do you have any other thoughts about this tool that we have not addressed?

P1	<ul style="list-style-type: none"> • Nothing except a better search bar
P2	<ul style="list-style-type: none"> • want to know about the taxes, because she believes big corps. are not paying any tax money
P3	<ul style="list-style-type: none"> • "I'm a big advocate for infographics" and he found that the bar charts work well in some respects, but that there are other charts that would work better to display information. • He wondered if there was a way to export the data, since if he wanted to make a presentation from this data, he would prefer not to show the website. • "I'm guessing this tool is to empower communities and raw data empowers better."
P4	<ul style="list-style-type: none"> • Thinks this is a great tool with a little bit of tweaking it could be very helpful. • Transparency is essential, the more people can see the spending the easier it is for citizens to understand
P5	<ul style="list-style-type: none"> • Nothing to add • Think it is a great tool
P6	<ul style="list-style-type: none"> • Pictures speak to and attract people to the website • She does not usually dig in too deep to find new tools • She gets information by talking to people about different events she is going to and watches the news to get good information