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**INTERNAL AUDIT AND ADVISORY SERVICES**

Website Accessibility Audit

Report No. M23A009

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**Website Accessibility Audit  
M23A009  
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# Website Accessibility Audit

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## EXECUTIVE SUMMARY

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Internal Audit and Advisory Services (Internal Audit) has conducted an audit of UC Merced's compliance with IT accessibility requirements stipulated in the University of California (UC) Policy IMT-1300: Information Technology Accessibility (ITAP). This audit was performed at the request of the chancellor. The primary objective of the audit was to evaluate processes and controls in place to facilitate compliance with IT accessibility requirements as they relate to UC Merced websites.

Overall, Internal Audit noted several challenges affecting UC Merced's compliance with ITAP that need improvement in order to provide reasonable assurance that risks are being mitigated and objectives are being met. External Relations & Strategic Communications (External Relations) and the Office of Information Technology (OIT) have embraced IT accessibility and have instituted initiatives to bring UC Merced into compliance with ITAP requirements.

The following observations need improvement to strengthen internal controls and/or effect compliance:

**IT Accessibility Program.** Internal Audit recommends External Relations and OIT collaborate to develop and implement an IT Accessibility Program that aligns with ITAP requirements.

**Websites Identification and Tracking.** Internal Audit recommends External Relations develop an inventory process for all UC Merced websites. External Relations should develop a policy to ensure all new websites are added to Siteimprove, and to ensure the owners of the new websites are made aware of their responsibilities for compliance with accessibility requirements.

**Re-Deployment of Siteimprove.** Internal Audit recommends OIT initiate a strategic rollout of Siteimprove for all UC Merced website owners, site managers and content providers to include training on the software as noted in Observation 4.

**Accessibility Awareness and Training Plan.** Internal Audit recommends OIT develop an IT accessibility awareness campaign that includes a training program of UC Merced's IT Accessibility procedures and the use of Siteimprove.

**Escalation Process for Accessibility Issues.** Internal Audit recommends External Relations develop policies and procedures for the escalation and resolution of accessibility issues.

**Accessibility of YouTube Channels.** Internal Audit recommends External Relations develop policies and procedures for the registration of YouTube channels and to delineate the responsibilities of channel owners for compliance with accessibility requirements. In addition, External Relations should consider utilizing its internal video hosting system.

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## BACKGROUND

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The UC has acknowledged the importance of web accessibility and providing equal access to university services and information to the entire university community, including people with disabilities. In 2013, the UC published policy IMT-1300: Information Technology Accessibility (ITAP), which aims to “deploy information technology that has been designed, developed, or procured to be accessible to people with disabilities, including those who use assistive technologies.” The policy was revised in 2017 to comply with Web Accessibility Guidelines (WCAG) 2.0. ITAP outlines the minimum IT requirements locations must meet to achieve compliance with the policy.

Compliance with ITAP centers on three main components:

1. The establishment of an Information Technology Accessibility Program.
  - a. The plan must align with the World Wide Web Consortium’s (W3C) Web Content Accessibility Guidelines (WCAG) 2.0 at level AA.
2. Developing and/or procuring hardware and software products that are accessible to people with disabilities.
3. Promoting the awareness of ITAP to the university community, especially content and website owners.

### **World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG)**

The World Wide Web Consortium (W3C) is the official organization that develops web standards. The W3C defines web accessibility as the means of designing and developing websites, tools, and technologies so that people with disabilities can use them. Web accessibility goes beyond making websites, tools, and technologies accessible to people with disabilities; website accessibility efforts translate to a benefit for all users.

The W3C created the Web Content Accessibility Guidelines (WCAG) in an effort to make the web more accessible to a wider range of people with disabilities and to improve the overall usability for all people in general. The UC requires locations to adhere to WCAG 2.0 at level AA.

## Regulations Governing Website Accessibility

Website accessibility falls under the purview of various federal and state regulations such as the Americans with Disabilities Act (ADA), the Rehabilitation Act of 1973, and California Government Code Sections 7405 and 11135.

The Rehabilitation Act of 1973:

- **Section 503.** Prohibits employment discrimination based on disability by federal contractors and subcontractors.
- **Section 504.** Prohibits federal agencies from discrimination and requires reasonable accommodation for qualified individuals with disabilities.
- **Section 508.** Requires federal agencies to make their electronic and information technology (EIT) accessible to people with disabilities. Furthermore, access to information must be the same for everyone.

The American with Disabilities Act (ADA)

- **Title I.** Prohibits discrimination in employment.
- **Title II.** Covers public entities and states that communication with people with disabilities must be “as effective as communications with others.”
  - “No qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any public entity.” 28 C.F.R. § 35.130(a)
  - “A public entity shall take appropriate steps to ensure that communications with applicants, participants, members of the public, and companions with disabilities are as effective as communications with others.” 28 C.F.R. § 35.160(a)(1)
  - A public entity shall furnish appropriate auxiliary aids and services where necessary to afford qualified individuals with disabilities, including applicants, participants, companions, and members of the public, an equal opportunity to participate in, and enjoy the benefits of, a service, program, or activity of a public entity. 28 C.F.R. § 35.160(b)(1)
- **Title III.** Deals with non-discrimination towards people with disabilities in “places of public accommodation.”

California Government Code

- **Section 7405.** Requires state government entities (e.g., public institutions of higher education) comply with the accessibility requirements of the Rehabilitation Act of 1973 Section 508.

- **Section 11135.** Gives people with disabilities the right to full and equal access to the benefits of any program or activity conducted by a state agency.

### **Siteimprove**

In an effort to further their accessibility initiatives, the UC signed an agreement with Siteimprove, a cloud-based tool that assesses the accessibility of the university websites that are uploaded to the tool. Siteimprove “generates reports identifying different issues, including major accessibility problems, broken links, and misspelled words. Siteimprove also provides information about how to fix accessibility issues, helps you prioritize what to fix, and helps you improve search engine optimization (SEO).”

### **Consent Decree between the United States and the Regents of the University of California, on Behalf of the University of California at Berkeley**

Beginning in 2014, the University of California, Berkeley (Berkeley) was subject to an investigation by the United States Department of Justice (DOJ) regarding the accessibility of certain online content. The DOJ issued a Letter of Findings in 2016 outlining its findings of facts and conclusions of law. In the Letter of Findings, the DOJ concluded that Berkeley had certain online content that was not accessible to individuals with hearing, vision, and manual disabilities, therefore, did not allow these people the “full and equal enjoyment of its services.” As a result, the DOJ concluded that Berkeley was not compliant with Title II of the ADA. The Regents of the University of California (Regents) dispute the findings and conclusion of laws, citing Berkeley’s accessibility efforts.

On December 2, 2022, the federal district court entered a consent decree to resolve the allegations raised in the Letter of Findings. A consent decree is a “decree made by a judge with the consent of all parties. It is not strictly a judgment, but rather a settlement agreement approved by the court. The agreement is submitted to the court in writing after the parties have reached a settlement, and once approved by the judge, the agreement is binding and enforceable on both parties.”

While this consent decree does not apply to UC Merced, Internal Audit deemed the consent decree requirements as best practices and used the recommendations as criteria in the audit.

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## SCOPE AND OBJECTIVES

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This audit was selected based on a request from the chancellor as a response to website accessibility legal risks identified at UC Berkeley. The objectives of the audit were:

- To assess UC Merced's compliance with ITAP.
- To assess UC Merced's governance over website accessibility.
- To assess UC Merced's remediation process for website accessibility issues.
- To ensure UC Merced is monitoring accessibility compliance on all university websites.
- To assess UC Merced's website accessibility training program.

Internal Audit's primary scope included all of the website accessibility controls currently in place for the UC Merced website. Based on the Letter of Findings from UC Berkeley, Internal Audit also included YouTube channels attributed to UC Merced in the scope. The scope of the audit excluded UC Merced's procurement of IT accessibility resources, UC Merced's social media (including podcasts hosted by third-party vendors), digital signage, instructional content, and all non-public facing content. The audit included interview of personnel, review of policies, observations and tests of current practices and processing techniques, and other auditing procedures considered necessary.

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## POSITIVE OBSERVATIONS

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As stated in the university's mission, UC Merced strives for excellence in carrying out the university's mission of teaching, research, and public service. To achieve this mission, UC Merced stakeholders must be committed to the promotion of positive change in the university. As a result, Internal Audit is committed to highlighting practices in the areas audited that promote positive change within their organization and UC Merced as a whole.

During the Website Accessibility Audit, Internal Audit noted the following positive observations:

- External Relations and OIT staff collaborate well to foster synergies around website accessibility efforts.
- OIT and External Relations staff are receptive to creative solutions for effecting compliance with IT Accessibility requirements.
- External Relations and OIT staff are accommodating to website content creators to provide training and guidance on accessibility standards for websites.

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## MANAGEMENT ADVICE

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During the engagement, Internal Audit became aware of a potential inefficiency that did not rise to the level of a formal recommendation. This inefficiency is presented in the management advice section and management is not expected to formally report their response to this advice.

### COMPREHENSIVE ADA STRATEGIC PLAN

During the course of this audit, Internal Audit became aware of broader issues with ADA compliance at UC Merced. There does not appear to be a well-defined approach to ADA compliance for both physical and IT ADA compliance. Internal Audit notes that while UC Merced has identified a 504 coordinator as required by Title II Section 504 of the ADA, the assigned employee was the HR benefits manager and had little bandwidth to attend to any of the ADA requirements that need to be addressed by the 504 coordinator. In addition, Internal Audit noted the Accessibility Resource Group, which is charged with facilitating ADA compliance, has not met regularly and needs to be reconstituted since several key members are no longer with UC Merced. Internal Audit notes that much of the work being done for accessibility is ad-hoc and as such, does not lend itself to being strategically effective or efficient.

Internal Audit recommends that UC Merced develop a comprehensive strategic plan to address both physical and technological accessibility. The plan should include:

- Identify executive ownership of overall ADA compliance and executive ownership of the various components of the program including:
  - IT Accessibility
  - Physical Accessibility
  - Student, faculty, and staff accommodations
  - Oversight of 504 coordinator
- Identification of a 504 coordinator with sufficient bandwidth to fulfill the responsibilities of the position.
- Identification of resources to be invested in accessibility.
- Scope which would include physical and technological accessibility compliance.
- Scope which would include accommodations for all populations. Identification of roles and responsibilities for all stakeholders that will have oversight responsibility for ADA compliance.
- Should consider appointing coordinators at the divisional level to allow for an effective program.

- For example, coordinators at each division could be tasked with receiving web accessibility exception reports from External Relations and OIT and coordinating remediation efforts with the website managers/owners. This would alleviate the administrative burden of External Relations and OIT being directly tasked with managing compliance with the over 400 UC Merced websites. Internal Audit notes it would appear unreasonable to directly manage the websites centrally in one unit.

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## OBSERVATIONS

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### 1. IT ACCESSIBILITY PROGRAM

#### Background

ITAP requires locations to establish an IT Accessibility Program. Per ITAP:

The purpose of the IT Accessibility Program is to establish processes to address IT accessibility in a systematic fashion at each UC Location, using local structures and practices as appropriate. The Chancellor must designate an individual, and/or a committee to develop and oversee the Program and to promote coordination with systemwide IT accessibility initiatives. Any designated individual and/or committee must represent a broad range of functional areas and be able to address academic, research, and administrative concerns and needs.

In addition, per the Berkeley consent decree, effective web accessibility procedures should include the following:

- Required procedures that content and website owners must follow regarding the creation, development, and/or publication of online content;
- Establish recommended guidelines and best practices for the UC Merced community who are not content and website owners;
- Require the conformance with WCAG 2.0, Level AA, as prescribed by the W3C (exceptions could be made for extenuating circumstances);
- Procedures by which a person can file request for non-accessible content to be made accessible, as well as how the campus will investigate, respond to, and remediate any accessibility issues; and
- Make the procedures and a copy of UC ITAP publicly available via a direct link on the footer of the campus homepage.

**Observation**

During the assessment of the governance over website accessibility, Internal Audit noted UC Merced does not have an IT Accessibility Program.

Internal Audit notes IT accessibility has not been historically embedded in UC Merced culture; therefore, IT accessibility efforts have been performed ad-hoc, rather than as part of a comprehensive strategy for the university.

Without an effective IT Accessibility Program, UC Merced is exposed to potential litigation. UC Merced could be exposed to investigations from the Department of Justice Office of Civil Rights. Lastly, without a comprehensive strategy, UC Merced is falling short of its goal of supporting a fully inclusive environment for those requiring accessibility accommodations.

**Recommendation**

Internal Audit recommends External Relations and OIT collaborate to develop and implement an IT Accessibility Program that aligns with ITAP requirements.

**Management Corrective Action**

OIT and External Relations will collaborate to develop and charge an ITAP committee that aligns with relevant policy and requirements by March 31, 2024.

**2. WEBSITE IDENTIFICATION AND TRACKING**

**Background**

A necessary component of an effective IT Accessibility Program is an inventory of websites and website owners. This inventory gives administrators the population of websites that they would assess to determine compliance with WCAG 2.0. The list of website owners would need to be kept current as they are the individuals that administrators would need to contact for resolving any accessibility issues within their websites.

**Observation**

Internal Audit notes UC Merced does not have a process to identify and track university websites.

**Recommendation**

Internal Audit recommends External Relations develop an inventory process for all UC Merced websites. External Relations should develop a policy to ensure all new websites are added to Siteimprove, and to ensure the owners of the new websites are made aware of their responsibilities for compliance with accessibility requirements.

**Management Corrective Action**

External Relations will develop a policy that will ensure there is an active inventory of all production/development sites with a list of site owners/site managers as a means to communicate to those responsible for updating each website in order to make accessibility changes that meets current web standards by March 31, 2024

**3. RE-DEPLOYMENT OF SITEIMPROVE****Background**

In 2018, Systemwide Risk Services funded the Siteimprove tool to identify accessibility issues with university websites. Siteimprove scans websites every three to five days and is designed to send notifications to website owners of the issues that have been identified. This is a tool that the UC uses to effect compliance with WCAG 2.0.

**Observation**

Siteimprove has been deployed in an ad-hoc fashion with OIT and External Relations adding known websites and allowing UC Merced stakeholders to add their websites on a volunteer basis. The availability of the software and how stakeholders are to use it has not been widely communicated. In addition, it appears Siteimprove has not been configured to monitor compliance with WCAG 2.0 at Level AA for all websites, which presents an opportunity for Siteimprove administrators to optimize the tool to foster a more effective compliance monitoring program.

Internal Audit notes UC Merced does not have a comprehensive strategy to address ADA issues within the university. Therefore, roles and responsibilities for how to comply with various accessibility requirements have not been defined. The issues pertaining to a comprehensive ADA strategy are discussed in more detail in the Management Advice section.

Without utilizing Siteimprove effectively, UC Merced has no real way to identify accessibility issues efficiently and effectively. Consequently, UC Merced could be exposed to legal risks, as well as falling short of its commitment to maintaining an inclusive and diverse educational environment.

**Recommendation**

Internal Audit recommends OIT initiate a strategic rollout of Siteimprove for all UC Merced website owners and content providers to include training on the software as noted in Observation 4.

**Management Corrective Action**

OIT will initiate a re-rollout of the Siteimprove platform for all website owners. The rollout will include a process to identify and update site owners, a webpage with an introduction

to Siteimprove, a list of expectations for website owners, and links to training information. Rollout will be completed by March 31, 2024.

#### 4. ACCESSIBILITY AWARENESS AND TRAINING PLAN

##### **Background**

A successful IT Accessibility Program relies on an effective awareness campaign that aims to inform and train the university community, especially content and website owners, on the university's commitment to accessibility. Content and website owners should be trained on UC Merced's policies and procedures for website accessibility. This includes training on any tools needed (i.e., Siteimprove) to achieve compliance with accessibility requirements.

The UC requires the IT Accessibility Program include a "communication plan and campaign to raise awareness about IT accessibility," as well as "a training plan for personnel who develop and maintain electronic information resources, author web content, or make IT related purchases."

##### **Observation**

During the testing of the accessibility training, Internal Audit noted UC Merced does not have an accessibility training program. Content and website owners are not required to take any training prior to editing or creating websites.

Both External Relations and OIT offer individualized training to campus stakeholders who request it when designing a new web project (e.g., website). However, since it is not required, not many stakeholders have had the training. In addition, users of Siteimprove are referred to Siteimprove's training catalog for any training needs.

As noted in Observation 1, UC Merced does not have a formal IT Accessibility Program, therefore, several program components have gone unaddressed, and roles and responsibilities have not been defined.

The UC Merced community, and in particular, content and website owners, are not fully aware and trained on accessibility requirements, which could create gaps in the university's accessibility compliance efforts. Furthermore, content that is not compliant with ITAP requirements could be uploaded to university websites and create accessibility barriers for people with disabilities.

##### **Recommendation**

Internal Audit recommends OIT develop an IT accessibility awareness campaign that includes a training program of UC Merced's IT Accessibility procedures and the use of Siteimprove.

### **Management Corrective Action**

OIT will create a training program for site owners on the proper use of Siteimprove and other IT Accessibility procedures and requirements as prescribed by the ITAP committee prior to March 31, 2024.

## **5. ESCALATION PROCESS FOR ACCESSIBILITY ISSUES**

### **Background**

An effective IT Accessibility Program would need to be able to identify issues and then define a process by which these issues are remediated. Since issues are often not resolved timely, the program administrators would need a policy for how unresolved issues should be escalated to a higher level to effect compliance.

### **Observation**

During the testing of escalation and resolution of accessibility issues, Internal Audit noted UC Merced does not have an escalation process.

Per discussions with OIT and External Relations staff, they do not have the authority to enforce accessibility requirements at the university. The use of Siteimprove has been voluntary and dependent on the proactivity of the content and website owners. UC Merced does not have policies and procedures that define roles and responsibilities for the escalation and resolution of accessibility issues.

### **Recommendation**

Internal Audit recommends External Relations develop policies and procedures for the escalation and resolution of accessibility issues.

### **Management Corrective Action**

External Relations in consultation with OIT will develop policies and procedures for the escalation and resolution of accessibility issues by March 31, 2024.

## **6. ACCESSIBILITY OF YOUTUBE CHANNELS**

### **Background**

ITAP requires electronic information to meet W3C's WCAG 2.0 Level-AA success criteria. W3C requires that all time-based media (e.g., videos, audio files, etc.) include the following:

- Captions are provided for all prerecorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labeled as such.
- Captions are provided for all live audio content in synchronized media.

- Audio description is provided for all prerecorded video content in synchronized media.

**Observation**

During the testing of compliance with W3C's WCAG 2.0, Internal Audit noted several videos on YouTube channels associated with UC Merced are not compliant with WCAG 2.0.

Based on discussions with External Relations staff, Internal Audit notes UC Merced does not have control over all YouTube channels associated with UC Merced. Moreover, UC Merced does not have policies and procedures for registering YouTube channels associated with UC Merced and notifying owners of their responsibilities for accessibility.

**Recommendation**

Internal Audit recommends External Relations develop policies and procedures for the registration of YouTube channels and to delineate the responsibilities of channel owners for compliance with accessibility requirements. In addition, External Relations should consider utilizing its internal video hosting system.

**Management Corrective Action**

External Relations will develop policies and procedures to ensure all internal UC Merced videos are posted to YouTube channels managed by External Relations by March 31,2024.