Office of the Chief Information Officer — OCIO

STATE OF IOWA

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Web Management, Content, and Design Standard/Guidelines
("IT Governance Document")
Revised (May 3, 2022)

1. **Overview.** The Web is one of the most important means by which the State communicates with the public. To that end, it is critical that Iowa's state websites present a professional, user-friendly, integrated portal to state information and services. The State of Iowa's presence on the Internet must be professional, comprehensive, and coordinated. All state websites must be accessible to the broadest possible audience and easy to understand and use.

2. **Purpose.** This IT Governance Document establishes minimum web management, content, and design requirements and recommendations, intended to:

    2.1.   Reinforce the Iowa.gov identity and make it clear to users they are on an Iowa Executive Branch site.

    2.2.   Provide consistency and continuity in website appearance.

    2.3.   Improve the quality, usability and accessibility of State web sites and services for the public.

    2.4.   Ensure that critical state links appear on all State of Iowa sites.

    2.5.   Integrate State of Iowa sites, web applications, and the portal to support a "one government" approach and move away from bureaucratic separation of information.

    2.6.   Increase the efficiency of website development and management by agencies.

3. **Scope/Application.** This IT Governance Document applies to all Participating Agencies. Non-Participating Agencies are encouraged to follow this and other Enterprise IT Governance Documents. This IT Governance Document shall be deemed to have been adopted by all Participating Agencies. Because this IT Governance Document establishes minimum requirements, in addition to this IT Governance Document, Participating Agencies may adopt Agency-Specific IT Governance Documents augmenting but not diminishing this IT Governance Document. In the event of a conflict or inconsistency between this IT Governance Document and an Agency-Specific IT Governance Document adopted by a Participating Agency, this IT Governance Document shall prevail.

    This document contains two different types of IT Governance:

    3.1.   **Required/IT Standard(s)** means, as defined in the Taxonomy, "a specific,

minimum requirement(s) applicable to the acquisition, utilization, or provision of IT, typically designed to facilitate the uniform application or implementation of one or more IT Policies." These items are required and must be followed by Participating Agencies in an effort to enhance usability or accessibility concerns or to promote consistency in website appearance across state agencies.

3.2. **Recommended/"IT Guideline(s)" or "Guideline(s)"** means, as defined in the Taxonomy, "a recommended policy, process, task, or action related to the acquisition, utilization, or provision of IT, typically designed to communicate a best practice(s), as opposed to a minimum requirement(s), and/or to support IT Policies and/or IT Standards." These items are only recommendations and, while encouraged by the office as a best practice, are not strictly required.

4. **Definitions.** Capitalized terms not defined herein shall have the same meaning as the corresponding defined term in the following sources, as may be amended from time to time, in the following priority order: Iowa Code Chapter 8B, Iowa Administrative Code Chapter 129; and the Information Technology Governance Document Taxonomy (**"Taxonomy"**). In addition to any other terms specifically defined herein, the following terms are defined as follows:

4.1. **"Browser Environment(s)"** means a combination of browser software, a version of that software, and the platform it is running on. Examples include Internet Explorer for Windows, Safari for Mac or iOS, and Chrome for Android.

4.2. **"Mobile Device(s)"** means a device that combines telephone, email, text messaging, and web browsing functionality into a single wireless device. Examples of mobile devices include smartphones, laptops, tablets, netbooks, iPads and similar devices.

4.3. **"Online Service"** means a service that allows a two-way transaction or interaction between citizens and government through a web page.

4.4. **"Primary Navigation"** means the primary means by which users navigate a website, and the key content available on the website,as is generally represented by keywords at the top of the website and in the mobile views menu.

4.5. **"Public Facing Website"** means a website comprised of web pages that can be viewed by the general public without login credentials.

5. **Web Management, Content, and Design Standard/Guidelines.**

5.1. *Domain and Site Management*.

5.1.1. <u>Domain Names</u>.

5.1.1.1. **[Required]** Participating Agencies shall utilize a .gov domain name such as https://agency.iowa.gov.

5.1.1.2. **[Recommended]** Fourth level domains (those with four parts to the URL) such as https://www.agency.iowa.gov are to be

avoided due to Secure Socket Layer (SSL) constraints because they require additional certificates.

        5.1.1.3.   **[Recommended]** Participating Agencies migrating from a .com, .org, or .net domain are advised to continue ownership of the domain to support transition to the new .gov domain and eliminate unintended impacts associated with cyber squatting.

5.1.2.   <u>Proxy Redirect Entries</u>. **[Required]** Participating Agencies changing domain names, from an old to a new domain, may only utilize a redirect from the old domain to the new domain for a period of up to six (6) months.

5.1.3.   <u>Promoting Domain Name Change</u>. **[Required]** Participating Agencies shall promote their new domain name on the existing Public Facing Website in advance of the launch of a new website with as much notice as possible.

5.1.4.   <u>Site Decommissioning</u>. **[Required]** Participating Agencies are responsible for the decommissioning of an old site(s) within ninety (90) days of the new site(s) move to production. Domain names associated with the old site shall follow 5.1.2.

5.2.   *Site Components*. These items apply to the components of every Public Facing Website. The following are site-wide items, not page specific.

5.2.1.   <u>"About" Page or Section</u>. **[Required]** Each Public Facing Website must include an "About" page or section that contains, at a minimum, a statement of the Participating Agency's purpose (*e.g.*, mission, vision, etc.). A link to this page or section must be visible in the root level of the Primary Navigation or header and must use the word, "About" in the text of the link. The "About" page or section may also include any other information that the Participating Agency deems necessary.

5.2.2.   <u>"Contact" Page</u>. **[Required]** Each Public Facing Website must include a "Contact" page that contains, at a minimum, general contact information for the Participating Agency, including a phone number, address, map or link to a map, and an email address or contact form. *See also* Footer 5.3.3.1.

5.2.3.   <u>Search</u>. **[Required]** Each Public Facing Website must include site-specific search functionality. The website's design must include a site-wide search in the top quarter of all pages.

5.2.4.   <u>Title Tag</u>. **[Required]** Each Public Facing Website must use unique, descriptive page titles across all pages. See Web Content Accessibility Guidelines (WCAG) 2.4.2. - http://www.w3.org/TR/WCAG20/.

5.2.5.   <u>Site Analytics</u>. **[Required]** Each Public Facing Website must connect the site into an analytics product approved by OCIO. The data collected can be used to make decisions about the content on the site and its

relevance.

5.2.6.   Services. **[Required]** Each Public Facing Website must highlight the Participating Agency's services on the homepage in a content area near the top of the page.

5.2.7.   News. **[Required]** Each Public Facing Website homepage must include a content section of news.

5.2.8.   Feedback. **[Required]** Each Public Facing Website homepage must include a feedback button for citizens to provide feedback. The button or link must be labeled as "feedback" or "website feedback."

5.2.9.   Page Titles. **[Recommended]** Public Facing Website page titles should be formatted with the page-specific title first, followed by the Participating Agency or website name. This helps the user identify where they are and what site they are on when moving from tab to tab in the browser.

5.2.10.   Questions Page or Section. **[Recommended]** Each Public Facing Website should include a questions page or pages to address common questions users might have. This empowers the user to self-serve and find their own solutions.

5.2.11.   Search Engine Optimization. **[Recommended]** An XML site map file can be generated for search engines. This helps maximize indexing by search engines and tends to increase the page ranking.

5.2.12.   Chat. **[Recommended]** Each Public Facing Website homepage should offer chat capability.

5.2.13.   Iowa Web Template.   **[Recommended]** Participating Agencies using Drupal are encouraged to use the Iowa Web Template; the use of which should assist Participating Agencies in complying with the above requirements. If not using Drupal, Public Facing Websites must still comply with the above-identified "required" site components.

5.3.   *Design Elements.* These items apply to each Public Facing Website's design.

5.3.1.   Header.

5.3.1.1.   Sliver Header. **[Required]** Each page of a Public Facing Website must include the official state-wide sliver header at the top. Implementation must follow the directions at http://www.iowa.gov/sliver/directions.php.

5.3.1.2.   Agency Header and Logo. **[Required]** Each Public Facing Website must have a consistent page header that includes, at a minimum, the Participating Agency name and/or logo/branding.

The Participating Agency logo/branding must link to the website homepage.

5.3.2. <u>Navigation</u>.

5.3.2.1. <u>Primary</u>. **[Required]** Each Public Facing Website must have consistent primary, top-level navigation across all pages. Primary Navigation must be laid out horizontally at non-mobile resolutions.

5.3.2.2. <u>Home Link</u>. **[Required]** Each Public Facing Website's primary, top-level navigation must include as the first item a link with the text "Home" or a Home icon to the website homepage.

5.3.2.3. <u>Second Level</u>. **[Recommended]** For websites that utilize a second level of navigation, the secondary navigation should be vertical and should not be on the bottom.

5.3.3. <u>Footer</u>. **[Required]** Each Public Facing Website must include a consistent page footer that includes, at a minimum, a contact link, and policy link(s), in accordance with the following:

5.3.3.1. <u>Contact Link</u>. **[Required]** Each Public Facing Website must include a link in the footer to the site's "Contact" page.

5.3.3.2. <u>Policies Link</u>

5.3.3.2.1. **[Required]** Each Public Facing Website must include a link in the footer to the Iowa.gov/policies page.

5.3.3.2.2. **[Recommended]** Participating Agency websites may also link to Agency-Specific policies. Where an Agency has its own Agency-Specific policies, that policies page should also contain a link to the Iowa.gov/policies page.

5.3.3.3. <u>Sitemap Link</u>. **[Required]** For Public Facing Websites that include a sitemap, the Public Facing Website must include a link in the footer to the sitemap.

5.3.3.4. <u>Plugins Link</u>. **[Required]** For Public Facing Websites that require the use of special software to view content (*i.e.*, viewers, media players, plugins, etc.) the website must include a link in the footer directing users to the location at which the appropriate software can be acquired. If multiple software types are needed, website designers may elect to place all of the appropriate information on a separate page and link to that page in the footer.

5.3.3.5. <u>Copyright Notice</u>. **[Required]** If Participating Agency content is copyrighted, a copyright notice must be placed in the footer.

5.3.3.6. <u>Social Media Links</u>. **[Required]** If a Participating Agency uses social networks/services, the links to those services must adhere to that social media site's Branding Guidelines when linking to or representing that site. Social network-specific graphics shall be displayed on the homepage of the site in the footer.

5.4. *Look and Feel.* These items pertain to the style of the Public Facing Website. They are not specific elements, but go to the overall "look and feel" of the site.

5.4.1. <u>Consistency</u>. **[Required]** All subpages on a Public Face Website must have a consistent look.

5.4.2. <u>Website Text</u>. **[Required]** Public Facing Website text (paragraphs, lists, etc.) must follow WCAG 2.1 guidelines. Specifically, in regards to sub sections 1.4.4 resize text, 2.4.6 headings and labels, etc. https://www.w3.org/TR/WCAG21/.

5.4.3. <u>Link Styles</u>. **[Required]** All body content links should be styled consistently throughout the Public Facing Website. Links in the text should all be the same font, color, style and have the same hover behavior. For accessibility, the link should be distinguished with some style (i.e. bold, italicized, underlined, etc.) besides a distinctive color. Follow WCAG 2.1 - subsection 1.4.1.

5.4.4. <u>Link Button Style</u>. **[Recommended]** Link button styling is recommended over inline text.

5.4.5. <u>Navigation – Current Page Clearly Marked</u>. **[Recommended]** Each page of a Public Facing Website should provide information to let users know where they are in a website. This can be done through breadcrumbs or other means to ensure the user experiences a displayed reference similar to Home page > Section Page > Subsection Page.

5.4.6. <u>Page Width</u>. **[Recommended]** Public Facing Websites should not require horizontal scrolling for more than 10 percent of their user base (as determined by analytics), unless horizontal scrolling is part of a specific design feature.

5.5. *Content*. These items pertain to body content throughout the entire site.

5.5.1. <u>"Online Services"</u>. **[Required]** If Participating Agencies offer services online to their users, they must be referred to as "online services."

5.5.2. <u>Descriptive Link Text</u>. **[Required]** Link text must be descriptive so that it remains meaningful when read out of context.

5.5.3. <u>Content Format</u>. **[Required]** Standard HTML must be used where content is being created for display in a browser. Non-HTML documents shall be used only when:

 5.5.3.1. Documents are intended for printing;

 5.5.3.2. Precise or official document layout is important; or

 5.5.3.3. Documents contain content that cannot be displayed using standard HTML.

5.5.4. <u>Link Behavior</u>. **[Recommended]** All links, except those to documents or downloads, should open in the same browser window or tab. When a new window is required, an indicator should notify users that a new window will be opened.

5.5.5. <u>Link to Top for Long Page</u>. **[Recommended]** For long pages, especially those with long listings, an anchor that returns the user to the top of the page should be provided at the bottom of the page.

5.5.6. <u>File Type Indicator on File Downloads</u>. **[Recommended]** Links to download files should include an indicator to let users know the file type. This can be done textually or with the use of an icon. An indicator of file type may help the site visitor determine if they want to download the file and more clearly notifies users there is a file available for download.

5.5.7. <u>Link Content for Single Source of Truth</u>. **[Recommended]** Links to content originating from other sites or organizations and associated websites is preferred over copying third-party content directly into a Participating Agency's Public Facing Website. The "single source of truth" should be preserved. Example: link to the [Administrative Rules Site](#) for agency rules instead of posting a document to the agency site with the same rules. Linking to the authoritative and original source of information helps to ensure information is accurate. The entity or person who owns or maintains the content is best positioned to handle version management and keep content up-to-date.

5.5.8. <u>Video Content</u> **[Required]** Video content shall be presented through a YouTube channel or other approved streaming provider Agencies are not required to create their own channel and may submit the video content to OCIO for posting to the State of Iowa channel.

5.6. *Usability*.

5.6.1. <u>Browser Compatibility</u>. **[Required]** All Public Facing Websites must be designed to look and function correctly in eighty (80%) percent of the Browser Environments used by the website users as determined by analytics.

5.6.2. <u>Mobile Compliant</u>. **[Required]** Public Facing Websites must be designed to be mobile responsive/adaptive and present content in a

manner that is easily readable on Mobile Devices.

      5.6.3.   <u>Images</u>. **[Recommended]** Attention should be paid to the file size of images. Optimally, no single graphic will exceed 50kb and the sum of all graphic elements on a page would not exceed 400 kb. Smaller images improve the response time of websites and benefit users with low bandwidth.

      5.6.4.   <u>Page Load Time</u> **[Recommended]** Page load time for a single page should be under four (4) seconds. Https://www.webpagetest.org/ is a useful resource that can be used to test page load times.

6. **Vendors/Contractors.** Vendors must comply with this IT Governance Document. Vendors designing/building Public Facing Websites on behalf of Participating Agencies are required to ensure compliance with this IT Governance Document, and Participating Agencies should take reasonable steps to ensure the requirements of this IT Governance Document are incorporated into Information Technology Contracts through appropriate terms and conditions.

7. **Amendment.** This IT Governance Document shall be reviewed at least every two (2) years and amended as needed. This IT Governance Document may be amended in the sole discretion of the CIO, taking into consideration the advice and input of the TLG and its various Subcommittees.

8. **Enforcement.** This IT Governance Document shall be enforced pursuant to Iowa Administrative Code rules 11— 25.11 and 11—117.11 and Iowa Code sections 8B.21(1)(d), (f), and (h), 8B.23(1), 8B.23, and 8B.24(1), as applicable. Upon a finding of a violation of or noncompliance with this IT Governance Document, the Office may, by way of example only:

    8.1.   Bar or otherwise limit a Participating Agency's use of Contracts entered into by the Office;

    8.2.   Remove or bar State Personnel of a Participating Agency from participating on IT Governance Subcommittees, work groups, or task forces established, organized, or managed by the Office;

    8.3.   Report such violations or noncompliance to the department of management, office of the governor, or auditor of state;

    8.4.   Recover administrative fees commensurate with any increased fees incurred by the Office or other Participating Agencies as a result of the violation or noncompliance.

9. **Waiver/Variance.** Iowa Administrative Code rules 11—25.11(2) and 11—117.11(3) and Iowa Code section 8B.21(5) provide for variances\waivers from IT Governance Documents. Requests for a waiver/variance from any of the requirements of this IT Governance

Document shall be submitted in writing to the Office in accordance with the requirements of those statutes and rules, as applicable.

10. **Dispute resolution.** If a dispute arises between the Office and a Participating Agency as it relates to compliance with or the administration or enforcement of this IT Governance Document, such dispute shall be resolved as provided by Iowa Code section 679A.19.

IN WITNESS WHEREOF, the CIO has caused the CIO's duly authorized representative to execute this IT Governance Document, which is effective as of the date of signature.

Chief Information Officer
State of Iowa