Civic User Research Playbook

Guidance for City of Long Beach staff on how to uplift community voices through user research to create services that are accessible to all Long Beach residents.

TECHNOLOGY & INNOVATION LONGBEACH

CITY OF LONGBEACH

Civic User Research Playbook

Introduction

How to use this playbook

This playbook provides an overview of the Civic User Research process, highlighting the importance and benefits of engaging in Civic User Research for all the City's digital tools and includes best practices, training and sample materials, standards, communication templates, examples, guides, and additional resources for city staff. **The tools found in this document are meant to aid City staff and facilitate the Civic User Research** process so that Long Beach can take an inclusive approach to creating and implementing easy-to-use digital services that are accessible to everyone.

This playbook is modular and is not meant to be read front to back, though you are welcome to do so.

Each section contains tools and resources specific to each phase of the Civic User Research process.

- **Tools**
- **Templates**
- **Examples in Action**
- **Equity Checks**

You may view and download all the modules in this playbook by visiting the **Civic User Research Playbook Resources and Materials** page on the Smart Cities SharePoint site.

As the world shifts to operate digitally, there is a growing need for local governments to keep pace and design, create, and offer digital services that are accessible and user-friendly for everyone.

Our Smart City Initiative Strategy and 2030 Strategic Vision commit the City to developing channels for community co-design with residents, small businesses, and other stakeholder groups by centering user-experience in the development of digital services. As part of the City's efforts to engage the public in the digital space and solicit public input to create digital services that are accessible for all Long Beach residents, the City has developed a Civic User Research practice for the design and creation of digital services and products.

Civic User Research is a process used to evaluate the usability and effectiveness of digital services such as digital tools, applications, or platforms designed for public use.

Examples include:

- **Government websites (City website: longbeach.gov)**
- **Mobile apps (Go Long Beach)**
- **Customer information system portals (City of Long Beach Customer-Utility Engagement System)**
- **Community engagement platforms (Municipal 511)**

and other digital resources aimed at serving the needs of residents and the general public.

The primary goal of Civic User Research is to ensure that digital services are user-friendly, accessible, and effectively meet the needs of its intended users. Civic User Research uses a "build with" collaborative approach to design rather than a "build for" approach, with the motto:

> **"If it does not work for Long Beach, it doesn't work."**

The Civic User Research process involves recruiting a diverse group of participants who represent the target audience of the service or product. These participants then engage with the digital tool by performing a series of tasks while observers collect feedback on their interactions and experiences.

Civic User Research

Definition

Civic User Research is a process used to gather public feedback to evaluate the usability and effectiveness of digital services and products intended for public use through active community outreach and engagement during the development of digital services.

Objectives:

Civic User Research uses a **"build with"** approach in the creation of digital services and products to ensure they are user-friendly, accessible, inclusive, and effectively meet the needs of intended users.

The Civic User Research process is essential to creating digital tools that **effectively engage community members, provide information, and facilitate participation in public processes.** By incorporating user feedback and focusing on user-centered design, governments and organizations can enhance the overall user experience and achieve their civic goals more effectively.

Why Civic User Research?

Civic User Research is a crucial part of the development and creation process of digital tools because it asks questions of real-life users who are more likely to uncover usability issues in a product than staff who are too familiar with the product. Often, in-depth knowledge and familiarity with a subject and product make it easy for a designer, developer, or project manager, to miss a product's usability issues. Bringing in fresh sets of eyes from the public to test our products helps determine whether the product is in fact meeting the needs of the end-users.

During a usability test staff can accomplish the following:

- **Learn** if participants understand your product and can complete specific tasks successfully
- **Discover** bugs, errors, and other usability issues
- **Identify** how long it takes to complete specified tasks
- **Discover** how satisfied participants are with our product
- **Identify** changes required to improve user experience, satisfaction, and accessibility

Ultimately, **Civic User Research helps us implement services that are user-friendly, inclusive, and accessible for all Long Beach residents,** especially those who may experience additional barriers and challenges due to their identities and abilities.

Civic User Research advances equity by collecting feedback from people who encounter greater challenges to accessing digital services such as users who identify as older adults, having a disability, speak a language other than English, or who belong to different races, ethnicities, and cultures.

Designing for equity and making services accessible and usable for people with disabilities benefits everyone in the process, including those without disabilities.

This phenomenon is also known as the curb cut effect.

For example, closed captioning and subtitles were developed for those who are deaf or hard of hearing, but benefit everyone in noisy environments. Engaging in Civic User Research presents many benefits for the public, **the absence of Civic User Research however, can lead to adverse effects.** By failing to conduct Civic User Research, we increase the risk of creating a product that is inaccessible and not user-friendly.

The creation and implementation of digital services and products requires significant resources including labor, time, and money.
Therefore, we want to make sure we do all that we can to invest in a solution that meets people's needs and that the public will utilize and enjoy. The absence of Civic User Research may also increase costs. The earlier we identify user issues and address them, the less expensive the fixes will be in terms of both staff time and money. Trying to fix issues after a product is launched is often more costly.

Benefits of Utilizing Civic User Research	Risks of not Utilizing Civic User Research
• Design services and products that meet the needs of intended users through user-centered approach • Discover bugs, errors, and other usability issues • Learn if participants understand the product and can complete specific tasks successfully • Track how long it takes participants to complete specified tasks • Discover how satisfied participants are with a product or service • Identify required changes to improve user experience, and satisfaction • Improve a product's accessibility and advance digital equity	• Design a product that is inaccessible and non user-friendly • Public underutilization of product or service • Lower rates of user satisfaction • Higher rates of complaints • Increased costs and use of additional City staff and monetary resources to implement changes after service or product launches

When to Utilize Civic User Research?

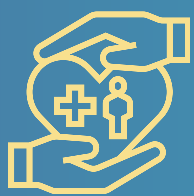
The applicability of Civic User Research is not limited to the Technology and Innovation Department nor to digital services and products, rather Civic User Research is applicable to a wide range of City projects across departments. As project managers, team members, service implementors, or support staff working on civic initiatives, we should always be thinking about how the public will interact and utilize our services and always aim to improve user-experience, effectiveness, accessibility, and inclusivity in our work. While this playbook focuses on the application of Civic User Research for digital services and products, Civic User Research can also be applied to non-digital tools.

Below are some examples:

Paper forms and documents: Government agencies often create forms to apply for programs, licenses, permits, or to collect information. In this context, Civic User Research can involve observing users fill out forms, noting any points of confusion in the document's instructions, wording, and layout. The findings can help clarify instructions and change the layout to enhance user experience.

Community Outreach Materials: Pamphlets, flyers, brochures, are developed by various public agencies to engage the public and inform them of different services, programs, and initiatives. Similar to paper forms and documents, Civic User Research may consist of distributing materials to a sample of residents and collecting feedback on clarity, effectiveness, and impact.

Physical and Public Spaces: Cities often build or develop public spaces for public use. Testing can be conducted in physical public spaces such as parks and community centers to optimize the layout of these spaces and improve accessibility.



Public Health Campaigns: Civic User Research can be used to analyze the effectiveness and public understanding of messaging for public health campaigns aimed to raise public awareness on health-related topics and issues. Observers can gauge participants' understanding of messaging and information.

Emergency Response Protocols: In preparation for natural or human made disasters, cities have developed emergency response protocols. Civic User Research can involve running through fake scenarios with participants to test non-digital response protocols. Insights can help modify communication, instructions, and training for improved results.

As shown above, the core principles of Civic User Research can be applied to non-digital tools to gather input and incorporate feedback for improved services. Ultimately, **involving the public in the design and development process of services help create more inclusive, accessible, user-center solutions** that help Long Beach implement services with higher user-satisfaction scores and low-complain rates.

Examples in Action - Activation of Harvey Milk Plaza

During the activation of Harvey Milk Plaza, the Parks, Recreation, and Marine Department engaged in user testing of different equipment that could be used to activate the space. The Department issued a Request for Proposals (RFP) to vendors for different equipment (e.g. benches, exercise machines, etc.).

Vendors installed their equipment in the plaza for one month while staff observed which equipment was being utilized, how the public interacted as well as conducted surveys. This simple test to collect feedback helped inform the Department of which equipment to install permanently at the plaza.

How to Conduct Civic User Research?

The Civic User Research process consists of six phases. We will go into further detail on each of these major components in later sections of the playbook.

1. **Getting Started:**
Staff begin planning for Civic User Research by budgeting adequate time, staff, funds, and other resources to ensure a smooth Civic User Research process. This includes adding Civic User Research in RFPs and contracts with vendors and taking the necessary steps to design for equity.

2. **User Experience (UX) Methods and Prototyping:**
Staff engage in a series of activities and UX methods that actively engage the public when designing and creating a prototype.

3. **Recruitment - Community Outreach and Engagement:**
Staff engage in community outreach efforts to identify and recruit individuals who match the demographic characteristics of the product's intended users. This helps ensure that the testing process is representative of the actual user base.

4. **Research Design:**
Staff design specific instruments to use during testing. This can range from survey or focus group questions to tasks or scenarios that participants will perform using the digital tool. These scenarios are meant to simulate real-world interactions and goals that users might have when using the tool.

5. **Research Implementation:**
Participants engage with the designed instruments, whether it be a survey or moderated usability test. The research activity can be performed in-person, remote, or completely unmoderated depending on the research design. The researchers collect data, often through observing the participant's interactions and note any challenges, confusion, or successes encountered during the process.

6. **Iterative Design:**
Based on the feedback and insights gained from user testing, designers and developers can make necessary changes and improvements to the digital tool's design, functionality, and user interface.

1. Getting Started

For any project, time is of the essence, and it is important to carefully plan and allocate sufficient time and resources for a project as early as possible.

As you get started with your project and begin the design process, here are a few things to consider to ensure your solution is accessible and on track for Civic User Research.

- Include a Civic User Research in RFPs and Contracts
- Design for Equity
- Budget Sufficient Time and Resources for Civic User Research

Include Civic User Research in RFPs and Contracts

Whether you plan to develop a digital solution in-house, contract developers, or partner with vendors to adopt and implement a service or product, it is imperative to set expectations from the beginning. When partnering with vendors, your team needs to set the expectation that the vendor is expected to support City staff throughout the different stages of Civic User Research and that part of the City's process is to obtain and integrate user feedback to any digital service or product that will be implemented citywide. Setting these expectations starts as early as writing the Request for Proposal (RFP) and vendor contracts.

The extent to which the vendor will be involved in the Civic User Research process will depend on the service or product that is being developed or implemented. As a general model, the expectation is that City staff will take the lead in conducting Civic User Research and direct the vendor to support staff where necessary.

Using this general model, below are some expectations as to the level of involvement that the vendor may play throughout each phase of Civic User Research:

Civic User Research Phase	Vendor Level of Involvement	Description
1. Getting Started	Low	This phase generally only involves city staff, specifically the team that will be carrying out the project. Vendors do not need to be involved in these early planning sessions, typically, the vendor has not been selected at this point, their active involvement starts once a vendor has been selected from the RFP process.
2. User Experience (UX) Methods and Prototyping	High	The vendor or developer will take the lead during this phase, employing various UX Methods for research, design, and prototyping of the service or product. City staff can support vendors and developers with certain activities to ensure a user-centered approach.
3. Recruitment	Low	City staff will take the lead during this phase to conduct community outreach and engagement to recruit participants for testing sessions. Vendors with Civic User Research experience may assist staff with recruitment efforts for user testing.
4. Research Design	Moderate	Depending on how technical the product or service is, the vendor may need to assist City staff in designing the research instruments during this phase. City staff can come up with test scenarios and tasks on their own or with some assistance from vendors, however, if the product that is being tested is very technical, vendors may need apply their technical skills to help design the test.

5. Research Implementation	Moderate	For the most part, City staff can execute and moderate the testing sessions on their own. For more technical projects, vendors may need to be present to assist or moderate part of the testing. Even if the vendor does not play an active role during the testing sessions, it is beneficial for them to be present in a few sessions so they can observe first-hand the issues that users are experiencing and better understand what may be causing the issue(s).
6. Iterative Design	High	Vendors and developers play a huge role in this phase. City staff may need vendor support when analyzing the findings from the testing sessions. Vendors and developers may use their expertise to help the team identify the root cause of certain issues that came up during the testing sessions. When it comes time to implement the necessary changes, the vendor or developer is most likely the only person(s) who can implement the changes on the prototype and final product.

The model above will not apply to every project, some projects may require higher or lower levels of vendor involvement, however, you can use the model above as a starting point to help you write an RFP that includes Civic User Research.

There are six sections of the RFP where you can mention Civic User Research.

1. **Goals**
2. **Description of Services**
3. **Performance Metrics**
4. **Contract Payment**
5. **Evaluation Criteria**
6. **Proposal Content/Template**

You may mention Civic User Research in all six sections of the RFP, by mentioning a given requirement in most or all sections, we communicate to potential vendors how important that requirement is for the project. There may be some vendors that do not have much or any experience with Civic User Research, make sure that your RFP includes language that encourages partnerships or subcontracting with UX designers who do have experience.

Taking these seemingly simple steps establish Civic User Research as a standard practice in the City's process and sets clear expectations for vendors about their participation throughout the Civic User Research process. Additionally, this may encourage vendors to start incorporating public input during their scoping process.

Tools – Starting Conversations about Civic User Research with vendors and partners

Here are some talking points you can use to start conversation about Civic User Research with vendors:

- In our RFP, we list civic user research as a requirement, do you have a plan to collect and incorporate public feedback in your process?
- Here in Long Beach, we apply an equity lens to everything that we do to ensure that we offer our residents services that are inclusive and accessible to everyone. Incorporating public feedback into our services is part of our efforts to ensure equity. What is your organization's process for integrating public feedback and how will it fit into this project?
- As mentioned in our RFP, part of our process is to conduct civic user research on services and products. Does your organization have standards to collect and incorporate public feedback into your solutions?
- If the answer is "no" then follow-up with the question below.
- Are you able to support our team and help us come up with a plan for civic user research on this project?

If you included civic user research in the RFP process, these conversations will be a lot easier, but also remember: We are paying vendors for a service, it is okay to ask them for certain requirements.

Having conversations with vendors early on about Civic User Research can be difficult, but it is certainly necessary to have them on board as early as possible. Including Civic User Research in our RFPs and contracts sets the groundwork to have those conversations throughout the project.

Tools – Guide to Include Civic User Research in the RFP Process

Before you begin writing an RFP that includes Civic User Research, it is helpful to have an idea of the level of involvement vendors will have throughout the Civic User Research process.

For example, you should think through whether a technology vendor, City staff, or a community partner, or some combination of the three, may be best positioned to lead various aspects of the Civic User Research process. Keep in mind that the vendor's level of involvement will depend on the project. There is not a one-size-fits all method to writing an RFP that includes Civic User Research, however, this guide can be a great starting point. Use your best judgement to write an RFP that makes sense for your specific project.

If you have questions, you may work with your Buyer or point of contact in the Purchasing Division for good ways to incorporate these ideas.
When writing an RFP that includes Civic User Research, make sure to use language that the vendor is familiar with. It is likely that vendors are more familiar with the term "user research" or "UX research," rather than "civic user research."

Below are six sections where you can mention Civic User Research when you write the RFP. You do not need to include Civic User Research in all six sections, do what makes the most sense for your specific project, however, you should aim to include Civic User Research in at least four of the sections listed below. As you will see in the sample language provided in each section, you do not need to explicitly mention Civic User Research in every section.

Instead you may choose to use language that describes various goals of Civic User Research or the different phases of the Civic User Research process.

Goals

- **This section outlines the project's high-level goals; you may include accessibility or equity as a high-level goal (i.e. that no matter a person's age, physical ability, race, ethnicity or language spoken, the product needs to be accessible to all)**

Sample Language: Product/service is user-friendly, accessible, inclusive, and effectively meet the needs of intended users regardless of a person's age, physical ability, race, ethnicity, or language spoken.

Description of Services

- **This section describes the services we expect from the vendor. As such, be sure to include services that are part of Civic User Research such as user testing, test design, and iterative design. (Reminder that the Civic User Research services that we expect from the vendor will depend on their level of involvement throughout the different phases of Civic User Research.)**

Sample Language: User Testing and Iterative Design: The selected vendor is expected to support city staff (and/or the City's community partners) throughout the different phases of user testing, including 1) designing a user test, 2) moderating testing sessions, and 3) integrating public feedback into the final product. The selected vendor should plan to integrate civic user Research into the product/service implementation schedule. Vendors with limited user testing experience are encouraged to partner or sub-contract with UX designers or researchers to meet criteria.

Performance Metrics (Optional)

- **RFPs generally include 4-5 metrics. Depending on your project, you may want to include metrics related to Civic User Research and accessibility.**

Sample Metric: Rate of user satisfaction with product/service OR Speed of issue resolution by user demographic (age, sex, race, etc.)

Contract Payment (Optional)

- **In this section you may include Civic User Research as a key milestone for the project and make it a requirement for payment.**

Sample Language: The City will compensate the selected vendor upon completion of key project milestones. While final payment schedule will be determined during contract negotiation, key milestones of the project are anticipated to include conducting user testing and incorporating public feedback into the product.

Evaluation Criteria

- **Evaluation Criteria specify exactly how the City intends to evaluate vendors, and therefore highlights the City's priorities and values. You may choose to incorporate bullet points related to Civic User Research in the Method of Approach criterion, or you may choose to add a new criterion section called Equitable Service Delivery. By including Civic User Research into the evaluation criteria, you make it clear to vendors that this is a priority.**

Sample Criteria: Criteria = Method of Approach OR Equitable Service Delivery

- Products/services are equitable, user-friendly, accessible, inclusive, and meet the needs of Long Beach residents.
- Vendor is prepared to lead/ support city staff with user testing, including testing the service or product on intended users and incorporating public feedback before the service is implemented.

Proposal Content/Template

- **This section of the RFP includes questions for the potential vendors to respond to. It will be important to include questions related to Civic User Research so you can hear from vendors in their own words what expertise and experience they may bring to your project.**

Sample Question:

- Please describe your experience with user testing. If you have little to no experience with user testing, how would you approach working with city staff or community partners to conduct user testing and ensure your product meets the needs of end users?
- How will you ensure that public feedback is incorporated into the final product/service?

Design for Equity

Long Beach is committed to equity in everything that we do. We strive to be a city where everyone can reach their highest level of health and potential for a successful life, regardless of background, neighborhood, or identity.

As mentioned earlier, Civic User Research helps us design for equity by incorporating feedback from the public, including those of marginalized and disadvantaged identities, and create solutions that are user-friendly and accessible to everyone.

When we center community voices in our programs and services, we eliminate barriers and create opportunities for everyone.

Therefore, it is crucial to start thinking about designing for equity early in the process. You can start by asking yourself the following questions:

- *How will people affected by this product, solution, or service be meaningfully engaged throughout the planning, implementation, and evaluation processes?*
- *Have we defined our audience and identified the intended end-users? Do any of them have special needs or additional barriers? How will we accommodate those needs?*
- *Do we have a plan to incorporate the public in the scoping of the project?*

- *What time and resources are allocated in our plan to talk to and learn from people most affected by the inequities our project, program, or service is addressing?*
- *How will the project, program, or service benefit or improve the quality of life not only for the intended population but for everyone in Long Beach? In other words, what ripple effects might benefit the community at large?*
- *How will we ensure that a full diversity of people can participate, benefit, and be treated with respect and dignity through the design and implementation of this product, solution or service?*

You don't need to have all the answers to these questions yet, but it is important that you start thinking about these as you start planning and begin the design process.

For additional resources on how to design for equity, please reference the Long Beach Equity Toolkit. Specifically, p. 18 provides an equity tool for planning services, projects, and programs.

Prioritize Accessibility

Accessibility is an important part of the design and development process to ensure disabled people can access and enjoy the benefits of a digital service or product and have a pleasant user experience. Reminder, implementing accessibility best practices benefits everyone, not just people with disabilities.

Treating accessibility as an afterthought is an expensive mistake and will cost the organization to make changes and fix accessibility issues that were overlooked.

The Web Content Accessibility Guidelines (WCAG) 2.0 provides recommendations that make web content more accessible for people with disabilities including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, and others. Therefore, once you have your prototype, conduct an accessibility audit to evaluate if your digital product or service meets the needs of people with disabilities and complies with WCAG and with American with Disabilities Act.

If you need additional support or guidance, please reach out to City of Long Beach Office of Equity, the office's staff are a great resource, specifically the Citywide Accessibility Coordinator. For more information check out Usability.gov's page on Accessibility Basics and 18F Methods Accessibility Guide.

Tool – Accessibility Audit Review Tools

The following is a list of tools and resources you can use to test your product for accessibility and compliance with WCAG:

- Accessibility Insights - Browser plugin (Chrome, Edge), Android and Windows applications for automated and guided manual testing for accessibility including WCAG 2.0 and 2.1.
- Accessibility Management Platform (AMP): GSA-specific info and general product info
- Google's Accessibility Developer Tools is a Chrome plugin for running basic accessibility tests from the comfort of your browser.
- Web Accessibility Toolbar (WAT) is an IE tool that has been developed to aid manual examination of web pages for a variety of aspects of accessibility. It is used by DHS's Trusted Tester program.
- WAVE is an accessibility auditor and browser extension with document inspection features.
- The W3C maintains a comprehensive list of web accessibility evaluation tools.

Budget Sufficient Time and Resources for Civic User Research

Time is a precious resource and timing is crucial to any project, therefore it is important to plan carefully and give yourself enough time to conduct Civic User Research in your project.

As you are setting up your project timeline in your RFP or scope of work, include time for the 6 major phases of civic User Research, some of which can be done concurrent with other project work:

Phase	Recommended Time
Getting Started	1-2 weeks
User Experience (UX) Methods and Prototyping	1-2 months
Recruitment - Community Outreach and Engagement	4-6 weeks
Research Design	2-4 weeks
Research Implementation	3-6 weeks
Iterative Design	3-4 weeks or longer

Budgeting time for Civic User Research from the get-go will establish Civic User Research as part of the development process and set expectations for all stakeholders.

The times listed above are recommendations and meant to serve as a starting point for your team and to help you budget enough time for Civic User Research. The amount of time it will take to complete each phase of the process will vary from project to project and depends on a variety of factors such as staff capacity, costs, methods utilized.

The following sections list other factors to budget time and resources.

Budget Time For Language Access

Depending on the target audience for your project, but more likely than not, your solution will require accessibility for multiple languages. Long Beach recognizes four official City languages: **English, Spanish, Tagalog, and Khmer.**

You want to make sure that you include enough time in your project to translate all relevant materials for your product and testing sessions. **Please note that the time it takes to complete translation requests vary depending on prioritization and other factors** such as number of languages requested, document length, and the Language Access Team's workload. It is best to submit translation requests as early as possible.

For tips on getting a document translated successfully, please visit the Office Of Equity's Language Access Policy page.

Tool – Instructions to Submit Translation and Interpretation Requests

Email Translation Requests to: LanguageAccess@longbeach.gov

For Document Translation

Please ensure you:

1. Attach the files needed for translation, including the source file if applicable
   a. Word, Excel or Canva are preferred
   b. We are unable to work with PDFs (though they may be attached for reference in addition to a compatible file)
2. Specify which languages you wish to translate the documents into
3. Provide a subject line including your Name, Dept. Initials, and Brief Description of the Document(s)
   a. Example 1: "Juan Rosas CM: Language Access Guidelines Flyer"
   b. Example 2: "John Rose PW: ADA Trifold
4. Provide a brief description of the context. This can include a definition of any specialized terms/branding, a description of the program, and the target audience.
5. Provide a deadline using our prioritization tracks below
   a. **Low-Priority: 10 - 15 Business Days** *(NOTE: If no deadline is provided, your request is tracked into this tier)*
   b. **Mid-Priority: 7 - 10 Business Days**
   c. **High-Priority: 5 - 7 Business Days**

The above timetables are estimates that can be affected by a variety of factors, including:

1. Number of languages requested
2. Document length
3. Number of other translation requests at any given time

🎧 For Meeting Interpretation

Please ensure you:

- Allow at least 5 Business Days to process your request (but the earlier the better!). This will ensure we can find interpreters in time for your meeting or event.
- Provide background documents for the interpreters to review including
    - PowerPoint slides
    - Agendas
    - Event handouts
    - Talking points
    - Website
- Provide Language Access with information from the following template (we encourage you to copy and paste in a reply to this email):

Name of Event:
Date:
Start Time and End Time:
Zoom Link (For Virtual Meetings NOTE: WebEx is not compatible with interpretation):
Meeting Location (For In-Person Meetings):
Number of Headsets Needed (For In-Person Meetings):
Point of Contact Name and Cell Phone Number:
Language(s) Needed for Interpretation:
Brief description of the context/setting/format (round table, Q&A, PowerPoint-style presentation):

Budget Monetary Resources

When engaging the public and asking for feedback, it is best practice to compensate people for their time. Typically, participants are compensated **$20-$25 per testing session**.

At this stage, you may not yet know how many testers you will recruit or how many testing sessions you will hold, but it is important to start thinking about this now to ensure you have enough resources to cover these costs. Make sure that you factor in these costs in the project budget so the project's funding sources cover the costs. Try to estimate how many testers you will need and how many sessions you will hold to come up with an estimate.

Here are some examples of costs your team will incur throughout the different phases of Civic User Research:

Printed Materials (Flyers, Posters, Cards)	~$500 for 300 flyers and 600 postcards (double-sided)
Tabling Materials	$100-$250 for snacks, event fees, materials, etc.
Gift Cards	~$25 per participant per testing session
Paid Advertisement	TikTok: $10 per 1,000 impressions Facebook: $7.19 per 1,000 impressions Twitter: $6.46 per 1,000 impressions Instagram: $7.91 per 1,000 impressions LinkedIn: $6.59 per 1,000 impressions YouTube: $9.68 per 1,000 impressions Pinterest: $30 per 1,000 impressions For more information on advertising costs on social media check out this article by Nutshell here.

2. UX Methods and Prototyping

Before you are ready to launch your community outreach and engagement efforts to recruit participants to test your product or service, your team will need to develop a working prototype first. You will need to work closely with your developer and vendor, which will take the lead in developing your project's product. **However, recall that one of the goals of Civic User Research is to involve the public in the design and creation process of digital products intended for public use.**

While the vendor, developer, and/or UX designer will complete most of the technical work in designing and developing the solution, there are steps that project managers and city staff can take to ensure community participation at this stage of the process. It is important for the entire team to understand the intended users' needs and take a user-centered approach during this process. Failing to do so can result in developing a product that does not meet the needs of the public or that is inaccessible, not to mention the additional costs of making changes after to the product.

This section highlights a few important UX methods to employ during the pre-Civic User Research phases of the development process that promote a user-centered approach, community engagement, public feedback, and accessibility in building a prototype.

Conduct Community Engagement

Define Your Users

Conduct Community Engagement

During the discovery and scoping phases of your project, when your team works to better understand and define the problem you are trying to address as well as the project's goals, users, and requirements, the project manager should be taking actions to actively engage the public. **Two methods that project managers often use are user interviews and surveys.** Both methods are a good way to help your team better understand the problem space and uncover the needs and preferences of your project's intended users.

For example, say the City is looking for a digital solution for residents to pay for parking tickets and fees. You may want to interview or survey intended users (those who have received parking citations or have unpaid parking fees) and uncover information that will help inform and create a solution. You may want to understand how users currently pay for parking citations and fees (on-line vs. in-person), what their pain points are, any specific features or functions they would like to see. This information can be collected via interviews or surveys.

Interviews

Before you conduct user interviews, **be sure to have a plan that covers what information you hope to collect as well as the structure of your interview.** Even if you have an interview structure, it can be flexible as you conduct your interview. You can add or remove questions depending on how the interview is going, unplanned portions of interviews can provide some of the best insights.

For more information and details, check out User Interview's User Interview Launch Kit and 18F Method's Interview Checklist. In later sections, we will cover how to conduct community engagement and outreach efforts to recruit Civic User Research participants.

Tool – General Guide on Interview Structure

- **Introduction**
  - Start the interview with a brief introduction and rundown of topics
- **Participant Engagement**
  - Start by asking a couple of quick, interesting, and easy to answer questions to get the participant comfortable and engaged
- **Flow of Questions**
  - After the initial questions, your question flow should go from generic to specific and from easy to difficult
- **Conclusion**
  - You should end the interview with a couple more light and easy questions

Surveys

Just like interviews, surveys can help gather information about your intended users, but **surveys have the potential to collect input from a larger sample size** than cannot be reached through interviews or other methods. Surveys can be quickly deployed to collect information.
Be sure to keep surveys short, and easy to complete.

For additional information and resources on best practices for designing and distributing surveys please refer to the City of Long Beach Equitable Data Collection Toolkit.

Tool – Tips to Create Survey

- **Keep** the survey short
- **Use** mostly close-ended questions
- **Pair** open-ended questions with close-ended questions
- **Make** questions specific, concise, and consistent
- **Avoid** questions that require people to predict their own future behavior
- **Provide** specific, appropriate answers to multiple-choice questions
- **Test** your survey

While surveys and interviews are two great ways to understand the problem your users are facing, there are a number of additional methods that could be utilized.

These can include focus groups, ethnography (observing how people behave in the real word), contextual inquiry (interviewing users on site), and even a secret shopper approach which places the researcher as the user to understand the quality of service. It is important to reflect on your research question and available resources when selecting which method(s) to utilize.

Focus Groups

Contextual Inquiry

Ethnography

Secret Shopper Approach

Define Your Users

Taking the time to clearly define your intended audience is crucial to developing a solution that centers the needs of your users. **Developing User Personas are a great method to help define the audience of a given project.**

A Persona is a model of users and people that provide a reliable representation of your key audience; in short Personas represent a group of users. A Persona is not a real person, it is only a model, however, they are based on real people and have attributes of a real person such as age, gender, needs, desires, motivations, and goals.

Personas ground the development of a solution's design in reality by forcing us to consider the goals, behaviors, and pain points of the people affected by our design decisions. Additionally, **it helps the development team share a common understanding of who the users are and helps the team to put themselves in the shoes of the users.**

For more information on developing Personas please visit Usability.gov's page on Personas or 18F Methods.

Tool – General Guide to Create Personas

- **Ground** your persona with your research
- **Avoid** Personas that are too generic
- **Avoid** Personas that are too specific
- **Include** information based on the needs of the project
- **Make** persona artifacts concise, clear, and focused
- **Create** 3-4 Personas

Examples in Action - Long Beach Single Sign-On

The Smart City Team conducted an exercise to create Personas for the Long Beach Single Sign-On Project. **The Personas are displayed below:**

Mario

Older Adult

- Age: 62
- Occupation: Retired
- Location: Downtown Long Beach

Bio

- A friendly conversation starter who is stays active walking around downtown and to local parks with granddaughter. Cares about civic issues and is actively engaged with notifying issues going around in the City.
- Has hopes of ensuring the neighborhood he lives in is safe and clean for everyone. Now that he is retired he has more time to commit to ensuring the well-being of his neighborhood and hopes for city services that are accessible and in his primary language to report existing issues.

Mario's Pain Points

- Since English is not his first language, Mario has difficulty using the Go Long Beach app and contacting city hall in his primary language.
- Mario also has difficulty in reading text on cell phone.

Features for Mario

- Easy access to Spanish translation
- Accessible tech support
- Mobile friendly in big font

Laticia

Working Mother

- Age: 34
- Occupation: Engineer & Parent
- Location: East Long Beach

Bio

- A busy working mother who works at an aerospace technology firm in Long Beach. She has an ever growing list of to-dos, she dislikes waiting in line and talking on the phone
- I am all about efficiency and convenience so I can have more family time. If I need to use a City service, it should be quick and accessible so I can move on with my day and avoid late fees or confusion with the City, because who likes dealing with the City.
- My kids enjoy partaking in the City's parks programs and camps

Laticia's Pain Points

- I forget my password all the time and have too many usernames and passwords.
- I am a parent so I am juggling a lot and have lots of responsibilities with my job too. I don't have a lot of time for errands either.
- I sometimes forget to move my car for street sweeping and have received several tickets.

Features for Laticia

- Streamlined interface for ease of use
- Mobile friendly

Equity Check

As you move forward in the design process of your project, ask your team the following questions and discuss as a group. These group discussions will help identify any changes or adjustments to your team's approach to ensure equity.

- Are we designing for equity?
- Did we engage with the public during the design process?
- Did we engage a representative sample of our intended users?
- Did we develop Personas? Do any of our Personas have any special needs, additional barriers, or disabilities? How did we accommodate or address for those needs during the design phase?
- Is our prototype accessible to disabled users?
- Did we test our prototype for accessibility?
- Is our prototype in compliance with WCAG?

3. Recruitment - Community Outreach and Engagement

Now that you have a working prototype of your product or service, it is time to start testing your solution on users. The first thing you will need to do is community outreach and engagement to recruit participants for Civic User Research. **Recruiting participants who represent your core group of intended users is critical to ensure the testing process is representative of the actual user base.**

Recruiting participants can take time, as mentioned in the **Getting Started Section**, recruitment should be included in your project timeline.

Create Communication Materials

Build Sign-up Form

Select Outreach Methods

Currently, the Smart Cities Team has an ongoing recruitment effort for Civic User Research. Long Beach residents can sign-up to become civic user testers by filling out an interest form. Those who fill out and submit the interest form are added to an ongoing list managed by the Smart Cities Team. The list serves as a pool of potential testers for your project.

There is more information and instructions on how to access and utilize this list under the sub-section titled Select Outreach Methods.

Example In Action: Single Sign-On Social Media Graphic

Create Communications Materials

Creating materials for outreach and recruitment is key to capturing the public's interest and engaging them in the Civic User Research process.

The most common outreach and communication materials include:

- **Emails**
- **Posters**
- **Flyers**
- **Social media posts**

Below are some general guidelines when creating outreach and communication materials, it is recommended that you view the City's Style Guide to ensure your communication materials follow established city guidelines.

- **Keep** it brief
- **Make** content engaging
- **Be creative** to grab people's attention, use a catchy subject line, use visuals to your advantage especially when creating flyers, posters, and social media posts
- **Use language that is written at a 6th-8th grade reading level** to make the communication material easily accessible and understood by a full diversity of audience
- **Provide a short description of the product** or service participants will be testing
- **Provide an estimate** of the user test duration
    - (optional) If you have already scheduled a time and date for the testing session, you can include it in the recruitment material
- **Highlight compensation** for participation (i.e. $25 gift card)
- **Include link or QR cod**e for a sign-up form

After you have created and finalized your outreach and communication materials, consider your intended users and target audience for recruitment. **Many Long Beach residents speak languages other than English, specifically Spanish, Khmer, or Tagalog. It is for this reason that we encourage everyone to submit a translation request with Language Access as soon as possible to translate materials in the necessary languages.** It is best practice to have materials available in these four languages, but if budget is limited consider your users and translate the materials into the language with the most interaction.

Template - Recruitment Email

Subject Line: Opportunity to earn a $25 gift card

Hello **{name},**

The **{department name}** at the City of Long Beach would love your help testing **{name of product/service}**. Your feedback will help us better understand your experience and make our product as accessible and user friendly as possible.

{Insert brief description of product/service (2-3 sentences)}

Can you join us for **{duration of testing session}**, on **{date and time},** for an in-person/virtual session?

If you are interested, please fill out this form **{insert link or QR code to form}** to sign-up. If selected to become a tester for **{name of product/service}**, you will receive a $25 gift card for your participation.

Your stories and feedback, both positive and negative, will help us figure out how to better serve residents such as yourself.

Thank you for your partnership,
{Email Signature}

Examples in Action - Long Beach Single Sign-On Outreach Materials

The Smart Cities Team created some great recruitment materials for the Single Sign-on project including post cards and flyers.

Click **here** to view the post card
Click **here** to view the flyer

Examples in Action - Chicago Recruitment Email for Food Poisoning App

Subject line: Make $20 at an in-person test of a food poisoning app.

Hi **<<First Name>>,**
We've got a new opportunity for you to make money in the Civic User Testing Group (CUTGroup) by testing an app.

This app helps report food poisoning incidents to the Chicago Department of Public Health. We want to know if this app serves your needs, and how it can be improved.

Are you available for a 30-minute, in-person test on Monday, April 14, between 4:00 and 7:30 p.m.? If so, you qualify. Complete this form to start the process.

We are in the process of gathering responses, so we will be in touch to check availability and let you know if you have been chosen. We are looking for 15-20 testers for this test.

For your participation, you will receive a $20 Visa gift card. You'll also help make better software for Chicago.

Thanks for being a member of the CUTGroup! As usual, call or write with questions.

<<Signature>>

Examples in Action - Recruitment Email for Long Beach Single Sign-On

Subject line: Opportunity to earn a $20 gift card

Dear City Residents,

We hope this letter finds you well. We are excited to announce that City of Long Beach is in the process of implementing a Single Sign On solution for better user experience in accessing city's web sites, and we need your help to ensure it is functioning properly before we implement and releasing to the public.

We are looking for volunteers who are willing to test the new service and provide feedback on its functionality and ease of use. Your input is incredibly valuable to us, as we want to ensure that our website meets the needs of our community.

As a token of our appreciation for your time and effort, all participants will receive a gift card worth $25.00.

We estimate the testing process will take approximately thirty (30) minutes, and it can be done from the comfort of your own home or in person if you prefer. We will provide you with a set of instructions to follow, and you will be asked to complete a series of tasks on our website while providing feedback on your experience.

If you are interested in participating in our user testing program, please click HERE to provide us some information about you to help us with selection. We will provide you with further instructions on how to get started.

Thank you in advance for your participation. Your help is crucial in making this solution a success.

Build Sign-Up Form

As mentioned in the section above, your recruitment materials need to include a link or QR code to a sign-up form for interested participants. The form should collect basic demographic information such as:

Name	Contact Information	Age
Gender	Race/Ethnicity	Household Income
Language	Employment	Education

You do not need to collect all this information, only the parts that are most germane to the intended users of your product, this will vary by project. Please see pages 5 – 8 of The Equitable Data Collection Toolkit to view a list of highly recommended demographic questions to ask participants.

In addition to demographic information, you will want to include questions that collect relevant information on potential participants that will help you identify and select a diverse, representative group that matches your core intended users. You can refer back to your notes on defining the target audience or the Personas you created early in the process. This will be very useful in determining what information and questions to ask of interested participants.

For example, say you are testing an app that provides information on social services offered throughout Long Beach. Your intended users are residents of Long Beach who are lower-income, have disabilities or mental health conditions, are unemployed, are experiencing homelessness and frequently seek out social services. In this example, you will want to ask questions about people's income, age, and frequency of use of social services.

Let's say two potential participants filled out the form, Person A and Person B.

Person A: Low-income, 50 years old, unemployed, frequently utilizes social services

Person B: Upper middle-income, 29 years old, employed, rarely or never utilizes social services

From the form, you collected the following information:

From the two potential participants listed above, Person A more closely represents your core group of intended users, therefore, your team is better off selecting Person A and not Person B as a tester.

There are different platforms you can use to create a sign-up form, however, we encourage using Microsoft Forms which is included in your Microsoft 365 account.

Examples in Action – Long Beach Single Sign-On Sign-up Form

Check out the sign-up form for the Long Beach Single Sign-On project to get a sense of what types of questions to ask and what information to collect.

Select Outreach Methods

While there are a multitude of outreach methods out there, digital communications, including social media and email, lead the way for efficiency and reach. However, certain projects benefit and sometimes even require additional in-person communication and engagement. The outreach methods that you choose for your Civic User Research will depend on a myriad of factors such as your project's timeline, budget, staff resources, capacity, etc.

Below are a few outreach methods you and your team can use in conjunction to recruiting participants for civic user research:

Tool - Long Beach Civic User Research Group

The City has an ongoing Interest Form available to Long Beach residents who are interested in becoming civic user testers for current and upcoming city projects. Interested residents can fill out the form to be added to a list of civic user testers that city staff can utilize when recruiting participants. You can view the City of Long Beach Civic User Research Interest Form to view the questions and information that is collected.

To access this city list, submit a request to the Technology and Innovation Department Smart City Team (smartcity@longbeach.gov) and briefly describe your service or product's intended users. The team may reach out to you for additional information (if needed). Using the information you provide in the intended users you are looking to recruit, the Smart City Team will send you a vetted list of civic user testers that match your intended users.

This is one of the first outreach methods you should utilize. The individuals on this list have already demonstrated an interest in participating by filling out the form and are more likely to want to sign-up as a tester for your project.

Print media

This includes recruitment posters, flyers, and signage.

You want to be strategic as to where you hang up posters and signage and where you distribute flyers. Think about public spaces that your intended users frequent. Do they visit public libraries often? Are they parents with school aged children? Do they visit City Hall often for in-person services? What part of town do they live? Put yourself in the users' shoes and imagine the spaces they visit most frequently. Those are the spaces where you should hang posters and distribute flyers.

E-Notification

Public outreach via email is a fast and efficient method to reach large audiences. **Recruiting participants for civic user research using email campaigns using is a good start, but be cognizant of its limitations and use other outreach methods to fill those gaps.** Think about the potential participants you may miss if you only use emails to recruit participants.

For example, older adults may not have an email or if they do, they may not check it regularly and rely on family members, friends, or others to help them navigate and use their email. The same goes for people with low-levels of digital literacy. People without limited internet access or no internet at home may also be missed with email campaigns. If your intended users fall into these or similar categories, it is necessary to this method in conjunction with other methods that will reach all of your intended users.

Social Media

The City of Long Beach and several Departments have various social media pages across several social media platforms. Posting across these various platforms is a great way to increase your reach when recruiting participants. It is a particularly great way to reach a younger demographic as youth and younger adults tend to be more active on social media, although this varies depending on the platform (e.g. older adults tend to be more active on Facebook than younger adults). Take advantage of the city's social media pages and make written posts or upload electronic versions of the posters and flyers.

NOTE: Remember to only use official, city approved social media accounts, never create your own to conduct city business. Please take a moment to view Long Beach's Social Media Policy here.

Applicable Advisory Bodies

The City of Long Beach has a number of commissions, boards, and committees. Reaching out to relevant advisory bodies as partners in your recruiting efforts is a good idea, as these have a network of stakeholders you can tap into or perhaps they may have additional resources to aid you in your recruiting efforts. Other cities like Asheville, North Carolina have had success recruiting through advisory boards and commissions.

To view and identify relevant commissions, boards, and committees for your project, please visit the Mayor's Page on the Long Beach's website, you can also find a contact email for each commission and board on this page.

Email Newsletters

All (or most) Long Beach Council Districts have an electronic newsletter. If your intended users are concentrated in council district(s), you can reach out to district staff and request that they include your recruitment material (message, flyer, etc.) in their next newsletter.

Several City Departments and offices have newsletters that you can utilize, for example the Smart City Initiative Newsletter, The Equity Newsletter, Go Long Beach Newsletter, to name a few.

Paid Media

Depending on your project's budget, **you may consider paid media campaigns to increase your reach** in recruitment. These can be ads on social media like Facebook or Instagram, other websites, or local news outlets.

City Website Homepage

Consider posting your recruitment materials to your Department or Division's webpage. **Consider how much traffic your Department's page receives to determine if it is worth posting there** or perhaps a different page on the City's website that receives more traffic.

Tabling

A great way to recruit participants in person is by holding tabling events in public spaces such as libraries and coffee shops or at community events with opportunities for interaction. Be strategic when planning out and selecting spaces and events to table at. Do your research and be aware of what community or special events are happening in Long Beach that your end-users are most likely to attend. What public spaces do your intended users frequent? Perhaps the library or a local park.

TIP: Keep in mind that you are more likely to reach certain demographics in-person, that you would not have reached otherwise through digital outreach methods. For example, you can reach older adults, people with limited or no internet access at home, individuals with low-levels or digital literacy, etc. These folks may also need help filling out the sign-up form. Offer to help interested participants fill out the form, you can fill-out the form with them on your City device or help them navigate the form on their devices. This can go a long way.

Appropriate Community Groups and Liaisons

Leveraging existing relationships and partnerships with community-based organizations (CBOs) such as neighborhood associations, nonprofits, advocacy groups, etc. is a great method to utilize community networks for a larger reach in recruitment. Especially when it comes to conducting outreach for harder to reach populations, think about the CBOs that work closely and engage with intended users of your service or product.

For example, if you need to recruit older adults you may consider reaching out to the Long Beach Grey Panthers. If you would like to recruit folks that live in a specific area or neighborhood like Alamitos Beach, you may reach out to the Alamitos Beach Neighborhood Association.

The City's Neighborhood Resource Center (NRC) maintains a current listing of neighborhood associations and community groups in Long Beach. To access the List of Neighborhood Groups Directory, please visit their page here. The directory list contact information for each organization.

No matter what outreach methods you choose for recruitment for your project, remember to practice an equity lens and carefully think about which methods are best to reach your product or service's intended users. For more information and strategies on community engagement check out the City's Community Engagement Playbook.

Examples in Action – Single Sign-On Outreach Strategy

Check out the Long Beach Single Sign-On Outreach Plan to get a sense of how you can plan and organize your recruitment efforts so that your team is all on the same page.

Equity Check 2!

Before moving forward, ask your team the following questions and discuss as a group. These group discussions will help identify any changes or adjustments to your team's approach to ensure equity.

- Do your recruitment materials use plain language (6th-8th grade reading level) so that the messaging is understood by diverse audiences?
- Did you translate outreach materials in more than one language?
- Do your outreach methods reach a diverse group of people? Did you include outreach methods to recruit harder to reach populations?

4. Research Design

The next phase of Civic User Research is to select and design your research methods. This can include a number of methods including content testing, A/B testing, or card sorting, but will often include usability testing. Usability testing is a method used to evaluate a product or service on intended users to uncover issues with related to ease of use, learnability, and overall intuitiveness. It is best practice to conduct Usability Testing on the product or service's prototype to minimize costs and waste. It is less expensive to fix issues identified with the prototype than to fix issues after the final product has been created.

- **Learn** if participants can complete specified tasks successfully
- **Identify** how long it takes to complete specified tasks
- **Find out** how satisfied participants are with your product or service
- **Identify** changes required to improve user performance and satisfaction
- **Analyze** the performance to see if it meets your usability objectives

Design Test Scenarios and Tasks

Select Testing Methods

Plan Your Usability Tests

Design Test Scenarios and Tasks

Before you can conduct a Usability Test, you need to design the test itself and develop a plan. First, you will create realistic scenarios that your users will face when utilizing your product or service. Next, you will plan and document specific tasks for participants to complete during the test. It may be helpful to review your notes on your intended users from the User Personas, interviews, and surveys you conducted in earlier phases.

Let's go back to the app that provides information on social services offered in Long Beach as an example. For this app, you want to test how easy or hard it is for users to find information on specific services such type of service, organization providing service, address, and contact information.

You may write the following tasks for participants:

- **Scenario:** You were just laid off from your job and need food assistance as well as financial assistance with your upcoming bills.

- **Task 1:** Starting from the app's homepage, find an organization that offers utility assistance
- **Task 2:** Please find the address, hours of operation, and contact information of the organization

Tools - Guide to Create Test Scenarios and Tasks

- **Provide context**
  - Give enough information and context so that the participant understands why they are performing the task.
- **Keep tasks simple and specific**
  - It is better to have simple, discrete, and specific tasks than a single complex one.
- **Keep tasks focused on what you need to learn**
  - You can't include every single scenario or task in a test, so remember to prioritize tasks around the main objectives of the product or service.

Selecting Testing Methods

There are several types of usability tests that you can employ, the type of test you design depends on the type of information you are trying to gather about your product or service.

Below are the most common types of tests:

Qualitative VS Quantitative

Qualitative testing allows you to understand the subjective experiences of participants when interacting with your service or product (e.g. participants' pain points and opinions). You can collect detailed information about the user experience, but qualitative data may be more difficult and time-consuming to summarize and analyze.

Quantitative testing allows you to gather numerical data on what is happening in your product or service. You can gather information on satisfaction rates, time taken to complete a task, number of clicks to complete a task, or error rates.

Quantitative and qualitative testing typically work in conjunction with one another, think about using both in your test.

Moderated VS Unmoderated

In a moderated test, there is a moderator who is in contact with the participant during the test to guide them through it. In moderated testing, the moderator can observe the facial and body expressions of the participant which can give you additional insight to how they are feeling.

During moderated sessions, it is best practice to have a note-taker as well. That way there is one person who is fully concentrated on observing and taking notes. The moderator can also be the note-taker, however, they may miss some key observations playing the two roles. If your team has the capacity, it is better to have one person for each role.

As the name suggests, there is no moderator present in an unmoderated test. Instead, the participant is given instructions and tasks to complete beforehand at a time and place of the participant's choosing and then asked to provide feedback. These tests are considered more flexible, convenient, and faster, although they might not be as insightful since there is no one to observe the participant.

Remote VS In-Person

Remote testing is when the participant and moderator are in different locations and the test is conducted using an online usability testing platform or by phone. If using an online testing platform, you may even record the session to gain valuable insights.

In-person testing is conducted face-to-face with the participant in a designated space. With in-person testing, staff can see the participant and communicate in real-time, analyzing facial expressions and body language.

Focus Groups

Sometimes you can gather more qualitative information on a user's experience with your product or service through a focus group. Focus groups allow you to collect feedback from several participants simultaneously through a guided group discussion by a moderator.

Group discussions help make participants feel more relaxed, at ease, and encourages them to open up. Focus groups are not optimal for understanding individual user perspectives and experiences with your product or service but the group dynamic gives you great insight to understand your target audience as a whole.

Interviews

One-on-one interviews allow you to understand an individual's experience with your product or service. It is best to have a set of predetermined questions that will get the participant talking and allow you to gather the information you need. If something comes up in the interview that was not planned but is insightful, do not be afraid to dig deeper, your interview should be flexible.

Individual interviews are not biased by group dynamics and make it easy to ask follow-up questions. However, they are more time consuming and it may be more difficult to analyze results.

Surveys

You can gather participant feedback on your product or service through surveys, which are quick and easy to set-up. These can be set up and distributed digitally which is great for collecting feedback at scale. However, surveys should be short and sweet and are therefore not great for broad, more in-depth user research. Be mindful of other risks of using surveys such as bots or individuals who are not your target audience filling out your survey for the monetary compensation.

You can mix and match the various testing methods to what makes the most sense for testing your product or service. For more information on usability test types and methods you can read this quick article by UXtweak, or visit Maze and Hotjar.

Plan your Usability Test

It is important to have a test plan in place to outline what you are going to do, how you are going to conduct the test, the type of test, and what scenarios you will use. It is also important to make sure that the entire team is on the same page to coordinate the test. For more information, you can check out Usability.gov's page on Planning a Usability Test.

Below are some common elements of a Test Plan:

Scope	Purpose	Schedule & Location
Sessions	Equipment	# of Participants
Scenarios	Metrics	Roles

There is no right or wrong way to plan and create a Usability Test, the test you design will depend on your project, team, capacity, and resources. Design a test that makes sense for your product or service.

Template - Test Plan for Civic User Research - San Jose

Research Goal
What outcomes are you aiming to achieve? To discover general user behavior about your city service? To test observe reactions to a specific tool?
Two to three sentences, max.

Research Questions
What problems are you aiming to solve for? What outcomes are you aiming to achieve? Three to five specific questions, max. (If you have more, you likely need another research plan).

Example:
1) What, if anything, do users find confusing?
2) What, if anything, do users find clear and easy to use?
3) What usability improvements, if any, can we apply to the new [website, tool, app etc.]?

Methodology
How will you conduct your research? Will it all be in English or other languages? How many people will you interview? What devices will they use?

Example:
We'll conduct in-person interviews with English and Spanish speakers who live in San Jose: 4 on mobile device; 4 on desktop device.

Script
How will you talk the users through each task? What questions do you want to ask them? How will you measure feedback to their reactions? (This part varies depending on the nature of your research study)

Example:
"Please remember we're testing our ideas not you. There are no right or wrong answers. Please speak your thoughts out loud and be as honest as possible."

Follow-up questions:
- On a scale from 1(very difficult) to 5(very easy) how difficult was it to perform the tasks described?
- What, if anything, wasn't clear?
- What, if anything, was clear?

5. Research Implementation

Now that you have selected your methods, designed your testing instrument(s), and recruited participants, it is time to administer the test. Typically, during implementation, participants will try to complete tasks while observers watch, listen and take notes on any challenges, confusion, or successes encountered during the process. How you conduct your testing session depends on the project and the test type (e.g. unmoderated/moderated, in-person or remote).

This section provides some general information and tips on how to conduct moderated testing sessions.

- Create a Test Script
- Moderate Usability Tests
- Project Staffing
- Data Collection
- Food/Snacks
- Compensate Testers

Create a Test Script

Before you begin moderating the testing session, you will need to create a test script that your moderator(s) will use to conduct the test. A test script will establish continuity across all tests and ensure participants have the same testing experience. You can use the test plan you created earlier to help you write the script.

The script should outline the order of the test and provide instructions for the moderator on how to conduct each portion of the test. You may also provide sections or designated space in your test script for the moderator or observer to take good notes and document results.

For more information on creating a Test Script, check out 18F Methods.

Example in Action- Long Beach Single Sign-On Test Script

The Long Beach Single Sign-On Test Protocol is a great example of what a test script should include and look like.

Tool - General Format of a Test Script

- **Document Overview**
  - Provide a brief overview of the product or service, goals and objectives, purpose, and what information is included in the script
- **Introduction**
  - Script introducing the moderator, product or service that will be tested, and structure of the test
  - The script should set expectations for participants and explain how participant feedback will be utilized, this ensures we are being transparent with our testers
- **Pretest Interview Questions or Tasks**
  - Before you engage in the scenarios and tasks, you may want to ask your participants a few questions relevant questions before they begin the test to make them more comfortable and better understand their relationship to the product or service
- **Research Tasks**
  - Provide a script for each of the research tasks you will ask your participants to complete
  - Include templates or space for the moderator and observer to take notes
- **Post-test Interview Questions or Tasks**
  - Ask participant open-ended questions to capture last thoughts and reactions on the product or service
  - This is a great opportunity to gauge user satisfaction

Moderate Usability Tests

If conducting a moderated testing session, carefully select which moderating technique your team will employ. The most common moderating technique is the Concurrent Think Aloud (CTA) technique, in which participants are asked to think aloud while they complete the tasks of the test. The idea is to enable participants to keep a running stream of consciousness as they work. On the other hand, the Retrospective Think Aloud (RTA) technique asks participants to retrace their steps once the session is complete. If the session was recorded, moderators show participants a video replay of their actions so they can retrace their steps.

In the Concurrent Probing (CP) technique, as participants are completing tasks, anytime they say or do something interesting, the moderator asks follow-up questions. Lastly, in Retrospective Probing (RP), the moderator asks the participant questions on their thoughts or actions after the session is complete. For more information, please visit Usability.gov.

Technique	Pros	Cons
Concurrent Think Aloud (CTA)	• Understand participants' thoughts as they occur and as they attempt to work through issues they encounter • Elicit real-time feedback and emotional responses	• Can interfere with usability metrics, such as accuracy and time on a task
Retrospective Think Aloud (RTA)	• Does not interfere with usability metrics	• Overall session length increases • Difficulty in remembering thoughts from up to an hour before = poor data
Concurrent Probing (CP)	• Understand participants' thoughts as they attempt to work through a task	• Interferes with natural thought process and progression that participants would make on their own, if uninterrupted
Retrospective Probing (RP)	• Does not interfere with usability metrics	• Difficulty in remembering = poor data

Tools - Best Practices for Moderating a Testing Session

- **Treat participants with respect** and make them feel comfortable.
- **Remember that you are testing the site not the users.** Help them understand that they are helping us test the prototype or Web site.
- **Remain neutral – you are there to listen and watch.** If the participant asks a question, reply with "What do you think?" or "I am interested in what you would do."
- **Do not jump in and help participants immediately and do not lead the participant.** If the participant gives up and asks for help, you must decide whether to end the scenario, give a hint, or give more substantial help.
- **The team should decide how much of a hint you will give** and how long you will allow the participants to work on a scenario when they are clearly going down an unproductive path.
- **Take good notes.** Note-takers should capture what the participant did in as much detail as possible as well as what they say (in their words). The better the notes are that are taken during the session, the easier the analysis will be.
- **Measure both performance and subjective (preference) metrics.** People's performance and preference do not always match. Often users will perform poorly but their subjective ratings are very high. Conversely, they may perform well but subjective ratings are very low.
    - Subjective metrics include questions that you may ask the participants prior to the testing sessions (e.g. background questionnaire) and questions about overall ease, satisfaction, and likelihood to use or recommend the product or service
    - Quantitative metrics are quantitative data you will collect during your testing session, such as completion rates, error rates, and time to complete tasks

Example in Action! - Testing Session Example

1. **The facilitator will welcome the participant** and explain the test session, ask the participant to sign the release form, and ask any pre-test or demographic questions.
2. **The facilitator explains** thinking aloud and asks if the participant has any additional questions. The facilitator explains where to start.
3. **The participant reads the task scenario** aloud and begins working on the scenario while they think aloud.
4. **The note-takers take notes** of the participant's behaviors, comments, errors and completion (success or failure) on each task.
5. **The session continues until all task scenarios are completed** or time allotted has elapsed.
6. **The facilitator either asks the end-of session subjective questions or sends them to an online survey,** thanks the participant, gives the participant the agreed-on incentive, and escorts them from the testing environment.

Project Staffing

When you are ready to begin conducting the tests, you need to identify at least three people involved in proctoring the session: a moderator, an observer, and technical support staff. The moderator will be the staffer who directly engages with the participant, they administer everything in the testing protocol. Second is the observer who is tasked with documenting the participant's experience, both verbal and nonverbal. Additionally, the observer may take on additional responsibilities to help the testing session run more smoothly.

Lastly, technical support should be available to troubleshoot any unexpected technical issues. If you are conducting the sessions in-person, it is critical that the moderator and observer are present next to the participant, the technical support can be remote, but should be readily available.

Data Collection

Remember to take good notes throughout the testing session to collect the data in a way that will be easy to analyze and interpret.

As mentioned in the section above, you can include space or sections for the moderator and observer to take notes or you may choose to collect data on a separate document.

Reminder to reference the City of Long Beach's Equitable Data Collection Toolkit to ensure you are using equitable data collection methods.

Food/Snacks

For testing sessions that will be held in person, it is best practice to provide something to eat for the participants.

This is part of compensating the participants for their time. Try to pick a snack that is not going to be too messy or distracting. For example, you can bring a mix of small candies (hard candy, mini chocolate bars, twists, etc.). Make sure to bring enough for everyone!

Compensate Testers

Any time we are asking the public to contribute their time and energy to help us, it is best practice to provide compensation for their time.

Other cities typically provide compensation through gift cards to an accessible, community-friendly store (e.g. Target, Amazon, Walmart) that ranges between $20-$25. Compensating participants for their time and lived experience with your team results in a more diverse and representative set of testers.

During the testing session, staff should provide information on how participants will be compensated, when and how participants should expect to receive compensation. It is all about setting and managing expectations as well as respecting people's time.

Please check in with your Department Administrative Officer for policies and documentation required for disbursement of gift cards.

6. Iterative Design

After the testing session is done and your team has recorded and collected data, you're almost done.

The last steps of the Civic User Research process are to analyze the data and feedback from the test, develop actionable recommendations from your findings and implement the necessary changes to your product or service.

- Analyze Data
- Actionable Recommendations
- Create a Test Report
- Implement and Iterate
- Continuously Test

Analyze Data

Depending on what you outlined in your test, you will have collected several types of data (e.g. qualitative and quantitative). **You will need to analyze your data to identify the major issues and errors of your service or product before you can create actionable recommendations for improvement.**

Right after each test, it is useful to conduct a quick analysis by taking a moment to write down the top issues and observations from the session while they are still fresh in your mind. This is an especially useful method when you are short on time and need to quickly adjust your product or service. You will immediately see trends and patterns and identify the major findings of your tests from looking at this quick list.

To conduct a more in-depth and thorough analysis, carefully read through all your testing session notes and highlight patterns and trends from your observations. This includes noting common problems participants experienced, recurring participant comments, and answers to questions. If you have quantitative data, it may be easier to import your data into Excel for number crunching and generating visuals. You may calculate success rates, time(s) to complete tasks (mean, median, and mode), satisfaction rates, etc.

Tools - General Data Analysis Practices (Quantitative and Qualitative)

Quantitative Data	Qualitative Data

• Enter the data in a spreadsheet to record data or make calculations such as:
  ◦ Success rates
  ◦ Task time
  ◦ Error rates
  ◦ Satisfaction questionnaire ratings
• You may want to add participant's demographic data so that you can disaggregate results by demographics to see if any of the data differ by the demographic variables.
• Make sure you identify the task scenarios for each of the metrics
	• Record data related to:
	  ◦ Observations about pathways participants took
	  ◦ Problems experienced
	  ◦ Comments/recommendations
	  ◦ Answers to open-ended questions
	• Make sure your problem statements are exact and concise. For example:
	  ◦ Good problem statement: "Clicked on link to Research instead of Clinical Trials."
	  ◦ Poor problem statement: "Clicked on wrong link."
	  ◦ Poor problem statement: "Was confused about links."

Actionable Recommendations

After conducting an analysis of your findings from the testing sessions, it is time to develop actionable recommendations from those findings that will improve the user experience of your product or service.

When reviewing findings of the major issues and errors of your solution, first identify the root cause of the issue or error. Once you identify the root cause, it will be easier to develop an actionable recommendation to address the root cause.

Using quantitative and qualitative data together can help paint the bigger picture of the root cause(s) of the major issues.

Let's revisit our example of the app that provides information on social services offered in Long Beach. Say your quantitative data tells you that it took participants an average of 90 seconds to locate an organization's phone number on your app.

The organizations' phone numbers are listed all the way at the bottom of the page. From your observation notes on that task, you identify a pattern: most participants did not scroll all the way down the page. By looking at these two major findings in relation to one another, you can identify that the root cause of participants taking longer than the desired time to find an organizations' phone number is due to the placement of the phone numbers at the bottom of the page. Now that you found the root cause, you have information to develop an actionable recommendation. Your recommendation for the vendor or development team would be to change the placement of phone numbers to the top of the organization's page on the app.

Issue	It takes participants 90 seconds on average to find an organizations phone number
Root Cause	Placement of organization's phone number at the bottom of the page
Recommendation	Change placement of phone numbers to the top of the organization's page

Tools - Crafting Actionable Recommendations

Review Major Issue → Identify Root Cause → Develop Actionable Recommendation

Create a Test Report

Now that you have developed actionable recommendations from your findings and analysis, you can put together a Test Report to organize and document your process, results, findings, and next steps. It is a great document to share information with your team and vendors about the results of your testing sessions and what changes need to be implemented to improve the service or product. Test Reports generally include a background summary, methodology, results, findings and recommendations.

You can include graphics or other visuals if they are useful, but they are not necessary. In the findings and recommendations section, it is best to categorize by level of severity. Think about which recommendations are priority.

Example in Action- Test Report Example

Check out this Test Report example and template from Usability.gov.

Implement and Iterate

The last step is to share your Test Report and recommendations with your team and the product developers.

You will need to work with your developers to figure out which recommendations and changes are feasible and can be implemented. It may be that not all proposed recommendations and changes are feasible due to cost, time constraints, capacity, or other factors. Use your best judgement and revisit your service or product's objectives, think about which recommendations will have the most significant impact that will enable your solution to meet its intended goals.

Continuously Test

In some cases, you may need to repeat the testing process on your updated prototype once changes have been implemented.

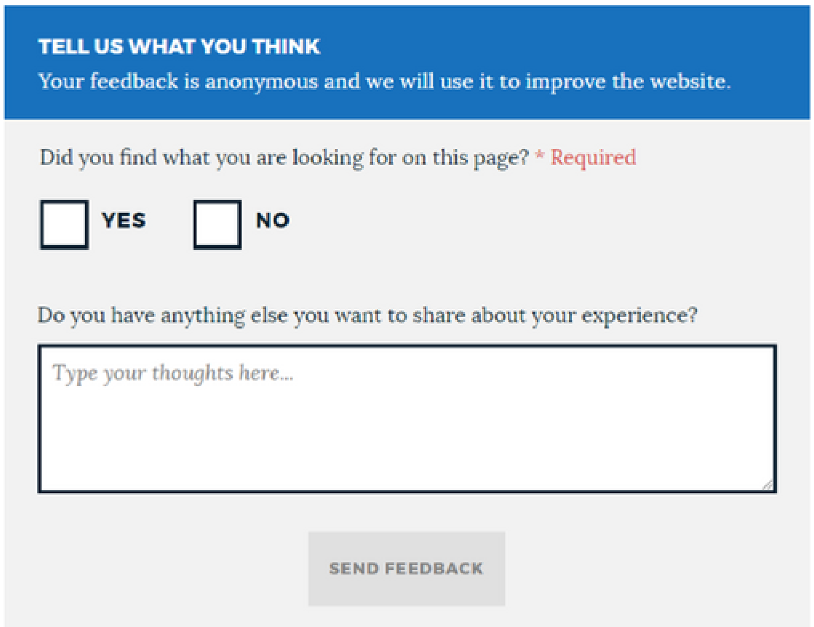
Note that repeating the process will require more resources (time, money, staff capacity, etc.) but if it is within your team's means and truly valuable to your service or product, then it may be worth repeating, however, there are other more simple ways to conduct further testing.

To continuously test their website, the City of Boston utilizes an ongoing passive method to gather user feedback. The City has a simple two question form (one quantitative and one qualitative question) at the bottom of each webpage on their website.

This simple form allows the city to collect ongoing user feedback and identify any problems such as broken links, outdated information, errors and glitches. Further testing is not required but highly recommended as it helps uncover new issues that may arise after launch.

Example in Action! - City of Boston Feedback Form

To continuously collect public feedback on the usability of their website, the City of Boston includes a feedback form at the bottom of each webpage for site visitors to fill out anytime they visit the site:



TELL US WHAT YOU THINK

Your feedback is anonymous and we will use it to improve the website.

Did you find what you are looking for on this page? * Required

YES NO

Do you have anything else you want to share about your experience?

Type your thoughts here...

SEND FEEDBACK

Additional Resources

For more information and resources on Civic User Research, check out the following materials including books, websites, articles, and more:

- Usability.gov
- 18F Methods
- Digital.gov
- User Experience Toolkit | City of Boston
- User Experience Guide | City of San Jose
- User Interview Launch Kit
- Understanding WCAG 2.0
- UXtweak
- Maze
- Hotjar
- The CUT Group | Daniel X. O'Neil
- The UX Learner's Guidebook: A Ramp and Reference for Aspiring UX Designers | Chad Camara and Yujia Zhao
- A Civic Technologist's Practice Guide | Cyd Harrell
- This is Service Design Thinking: Basics, Tools, Cases | Marc Stickdorn and Jakob Schneider

As a reminder, you may view and download these additional resources by visiting the Civic User Research Resources and Materials page on the Smart Cities SharePoint site.

To learn more

Visit: https://longbeach.gov/smartcity/projects/civic-user-testing/

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