



Georgia Technology Authority

NASCIO 2016 State IT Recognition Awards

Title: Accessible Platform Initiative

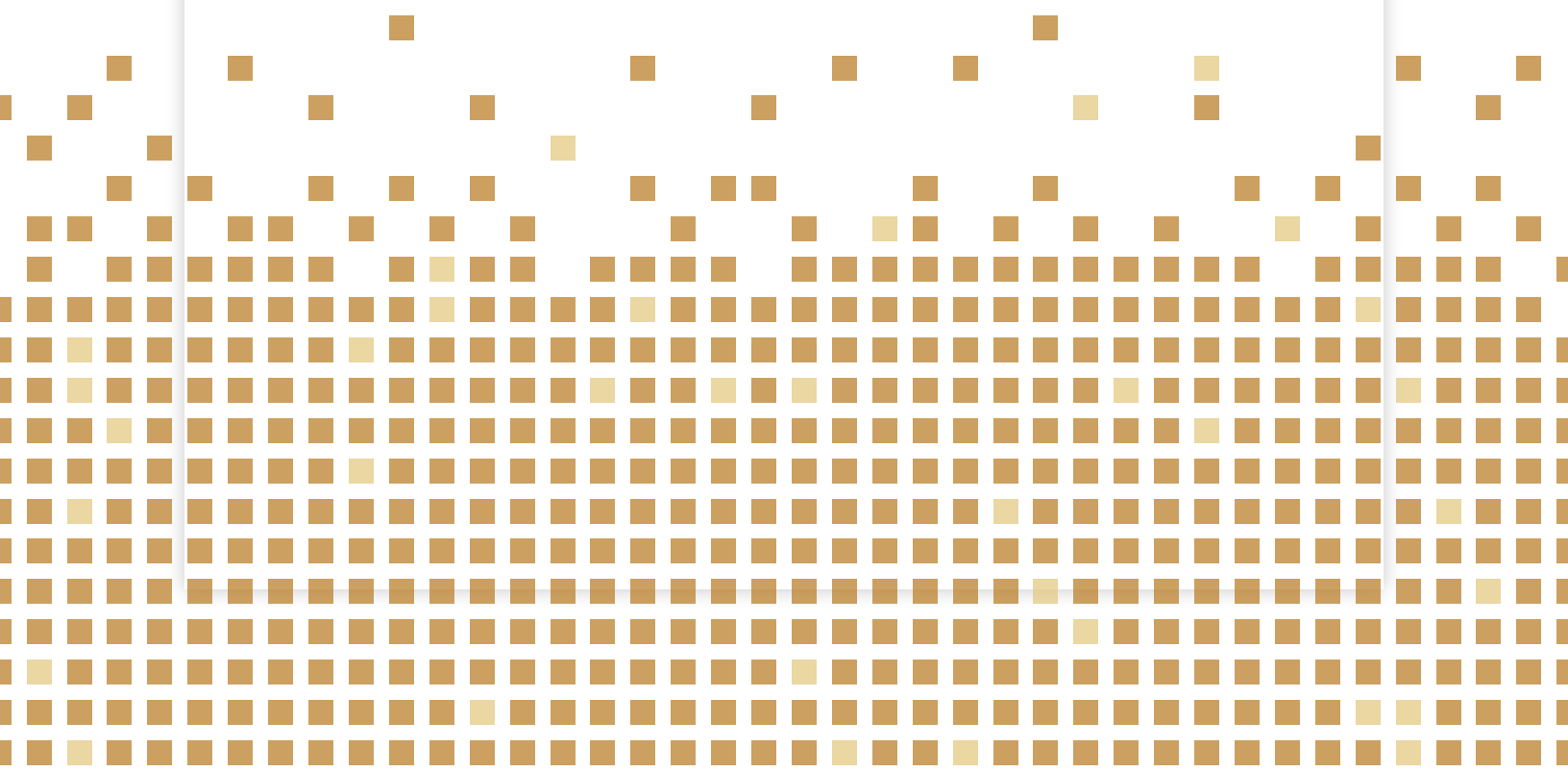
Category: Digital Government – Government to Citizen

State: Georgia

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EXECUTIVE SUMMARY

Government agencies are turning more and more to online self-service to provide a range of mission-critical services, including unemployment benefits, veterans' services, comprehensive benefits availability and eligibility determinations, justice programs and revenue and tax collections.

Online self-service benefits constituents by enabling them to transact business with government at whatever time or location is convenient for them, but if you have one or more disabilities, it might not be as easy, quick and convenient as it sounds.

While it may take just a few seconds for a sighted person to find the right link on a government website, it could take an agonizingly long time for someone with a visual impairment who's using a screen reader on a website that isn't designed for universal accessibility. Far too often, people with disabilities are the constituency who need online self-service more than anyone else.



Because the government has a special responsibility to make its services readily available to everyone, the GeorgiaGov Interactive team at the Georgia Technology Authority made universal accessibility one of its top priorities in 2015. The team oversees the state's web portal, Georgia.gov, and provides an enterprise publishing platform used by 75 state agency websites. The platform features 12 website design themes, each with its own color combinations and typefaces.

With its **Accessible Platform Initiative**, the team set out to make Georgia's web portal, **all design themes and all 75 websites** on the enterprise publishing platform compliant with widely recognized standards for accessibility. The initiative required significant research, planning, testing, and countless hours of code development. For assistance in research, planning, and testing, the team worked with the [AMAC Accessibility Solutions and Research Center](#) at the Georgia Institute of Technology and the state of Georgia's ADA (Americans with Disabilities Act) [Coordinator's Office](#). For code development, the team relied solely on its own internal resources. Beginning in July 2015, the team implemented **24 enhancements to the state's enterprise publishing platform and updated all 12 design themes to ensure greater color contrast and font legibility**. In addition, improvements to functionality now make it easier to access online content using a range of assistive tools.

The accessibility enhancements are making a difference for hundreds of thousands of Georgians. Independent, detailed evaluations by individuals with years of experience in IT and assistive technologies helped measure the effectiveness of the enhancements and identify where additional steps were needed. Through the Accessible Platform Initiative and a process of continuous review and improvement, the state of Georgia is ensuring that people with disabilities can benefit from online access to government services and information on the same level as anyone else.

CONCEPT

State and federal laws pertaining to web accessibility have been applied in varying ways and degrees to for-profit businesses and government agencies in recent years. Most of the laws were enacted before the impact of the web on e-commerce, employment and education, but accessibility guidelines and regulations are beginning to reflect the web's influence more clearly.

Many people think of the Americans with Disabilities Act (ADA) as relating to public places and physical requirements such as wheelchair ramps and handrails. What's not as visible is how the ADA is applied to accessible information and communications technology for people with disabilities. The U.S. Department of Justice affirmed the application of Title II of the ADA to websites in a technical assistance publication, [Accessibility of State and Local Government Websites to People with Disabilities](#), and in numerous settlement agreements with state and local governments.

Making a website accessible and providing universal access means tuning its design, code, and content to serve users with disabilities and the population at large. Disabilities span a broad spectrum. **While we may initially think of someone who is blind, deaf, or with a noticeable physical impairment, there's actually a range of issues that may prevent someone from accessing a website's content:**



- **Visual** – blindness, low vision, and color blindness.



- **Hearing** – deafness or a range of hearing loss.



- **Motor** – inability to use a mouse, slow response time, and limited fine motor control.



- **Cognition** – learning disabilities, distractibility, inability to remember or focus on large amounts of information.

Websites designed for universal access benefit everyone, not just people with disabilities. Accessible websites are more user and search-engine friendly, and building websites without thinking about accessibility creates barriers for users who may have the greatest need for them.

For these reasons, GTA launched the Accessible Platform Initiative.

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SIGNIFICANCE

GTA's GeorgiaGov Interactive team focused on enhancing **two primary areas** of the state's enterprise web platform:

- **Color contrast, font selection and font size improvements** in each of the platform's 12 design themes to benefit users with low vision and color blindness.
- **Functionality** in the underlying code to benefit users of screen readers, special web browsers and other assistive tools for people with disabilities, and to meet [Web Content Accessibility Guidelines \(WCAG\) 2.0](#) (Level AA) accessibility requirements.

From July 2015 to December 2015, **a total of 24 functionality enhancements were implemented**. A complete list of the enhancements and the schedule for the rollout of color-contrast and font improvements are available on the GeorgiaGov Interactive website at <http://portal.georgia.gov/interactive/accessible-platform-initiative-enhancements-list>.

The initiative required significant research, planning and countless hours of code development. The [AMAC Accessibility Solutions and Research Center](#) at the Georgia Institute of Technology and the state of Georgia's ADA (Americans with Disabilities Act) [Coordinator's Office](#) contributed to the team's research and planning efforts. To validate every step of the process, the GeorgiaGov Interactive team performed extensive testing throughout and once again sought feedback from the [AMAC Accessibility Solutions and Research Center](#) and the ADA [Coordinator's Office](#).

How do you test the accessibility of a website for individuals with vision or hearing impairment?

First, the color schemes for all 12 design themes were assessed to make sure they were discernible to people with impairments such as color blindness. [WebAim](#), an organization dedicated to making the web's content accessible, provides a [color contrast checker](#) to assist in testing the contrast of text and icons against their background. Utilizing this tool allowed us to gain a better understanding of color-contrast standards.



"Friendly" design theme, before accessibility update

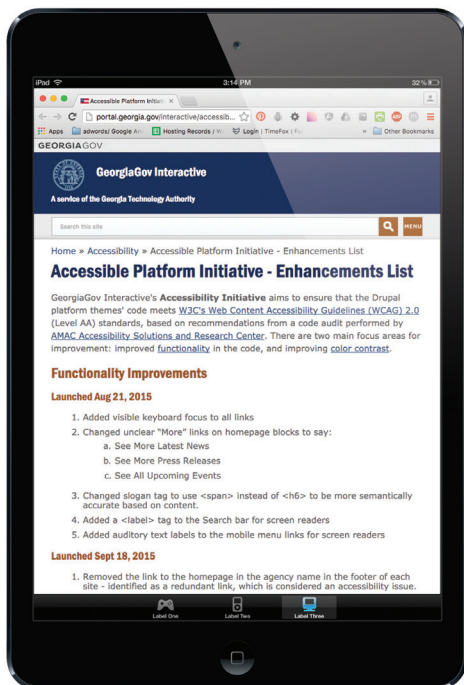


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A second aspect of accessibility is the use of keyboards and assistive tools, including screen readers and special web browsers for people with disabilities. We conducted a comprehensive review of code in order to change the way these tools interact with the platform's sites. Using a service called [BrowserStack](#), we tested code changes across different browsers and devices. The tests allowed us to expand accessibility to a broader base of our users. While careful testing initially seemed like a daunting task, it was essential to validating our changes and ensuring that the goal of universal access was successfully attained.



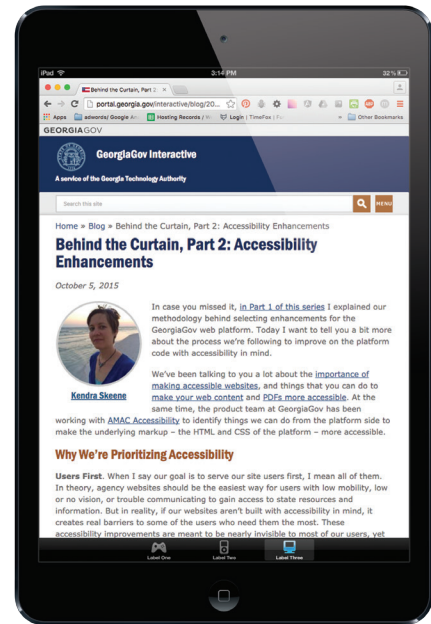
Accessibility isn't just a consideration affecting color contrast, fonts, and code. It extends to site content as well and encompasses such steps as adding alternate text to images, creating accessible PDFs and other documents, and writing content in plain, easy-to-understand language.



Accordingly, the GeorgiaGov Interactive team developed and implemented a multi-pronged communications campaign aimed at everyone in individual state agencies with responsibility for maintaining content on their agency's website. The campaign focused particular attention on the role of web content managers in making content accessible.

The team added a special section about the accessibility initiative on the GeorgiaGov Interactive website at <http://portal.georgia.gov/interactive/accessible-platform-initiative>. It includes extensive guidance for increasing the accessibility of website content and links to additional resources about accessibility in the field of information and communications technology.

Members of the GeorgiaGov Interactive team and staff from the AMAC Accessibility Solutions and Research Center **blogged** regularly about every phase of the accessibility initiative and the importance of web accessibility. The blogs are available on the GeorgiaGov Interactive website at <http://portal.georgia.gov/interactive/blogs>.



The GeorgiaGov Interactive team also hosted a **conference on accessibility as part of GOVTalks**, its series of conferences dedicated to helping state agencies create outstanding websites and user experiences. The conference on accessibility included subject matter experts from the [AMAC Accessibility Solutions and Research Center](http://portal.georgia.gov/interactive/blogs) and the state's ADA [Coordinator's Office](http://portal.georgia.gov/interactive/blogs), and it addressed the significance of accessibility, what it means to be accessible and the changes we can make to convert our work settings and webpages into accessible environments. **The conference was attended by 50 people from 23 state agencies**, and videos of the presentations, slides, photos and links to accessibility resources are available online at <http://portal.georgia.gov/interactive/blog/2014-12-10/govtalks-accessibility-wrap>.



In addition, **the team conducts training classes for website content managers** in state agencies on a regular basis. Content managers are taught how to use Drupal, the enterprise publishing platform, and accessibility is now an integral part of all classes. They learn about how design elements affect accessibility and their role in making content accessible.

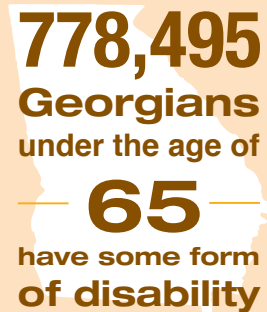
The team meets monthly with staff from the [AMAC Accessibility Solutions and Research Center](http://portal.georgia.gov/interactive/blogs) to **discuss emerging issues and opportunities** for further enhancements to accessibility.

The team consults with individual state agencies whenever questions arise about the accessibility of particular website elements. For example, when a state agency wanted to add an online chat applet to its website, the team assisted in testing for accessibility. When the applet was found not to be accessible, the team guided the agency in making the necessary changes.

Our message to state agencies is simple: Every time you consider a solution, evaluate it for accessibility.

IMPACT

These enhancements can potentially benefit a significant portion of Georgia's population. We estimate that **778,495 Georgians under the age of 65 have some form of disability** and can more easily access the information and services they need as a result of our accessibility enhancements. (According to the U.S. Census Bureau, Georgia had a population of 8,948,217 under the age of 65 in 2015, and **8.7 percent of Georgians under the age of 65** are estimated to have some form of disability.) In addition, vision loss increases with age and almost one million Georgians are estimated to have some form of vision loss.



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Throughout the initiative, staff from the [AMAC Accessibility Solutions and Research Center](#) at the Georgia Institute of Technology conducted independent, detailed evaluations to measure the accessibility of the state's web portal, [Georgia.gov](#), and individual agency websites on the enterprise platform.

The evaluations focused on such elements as keyboard access, contrast ratios and the use of headings, links and tables. They were conducted using multiple browsers, screen-reading and magnification programs, and operating systems for desktops and mobile devices. Each of the evaluators had many years of experience in the IT industry and some were certified in the fields of Assistive Technology, Vision Rehabilitation and Orientation and Mobility. Their point-by-point analyses of changes to various webpage elements concluded with detailed recommendations for additional accessibility enhancements and included links to numerous reference documents and authoritative sources.

In addition, GTA's GeorgiaGov Interactive team meets monthly with AMAC staff in an ongoing partnership to continuously monitor and strengthen accessibility.

John Rempel, an AMAC quality control and training specialist who is visually impaired and conducted website evaluations, offered the following endorsement of the initiative: *"The Georgia Technology Authority is to be commended for its commitment to promoting digital access for people with disabilities throughout state agencies across Georgia. Through their hard work and dedication, Nikhil Deshpande [Director of the GeorgiaGov Interactive team] and Kendra Skeene [GeorgiaGov Interactive Web Content Administrator] have dedicated time and resources to ensuring a robust level of accessibility for a dozen design themes. Through the Georgia.gov state portal, GTA has also disseminated valuable resources and information to Georgia state agencies pertaining to information and communications technology accessibility."*

Through the Accessible Platform Initiative and a process of continuous review and improvement, the state of Georgia is ensuring that people with disabilities can benefit from online access to government services and information on the same level as anyone else.