LAUC Web Review Ad Hoc Committee: Strategic Document

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Committee members:

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I. Charge

- Review the LAUC website and recommend changes that will improve usability and make the site easier to administer.
- Investigate options for the underlying technology that will support the LAUC website, including content management platforms.
- Investigate options for hosting.
- Recommend improvements to the information architecture, including revisions to the top level and secondary level navigation menus.
- Assess scale and scope of a project to implement any recommended information architecture and platform changes.
- Consult with LAUC and UCOP colleagues and website design experts as appropriate.

II. Organization overview

The Librarians Association of the University of California (LAUC), founded in 1967, is a statewide organization of all librarians employed at least half time by the University. The formal objectives of LAUC include: to advise the University on professional and governance matters, and to make recommendations concerning the operations and policies of the libraries.

III. Site review

A. Technology

Official LAUC documents and communications are published on the LAUC website (http://lauc.ucop.edu/). The site includes procedures, minutes, committee rosters, resources, and links to relevant documents on other sites.

The LAUC website is hosted on a UCOP server to which only the LAUC Web Manager may upload files. As a UCOP site, the LAUC website is subject to the UCOP web security policy, which stipulates that only users who are physically on-site at UCOP offices may access the webserver. A workaround involving VPN client software and private key authentication allows the Web Manager to manage the site remotely. UCOP provides limited technical support.

The site uses HTML and CSS, and links to reports in PDF and Word formats. It does not include a search engine, a back-end database, or dynamically generated content. Files in PDF format dominate the site, both in count and size. The following table lists the top three file types on the site:

Type	count	Σ size	% count	% size
PDF	332 URLs	216112 KB	39.49%	88.19%
HTML	241 URLs	2269 KB	28.62%	0.93%
MS Word	216 URLs	9992 KB	25.65%	4.08%

A web crawl of the site reports 492 broken links and 20 bad local (“anchor”) links.

B. Content

LAUC officers, committee chairs, and representatives are responsible for ensuring that web content within their areas of responsibility is accurate and current, and for submitting new and revised documents to the Web Manager for posting on the website.

As a key function of the site is to document the activities of the organization, the site's pages are text-heavy, often composed entirely of lists of links. While this structure perhaps cannot be avoided, given the archival role of the site, many top-level pages lack context or narrative explanation of the content, which negatively affects usability for both UC librarians and the general public.

Because of staffing and time constraints, most documents are posted to the site in PDF format, which is simpler than coding the document in HTML. The price of this convenience, though, is that the PDFs are largely hidden from search engines, and can be difficult to view on mobile devices.

The site contains little in the way of narrative explanation of LAUC's history, purpose, and goals; nor does it include imagery related to members or their library workplaces. This gives the site the feel of a staff intranet, with little to draw the interest or support of non-UC librarians.

C. Information Architecture

The design of the site is fairly flat, with minimal differentiation between sections and types of content. The layout of the home page is indistinguishable from other pages on the site. Page headings follow a logical descending hierarchy, but text font size varies across pages, which can cause user confusion about relative importance of the content.

Site navigation is accomplished via a static left-side menu bar containing 15 links. Some pages include a variation of this menu bar (that includes fewer links), and other pages have a right-side menu as well.

IV. Site Improvements

A. Technology

1. Migrate the LAUC site to the Drupal content management system (CMS). The primary benefits of a CMS include:
    a. Simplified administrative interface.
    b. Multiple options for design/layout via themes and templates.
    c. Different levels of website management privileges allow a variety of users to interact with the site.
2. Move the site to a new hosting environment, outside of UCOP, to facilitate administrative accessibility and shared governance.
    a. The committee investigated the possibility of hosting the site at CDL, but learned this was not an option. Felicia Poe, CDL User Experience Services Manager, said that "CDL is not structured to provide web hosting services to groups beyond those served by the UC Libraries website."
    b. The committee contacted UCOP for information on hosting within their Cascade CMS environment; however it doesn't appear that this is a viable option.
    c. Pantheon is an all-in-one Drupal platform that combines development with hosting in a highly collaborative environment. Their "Personal site" plan ($25/month) would suffice for the LAUC site.
    d. Because of the site's small size and low bandwidth requirements, the cost of a commercial shared hosting plan would be relatively modest. For example, the following plans would be suitable for the LAUC site:
        - Nixihost - $6/mo
        - Nearly Free Speech based on usage / probably less than ~$5/mo
        - Siteground - $4/mo
        - Veerotech - $7/mo
        - Geekghost - $15/yr
        - A Small Orange - $5/mo
3. Identify a sustainable model to make uploading and maintaining content accessible to a dispersed team of interested LAUC members.
4. Include form-based interfaces in the revised site for uploading standard types of content, such as meeting minutes and librarian profiles.

B. Content

1. Revise the home page to include public-facing content that describes and promotes LAUC and its members, such as a "Meet our Members" feature. (See report by the Subcommittee on "Meet Our Members" section on the LAUC Statewide Website.)
2. The committee notes the following examples as possible models for such a feature. Examples (a) and (b) use responsive design to adapt to mobile environments:
    a. http://www.backonmyfeet.org/meet-our-members
    b. http://www.urbanbound.com/ (click "Our Team")
    c. http://www.ice.org.uk/Membership/Meet-our-members
    d. http://www.ala.org/acrl/membership/memberoftheweek/members
3. Promote use of HTML markup for significant web elements (instead of PDF) for improved searchability and device independence.
4. Implement a consistent design for all sections, including uniform top-level navigation links.
5. Place a search box in a prominent position on the homepage and on all sub-pages.

6. Use responsive design to serve users with all varieties of browsing devices.
7. All pages should follow guidelines for ADA accessible code (see Appendix).

C. Information architecture

1. Create a visually distinct and inviting home page that publicizes the work of LAUC with stories and images.
2. Consolidate the existing 11 sub-sections into fewer categories (optimally 5-6). Preliminary analysis indicated that these categories may be viable options:
    - Who we are
    - Activities
    - Governance
    - Career resources
    - Key documents
    - Facts and figures
3. Switch navigation links from vertical-left to horizontal, avoiding dropdown menus.
4. Use a smaller sub-menu for links to:
    - Contact
    - Member directory
    - Calendar
5. Redesign subpages with consistent order and patterns to prevent user disorientation.
6. Provide context for links, instead of just presenting long lists.
7. Long tables or lists should have “back to top” links.

V. Implementation

1. Create a Website Redesign Ad Hoc Committee with members representing specific skills sets to plan and develop (or manage the development of) the new LAUC site.
2. Prior to implementation, the initial responsibilities of this working group would include:
    - Write a detailed project scope statement including:
        - Key deliverables
        - Requirements
        - Wish-list features
        - A timeline for the project
        - Determine costs and timeline related to migration
    - Obtain estimates from outside consultants for website development
    - Oversee engagements with outside vendors or contractors, if used
3. During implementation, the working group would:
    - Design and build a new LAUC website in Drupal. (Aspects of the Drupal site, including its design, or the entire site build, may be contracted out, in which case the working team will oversee that work.)
    - Coordinate training for users who will be migrating or developing content on the new site.
    - Update web maintenance best practices for LAUC members to suit the capabilities and limitations of Drupal.

VI. Implementation options

These options have been identified by the Web Review Ad Hoc Committee as feasible for implementation. Various options or a combination of options can be selected based on development needs identified by the project scope statement, in-house expertise assessment, and available funding.

1. Outsource entire project: Select a vendor to build Drupal website, defining infrastructure needs and creating necessary templates.
2. Hire one or more Drupal contractors to work with the LAUC web administrator to develop a Drupal website.
3. Develop project in-house with LAUC web administrator and a designated task force of LAUC members.

VII. Website maintenance plan

Drupal will allow for different levels of website management privileges. Via templates that will control the look and feel of the LAUC website across all pages, designated LAUC members will be able to create, edit and delete content with no (or minimal) knowledge of HTML.

The LAUC web administrator will remain the primary overseer of site content. With a new CMS-based site, the administrator can authorize other LAUC members to upload new content to specific areas.

Responsibilities of the web administrator include:

- Communicate closely with the Executive Committee to maintain current content and integrate new content
- Create an editorial calendar identifying when and why content will be updated:
    - Include schedule for launching new sites, pages and services
    - Run ongoing content audits
    - Weed irrelevant pages every year on a schedule and maintain a cold archive of retired pages for LAUC and for posterity
- Train LAUC members on uploading new content.
- Maintain a publication workflow
- Perform basic maintenance (such as fixing links, updating bad metadata and enforcing standard terminology)

Appendix: ADA Accessibility and usability guidelines

As with library resources, LAUC content should be accessible to all users, whether online or in-person. Specific ADA web guidelines should be followed, since accessibility to all is a fundamental tenet.

A. General Guidelines

- Use valid XHTML, CSS and RSS/Atom markup across all sites.
- Provide multiple points of access to the most essential features of the website. Duplicate important elements of the site navigation in an easy-to-read fat footer, for example.
- When developing advanced features with tools such as Javascript or AJAX, design for progressive enhancement[1].
- Use responsive design to serve users with all varieties of browsing devices, rather than maintaining a separate mobile site.
- All pages should follow guidelines for accessible code.

B. Specific Guidelines

- Text links. Text used for links should convey the purpose or function of the link.
- Active images. Alt-text for Active Images (image links, buttons, areas, etc.) should convey the purpose or function of the link or button.
- Inactive image. For images which are not links, the alt-text should convey the same information as the image; if redundant or decorative, use alt="".
- Form labels. Form controls must be labeled, using the label tag when the on-screen text is adequate and contiguous. When it is not, use the title attribute to specify the purpose of the control. Use fieldset/legend markup to provide context for sets of radio buttons.
- Button/graphic contrast. A contrast ratio of 4.5 to 1 is required for normal text; larger text (18 point or 14 point bold) passes with a contrast ratio of 3:1.
- In-page navigation (skip link). Each page should have a link at the top of the page which is visible (at least visible when it receives focus) and jumps to the main content of the page.
- In-page navigation (landmark roles). Use landmark roles judiciously to provide simple access to features of the site. These are usually appropriate:
    - role="navigation" - Use aria-label if it is important to distinguish different navigation areas
    - role="main" – For the main content
    - role="search" – The search section
    - role="content info" – The content at the bottom like copyright, privacy, etc.
- In-page navigation – headings. Make sure all major sections of the page have headings, that numbering is consistent and doesn't skip. Try to have at most one h1 heading per page.
- Frame titles. Each frame or iframe must have a title attribute that at least suggests the purpose of the frame. Without it screen readers may read useless and annoying source code.
- Layout tables. Though layout tables are to be discouraged, if they are used be sure to include role="presentation" on the table tag for all layout tables.
- Keyboard access. It is crucially important that all functionality links, i.e., buttons controls be available to one who does not use a mouse. Keyboard access generally means tabbing to active objects and pressing enter or space bar to activate the object.

[1] "Progressive enhancement uses web technologies in a layered fashion that allows everyone to access the basic content and functionality of a web page, using any browser or Internet connection, while also providing an enhanced version of the page to those with more advanced browser software or greater bandwidth." via http://en.wikipedia.org/wiki/Progressive_enhancement

- Finding added content. When a modal window is opened, there is no page reload – a screen reader has no indication that anything has happened or where it has happened. This can be fixed by doing three things.
    - Code as an alert dialog with the important message as the ARIA label. Sample here: http://tinyurl.com/alertdialog.
    - Have a heading and make it an h2.
    - Move focus to the dialog.
- Semantic markup. Use proper html semantic markup for native structures, like unordered lists, ordered lists, definition lists, blockquotes, and headings.
- Event handlers. Ensure the sole use of device dependent event handlers is avoided.
- Image Maps. Avoid where possible, but if using an image map be sure area tags are in the same order as the image map.
- Language. Ensure the language of a document is set.
- Focus control. Ensure keyboard focus is only assigned to elements that are defined as keyboard focusable without setting a tabindex.
- Format. Do not use hierarchical HTML tags for formatting alone, e.g., don't use lists just for the purpose of indentation.
- Lists. Use <ul> for lists rather than creating them without HTML tags, e.g., >>. Ensure list items are found in a list container