



**Hillsborough**  
**County** Florida

**Board of County Commissioners  
County Internal Auditor's Office**

**Communications and Digital Media – Website Content Management  
Report #2024-02  
April 3, 2024**



**Hillsborough  
County Florida**

**Board of County Commissioners**

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**TO:** Board of County Commissioners  
**FROM:** Melinda Jenzarli, Acting County Internal Auditor  
**DATE:** April 3, 2024  
**SUBJECT:** Communications and Digital Media – Website Content Management, Report #2024-02

Pursuant to the 2023 Annual Audit Plan, the County Internal Auditor's Office conducted an audit engagement of the Communications and Digital Media (CDM) – Website Content Management. The Audit Team's objective was to determine the maturity of the website content management activities.

The purpose of this Report is to provide management with independent, objective analysis, recommendations, counsel, and information concerning the activities reviewed. As such, this Report is not an appraisal or rating of management.

Although the Audit Team exercised due professional care in the performance of this engagement, this should not be construed to mean that unreported noncompliance or irregularities do not exist. The deterrence of fraud and/or employee abuse is the responsibility of management. Audit procedures alone, even when carried out with professional care, do not guarantee that fraud or abuse will be detected.

I appreciate the cooperation and professional courtesies extended to the Audit Team. The County Administrator gave the Audit Team full, free, and unrestricted access to all applicable activities, records, property, and personnel necessary to accomplish the stated objective of this engagement. Personnel also provided necessary assistance for the Audit Team to effectively perform the engagement in an efficient manner.

Sincerely,

Melinda Jenzarli, CIA, CISA, CFE, CPA, MBA  
Acting County Internal Auditor

Copy: Christine Beck, County Attorney  
Terri Cordova-Hewitt, Communication & Digital media Director  
Liana Lopez, Chief Communications Administrator  
Bonnie M. Wise, County Administrator

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## EXECUTIVE SUMMARY

Pursuant to the 2023 Annual Audit Plan, the County Internal Auditor's Office conducted an audit engagement of the CDM – Website Content Management. The Audit Team's objective was to determine the maturity of the website content management activities in three key areas.

1. Website Content Accuracy - Collectively, CDM's standard operating procedures (SOPs), control design, and activities performed provide a reasonable level of assurance that the risk of inaccurate or outdated website content is mitigated. Mitigation of this risk enables CDM to efficiently and effectively achieve its principal business objective to carefully vet website content to ensure that visitors receive the most accurate and timely information about County services available to residents.
2. Website Content Quality - Collectively, CDM's SOPs, control design, and activities performed provide a reasonable level of assurance that the risk of website content lacking quality and information on needed services is mitigated. Mitigation of this risk enables CDM to efficiently and effectively achieve its principal business objective to ensure that website content is easy to navigate and provides value to visitors by improving quality of life, business growth, and overall understanding of County services and emergency matters.
3. Website ADA Compliance - Collectively, CDM's SOPs, control design, and activities performed provide a reasonable level of assurance that the risk of website content not conforming with the Americans with Disabilities Act (ADA) requirements is mitigated. Mitigation of this risk enables CDM to efficiently and effectively achieve its principal business objective to ensure that the website is compliant with ADA requirements.

The Audit Team evaluated the impact control deficiencies had on ensuring the achievement of business objectives. The evaluation results are included in this Report. Recommendations were made to build upon the control environment already in place.

Other minor concerns that may have been identified and not included in this Report were communicated to management and/or corrected during fieldwork.

The exit conference was held on February 19, 2024.

## OVERALL OPINION



It is the Acting County Internal Auditor's overall opinion that CDM's website content management activities are at the formal control maturity level. Controls are well-established and proactive. Control gaps are detected and remediated timely. The SOPs generally provide detailed guidance. Key performance indicators and monitoring techniques are employed to measure success. There is clarity on roles, responsibilities, authorities, and accountability.

The recommendations in this Report are designed to further strengthen and mature the control environment already in place.

## AUDITED BY

Melinda Jenzarli, CIA, CISA, CFE, CPA, MBA, Acting County Internal Auditor  
Abram Gablla, CIA, CGAP, Senior Internal Auditor  
Jeremy Miller, CIA, MBA, Senior Internal Auditor

## BACKGROUND INFORMATION

CDM's primary business objective is to communicate the County's message in a clear, concise, and engaging way. By doing so, CDM helps ensure that residents, businesses, and community partners are informed about the County's programs and services and that they have the tools they need to participate in the County's decision-making process.

### Website Management and Quality Assurance

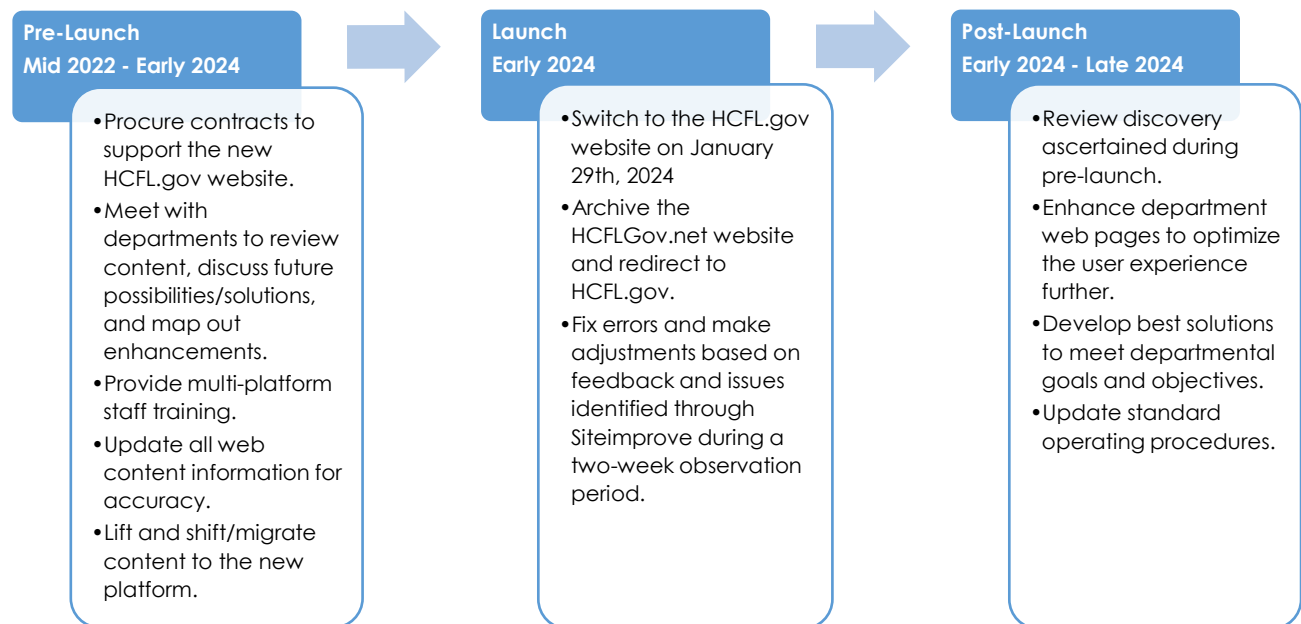
To achieve its primary objective, CDM employs a quality assurance framework in managing the County's website. This framework includes the following activities:

- **Website Content Review and Approval:** Content undergoes a review and approval process to support accuracy and alignment with established County messaging guidelines.
- **Website Content Periodic Review:** Periodic content reviews identify areas for improvement and ensure information remains current.
- **Performance Score Tracking:** Tools like Google Analytics and Siteimprove, a software solution for website governance and optimization, provide valuable insights into user behavior and website effectiveness, enabling data-driven optimization.
- **Customer Surveys:** CDM proactively solicits user feedback through customer surveys to understand preferences and refine the website experience.
- **Website Accessibility Scans:** Performance of accessibility scans using Siteimprove supports consistent adherence to the ADA requirements.

These activities allow CDM to continually monitor and improve the website, fostering a positive user experience, increased traffic, and deeper engagement.

### New Website Development and Launch

Recognizing the evolving digital landscape and user expectations, in 2022, CDM undertook developing and launching a new Hillsborough County website following a multi-phased approach as indicated in the workflow below.



## ENGAGEMENT OBJECTIVE

The Audit Team's objective was to determine the maturity of the website content management activities.

## APPROACH

The audit was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing*. These Standards require that the County Internal Auditor's Office plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for the audit comments and conclusions based on the audit objectives. The Acting County Internal Auditor believes that the evidence obtained provides this reasonable basis.

To assist in evaluating the control environment, the County Internal Auditor's Office follows the Committee of Sponsoring Organizations of the Treadway Commission framework (COSO). This standardized system assesses and enhances internal controls, risk management, and business processes to assist organizations in maintaining accountability and achieving goals and objectives.

## SCOPE

The Audit Team determined whether the following principal business objectives support the achievement of the primary business objective to communicate the County's message in a clear, concise, and engaging way to help ensure that residents, businesses, and community partners are informed about the County's programs and services and have the tools needed to participate in the County's decision-making process.

- Website content is carefully vetted to ensure that visitors are receiving the most accurate and timely information about County services available to residents.
- Website content is easy to navigate and provides value to visitors by contributing to improved quality of life, business growth, and overall understanding of County services and emergency matters.
- The website is compliant with ADA requirements.

The Audit Team performed interviews, observations, and testing on the control environment and activities performed from August 1, 2022, through February 14, 2024.

## POSITIVE ATTRIBUTE

The new HCFL.gov website prioritizes accessibility, education, and user-friendliness across various platforms, including mobile and voice-search optimization. This commitment to enhancing digital communication is further evidenced by:

- **Consulting Services:** Utilizing the expertise of Bonfire Inc., CDM ensured a smooth migration process.
- **Penetration Testing:** The Information & Cyber Security Division conducted rigorous penetration testing to maintain robust website security.
- **Enhanced Security:** Implementing a stronger SSL certificate with an "A" security rating further bolsters user data protection.

## **AUDIT COMMENTS & RECOMMENDATIONS**

**PRINCIPAL BUSINESS OBJECTIVE**  
**WEBSITE CONTENT ACCURACY**

**AUDIT COMMENT 1**

Collectively, CDM's SOPs, control design, and activities performed provide a reasonable level of assurance that the risk of inaccurate or outdated website content (monitoring and reporting – inaccurate risk) is mitigated during the following activities:

- Website Content Review and Approval
- Website Content Periodic Review

Mitigation of this risk enables CDM to efficiently and effectively achieve its principal business objective to carefully vet website content to ensure that visitors receive the most accurate and timely information about County services available to residents.

## **1.1 WEBSITE CONTENT REVIEW AND APPROVAL**

### **ACTIVITY OVERVIEW**

CDM works closely with departments to determine the most effective means of matching services with community needs. Web content goes through a review and approval process, as explained below.

- Each department assigns at least two web liaisons as the only users authorized to request changes to their department's web content.
- CDM receives requests through HelpScout, the helpdesk triage solution, which automates and assigns incoming web requests to personnel, routes replies and responses, and tracks timelines and service ratings.
- When a web request is received through HelpScout, CDM:
  - Verifies the submitter's authority.
  - Coordinates with the department's assigned Public Relations Strategist to ensure cohesive messaging.
  - Makes the final changes to web content.
  - Requests the web liaison to approve web content and rate their experience with the content update process.

### **AUDIT PROCEDURES**

The Audit Team determined if SOPs provide adequate guidance and if the control design is efficient and effective to support management in achieving the website content review and approval activity and mitigating the monitoring and reporting – inaccurate risk.

To validate proper authorization and approval of website content, the Audit Team:

- Using a 90% confidence level, selected a random sample of 24 out of 360 HelpScout web service requests created during FY2023.
- Reviewed the documentation included in the three-tiered content approval process for each of the 24 web service requests sample tested and validated that HelpScout assigned the requests to the appropriate personnel for review and approval, routed replies and responses, and maintained detailed records of timelines and service ratings.

**Figure 1 – Website Content Review and Approval**

**PRINCIPAL BUSINESS OBJECTIVE 1** – Website content is carefully vetted to ensure that visitors are receiving the most accurate and timely information about County services available to residents.

**RISK: Monitoring and Reporting – Inaccurate** – Website content is not carefully vetted, resulting in inaccurate or outdated information being presented to visitors, leading to confusion, frustration, and even financial losses for residents who rely on the County website for accurate information about available services.

**COSO CONTROL: Other Process Oversight Activities** – There are methods, procedures, or activities designed to assess the appropriateness of the control and risk management frameworks in place.

| Written Guiding Principles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | Activities Performed Conform with Written Guiding Principles |                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------|--------------------------------------------------|
| There are no higher-level written guiding principles for this activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  | N/A                                                          |                                                  |
| SOPs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | SOPs Provide Adequate Guidance                               |                                                  |
| <p><b>CDM Service Level Agreement (SLA) For County Administrator Departments,</b></p> <p><b>§ Management Procedures</b> states, "CDM and the client department will each assign a liaison. The liaison for CDM will be the Public Relations Strategist assigned to the department. The liaison for the department is the director, unless a designee is appointed....All requests will be reviewed and sent through the department's appointed liaison...."</p> <p><b>§ CDM Core Responsibilities, Web Services (Intranet/Internet)</b> states, "CDM will 1) Plan, develop, and work with the department...to implement new web content...on the County's website (Internet). The department's web liaison is responsible for updating content for submission; 2) Manage the department's access to Intranet updates and provide training for Intranet (COIN) liaisons; 3) Manage web messaging for internet and outward-facing content using a standardized methodology that meets security standards; 4) Establish, plan, and implement quality assurance standards for all of the department's web content; 5) Act as the resource for the department to assist in determining the best web-based approach to meet their business needs for web communications."</p> <p><b>Authorized Web and Internet Department Liaisons procedures</b> include each department's appointed web liaison and states, "To request updates to the public-facing website or COIN, ... contact the web liaison for your department. Your department liaisons have been designated by your department director as the employees authorized to request changes...."</p> <p><b>HelpScout Request Handling Overview,</b></p> <p><b>§Approved Requestors</b> states, "When assigned a request in HelpScout, ensure that the requestor is on the web/coin liaison list or is the department's director...."</p> <p><b>§Workflows (ALL Requests)</b> states, "All requests are routed from approved requestors to HelpScout...."</p> |  | Yes                                                          |                                                  |
| Control Reviewed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | Control Design is Efficient and Effective                    | Activities Performed Conform with Control Design |
| <p>CDM has a three-tiered content approval process involving appointed department liaisons, Public Relations Strategists, and web content coordination personnel.</p> <p>CDM leverages HelpScout's automation capabilities to streamline the handling of incoming web requests. This automation assigns requests to the appropriate personnel for review and approval, routes replies and responses, and maintains detailed timelines and service rating records.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Yes                                                          | Yes                                              |

## **RESULTS**

The test results below indicate that the website content review and approval activity enables CDM to ensure that website content is thoroughly reviewed and approved by personnel with the necessary expertise.

### Conformance With Written Guiding Principles

There are no higher-level written guiding principles for this activity.

### SOPs Provide Adequate Guidance

CDM's website content SOPs provide adequate guidance for ensuring that website content is accurate and current.

### Control Design Efficiency and Effectiveness

The control design is efficient and effective. The three-tiered approval process, involving appointed liaisons, public relations personnel, and web content coordinators, ensures a comprehensive content review and approval. Additionally, CDM leverages HelpScout's automation capabilities, effectively assigning and routing requests while maintaining detailed records with timely and efficient resolution.

### Conformance with Control Design

The Audit Team determined that the activities performed conformed to the control design. The required reviews and approvals, as defined in the provided SOPs, were consistently documented. HelpScout assigned the requests to the appropriate personnel for review and approval, appropriately routed replies and responses, and maintained detailed records of timelines and service ratings. No exceptions or deviations from the control design were identified within the sample tested.

## 1.2 WEBSITE CONTENT PERIODIC REVIEW

### ACTIVITY OVERVIEW

CDM has a periodic review process where departments are offered two options, as included in Figure 2, to ensure the accuracy and currency of information presented on departmental websites and online resources.

**Figure 2 – Website Content Periodic Review Options**

| <b>OPTION ONE</b><br><b>Website Content Review Questionnaire</b>                                                                                                                                                                                                                                                                                                               | <b>OPTION TWO</b><br><b>Departmental Meetings and Webpage Inventory</b>                                                                                                                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Departmental liaisons receive a questionnaire to assess their website content and online resources. They then complete and return the questionnaire, providing insights into potential updates. CDM analyzes these responses to pinpoint specific areas where content needs to be revised or refreshed and collaborates with departmental liaisons to implement these updates. | For departments facing challenges completing the questionnaire, CDM holds individual meetings with key representatives to assess website content and online resources. CDM collaborates with the department to create a detailed spreadsheet inventorying all web pages and online resources with any needed updates. |

### AUDIT PROCEDURES

The Audit Team determined if SOPs provide adequate guidance and if the control design is efficient and effective to support management in achieving the website content periodic review activity and mitigating the monitoring and reporting - inaccurate risk.

To determine if activities performed conform with written guiding principles and the control design, the Audit Team reviewed the last website content review questionnaire completed by each department or the spreadsheet created, inventorying the department's web pages and online resources with needed updates.

**Figure 3 – Website Content Periodic Review**

**PRINCIPAL BUSINESS OBJECTIVE 1** – Website content is carefully vetted to ensure that visitors are receiving the most accurate and timely information about County services available to residents.

**RISK: Monitoring and Reporting – Inaccurate** – Website content is not carefully vetted, resulting in inaccurate or outdated information being presented to visitors, leading to confusion, frustration, and even financial losses for residents who rely on the County website for accurate information about available services.

**COSO CONTROL: Self-Assessment Quality Assurance Reviews** – The organization utilizes self-assessment processes to examine and report on all or part of the operation, and the self-assessment reports are subjected to some form of quality assurance review to ensure that they are producing reliable information.

| Higher-Level Written Guiding Principles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | Activities Performed Conform With Written Guiding Principles |                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------|--------------------------------------------------|
| There are no higher-level written guiding principles for this activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | N/A                                                          |                                                  |
| SOP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  | SOP Provides Adequate Guidance                               |                                                  |
| <p><b>Website Content Review Questionnaire</b> – Includes questions each department periodically answers, such as:</p> <ul style="list-style-type: none"> <li>• Are contacts, phone numbers, links, documents, and forms still accurate?</li> <li>• Does the content still serve the department's audience, and are all services provided included on the webpage?</li> <li>• Have you received requests, complaints, or feedback from the public on your webpage?</li> <li>• Are there upcoming campaigns, initiatives, or changes that will need to be promoted on the website?</li> </ul> <p>In preparation for the launch of the new website, the questionnaire was expanded to include questions such as:</p> <ul style="list-style-type: none"> <li>• Why does your department exist?</li> <li>• What are your goals for your department's web pages?</li> <li>• Who are your core customers, and how do they use your content?</li> </ul> |  | Yes                                                          |                                                  |
| Control Reviewed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | Control Design is Efficient and Effective                    | Activities Performed Conform with Control Design |
| To assess the accuracy and currency of information on departmental websites and online resources, CDM periodically sends a website content review questionnaire to each department liaison, reviews the completed questionnaires, and coordinates with the departmental liaisons to perform needed updates. For departments facing challenges completing the questionnaire, CDM holds individual meetings to assess website content and online resources and creates a detailed spreadsheet inventorying all web pages and online resources with any needed updates.                                                                                                                                                                                                                                                                                                                                                                             |  | Yes                                                          | Yes                                              |

## **RESULTS**

The test results below indicate that the website content periodic review activity enables CDM to ensure the accuracy and currency of website information and online resources.

### Conformance With Written Guiding Principles

There are no higher-level written guiding principles for this activity.

### SOP Provides Adequate Guidance

The website content review questionnaire is sufficiently detailed to enable department liaisons to adequately review and assess the accuracy and currency of website information.

### Control Design Efficiency and Effectiveness

The control design is efficient and effective. CDM's coordination with department liaisons to complete a questionnaire or a spreadsheet to inventory web pages and online resources with needed updates effectively ensures information and online resources remain accurate and current while efficiently utilizing resources.

### Conformance with Control Design

The Audit Team determined that the activities performed conformed to the control design. CDM conducted a comprehensive content review in preparation for the new website and collaborated with each department to identify content accuracy and enhancement updates. All 41 areas listed under departments on the website completed a questionnaire or spreadsheet inventorying the departments' web pages and online resources. CDM indicated it prioritized updating inaccurate and outdated content identified through this activity and the most frequently visited web pages before launching the new website. Content enhancements will continue post-launch through late 2024.

**PRINCIPAL BUSINESS OBJECTIVE  
WEBSITE CONTENT QUALITY**

**AUDIT COMMENT 2**

CDM's SOPs, control design, and activities performed provide a reasonable level of assurance that the risk of website content lacking quality and information on needed services is mitigated (service or quality risk) is mitigated during the following activities:

- Customer Survey
- Performance Score Tracking

Mitigation of this risk enables CDM to efficiently and effectively achieve its principal business objective to ensure website content is easy to navigate and provides value to visitors by improving quality of life, business growth, and overall understanding of County services and emergency matters. Recommendations were made to build upon the control environment already in place.

## 2.1 CUSTOMER SURVEY

### ACTIVITY OVERVIEW

CDM tracks qualitative data using HotJar, a platform that manages customer surveys on the website. The pop-up customer surveys are available at the bottom of each webpage, where visitors can provide feedback on their experience by answering the question: "Was this page helpful?". CDM analyzes the feedback to update website content and improve the user experience.

### AUDIT PROCEDURES

The Audit Team determined if SOPs provide adequate guidance and if the control design is efficient and effective to support management in achieving the customer survey activity and mitigating the service or quality risk.

To determine if activities performed conform with the control design, the Audit Team:

- Validated that CDM analyzed feedback included in customer surveys to identify improvements to website content and the user experience.
- Reviewed a User Personas report published by CDM using quantitative data and qualitative data collected through customer surveys spanning five years (2018 – 2022).

| Figure 4 – Customer Survey                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                             |                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------|
| <b>PRINCIPAL BUSINESS OBJECTIVE 2</b> – Website content is easy to navigate and provides value to visitors by improving quality of life, business growth, and overall understanding of County services and emergency matters.<br><b>RISK: Service or Quality Risk</b> – A poorly designed website can make it difficult for residents to access information on needed services and critical communications and resources during an emergency, resulting in a loss of public trust and community prosperity.<br><b>COSO CONTROL: Customer Survey Tools/Processes</b> – There are activities and processes that seek information and feedback from customers in relation to a business/quality objective or objectives. |                                                             |                                                  |
| Higher-Level Written Guiding Principles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Activities Performed Conform with Written Guiding Principle |                                                  |
| There are no higher-level written guiding principles for the customer survey activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | N/A                                                         |                                                  |
| SOPs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SOPs Provide Adequate Guidance                              |                                                  |
| There are no SOPs for the customer survey activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | No                                                          |                                                  |
| Control Reviewed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Control Design is Efficient and Effective                   | Activities Performed Conform with Control Design |
| CDM tracks qualitative data using HotJar, a platform that manages customer surveys on the County's website. The data gathered is analyzed by CDM to identify updates needed to website content and improve the user experience.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Partial                                                     | Yes                                              |

### RESULTS

The test results below indicate that the customer survey activity could be enhanced to ensure feedback received in customer surveys is effectively collected to improve website content and the user experience.

#### Conformance With Written Guiding Principles

There are no higher-level written guiding principles for this activity.

#### SOPs Provide Adequate Guidance

There is no SOP that provides guidance on how the qualitative data collected through customer surveys is analyzed to identify updates needed to website content and improve the user experience.

#### Control Design Efficiency and Effectiveness

While the control design is efficient, it could be more effective. Collecting user feedback on website improvements in real-time efficiently identifies information that could be more useful. The Audit Team identified in an analysis of user feedback collected via customer surveys that many users used the survey to ask questions rather than provide feedback.

#### Conformance with Control Design

The Audit Team determined that the activities performed conformed to the control design. The User Personas report published by CDM in 2022 includes six primary user profiles that seek information on the County's website. CDM summarized the feedback received by customer surveys into these six user profiles to identify user experience improvements, as indicated in Figure 5. CDM indicated improvements that have not yet been performed will be considered during the website's post-launch phase.

**Figure 5 - County Website Primary User Profiles**

| User Profile                                      | Customer Survey Feedback Improvement Examples    |
|---------------------------------------------------|--------------------------------------------------|
| Gray Sky (more apt to engage during an emergency) | Flood and evacuation zone maps.                  |
| Business Owner/Developer                          | Permit status and pulling old permits.           |
| Pet Owner/Advocate                                | Pet registration and locating a lost pet.        |
| New Resident                                      | Connecting to core County services.              |
| Non-Profit Provider/Social Worker                 | Details to find targeted services.               |
| Parks and Recreation Enthusiast                   | Interactive map of parks in Hillsborough County. |
| Political Enthusiast                              | Access to voting data.                           |

#### **RECOMMENDATION**

SOPs and control design are essential parts of any organization. They provide a roadmap for day-to-day operations, ensure compliance with higher-level written guiding principles, give guidance for decision-making, and streamline internal processes. Therefore, consideration should be given to building upon the foundation already in place by:

- Developing and implementing a formal SOP to establish clear expectations and procedures for the customer survey activity.
- Enhancing user support and clarifying feedback expectations by implementing a dual-function feedback system: one for questions and one for feedback.

#### **MANAGEMENT RESPONSE: CONCUR**

This internal audit was conducted at point-in-time when Hillsborough County's website was undergoing major changes and improvements – a ground up rebuild. With the transition to a new website successfully completed, Communications & Digital Media is looking forward to updating

successful past procedures for response to feedback, and plans are in place for formalizing SOP's, including the handling of customer survey activity.

**TARGET COMPLETION DATE: SEPTEMBER 30, 2024**

## 2.2 PERFORMANCE SCORE TRACKING

### ACTIVITY OVERVIEW

Siteimprove routinely scans the website to identify areas for improvement and reports the performance scores for digital certainty index, quality assurance, search engine optimization (SEO), accessibility, and readability, as indicated in Figure 6. CDM monitors the performance scores, and resolves identified issues to achieve the performance expectations.

**Figure 6 - Siteimprove Performance Score Tracking**

| Performance Score Name  | Performance Score Description                                                                                                                                                                                                                                       | Performance Score Expectation<br>(Scale 0 - 100) |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| Digital Certainty Index | Measures the quality and potential impact of a website's digital presence and is calculated based on a website's performance across quality assurance, SEO, and accessibility. Each module makes up 33.33% of the overall DCI score.                                | Above 80                                         |
| Quality Assurance       | Measures a website's credibility and trustworthiness regarding its user-facing characteristics. It's determined by performance in four subcategories: content quality, freshness, user experience, and security.                                                    | Above 95                                         |
| SEO                     | Measures how well a site's user-facing and technical aspects contribute to search engine optimization and, ultimately, higher rankings and organic traffic. It's determined by performance in four sub-categories: technical, content, user experience, and mobile. | Above 75                                         |
| Accessibility           | Measures how well a website tests against the Web Content Accessibility Guidelines. <sup>1</sup>                                                                                                                                                                    | Above 80                                         |
| Readability             | Assesses how difficult written content is to read based on the length of words and sentences and indicates how difficult a web page is to read.                                                                                                                     | At or below high school level                    |

### AUDIT PROCEDURES

The Audit Team determined if SOPs provide adequate guidance and if the control design is efficient and effective to support management in achieving the performance score tracking activity and mitigating the service or quality risk.

To determine if activities performed conform with the control design throughout the audit and during the two-week observation period following the new website's launch on January 29, 2024, the Audit Team validated that CDM monitored the Siteimprove performance scores and resolved identified issues to achieve the performance score expectations.

<sup>1</sup> Covered in Objective 3 – Website Accessibility Scans

**Figure 7 – Performance Score Tracking**

| <p><b>PRINCIPAL BUSINESS OBJECTIVE 2</b> - Website content is easy to navigate and provides value to visitors by improving quality of life, business growth, and overall understanding of County services and emergency matters.</p> <p><b>RISK: Service or Quality Risk</b> - A poorly designed website can make it difficult for residents to access information on needed services and critical communications and resources during an emergency, resulting in a loss of public trust and community prosperity.</p> <p><b>COSO CONTROL: Automated Monitoring/Reporting Mechanisms</b> – There are measurement activities undertaken by computers or machines that result in action occurring if the mechanism indicates situations outside of acceptable tolerance.</p>                                                                                                                                                                                           |                                                              |                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|------------------------------------------------|
| Higher-Level Written Guiding Principles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Activities Performed Conform with Written Guiding Principles |                                                |
| There are no higher-level written guiding principles for this activity.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | N/A                                                          |                                                |
| SOP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | SOP Provides Adequate Guidance                               |                                                |
| <p><b>Siteimprove Overview §Expectations</b> establishes the following performance score expectations:</p> <ul style="list-style-type: none"> <li>Digital Certainty Index: &gt; 80</li> <li>Quality Assurance: &gt; 95</li> <li>SEO: &gt; 75</li> </ul> <p><b>Siteimprove Overview §Readability</b> states, "Our overall goal is to achieve a readability score at or below a high school level. The County's unique vocabulary unnaturally inflates our average Flesch Kincaid Grade Level; therefore, we aim for a higher than industry standard to compensate...."</p> <p><b>Siteimprove Overview §Misspellings</b> states, "Misspellings reports come in once a week. Any misspellings should be addressed the same business day that the email report lands...."</p> <p><b>Siteimprove Overview §Broken Links</b> states, "Broken links reports come in twice weekly. Any issues should be addressed the same business day that the email report lands...."</p> | Yes                                                          |                                                |
| Control Reviewed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Control Design is Efficient and Effective                    | Activities Performed Align with Control Design |
| Siteimprove routinely scans the website to identify areas for improvement and report the performance scores. CDM monitors the performance scores and resolves identified issues to achieve the performance expectations for quality assurance, SEO, digital certainty index, and readability.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Yes                                                          | Partial                                        |

## RESULTS

The test results below indicate that while the readability of website content could be improved, the performance score tracking activity enables CDM to ensure website content is high-quality, easy to navigate, and creates an overall positive user experience.

### Conformance With Written Guiding Principles

There are no higher-level written guiding principles for this activity.

### SOP Provides Adequate Guidance

The Siteimprove Overview SOP provides adequate guidance by establishing performance scores that CDM frequently monitors.

### Control Design Efficiency and Effectiveness

The control design is efficient and effective. CDM's monitoring of Siteimprove reports to resolve identified issues and validate performance expectations are achieved efficiently and effectively ensures the website content is high-quality, easy to understand and navigate, and creates a positive user experience.

### Conformance with Control Design

The Audit Team determined that the activities performed overall conform with the control design. CDM monitored the Siteimprove performance scores throughout the audit period and resolved identified issues. As of February 14, 2024, as indicated in Figure 7, after CDM's two-week observation period following the new website's launch, the digital certainty index, quality assurance, and SEO scores exceeded expectations. The readability score, a shared responsibility of all departments, partially met the expectation of being at or below a high school level. CDM indicated while it continues to work with the departments to achieve this target, the unique and technical nature of certain content limits its achievability.

**Figure 7 – February 14, 2024 Performance Scores**

| Performance Score Name  | Expectation                    | Actual Score                                                                                                                                                                                       | Expectation versus Actual Score |
|-------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Digital Certainty Index | > 80                           | 87.5                                                                                                                                                                                               | +7.5                            |
| Quality Assurance       | > 95                           | 98.2                                                                                                                                                                                               | +3.2                            |
| SEO                     | > 75                           | 83                                                                                                                                                                                                 | +8.4                            |
| Readability             | At or below high school level. | 25% met the expectation.<br>31% scored "College" (difficult to read)<br>19% scored "College graduate" (very difficult to read)<br>25% lacked a score due to navigation pages or too few sentences. | Partially meets expectation.    |

### **RECOMMENDATION**

During the new website's post-launch phase, consideration should be given to reviewing the web pages with a readability score above a high school level and working with the respective departments to clarify and simplify language when feasible, given the content's unique and technical nature.

### **MANAGEMENT RESPONSE: CONCUR**

CDM always carefully considers the reading levels of each page and every article before publishing and will continue to do so in the post-launch phase. Special consideration is given when reviewing web pages with a readability score above a high school level. The department recognizes that it is best to communicate in plain language and the simplest terms available for the subject matter in order to appeal to the broadest audience, recognizing varying educational levels. CDM employs a host of professional writers, from web content curators, to public and media relations strategists, to social media content writers, to television script writers, who are all highly experienced and trained in the art of writing for a global audience. They assist client departments

daily in helping to make the technical aspects of their job understandable to all residents. They do this expertly, and with little room for improvement in this area. Some governmental subject matters do require specific language, and some government web pages have very unique target audiences. To illustrate, among Development Services target audiences are developers themselves. There is a necessity to talk about “variances”, “rezonings”, “development codes”, “nonconformities”, and “conditional usage.” These words are necessary to the audience. Also of note, many technical materials are required to be placed on the public-facing website to meet regulatory requirements. The language in these materials cannot be altered or adjusted and therefore a blanket readability metric would serve no purpose.

**TARGET COMPLETION DATE: Ongoing as new content is added to the website.**

**PRINCIPAL BUSINESS OBJECTIVE  
WEBSITE ADA COMPLIANCE**

**AUDIT COMMENT 3**

Collectively, CDM's SOPs, control design, and activities performed provide a reasonable level of assurance that the risk of website content not conforming with the ADA requirements (fiduciary – know your customer - suitability/disclosure issues risk) is mitigated during the following activity:

- Website Accessibility Scans.

Mitigation of this risk enables CDM to efficiently and effectively achieve its principal business objective to ensure the website is compliant with the ADA requirements. Recommendations were made to build upon the control environment already in place.

### 3.1 WEBSITE ACCESSIBILITY SCANS

#### ACTIVITY OVERVIEW

The ADA contains five sections called titles. Title II covers state and local government requirements prohibiting discrimination against people with disabilities in all services, programs, and activities.

Per the U.S. Department of Justice Civil Rights Division's guidance on web accessibility and the ADA, state and local governments have flexibility in how they comply with the ADA's general requirements of nondiscrimination and effective communication but must comply with the ADA's requirements. State and local governments can choose how they will ensure that the programs, services, and goods they provide online are accessible to people with disabilities. The Web Content Accessibility Guidelines (WCAG), followed by the federal government, provide helpful guidance on how to ensure the accessibility of website features. WCAG includes three levels of success criteria to determine conformance: A, AA, and AAA. The County must conform to all level A and AA success criteria.

The Siteimprove Website Accessibility Checker scans web pages, PDFs, and content. These scans produce an accessibility score by measuring how well the website tests against WCAG based on the number of success criteria fulfilled under the three conformance levels. Issues identified by Siteimprove are categorized as follows:

- Level A issues are the most urgent and include problems that can severely limit a disabled visitor's ability to navigate or use the website.
- Level AA issues tend to be more rooted in functionality, addressing areas where improvement is needed to give disabled users the full experience of a site. (Level AA is considered the target standard for most commercial websites.)
- Level AAA issues are the highest standard, fine-tuning and expanding on issues identified as Level A and AA. While it is an excellent goal, full Level AAA compliance is likely beyond the reach of most websites.

CDM's performance score expectation for accessibility is > 80 on a scale of 0 – 100. Issues are prioritized for remediation based on the three conformance levels to achieve this score and ensure adherence to the ADA requirements.

#### AUDIT PROCEDURES

The Audit Team determined if SOPs provide adequate guidance, align with higher-level written guiding principles; and if the control design is efficient and effective to support management in achieving the website accessibility scans activity and mitigating the fiduciary – know your customer - suitability/disclosure issues risk.

To determine if activities performed conform with written guiding principles and the control design, the Audit Team:

- Observed a Siteimprove accessibility scan of the new website on February 14, 2024, to determine whether there were any level A or AA WCAG conformance issues.
- Validated that CDM used Siteimprove to scan the County's web pages, PDFs, and content; reviewed the scan results to ensure the accessibility score achieved the expectation of > 80; and prioritized and remediated issues identified in the scans based on the three WCAG conformance levels: A, AA, and AAA.

**Figure 8 – Website Accessibility Scans**

**PRINCIPAL BUSINESS OBJECTIVE 3** – The website is compliant with the ADA requirements.

**RISK: Fiduciary – Know Your Customer - Suitability/disclosure issues** - Website content is not compliant with the ADA requirements, limiting accessibility for residents with disabilities, causing reputational damages and possibly costly, time-consuming lawsuits.

**COSO CONTROL: Automated Monitoring/Reporting Mechanisms** – There are measurement activities undertaken by computers or machines that result in action occurring if the mechanism indicates situations outside of acceptable tolerance.

| Higher-Level Written Guiding Principles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Activities Performed Conform with Written Guiding Principles              |                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------|
| <p><b>The Web Content Accessibility Guidelines (WCAG)</b><br/>The website must conform with the success criteria for levels A and AA included in WCAG's 13 guidelines listed below.</p> <p><b>§Guideline 1.1 Text Alternatives</b> – Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols, or simpler language.</p> <p><b>§Guideline 1.2 Time-Based Media</b> – Provide alternates for time-based media.</p> <p><b>§Guideline 1.3 Adaptable</b> – Create content that can be presented in different ways (for example, simpler layout) without losing information or structure.</p> <p><b>§Guideline 1.4 Distinguishable</b> – Make it easier for users to see and hear content, including separating foreground from background.</p> <p><b>§Guideline 2.1 Keyboard Accessible</b> – Make all functionality available from a keyboard.</p> <p><b>§Guideline 2.2 Enough Time</b> – Provide user enough time to read and use content.</p> <p><b>§Guideline 2.3 Seizures and Physical Reactions</b> – Do not design content in a way that is known to cause seizures or physical reactions.</p> <p><b>§Guideline 2.4 Navigable</b> – Provide ways to help users navigate, find content, and determine where they are.</p> <p><b>§Guideline 2.5 Input Modalities</b> – Make it easier for users to operate functionality through various inputs beyond keyboard.</p> <p><b>§Guideline 3.1 Readable</b> – Make text content readable and understandable.</p> <p><b>§Guideline 3.2 Predictable</b> – Make Web pages appear and operate in predictable ways.</p> <p><b>§Guideline 3.3 Input Assistance</b> – Help users avoid and correct mistakes.</p> <p><b>§Guideline 4.1 Compatible</b> – Maximize compatibility with current and future user agents, including assistive technologies.</p> | Yes                                                                       |                                                  |
| SOP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SOP Provides Adequate Guidance and Aligns with Written Guiding Principles |                                                  |
| Siteimprove Overview §Expectations, establishes an accessibility performance score expectation of > 80.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Partial                                                                   |                                                  |
| Control Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Control Design is Efficient and Effective                                 | Activities Performed Conform with Control Design |

|                                                                                                                                                                                                                                                                                                                            |         |     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|
| The Siteimprove Website Accessibility Checker routinely scans web pages, PDFs, and content. To achieve the accessibility score expectation of > 80 and ensure adherence to the ADA requirements, CDM prioritizes and remediates issues identified in the scans based on the three WCAG conformance levels: A, AA, and AAA. | Partial | Yes |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----|

## RESULTS

The test results below indicate that the website accessibility scans activity enables CDM to ensure the website conforms with the WCAG levels A and AA success criteria and adheres to the ADA requirements. Expanding on the Siteimprove Overview SOP to provide additional guidance and further enhancing the efficiency and effectiveness of the control design will aid in streamlining this activity.

### Conformance With Written Guiding Principles

The Audit Team determined the activities performed conform with written guiding principles. The testing conducted for the new website on February 14, 2024, demonstrated no level A (most critical) WCAG conformance issues. CDM is remediating the two AA issues identified.

### SOP Provides Adequate Guidance and Aligns With Written Guiding Principles

While the Siteimprove Overview SOP establishes a performance score for accessibility that CDM frequently monitors and supports conformance with WCAG, additional guidance on how CDM identifies, prioritizes, and remediates accessibility issues may further aid in ensuring conformance with WCAG and ADA requirements.

### Control Design Efficiency and Effectiveness

The control design could be more efficient and effective. While Siteimprove identifies and prioritizes WCAG conformance issues, CDM identified a solution through userway.org that can identify and remediate accessibility issues. Also, incorporating manual WCAG testing alongside the Siteimprove scans may enhance the effectiveness. Limited manual testing conducted by the Audit Team identified valuable observations that could improve the website's accessibility.

### Conformance with Control Design

The Audit Team determined the activities performed conform with the control design. Throughout the audit period, CDM used Siteimprove to scan the website and prioritized and remediated WCAG conformance issues to achieve the accessibility score expectation. As of February 14, 2024, after CDM's two-week observation period following the new website's launch, the accessibility score was 80.8, achieving the expectation of > 80.

## RECOMMENDATION

SOPs and control design are essential parts of any organization. They provide a roadmap for day-to-day operations, ensure compliance with higher-level written guiding principles, give guidance for decision-making, and streamline internal processes. Therefore, consideration should be given to building upon the foundation already in place by:

- Expanding on the Siteimprove Overview SOP to include detailed procedures for identifying, prioritizing, and remediating accessibility issues to ensure conformance with WCAG and ADA requirements.
- Exploring the solution available through userway.org or a similar product capable of identifying and remediating accessibility issues. A cost-benefit analysis, including the reduced resource costs and potential liability from nonconformance, would further support procuring such a solution.

- Integrating manual WCAG testing of the website with the Siteimprove scans. This hybrid approach could improve the accuracy and effectiveness of CDM's website accessibility efforts.

**MANAGEMENT RESPONSE: CONCUR**

We have already procured and added the Userway solution. It is active on HCFL.gov, and has been utilized thousands of times. When creating the new website, the highest standards of ADA accessibility were of utmost priority to the department. CDM will consider expanding on the Siteimprove Overview SOP to include detailed procedures for identifying, prioritizing, and remediating accessibility issues to ensure conformance with WCAG and ADA requirements. We will also look into integrating manual WCAG testing of the website with the Siteimprove scans.

**TARGET COMPLETION DATE: SEPTEMBER 30, 2024**