

Improving the OPPI Data Hub Recreation Page UX Report



Mariah Lopez, UX Researcher, UCCS
Prepared for Conner Borkowski, Program & Special
Projects Coordinator, Pikes Peak Outdoor Recreation
October 15th, 2025

Executive Summary

This User Experience (UX) Report looks at the **Recreation Data** page on the **Outdoor Pikes Peak Initiative (OPPI) Data Hub**, which is part of the **Pikes Peak Outdoor Recreation Alliance (PPORA)** website. The page is meant to share maps, reports, and other data about outdoor recreation in the Pikes Peak region. It helps planners, businesses, and the community make informed decisions about local outdoor spaces.

Right now, the Recreation Data page mostly shows a long list of links to different maps and dashboards. While the links are useful, the page is hard to understand and not well organized. Many users said they didn't know what each link led to, what kind of data it showed, or if the information was current.

To learn more about these problems, I conducted usability testing and created a user persona and journey map. During testing, most users said they wanted the page to look more organized and include short summaries that explain each resource. They also wanted to see update dates, simple wording, and small visuals like icons to help them find information faster.

Based on this research, this report suggests the following improvements:

- **Add short summaries** under each link to explain what it contains.
- **Group resources into sections** such as Maps, Reports, and Dashboards.
- **Use simpler words** and remove confusing technical terms.
- **Show update dates and contact info** so users know the data is trustworthy.
- **Add icons and improve design** for better readability and accessibility.
- **Include a “subscribe for updates” feature** so users know when data changes.

These changes will make the page easier to read, more organized, and more helpful for everyone who visits. Updating the Recreation Data page will help PPORA share outdoor information more clearly and continue its mission to support the people and environment of the Pikes Peak region.

Contents

Introduction	4
Project Objectives	4
Add structure and context to the page.....	4
Make information easy to understand.	4
Improve the visual layout for better usability.	4
Support PPORA's communication goals.	5
Research Overview	5
Organize the Recreation Data page for easier navigation.....	5
Add short summaries to explain what each dataset includes	5
Simplify technical language for better understanding.....	6
Show update dates and data sources to build trust.....	6
Add visuals and icons to improve scanning and accessibility	6
Encourage return visits with update notifications	7
Key Insights	7
Usability Testing Results.....	7
Clarify the purpose of each link	8
Organize links into categories for better navigation.....	8
Simplify the wording and use plain language	8
Add visual cues for faster scanning.....	9

Provide clear update dates and data sources	9
Add a way for users to stay informed	9
Identify overall trends and key issues	10
Recommendations	10
Add short summaries under each dataset link	10
Simplify technical language and use plain terms	11
Show update dates, sources, and contact information	11
Add visual cues and icons for better scanning	12
Add a feature that allows users to subscribe for updates	12
Improve accessibility and readability across the page	12
Summarize the overall benefit	13
Conclusion	13

Introduction

The Pikes Peak Outdoor Recreation Alliance (PPORA) is a local organization that brings together outdoor businesses, nonprofits, government groups, and community members who care about the natural and recreational spaces in the Pikes Peak region (Pikes Peak Outdoor Recreation Alliance, 2025). Its goal is to protect these outdoor areas while helping people and organizations work together to build a stronger recreation community.

To support this mission, PPORA created the Outdoor Pikes Peak Initiative (OPPI) and the OPPI Data Hub. The Data Hub is an online resource that shares maps, data, and reports about Colorado's outdoor spaces. It helps planners, researchers, and residents make decisions about trails, parks, and conservation efforts. The site is built on Esri's ArcGIS platform, which hosts interactive maps and dashboards that show environmental, recreational, and social information.

This UX project focused on improving the Recreation Data page of the OPPI Data Hub. This page gathers many useful links to maps, reports, and dashboards. However, it mostly appears as a plain list of links without short descriptions or clear organization. During usability testing, users said the page felt confusing and time-consuming to navigate. They were unsure which resources were most useful or what each link offered (Pikes Peak Outdoor Recreation Alliance, 2025).

Project Objectives

Add structure and context to the page.

Testing results showed that users spent too much time scanning the list of links. The persona Jordan Alvarez, a Parks and Trails Coordinator, needed quick access to reliable recreation data for grant writing and reports. His journey map revealed frustration and hesitation when deciding which links to click. Market research also showed that well-structured websites with grouped content and clear headings improve user confidence and speed (Esri, 2024).

Make information easy to understand.

Usability participants said they wanted short summaries and plain-language explanations next to each link. The persona confirmed that technical terms like “feature layer” or “app” were confusing. The journey map showed that confusion caused users to leave the page early. Adding short descriptions, update dates, and source names would help users know what data they are viewing and whether it is trustworthy.

Improve the visual layout for better usability.

Users found it difficult to scan the page because all links looked the same. In the journey map, most users expressed relief when imagining grouped sections or icons that labeled content types like maps, dashboards, and reports. Research on digital accessibility supports using visuals and clear contrast to guide users and make the site easier to read for everyone.

Support PPORA's communication goals.

All research methods, usability testing, persona development, and journey mapping, showed that a clear, structured, and user-friendly design will help PPORA share outdoor data more effectively. A better page layout will help users find information faster and build trust in PPORA's work to keep the Pikes Peak region an accessible and sustainable outdoor destination.

Research Overview

This research combined market analysis, persona development, journey mapping, and usability testing to understand how people use the Recreation Data page on the Outdoor Pikes Peak Initiative (OPPI) Data Hub. The goal was to identify what makes the page difficult to use and to suggest ways to make it easier, clearer, and more accessible for everyone.

Organize the Recreation Data page for easier navigation

Usability testing showed that most participants struggled to find what they needed because all the links looked the same and were not organized by type. Users had to scroll up and down several times before clicking a resource. The persona, Jordan Alvarez, a Parks and Trails Coordinator, had the same issue. He wanted a simple and trustworthy place to find recreation data, but the long list of links made him feel uncertain and frustrated. The journey map also showed that Jordan felt hopeful when he first visited the site but then became anxious when he could not tell which links were most helpful.

Market research supports this finding. Websites that group information by category and use clear section titles help users locate data faster and feel more confident. Organizing the Recreation Data page into categories such as Maps, Reports, and Dashboards would make it easier to navigate and improve user satisfaction (Markel & Selber, 2018).

Add short summaries to explain what each dataset includes

Participants said they wanted short summaries written in plain language under each link to help them understand what the dataset contained. Many users hesitated to click because they did not know what information they would find. The persona confirmed this behavior. Jordan needed short explanations to decide which data sources supported his projects and reports. The journey map showed that when the page lacked details, he felt anxious and wasted time opening several links that did not meet his needs.

Market research shows that short, clear descriptions help users scan information quickly and understand what is being offered. Adding summaries under each dataset would reduce

confusion, save time, and make the page more user-friendly for both professionals and the general public (Powder, 2021).

Simplify technical language for better understanding

Testing results showed that users struggled with technical words such as “feature layer,” “metadata,” and “dashboard.” The persona had the same issue. Jordan understands maps well but not complex technical terms. In his journey map, confusion grew whenever he saw unfamiliar words and decreased when content was written in clear, simple language.

Market research in user experience writing recommends replacing technical terms with plain language or adding short explanations beside them (Selber & Johnson-Sheehan, 2019). Simplifying the language on the Recreation Data page would make it easier for everyone to understand, helping PPORA reach a wider audience and share its information more effectively (Montgomery, 2020).

Show update dates and data sources to build trust

Several participants in the usability test said they were not sure if the data was up to date or reliable. They wanted to see when the data was last updated and who was responsible for maintaining it. The persona, Jordan, needed this information to cite accurate sources for his reports. The journey map showed that uncertainty about data reliability lowered trust and interest in the website.

Market research supports this insight. People are more likely to trust and reuse data when websites include update dates, source names, and contact information (World Wide Web Consortium [W3C], 2023). Adding these details to the Recreation Data page would make it feel more professional and reliable.

Add visuals and icons to improve scanning and accessibility

Testing showed that users relied heavily on visual patterns to find information. They said that icons or small images would help them recognize the type of resource faster. Jordan’s journey map revealed that he felt relieved when imagining the use of icons and clear sections that grouped similar content together.

Market research also shows that icons, color contrast, and visual hierarchy improve accessibility for people with visual or cognitive challenges. Adding icons and organizing information visually would make the page easier to read and help users locate the data they need faster.

Encourage return visits with update notifications

Participants said they often forgot where they found certain data and wanted a way to know when information changed. The persona, Jordan, had the same concern. He wanted to receive alerts when data sets were updated so he could use the most recent information in his work. The journey map showed that users felt more confident when they imagined a feature that kept them informed about new updates.

Market research shows that websites with features like update notifications or email subscriptions keep users engaged and encourage them to return. Adding a subscription or alert option would help people stay connected to the Recreation Data page and strengthen their relationship with PPORA's resources.

Key Insights

The findings from usability testing, persona research, journey mapping, and market studies all point to the same key ideas. Users want the page to be organized, easy to understand, and visually clear. They struggle with too many links, confusing wording, and the lack of simple explanations. By improving organization, adding short summaries, simplifying language, showing updating information, and using visuals, the Recreation Data page can become a more helpful and trustworthy resource.

Together, the research confirms that these changes will make the page easier to use, more professional, and better aligned with PPORA's mission to support outdoor recreation, conservation, and community engagement in the Pikes Peak region.

Usability Testing Results

The usability testing was designed to find out how easy it is for people to use the Recreation Data page on the Outdoor Pikes Peak Initiative (OPPI) Data Hub. The goal of the test was to see how users move through the page, what problems they face, and what improvements can make the site clearer and more useful.

The test followed the "See, Say, Do" method. This means participants shared what they saw, said what they were thinking, and showed what they did while using the page. Each participant completed a short set of tasks based on real situations. Afterward, they answered a few questions about what was easy, what was confusing, and how the page could be improved (Markel & Selber, 2018).

The tasks included finding recreation resources, comparing two data links, downloading a map, and identifying PPORA's role based on the content of the page (Powder, 2021). Each session lasted about 20 to 30 minutes. During the test, I observed how participants clicked, what they said out loud, and how long it took them to finish each task.

Clarify the purpose of each link

Testing showed that participants had a hard time understanding what each link on the page represented. Most users clicked several links before finding what they were looking for. Many said the page looked like “a long list of random links.” The lack of short summaries made it difficult to know what kind of data was behind each link .

The persona, Jordan Alvarez, had the same experience. He needed clear explanations to decide which resource was useful for planning park projects or writing reports. The journey map showed that Jordan felt hopeful when starting his search but quickly became confused and frustrated when he could not tell which resources matched his needs.

This shows that users need short, clear descriptions that explain what each link contains and why it is important. Adding summaries would help people find information faster and reduce uncertainty when exploring the page.

Organize links into categories for better navigation

Participants said they felt lost because the links were not grouped or labeled in any way. They wanted the content to be divided into sections such as Maps, Reports, and Dashboards. Most said that having headings would help them know where to start.

The persona and journey map support this idea. Jordan needed an easy way to find data relevant to trail planning. His map showed a dip in confidence when he had to scroll through the page multiple times. Market research on user experience also confirms that grouping similar information into sections helps users scan content more quickly.

Organizing links into categories will make the page feel cleaner and more professional while saving users time.

Simplify the wording and use plain language

Many participants said the page used too many technical words they did not understand. Terms like “feature layer” or “metadata” caused confusion. Some participants said they were afraid to click because they thought it might take them to something too complex or unrelated.

The persona also struggled with the same problem. Jordan knows how to read maps but does not work in data science. In his journey, he felt frustrated when the language sounded too technical. He gained confidence when information was written in simple, direct language.

Simplifying wording and using everyday terms will help both professionals and the general public feel more comfortable using the page. It also makes the content more accessible and aligns with PPORA’s mission to reach a wide range of users.

Add visual cues for faster scanning

Participants said the page looked plain and difficult to scan. Many said that icons, color differences, or small preview images could help them recognize each type of resource more easily. When shown examples of pages with visuals, users said they felt more confident and could find what they needed faster.

The persona and journey map supported this finding. Jordan said he wanted to see visual elements that separated different kinds of data. In his journey, his confidence increased when he imagined icons and short labels that helped him tell datasets apart.

Visual cues such as icons, cards, or clear headings would make the page more engaging and help users recognize key information briefly .

Provide clear update dates and data sources

Many participants said they were unsure if the data was current or reliable. They wanted to know when each dataset was last updated and who created it. Several said that seeing this information would make them trust the data more.

The persona confirmed this idea. Jordan needed to use current and accurate data in his reports. When he could not find update dates or source names, he doubted whether he could rely on the information. His journey map showed that his trust in the page dropped when data credibility was unclear.

Adding update dates, data sources, and short contact details would help build user trust and make the page feel more professional and transparent.

Add a way for users to stay informed

During the post-test questions, users said they wanted a way to receive notifications when new data or updates were added. They said this would save time and make it easier to revisit the page.

The persona felt the same way. Jordan wanted to keep track of changes so he could use the most recent data. His journey map showed that after finishing a task, he was satisfied but still worried about missing updates.

Market research supports the idea that adding a subscription or update feature keeps users engaged and encourages them to return to the site. A simple “Subscribe for Updates” button or email alert system could meet this need.

Identify overall trends and key issues

Across all usability tests, participants shared similar experiences. They found the page helpful but difficult to navigate. Most users needed extra time to complete tasks because they were unsure which link to choose or what information it contained.

The most common issues were poor organization, lack of explanations, technical wording, and no clear visual design. Users wanted the page to look more modern, with short summaries, grouped sections, and clear headings. They also wanted signs of reliability, such as update dates and data sources.

By connecting the testing results with the persona and journey map, it becomes clear that users are looking for structure, simplicity, and transparency. Making these changes would reduce confusion, improve user confidence, and create a more positive experience for all visitors to the Recreation Data page.

Recommendations

The following recommendations are based on findings from usability testing, persona development, journey mapping, and market research. Each suggestion focuses on improving how users experience the Recreation Data page on the Outdoor Pikes Peak Initiative (OPPI) Data Hub. Together, these changes will make the page more organized, clear, and user-friendly while helping the Pikes Peak Outdoor Recreation Alliance (PPORA) meet its goal of sharing outdoor data in a way that supports the community and its environment (U.S. Department of Health and Human Services, 2023).

Add short summaries under each dataset link

Testing results showed that users had trouble knowing what each link contained. Many people said they clicked multiple links before finding the right one because there were no explanations (Selber & Johnson-Sheehan, 2019). The persona, Jordan Alvarez, also had this issue. As a Parks and Trails Coordinator, he needed to understand which data would help him with planning and grant writing. His journey map showed frustration when links lacked clear context and relief when descriptions made information easy to understand (Esri, 2024).

Adding short summaries under each dataset link will help users know exactly what kind of data they are opening and why it is useful (Montgomery, 2020). Market research on open data and usability confirms that clear summaries improve scanning and reduce mistakes. For PPORA, this will help visitors use data more confidently and view the organization as transparent and professional. Users will save time and feel more confident using the site. PPORA will gain trust from its partners and community members by providing clear, well-organized information.

Organize resources into clear categories

Users often said they felt lost while scrolling through the page because all links looked the same and were not grouped together. The persona and journey map supported this observation. Jordan became anxious when faced with a long, unstructured list and said he wanted easier navigation. Market insights show that organizing web content into logical categories helps users locate information more quickly and improves comprehension (W3C, 2023).

Dividing the Recreation Data page into sections such as Maps, Reports, and Dashboards will create a logical structure that allows users to find data by purpose or type. This will reduce confusion and make the page easier to navigate for both professionals and the public. Users will complete their tasks faster and feel less overwhelmed. PPORA will demonstrate strong information design practices that support accessibility and collaboration.

Simplify technical language and use plain terms

During testing, many participants said that technical terms like “metadata,” “feature layer,” and “application” were confusing. The persona confirmed this problem. Jordan understands map-based data but does not have a background in GIS technology. In his journey, he expressed frustration when reading unfamiliar words and confidence when seeing information written in plain, everyday language.

Market research in UX communication shows that clear, human-centered writing helps users understand data and improves trust. By replacing or explaining complex terms, the page will become more welcoming and accessible to all audiences. Users will better understand the data and feel comfortable exploring more of the website. PPORA will reach a broader audience and make technical information easier for everyone to access and use.

Show update dates, sources, and contact information

Usability testing revealed that people questioned whether the data was current or reliable. Most participants said they wanted to see the date of the last update and the organization responsible for each dataset. The persona supported this idea. Jordan needed accurate, up-to-date data for his reports. The journey map showed a loss of trust when he could not confirm if the data was recent or official.

Adding update dates, data source names, and contact information will show transparency and professionalism. Market studies show that open-data platforms that include this information are viewed as more trustworthy and credible. Users will trust the Recreation Data page more and return to it for reliable information. PPORA will strengthen its reputation as a dependable source for outdoor data and community planning resources.

Add visual cues and icons for better scanning

Participants said that the page was difficult to read because all links looked the same. They suggested adding icons or small visuals to help them identify different types of resources. The persona also expressed this need. In his journey, Jordan felt more confident when imagining icons or colored labels that made data types easy to recognize. Market insights show that visuals like icons, color contrast, and headings help people scan information faster and improve accessibility for users with visual or learning challenges.

Adding simple icons or small images beside each resource and using clear visual sections will make the page easier to navigate and more appealing. These visuals will guide users' attention and make important information stand out. Users will find information faster and enjoy a more visually engaging experience. PPORA will present its data in a way that feels modern, accessible, and professional.

Add a feature that allows users to subscribe for updates

After completing their tasks, many participants said they wanted a way to be notified about new or updated data. They said it would be helpful to get updates by email or through a subscription link. The persona agreed with this idea. Jordan wanted to stay informed about new recreation data without having to revisit the page every week. His journey map showed that he felt satisfied after finding useful data but worried about missing updates later.

Market research supports this recommendation. Many open-data platforms use subscription tools to keep users engaged and encourage repeat visits. Adding a "Subscribe for Updates" feature will help users stay connected and informed about changes to the Recreation Data page. Users will stay updated and feel supported by PPORA's commitment to transparency. PPORA will benefit from stronger engagement and repeat visits from its target audience.

Improve accessibility and readability across the page

Testing and market research both showed that the current page could be difficult to read for people with visual or cognitive challenges. Participants said that color contrast, text size, and link spacing could be improved. The persona's journey supported this as well. Jordan valued design elements that made information easy to scan and read.

Improving accessibility through strong color contrast, larger text, and keyboard-friendly navigation will help more people use the page comfortably. This aligns with Section 508 and WCAG standards for digital accessibility. Users with all levels of ability will have smoother experience. PPORA will demonstrate leadership in creating inclusive, accessible web content that supports its community-focused mission.

Summarize the overall benefit

The research across all methods clearly shows that users want a simpler, more organized, and more visually clear Recreation Data page. These recommendations add summaries, organizing sections, simplifying language, increasing transparency, improving visuals, offering updates, and supporting accessibility will make the page easier for everyone to use. For users, the changes will make it faster and easier to find accurate recreation data and trust the information they find. For PPORA, the changes will strengthen credibility, support collaboration, and align the website with its mission to make outdoor information accessible, equitable, and valuable to the Pikes Peak community.

Conclusion

This User Experience (UX) Report examined the Recreation Data page on the Outdoor Pikes Peak Initiative (OPPI) Data Hub for the Pikes Peak Outdoor Recreation Alliance (PPORA). The goal was to identify what made the page difficult to use and to recommend improvements that make it clearer, more organized, and easier for people to understand.

The research included usability testing, persona development, journey mapping, and market analysis. Together, these methods showed that users want a page that is better structured, easier to scan, and written in simple language. Participants said they struggled with long lists of links, unclear wording, and a lack of helpful visuals. They also said they wanted clear update information and an easy way to stay informed about data changes.

The report recommends adding short summaries, organizing links into categories, using plain language, showing update dates and sources, including icons and visual cues, creating an update subscription feature, and improving accessibility. These changes will make the page more user-friendly and help PPORA share its outdoor data more effectively (Markel & Selber, 2018; W3C, 2023).

The next steps are to create a prototype of the redesigned Recreation Data page, test it with new users, and gather feedback to refine the design. Once these updates are made, PPORA can apply the same design approach to other pages on the Data Hub to create a consistent and professional experience across the entire site (Pikes Peak Outdoor Recreation Alliance, 2025).

Thank you for taking the time to review this report and for the opportunity to work with PPORA on improving the OPPI Data Hub. These recommendations are designed to support PPORA's mission of connecting people, nature, and data through accessible and reliable information.

For questions or additional information, please contact:

Mariah Lopez
University of Colorado Colorado Springs
Technical Communication and Information Design Program
Email: mlopez6@uccs.edu

References

- Esri. (2024). *ArcGIS Hub: Connecting communities with open data*. Esri.
<https://www.esri.com/en-us/arcgis/products/arcgis-hub/overview>
- Markel, M., & Selber, S. A. (2018). *Practical strategies for technical communication* (3rd ed.). Bedford/St. Martin's.
- Montgomery, L. (2020). *Understanding learning styles in workplace training*. *Journal of Workplace Learning*, 32(5), 321–334. <https://doi.org/10.1108/JWL-11-2019-0138>
- Pikes Peak Outdoor Recreation Alliance. (2025). *Outdoor Pikes Peak Initiative (OPPI) Data Hub*.
<https://oppi-ges-gislab.hub.arcgis.com/>
- Powder, A. (2021). *Adapting training methods for diverse learning styles*. *International Journal of Training and Development*, 25(3), 250–263.
- Selber, S. A., & Johnson-Sheehan, R. (2019). *Technical communication today* (6th ed.). Pearson Education.
- U.S. Department of Health and Human Services. (2023). *Section 508 and accessibility standards*.
<https://www.section508.gov/manage/laws-and-policies/>
- World Wide Web Consortium (W3C). (2023). *Web Content Accessibility Guidelines (WCAG) 2.1*.
<https://www.w3.org/WAI/standards-guidelines/wcag/>

Appendices

Appendix A: Market Research Data

Includes notes and summaries from UX market studies and academic sources on web usability, information architecture, accessibility, and user-centered design best practices. These findings guided design and content recommendations for the Recreation Data page.

Appendix B: Persona – Jordan Alvarez

A detailed persona representing a Parks and Trails Coordinator who uses the OPPI Data Hub to find reliable recreation data for reports and planning. The persona identifies goals, frustrations, motivations, and accessibility needs.

Appendix C: Journey Map – Recreation Data Page Flow

A visual map showing Jordan's steps, thoughts, emotions, and pain points while navigating the Recreation Data page. It highlights where users feel confused and where improvements can increase confidence and satisfaction.

Appendix D: Usability Testing Protocol

Outlines the testing plan, including participant instructions, tasks, scripts, and pre- and post-test questions. It describes how user behaviors and comments were recorded and analyzed to find usability issues.

Appendix E: Usability Test Results and Participant Data

Summarizes participant demographics, key performance results, task completion rates, and quotes from user feedback. Includes timing data and success rates across all testing sessions.

Appendix F: Supplementary Notes and Visuals

Contains sketches, prototype layout concepts, and screenshots of the Recreation Data page that support the analysis and recommendations in the main report. These visuals illustrate proposed organization, summaries, and accessibility updates.