

# Accessing Illinois

*"Elevating Accessibility for Residents with Disabilities"*

Category: State CIO Office Special Recognition

State: Illinois

Contact: [Vickie.Simpson@illinois.gov](mailto:Vickie.Simpson@illinois.gov)

Initiation Date: 2020 September

End Date: Project Continues



## EXECUTIVE SUMMARY

More than 30 years ago, the Americans with Disabilities Act revolutionized how we thought about accessibility – making it a legal requirement for employers, governments, and public entities to ensure that people with disabilities could access buildings, communications, and services as effectively as anyone else. The following decades, however, saw a revolution in what it meant to be accessible, as the physical world became virtual, and information systems, websites, and apps began taking the place of government offices, worksites, and stores. In 2020, the COVID-19 pandemic brought the point firmly home – access to the virtual world is a requirement for participation in modern life.

Unfortunately, the pandemic proved that our virtual world was not nearly as accessible as it needs to be. When the pandemic shifted many of us to remote work, video meetings, and online services, people with disabilities faced virtual barriers that were as real as unclimbable stairs, unopenable doors, and unreachable shelves. Fortunately, this crisis also brought opportunity – and the State of Illinois took advantage of this opportunity to dramatically improve the accessibility of its information technologies for residents and staff with disabilities.

Not long into the pandemic, two disability advocacy groups alerted the State of Illinois that some of its key information systems were not fully accessible to all Illinoisans with disabilities. Pointing to issues with the State’s unemployment benefits system, new video conferencing platform, and several State websites, the advocates stressed the seriousness of ensuring that people with disabilities could continue to access State services. With the support of the Illinois Governor’s Office and the leadership of the State CIO, the Illinois Department of Innovation & Technology (DoIT) partnered with the advocacy groups to embark upon a two-year journey not only to address specific accessibility issues, but to reinvent the way the State of Illinois ensures its information technologies are accessible to all.

Over the last two years, DoIT – in partnership with the disability advocates, accessibility specialists, staff with disabilities, and private-sector partners – worked and succeeded at improving the accessibility of its key information systems and technologies. DoIT also explored and found ways to operationalize accessibility – by focusing on developing partnerships, efficiencies, automation, and governance – and culminated with the State CIO establishing a dedicated Office of Information Accessibility and Chief Information Accessibility Officer to continue this important work through the end of the pandemic and beyond.

## IDEA

The idea that information technology (IT) should be accessible to people with disabilities is not new. The Americans with Disabilities Act has required accessibility, in spirit if not in specifics, since 1990. Between 1999 and 2001, the World Wide Web Consortium developed the first Web Content Accessibility Guidelines, the United States Access Board codified the Section 508 Standards for Accessible Electronic and Information Technology, and the State of Illinois adopted the Illinois Web Accessibility Standards (which were later enacted as the Illinois Information Technology Accessibility Act in 2007).

But even after twenty years, the state of IT accessibility remains frustratingly problematic. Although legal requirements have existed for decades, many states do not have entities or resources responsible for ensuring their information and technologies are accessible.

Demonstrating the scope of the problem, WebAIM analyzed one million home pages and found 98% had accessibility failures – with errors as basic as missing image alt text (66%) and form input labels (53.8%):

### 2020 State of Accessibility

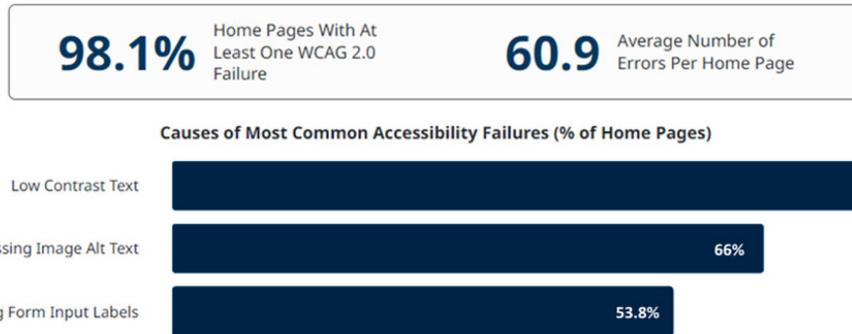


Figure 1. From the [WebAIM Million Report](#) as cited on the [Global Accessibility Awareness Day](#) website.

Consequently, and unsurprisingly, people with disabilities have had to turn to legal action to enforce IT accessibility requirements. In a review of ADA lawsuits regarding digital accessibility failures, UsableNet found the numbers to be increasing dramatically, surpassing 4,000 cases in 2021 alone:

### 2021 Digital ADA Lawsuits

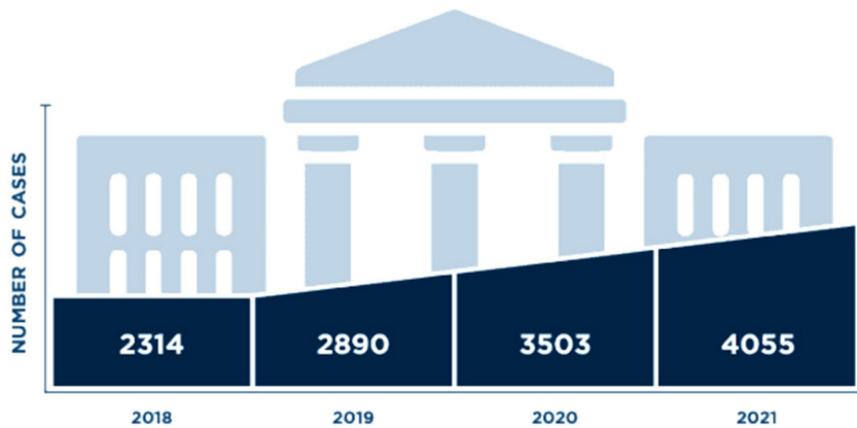


Figure 2. From the [2021 Report of ADA Digital Accessibility Lawsuits](#) at [UsableNet.com](#).

When disability advocacy groups in Illinois reported encountering accessibility issues with Illinois’ unemployment benefits system, video conferencing platform, and websites, Illinois took the report seriously. The State CIO determined not only to address the immediate concerns, but also to make changes that would last through the pandemic and beyond.

Recognizing the importance of accessibility – as well as the vast amount of work to be done – the State CIO conceptualized a plan to create a formal Office of Information Accessibility and appoint a Chief Information Accessibility Officer for the State. The new Office would leverage the momentum of the immediate project and position the State to ensure its information systems would be accessible into the future.

## IMPLEMENTATION

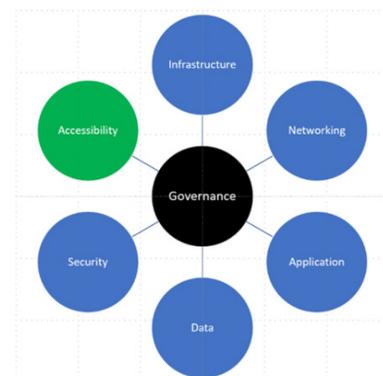
Illinois’s effort to address and improve IT accessibility required a comprehensive and multi-pronged approach. To ensure that improvements would be successful *and* sustainable, Illinois focused on finding ways to operationalize accessibility, emphasizing several key principles:

**Partnership** – DoIT Leadership engaged the advocacy groups in a spirit of partnership, acknowledging mistakes, sharing information about challenges, and committing to regularly report on and track progress. This partnership built the trust necessary for the team to work on systemic change as well as immediate fixes. DoIT Leadership also engaged in partnerships with its private sector partners. Beyond just looking for immediate solutions, Illinois asked these partners for demonstrable commitments to accessibility. By engaging at the highest levels and demonstrating its own persistent commitment (and by promoting the idea that accessibility could be a competitive advantage), Illinois encouraged its partners to invest in accessibility for the long-term.

**Efficiency** – At the beginning of the effort, DoIT had only a small, informal group of accessibility specialists. This small team was quickly outpaced by the demand for their assistance, so the team focused on finding ways to maximize its effectiveness. By exploring approaches such as “triage” reviews (to gauge need and determine how best to start), representative sampling (testing components and design patterns rather than entire applications), iterative audits (allowing developers to make fixes in rounds, from easiest to most complex), and independent verification and validation (requiring large project teams to include their own accessibility specialists), the team was able to keep up with what would otherwise have been overwhelming demand. The techniques developed through this effort are now being standardized and operationalized for ongoing use.

**Automation** – To compliment necessary but time-consuming manual accessibility testing, DoIT explored automated, enterprise-level testing tools. Starting in March 2021, DoIT implemented the SiteImprove website quality testing platform, which includes a robust accessibility testing component. SiteImprove was configured to monitor nearly 95,000 web pages across more than 115 State websites, running scans on a weekly basis and providing detailed reports of accessibility errors that content development teams use to identify and correct issues as they arise. DoIT Leadership also bundled SiteImprove results into quarterly scorecards provided to help agency management recognize and prioritize accessibility efforts.

**Governance** – DoIT currently includes five domains in its Governance model: Infrastructure, Networking, Application, Data, and Security. To support the ongoing success of this accessibility effort, DoIT Leadership added Accessibility as a sixth domain. By elevating Accessibility as its own governance domain, it was incorporated into existing departmental processes such as Enterprise Demand Management, Enterprise Project Portfolio Management, and Procurement. Being part of these established processes, is already helping ensure that accessibility is addressed proactively and reducing the risks involved in waiting to address accessibility until late in project lifecycles.



## OFFICE OF INFORMATION ACCESSIBILITY

To ensure that accessibility efforts would continue into the future, the State CIO conceptualized and created the Office of Information Accessibility to be headed by a new Chief Information Accessibility Officer for the State. Under the CIO's leadership, Human Resources staff and others gathered information and collaborated to develop the vision, scope, goals, and objectives of the Office.

The Office of Information Accessibility was structured to include the Chief Information Accessibility Officer and three professional information technology staff, with the Chief reporting directly to the Office of the Secretary. The Chief Information Accessibility Officer will serve as the State's primary authority in ensuring the accessibility of information and information systems for people with disabilities, as well as maintaining compliance with Department, State and Federal accessibility requirements. The responsibilities of the position provide the Chief with the authority to speak on behalf of the Department and State, develop and implement policy, and commit the State to actions aimed at improving accessibility. The position was developed with the goal of not only providing the highest quality of service delivery, but also to empower it to serve as a leader and voice in the industry.

## IMPACT

The DoIT project team and partners regularly referred to the accessibility initiative as "a journey" – not toward a specific finish line, but one that would continue along the path set well after the initial issues were addressed. Even with that recognition, the effort has already produced real-world impact.

## UNEMPLOYMENT BENEFITS

The Illinois Unemployment Benefit system was of critical import during the early months of the pandemic and was the first area of focus for this effort. By testing representative samples, the team was able to quickly identify common accessibility errors in the legacy application. The accessibility team then performed iterative reviews, training the development team to correct errors as they progressed. After the initial iterations, the application showed marked improvement, as displayed in the following figure showing "before" and "after" results of testing with the WAVE Web Accessibility Evaluation tool:



Figure 3. Illinois Unemployment Benefits website with WAVE results before & after

By taking the time to show the developers how testing was done and to train them on the concepts required to implement fixes, Illinois also grew its capacity to address accessibility in a way that will continue to benefit this application as well as those to come.

## VIDEO CONFERENCING

In the response to the pandemic, Illinois shifted rapidly to the use of Cisco Webex in place of in-person meetings, for both communications between State employees and communications between employees and the residents they serve. This rapid change came with growing pains, including initial struggles for users with visual and hearing disabilities. Partnering with Illinois to identify needs, Cisco rapidly addressed issues and added enhancements to support users with disabilities, including features such as:

- Automated real-time captioning for participants who are deaf
- Video window locking and stage customizations for participants using sign language interpreters
- Customized invitation messages with screen-reader friendly “join” links
- Comprehensive and customizable keyboard shortcuts
- Accessibility Settings for screen reader notifications of chat messages, reactions, etc.

The figure below shows an example of Accessibility Settings now available to *all* Webex users:

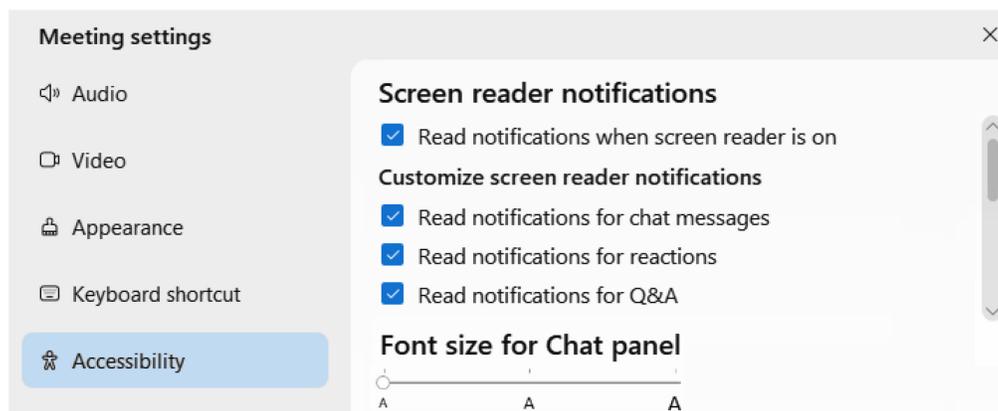


Figure 4. New Accessibility Settings in Cisco Webex Meetings

Helping to improve the accessibility of a product used far beyond Illinois' borders was one of the most rewarding achievements of this effort.

## WEBSITES

While automated accessibility testing has its limitations (studies such as the UK Government Digital Service's [Accessibility Tools Audit](#) show that automated tools can only find 30-35% of accessibility errors), Illinois found SiteImprove to be an invaluable tool for improving and *maintaining* the accessibility of State websites. With the ability to tirelessly monitor tens of thousands of web pages, SiteImprove gave state web content teams visibility they had never known.

As shown below, many teams were able to correct and maintain accessibility well above the benchmark level:

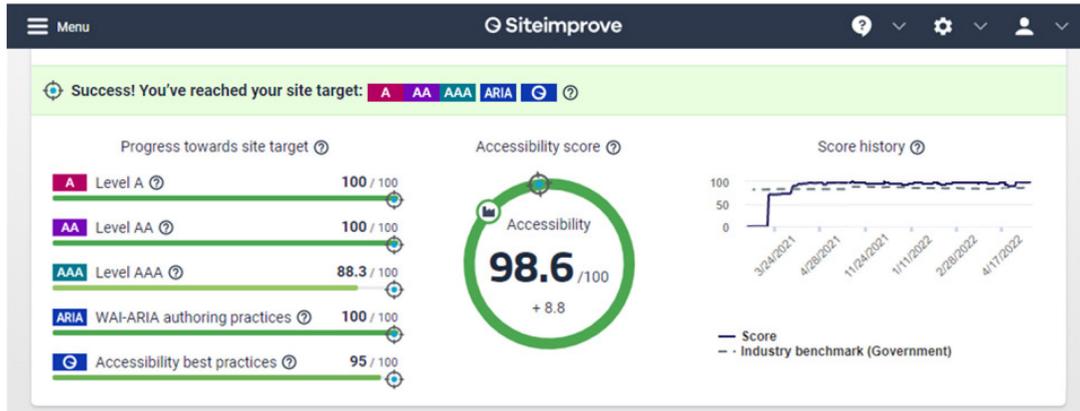


Figure 5. SiteImprove Accessibility Overview of Illinois Department of Human Services website

## OFFICE OF INFORMATION ACCESSIBILITY

The creation of the Office of Information Accessibility by the State CIO was the culmination of Illinois' journey to improve IT accessibility during the pandemic. With the Chief Information Accessibility Officer in place, the Office will grow to oversee and ensure the continued development and implementation of IT accessibility standards, policies, and procedures, along with the tools, training, and education to support that mission. In addition to working within DoIT, the Office will reach out to and include all Illinois agencies in the effort, providing training to staff who create content as well as systems. The Office has already initiated these efforts by working with the Governor's Office to create and deploy a "Disability Access Self-Assessment Survey" to Illinois agencies and to establish a "Disability Access Coordinator" committee of staff from all agencies, starting with discussions focused on the importance and methods of ensuring electronic documents are accessible.

While it took a crisis to raise this opportunity, DoIT and the State of Illinois are proud and excited about the progress made over the last two years and the creation of the Office of Information Accessibility that will continue and grow these successes in the years to come. By focusing on constructive partnerships with disability advocates, staff and residents with disabilities, and private-sector partners, and emphasizing long-term, systemic improvements rather than just short-term solutions, the State CIO was able to improve accessibility in ways that were long overdue and that will benefit people with disabilities within and beyond Illinois for years to come.