

City of Austin
Website Redesign
Content Analysis Report

September 24, 2010

Table of Contents

- Executive Summary.....3
 - Introduction
 - Methodology
 - Recommendations
- Content Creation & Publishing.....6
 - Interviews
 - Key Findings
 - Recommendations
- Current Content Usage.....10
 - Methodology
 - Key Findings
 - Recommendations
- Content Quality.....16
 - Methodology
 - Quality Criteria
 - Quality Rankings by End Users
 - Key Findings
 - Recommendations
 - Workflows
- Appendix.....26

Executive Summary

Introduction

The purpose of this analysis is to focus on the content for the City of Austin's website. Content includes all information provided by the website, regardless of delivery method or media. For instance content can be text, a video, or services provided through a technical functionality. Other reports during this project have discussed the structure of the website content, the navigation schemes for arriving to the content, and underlying categorization of the content via an organized taxonomy. This report focuses on how content is created and displayed, what content is being used on the current site, how that content is ranked for quality, and what content is the most important to the end users.

Methodology

Content Creation and Publication

SteelSMBology conducted three facilitated group sessions with the Web Liaisons, identified as content creators and publishers, for all of the departments or agencies within the City of Austin organization. In these sessions the groups identified obstacles that currently exist for creating and publishing content, the "ideal" set of tools that would enhance the creation of content on the website, and gathered input on the current processes for content development and publishing.

Usage

Two studies were completed to understand what content is currently being used on the website and to what extent. The first was through an analysis of website statistics. Google Analytics statistics were pulled for an eight-month period from October 2009 to May 2010, spanning four months prior the beginning of the redesign project through the four months after the beginning of the project. The primary metric used from this data was unique page views. This number represents the number of times a web page is "hit" within a user's session. This is the best metric to employ when looking at how often content is read by users.

The second analysis utilized data collected in an end user study where users self-selected content that they were currently using on the website. This data was collected during a site intercept survey conducted on the current City website from July 9, 2010, through August 3, 2010, where current users were asked about the type of content they find important (whether it was provided on the current website or not), what content they currently used on the website, and to rank the quality of the content they currently used. The data collected on usage and quality of content was utilized for this content analysis.

Quality

In addition to the above-mentioned ranking of current content quality provided by site intercept survey, a review was completed on a random sample of pages to look at the following:

- Usability – is the content organized based on best practices identified for delivery of content on the web.
- Duplication – is the content duplicated somewhere else on the website?

- Accessibility – does the page follow the basic practices that allow that content to be accessed by users that are blind or have poor eyesight, or in the case of audio files, by those with hearing issues.

Recommendations

In light of the diversified responsibility for content development, the following best practices can be incorporated into the content creation process to ensure the quality level of content that is created for the City of Austin’s website. It is recommended that website content creators receive some training on the standards and practices for writing web copy and presenting web content. A review of content prior to publishing has been recommended in the new process workflows provided in this section.

There are some common standards applied to website content development that are different from the standards typically applied to content development in other areas of marketing. Most importantly, the interactive nature of the Internet can and should be fully utilized. The common expectations of users is that the information will be:

- Easy to find. Using intuitive navigation labels, rollovers to view content deeper into a section, and search functions that are based on keywords they would use.
- Visual. Fully using the web medium that allows for animation, video, images, etc.
- Hierarchical. When a topic or category is clicked on a quick scan of the key information is available and much more detail can be found “behind” as the user drills down into subjects.
- Communicative. Communication has changed and the web has replaced many other forms such as phone, as the key information source for users to find the information they are seeking.

As mentioned above, some training provided to content creators will help the overall content quality on the website. It is recommended that training include brand messaging and values training as well. As a part of this project a brand strategy was created for the City of Austin, see *Branding and Creative Report*. An understanding of the underlying branding strategy, values and messaging of the website is important so they can be incorporated into the departmental messages. Based on the Brand values approved, these are the areas where web content could apply:

- Authentic – The City of Austin Government is transparent and trustworthy (e.g. opens its books, publishes decisions, and shares both successes and failures with the public). Is the content “complete” telling the whole story that a reader would want about that topic?
- Accessible – Information and answers from COA are always available (e.g. provides information and easy-to-use tools, via the web, available to everyone, from anywhere, anytime). Can the reader get answers online or at anytime? Is the information easy-to-use/understand?
- Open – The City of Austin provides platforms for participation and communication (e.g. encourages feedback, input, and collaboration from staff and citizens). Does the content provide a way for readers to ask questions or comment?
- Relevant – The City of Austin provides information and services that are meaningful and useful.

One of the objectives of the redesign project is to create processes that will ensure the quality and consistency of content delivery on the new website. These processes, or workflows, should include participation from content creators, reviewers, and publishers to ensure the appropriate checkpoints for quality and communication are included. Through feedback received from the web liaisons and the web team, SteelSMBology created workflows for the following scenarios:

- Sensitive/Emergency Content – an example of this type of content would be HSEM emergency notification
- Active Content – content that is time-sensitive, a current event or topical that may effect changes in multiple locations on the website. An example of this type of content would be a press release.
- Static Content – content that does not change frequently, and is typically located in one section or department. An example of this type of content would be a departmental project or program.
- Creation of a new website or section of the main website
- Removing content from the website – this includes archiving of content.
- Emergency/Incident Command Content – reserved for extreme emergencies with Incident Command is activated.

See the appendix of this document for diagrams detailing the steps and responsibilities for each workflow.

Content Creation and Publication

Often one of the most important factors that effects the overall quality of content on the website is the process for developing the content and publishing it onto the website. In government, or large enterprise-size corporations, the responsibility for content creation, publication, and maintenance is a distributed responsibility. Each department has the responsibility for a section of the website (or micro-site) and key content items related to their department. This structure can exist with or without a centralized checkpoint. With diversified responsibility, priorities and varying levels of technical proficiency, this structure can result in inconsistencies relating to content provided, overall quality, and attention to maintenance.

Interviews

SteelSMBology conducted three group sessions with the web liaisons from all of the departments at The City of Austin and the web team, to identify needs, wants, and preferences for the future system's content creation and publishing system. In the sessions we discussed three main topics:

1. The types of content that are, or should, be displayed on the website to ensure that research into the new system technology and the development of page templates can incorporate these needs.
2. Obstacles within the current process that affect the quality and maintenance of content as well as solutions.
3. Current workflows, and opportunities to improve or create new workflows that will improve the quality and effectiveness of the content.

Key Findings

Types of Content

In the facilitated sessions we discussed the key types of content that are presented on the website. The majority of the information is text, images, and lists or managed lists; however, it was discovered that there is increasingly a need for interactive maps, a more sophisticated calendar (with filtering) and embedded video on certain pages of the website. The following is a list of content types was developed from the input received:

- News releases
- Emergency Notification – alerts and news releases
- Project updates for city construction (monthly)
- Road closures/conditions and traffic pattern updates
- Council directives, PDF of presentation to be available
- Graphics/artwork – public art images (working with GIS)
- Video/audio/image slideshows - embedded
- Maps – prefer interactive, not PDF
- Neighborhood plans
- Purchasing and Contracts have vendor updates and documents; amendments to RFP docs
- Criminal records (pulled directly from a server/database)
- Calendar entries/events – with filtering by topic available
- News items for the home page
- Agenda for council meetings and supporting documents from those meetings – would include presentations provided during meeting
- Job postings
- CSR database updates for the 311 department

- Code & ordinances (AMLegal is the host of the city code – third party)
- Form submissions – for applications and permits, feedback, and “reporting” issues such as graffiti, maintenance issues, etc.

This feedback was combined with the input received from the internal end users facilitated sessions, see *End Users Needs Analysis* document for more details. After review, the following list was developed for the creation of template types to be available in the new system:

1. Homepage Template (Used for role-based home pages)
2. Basic Informational Page Template (1 col wrapper)
3. Basic Informational Page Template (2 col)
4. Basic Informational Page Template (3 col)
5. Portal Template
6. Directory Page Template
7. Video Page Template
8. Social Media Center Page Template
9. Department Homepage Template
10. List w/ Abstract Page Template
11. List Item Page Template
12. Blog Category Template
13. Blog Entry Template
14. Search Results Page Template
15. Calendar Page Template
16. Map/GIS Page Template
17. Online Form Page Template
18. Photo Gallery Page Template
19. File Repository Page Template
20. Neighborhood Page Template
21. Mobile Version Site Template List View
22. Mobile Version Site Template Content View

The development of the wireframes for the above page templates for the City of Austin redesign project is discussed further and included in the *Information Architecture Report & Documents*.

Current Obstacles

Through the facilitated sessions SteelSMBology identified obstacles to the current content management and publishing system, as seen by the internal users or web liaisons. First and foremost, it was a common finding among all of the sessions that the current publishing system is tedious to manage and generally not user-friendly. It was also found that the current system often requires assistance through the CTM group, as publishing is not possible for non-technical users of the system. Most attendees were familiar with the basic features and benefits of a true “content management” system; offering easy publishing for non-technical users, “widgets” or “modules” that assist in the development of content that feels more “automated” and does not require additional programming, and the ability to disseminate notification of changes to multiple parties within the system. The benefits of a true content

management system were discussed at length with all of the groups and with the Web Team. It was a common conclusion among all that a content management system platform should be a requirement for the new system to save time, provide richer content, include more governance, and improve communication across departments of changes and maintenance needed. Currently, communication of updates is inadequate. All communication is done outside of the system, requiring an email and no automation to ensure that the notification is done and the appropriate groups are notified.

Another key obstacle identified was the lack of governance of the content overall to ensure consistency and maintenance of the content. In particular, this is important for the end users to receive a consistent experience throughout the website regardless of the department or agency providing the content. A topic related to governance and quality of content is the accessibility. Accessibility to information as required by the American Disabilities Act, includes features that allow for items to be easily read and delivered by automated readers to users that have poor eyesight or are blind. These requirements are often forgotten during the content development and must be addressed after the content is made available on the website.

Content management does not only cover the development of content and quality assurance, but the life-cycle of content through removal and archival of content to reduce confusion by both internal users and external end users. It was discussed that governance should include processes for, and automation of, scheduled publication, removal, and archiving of content that is displayed on the website.

To develop appropriate processes to ensure consistency and quality across all content that is developed and displayed on the website, SteelSMBology discussed the current workflow processes. The current process is decentralized, with individual departments having the responsibility for developing, reviewing, and publishing new content and content updates to the website. Currently, a process for centralized review of content is not in place, prior to publication, however a review of existing content on the website is being conducted by the members of the PIO and CTM groups for identification of accessibility issues and/or archiving opportunities.

Recommendations

From discussions with the web liaisons and the web team the following is a list of requirements to be considered for the website redesign:

- A true content management system platform
- Support for workflows within the system; with some automated activities
- Support for notifications within the system, such as: automatically update 311 CSRs of new content and information or, notification of key departments when content is updated
- Support for full life-cycle content management, to include:
 - Scheduled publication of content
 - Scheduled removal of content
 - Automatic archival of relevant content
- Integration with project management system for automatic project updates on the website
- Version tracking
- Page templates to assist in content publishing and to reinforce the brand, style, and navigation structure consistency
- Easy to use “widgets” available when building pages and creating content
 - Calendars
 - Surveys
 - Maps

- Payment modules
- Online forms
- “Libraries” to choose images, videos for enhancing content
- A staging area for reviews and approvals prior to publishing content to the live website

Current Content Usage

The primary objective for this stage of the project is to understand what content is currently being viewed. While results showing infrequently viewed content do not suggest that the information is unimportant, they may point to those areas that need to be reviewed for quality or location within the navigational structure. This is especially true for those topics that are shown to be important by end users.

Methodology

SteelSMBology conducted two studies to understand what content is currently being used on the website, the first is through actual page visits. Google analytics statistics were pulled for an eight-month period from October 2009 to May 2010, spanning four months prior the redesign project beginning through the four months after the beginning of the project in February 2010. The primary metric used from this data was Unique Page views. This number represents the number of times a page is “hit” within the time period selected, however it only counts the page once within an individual session.

The second was through an end user study where end users self-selected content that they were currently using on the website. In a site intercept survey conducted on the current City website from July 9, 2010, through August 3, 2010, current users of the website were asked several questions about the type of content they find important (whether it was provided on the current website or not), what content they currently used on the website, and to rank the quality of the content they currently used.

Key Findings

Analysis of Unique Page Views

In the time period studies, Google Analytics revealed just over 10,000 pages on the ci.austin.tx.us website. These pages represented just over 11.3 million unique page views (for reference, these pages registered 25.7 million total page views). Of these pages, 275 registered a 0.1% usage of the total Unique Page Views or above, the highest percentage being 6.1%.

The top 25 visited pages includes

- Home page
- Library main page
- Police main page
- Municipal Court main page and pay a fine page
- Airport main page as well as the airlines page
- Parks main page, and Zilker Park Holiday Event page
- HR main page and jobs page
- Development main page
- Help pages such as directory, org chart, 311 contact us page
- Animal services and adoption pages

Currently some of the pages listed in the Top 25 are delivering 404 errors. As mentioned above, there has been continual work by the City’s Web Team on the site during the course of this project and it is assumed that those pages have been archived or renamed as a part of that process.

Top 25 pages, ranked by number of Unique Page Views

Range Oct 2009-May 2010		
Page: http://www.ci.austin.tx.us	Unique Page Views	Percentage Unique Page Views
/library/front.htm	693,638	6.1%
/default.htm	621,464	5.5%
/library/default.htm	467,233	4.1%
//default.htm	360,418	3.2%
/hr/default.htm	359,080	3.2%
/library//default.htm	214,750	1.9%
/austinairport/airlines.htm	185,471	1.6%
/austinairport/default.htm	162,266	1.4%
/police/default.htm	151,435	1.3%
/library/map.htm	119,074	1.0%
/site/departments_portal.htm	114,769	1.0%
/help/orgchart.htm	108,933	1.0%
/library/wireless_at_apl.htm	104,035	0.9%
/help/directory_a.htm	97,781	0.9%
/health/animal_services.htm	93,958	0.8%
/court/default.htm	89,142	0.8%
/connect/response.htm	76,026	0.7%
/health/animal_services_adoption.htm	72,093	0.6%
/tol/default.htm	65,296	0.6%
/parks/default.htm	62,918	0.6%
/police//default.htm	62,588	0.6%
/development/default.htm	62,338	0.5%
/austinairport//default.htm	62,180	0.5%
/court/fine_pay.htm	58,911	0.5%
/hr/citywork.htm	55,976	0.5%

In addition the data was sorted by website section (or corresponding department), and the Unique Page Views added for each of the pages within that section, to identify the highest used content on the site by section. Below is the top 10:

Unique Page Views	Section	Percent of Total
2,312,981	/library/	20.38%
1,026,137	/default.htm (all home page URLs)	9.04%
864,788	/austinairport/ (and /airport)	7.62%
770,437	/parks/	6.79%
676,998	/police/	5.97%
593,998	/hr/	5.24%
382,165	/sws/	3.37%
381,742	/site/	3.36%
370,635	/health/	3.27%
353,972	/fire/	3.12%

A full listing of pages that registered 0.1% usage, as determined by Unique Page Views, or higher, can be found in the Appendix of this document, *Content Analysis Appendix 1*. Also included in the Appendix is a full listing of the Unique Page View ranking by website section *Content Analysis Appendix 2*.

Analysis of End User Self Selected Categories of Usage

A site intercept survey was conducted on the current site in July 2010. Among the data collected during this study, end users selected the categories of informational content, features, and functionality that they use or visit on the current City website. The full details of this survey can be found in *Product Gap Analysis Research Report*.

For the purpose of this analysis the data collected on current usage and the quality rating of the content will be isolated. In the first part of the survey, users self-selected the “role” they were in when visiting the site when they participated in the survey. These selections were then grouped by major user groups of Resident, Business, Government Employee, and Tourist. The two primary groups we will look at in this analysis are Resident and Business, representing the largest overall percentage of users. Over 90 total elements of informational content, features, and functionality were tested in this survey. To ensure that each element was tested sufficiently and the survey remained effective in length, these items were broken into grids and served up randomly to participants based on the self-selected user group. Each participant was served two to three grids for ranking. For reference, the grids with the elements tested are listed in the appendix.

It’s important to note that proposed elements were included in these grids to be ranked alongside the existing content for a ranking of importance to the users. These items do not appear in this analysis of usage or quality in this report, as they do not currently exist on the website. The data from importance ranking, and recommendations of these new elements appear in the full research report, *Product Gap Survey Research Report*.

Residents

The top 25 categories of content used most by those respondents that selected “resident” as their user group included Austin Public Library information, Parks and Recreation, Utilities information, City news, water quality, City Codes and Ordinances, Career opportunities, City Council information, Neighborhood Code Ordinances, Voter information, Neighborhood Planning, Public Safety, Public Records, Municipal Court information and online payments, Police reports database, Town Lake Animal Shelter, and public transportation information. The full ranking is provided on the next page of those elements that registered a ranking percentage higher than 0%.

Element	Resident Percent Usage
Austin Public Library information (locations, hours, and events)	12.5
Library book search	12.4
Parks and Recreation (area locations, hours, pictures, events)	9.9
Utilities information (water, electric, garbage and recycling)	9.0
City news (breaking news, announcements)	8.9
Information on arts, museums, cemeteries, trails, and preserves (locations and special)	8.3
Water quality and conservation information	7.7
Utilities online account management (payment, set-up, cancel)	7.3
Online library databases (articles, eJournals, eBooks, periodicals)	7.2
City Codes and Ordinances for building and/or renovation	5.6
Utilities usage (look-up/download electricity or water usage online)	5.4
Job/Career Opportunities (search & apply for jobs with the City of Austin)	5.3
City Council and Boards & Commissions (meeting schedules and minutes)	5.1
Neighborhood Code Ordinances, boundaries, and list of community groups	4.7
Information on Neighborhood Planning (planning neighborhoods, development of)	4.4
Voter information (charters, bonds, and voter initiatives)	4.4
Public Records on Businesses (online access/search)	4.3
Public safety information (police, fire department, EMS, contact info)	4.3
Municipal Court (how/where to pay your fines, resolve tickets, report for jury duty)	3.9
Online payments (citations, tickets, court fees)	3.9
Austin Police incidents report database (ability to search)	3.8
City meetings (watch live online and archive of past)	3.7
Town Lake Animal Shelter information (general, adoption, lost/found pet information)	3.6
City public transportation (information and schedules)	3.5
Public records/conduct legal research (birth and death records)	3.1
Library "good reads" and book club suggestions"	3.1
Public health information for regional health issues	2.9
City finance data/budget (budget archives, monthly and quarterly financial reports)	2.8
Channel 6 programming (government access channel, watch City meetings, program)	2.5
Local tax information	2.5
Austin-Bergstrom flight arrival and departure information (online status)	2.4
Animal control/removal (contact information and procedures)	2.0
Ask a librarian feature to get answers and research help by chat, email, or phone	2.0
Performance measures by department and programs (searchable database)	1.7
City public parking information	1.7
Homeless assistance, day labor, and employment programs	1.7
Library youth reading programs (information and sign-up)	1.6
Arrest warrant and accident report information	1.5
Austin City Charter information (search, print, or download)	1.4
Online library card application	1.4
Childcare resources and children's health issues	1.3
Austin-Bergstrom Airport parking and ground transportation information	1.2
City of Austin Hazard Mitigation Plan with public emergency news, alerts, and information	1.2
Austin-Bergstrom Airport terminal services (shopping, dining, airline info)	1.1
Buy tickets online for City bus and rail	1.0
City calendar integrated with iCal or Outlook to add an event your iCal or Outlook	1.0
Register new and manage community group information online	0.9
Library online homework helpers (for K-12 students)	0.6

Business

The top 25 categories of content used most by those respondents that selected “business” as their user group included information development such as: codes and ordinances, permits, zoning, development plans, neighborhood planning, fee schedules for building and land use, green building information, and water quality or conservation information. Another cluster identified in the top 25 contains topics related to concerns that may affect a business or small business such as: City news, City Council information, Small business development information, commercial water, and classes offered for entrepreneurs. The full ranking is provided below on those elements that registered a percent usage higher than 0%.

Element	Business Percent Usage
City Codes and Ordinances for building and/or renovation	28.6
Permit information (rates, how to apply)	20.7
Austin demographics information	18.9
Interactive Maps with City development and redevelopment information	18.1
Neighborhood Code Ordinances, boundaries, and list of community groups	17.6
Zoning information on districts	17.6
City development regulations technical manuals to assist users in	17.6
Information on Neighborhood Planning (planning neighborhoods, development of	15.4
Commercial water and wastewater utility (file a claim, standard products, road works)	14.5
Bidding opportunities with the City	14.1
Public Records on Businesses (online access/search)	13.7
City Council and Boards & Commissions (meeting schedules and minutes)	12.3
Small business development (information and programs)	12.3
City news (breaking news, announcements)	11.9
Residential site development regulations	11.9
City Development Site Plans for upcoming years	11.9
Travis County and City fees (building fees and permit fee schedule)	11.5
Fees for Land Use (site plan review, site plan revision, zoning, & subdivision fees)	10.6
City of Austin vendors (new vendor online registration, maintain account, respond to	9.7
Green building (consulting, resources, education, calendar of events)	9.7
Water quality and conservation information	9.3
Classes for entrepreneurs on customized business solutions to transition from one growth	8.4
City meetings (watch live online and archive of past)	7.9
Grant information (types available, how to apply)	7.0
Channel 6 programming (government access channel, watch City meetings, program	6.2
Downtown building permits (information for commercial builders)	6.2
Event information for promoters (event permits, commonly used links and information,	5.7
City finance data/budget (budget archives, monthly and quarterly financial reports)	4.0
Performance measures by department and programs (searchable database)	4.0
Cap Metro Business Center (transit advertising, list of current registered solicitors, vendors)	4.0
Alcoholic beverage permit info	4.0
How to create a successful food business in Austin (regulatory info, networking)	3.1
Emergency Medical Services (EMS) for events (how to get stand-by EMS services at	2.6
Register new and manage community group information online	2.2
Emergency Medical Service (EMS) approvals for street closures	1.8

Recommendations

After a review of all of the data from both studies, analytics and the survey it is clear that end users placed a high priority on information relating to library information, The Parks and Recreation Department, jobs and careers at the City, city ordinances, public safety, Solid Waste Services, and selected areas of Development.

Utilities as a category ranked very high for users that self-selected usage categories, this includes solid waste, water, and electricity. It is assumed that those page views are also high in actual statistics, however the Austin Energy site page views are not recorded in the analytics. A similar note should be made for the Austin Bergstrom Airport. This section of the website ranked very high on the actual page view statistics, however did not rank very high in the end user study. We assume in this case that end users do not necessarily relate that information to the City website, but rather see that website as completely separate.

It is recommended that the combined the lists of top categories of content be addressed in the top levels of navigation so that the most sought after content on the site, and most used, is easy for the user to find. As indicated in the *Information Architecture Report and Documents*, the following key recommendations for navigation structure apply to the above analysis:

- The Library, Airport, and Austin Energy should appear in the “Brand Bar” at the very top level of navigation. These sites are considered by users as separate entities and highly used; therefore as a part of the Brand Bar they are easily found and distinguished.
- Dividing the navigation into intuitive role-based sections for Residents, Businesses, and Development allow for the diverse amount of information provided by the City website to be divided and therefore reducing the total amount of browsing by a user. Top level categories under each can be seen upon roll over of the role-based portals and therefore only one click from the home page of the website.

Parks and Recreation, Public Safety, Utilities, and Jobs should appear at the top level of role-based tab for Residents.

Content Quality

The primary objective in this portion of the project is to evaluate the quality of the content currently available on the website. This review is intended to provide general direction on areas of the site that could be improved. Recommendations will be focused on standard best practices for developing content for the Web, and what processes can be incorporated into the existing workflow for improvement. Additionally, recommendations will be made for processes to be employed as a part of the website redesign build during content migration.

Methodology

To review the quality of the current content on the website we first turned to the site intercept survey that was conducted on the City's website from July 9, 2010, through August 3, 2010. As a part of that survey, current users were asked about the type of content they find important (whether it was provided on the current website or not), what content they currently used on the website, and to rank the quality of the content they currently used. It is the quality rankings that are most relevant to this analysis

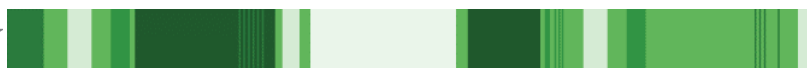
In addition to the above-mentioned ranking of current content quality provided by site intercept survey, a review was completed on a random sample of pages to look at the following:

- Usability – is the content organized based on best practices identified for delivery of content on the web.
- Duplication – is the content duplicated somewhere else on the website?
- Accessibility – does the page follow the basic practices that allow that content to be accessed by users that are blind or have poor eyesight, or in the case of audio files, by those with hearing impairments.

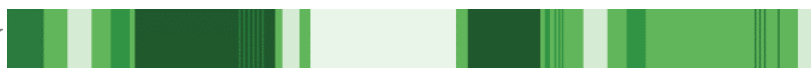
The City of Austin's website has approximately 15,000 web pages associated with the ci.austin.tx.us website which was used for this analysis. A statistically sound sample size for this amount of pages is 135; this amount has a 0.25% acceptable quality level for the sample size. The 135 pages were selected randomly, so as not to bias the sample to one particular group or section of pages on topic.

List of Randomly Selected URLs

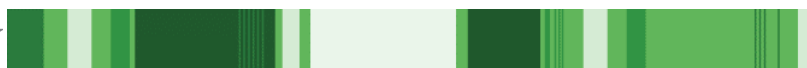
1. <http://www.ci.austin.tx.us/cityhall/default.htm>
2. <http://www.ci.austin.tx.us/cityhall/guytown.htm>
3. <http://www.ci.austin.tx.us/finance/unclaimedproperty.htm>
4. <http://www.ci.austin.tx.us/ahfc/>
5. <http://www.ci.austin.tx.us/housing/fairhousing.htm>
6. <http://malford.ci.austin.tx.us/boards/results.cfm?bid=19>
7. <http://www.ci.austin.tx.us/greencityfest/gcmission.htm>
8. <http://www.ci.austin.tx.us/ahfc/repairs.htm>
9. <http://www.ci.austin.tx.us/publicworks/bicycle.htm>
10. <http://www.ci.austin.tx.us/cityworks/materials.htm>
11. http://www.ci.austin.tx.us/sws/residential_hazardous_waste.htm#location
12. http://www.ci.austin.tx.us/sws/disposal_index_a.htm



13. http://www.ci.austin.tx.us/sws/residential_bulk.htm
14. http://www.ci.austin.tx.us/cityclerk/edims/edims_minutes_index.htm#2010
15. <http://www.ci.austin.tx.us/fire/phydrants.htm>
16. <http://www.ci.austin.tx.us/cityclerk/>
17. <http://www.ci.austin.tx.us/boards/vacancy.cfm>
18. <http://www.dot.state.tx.us/TRF/mutcd.htm>
19. <https://www.ci.austin.tx.us/rowman/index.cfm>
20. <http://www.ci.austin.tx.us/library/meeting.htm#care>
21. <https://www.ci.austin.tx.us/police/reports/index.cfm>
22. http://www.ci.austin.tx.us/council/martinez_bio.htm
23. <http://www.ci.austin.tx.us/growgreen/designs.htm>
24. http://www.ci.austin.tx.us/health/std_programs_transportation.htm
25. <http://www.ci.austin.tx.us/carver/classes.htm>
26. <http://www.ci.austin.tx.us/election/cfreports.htm>
27. <http://www.ci.austin.tx.us/neighbor/defaultnew.cfm>
28. <http://www.ci.austin.tx.us/library/kids.htm>
29. http://www.ci.austin.tx.us/trees/en_spec.htm
30. <http://www.austinhsem.com/go/site/2333/>
31. <http://www.austinhsem.com/go/doc/2333/483467/>
32. <http://www.ci.austin.tx.us/library/news/nr200909b.htm>
33. <http://www.ci.austin.tx.us/water/awardsone.htm>
34. http://www.ci.austin.tx.us/news/2009/candidates_file_2009.htm
35. <http://www.ci.austin.tx.us/wri/executive.htm>
36. http://www.ci.austin.tx.us/parkingdistrict/west_campus.htm
37. <http://www.ci.austin.tx.us/sustainable/default.htm>
38. <http://www.ci.austin.tx.us/greengarden//default.htm>
39. <http://www.ci.austin.tx.us/neighbor/innplay.htm>
40. <http://www.ci.austin.tx.us/fire/clocks01.htm>
41. http://www.ci.austin.tx.us/planning/comp_plan_committee.htm
42. <http://www.ci.austin.tx.us/zoning/principles.htm>
43. <http://www.ci.austin.tx.us/greencityfest/gcphotogallery200912.htm>
44. <http://www.ci.austin.tx.us/library/bmusponsors.htm>
45. <http://www.ci.austin.tx.us/preserves/fotodrg3.htm>
46. http://www.ci.austin.tx.us/zoning/comp_plan_interim_update.htm
47. http://www.ci.austin.tx.us/downtown/dn_off1196.htm
48. <http://www.ci.austin.tx.us/telecom/cswrdg1.htm>
49. <http://www.ci.austin.tx.us/purchase/cydrfa.htm>
50. http://www.ci.austin.tx.us/sbdp/map_realestate.htm
51. <http://www.ci.austin.tx.us/preserves/fotosal2.htm>



52. <http://www.ci.austin.tx.us/budget/98/default.htm>
53. <http://www.ci.austin.tx.us/auditor/reports/default.htm>
54. <http://www.ci.austin.tx.us/childcare/50ways.htm>
55. <http://www.ci.austin.tx.us/eastsidestory/svchelp.htm>
56. http://www.ci.austin.tx.us/charter/cr_calendar.htm
57. http://www.ci.austin.tx.us/library/wireless_at_apl.htm?loc=ami
58. <http://www.ci.austin.tx.us/realestate//default.htm>
59. http://www.ci.austin.tx.us/library/ff_lang16.htm
60. <http://www.ci.austin.tx.us/preserves/fotooak.htm>
61. <http://www.ci.austin.tx.us/help.htm>
62. http://www.ci.austin.tx.us/bigbig/more_creative_letters.htm
63. <http://www.ci.austin.tx.us/wellness//default.htm>
64. <http://www.ci.austin.tx.us/austinairport/abia%20wins.htm>
65. <http://www.ci.austin.tx.us/development/announcements.htm>
66. <http://www.ci.austin.tx.us/greencityfest/gcphotogallery20094.htm>
67. <http://www.ci.austin.tx.us/roadworks/lamar.htm>
68. http://www.ci.austin.tx.us/news/2009/budget_town_hall_0630.htm
69. <http://www.ci.austin.tx.us/aeservices/>
70. <http://www.ci.austin.tx.us/disasterready/volunteers.htm>
71. http://www.ci.austin.tx.us/news/2009/news_0709.htm
72. <http://www.ci.austin.tx.us/preserves/fotoargia.htm>
73. http://www.ci.austin.tx.us/publicworks/ncd/urbantrails_programs.htm
74. <http://www.ci.austin.tx.us/preserves/fotowevi.htm>
75. <http://www.ci.austin.tx.us/parks/camps//default.htm>
76. <http://www.ci.austin.tx.us/water/dec14minutes.htm>
77. <http://www.ci.austin.tx.us/water/globalimportantbirdarea.htm>
78. http://www.ci.austin.tx.us/austinairport/actov_nov2008.htm
79. <http://www.ci.austin.tx.us/budget/beac200601.htm>
80. <http://www.ci.austin.tx.us/auditor/reports//default.htm>
81. <http://www.ci.austin.tx.us/fire/cigsmoke.htm>
82. <http://www.ci.austin.tx.us/water/bullcreek.htm>
83. <http://www.ci.austin.tx.us/publicworks/sustainability//default.htm>
84. <http://www.ci.austin.tx.us/police/disqual.htm>
85. <http://www.ci.austin.tx.us/wri/reclaim.htm>
86. <http://www.ci.austin.tx.us/preserves/fotevax.htm>
87. http://www.ci.austin.tx.us/agenda/boards_4thq_fy07.htm
88. http://www.ci.austin.tx.us/cityclerk/boards_commissions/financialform/add_question.cfm?q=q4&CFID=2965050&CFTOKEN=7afca45f650240461BE3A9BA0A9D2AC37D0F7A9FFD30FC6C&jsessionid=2a3089a2b37fea914500776eb16303563c58TR



89. <http://www.ci.austin.tx.us/leaps/calendar.htm>
90. http://www.ci.austin.tx.us/hr/ae_austin.htm
91. <http://www.ci.austin.tx.us/aipp/beams.htm>
92. <http://www.ci.austin.tx.us/greatstreets/bproducts.htm>
93. <http://www.ci.austin.tx.us/election/runoff.htm>
94. <http://www.ci.austin.tx.us/election/0603ed3.htm>
95. <http://www.ci.austin.tx.us/watercon/icinewsletter.htm>
96. <http://www.ci.austin.tx.us/water/boilwater43008.htm>
97. <http://www.ci.austin.tx.us/greencityfest/gcphotogallery20098.htm>
98. http://www.ci.austin.tx.us/police/dr_se3.htm
99. <http://www.ci.austin.tx.us/preserves/fotonymf.htm>
100. <http://www.ci.austin.tx.us/library/news/nr20031121.htm>
101. http://www.ci.austin.tx.us/library/ff_texa09.htm
102. http://www.ci.austin.tx.us/parks/camps/fall_camps_home.htm
103. <http://www.ci.austin.tx.us/culturalplan/prior.htm>
104. http://www.ci.austin.tx.us/ada/ada_report03.htm
105. <http://www.ci.austin.tx.us/redlights/citations.htm>
106. <http://www.ci.austin.tx.us/watershed/rptpahfig1main.htm>
107. <http://www.ci.austin.tx.us/downtown/0498/labor0498.htm>
108. <http://www.ci.austin.tx.us/go/doc/2333/419211>
109. <http://www.ci.austin.tx.us/childcare/flexben.htm>
110. <http://www.ci.austin.tx.us/greencityfest/gcphotogallery20093.htm>
111. <http://www.ci.austin.tx.us/library/ahc/favorites2.htm>
112. http://www.ci.austin.tx.us/water/american_goldfinch.htm
113. http://www.ci.austin.tx.us/austinaairport/busops_pending_solicitation.htm
114. <http://www.ci.austin.tx.us/parks/forestry17.htm>
115. http://www.ci.austin.tx.us/library/ff_math.htm
116. <http://www.ci.austin.tx.us/purchase/mwbereports.htm>
117. http://www.ci.austin.tx.us/publicworks/childsafety_projects.htm
118. <http://www.ci.austin.tx.us/water/wildland/slidetwo.htm>
119. <http://www.ci.austin.tx.us/macc/index.htm>
120. <http://www.ci.austin.tx.us/citymgr/cmmissio.htm>
121. <http://www.ci.austin.tx.us/sws/garbagepecial.htm>
122. <http://www.ci.austin.tx.us/dougherty/theater.htm>
123. <http://www.ci.austin.tx.us/vision/planning.htm>
124. <http://www.ci.austin.tx.us/sws/recyclerulestext.htm>
125. http://www.ci.austin.tx.us/news/2007/sws_tree_recycling.htm
126. <http://www.ci.austin.tx.us/library/ahc/ohenry.htm>
127. http://www.ci.austin.tx.us/cepreserves/col_index.htm

128. <http://www.ci.austin.tx.us/telcommission/backup.htm>
129. <http://www.ci.austin.tx.us/fire/recruitment/training.htm>
130. <http://www.ci.austin.tx.us/splash/links.htm>
131. <http://www.ci.austin.tx.us/fitness/kearns.htm>
132. <http://www.ci.austin.tx.us/urbanheatisland/resources.htm>
133. <http://www.ci.austin.tx.us/compplan/taskforce.htm>
134. <http://www.ci.austin.tx.us/water/wildland/bcvi.htm>
135. http://www.ci.austin.tx.us/carver/online_exhibits/pf_civilrights.htm

Quality Criteria

Best Practices for Web Content

When developing content for the web, there are some key differences to developing copy for other marketing pieces like collateral. The basic guidelines are:

- Organize web copy in short; succinct paragraphs that link to additional information within the site.
- Infuse web copy with calls to action and links that provide adequate information for the reader to make an informed choice.
- Utilize keywords in your web copy so your web page appears near the top of a search engine's summary.
- Web page information should cross-reference with the rest of the site to educate or lead to further information about that topic.

Web copy should be much shorter in length than what a written piece contains, with succinct paragraphs using headings and subheadings to divide the content into key topics. Approximately 79% of users are “scanners” that search the website and its content to find a piece of information or a topic they want to read about. By placing important information and facts about that topic at the top of a page, breaking the text into key topics with headings, and using a bulleted list where appropriate are all ways to ensure the content is scan able and the user can find information easily. If the content is very dense, or includes several key topics, use a topic sentence or an abstract to summarize the topic and link to the more detailed information within the website or on another page. Again this will allow the user to scan the topics and choose where to click next to obtain their information.

Use topical keywords throughout the content, and appropriate categorical tags for each topic or piece of content so the website's search engine pick it up and deliver relevant results to users who prefer to “search” and not “browse” the website. It is known that both types of users exist and that typically there isn't a clear preference of one or the other. So, effective websites have strong navigational structures with labels that are meaningful to the target users AND strong search engine capabilities.

It is also an effective practice to provide links to related information or additional information on similar topics on each page of the website. This avoids the user coming to a “dead end” or, more importantly, gives the user options if the information is not exactly what they were looking for or expecting. It is also a good practice to provide links to FAQs, help, or a contact (this could be a phone number or an email form) for the user if they have further questions and not able to find the information they need.

A website is a visual medium so the use of images, maps, charts, videos, etc, are all ways to convey content and provide multiple ways for users to see information on a topic. Integrating text along with these other visuals is the most effective way to communicate information and a “user-friendly” way.

Key Findings

Each of the above pages were reviewed according to the following criteria:

1. Does it align with top priorities of the site for content usability – is it easy to understand the content.
 - A. Is it organized based on best practices for web content?
 - B. Does the page have too much information on it or look too cluttered?
 - C. Are there links to related information or a way to ask questions if the reader's needs are not met on this page?
 - D. Is the content "named" or "labeled" in a way that users can understand what is contained in the page/content?
 - E. Is this topic duplicated somewhere else on the website, in another section, on another page?
2. Is the information current and accurate?
 - A. To the reader, does this content appear accurate?
 - B. If the content includes a date, is that date within the last 6 months to a year?

3. Accessibility Review

Each page was run on a development tool used for identifying possible alerts or "flags" to content that may not be accessible to readers used by the visually impaired.

In the review for usability, it was found that about 25% of the 135 pages reviewed did not follow the above best practices for creating scan able or well-organized content pages. The key issues were the lack of use of headings and subheads to organize the content on the page well and provide key information clues to the reader about what was contained on that page. Fourteen percent of the pages reviewed contained too much information on a single page. The combination of a large amount of content and a lack of organization, these pages were difficult to read and felt cluttered.

For the most part the pages reviewed were named or labeled in a way that users could understand what would be contained in that page, only 8% were found to need some improvement in that area. This was largely due to usage of terms or titles that did not seem to be user-focused, but rather organizational jargon.

When reviewing the content for accuracy and whether or not the content appeared to be current, it was found that the majority seemed to be both accurate and somewhat current. There was about 19% of the content that was found to have material dated older than six months to a year. While that material may in fact be the latest or most current, it could appear to the user to be "stale" and not the latest information.

Accessibility

There are some basic principles to follow when creating content that is accessible on the website. It is best to have these items created, or addressed, along with the content itself so that the information is available when the page is published.

- Create alternative text for all non-text content like images, maps, etc. The alternative text should label the content, or describe the action that is happening if appropriate.
- Provide headings for all tables used on the web page, and appropriate headers for data cells within the table
- Ensure that all form fields (text, checkbox, dropdown list, etc.) has a label and is associated to the correct form element, so that forms can be submitted correctly. This includes any error labels for incomplete form fields that are required.
- Provide hyperlink text that makes sense to the reader about what they will find behind that link, avoid links that simply say, “click here”.
- Avoid relying on color alone to communicate information, be sure to provide labels that provide direction on content that is color dependant.
- Provide captioning for video elements, if available, and provide written transcripts for video and audio elements.
- If sound is played automatically within content, provide a visual notification and transcript if appropriate.

In a review of the site, the 135 sample pages, the content did not seem to trigger major flags or issues. About 28% of the sample pages showed some issues, but they seemed to be minor and easily addresses. The most common alerts were links to PDF files that did not provide an html alternative for the content, popup windows that did not inform the user about the popup, or provide the content within the same window, and alternative text for some images that were missing.

It is important to note that the internal City of Austin Web Team is continually reviewing the website for accessibility issues and correcting as they are found. It is likely that these issues are being corrected as a part of that process. The primary take-away from this review is that content accessibility can and should be a part of the content creation process and provided when the content is published.

Quality Ranking by End Users

In a site intercept survey that was conducted on the City’s website from July 9, 2010, through August 3, 2010 participants were asked to rank the quality of the content they currently used. The list of website elements (provide in the previous section of this report), with the exception of the “new” elements listed, was presented to the participant. They were asked to rate the content quality based on a five-point scale (5=Excellent, 4=Good, 3=Average, 2=Below Average, 1=Poor). Specific criteria was not provided to the user, but rather asked for their opinion of the quality overall. The following charts provide the content rankings by average ranking for the overall Resident and Business user groups.

Average Quality Rankings by End Users in Resident User Group

Austin Public Library information (locations, hours, and evenms)	4.15
Ask a librarian feature to get answers and research help by chat, email, or phone	4.11
Library book search	4
Library online homework helpers (for K-12 studenms)	4
Online library databases (articles, eJournals, eBooks, periodicals)	3.95
Library \good reads" and book club suggestions"	3.92
Online library card application	3.88
Austin City Charter information (search, print, or download)	3.7
Channel 6 programming (government access channel, watch City meetings, program schedule)	3.64
Austin-Bergstrom flight arrival and departure information (online status)	3.63
Library youth reading programs (information and sign-up)	3.63
Utilities usage (look-up/download electricity or water usage online)	3.57
City public transportation (information and schedules)	3.55
Water quality and conservation information	3.55
Austin-Bergstrom Airport parking and ground transportation information	3.52
Utilities information (water, electric, garbage and recycling)	3.51
City calendar integrated with iCal or Outlook to add an event from the City calendar to your iCal or Outlook	3.5
Utilities online account management (payment, set-up, cancel)	3.46
City news (breaking news, announcemenms)	3.46
Job/Career Opportunities (search & apply for jobs with the City of Austin)	3.45
Public safety information (police, fire department, EMS, contact info)	3.45
City meetings (watch live online and archive of past)	3.45
Online paymenms (citations, tickems, court fees)	3.42
Town Lake Animal Shelter information (general, adoption, lost/found pet information)	3.41
Parks and Recreation (area locations, hours, pictures, evenms)	3.4
Municipal Court (how/where to pay your fines, resolve tickems, report for jury duty)	3.39
Information on arms, museums, cemeteries, trails, and preserves (locations and special evenms)	3.34
City Council and Boards & Commissions (meeting schedules and minutes)	3.34
Public health information for regional health issues	3.33
City public parking information	3.32
Austin-Bergstrom Airport terminal services (shopping, dining, airline info)	3.3
Buy tickems online for City bus and rail	3.27
Childcare resources and children's health issues	3.27
Local tax information	3.21
Voter information (charters, bonds, and voter initiatives)	3.19
City finance data/budget (budget archives, monthly and quarterly financial reporms)	3.16
Austin Police incidenms report database (ability to search)	3.15
City of Austin Hazard Mitigation Plan with public emergency news, alerms, and information	3.12
Public Records on Businesses (online access/search)	3.11
Animal control/removal (contact information and procedures)	3.1
Neighborhood Code Ordinances, boundaries, and list of community groups	3.07
Homeless assistance, day labor, and employment programs	3.03
Information on Neighborhood Planning (planning neighborhoods, development of neighborhoods)	2.99
Public records/conduct legal research (birth and death records)	2.97
City Codes and Ordinances for building and/or renovation	2.97
Register new and manage community group information online	2.95
Arrest warrant and accident report information	2.94
Performance measures by department and programs (searchable database)	2.81

Quality was evaluated on a five point scale: 5=Excellent, 4=Good, 3=Average, 2=Below Average, 1=Poor

Average Quality Rankings by End Users in Business User Group

Website Content	Total Business Ranking
City meetings (watch live online and archive of past)	3.72
City Council and Boards & Commissions (meeting schedules and minutes)	3.61
Channel 6 programming (government access channel, watch City meetings, program schedule)	3.57
Classes for entrepreneurs on customized business solutions to transition from one growth phase to another	3.53
City news (breaking news, announcements)	3.48
Small business development (information and programs)	3.43
City development regulations technical manuals to assist users in researching/understanding regulations	3.42
Interactive Maps with City development and redevelopment information (neighborhood plans, zoning)	3.4
Austin demographics information	3.3
City Development Site Plans for upcoming years	3.27
City Codes and Ordinances for building and/or renovation	3.25
Zoning information on districts	3.25
Green building (consulting, resources, education, calendar of events)	3.24
Performance measures by department and programs (searchable database)	3.22
Cap Metro Business Center (transit advertising, list of current registered solicitors, vendor registration)	3.22
Neighborhood Code Ordinances, boundaries, and list of community groups	3.17
Emergency Medical Services (EMS) for events (how to get stand-by EMS services at a venue, athletic events)	3.17
Bidding opportunities with the City	3.16
Event information for promoters (event permits, commonly used links and information, guidelines)	3.15
Information on Neighborhood Planning (planning neighborhoods, development of neighborhoods)	3.14
How to create a successful food business in Austin (regulatory info, networking)	3.14
Permit information (rates, how to apply)	3.06
Water quality and conservation information	3.05
Residential site development regulations	3.04
Public Records on Businesses (online access/search)	3
Register new and manage community group information online	3
City of Austin vendors (new vendor online registration, maintain account, respond to solicitations)	3
Grant information (types available, how to apply)	2.88
Fees for Land Use (site plan review fees, site plan revision fees, zoning fees, subdivision fees)	2.88
Commercial water and wastewater utility (file a claim, standard products, road works)	2.79
City finance data/budget (budget archives, monthly and quarterly financial reports)	2.78
Travis County and City fees (building fees and permit fee schedule)	2.76
Alcoholic beverage permit info	2.67
Downtown building permits (information for commercial builders)	2.64
Emergency Medical Service (EMS) approvals for street closures	2.5

Quality was evaluated on a five point scale: 5=Excellent, 4=Good, 3=Average, 2=Below Average, 1=Poor

Content that received a below average or poor average ranking should be reviewed. It is likely that these areas of content may be out of date, don't provide enough information, or perhaps is not clear.

Recommendations

Training provided to content creators will help the overall content quality on the website. It is recommended that training include brand messaging and values training as well. As a part of this project a brand strategy was created for the City of Austin, see *Branding and Creative Report*. An understanding of the underlying branding strategy, values and messaging of the website is important so they can be incorporated into the departmental messages. Based on the Brand values approved, these are the areas where web content could apply:

- Authentic – The City of Austin Government is transparent and trustworthy (e.g. opens its books, publishes decisions, and shares both successes and failures with the public). Is the content “complete” telling the whole story that a reader would want about that topic?

- Accessible – Information and answers from COA are always available (e.g. provides information and easy-to-use tools, via the web, available to everyone, from anywhere, anytime). Can the reader get answers online or at anytime? Is the information easy-to-use/understand?
- Open – The City of Austin provides platforms for participation and communication (e.g. encourages feedback, input, and collaboration from staff and citizens). Does the content provide a way for readers to ask questions or comment?
- Relevant – The City of Austin provides information and services that are meaningful and useful.

One of the objectives of the redesign project is to create processes that will ensure the quality and consistency of content delivery on the new website. These processes, or workflows, should include participation from content creators, reviewers, and publishers to ensure the appropriate checkpoints for quality and communication are included. Through feedback received from the web liaisons and the web team, SteelSMBology created workflows for the following scenarios:

- Sensitive/Emergency Content – an example of this type of content would be HSEM emergency notification
- Active Content – content that is time-sensitive, a current event or topical that may effect changes in multiple locations on the website. An example of this type of content would be a press release.
- Static Content – content that does not change frequently, and is typically located in one section or department. An example of this type of content would be a departmental project or program.
- Creation of a new website or section of the main website
- Removing content from the website – this includes archiving of content.
- Emergency/Incident Command Content – reserved for extreme emergencies with Incident Command is activated.

Workflow processes are included in the Appendix; full size workflow diagrams and detail pages are provided for each process outlined above.

Appendix

- 1) Analytics and statistics on unique page views, by page
- 2) Analytics and statistics on unique page views, by content section
- 3) Workflow process diagrams