CITY OF LOS ANGELES

INFORMATION TECHNOLOGY POLICY COMMITTEE

Citywide Website Development and Publication Policy

Policy Number: IT-007
Effective Date: May 24, 2013

Description: Description: This policy covers minimum acceptable standards for the design and development of Internet and intranet websites for the City of Los Angeles.

1. Overview

The City of Los Angeles (hereafter, known as "the City") creates and uses websites as a service to promptly and accurately provide information about City services, official events and other matters of importance to the City's residents, businesses, visitors, and City employees. The City's goal for these websites is to encourage increased participation in City government and to help create an information resource. Towards that end, the design and development of websites by the City ~~are~~ shall be guided by this Website Design and Development Policy. References to website design and development in this policy include but may not be limited to the creation and presentation of photos, images, audio, video, pages, and other visual elements that appear on a City website.

2. Purpose

The purpose of this policy is to ensure that acceptable standards are adhered to in regards to websites designed and developed by the City. City Department Heads, Elected Officials, or personnel authorized by the Department Heads or Officials will be responsible for determining what websites will be developed and deployed based on this and the Web Content Policy, and to impose standards on the use of websites.

The underlying principle in setting forth these standards is to provide direction in designing and developing websites about the City and its services that is accurate, manageable, efficient and organized. It is the responsibility of the Department Heads and Elected Officials to ensure that departmental staff adheres to City website related policies.

3.   Scope

This policy applies to all websites owned or operated by the City of Los Angeles, and all involved in the management, design, development, and maintenance of these websites. This includes, but is not limited to full-time staff, part-time staff, contractors, freelancers, and other agents who perform one or more of the following roles: website managers, usability specialists, content writers, information architects, graphic designers, developers/programmers, and subject matter specialists (as defined in Section 4.1 Staff Roles and Responsibilities).

3.1. Types of City Websites

This policy defines City websites by the website's intended audience, or site visitor group.

- Internet Website – Internet websites are published on the Internet for access by the General Public.

- Intranet Website – Intranet websites are published on the City's intranet for access by City Employees and other authorized staff within the City's Internal network, but not accessible by the General Public

- Employee/Group Website – Employee/Group websites are intranet sites published, for access restricted to an individual or group of City Employees and other staff within a City's Internal network, and not intended to be linked to by an Internet or intranet website.

4. Policy

The following rules provide direction on what the City's governing standards are with regards to the design and development of the three types of City Websites. See Citywide Web Content Policy for additional related policies. For a specific list of guidelines for the design and development of City websites, refer to section 5 of this Policy.

4.1 Staff Roles and Responsibilities. Various responsibilities are needed to ensure the usability of City websites and the accuracy and timeliness of information. These responsibilities are shared among staff roles based on definitions by Usability.gov on the Project Team page (http://usability.gov/methods/plan/assemble.html).

For Internet and intranet websites, employees performing one or more of these roles shall be identified. For Employee/Group websites, employees performing one or more of these roles shall be considered.

- Website Manager – A skilled manager who actively leads and manages a complex project.

- Usability Specialist – Usability specialists help work through the user-centered design process. They help evaluate websites and make recommendations for improvement.

- Content Writer(s) – Writers and editors skilled in writing for the Web creating content that is accurate, up-to-date, and easy for users to read and understand.

- Information Architect(s) – Information architects organizing the content and functionality on the Website into a navigation structure that is logical and usable to intended audiences.

- Graphic Designer(s) – Graphic designers specializing in creating visually appealing designs that enhance the usability of the Website.

- Developer(s)/Programmer(s) – Developers manage the technical aspects of the Website including any programming of the site. Developers shall develop accessible websites according to section 4.3. of this policy, or be able to provide the tools necessary for Content Writers to comply with 4.9 of the Web Content Policy.

- Subject Matter Specialist(s) – People who are familiar with the topics on the site and provide information for the site. If they are not trained in writing for the Web, they should work with content writers and editors.

4.2. Design and Development of Official Websites

Websites should be designed and developed for official use only. The design and development of websites for disruptive, discriminatory, unethical or unprofessional activities, for personal gain, for any purpose that would jeopardize the legitimate Interests of the City, or violate any City, state or federal law is strictly prohibited. All activities related to the design and development of City websites must have approval from the appropriate authorities within a City Department or Elected Official Office.

4.3. Accessibility

Internet and intranet websites shall be designed and developed to comply with the latest Technical Standards for Web-based intranet and Internet information and applications as stated in Section 508 of the Federal Rehabilitation Act found on (http://www.section508.gov/index.cfm?fuseAction=stdsdoc). An Employee/Group website shall comply with the same standards **where appropriate.**

4.4. Multi-Browser Compatibility

All City Internet sites whenever possible shall be designed and developed to look and operate identically with the most, commonly used Internet browser software versions that cover at least 80% of the browser users in the United States according to the most recent statistics. One site that can be accessed for statistical information is gs.statcounter.com where filters can be set to include Browser Version, Country, Month, and Year.

Selection of Browsers for Employee Groups sites are dependent on the target audience and not subject to any of these multi-browser compatibility policies set above.

4.5. Consistent Identity and Domain

In order for the public to easily identify a City of Los Angeles website, it is required that all City Internet sites include the City seal, the words "City of Los Angeles", and their Department (or Office) Logo and/or name on each page. It is also highly recommended that the City Seal be a link back to www.lacity.org. Recommended templates can be found on the ITA intranet site on the E-Government and Web Services page.

City intranet websites are required to include the Department (or Office) Logo or name, while the City Seal and the words "City of Los Angeles" are optional.

Employee Group websites are required to display a title that identifies the project or subject matter of the site, and the name and contact info of the employee responsible for maintaining the site. It is recommended that a Department (or Office) logo and/or name also be displayed.

4.6. Inquiries and Feedback.
City websites shall provide an easy way for users to give feedback and make inquiries regarding the website or information found on the website. All City websites are required to provide one of the following methods of contact on a consistent location on every page of the website:

- Email address

- Phone number including a telecommunications device for the deaf (TDD) number

- Online form for submitting feedback

- CityFone Directory

- Link to a page containing one or more of the above

Is it highly recommended that City websites provide two or more of the contact information sources listed above.

Each website inquiry and feedback function should be tested at regular intervals to verify that the functions are in good working order.

4.7. Privacy

The City, through authorized personnel, reserves the right to access and monitor all City websites without prior notification. Therefore, developers should not have the expectation of privacy with their websites even if it is intended for a small group.

4.8. California Public Records Act and Other Disclosures

Website files, including related log files, stored on City servers may be subject to release to the public upon request under the California Public Records Act (CPRA) (California Gov't Code §6250 et seq.). Employees should consult with the management of their employing agencies and departments, as well as the City Attorney's Office, to determine appropriate procedures to follow when such cases arise.

4.9. Access and Security

Access to modify City websites is limited to personnel who have been determined to have an appropriate business reason for having access. All personnel who are granted security access will be identified by an Account ID. All actions performed with an Account ID will be the responsibility of the ID's registered owner, or those delegated responsible for the account. Those responsible for the Account ID should notify the appropriate authority immediately in the event an Account ID password is compromised. To protect against passwords from being compromised, it is suggested to follow the minimum password standards in the Citywide Password Policy.

The registered owner, or those delegated responsible for the account, are required to notify the Account ID administrators if there are any changes in personnel accessing City websites (e.g., an employee leaving the department).

The City will not be responsible for any damages to City websites caused by the unauthorized use of an access account. The registered owner, or those delegated responsible for the account, are responsible for all activities that occur under their assigned account.

Measures to secure websites from defacement or server attacks must also be taken. It is highly recommended that online forms on City websites use a spam guard technique such as a CAPTCHA (Completely Automated Public Turing test to tell Computers and Humans Apart). If the forms are submitting data to a database, safeguards shall be taken to protect against common hacking techniques such as SQL Injections.

4.10   File Maintenance

Hosting and backing up website files in the production, development, and test servers require a substantial amount of system resources. To help optimize the use of these resources, the following measures shall be folllowed:
- Production web servers will only host website files in the latest version
- Orphaned files (files of a website that are not linked to from the website) should be deleted from the production web servers at least every quarter. If an orphaned website file needs to be retained for a longer period, the file should be archived to an appropriate filing system.

4.11.   Website Retention

Employees should be aware that certain website files may be retained according to Departments specific records retention plans. Employees involved in website design and development should be trained by their Department Heads, Elected Officials or personnel authorized by Department Heads or Officials in the appropriate record retention guidelines that apply to their Departments and/or particular assignments.

5.   Guidelines

To produce professional and usable websites, it is important that along with this policy, a minimum set of standards are followed in any web design and development project. Appendix A contains a subset of guidelines taken from the Research-Based Web Design and Usability Guidelines, provided by the US Department of Health and Human Services that should be applied to the design and development of City of Los Angeles websites. More information about these guidelines and a complete set of guidelines can be found at Usability.gov.

6.   Policy Enforcement

Enforcement of this Policy is the responsibility of those individuals designated by the Department Heads, Elected Officials or personnel authorized overseeing respective web site and development projects

7.   Revision History

The Information Technology Policy Committee (ITPC) will periodically review and update this policy, and submit the updated policies for approval.

Appendix A. Guidelines for the Design and Development of City Websites

Below is a subset of guidelines taken from the 2nd Edition of the Research-Based Web Design and Usability Guidelines, provided by the US Department of Health and Human Services. These are the minimum set of guidelines, that should be applied to the design and development of City of Los Angeles websites. It is important to note that this set of guidelines may be updated as needed so it is important to refer to the online version of this document to obtain the latest set of guidelines. More information about these guidelines and a complete set of guidelines can be found at Usability.gov.

1. Establish User Requirements

Guideline: Use all available resources to better understand users' requirements.

Comments: The greater the number of exchanges of information with potential users, the better the developers' understanding of the users' requirements. The more information that can be exchanged between developers and users, the higher the probability of having a successful Web site. These could include customer support lines, customer surveys and interviews, bulletin boards, sales people, user groups, trade show experiences, focus groups, etc. Successful projects require at least four (and average five) different sources of information. Do not rely too heavily on user intermediaries.

The information gathered from exchanges with users can be used to build 'use cases.' Use cases describe the things that users want and need the Web site to be able to do. In one study, when compared with traditional function-oriented analyses, use cases provided a specification that produced better user performance and higher user preferences.

2. Standardize Task Sequences

Guideline: Allow users to perform tasks in the same sequence and manner across similar conditions.

Comments: Users learn certain sequences of behaviors and perform best when they can be reliably repeated. For example, users become accustomed to looking in either the left or right panels for additional information. Also, users become familiar with the steps in a search or checkout process.

3. Design for Working Memory Limitations

Guideline: Do not require users to remember information from place to place on a Web site.

Comments: Users can remember relatively few items of information for a relatively short period of time.

When users must remember information on one Web page for use on another page or another location on the same page, they can only remember about three or four items for a few seconds. If users must make comparisons, it is best to have the items being compared side-by-side so that users do not have to remember information.

4. Do Not Use Color Alone to Convey Information

Guideline: Ensure that all information conveyed with color is also available without color.

Comments: Never use color as the only indicator for critical activities. A sizable enough percentage of users have difficulty discriminating colors. Most of these users have difficulty seeing colors in the green portion of the spectrum.

To accommodate color-deficient users, designers should:
- Select color combinations that can be discriminated by users with color deficiencies;
- Use tools to see what Web pages will look like when seen by color deficient users;
- Ensure that the lightness contrast between foreground and background colors is high;
- Increase the lightness contrast between colors on either end of the spectrum (e.g., blues and reds); and
- Avoid combining light colors from either end of the spectrum with dark colors from the middle of the spectrum.

5. Create a Positive First Impression of Your Site

Guideline: Treat your homepage as the key to conveying the quality of your site.

Comments: In terms of conveying quality, the homepage is probably the most important page on a Web site. One study found that when asked to find high quality Web sites, about half of the time participants looked only at the homepage. You will not get a second chance to make a good first impression on a user.

6. Place Important Items Consistently

Guideline: Put important, clickable items in the same locations, and closer to the top of the page, where their location can be better estimated.

Comments: Users will try to anticipate where items will appear on their screen. They will start 'searching' a page before the layout appears on their screen. When screen items remain constant, users learn their location on a page, and use this knowledge to improve task performance. Experienced users will begin moving their mouse to the area of the target before the eye detects the item. Users can anticipate the location of items near the top much better than those farther down the page.

7. Place Important Items at Top Center

Guideline: Put the most important items at the top center of the Web page to facilitate users' finding the information.

Comments: Users generally look at the top center of a page first, then look left, then right, and finally begin systematically moving down the total Web page. All critical content and navigation options should be toward the top of the page. Particularly on navigation pages, most major choices should be visible with no, or a minimum of, scrolling.

8. Align Items on a Page

Guideline: Visually align page elements, either vertically or horizontally.

Comments: Users prefer consistent alignments for items such as text blocks, rows, columns, checkboxes, radio buttons, data entry fields, etc. Use consistent alignments across all Web pages.

9. Eliminate Horizontal Scrolling

> ***Guideline:*** Use an appropriate page layout to eliminate the need for users to scroll horizontally.

> ***Comments:*** Horizontal scrolling is a slow and tedious way to view an entire screen. Common page layouts including fluid and left-justified may require some users to scroll horizontally if their monitor resolution or size is smaller than that used by designers.

10. Use Clear Category Labels

> ***Guideline:*** Ensure that category labels, including links, clearly reflect the information and items contained within the category.

> ***Comments:*** Category titles must be understood by typical users. Users will likely have difficulty understanding vague, generalized link labels, but will find specific, detailed links, and descriptors easier to use.

11. Use Dark Text on Plain, High-Contrast Backgrounds

> ***Guideline:*** When users are expected to rapidly read and understand prose text, use dark text on a plain, high-contrast, non-patterned background.

> ***Comments:*** Dark text on a plain background elicited reliably faster reading performance than on a medium-textured background. When compared to reading light text on a dark background, people read black text on a white background up to thirty-two percent faster. In general, the greater the contrast between the text and background, the easier the text is to read.

12. Order Elements to Maximize User Performance

> ***Guideline:*** Arrange lists and tasks in an order that best facilitates efficient and successful user performance.

> ***Comments:*** Designers should determine if there is an order for items that will facilitate use of the Web site. If there is, ensure that the site is formatted to support that order, and that all pages follow the same order. For example, ensure that lists of items, sets of links, and a series of tabs are in a meaningful order.

> Where no obvious order applies, organize lists alphabetically or numerically. Keep in mind that it is the user's logic that should prevail rather than the designer's logic.

13. Use Simple Background Images

> ***Guideline:*** Use background images sparingly and make sure they are simple, especially if they are used behind text.

> ***Comments:*** Background images can make it difficult for users to read foreground text. A single, large, complex background image (including a picture) can substantially slow page download rates. If background images must be employed, use small, simple images with 'tiling,' and/or keep the image resolution as low as possible.

14. Make Action Sequences Clear

Guideline: When describing an action or task that has a natural order or sequence (assembly instructions, troubleshooting, etc.), structure the content so that the sequence is obvious and consistent.

Comments: Time-based sequences are easily understood by users. Do not force users to perform or learn tasks in a sequence that is unusual or awkward.

15. Use Mixed Case with Prose

Guideline: Display continuous (prose) text using mixed upper- and lowercase letters.

Comments: Reading text is easier when capitalization is used conventionally to start sentences and to indicate proper nouns and acronyms. If an item is intended to attract the user's attention, display the item in all uppercase, bold, or italics. Do not use these methods for showing emphasis for more than one or two words or a short phrase because they slow reading performance when used for extended prose.

16. Organize Information Clearly

Guideline: Organize information at each level of the Web site so that it shows a clear and logical structure to typical users.

Comments: Designers should present information in a structure that reflects user needs and the site's goals. Information should be well-organized at the Web site level, page level, and paragraph or list level.

Good Web site and page design enables users to understand the nature of the site's organizational relationships and will support users in locating information efficiently. A clear, logical structure will reduce the chances of users becoming bored, disinterested, or frustrated.

17. Group Related Elements

Guideline: Group all related information and functions in order to decrease time spent searching or scanning.

Comments: All information related to one topic should be grouped together. This minimizes the need for users to search or scan the site for related information. Users will consider items that are placed in close spatial proximity to belong together conceptually. Text items that share the same background color typically will be seen as being related to each other.

18. Use an Iterative Design Approach

Guideline: Develop and test prototypes through an iterative design approach to create the most useful and usable Web site.

Comments: Iterative design consists of creating paper or computer prototypes, testing the prototypes, and then making changes based on the test results. The 'test and make changes' process is repeated until the Web site meets performance benchmarks (usability goals). When these goals are met, the iterative process ends.

The iterative design process helps to substantially improve the usability of Web sites. One recent study found that the improvements made between the original Web site and the

redesigned Web site resulted in thirty percent more task completions, twenty-five percent less time to complete the tasks, and sixty-seven percent greater user satisfaction. A second study reported that eight of ten tasks were performed faster on the Web site that had been iteratively designed. Finally, a third study found that forty-six percent of the original set of issues were resolved by making design changes to the interface.