



# Agenda Bill

City Council Special Meeting & Regular Study Session - 25 Mar 2019

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**Department**

Administrative Services

**Staff Contact**

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**Agenda Bill Title**

Update on the Website Improvement Project.

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**Summary**

The City of Burien launched a new website in May 2018. While response to the new website had been mostly positive, there were enough concerns expressed by residents and other stakeholders that the City made the decision to hire an outside firm to test the usability and accessibility of the new website. This presentation will discuss the findings from the usability and accessibility testing project, and outline the actions City staff will be taking to improve the website based on those findings.

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**Options**

N/A

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**Advisory Board Recommendation**

N/A

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**Administrative Recommendation**

N/A

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**Suggested Motion**

N/A

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**Fiscal Impact**

FUND: N/A

COST OF PROPOSAL: N/A

AMOUNT BUDGETED: N/A

ADDITIONAL REQUIRED: N/A

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**Attachments**

[Action Plan from Website Usability Testing Project](#)

[City of Burien Data Infrastructure Strategy Brief](#)

[Burien Usability Report Parallel Public Works](#)

[Website Action Plan Presentation](#)

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*Updated March 21, 2019*

## Background

In May 2018, the City of Burien launched a new website. The website's information architecture (navigation and organization), content, and design received a major overhaul. The website also moved from the CivicPlus content management system to CivicLive's Presence content management system. The City has also launched several new third-party websites in the past nine months, including: MyCivicApps for issue reporting, iCompass to manage Council and Commission communications, PetTrack to manage pet licensing, and PerfectMind to manage registration for recreation classes and programs as well as facility rentals.

The City continues to use several other third-party websites to share important information with residents as well as provide critical services. These third-party sites include: CrimeReports for crime reports data, GIS for map data, ApplicantPro for job applications, Codepublishing.com for the Burien Municipal Code, and MyBuildingPermit.com for permits. An effort was made before the launch of the new website to update the design interface of these third-party systems to match the look and feel of the new Burien website. As these proprietary systems are owned by external organizations, the City's ability to control their design and functionality is limited.

While response to the new website has been mostly positive, there were enough concerns expressed by residents and other stakeholders that the City made the decision to hire an outside firm to test the usability and accessibility of the new website. Parallel Public Works won the contract through a competitive RFP process. They eight separate usability and accessibility testing methodologies that combined analysis of quantitative data from our website with qualitative analysis through testing with real users. They presented their final report and recommendations to City staff on February 27, 2019.

This document outlines the Communications Division's plan to act on the report's recommendations.

## Findings

The consultant found a number of issues that will need to be addressed to improve both the [usability](#) and [accessibility](#) of the website. The findings can be broken up into two areas of responsibility (CivicLive and City staff) and six broad categories of tasks: content design and strategy, third-party websites and services, navigation, performance, and accessibility. The full set of findings can be found at: [Burienwa.gov Usability Report](#).

## Scope

The website improvement project will take steps to make corrections to the website that can be accomplished internally, make recommendations to CivicLive for corrections that should be within the scope of our contract, and make recommendations for tasks that need more resources to complete.

## Stakeholders

- Cathy Schrock (Admin Services)
- Emily Inlow-Hood & Rio Fernandes (Communications)
- Fernando Llamas Jr. (IS)
- Leadership Team (all departments)



- Communications Committee (all departments)

## Timeline

Action	Deadline	Status
Compile notes	March 8	Complete
Develop action plan	March 13	Complete
Present high-level results and action plan to Leadership Team	March 19	Complete
Present action plan to Communications Committee	March 20	Complete
Present action plan to Council	March 25	In progress
Deliver CivicLive recommendations	April 5	Not Started
Implement internal action plan	August 1	Not Started

## Action Steps

The following action steps are divided into categories.

### Content Strategy

Action steps in this category relate to how content is displayed, organized, and implemented across the website. There will be remedial steps taken to fix broken or poorly organized content, and recommendations for future content development so that issues don't arise again.

Action Step	Responsible	Deadline
Audit and fix broken links	Communications	June 1
Make all links consistent/clear through a manual audit. This includes reviewing associated link text, icons (quick links), and other ways links are displayed throughout the site. A standard pattern will be recommended.	Communications	June 1
Examine how contact info is displayed and make it more consistent	Communications	June 1
Use descriptive headers	Communications	June 1
Update homepage with relevant information for residents	Communications	June 1

## WEBSITE IMPROVEMENT ACTION PLAN



Organize most popular content for easier access	Communications	July 1
Examine and make changes to homepage/top level landing pages. Make layout consistent.	Communications	July 1
Review and make changes to City Council information. Re-evaluate what lives on burienwa.gov vs. iCompass Meeting Center	Communications	July 1
Prioritize review and making changes to the following areas of the website: <ul style="list-style-type: none"> <li>• PaRCS, particularly around registration</li> <li>• City Council</li> <li>• Permits</li> </ul>	Communications	July 1
Audit and edit content for <a href="#">plain language principles</a> , reading level, and length.	Communications	October 1
Images: Remove unnecessary images, optimize images (image selection and image file type), and reduce image file size	Communications	October 1

## Navigation

Navigation refers to both how information is organized on the website as well as how navigational elements are displayed.

Action Step	Responsible	Deadline
Develop criteria for left hand navigation	Communications	June 1
Flatten hierarchy and decrease the number of overall pages where content is stored	Communications	July 1
Fix side menu display, including: <ul style="list-style-type: none"> <li>- distinguishing parent and child pages through indents and different font weight</li> <li>- only displaying carats when a child page is present</li> <li>- only displaying pages in the child-parent relationship</li> </ul>	CivicLive	TBD
Streamline and establish clearer pathways to popular pages, making sure terminology is consistent	Communications	July 1



Improve search function	CivicLive	TBD
Remove duplicate landing page/messy URLs (CivicLive)	CivicLive	TBD
Remove extra underscores from URLs	Communications	August 1

## 3<sup>rd</sup> Party Services

The City has X software as service (SAAS) contracts to establish online communication and service for Burien constituents. The action steps in this section of the project plan refer to ways to make those services easier to find and understand on the City’s website.

Action Step	Responsible	Deadline
Remove embeds (i-frames) and replace with distinct external link treatment (such as image button, etc.)	Communications	June 1

## Accessibility

Websites that follow [universal design standards](#) are able to be used by all people, including those living with disabilities. The City of Burien is required by [federal law](#) to be accessible to people with disabilities. Parallel Public Work’s found several major accessibility issues with the burienwa.gov website. The website was audited using a suite of accessibility scanning tools. Burienwa.gov received a score of 68 out of 100 according to Google’s Lighthouse suite of tools (a score of much higher is recommended). Fortunately, they were able to recommend several fixes to bring our website up to a higher standard.

Action Step	Responsible	Deadline
Fix aria implementation	CivicLive	TBD
Ensure that all form control elements are labeled clearly including the search button in header	CivicLive	TBD
Announce item list location	CivicLive	TBD
Visually demonstrate, with clarity, the focus of all link elements	CivicLive	TBD
Use only one <h1> per page	CivicLive	TBD
Clarify use of icon semantics	CivicLive	TBD
Improve search to provide facets and other sorting tools	CivicLive	TBD



## Performance

Site performance refers to the speed of a website (page load time) and the reliability of forms and other transactional elements. Page load speed and site performance for burienwa.gov is very low, meaning pages take a significantly long time to load. Performance on mobile users is particularly poor. Action steps to improve site performance overlap other action step categories.

Action Step	Responsible	Deadline
Reduced server response time (TTFB)	CivicLive	TBD
Reform cache policy	CivicLive	TBD
Avoid enormous network payloads	CivicLive	TBD
Enhance mobile strategy, limit use of multiple menus, remove unnecessary images, reduce image size, avoid scrolling iFrames	Communications	July 1
Defer offscreen images to load only when required	CivicLive	TBD
Eliminate render-blocking resources	CivicLive	TBD
Avoid an excessive DOM size	CivicLive	TBD

## Governance

Digital governance is an organization's structure of staff and the technical systems, policies, and procedures to maintain and manage a website, social media channels, and other digital communications.

Guiding principles:

1. **Review and vetting** helps ensure content is accurate and that we maintain style, brand, and accessibility standards.
2. **Department accountability** keeps content fresh and up-to-date.
3. **Advance planning** helps ensure content strategy, policies, and standards are well executed.

There are several issues that were identified by the consultants that could be addressed with tighter governance of the website. In order to ensure quality and accuracy moving forward, there needs to be a documented governance system attached to people's job descriptions, an established content strategy, and process improvement, including a queuing system for website update requests similar to IS's help ticket system. The distributed content management system, which has been in place since 2008, should also be re-examined. Specific strategies will be rolled out by July 1.



## Decisions

Log of decisions made in this project.

Decision	Category	Decision party
Move away from embedding 3rd party programs altogether	3 <sup>rd</sup> Party Websites	Comms/IS
Have the left hand menu disappear after going down 3 levels (or the last level of a page hierarchy), leaving people with the breadcrumbs as a guide.	Navigation	Comms/IS

## More information

- [Data and Communications Infrastructure Strategy Brief](#)
- [Burienwa.gov Usability Report](#)

## CivicLive Tasks

### Navigation/Design

- Fix carat display (CivicLive)
- Improve search function (CivicLive)
- Remove duplicate landing page/messy URLs (CivicLive) – currently there are three formats
- Create page template with no hero image

### Accessibility

- Fix aria implementation (CivicLive)
- Ensure that all form control elements are labeled clearly including the search button in header (CivicLive)
- Announce item list location (CivicLive)
- Visually demonstrate, with clarity, the focus of all link elements (CivicLive)
- Use only one <h1> per page (CivicLive)
- Describe I-frame content (CivicLive + Comm) – tentative – we may kill iframes
- Ensure that all interactive elements are accessible by tabbing
- All buttons should be clickable using ENTER and SPACE
- SPACE bar should not scroll screen when a button is focused

### Performance

- Reduced server response time (TTFB) (CivicLive)
- Reform cache policy (CivicLive)
- Avoid enormous network payloads (CivicLive)
- Avoid an excessive DOM size
- Defer offscreen images to load only when required
- Eliminate render-blocking resources
- Can we move site to a more localized data center? Are you increasing compute resources to accommodate new websites and customers?

AUGUST 2017

CITY OF BURIEN

# DATA AND COMMUNICATIONS INFRASTRUCTURE STRATEGY BRIEF



**Parallel**  
PUBLIC WORKS

# DATA AND COMMUNICATIONS INFRASTRUCTURE STRATEGY BRIEF

A data and communication infrastructure is a digital infrastructure that promotes information sharing and consumption. Like other infrastructures (transportation networks, water, and sewer) a data infrastructure is essential to the operation of society as it supports many of the services and facilities necessary for an economy to function and acts as a vital link between the public and their government.

This brief provides a high-level guide for the development of the City of Burien's data and communication infrastructure over the next 5-7 years as it specifically applies to communication, public engagement, and delivery of services online. Along with providing more efficient access to services, a strong and accessible data and communication infrastructure, can build confidence and trust that the City of Burien is working in partnership with the public to build a stronger community.

## WHERE WE ARE NOW

Within the City of Burien there are many different voices, internal systems, and departmental needs that may not be moving towards a united goal. The City of Burien's main web portal is currently being replaced to improve access to services and information. At the same time, many key internal digital systems are in the process of being upgraded or replaced. The current ecosystem is improving but is somewhat fractured.

## WHERE WE WANT TO GO

We want to create a data and communication infrastructure that is flexible, based on open standards, communicates with a single voice, and facilitates public engagement via a modern user-centered interface.

## HOW DO WE GET THERE?

Below are a set of principles to guide future data and communication infrastructure decisions, including the development of the City of Burien's new web portal.

# 1 MAKE PUBLICLY FACING INTERFACES USER-CENTRIC

All digital applications built for the public should be structured around their needs. Information should be organized by user group (e.g. Residents, Business Owners, Visitors) instead of by city department (e.g. Legal, Public Works, Engineering).

User interfaces should be consistent regardless of the internal department that is responsible for the service. This means consolidating systems so that common functions like payment processing provide the same user experience.

Based on our review of the City of Burien's current digital ecosystem, we have identified the following key public service needs that are addressed or supported online.

Payment processing	Class scheduling
Facility rentals	Electronic document management
Emergency reporting	General support/question
Crime reporting	Event calendar
Latest news updates (blog)	Social media
Search	Project reporting
Service requests	Permitting
Public meeting casting	Council information
Code review	Job applications
GIS and data access	Pet licensing
Public comment	Code violation reporting
Business licenses	Access to social/human services
Community information	

A visual representation of these services is available in figure 1.

## 2 LEVERAGE COLLECTION OF SWAPPABLE THIRD-PARTY SERVICES

Concepts like zero infrastructure, software-as-a-service, and managed services dominate the digital ecosystem and market. While municipalities have unique security and accessibility requirements, cities should take full advantage of the variety of service options available versus purchasing and deploying monolithic software systems that try to do everything at once. While monolithic systems are appealing in their promise of simplicity, they do not do everything well and are often difficult to migrate away, leaving a city locked into a brittle system that is often expensive to maintain.

The challenge with using multiple services is the user experience can be fractured as users move between services to perform simple tasks like processing a payment or submitting a service request.

To mitigate against this, the City of Burien should develop a standard API format policy that reflects industry best practices. Third party services should be selected that can support the chosen format(s) to facilitate the seamless integration of content into the City website.

In addition, it would be beneficial to create an API endpoint for the city's main public portal and select third-party vendors who are able to post data directly to city applications so that the city can control the look, accessibility, and overall user experience regardless of the nature of the data.

## 3 CREATE A CONSISTENT USER EXPERIENCE WITH A PATTERN LIBRARY

If a digital application is created or sponsored by the city all efforts should be focused on creating a single, united user experience that avoids UX switching (moving to a new site with a new navigation or a new look and feel) as a matter of policy.

This can be achieved by developing a municipal design pattern library. Related to the City of Burien's brand guideline, a design pattern library will define a set of user interactions that can be used across interfaces and provides code examples to implement them. These patterns can include navigation states, animation styles, colors, fonts, form elements, submission verification pages, alerts, and other types of objects common to all digital interaction. With a design pattern developed, future development of a city's main site or any other application developed for any type of device will have a similar look and feel that enforces a city's brand online and overall professionalism.

## 4 FOCUS ON SELF-SERVICE

While not all people have access to the internet, digital applications for the public should focus on providing tools that help people find information, or complete tasks on their own without calling city employees. This will free up staff time to serve those who do need to call or communicate directly with the city. A clear information architecture combined with quick links that are hyper-focused on common tasks will assist this.

A “search-first” design approach may also help users find what they are looking for directly and limit staff calls. When possible, search should be integrated across all city departments so that a search in one location will return all possible results in a single and easily filterable interface.

If a member of the public is not able to complete their task, a clear pathway for to submit a question should be provided. Questions submitted in this manner should be monitored to ensure staff can follow up either via email, chat, or by phone. Customer support systems commonly used by software companies and other digital services could provide an efficient means to manage “support” questions from the public as they both provide automated responses and escalation processes.

## 5 INCREASE PUBLIC ENGAGEMENT

Digital tools and application should be built to facilitate the level of engagement and dialogue between the public and their government that is required for a healthy, modern democracy. Considerations include native language support, adherence to accessibility requirements, clear information on public meetings and volunteer opportunities, and open channels for the public to directly communicate with elected officials.

Any tools built to aid public commenting and involvement need to be supported by staff before being deployed. Engagement is a two-way dialogue between the public and their government and channels of communication can only be opened if they can be effectively monitored and responded to in a timely manner.

## 6 OPEN SOURCE AND OPEN DATA

Cities run on data and the data collected, created, and stored by a city government is owned by the public. This data needs to be accessible within the limits of existing local, state, and federal laws. An effort should be made to not only open all electronically stored data for consumption but also to contextualize that data into data stories that have meaning for constituencies.

Data in this context refers to any stored data a city may hold. This can include GIS information, census information, budget information, police and fire response times, and other types. “Openness” of that data can be understood in relationship to 10 principles defined in part by the Sunlight Foundation, a nonpartisan nonprofit that advocates for open government globally and uses technology to make government more accountable to all. These principles as defined by the Sunlight Foundation are cited below.

### **COMPLETENESS**

Datasets released by the government should be as complete as possible, reflecting the entirety of what is recorded about a particular subject. All raw information from a dataset should be released to the public, except to the extent necessary to comply with federal law regarding the release of personally identifiable information. Metadata that defines and explains the raw data should be included as well, along with formulas and explanations for how derived data was calculated. Doing so will permit users to understand the scope of information available and examine each data item at the greatest possible level of detail.

### **PRIMACY**

Datasets released by the government should be primary source data. This includes the original information collected by the government, details on how the data was collected and the original source documents recording the collection of the data. Public dissemination will allow users to verify that information was collected properly and recorded accurately.

### **TIMELINESS**

Datasets released by the government should be available to the public in a timely fashion. Whenever feasible, information collected by the government should be released as quickly as it is gathered and collected. Priority should be given to data whose utility is time sensitive. Real-time information updates would maximize the utility the public can obtain from this information.

### **EASE OF PHYSICAL AND ELECTRONIC ACCESS**

Datasets released by the government should be as accessible as possible, with accessibility defined as the ease with which information can be obtained, whether through physical or electronic means. Barriers to physical access include requirements to visit a particular office in person or requirements to comply with particular procedures (such as completing forms or submitting FOIA requests). Barriers to automated electronic access include making data accessible only via submitted forms or systems that require browser-oriented technologies (e.g., Flash, Javascript, cookies or Java applets). By contrast, providing an interface for users to download all of the information stored in a database at once (known as “bulk” access) and the means to make specific calls for

data through an Application Programming Interface (API) make data much more readily accessible. (An aspect of this is “findability,” which is the ability to easily locate and download content.)

### **MACHINE READABILITY**

Machines can handle certain kinds of inputs much better than others. For example, handwritten notes on paper are very difficult for machines to process. Scanning text via Optical Character Recognition (OCR) results in many matching and formatting errors. Information shared in the widely-used PDF format, for example, is very difficult for machines to parse. Thus, information should be stored in widely-used file formats that easily lend themselves to machine processing. (When other factors necessitate the use of difficult-to-parse formats, data should also be available in machine-friendly formats.) These files should be accompanied by documentation related to the format and how to use it in relation to the data.

### **NON-DISCRIMINATION**

“Non-discrimination” refers to who can access data and how they must do so. Barriers to use of data can include registration or membership requirements. Another barrier is the uses of “walled garden,” which is when only some applications are allowed access to data. At its broadest, non-discriminatory access to data means that any person can access the data at any time without having to identify him/herself or provide any justification for doing so.

### **USE OF COMMONLY OWNED STANDARDS**

Commonly owned (or “open”) standards refers to who owns the format in which data is stored. For example, if only one company manufactures the program that can read a file where data is stored, access to that information is dependent upon use of the company’s processing program. Sometimes that program is unavailable to the public at any cost, or is available, but for a fee. For example, Microsoft Excel is a fairly commonly-used spreadsheet program which costs money to use. Freely available alternative formats often exist by which stored data can be accessed without the need for a software license. Removing this cost makes the data available to a wider pool of potential users.

### **LICENSING**

The imposition of “Terms of Service,” attribution requirements, restrictions on dissemination and so on acts as barriers to public use of data. Maximal openness includes clearly labeling public information as a work of the government and available without restrictions on use as part of the public domain.

### **PERMANENCE**

The capability of finding information over time is referred to as permanence. Information released by the government online should be sticky: It should be available online in

archives in perpetuity. Often times, information is updated, changed or removed without any indication that an alteration has been made. Or, it is made available as a stream of data, but not archived anywhere. For best use by the public, information made available online should remain online, with appropriate version-tracking and archiving over time.

### **USAGE COSTS**

One of the greatest barriers to access to ostensibly publicly-available information is the cost imposed on the public for access—even when the cost is de minimus. Governments use a number of bases for charging the public for access to their own documents: the costs of creating the information; a cost-recovery basis (cost to produce the information divided by the expected number of purchasers); the cost to retrieve information; a per page or per inquiry cost; processing cost; the cost of duplication etc.

It is important to understand that opening data is not enough. A city's data users need to be identified and relevant data stories need to be created that speak to their interest. These stories should be presented in a clear manner whether that be in the form of an infographic, or via targeted applications that allow users to explore specific data sets. While all data needs to be available to the public, it is the responsibility of the city to contextualize that data in meaningful ways.

## **7 DEVELOP CONTENT THAT IS SPECIFIC TO YOUR VISION STATEMENT AND BRAND**

Burien's vision statement describes the city as "a vibrant and creative community where residents embrace diversity, celebrate arts and culture, promote vitality and treasure the environment."

Content created and presented on all digital applications sponsored by the city should reflect this statement as well as the key messages outlined in the City's brand guide. This includes all copy and imagery. The city's vision statement and brand should also be considered when developing any information architecture for digital applications so that content and functionality can be prioritized appropriately.

Content should be clear, concise, and focused on communicating the image of a city that is creative, diverse, rich in environmental beauty, and defined by a strong sense of community identity. Generic content that can't be placed in the City of Burien should be avoided.

## 8 CONTENT POLICIES

Content produced across all city sponsored digital applications should have one voice that supports the city's vision. Along with visual brand guidelines and a design pattern library, a content style guide should be developed to help all content owners to write with a consistent and appropriate voice.

Visual guidelines should also be expanded to include visual infographic guidelines to help maintain consistency across all visual communications. Third-party infographic systems like infogr.am can help all content contributors easily develop compelling, data-based, infographics to help to communicate to constituents.

All content should be accessible across all devices and be reviewed regularly to ensure that all information presented remains accurate and current. Editorial policies should include automated reminders to content authors to review content on a regular basis to help enforce authorship accountability.

## 9 EDITORIAL WORKFLOW

To ensure that all content being produced by city employees is accurate and conforms to content and brand policies, a flexible, tier-based editorial workflow should be designed and implemented. A tier-based editorial workflow identifies levels of approval in which multiple individuals can review and publish content. This structure helps avoid bottlenecks that can occur if a single editor is responsible for all content being published.

## 10 QUALITY ASSURANCE AND AUTOMATED MONITORING

Digital content across all city sponsored applications needs to be maintained and checked for accuracy on a regular basis. These checks should include accessibility reviews, link checking, content policies adherence, and sensitive information checks to find and delete any internal documents and information that has been inadvertently published.

All publicly accessible applications should also be regularly screened for any security breaches as well as downtime.

On-going quality assurance and site monitoring requires adequate staffing to be effective. Tools like Siteimprove and Detectify are available to help smaller teams multiply their force in this arena and should be considered alongside dedicated staff commitments.

## 11 CHANGE MANAGEMENT

To maintain the quality and integrity of the City of Burien's data and communications infrastructure, and to ensure that it continues to best serve the public, any system updates, improvements, or additions to the ecosystem should be reviewed using standardized methods and procedures by city information technology staff. Viewing all changes within the context of a holistic networked system will help facilitate the onboarding of new technologies and balance the benefits of new approaches, vendors, and systems with the potential detrimental impacts of changes.

## CONCLUSION AND MEASURES OF SUCCESS

The strategies described above are intended to improve the City of Burien's data and communications infrastructure. A newly designed transportation infrastructure is not deemed successful unless it improves mobility and a region's economic growth. What should a newly designed data and communications infrastructure improve? Below are a few key metrics.

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### BUDGET

An improved data and communication infrastructure should be able to achieve more with less than the current systems in place. A baseline budget should be identified that looks at all costs currently connected to the flow of information to and from the public. This includes staff time needed to address public concerns, current subscriptions and costs connected to third-party systems, content creation costs, hosting equipment costs, and other budget line items across all city departments related to public communications. This baseline budget should then be revisited biannually to verify that the new data and communication infrastructure is more efficient.

### PUBLIC ENGAGEMENT

The public should be able to increase their level of engagement with their government using an improved data and communications infrastructure. With more open data available to consume and understand, clearly written content, and easier methods to communicate with staff and elected officials, the amount of constructive two-way dialogue with the public should increase. This can be measured in the volume of requests and responses between the public and staff.

### THE BUILDING OF A CIVIC NETWORK

Ultimately, the goal of a data and communications infrastructure should be to increase the public's direct involvement in the democratic process through higher voting participation. While it may be difficult to draw a direct correlation between a data and communication infrastructure and voting, it is important to view this work as an effort to shrink the gap between the public and their government by leveraging many of the same tools and interfaces that connect people to their own professional and social networks.

A robust and vibrant data and communications infrastructure can be the foundation for a new civic network, a collection of connected people that are not only associated by place, in their environment, but also digitally. While anchored by a physical network of roads, parks, nature, and personal property, a civic network is flexible, constantly expanding and contracting with the people connected to it.

The City of Burien has a central role in strengthening this civic network by providing key data infrastructure services and tools, opening data access, creating content that is relevant, and facilitating the productive dialogue between the public, staff, and elected officials. Building a strong civic network upon a city's data and communications infrastructure will improve a city's overall sense of community.



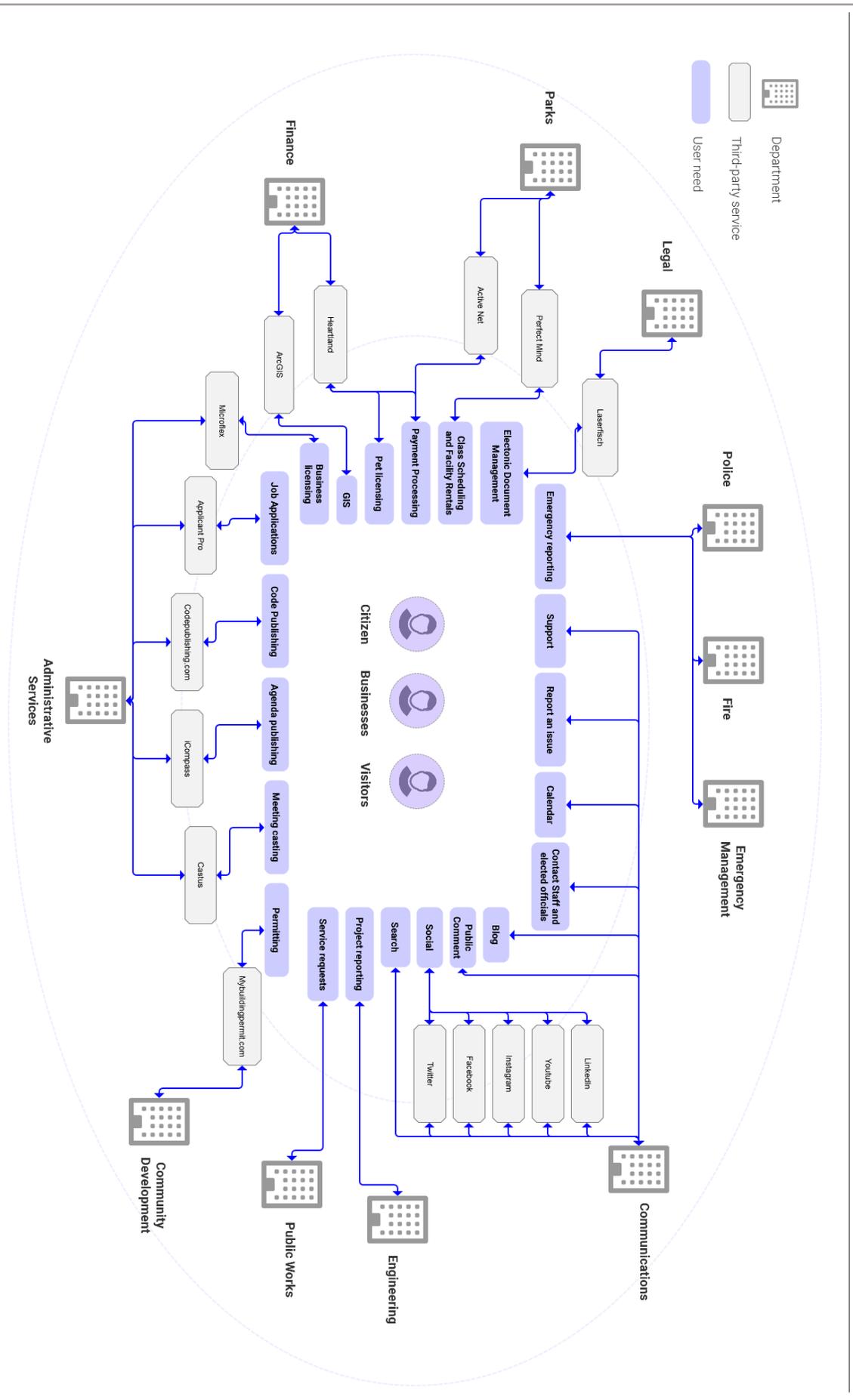


Figure 1: High-level overview of the City of Burien's Digital Ecosystem

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Attachments:

- A: Onsite Survey Results
- B: Heatmap Analysis Results
- C: Google Analytics
- D: Stakeholder Survey Questions and Results
- E: Usability Tasks and Results

## Project Overview

The City of Burien (CoB) website at burienwa.gov was developed and launched in the Spring of 2018. The site launch was the result of many months of work by the City of Burien and the City's web development contractor, CivicLive.

To evaluate the results of this effort and to identify any areas that need improvement, the City of Burien contracted Parallel Public Works to analyze the site's usability, accessibility, and performance of the new website.

In coordination with the City of Burien, Parallel Public Works conducted a series of usability tests and data collection in order to assess the clarity and functionality of burienwa.gov. From December 2018 through January 2019, we collected and analyzed google analytics data, general consumer surveys, targeted user surveys, and real user interaction. Additionally, we conducted an analysis of page load speed and website performance and completed an accessibility review of select pages.

Through this work five main pain points for users emerged:

- ✓ Third-party services are integrated poorly and/or not service the user's needs
- ✓ Site navigation is not clear and overly complicated
- ✓ Content design/strategy is not consistent and overly complicated
- ✓ Site performance, especially for mobile users, is poor
- ✓ Compliance with WCAG 2.0 levels (A, AA) is lacking

As a point of reference while reviewing this report, third-party websites and services refer to programs such as iCompass for City Council information, PerfectMind for Parks, Recreation, and Cultural Services classes and registration, Crime Reports for crime statistics, and more. These websites are separate websites/databases utilized by various city departments. Users are either redirected to these separate websites, or these sites may be displayed as embedded iframes throughout burienwa.gov. Please note that full scale evaluation of third-party websites and services are not within the scope of this usability evaluation of burienwa.gov. Throughout the report there is mention paid to the interaction of these third-party websites as they relate to the main City website at burienwa.gov and their impact on site users.

Below is a summary analysis of the data collected, followed by our recommendations for addressing issues raised during assessment.

## Section I. General Consumer Survey

We installed a short six question survey on burienwa.gov to help gauge behavior and responses from anonymous site users. The survey was designed as a pop survey that would appear randomly during a user's session on the website. We asked the following questions:

1. What brought you to <https://www.burienwa.gov/> today?
2. Did you find what you were looking for?
3. Did it take you more or less time than you expected to find what you were looking for?
4. How often do you visit <https://www.burienwa.gov/>?
5. Please rate your experience on <https://burienwa.gov/>.
6. Is there anything that could improve your experience today?

Over a month-long period, we received a total of 109 responses, 52 as complete submissions and 57 as partial submissions.

Full documentation of these responses are included in Attachment A.

### **Key Respondent Quotes**

*"Looks great! How often is the home page content updated? I'd come back more often if I knew there would be new information right in front of me when I arrive at the website. :) Thanks!"*

*"More local news and less fluff"*

*"The site was slow to respond and I never got to finish my registration. I will try again."*

*"It's hard to find the link to register for burien parks rec events; I always find it hard to find this link from the city of burien landing page."*

*"1. Post different home page photos, really tired of those. 2. Frustrating to find planning information. There is no landing page for that department."*

*"Way too confusing to use"*

*"Fix broken links".*

*"Info was easy to find! Thank you!"*

## **A. Findings**

While reasons for visiting burienwa.gov varied greatly, a few notable top responses include careers, taxes, crime reports, and current events, news, and activities. Frequency of website visits varied among respondents with 28.4% of users rarely visiting the website, 25.4% reporting average use of the website and only 3.0% identifying as daily website users. Frequent users of the site generally trend toward an older demographic of 65+ years of age.

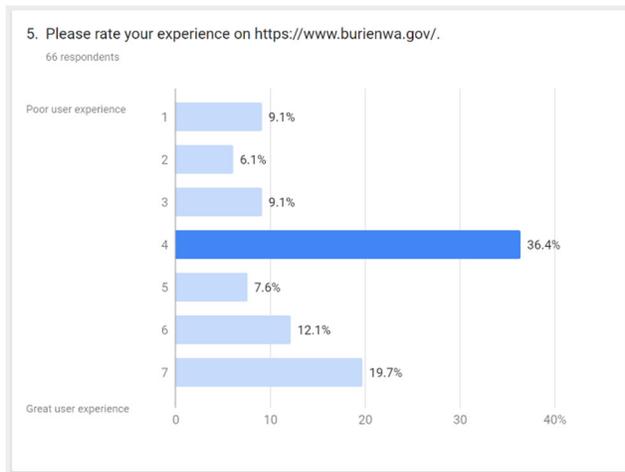


Figure 1 - Onsite survey results: rating user experience

When asked if they found what they were looking for on the site, 50.4% respondents confirmed that they found the information they were seeking in relatively less time than they expected to find it. On the other hand, 49.4% of respondents indicated that they did not find what they were looking for and it took more time than expected. On a scale of 1 (poor user experience) to 7 (great user experience), most users selected 4 and 7. While users reported an average to great user experience, 24.3% reported relatively low ratings for user experience (between 1 - 3) with the trend of negative ratings from the male demographic.

Voluntary comments provided a combination of compliments on the new and updated website, as well as suggestions for improvement. Some suggestions included making information more accessible from the homepage, including more relevant and up to date information, and updating broken links.

## B. Recommendations

- ✓ Strategically position the following popular content/features on the homepage for ease of access and to respond to what many site users are searching for when visiting.
  - Careers
  - Crime Reports
  - City events, news, and announcements
  - Parks, Recreation and Cultural Services classes and registration.
- ✓ Update the homepage frequently with relevant information for residents.
- ✓ Audit and update any broken website links.

The City of Burien website serves as a crucial engagement and vast informational resource for many people with a large variety of interests. Fortunately, the data suggests that while individuals access burienwa.gov for several reasons, there are few topics that are accessed frequently by a large number of users. These topics include; job opportunities, city news and events, classes and registration and should be made readily accessible on the website, especially on the homepage. Despite users still adjusting to the new website, impressions were generally positive!

## Section II. Site Analytics

### A. Heatmap Analysis Findings

Between December 2018 and January 2019, we ran a “heat map” analysis at burienwa.gov that recorded where people clicked on the site. This information presented a clear picture of how the site is being used. Visual reports of this testing are included in Attachment B.

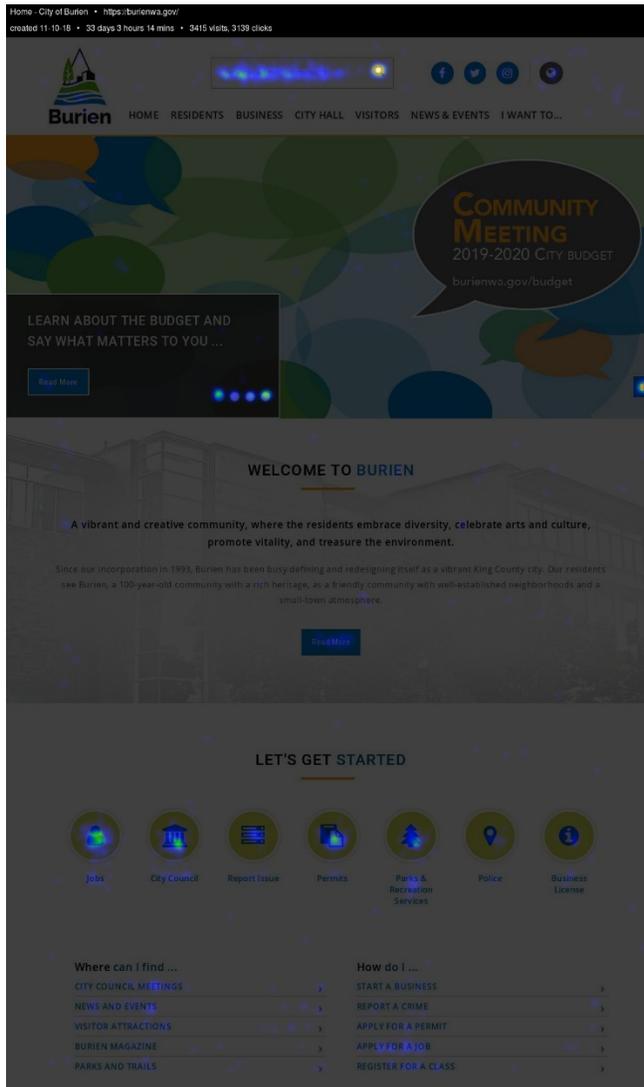


Figure 2 - Heatmap data from home page

Data showed that search is being used frequently on the homepage which insinuates that navigation pathways are unclear, and search is the most direct path to content. Throughout the site users are clicking the “>” caret next to items listed in the left-hand menu. The caret symbol is a visual signal that there is more information to be seen upon clicking. However, for many of the left menu items, there is no secondary menu items displayed by clicking the “>” caret.

Similarly, users often click featured banner images anticipating them to link to more information. This mounting uncertainty for users is pushed further as landing page content across the site lacks consistency in basic structure and purpose. Specifically, active text links are used inconsistently with some displayed using bullet points and others as linkable headers that link to pages of content or to resources. This could explain users attempts to click on other elements of the page that do not link content, like banner images. The lack of clarity and consistency across the basic foundations of webpages makes information difficult to quickly and easily locate on the page and increases a sense of uncertainty for users.

Heatmap data also revealed some friction with third party websites such Crime Reports, located on the Police page. Many users seek out crime statistic information and when they access Crime Reports, there is no data available for the City of Burien.

Additionally, links are not always clear or they are misleading. For example, in the Staff Directory there is a “more” button with additional information that displays once it has been clicked.

In other areas, text such as contact numbers use the same color that links are displayed but the text itself is not a link. This leads users to click on elements that are not meant to be interactive.

It is also noted that there are many links to internal web pages (pages within burienwa.gov) that consistently open in new tabs causing difficulty with navigation over the length of a browsing session.

## B. Google Analytics Findings

We reviewed Google Analytics data over the last year, with a general focus on data trends between December 23, 2018 - January 23, 2019.

Over the review period, there were approximately 9500 users and 31,255 page views. Traffic trends indicate that organic search, (e.g. typing keywords into a search engine) and Facebook bring a significant number of users to the website. There was a notable rise in the number of retained users meaning people are coming back to the site regularly. While most users continue to access the website from a desktop computer, mobile traffic is significant at nearly 50%. A look at analytics over time show a spike in traffic to the website in June with continued growth through the summer. Traffic spiked in September and then steadily declined into Fall with the lowest use during the holiday season.

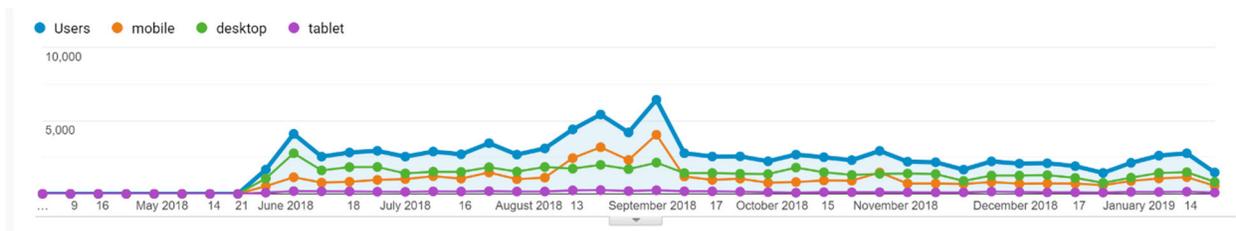


Figure 3 - Long term user trends from Google Analytics

The top landing pages (the first page viewed when a user visits a website) and exit pages (the last page accessed during a visit) include: Police, Parks Recreation & Cultural Services, Permit Center, and City Council.

A summary of the top search terms from google search that brought users to the site include: Senior Center, Police, Crime, and Seahurst banquet hall.

Finally, the most viewed pages that users spent the most time on, likely due to both popularity and slow page performance, include:

- Home
- Taxes
- Pet Licenses
- Report an issue
- Utilities
- Crime Reports & data
- Empty Bowls
- Map Library
- Apply for advisory board
- Request an inspection
- Permit Center
- Business license
- Registration
- City Council
- Seahurst Park
- Bids, RFPs, & RFQs
- Recreation guide
- Community Center
- Zoning
- Why work for Burien
- Animal care and control

A summary of this data is included in Attachment C.

### C. Analytics Recommendations

- ✓ Reconsider/refine left-hand navigation
- ✓ Continue cross posting between Facebook and burienwa.gov.
- ✓ Enhance the mobile experience by making responsive views more intuitive and designed to enhance efficiency.
- ✓ Update content strategy of:
  - Left hand menu navigation
  - Landing pages
  - Links
  - Linked/embedded third party websites/services
- ✓ Ensure that all pages have a unique and “clean” URL to improve SEO results, usability, and Analytics reporting.
- ✓ Position most popular content to be easily accessible on the homepage and individual landing pages.

The left-hand navigation menu displays many challenges for users as it is text heavy and lengthy with questionable functionality and purpose. Also, it is not clear where in the site architecture a page is as users navigate to content that is nested 3 or 4 levels down. Icon semantics are also not consistent. For example, it isn’t clear whether items have nested elements or not since icons such as “>” are used on menu items that do not have any additional elements contained within. Pairing the left-hand menu with landing pages creates a redundancy that only serves to further confuse the user experience since many of the links in the menu are repeated in the content of the landing page. It is recommended to review the content strategy for landing pages in coordination with the left-hand menu navigation.

Other content strategy considerations should include ensuring a consistent look, layout and purpose for landing pages, a review of page links to ensure they are clear to users, and an assessment of the functionality of all third-party websites (embedded or linked). Any embedded features or linked sites that are not working properly should be removed from the site until any issues have been resolved.

With mobile access to burienwa.gov on the rise, mobile view design and functionality should be refined to be more intuitive and enhance efficiency of site access and navigation on a small touch screen. For example, only include the main side sliding menu instead of including both the main menu and a mobile version of the side menu.

Good news is that the number of retained users on burienwa.gov is steadily growing in large part to organic search and Facebook traffic. Burienwa.gov should continue to be cross referenced on social media and efforts should be made to improve the sites SEO including cleaning up and simplifying site URLs and using key terms throughout website content. Currently, several pages are referenced by URLs with a string of variables which is not clear (<https://burienwa.gov/cms/One.aspx?portalId=11046019&pageId=11781348>). Also, these pages can also be referenced by a separate URL (<https://burienwa.gov/residents>). All pages should have one, canonical URL. All page should have a clean URL with understandable terms that represent the site's information architecture hierarchy.

To isolate where to focus attention on content and performance improvements, prioritize the pages that have the most page views and time on page, listed in section B.

### Section III. Stakeholder Survey

In order to address the needs and motivations of users of the current site, we collected feedback from key site users though an online survey. All survey questions were focused on three main areas: About the user, their current use of burienwa.gov, and an opportunity to submit voluntary comments.

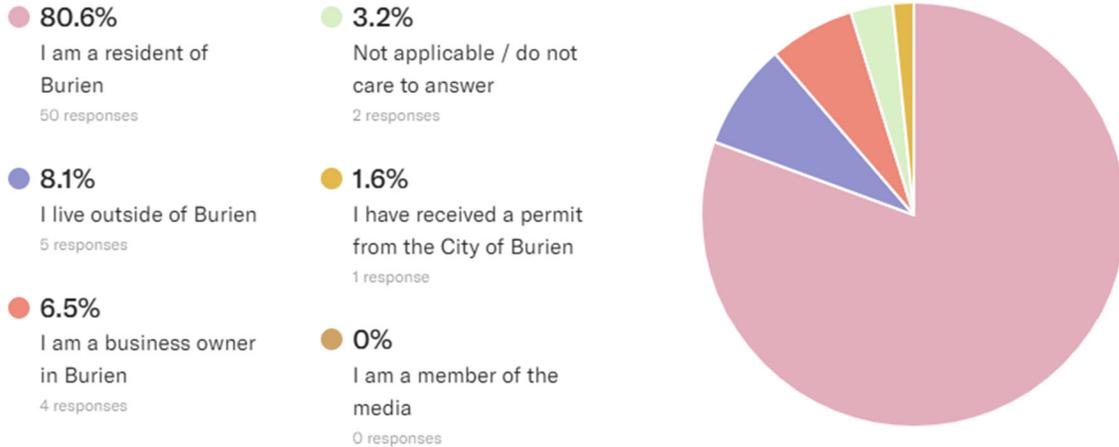
User groups targeted include:

- Residents
- Business Owners
- Permit Customers
- Members of the Media
- Individuals living outside of Burien

In coordination with CoB, we distributed the survey via a blog posting on the website, Facebook, and Twitter. We received 62 responses over a 4.5-week period.

Please indicate which BEST describes you:

Add a short description here to share the key thing you learned from this question



62 of 62 people responded

Figure 4 - Public survey respondent groups

45.9% of respondents reported accessing burienwa.gov quarterly (or a few times a year), 18% two times per month, 14.8% annually or semi-annually, 13.1% weekly, and 8.2% daily. Most users were English speakers (96.8%), who generally ranked their technological skill level as advanced and intermediate. Most respondents identified as residents of Burien, with five respondents identifying as living outside of Burien, four as business owners and one permit customer.

46% of survey respondents fell within the range of 26- 45 years of age, with 34% between the ages of 46 -64 and 20% age 65 and above. Zero survey respondents fell within the 19-25 or 13 - 18 age groups.

All survey data is included in Attachment D.

**Key Respondent Quotes**

Below are a few select quotes from respondents that we feel were illustrative of our findings and recommendations.

*"I tried to visit the crime statistics page for Burien (from the website), but when it got to the page it said there were "no incidents" of crime in Burien. ... Is this a deliberate attempt to hide information or is it poor web maintenance?"*

*"Easy to access and read/understand topics & outcomes from City Council meetings. The agendas & minutes are bulky and huge. It's very time consuming to stay informed".*

*"All Communication to the council should be made easily accessible in a timely manner. Many times I have attempted to stream the current council meeting and it is a nightmare going*

*through a million steps to find it. Same goes with attempting to view past meeting videos and review meeting minutes. A real lack of transparency"*

*"Council meeting agendas, notes, live links and recording links should be organized in one place by date, tagged and searchable by topic. Having parks and rec guide as a pdf and registration through a separate website is not user friendly. Fix the animal license form and enable email notifications that actually work."*

*"The site feels pretty nested - this morning, looking for classes, I had to hunt around the site - until I finally found them under the Parks & Rec booklet."*

*"Sometimes it seems like what is logical to the city on the website is not logical for users. It can be challenging to know where to go for some requests unless you know which dept is handling that service."*

*"It's not intuitive which makes it difficult for me to navigate."*

*"Tidier, cleaner layout. Easier navigation."*

*"I realize there is a LOT of information to be provided, organized and made accessible... but, the site is still cumbersome. Better in this new rendition than it had been. One does not find much City promotion on the web site: Tourist/Visitor information, highlights, events, etc. It's only a cursory listing*

*"Wow, great improvement! Beautiful website and I love it being responsive. Now it fits better on my laptop and my cell phone! Thank you for your work."*

*"Welcome first thing. Then Calendar. Needs to be reorganized"*

## **A. Findings**

The City of Burien recently redesigned their website at burienwa.gov to increase transparency through providing easy and intuitive access to information and enhance services and resource distribution to residents. Many users were pleased with the newly redesigned website and overall site improvements made during the redesign. While reception of the newly designed site was positive, users did experience frustration around accessing information most important to them. 41.3% of survey respondents indicated that they felt the City was unsuccessful/very unsuccessful in providing access to information about City activities and decisions (e.g. budgets, voting, etc.). This is important to note considering 81.2% of respondents indicated that City Council meeting and information as an important/very important expectation of a city website and 66.6% come to burienwa.gov for City Council meeting information and materials.

Most of the City of Burien's City Council information is maintained in iCompass, a third-party website that users are redirected to from burienwa.gov. In comparison, other users expressed issues with Crime Reports, an embedded third-party service/website that is connected to and maintained by separate private company. In both instances users expressed confusion about how to find information in these areas of the website.

Survey respondents provided several voluntary comments regarding navigation of the website. A number of users felt some information was not intuitive to locate. For example, locating registration and classes hosted by the Parks, Recreation and Cultural Services department is possible in three different ways from the main menu links: Programs & Services, Registration, Recreation Guide. Much of the same information is housed on three different pages, making the most efficient path unclear to users.

Residents, who made up 80.6% of survey respondents, indicated that the top three reasons they visit burienwa.gov include: City news and events (74%), Recreation classes and registration (58%), and Council meeting information and materials (66%). Users expressed a desire to have information such as the City events calendar more accessible and prominent on pages they visited most, like the homepage. Additionally, some users suggested including more local/breaking news on the homepage claiming that if there was more relevant, up-to-date information easily accessible, they would utilize the site more frequently. Others expressed a desire to have a cleaner, more simplistic layout to aid visual navigation content.

## **B. Recommendations**

- ✓ Audit and inventory of all third-party websites and assessment of functionality and how they are linked to users.
- ✓ Where possible, incorporate burienwa.gov design, layouts and content strategies with third-party websites.
- ✓ Clarify the information users will be accessing when clicking on a link to a third-party website/service.
- ✓ Assess and update information architecture pathways.
- ✓ Strategically position popular content for ease of reference and accessibility.

With most survey respondents desiring access to information largely housed in third-party websites, a complete usability and accessibility assessment of all the third-party embedded and linked websites is recommended to fully understand if there are barriers and challenges to accessing this information present.

Links to third-party services should also clearly communicate to a site user that she is leaving the main burienwa.gov site so that it is clearer what is being provided at the City's website and what is being provided by a different service or organization. Additionally, any services that are not currently working properly for the end user should be removed from the site until issues have been resolved.

Regarding navigation, burienwa.gov attempts to offer a variety of paths to information for users. While well intentioned, the number of paths to content has made navigation a tedious task for users at times. Users spend longer time than expected reading long lists of menus that also clutter internal pages with additional text. Users in these situations often get frustrated which can translate into frustration with the governance of the City and its data. The sites information architecture needs to be reviewed and refined for consistency and simplicity, where possible.

While much of the content provided on burienwa.gov is important to many different people for many different reasons, there are pieces of content that are popular among users and should be

made easily accessible from the homepage and landing pages. The overall content strategy of how information is laid out, linked, and listed should be examined for ease and simplicity so users can easily discern engagement points and important information.

## Section IV. Direct User Testing

Parallel conducted a series of task-based tests with real users. The users were given a series of tasks while their screen and time spent on the site was recorded as they narrated their experience and impressions of the site. Each user test varied in length of time with users generally taking 20 - 40 minutes to test the site.

Users tasks were combined into one test to get feedback across all user groups (residents, business owners, permit customers, and members of the media). We utilized two testing options lookback.io and formstack.com. Lookback.io is a screen sharing software that records the testers screen and verbal impressions of the site. We included an additional form via formstack.com, a form building and submission collection service, for testers who did not have access to the equipment needed (microphone and Google Chrome Browser) for the screen share software.

We requested feedback from 18 individuals. 8 users completed the test. One user submitted a written summary of her feedback and another utilized Formstack to submit her feedback in lieu of using lookback.io.

Overall, users enjoyed the updated look and feel of the new site. Some users had more experience with the website than others prior to testing, offering a solid variety in user experience. Below includes a summary of the test experiences received from testers including quotes from respondents, and a summary of findings of their thoughts and impressions of burienwa.gov followed by our recommendations.

### **Key Respondents Quotes**

- | *Re locating city council information: "This is tedious"*
- | *"Reorganize the menus, especially the 'I want to...' menu"*
- | *"(on the homepage) Put news and events above"*
- | *"Love the accordion style frames, maybe user more in other parts (of the site)"*
- | *"Unfortunately, the search results don't really pop up a clear selection of what I am looking for".*
- | *"A whole lot better than the last website"*
- | *"I like an online app for just about anything I am doing so I would spend time trying to figure out where that is"*
- | *"Homepage way too long."*

## A. Findings

A clear challenge to all testers occurred when users were faced with a third-party website/service such as iCompass for City Council information and PerfectMind and Issuu for classes and registration through the Parks, Recreation, and Cultural Services department. When users attempt to access the information that is housed in these separate, yet connected, websites they are met with several challenges. First, how third-party websites/services interact with the main City website at burienwa.gov is not always clear to users. Testers were often surprised that they had been redirected away from the main city site after clicking a link.

A lack of consistent look and feel between burienwa.gov and third-party sites also impacted the user experience for testers. While the third-party sites contain elements of the City of Burien branding, the overall look, feel and navigation are inconsistent with the main site at burienwa.gov, forcing users to reorient themselves to a new website to locate the information they are seeking.

When users can't intuitively access the information, it is common for them to resort to using a site search. In the case of third-party websites, the site search at burienwa.gov is not capable of searching the content and assets of these third-party websites. So, when testers searched for "voting record" as an example, search results did not produce any links to iCompass. As a result, users feel frustrated and assume there is lack of transparency around this information.

While the City of Burien made improvements on the information architecture and navigation of the website, there remains a residual department-centric organization of content that is still not intuitive to users. For example, some users were unclear where to review and register for classes hosted by the Parks, Recreation, and Cultural Services department as the main navigation provides three different pages related to classes and registration: Programs & Services, Registration, and Recreation Guide. Another example includes some testers having a difficult time locating where they could submit a public records request, not anticipating it to be located under Laws and Regulations.

Content is also getting overlooked at times when it is nested more than three levels deep and under sections that may not be easily understood. For example, users looking for information to renew a business license continually missed the relevant content since it was positioned under "Start your Business".

With such a large amount of information to disseminate to the public, it makes sense that the website offers multiple pathways to information. Unfortunately, there are numerous pathways to information and services that together lack a consistent pattern/rationale or terminology. To put things into perspective, the burienwa.gov homepage offers seven different pathways for users to locate information:

1. Main menu
2. Site search bar, "How can we help you today..."
3. "I want to" menu
4. "How do I..." menu

5. "Where can I find...?" menu
6. "Let's get started" quick links
7. Footer menu

Testers encountering these pathways searched for an order among all pathways to help them navigate to the information they were seeking. Unfortunately, the number of pathway options each with differing and lengthy list of options, resulted in users taking longer than expected to scan a list(s) to locate a relevant option or page. If the option selected was incorrect, patience lessened due to time spent up to that point.

The challenges of these long, text heavy menus are magnified for mobile users viewing on a smaller screen. Additionally, many of the URLs linking information open in new tabs for users, even if they are linking to an internal page from burienwa.gov. The number of tabs grows the longer a user navigates and clicks around the website, which can cause navigational confusion. During testing, one tester had up to 12 open tabs before closing a few to get back on task.

Like the text heavy menu options, testers at times had difficulty visually seeing the appropriate text or link on the page. Visually, pages appear text heavy, especially with the main navigation text displaying on the left-hand column of internal pages. Inline links are not always clear as to what information the link contains or that the link may redirect users to a third-party website. Lack of diverse page layouts/headers and over use of bullets make relevant information difficult to discern. Some users also suggested that some sections of the website seems lacking in content compared to others, such as the Visitors section. A tester suggested cross linking the City Parks and Trails page in the visitors section for a more cohesive, intuitive user experience for individuals browsing that section of the website. Finally, some users expressed a desire for more embedded forms instead of being repeatedly forced to open another application.

## **B. Recommendations**

- ✓ Review purpose and utility of City Council pages on burienwa.gov.
- ✓ Clarify links to iCompass and other 3rd party services so users know that they will be redirected to a different website.
- ✓ Ensure link behavior works intuitively (i.e. URLs linking to internal web pages to open in same window, not a new tab).
- ✓ Reduce reliance on third party services or share important information through the main website.
- ✓ Include more functionality from third-party service as embedded forms or imported data to reduce the need to leave the main city site.
- ✓ Revisit IA to be more intuitive and user-centric.
- ✓ Simplify multiple pathways to information.
- ✓ Establish a consistent pattern/rationale for all menu options.
- ✓ Use similar terminology when referencing the same content in navigation or links (e.g. "permits" vs "permit center").
- ✓ Update responsive view design and behavior to be more intuitive and clearer for users.
- ✓ Refine content strategy so page text is simplified and has more of a visual draw for users.
- ✓ Decrease the overall number of pages where content is stored.
- ✓ Improve search to provide facets and other sorting tools to help users find information.

With direct user testing data, it is clear that the new website is a large improvement but there are still several areas that could be improved to enhance the end user experience and provide better services to website users. Compared to responses from the onsite consumer survey and the user group survey, users who participated in direct user testing experienced similar challenges with accessing information housed on third-party websites, intuitively navigating the website, and difficulty reading through many web pages with large amounts of content.

Ideally most information would be contained at the main website at burienwa.gov but there are unique features and databases that are provided through third party services. While less reliance/interaction with third-party websites is ideal for user experience, it is common for organizations to incorporate these types of services into their offerings. In this case, user pathways to third party websites/services should be reviewed to ensure links redirecting users away from burienwa.gov are clear about where they are taking users and what information is contained within those websites.

Regarding navigation, users struggled with the number of pages on the website and the residual department-centric organization of content. The information architecture should be reviewed and refined to consolidate webpages where possible and simplify navigation pathways so users can easily traverse the website and find information without guessing.

Popular content should be strategically positioned on the homepage and on their respective landing and internal web pages. Popular information like City events and upcoming classes should be prominently placed on the webpage so users feel the need to access burienwa.gov more frequently. Content strategy should be considered for all pages to be geared towards simplicity along with clear visual cues so when users scan a webpage, their eyes can easily locate the information they are seeking. This can be done by paring down web page copy, consolidating webpages where necessary, and utilizing web page layouts like multiple columns on a page, accordion menus, and headings. It should also be clear what information users can expect to find from clicking on a link.

Finally, since search is heavily used, the functionality of search on the site should be reviewed. First, only content that is available to the user should appear in the search settings. At times links to content appear in search results that require authentication (CMS credentials) to view. Also, there is no summary of information, or highlighting of keywords to help users determine if content listed in their search results is relevant. While there is an ability to sort by relevance and date, no other filters or facets are provided to the user to help sort their results. For example, searching for "building permit" returns several results and documents, and there is no easy way to narrow the options available without refining your search terms. Even with a refinement like appending "residential" to the initial query, the results returned are similar.

## Section V. Accessibility Assessment

An accessibility assessment was run on burienwa.gov to check the sites compliance with accessibility standards. We ran automated testing against WCAG 2 rules (including 2.0, 2.1, A, AA, and AAA) and Section 508 using multiple evaluation tools including Lighthouse, AInspector, WebAIM, and Ally. We also evaluated the site manually using NVDA on a Windows 10 machine

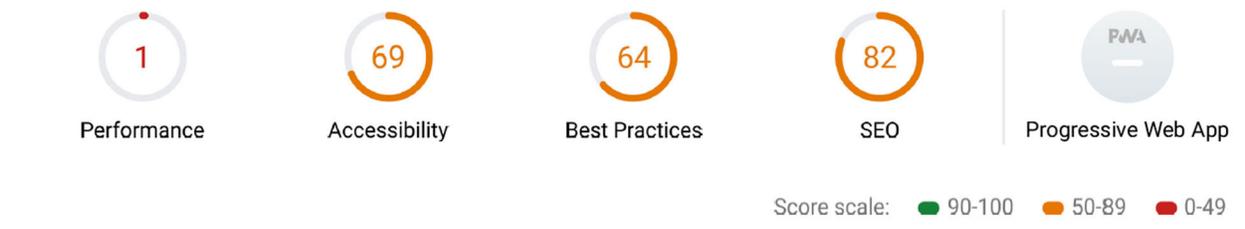
using the latest versions of Chrome, Firefox, and Edge to review issues that are not able to be captured via automated tools.

We focused on the following pages during our review.

- <https://burienwa.gov/>
- [https://burienwa.gov/residents/parks\\_recreation\\_cultural\\_services](https://burienwa.gov/residents/parks_recreation_cultural_services)
- [https://burienwa.gov/business/building\\_construction/permit\\_center](https://burienwa.gov/business/building_construction/permit_center)
- [https://burienwa.gov/city\\_hall/city\\_council](https://burienwa.gov/city_hall/city_council)
- [https://burienwa.gov/news\\_events/city\\_newsroom/news\\_announcements](https://burienwa.gov/news_events/city_newsroom/news_announcements)
- [https://burienwa.gov/residents/resident\\_resources/zoning\\_permits](https://burienwa.gov/residents/resident_resources/zoning_permits)
- [https://burienwa.gov/residents/parks\\_recreation\\_cultural\\_services/facility\\_rentals](https://burienwa.gov/residents/parks_recreation_cultural_services/facility_rentals)
- [https://burienwa.gov/residents/parks\\_recreation\\_cultural\\_services/registration](https://burienwa.gov/residents/parks_recreation_cultural_services/registration)
- [https://burienwa.gov/business/start\\_your\\_business/business\\_license](https://burienwa.gov/business/start_your_business/business_license)
- [https://burienwa.gov/business/building\\_construction](https://burienwa.gov/business/building_construction)
- [https://burienwa.gov/business/start\\_your\\_business](https://burienwa.gov/business/start_your_business)
- [https://burienwa.gov/city\\_hall/laws\\_regulations/public\\_record\\_request](https://burienwa.gov/city_hall/laws_regulations/public_record_request)
- [https://burienwa.gov/residents/public\\_safety/police](https://burienwa.gov/residents/public_safety/police)
- [https://burienwa.gov/residents/public\\_safety/animal\\_care\\_control](https://burienwa.gov/residents/public_safety/animal_care_control)
- [https://burienwa.gov/city\\_hall/laws\\_regulations/zoning](https://burienwa.gov/city_hall/laws_regulations/zoning)
- [https://burienwa.gov/residents/parks\\_recreation\\_cultural\\_services/city\\_parks\\_and\\_trails](https://burienwa.gov/residents/parks_recreation_cultural_services/city_parks_and_trails)
- [https://burienwa.gov/visitors/restaurants\\_attractions](https://burienwa.gov/visitors/restaurants_attractions)
- [https://burienwa.gov/visitors/community\\_events](https://burienwa.gov/visitors/community_events)
- [https://burienwa.gov/staff\\_directory](https://burienwa.gov/staff_directory)
- [https://burienwa.gov/city\\_hall/working\\_with\\_us](https://burienwa.gov/city_hall/working_with_us)

## A. Findings

During our automated testing, burienwa.gov returned an average grade (~68 out of 100) according to the Lighthouse suite of tools based on the open source “axe” accessibility engine. We discovered that aria landmarks were not correctly set (level A violation) and that much of the content on the page is orphaned and not contained within a landmark. Aria landmarks divide content on a page into logical sections and are announced to users using screen readers. They are critically important to communicating to disabled users whether there are viewing main navigation or links to secondary content.



## Performance

### Metrics

First Contentful Paint	13.2 s ▲	First Meaningful Paint	15.8 s ▲
Speed Index	14.3 s ▲	First CPU Idle	15.8 s ▲
Time to Interactive	25.4 s ▲	Estimated Input Latency	200 ms ▲

Values are estimated and may vary.

Figure 5 - Site performance, accessibility, and SEO grades

Form elements, specifically the search button in the main header, were not labeled (level A violation). Iframes were also not correctly labeled making their content difficult to interpret. There were also several errors related to keyboard navigation. We also found that while sections of the site were identified and announced by screen readers, the content labels were not always clear. For example, on the home page the slideshow banner area is announced to the user as a “toolbar”.

## B. Recommendations

- ✓ Include a “main” Aria landmark.
- ✓ Restructure site so that all content is contained within a landmark.
- ✓ Logically title all landmarks so that users can clearly determine what type of content is contained within the site section.
- ✓ Place all navigation elements within a landmark labeled navigation and specifically call out the type of navigation (e.g. main, complementary).
- ✓ Ensure that all form control elements are labeled clearly including the search button in header.
- ✓ Ensure that all interactive elements are accessible by tabbing. Both the news slider and the expand/collapse content containers on pages such as “Zoning and Permits” were not fully accessible by tabbing through.
- ✓ Use descriptive headers (e.g. h2, h3, h4) throughout the site to help users navigate content areas on a page and review content to make sure that the headers accurately describe content they are introducing. There are many pages that are missing headers to intro content, or the headers are not descriptive enough.
- ✓ All buttons should be clickable using ENTER and SPACE.
- ✓ SPACE bar should not scroll screen when a button is focused.
- ✓ Announce the locations of items within a list (e.g. <name>, 1 of 4). Many navigation elements are not announcing locations including the left menu.

- ✓ Visually demonstrate with clarity the focus of all link elements including the site's icon in the header.
- ✓ Use only one h1 per page. Most pages currently have 2 h1 headers due to an issue with the site's code.
- ✓ Clarify use of icon semantics so that carets consistently display the presence of nested content and are hidden when there is none. Carets currently appear in the left menu even when there is no other content contained in nested levels below the item.
- ✓ Provide a descriptive title for all iframe displaying content from third-party application and introduce iframes with properly nested headers (h2).
- ✓ Explicitly define aria labels to control overly verbose announcement specifically in the left-hand menu. Currently all items in the left menu are announced twice.

Using a variety of tools, we discovered multiple areas where the accessibility of burienwa.gov can be improved. One element not called out above is to work towards a more consistent content layout between similar page types so when a user is examining a landing page for example, they will grow familiar with how information is structured on the page. A decent example of this can be found in the Current Projects section of the site. Most projects follow a similar content structure. Also, all navigation elements should be structured similarly so that the logical structure of the site is easier to deduce for users interacting with the site via a keyboard with screen reader assistance.

Accessibility compliance requires satisfying the technical requirements laid out by the WCAG standards and Section 508 along with making subjective choices on how best to order a site and describe content and navigation to users using screen readers. Often one must balance the requirements of accessibility compliance with the informational and interactive requirements for all users. It is extremely difficult to meet 100% of the compliance standards but it is recommended to work to surpass a score of 90 when using the Lighthouse/axe accessibility tools.

## Section VI. Page Speed and Performance

Page speed and performance play a vital role in the success of any website and burienwa.gov is no exception. Parallel ran an analysis of burienwa.gov using Lighthouse, an open-source, automated tool for improving the quality of web pages.

### A. Findings

On a scale of 1-100, desktop performance for burienwa.gov is slow to average. The site performance was sampled with Pagespeed Insights from Google multiple times. Two data points were taken that are representative of the results. Site speed was measured at 35 and 81 (scores below 49 are considered slow and above 90 as fast). Speed for mobile users is extremely low, with speed scores of 5 and 7.



Figure 6 - Mobile performance score

The average load speed of the homepage according to Google Analytic, averaged over 3,244 page views, is 16.23 seconds. This is an extremely slow load speed considering 3.5 seconds is considered a slow load speed according to PageSpeed insights First Contentful Paint (FCP) scale. Other pages with notably slow load times include: Parks, Recreation and Cultural Services landing page at 5.75 seconds and registration page at 9.9 seconds.

## B. Recommendations

- ✓ Serve images in next-gen formats
- ✓ Properly size images
- ✓ Efficiently encode images
- ✓ Defer offscreen images
- ✓ Eliminate render-blocking resources
- ✓ Reduce server response times (TTFB)
- ✓ Serve static assets with an efficient cache policy
- ✓ Avoid enormous network payloads
- ✓ Avoid an excessive DOM size

In order to serve images in next-gen formats, consider image formats like JPEG 2000, JPEG XR, and WebP. These formats often provide better compression than PNG or JPEG, which means faster downloads and less data consumption. At the very least, all images should be optimized in Photoshop before being uploaded. Ideally, your page should never serve images that are larger than the version that's rendered on the user's screen. Anything larger than that just results in wasted bytes and slows down page load time. Offscreen images, images that appear below the fold of a webpage meaning users would have to scroll down the page in order to see them, should not be part of the initial page load. In other words, deferring the load of offscreen images can speed up page load time and the time it takes before a user can interact with the site. Related to this, page load speed may be reduced by inlining links and scripts that are required for first paint, or the first images/content to load on a user's screen and deferring those that aren't.

Slow server response times are another possible cause for long page loads. When users navigate to a URL in their web browser, the browser makes a network request to fetch that content. Your server receives the request and returns the page content. The server may need to do a lot of work in order to return a page with all the content that users want. For example, if users are looking at their order history, the server needs to fetch each user's history from a database, and then insert that content into the page. Optimizing the server to do work like this as quickly as possible is one way to reduce the time that users spend waiting for pages to load.

To reduce server response times further, consider that HTTP caching can speed up your page load time on repeat visits. Basically, when a browser requests a resource, the server providing the resource can tell the browser how long it should temporarily store or cache the resource. For any subsequent request for that resource, the browser uses its local copy, rather than going to the network to get it therefore increasing load time speed. Additionally, reducing the total size of network requests speeds up page load time and saves your users money that they would have spent on cellular data.

## Section VII. Overall Impressions & Summary of Recommendations

In review, we conducted, collected and analyzed google analytics, public and user targeted surveys, tested and recorded real user interactions, and analyzed speed performance and accessibility compliance to evaluate the City of Burien website at burienwa.gov. Through the various platforms used to evaluate burienwa.gov, five primary themes emerged from our findings:

- Challenges accessing important information via third party websites and services
- Difficulty with navigation
- Insights regarding content design/strategy
- Poor page speed website performance
- Need for accessibility improvements

Feedback regarding the recent redesign of burienwa.gov was positive and users welcomed the new changes throughout the website. Despite the overall pleasure of the new website, users offered valuable insights as to areas in which their user experience with the website, and ultimately the City as a governing entity, could be improved.

### A. Summary of Findings

#### 1. Third Party Websites and Services

Users were continually challenged while attempting to locate and access information housed in third-party websites/services. As a point of reference, third-party websites/services websites are separate entities from the main website at burienwa.gov. Users are either redirected to these separate websites or these sites may be displayed as embedded iframes throughout burienwa.gov. Examples of these third-party websites and services on burienwa.gov include: iCompass for City Council information, PerfectMind and Issu for classes hosted by the Parks, Recreation and Cultural Services department, and Crime Reports for crime statistics. Issues encountered by users include inability to search for information from the main search bar at burienwa.gov, challenges navigating between a third-party website and the main website at burienwa.gov, and a lack of functionality for some embedded third-party websites. All these challenges impact the user's experience with the website as well as their opinions on how successful the City is at providing the information they seek.

## 2. Navigation

Another challenge highlighted by our evaluation includes users' ability to intuitively navigate the large volume of information provided at burienwa.gov. Drop down menus are long and navigation options or links are not always worded the same, particularly on the home page. The left-hand navigation found throughout the site makes webpage content difficult to discern to the user and does not function in an intuitive manner. These issues become magnified for mobile users utilizing a smaller screen.

## 3. Content Design/Strategy

Data revealed a need to examine the overall content strategy and design of the website. Popular content is often lower on a user's screen, especially on the homepage or found buried on pages deep in the navigation tree. Text heavy pages with long bulleted lists, make it difficult for users to easily scan and identify content relevant to them. Often just decreasing space between links or removing bullets from groups of links can help. Unclear links and inconsistent use of page elements such as headers and bullets contribute to confusion and increased time spent searching for information.

## 4. Performance

Website performance and load times have a big impact on user experience and their perceived reliability of the City of Burien website. Page load speed and site performance for burienwa.gov was very low meaning pages take a significantly long time to load. This is especially true for some of the most visited pages on the website: homepage, Parks, Recreation and Cultural Services landing page and registration page. Performance for mobile users is particularly poor.

## 5. Accessibility

Using a variety of tools, we discovered multiple areas where the accessibility of burienwa.gov can be improved. While some elements of the site work well for disabled users, the aria landmark framework for the site is not correct. Care needs to be given to content as well to ensure that headers are used correctly and properly introduce subsequent sections. More attention needs to be given to presenting content across the site in a logical, consistent, and predictable manner to help disabled users limited to keyboard controls and screen reader assistance.

## B. Summary of Recommendations

The findings of all data collection channels yielded a series of recommendations to improve the City of Burien website at burienwa.gov. Recommendations are grouped by theme and primary data source. In some cases, data from multiple sources suggested a similar fix. In these cases, the data source that is most linked to the recommendation is listed.

ID	Recommendation	Priority	Theme
#1	<b>Audit and update broken website links</b>	1	Content Design/Strategy
#2	<b>Reconsider/refine left-hand navigation</b>	1	Navigation
	Consider if left-hand menu should be used given Civic Live's limits.		
	If menu remains, limit the depth of nested pages and make nested levels clear to the user through proper use of icons, indentations or breadcrumbs. For example, at <a href="https://burienwa.gov/visitors/community_events">https://burienwa.gov/visitors/community_events</a> it needs to be more clear in the left menu that "Community Events" is a secondary page.		
	Only use icons such as ">" to denote that more pages are available within section.		
	Use left-menu for secondary level page items and below only. For example, <a href="https://burienwa.gov/visitors">https://burienwa.gov/visitors</a> should not be showing other first level pages.		
#3	<b>Make all links consistently styled and clear</b>	1	Content Design/Strategy
	Select a single color and link styles for all links if possible and try not to use that style on non-linking items. For example, headers that do not link should not be colored and styled like a link.		
#4	<b>Review all embedded services and remove those that are not functioning</b>	1	Third-Party Websites and Services
	Consider removing embedded services that are not functioning properly or are not managed by the City itself to help clarify what the City is directly responsible for.		
	Regarding the Crime Reports embedded window, consider removing the window all together and instead linking to the King County Sheriff's office for users to access that data. This way, if the data is incorrect in the future the responsibility is clearly on the organization distributing the third-party service.		
#5	<b>Position most popular content to be easily accessible on the homepage and individual landing pages</b>	1	Content Design/Strategy
	Content positioned on the lower half of a web page is less visible to new users. Popular content on burienwa.gov should be positioned on the upper half of a webpage. For example, on the homepage the calendar and news posts are positioned near the bottom of the page despite being popular content for users.		
#6	<b>Clarify the information users will be accessing when clicking on a link to a third-party website/service</b>	1	Third-Party Websites and Services
	Provide web copy text on burienwa.gov describing what information is being linked and where users will be redirected. For example, on the City Council page there are two links to iCompass, a quick link titled "Meeting Center" and another bulleted in line link titled "Meeting schedule, agendas, minutes, Council profiles, and more can be found in the Meeting Center". Neither link indicates that the "Meeting Center" is a redirect to another website.		

#7	<b>Review purpose and utility of City Council pages on burienwa.gov</b>	1	Content Design/Strategy
<p>Make a determination as to what information should live on burienwa.gov so users can find the information or links to the information via site search or without having to be redirected to iCompass.</p> <hr/> <p>If users continue to be redirected to iCompass, determine if the City Council pages on burienwa.gov should continue to be utilized or if iCompass should house all City Council information.</p>			
#8	<b>Ensure link behavior works intuitively</b>	1	Navigation
<p>Links to internal web pages should open in same window, not a new tab. Links to third-party services and any external sources should open a new tab.</p>			
#9	<b>Reduce reliance on third party services or share important information through the main website</b>	1	Third-Party Websites and Services
<p>Where possible, reduce the number of third-party services that the user is required to visit by including the information into the main website at burienwa.gov preferably via an automated import.</p> <hr/> <p>For third-party services that continue to be used, include more web copy on burienwa.gov describing the information stored in the third party service so site search is effective for users searching for information stored outside of burienwa.gov.</p>			
#10	<b>Simplify multiple pathways to information and establish a consistent pattern/rationale for all menu options</b>	1	Navigation
<p>Reduce the number of pathways to information, especially from the homepage. For example, there are 4 user-centered options on the homepage (Let's get started, Where can I find..., How do I..., I want to...) and each has a different structure. "Police" and "Report a Crime" may mean the same thing to a user.</p> <hr/> <p>Make sure there is consistency (e.g. order, terminology) across all lists and links so users can easily navigate throughout the sites</p>			
#11	<b>Simplify page text</b>	1	Content Design/Strategy
<p>Users only read about 20% of the words on a webpage. Where possible, pare down and simplify web copy so users can easily locate the information they are seeking. If content is not providing value, or only introducing a navigation set, consider removing copy and leaving only navigation.</p>			

#12	<b>Improve search to provide facets and other sorting tools to help users find information</b>	1	Navigation
<p>Search should provide more options to the user to refine what they are seeking. Currently, sorting options are limited to relevance and date. Consider adding facets to help users find terms within specific subset of resources like council meeting agendas, or within events.</p>			
<p>Highlight or bold search terms in results.</p>			
<p>Include all content in search including documents or content housed at third-party services. If content from third-party services cannot be imported automatically, add pages within the site that will appear in search to help direct users to the proper third party service. For example, searching for “council agenda” does not bring up relevant pages. Clicking the first result actually triggers a mail client to open to email “council@burienwa.gov.”</p>			
<p>Add the ability to offer suggested results, or allow the ability for editors to increase the relevance of certain pages so the most popular pages appear at the top of the search results.</p>			
#13	<b>Fix aria implementation</b>	1	Accessibility
<p>Include a “main” aria landmark.</p>			
<p>Restructure site so that all content is contained within a landmark.</p>			
<p>Logically title all landmarks so that users can clearly determine what type of content is contained within the site section.</p>			
<p>Place all navigation elements within a landmark labeled navigation and specifically call out the type of navigation (e.g. main, complementary).</p>			
<p>Explicitly define aria labels to control overly verbose announcement specifically in the left-hand menu.</p>			
#14	<b>Ensure that all form control elements are labeled clearly including the search button in header</b>	1	Accessibility
#15	<b>Use descriptive headers</b>	1	Accessibility
<p>Make sure that headers (e.g. h2, h3, h4) accurately describe content they are introducing to provide the correct context for users. For example, the Permit Center page is essentially a long bulleted list of links and has ambiguous h2 headers that should be expanded to more completely describe what is contained below.</p>			
#16	<b>Announce the locations of items within a list (e.g. &lt;name&gt;, 1 of 4).</b>	1	Accessibility
<p>Left menu navigation element is not announcing locations along with many others menu elements.</p>			

<b>#17</b>	<b>Visually demonstrate with clarity the focus of all link elements.</b>	1	Accessibility
	Site logo on all pages does not change appearance when in focus.		
<b>#18</b>	<b>Use only one &lt;h1 &gt; per page.</b>	1	Accessibility
	Most pages currently have 2 <h1> headers.		
<b>#19</b>	<b>Clarify use of icon semantics</b>	1	Accessibility
	Do not show > or + on menu items that do not contain addition pages of content nested below.		
<b>#20</b>	<b>Describe iframe content</b>	1	Accessibility
	Provide a descriptive title for all iframes displaying content from third-party application.		
	Introduce iframes with properly nested headers (h2).		
<b>#21</b>	<b>Optimize images</b>	1	Performance
	Replace overly large images with those better targeted to mobile and desktop users versus print scale images.		
	Efficiently encode images.		
<b>#22</b>	<b>Reduce server response times (TTFB)</b>	1	Performance
<b>#23</b>	<b>Serve static assets with an efficient cache policy</b>	1	Performance
<b>#24</b>	<b>Avoid enormous network payloads</b>	1	Performance
<b>#25</b>	<b>Update the homepage frequently with relevant information for residents</b>	2	Content Design/Strategy
	Update frequently with up to date news, current events, and announcements to increase user engagement.		

<b>#26</b>	<b>Enhance the mobile experience by making responsive views more intuitive and designed to enhance efficiency</b>	2	Performance
	Limit use of multiple menus. Preferably, only include the main, side sliding, menu. Sections contain both the main menu and left menu in mobile views.		
	Remove unnecessary images like the header banner.		
	Avoid scrolling iframes.		
<b>#27</b>	<b>Review layout of landing pages and make consistent</b>	2	Content Design/Strategy
	Layout and structure of landing pages should be consistent across the website. For example, do not use bullet points for links in some areas and not others.		
	Consider removing left-navigation on landing pages, making pages full width and offering links to all section content on the landing page itself.		
<b>#28</b>	<b>Ensure that all pages have a unique and “clean” URL to improve SEO results, usability, and analytics reporting</b>	2	Content Design/Strategy
<b>#29</b>	<b>Simplify IA to be more intuitive and user-centric</b>	2	Content Design/Strategy
	Building on the IA work done during the initial website redesign and utilizing the data from the usability evaluation, determine appropriate updates/changes to the IA. As a general rule of thumb, limit navigation levels to no more than three, where possible.		
<b>#30</b>	<b>Use similar terminology when referencing the same content in navigation or links (e.g. “permits” vs “permit center”)</b>	2	Navigation
<b>#31</b>	<b>Decrease the overall number of pages where content is stored</b>	2	Content Design/Strategy
	Streamline pages of content where possible so users do not have to hunt for the right place to find information or services. For example, under the Parks, Recreation, and Cultural Services department pages, there are 3 pages related to classes and registration (Programs and Services, Registration, and Recreation Guide). It would be helpful to users to consolidate these pages into one so their path to class and registration information is clear.		
<b>#32</b>	<b>Ensure that all interactive elements are accessible by tabbing</b>	2	Accessibility
<b>#33</b>	<b>All buttons should be clickable using ENTER and SPACE</b>	2	Accessibility
<b>#34</b>	<b>SPACE bar should not scroll screen when a button is focused</b>	2	Accessibility

<b>#35</b>	<b>Defer offscreen images to load only when required</b>	2	Performance
<b>#36</b>	<b>Eliminate render-blocking resources</b>	2	Performance
<b>#37</b>	<b>Continue cross posting between Facebook and burienwa.gov</b>	3	Content Design/Strategy
<p>Facebook posts contribute to a significant amount of traffic to burienwa.gov. Continue linking information from the website on the City's facebook page and continue to direct traffic towards burienwa.gov.</p>			
<b>#38</b>	<b>Where possible, incorporate burienwa.gov design, layouts and content strategies with third-party websites</b>	3	Third-Party Websites and Services
<p>Third-party services should adopt similar designs and content strategies (like use of headers) found at burienwa.gov. For example, the banner image displayed on iCompass (<a href="https://burienwa.civicweb.net/portal/default.aspx">https://burienwa.civicweb.net/portal/default.aspx</a>) does not appear on burienwa.gov and the landing page has vastly different layout and logic than any of the landing pages found at burienwa.gov.</p>			
<b>#39</b>	<b>Avoid an excessive DOM size</b>	3	Performance

# Website Improvement Action Plan

City Council

March 25, 2019



# Tonight's presentation:

- Burien's digital infrastructure
- Why we tested the website
- Findings from the website usability and accessibility testing project
- What's next: Action Plan



How can we help you today...?



RESIDENTS >

RESIDENT RESOURCES >

REPORT AN ISSUE >

ZONING & PERMITS >

SCHOOLS & LIBRARIES >

GRANT OPPORTUNITIES >

UTILITIES >

COMMUNITY ENGAGEMENT >

HUMAN SERVICES >

PUBLIC SAFETY >

PARKS, RECREATION & CULTURAL SERVICES >

PUBLIC WORKS >

BURIEN'S VISION >

## RESIDENT RESOURCES

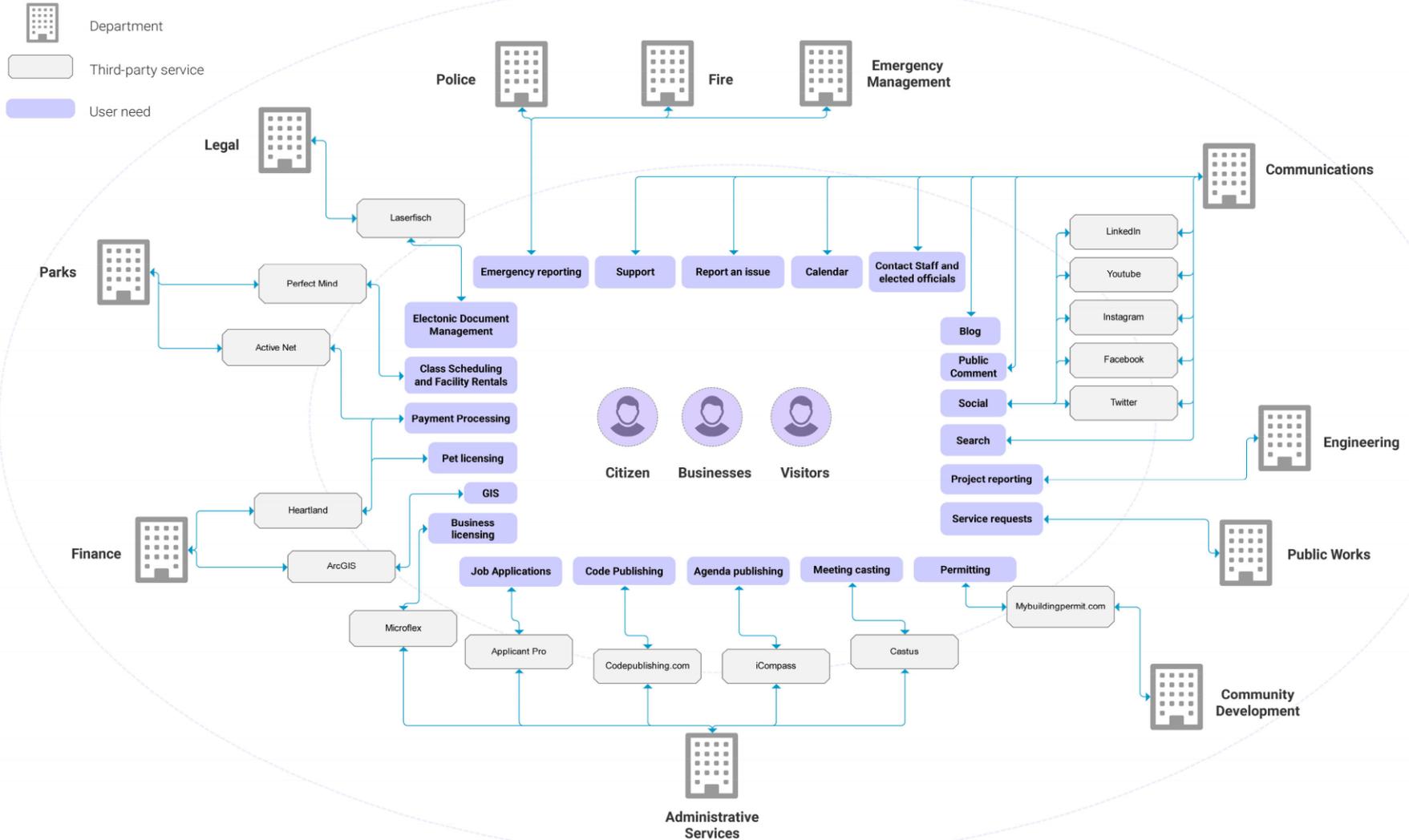
Find the information and resources you need to build a life in our city. Whether you are looking for statistics about local schools, help finding a social service provider, or want to report an issue to a city official, we can assist you.

In this section, you will find:

- Quick information about [zoning and permits](#).
- How to [report an issue or make a request](#)
- Information on local [schools and libraries](#)
- Help finding a [social service provider](#)
- [Grant opportunities from the City](#)
- Information about [utilities that serve Burien](#)
- [Ways to engage](#) with your local government

# Burien's Digital Ecosystem

City of Burien  
 September 29, 2017 - Version v2.0  
 Digital Ecosystem



# Usability vs. Accessibility

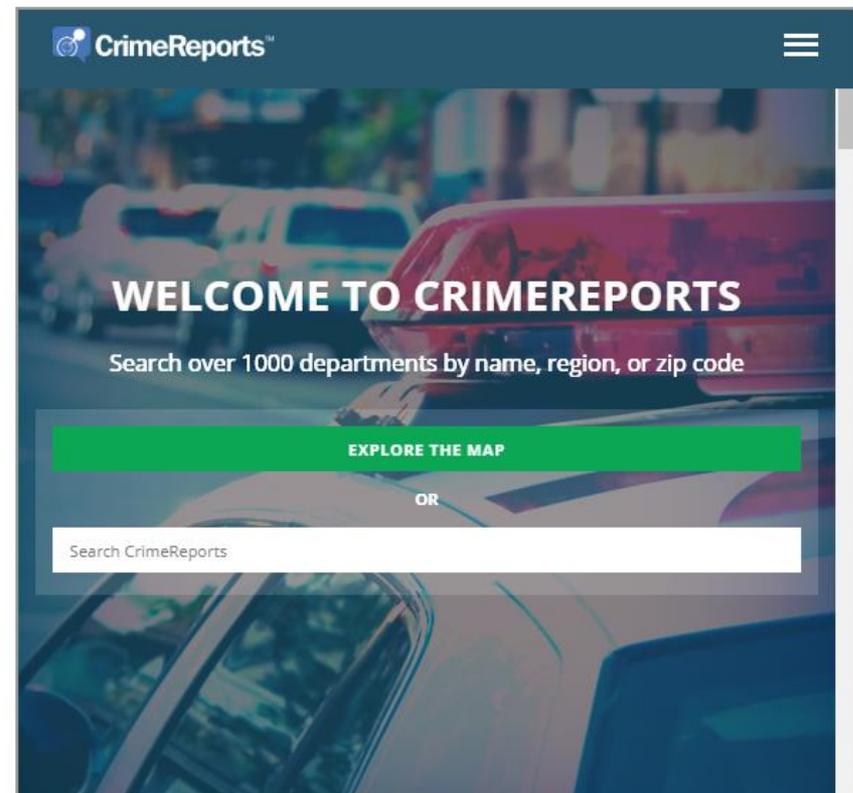


# Findings

- Third-party websites and services present challenges

## Public Crime Data

CrimeReports is a service used by more than a 1,000 law enforcement agencies across the country. The data on CrimeReports is sent by KCSO on a regular basis to be included on the map. If you have reported an incident or crime to, it will likely not appear on the map right away. Some crimes are not displayed because they are part of an ongoing investigation. KCSO may delay posting an incident until its investigation is completed as prematurely releasing information to the public may harm those investigations.



# Findings

- Navigation display and organization of information needs work

RESIDENTS	>
BUSINESS	>
CITY HALL	>
<b>VISITORS</b>	>
COMMUNITY EVENTS	>
RESTAURANTS & ATTRACTIONS	>
NEWS & EVENTS	>
I WANT TO...	>

# Findings

- Content needs to be simplified, hierarchy needs to be flattened

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PARKS, RECREATION & CULTURAL SERVICES >

---

PROGRAMS & SERVICES >

REGISTRATION >

RECREATION GUIDE >

FACILITY RENTALS >

CITY PARKS AND TRAILS >

CITY FACILITIES >

ART >

PARK & FACILITY IMPROVEMENT PROJECTS >

PARKS, RECREATION AND CULTURAL SERVICES ANNOUNCEMENTS >

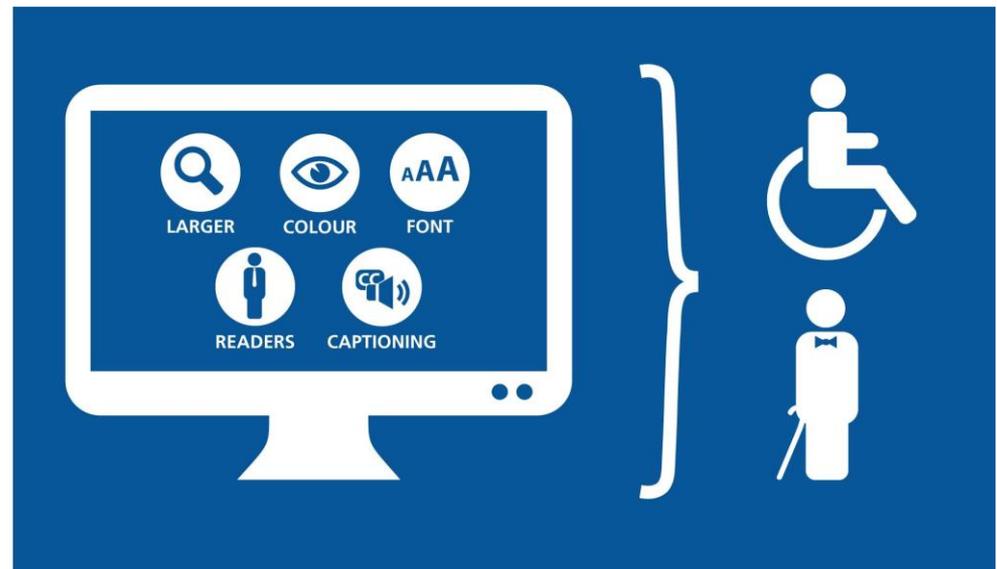
# Findings

- Site performance and load times too slow



# Findings

- Site scored poorly on accessibility audit



# Action Plan: City Staff

High-impact, *short-term* solutions

- Fix broken links and update link display
- Re-imagine landing page layout
- Update home page layout
- Compress images to smaller size
- Flatten page hierarchy
- Address confusing page navigation, duplicate info

# Action Plan: City Staff

High-impact, *long-term* solutions

- Develop and maintain more consistent content strategy for home page and top landing pages
- Update site consistently across all departments, projects, and programs
- Address inconsistencies with the way content is presented across the site
- Enforce content design and writing guidelines among content editors

# Action Plan: CivicLive

## Navigation/design:

- URLs
- Improve search
- Improve navigation display

## Accessibility:

- Make code fixes to address accessibility violations.

## Performance:

- Make code fixes to improve site speed/page load time.



# Priority Areas for Improvement

- PaRCS
- Featured Events and Calendars
- City Council
- Permit Center
- Community Development
- Newsroom
- Home page
- Staff Contacts

# Questions?

[communications@burienwa.gov](mailto:communications@burienwa.gov)

