

The Kansas Partnership for Accessible Technology

2013 Annual Report



May 9, 2014

CONTACT

Questions or comments concerning this report should be directed to Cole Robison, Director of IT Accessibility (cole.robison@ks.gov or (785) 291-3016). The website for the Kansas Partnership for Accessible Technology is located at: <http://oits.ks.gov/kpat>.

2013 ANNUAL REPORT

The Kansas Partnership for Accessible Technology

PREFACE

This report provides an overview of the efforts undertaken by the Kansas Partnership for Accessible Technology (KPAT) to make the use of technology by government and its partners accessible to employees, business, and citizens. A copy of the annual reports issued by the KPAT, including this one, can be found online at: <http://oits.ks.gov/kpat/reports>.

ABOUT THE KANSAS PARTNERSHIP FOR ACCESSIBLE TECHNOLOGY

Purpose

The Kansas Partnership for Accessible Technology was established by Executive Order 08-12 in December 2008 as an independent committee composed of senior program and policy leaders representing key stakeholders in accessible technology, and charged with coordination and oversight of a program to carry out the state's commitment to information technology (IT) accessibility. The Partnership is charged with the following responsibilities:

- Address web and IT accessibility issues
- Provide related policy, standards, guidelines, and procedural recommendations,
- Coordinate, review, and provide recommendations on programs for enterprise wide assessment and monitoring of accessibility compliance,
- Review the State of Kansas Web Accessibility Requirements (Information Technology Policy 1210) and related documents annually and update as required,
- Develop and provide information, training, support, and resources on web and IT accessibility,
- Work jointly to accomplish its mission with officials from other state agencies, organizations and county, municipal and tribal governments, as well as with businesses and organizations in the private sector whose products, services, or activities affect the accessibility of state services, programs, or systems.
- Establish a leadership role for Kansas in the national effort to improve access to and use of information and services by individuals with disabilities.

Membership

Membership is drawn from a wide variety of state agencies, as well as from disability community advocacy organizations and local government. Appointments to the Partnership are as specified in Executive Order 08-12. A list of current members is provided in an appendix to this report.

Program

The Partnership operates within the state IT governance structure and functions as a standing advisory committee to the Information Technology Executive Council (ITEC) and other committees, boards and commissions as appropriate. It meets quarterly and commissions ad hoc working groups to carry out individual initiatives. For administrative purposes, the Partnership is housed in the Office of Information Technology Services (OITS) and it receives staff support from the Director of IT Accessibility.

Executive Order 08-12 is archived at:

<http://www.kslib.info/Documents/executive/EO%2008-12.pdf>.

The State of Kansas Web Accessibility Requirements (Information Technology Policy 1210) are available at:

<http://oits.ks.gov/kito/itec/itec-policies/itec-policy-1210>.

2013 GOALS AND ACCOMPLISHMENTS

Goals

The overarching goal of the state IT accessibility program is to provide the leadership, policy direction, and support necessary to make all State of Kansas content and services delivered through information and communications technologies accessible. We believe successful implementation involves several dimensions:

- **Governance:** Involving affected stakeholders to develop and implement policy and standards; providing leadership in working with other governance bodies to proactively address IT accessibility
- **Assistance:** Providing consulting, training, documentation, and support for technology implementers, both technical (e.g., for web developers) and relating to process (e.g., procurement standards); facilitate understanding legal liability and responsibilities
- **Communication:** Advocacy for affected constituent groups; raising and maintaining awareness of the issues, requirements, and solutions; promoting the initiative; listening to concerns; and championing successes
- **Assessment:** Collaborate with and assist organizations in monitoring compliance, establishing accountability, reporting progress to stakeholders and oversight groups.

Accomplishments

Governance

The Partnership actively worked to fulfill its responsibilities in the area of governance in 2013. Highlights include:

- Reviewed and approved the Web Accessibility Compliance Statements of 19 state IT projects with budgets in excess of \$250,000, under the accessibility stipulations introduced in the December 29, 2010 revision of the Information Technology Project Planning Guidelines (ITEC Policy Guideline 2400A). Of these projects, there were six from six agencies, representing approximately \$6,038,000, to which the State of Kansas Web Accessibility Requirements (ITEC Policy 1210) were applicable (based on the inclusion of web-based user interface components), and for which these requirements were explicitly included, along with accessibility testing, in the project plans. An additional seven projects from five agencies, representing approximately \$18,636,000, are currently in the high-level planning stage, with confirmation that they will likewise include the accessibility requirements. In several of these cases, substantive discussions with agency and/or vendor personnel relating to these requirements have occurred as a direct result of this process, cementing compliance early and avoiding costly post-development remediation or non-compliant implementation.
- Researched, discussed and clarified our approaches to IT project planning for commercially available off-the-shelf items and undue burden exceptions to ITEC Policy 1210.
- Reviewed the federal Strategic Plan for Improving Management of Section 508 of the Rehabilitation Act for applicability to our own strategic planning.
- Reviewed process recommendations made by SSB BART Group as part of a project consultation.
- Continued to work with the Kansas Department of Health and Environment's and the Kansas Department for Children and Families' Kansas Eligibility Enforcement System (KEES) project staff to ensure that project's compliance with accessibility requirements.

Assistance

The primary staff person supporting the Partnership is the Director of IT Accessibility, Cole Robison. Either directly, or with his guidance, various types of accessibility-related assistance were provided to state agencies and other organizations throughout 2013. Examples include performing accessibility assessments of state websites at the request of site owners, assessing IT Project deliverables, evaluating and remediating Portable Document Format (PDF) documents, directing individuals to available captioning and functional testing resources, and answering inquiries for state agencies regarding a variety of topics, including basic accessibility; accessibility of particular web technologies such as HyperText Markup Language (HTML); PDF document format accessibility; captioning; and requirements interpretation.

As administrator for the Accessibility Management Platform (AMP) (see *Assessment*, below), Mr. Robison also provided account management, training, and technical support for almost 250 users.

Finally, while not driven by the Partnership, a significant form of assistive technology was provided by OITS Network & Telecommunication Services, which implemented a captioned telephone service available on office telephones. The service shows live transcribed conversations on the phone's display.

Communication

The Partnership continues to serve as a vehicle for communicating on accessibility-related topics with its members and the communities they represent. Specific examples of outreach include presenting on Partnership activities to the Information Technology Advisory Board, and providing a web accessibility overview to the health plan providers for the KanCare program in advance of their developing KanCare-related websites.

We continued to develop and support the KPAT website (<http://oits.ks.gov/kpat>), an integral part of our efforts to deliver information about accessible technology to stakeholder organizations. In particular, many new resource links have been added in the past year.

Assessment

One of the keys to being effective in addressing the subject of IT accessibility is the ability to assess compliance with state standards. From this capability comes the ability to track progress for compliance, to design training and communication that specifically targets identified deficiencies, to provide feedback to agencies about potential issues in need of remediation, and a method to identify best practices that can be shared across the enterprise.

In 2013 we continued our use of the AMP, an enterprise tool for use in performing automated assessment of the state's compliance with ITEC web accessibility requirements that is made available to agency personnel statewide. We continue to add new users gradually, increasing the total number by roughly 25% over the past year. An overview of some of the high-level, statewide results from evaluation with AMP is provided in the following section.

AMP provides for automated and manual evaluation of traditional, HTML-based web content, which has generally been the focus of most web accessibility attention to date. As configured for the State of Kansas, though, AMP also provides document inventory capabilities, and these were used to determine the extent of non-HTML website content, particularly in the form of PDF files. This scope assessment demonstrated that these make up an even larger share of State web content than previously thought—comparable, in fact, to the HTML-based portion. This study, along with additional research performed, has laid the groundwork for the pursuit of a PDF accessibility initiative similar to what we've instituted for HTML.

In order to establish an initial benchmark for compliance of these files, we engaged NetCentric Technologies to perform an evaluation of them, the results of which are provided in the following section.

In an effort to begin pursuit of PDF accessibility solutions, we enlisted the help of individuals from several agencies across the state who volunteered to participate in a trial evaluation of NetCentric’s production and remediation software. This resulted in a determination that the software would be of value in a PDF accessibility effort. A viable, cost-effective means to equip agency personnel with the software is now being sought.

ACCESSIBILITY STATUS OF STATE OF KANSAS WEBSITES

AMP Assessment

For the last two years, we have used the AMP, an enterprise tool for assessing the state’s compliance with ITEC web accessibility requirements, to perform an automated evaluation of a sampling of sixty-three major agency websites. The entities included were those listed on the Agency Contact Listing page of the Communication Directory at <http://da.ks.gov/phonebook/>, as well as the Legislature and additional public universities listed at http://www.kansasregents.org/interactive_map_listing. Each of these sites was automatically spidered by AMP to a maximum depth of 250 pages from its home page to comprise the assessment sample. For direct comparison to last year’s data, we have performed the same evaluation this year. These data were collected in January 2014.

This resulted in 12,157 pages being evaluated. Despite this being an increase of 1,126 pages over last year’s assessment sample, the number of violations found overall, 73,079, was reduced by 1.5%. One or more violations were found on 9,845 pages, or 81.0% of the total. This number is increased from 8,041 pages, or 72.9%, the previous year. The table below shows how the violations found are distributed by relative severity, and how these numbers compare to last year’s assessment.

	2012	2013	Difference
High Severity Violations	34,470	43,058	↑ 25%
Medium Severity Violations	9,994	5,116	↓ 49%
Low Severity Violations	29,758	24,905	↓ 16%
Total Violations	74,222	73,079	↓ 2%

The modest overall reduction in the number of violations, while representing a tapering-off from last year’s dramatic gains, remains a sign of progress. However, the increase in high severity violations indicates a need to both focus remediation on the most severe violations and redouble efforts to stem the introduction of new violations.

In addition to this evaluation matching last year’s, a more comprehensive evaluation was also performed, now that sufficient experience and proficiency with AMP have been attained to do so. This evaluation consisted of the primary websites of 190 agencies and associations, collected from the Agencies & Associations Listing at <http://www.kansas.gov/government/agencies-associations-listing/>, as well as the Legislature and additional public institutions listed at http://www.kansasregents.org/interactive_map_listing. Each of these sites was automatically spidered by AMP to a maximum depth of 50,000 pages from its home page. It is our intention to make this more extensive evaluation our standard going forward.

This assessment, also performed in January 2014, resulted in 385,989 pages being evaluated. Of these, one or more violations were found on 332,475 pages, or 86.1%. There were 3,205,762 violations found overall. The table below shows how these are distributed by relative severity.

High Severity Violations	1,768,937	(55%)
Medium Severity Violations	212,193	(7%)
Low Severity Violations	1,224,632	(38%)
Total Violations	3,205,762	

While these numbers are far from where we would like them to be (the ultimate goal, to which we continue to strive, of course being zero violations), it is worth noting that they are not out of line with what may typically be observed on the web at large. In fact, compared to a cursory assessment of other state government websites in the region, Kansas' results are similar to the others in average violations per page, and considerably better in percentage of pages with violations and percentage of violations that are highly severe.

To provide some characterization of the violations most prominent in the assessment findings, the following tables highlight the top violations, as ranked by different metrics in the AMP analysis: violation frequency, severity, and estimated ease of remediation.

Most frequent violations (by pages affected)

Best Practice	Violations	Percentage of Pages with Violation	Severity	Noticeability	Repair Effort
Ensure the language of a document is set	183,103	46%	1	6	2
Provide alternative text for images	401,021	32%	10	10	2
Provide valid labels for form fields	183,732	20%	10	6	2
Ensure heading elements are properly ordered	177,776	12%	3	6	4
Avoid unnecessary use of heading elements	700,781	10%	3	3	2

Most frequent violations (by violation count)

Best Practice	Violations	Percentage of Pages with Violation	Severity	Noticeability	Repair Effort
Ensure links do not directly target images	823,090	8%	7	4	7
Avoid unnecessary use of heading elements	700,781	10%	3	3	2
Provide alternative text for images	401,021	32%	10	10	2
Avoid the sole use of device dependent event handlers	258,248	5%	8	7	2
Provide valid labels for form fields	183,732	20%	10	6	2

Most severe violations (Higher Severity values mean the violation impact is more severe.)

Best Practice	Violations	Percentage of Pages with Violation	Severity	Noticeability	Repair Effort
Provide alternative text for images	401,021	32%	10	10	2
Provide valid labels for form fields	183,732	20%	10	6	2
Ensure headers and cells are properly associated	160	0%	10	7	4
Provide alternatives for server-side image maps	5	0%	9	8	8
Avoid utilizing sub-tables in header elements	7,079	1%	9	3	5

Violations requiring least remediation effort (Lower Repair Effort values mean the violation is simpler to fix.)

Best Practice	Violations	Percentage of Pages with Violation	Severity	Noticeability	Repair Effort
Provide alternative text for images	401,021	32%	10	10	2
Provide valid labels for form fields	183,732	20%	10	6	2
Avoid the sole use of device dependent event handlers	258,248	5%	8	7	2
Provide valid, concise, and meaningful alternative text for image buttons	38,769	10%	6	8	2
Ensure frame titles are meaningful	51,230	8%	7	6	2
Ensure the language of a document is set	183,103	46%	1	6	2
Avoid unnecessary use of heading elements	700,781	10%	3	3	2
Ensure hr elements utilize relative sizing	195	0%	4	2	2

There are, notably, two violations appearing among both the most common violations and the most severe, representing areas for specific focus: “Provide alternative text for images” and “Provide valid labels for form fields.” Fortunately, the level of effort required to fix these, and most of the others that appear here, is generally relatively low for these violations, representing the potential for improvement.

Assessment of PDF Documents

While AMP facilitates assessment of traditional website content, that is, webpages created using HTML and related technologies, it does not address other document types that are included in websites. Of these, it has been found that one document format—PDF—has, on average, a prevalence on state websites that approaches that of HTML-based webpages. Unfortunately, no evaluation of the accessibility of these files had ever been undertaken across the enterprise. To rectify this, the KPAT, using grant funding from the Information Network of Kansas, contracted with NetCentric Technologies to perform an automated evaluation of PDF files on state websites. Much as was initially the case for standard web content, which we now assess regularly, it is hoped that determining the current state of PDF accessibility on our websites will provide an actionable understanding of the nature and extent of the issues we face, and serve as a baseline for an effort going forward to improve PDF accessibility as well.

This evaluation was carried out with NetCentric’s CommonLook Clarity Cloud software for the primary websites of agencies and associations gathered from the same sources as the

comprehensive AMP assessment described above. Performed over a period of time from November 2013 to February 2014 and covering 124 websites on which PDF files were found, it encompassed 91,814 PDF files and 1,032,326 document pages. Of these, one or more failures of the accessibility checks were found on 79,873 files, or 87.0%.

A primary and essential characteristic for accessible PDF files is that they be *tagged*, meaning that information about the semantic roles of document elements is encoded into the file. The evaluation showed that only 32,986, or 35.9%, of the PDF files found were tagged, a key factor in the high percentage of inaccessible documents. Moreover, because tagging is (for all but the very simplest of documents) a necessary condition for accessibility, this means that 64.1% of the PDF files are very likely wholly inaccessible.

These results clearly confirm suspicions that accessibility issues with PDF documents are highly significant, and compel us to continue with our initiative to seek a means to drive their remediation.

OUTLINE OF 2014 PLANNED INITIATIVES

While progress was made on a number of initiatives in 2013, significant work lies ahead. The following sections outline the Partnership's planned areas of focus for the coming year.

Governance

The Partnership will continue to track ongoing federal efforts to update IT accessibility standards—such as the ICT Standards and Guidelines, the Notice of Public Rulemaking (NPRM) for which is expected in 2014—as well as emerging industry standards to understand their impact on activities in the state and recommend approaches for compliance, reflection in state standards, etc.

Assistance

The KPAT will develop a strategic plan for engaging agencies to actively improve the accessibility of state websites. We will attempt to provide support to directly and significantly address the issues identified in the assessments reported above.

We intend to develop training on proper development techniques for producing accessible content, as well as for identifying and addressing existing accessibility issues. Offerings will aim to provide a general foundation in accessible content creation as well as target specific areas of common need as identified by the enterprise-wide assessment effort.

PDF is a particular technology on which we will continue to focus, especially given our newfound understanding of its prevalence on State websites and its accessibility status. Exploration of PDF accessibility tool offerings, already underway, will continue in earnest.

Communication

With a wide user base for AMP now in place, we will endeavor to act on common feedback and form a user group for users of the assessment tool, and webmasters in general, to improve

engagement with this key stakeholder group on whom many of the tasks necessary for implementation of web accessibility standards fall. It is hoped that this could be done in conjunction with or in the context of the Web Development forum that is part of the OITS IT Initiatives undertaking. We hope that such a group will be an effective mechanism for providing support, and would generally foster a sense of community around the subject of web accessibility.

Assessment

Continuing use and support of AMP is now one of the KPAT's primary efforts. In addition to continuing to promote agency use of the tool, we will look to respond actively to the assessment results, to directly address the areas of need identified, and spur continued significant progress toward the goal of full compliance.

By working closely with state agencies in making an automated tool available for self-assessment, we hope to assist them in identifying strategies for compliance, developing plans for remediation where required, and to identify opportunities for training and best practice sharing that will increase the accessibility of the information and services delivered electronically by the state.

APPENDIX

Kansas Partnership for Accessible Technology Membership Listing

Chair

Martha Gabehart

Executive Director

Kansas Commission on Disability Concerns

900 SW Jackson St, Rm 100

Topeka, KS 66612-1246

(785) 296-1722

martha.gabehart@ks.gov

Vice-Chair

Donna Shelite

Administrative Chief of Staff

Kansas Office of Information Technology Services

Landon State Office Building

900 SW Jackson St, Rm 751-S

Topeka, KS 66612-1275

(785) 296-8134

donna.shelite@ks.gov

John Baranski

Information Delivery Manager

Kansas State Department of Education

120 SE 10th Ave

Topeka, KS 66612-1182

(785) 296-5125

jbaranski@ksde.org

Mike Burgess

Chief Information Officer

Kansas Department of Labor

401 SW Topeka Blvd

Topeka, KS 66603-3182

(785) 233-6278

mike.burgess@dol.ks.gov

Michael Donnelly

Director of Vocational Rehabilitation Services

Kansas Department for Children and Families

Docking State Office Building

915 SW Harrison St, Fl 9

Topeka, KS 66612-1505

(785) 368-7112

michael.donnelly@dcf.ks.gov

Bryan Dreiling

Chief Information Technology Architect

Kansas Office of Information Technology Services

Landon State Office Building

900 SW Jackson St, Rm 751-S

Topeka, KS 66612-1275

(785) 296-2809

bryan.dreiling@ks.gov

Mike Erickson

Associate Vice President, Technology and Computing Services

Emporia State University

1200 Commercial St, Box 4013

Emporia, KS 66801

(620) 341-5297

mericks2@emporia.edu

Anthony Fadale

State ADA Coordinator

Kansas Department for Children and Families

Docking State Office Building

915 SW Harrison St, Fl 6

Topeka, KS 66612-1505

(785) 296-1389

anthony.fadale@dcf.ks.gov

Jim Hollingsworth
Executive Director
Information Network of Kansas
632 SW Van Buren St, Ste 100
Topeka, KS 66603-3738
(785) 296-4277
jim.hollingsworth@ink.ks.gov

Michael Koss
League of Kansas Municipalities
300 SW 8th Ave, Ste 100
Topeka, KS 66603-3951
(785) 354-9565
mkoss@lkm.org

John Martello
Director of Human Resources and
Information Technology
Kansas State School for the Blind
1100 State Ave
Kansas City, KS 66102-4411
(913) 281-3308 x 308
jmartello@kssb.net

Jim Miller
Legislative Chief Information Technology
Officer
Kansas State Capitol Building
300 SW 10th Ave, Ste 63-W
Topeka, KS 66612-1504
(785) 296-5566
jim.miller@las.ks.gov

Kelly O'Brien
Judicial Chief Information Technology
Officer
Kansas Judicial Center
301 SW 10th St
Topeka, KS 66612-1599
(785) 296-7490
obrien@kscourts.org

Joe Oborny
Director of Technology
Kansas State School for the Deaf
450 E Park St
Olathe, KS 66061-5410
(913) 791-0573 x 61665
joborny@kssdb.org

Cole Robison
Director of IT Accessibility
Kansas Office of Information Technology
Services
Landon State Office Building
900 SW Jackson St, Rm 751-S
Topeka, KS 66612-1275
(785) 291-3016
cole.robison@ks.gov

Anthony Schlinsog
Executive Chief Information Technology
Officer
Landon State Office Building
900 SW Jackson St, Rm 751-S
Topeka, KS 66612-1275
(785) 296-4817
anthony.schlinsog@ks.gov

Marlo Tangney
Communications Unit Leader
Kansas Division of Emergency Management
2800 SW Topeka Blvd
Topeka, KS 66611-1287
(785) 274-1409
marlo.g.tangney.nfg@mail.mil

Matt Veatch
Assistant Division Director / State Archivist
State Historical Society
6425 SW 6th Ave
Topeka, KS 66615-1099
(785) 272-8681 x 271
mveatch@kshs.org

Melissa Wangemann
Legislative Services Director / General
Counsel

Kansas Association of Counties
300 SW 8th Ave, Fl 3
Topeka, KS 66603
(785) 272-2585
wangemann@kansascounties.org

Deby Zimmerman
Kansas Department for Aging and Disability
Services

New England Building
503 S Kansas Ave
Topeka, KS 66603-3404
(785) 296-6459
deby.zimmerman@kdads.ks.gov

Vacant

Kansas Department of Administration -
Procurement and Contracts

Vacant

Kansas Department of Health and
Environment Division of Health Care
Fincance

Vacant

Kansas Telecommunications Industry
Association / Kansas Relay Service

Vacant

State Geographic Information Systems
Director