

OFFICE OF THE STATE AUDITOR

DIANA DIZOGLIO

Official Audit Report – Issued November 3, 2025

Massachusetts Health Policy Commission

For the period July 1, 2023 through September 30, 2024



OFFICE OF THE STATE AUDITOR

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November 3, 2025

David Seltz, Executive Director
Health Policy Commission
50 Milk Street, 8th Floor
Boston, MA 02109

Dear Executive Director Seltz:

I am pleased to provide to you the results of the enclosed performance audit of the Massachusetts Health Policy Commission. As is typically the case, this report details the audit objectives, scope, methodology, findings, and recommendations for the audit period, July 1, 2023 through September 30, 2024. As you know, my audit team discussed the contents of this report with agency managers. This report reflects those comments.

I appreciate you and all your efforts at the Massachusetts Health Policy Commission. The cooperation and assistance provided to my staff during the audit went a long way toward a smooth process. Thank you for encouraging and making available your team. I am available to discuss this audit if you or your team has any questions.

Best regards,



Diana DiZoglio
Auditor of the Commonwealth

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LIST OF ABBREVIATIONS

EOTSS	Executive Office of Technology Services and Security
HPC	Massachusetts Health Policy Commission
IT	information technology
W3C	World Wide Web Consortium
WCAG	Web Content Accessibility Guidelines

EXECUTIVE SUMMARY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of certain activities of the Massachusetts Health Policy Commission (HPC) for the period July 1, 2023 through September 30, 2024.

The purpose of our audit was to determine whether HPC's website adhered to the World Wide Web Consortium's Web Content Accessibility Guidelines (WCAG) 2.1 for user accessibility, keyboard accessibility, navigation accessibility, language accessibility, error identification, and color accessibility. Adherence to WCAG helps ensure that all users, regardless of ability, can access the content and functions of HPC's website.

Below is a summary of our finding, the effect of that finding, and our recommendations, with hyperlinks to each page listed.

Finding 1 Page 10	HPC's website was not fully accessible to all website users.
Effect	<p>Noncompliance with WCAG 2.1 reduces accessibility for individuals with disabilities and limits equitable access to HPC information and services. Specific risks include the following:</p> <ul style="list-style-type: none">• If HPC's website cannot zoom in to 200% or reflow at 400%, some users will not be able to read content if they zoom in to alleviate a visual impairment.• Broken or faulty hyperlinks limit users from having access to critical information and key online services offered by HPC. Broken or faulty hyperlinks also increase the likelihood that users may either access outdated or incorrect information or be directed to webpages that no longer exist.• Videos without captions may prevent users with auditory impairments from receiving intended content.
Recommendations Page 11	<ol style="list-style-type: none">1. HPC should ensure that content on its masshpc.gov webpages displays clearly, even when zoomed in to 200% and 400%.2. HPC should review its masshpc.gov webpages to ensure that all hyperlinks lead to related and updated information.3. HPC should adopt procedures to ensure that videos posted to its masshpc.gov website are properly captioned.

OVERVIEW OF AUDITED ENTITY

The Massachusetts Health Policy Commission (HPC) was established in 2012 through the Commonwealth's landmark health care cost containment law, Chapter 224 of the Acts of 2012.

According to HPC's website,

The Massachusetts Health Policy Commission (HPC) is an independent state agency working to improve the affordability of health care for all residents of the Commonwealth. Through data-driven analysis, actionable policy insights, public accountability, and innovative investments, the HPC seeks to improve health care delivery, lower costs, and reduce health disparities.

HPC is overseen by an 11-member board of commissioners. HPC staff members and commissioners collaborate to monitor and enhance the effectiveness of the Massachusetts healthcare system. HPC is led by an executive director and a deputy executive director, and it comprises six departments: the Office of the Chief of Staff, Office of the General Counsel, Health Care Transformation and Innovation, Market Oversight and Transparency, Office of Patient Protection, and Research and Cost Trends. Each department focuses on specific areas, while also collaborating on cross-agency initiatives to ensure that HPC's responsibilities are met efficiently, transparently, and on time. The oversight and administrative duties are handled by two departments, while the remaining four concentrate on policy, research, and program operations.

According to Section 9 of Chapter 6D of the Massachusetts General Laws, "Not later than April 15 of every year, the board shall establish a health care cost growth benchmark for the average growth in total health care expenditures in the commonwealth for the next calendar year."

HPC received appropriations of \$11,436,606 and \$12,028,078 for fiscal years 2024 and 2025, respectively. HPC's office is located at 50 Milk Street, 8th Floor, in Boston.

HPC launched masshpc.gov in July 2024. HPC's website provides reports, policy tools, and updates on healthcare systems within Massachusetts.

Massachusetts Requirements for Accessible Websites

In 1999, the World Wide Web Consortium (W3C), an international nongovernmental organization responsible for internet standards, published the Web Content Accessibility Guidelines (WCAG) 1.0 to provide guidance on how to make web content more accessible to people with disabilities.

In 2005, the Massachusetts Office of Information Technology,¹ with the participation of state government webpage developers, including developers with disabilities, created the Enterprise Web Accessibility Standards. These standards required all executive branch state agencies to follow the guidelines in Section 508 of the Rehabilitation Act amendments of 1998. These amendments went into effect in 2001 and established precise technical requirements to which electronic and information technology (IT) products must adhere. This technology includes, but is not limited to, products such as software, websites, multimedia products, and certain physical products, such as standalone terminals.

In 2008, W3C published WCAG 2.0. In 2014, the Massachusetts Office of Information Technology added a reference to WCAG 2.0 in its Enterprise Information Technology Accessibility Standards.

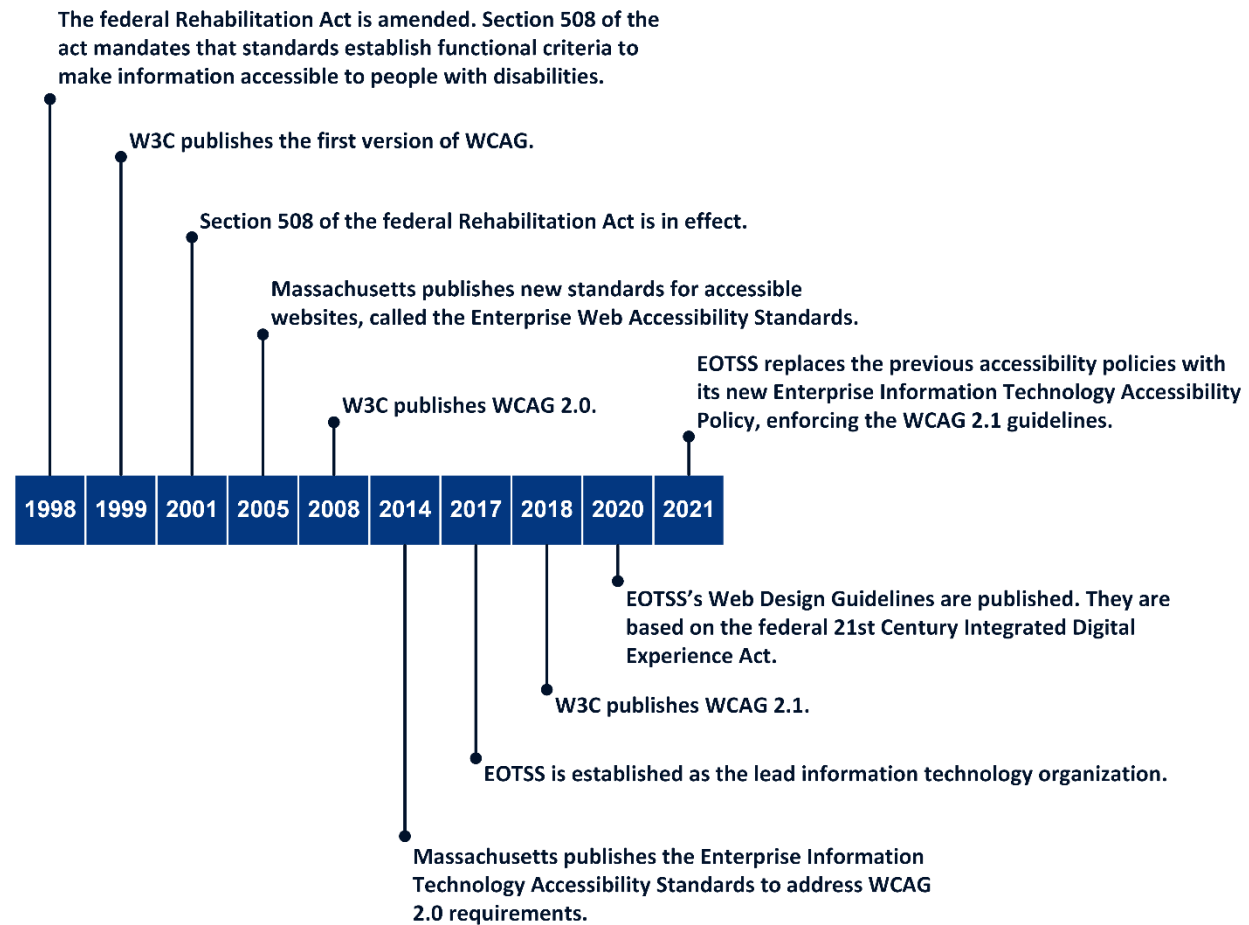
In 2017, the Executive Office of Technology Services and Security (EOTSS) was designated as the Commonwealth's lead IT organization for executive branch state agencies. EOTSS is responsible for the development and maintenance of the Enterprise Information Technology Accessibility Standards² and the implementation of state and federal laws and regulations relating to accessibility. As the principal executive agency responsible for coordinating the Commonwealth's IT accessibility compliance efforts, EOTSS supervises executive branch state agencies in their efforts to meet the Commonwealth's accessibility requirements.

In 2018, W3C published WCAG 2.1, which built on WCAG 2.0 to improve web accessibility on mobile devices and to further improve web accessibility for people with visual impairments and cognitive disabilities. EOTSS published the Enterprise Information Technology Accessibility Policy in 2021 to meet Levels A and AA of WCAG 2.1.

1. The Massachusetts Office of Information Technology became the Executive Office of Technology Services and Security in 2017.

2. EOTSS has since changed the titles and numbers of at least some of its policies and standards between the end of the audit period and the publication of this report. In this report, we reference the titles and numbers of EOTSS's policies and/or standards as they were during the audit period (unless stated otherwise).

Timeline of the Adoption of Website Accessibility Standards by the Federal Government and Massachusetts



Executive branch state agencies must comply with EOTSS's policies and standards. However, non-executive branch state agencies, such as HPC, must also comply with EOTSS's accessibility policies and standards when using an EOTSS web domain,³ as established by EOTSS's Website Domain Policy. Part of this policy states that any government organization using an EOTSS web domain must comply with EOTSS's Web Design Guidelines, which were published in 2020 and were based on the federal 21st Century Integrated Digital Experience Act. This law helps state government agencies evaluate their website design and implementation decisions to meet state accessibility requirements.

3. EOTSS web domains, according to its Website Domain Policy, include Mass.gov, Massachusetts.gov, Ma.gov, State.ma.us, related subdomains (e.g., example.mass.gov), and all domains that EOTSS owns and manages.

Web Accessibility

Government websites are an important way for the general public to access government information and services. Deloitte's⁴ 2023 Digital Citizen Survey found that 55% of respondents preferred to interact with their state government services through a website instead of face-to-face interaction or a call center. Commonwealth of Massachusetts websites have millions of webpage views each month.

However, people do not interact with the internet uniformly. The federal government and nongovernmental organizations have established web accessibility standards intended to make websites more accessible to people with disabilities, such as visual impairments, hearing impairments, and others. The impact of these standards can be significant, as the federal Centers for Disease Control and Prevention estimates that 1,488,012 adults (26% of the adult population) in Massachusetts have a disability, as of 2022.⁵ Among the estimated 26% of the adult population, 14% reported having serious difficulty with cognition, 10% reported having serious difficulty with mobility, 6% reported having deafness or serious difficulty hearing, and 5% reported having blindness or serious difficulty seeing (even when wearing glasses).⁶ Examples of web accessibility measures include, but are not limited to, having captioning on videos to help people with difficulty hearing understand the contents of the video, having form fields describe what data needs to be input into them to help people who have cognitive difficulties, and ensuring that people can interact with a webpage using keyboard commands alone to help people who have difficulty with mobility.

How People with Disabilities Use the Web

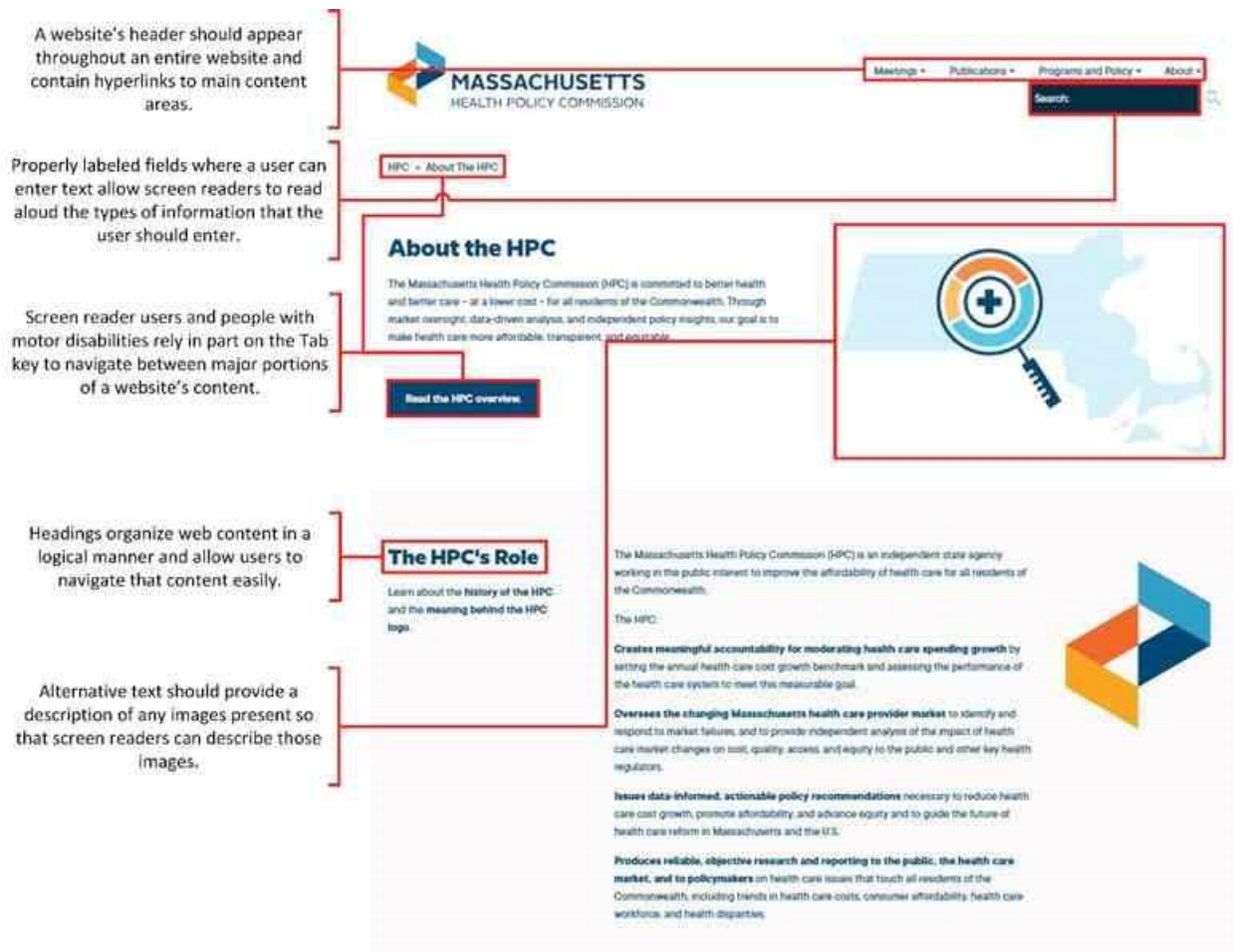
According to W3C, people with disabilities use assistive technologies and adaptive strategies specific to their needs to navigate web content. Examples of assistive technologies include screen readers, which read webpages aloud for people who cannot read text; screen magnifiers for individuals with low vision; and voice recognition software for people who cannot (or do not) use a keyboard or mouse. Adaptive

4. Deloitte is an international company that provides tax, accounting, and audit services to businesses and government agencies.
5. This data is collected from surveys conducted using both landline telephones and cellular telephones, and all responses are self-reported.
6. The percentages do not add up to 26%, as estimated by the federal Centers for Disease Control, because of overlapping data. The self-reported survey allows individuals to report having multiple disabilities.

strategies refer to techniques that people with disabilities employ to enhance their web interactions.⁷ These strategies might involve increasing text size, adjusting mouse speed, or enabling captions.

To make web content accessible to people with disabilities, developers must ensure that various components of web development and interaction work together. This includes text, images, and structural code, users' browsers and media players, and various assistive technologies.

Accessibility Features of a Website⁸



7. Web interaction refers to the various actions that users can take while navigating and using the internet. It encompasses a wide range of online activities, including, but not limited to, clicking on hyperlinks, submitting forms, posting comments on webpages, and engaging with web content and services in other forms.
8. We resized this webpage to fit in this audit report. To see the unaltered webpage, visit <https://masshpc.gov/about>.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

In accordance with Section 12 of Chapter 11 of the Massachusetts General Laws, the Office of the State Auditor has conducted a performance audit of certain activities of the Health Policy Commission (HPC) for the period July 1, 2023 through September 30, 2024.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our finding and conclusion based on our audit objective.

Below is our audit objective, indicating the question we intended our audit to answer, the conclusion we reached regarding our objective, and where our objective is discussed in the audit finding.

Objective	Conclusion
1. Did HPC's masshpc.gov website comply with the Executive Office of Technology Services and Security's Enterprise Information Technology Accessibility Policy and the Web Content Accessibility Guidelines (WCAG) 2.1 for user accessibility, keyboard accessibility, navigation accessibility, language accessibility, error identification, and color accessibility?	No; see Finding <u>1</u>

To accomplish our audit objective, we gained an understanding of the HPC internal control environment relevant to our audit objective by reviewing applicable policies and procedures and by interviewing HPC staff members and management. In addition, to obtain sufficient, appropriate evidence to address our audit objective, we performed the procedures described below.

Web Accessibility

To determine whether HPC's website adhered to WCAG 2.1, for user accessibility, keyboard accessibility, navigation accessibility, language accessibility, error identification, and color accessibility during the audit period, we performed the following procedures for a random, nonstatistical⁹ sample of 60 webpages from a population of 776 HPC webpages:

9. Auditors use nonstatistical sampling to select items for audit testing when a population is very small, the population items are not similar enough, or there are specific items in the population that the auditors want to review.

User Accessibility

- We determined whether content on each webpage could be viewed in both portrait and landscape modes.
- We determined whether content on each webpage was undamaged and remained readable when zoomed in to both 200% and 400%.

Keyboard Accessibility

- We determined whether all elements¹⁰ on each webpage could be navigated using only keyboard commands.
- We determined whether any elements on each webpage prevented a user from moving to a different element when using only keyboard commands to navigate the webpage in question.
- We determined whether the first focusable control¹¹ on each webpage was a hyperlink that would redirect users to the main content of the webpage.

Navigation Accessibility

- We determined whether each webpage contained a title that was relevant to the webpage's content.
- We determined whether there was a search function present to help users locate content across the whole website.
- We determined whether hyperlinks correctly navigated to the intended webpages.
- We determined whether headings within webpages related to the content of the section below the header.

Language Accessibility

- We determined whether any video content found on each webpage had all important sounds and dialogue captioned.
- We determined whether the words that appeared on each webpage matched the language attribute¹² to which the webpage in question was set.
- We determined whether any webpage sections that contained language differing from that to which the webpage was set contained their own specified language attribute.

10. An element is a part of a webpage that contains data, text, or an image.

11. The first focusable control is the first element a user will be brought to on a webpage when navigating with a keyboard. If first focusable control also redirects users to the main content of a webpage, then it is known as a bypass block or a skip link.

12. A language attribute (also known as a language tag) identifies the native language of the content on the webpage or PDF (e.g., a webpage in English should have an EN language attribute). The language attribute is listed in the webpage's or PDF's properties. This, among other things, is used to help screen readers use the correct pronunciation for words.

Error Identification

- We determined whether mandatory form fields alerted users if they left these fields blank.
- We determined, for form fields that required a limited set of input values, whether users were alerted if invalid values were entered into these types of fields.
- We determined whether there were labels for any elements that required user input. We also determined whether these labels were programmed correctly.
- We determined whether examples were presented to assist users in correcting mistakes (for example, a warning when entering a letter in a field meant for numbers).

Color Accessibility

- We determined whether there was at least a 3:1 contrast in color and additional visual cues to distinguish hyperlinks, which WCAG recommends for users with colorblindness or other visual impairments.

We used nonstatistical sampling methods for testing and, therefore, did not project the results of our testing to any corresponding populations.

For our objective, we found certain issues during our testing of the accessibility of HPC's website. See [Finding 1](#) for more information.

Data Reliability Assessment

To determine the reliability of the URL list that we received from HPC management, we interviewed knowledgeable HPC staff members and checked that certain variable formats (e.g., dates, unique identifiers, and abbreviations) were accurate. Additionally, we ensured that none of the following issues affected the URL list: abbreviation of data fields, missing data (e.g., hidden rows or columns, blank cells, or absent records), and duplicate records. We also ensured that all values in the dataset corresponded with expected values.

We selected a random sample of 20 URLs from the URL list and traced each to the corresponding webpages on HPC's website, checking that each URL and webpage title from the URL list matched the information on the HPC website. We also selected a random sample of 20 URLs from HPC's website and traced the URL and webpage title to the URL list to ensure that there was a complete and accurate population of URLs on the URL list.

Based on the results of these data reliability procedures described above, we determined that the URL list was sufficiently reliable for the purposes of our audit.

DETAILED AUDIT FINDINGS WITH AUDITEE'S RESPONSE

1. The Health Policy Commission's website was not fully accessible to all website users.

The Health Policy Commission's (HPC's) website was not fully accessible to all website users. We reviewed a sample of 60 webpages and found that 4 out of 60 webpages were not compliant with Web Content Accessibility Guidelines (WCAG) 2.1. We determined the following issues within our sample:

- of these 60 webpages, 1 contained content that was damaged at 200% and 400% zoom;
- of these 60 webpages, 1 had broken hyperlinks; and
- of these 60 webpages, 2 had videos without captioning.

Noncompliance with WCAG 2.1 reduces accessibility for individuals with disabilities and limits equitable access to HPC information and services. Specific risks include the following:

- If HPC's website cannot zoom in to 200% or reflow¹³ at 400%, some users will not be able to read content if they zoom in to alleviate a visual impairment.
- Broken or faulty hyperlinks limit users from having access to critical information and key online services offered by HPC. Broken or faulty hyperlinks also increase the likelihood that users may either access outdated or incorrect information or be directed to webpages that no longer exist.
- Videos without captions may prevent users with auditory impairments from receiving intended content.

Authoritative Guidance

The World Wide Web Consortium's WCAG 2.1 states,

Success Criterion 1.2.2 Captions (Prerecorded) (Level A)

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

Success Criterion 1.4.4 Resize Text (Level AA)

Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality. . . .

Success Criterion 1.4.10 Reflow (Level AA)

13. Reflow is defined as the rearrangement of content when type size, line length, spacing, etc. changes.

Content can be presented without loss of information or functionality, and without requiring scrolling in two dimensions for:

- *Vertical scrolling content at a width equivalent to 320 [cascading style sheet (CSS)] pixels;*
- *Horizontal scrolling content at a height equivalent to 256 CSS pixels. . . .*

Success Criterion 2.4.5 Multiple Ways (Level AA)

More than one way is available to locate a web page within a set of web pages except where the web page is the result of, or a step in, a process.

Reasons for Issue

The webpage that had damaged content at 200% and 400% contained an interactive table so users could examine different graphs with various public health statistics. This table was not legible at 200% or 400% zoom. HPC management told us that, when HPC transferred its website contents from its Mass.gov website to the new Masshpc.gov website, they neglected to change the sizing of the interactive table, which meant that the table did not appear correctly on the new website.

The webpage that had a broken link contained a link for a subscription feature that HPC does not use. HPC management told us that the link was included as part of the pre-generated template used to create the webpage. HPC did not remove the link when HPC management determined they would not offer subscriptions to the webpage.

The two webpages that included videos without captioning: each contained an embedded YouTube video without captioning. HPC management told us that, on the two YouTube videos, they did not set a language and, therefore YouTube was not able to determine the language of the videos and generate captions.

Recommendations

1. HPC should ensure that content on its masshpc.gov webpages displays clearly, even when zoomed in to 200% and 400%.
2. HPC should review its masshpc.gov webpages to ensure that all hyperlinks lead to related and updated information.
3. HPC should adopt procedures to ensure that videos posted to its masshpc.gov website are properly captioned.

Auditee's Response

The HPC is committed to having a fully accessible website, and we prioritized accessibility when designing the HPC's new website, www.masshpc.gov. HPC staff worked diligently with its website developer to ensure that the new website meets or exceeds accessibility standards, and HPC staff continue to ensure that the website is fully accessible. The HPC acted immediately to rectify the limited instances identified by the Auditor where page elements did not meet the applicable criteria, and has implemented processes and capabilities to ensure compliance with all elements going forward.

Auditor's Reply

Based on its response, HPC has taken measures to address our concerns regarding this matter. As part of our post-audit review process, we will follow up on this matter in approximately six months.