

EIR Accessibility Overview

Texas A&M Chancellor's Summit

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People with Disabilities: Only Diversity Group with a Dependency on Technology for Accessing IT

Vision

Blind users access software applications and the Web using a screen reader and the keyboard.

System information

If you are using an existing system or inquiring about software, please provide the following:

Machine type

Model / version

Operating system / platform
[\[help to select multiple options \]](#)

AIX
Amiga OS 3.1
Amiga OS 3.5
Amiga OS 5.0

"Machine type. Edit.
Model slash version. Edit.
Help to select multiple options. Link.
Operating system slash platform. Listbox. Not
selected AIX. 1 of 30."

Color-blind users need more than color differences.



Low vision users need sizable fonts and contrast settings.

Font size

Larger font size

Even larger font size



Poor contrast



Good contrast

Font size & contrast

Hearing

Deaf users need alternatives for audio content (captioning); the hard of hearing need the ability to increase volume.



Upper Mobility

Users with limited use of arms and hands need keyboard accessibility features and alternative input methods.

Alternative input hardware devices



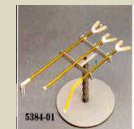
Joy Sticks



Keyboards



Switches



Mouth Sticks

Key Types	OS Keyboard Accessibility Features
Mouse Keys	Arrow keys control mouse pointer
Sticky Keys	[Ctrl] then [F] activates [Ctrl-F] shortcut
Slow Keys	Ignore short keystrokes
Repeat Keys	Turn off keystroke repeat Adjust delay before repeat begins Adjust delay between repeats

Scenario: Online Recruiting

Corporation X just completed the procurement and deployment of a large new web application for recruiting new employees and managing job candidates.

Software Company A developed the product. Both Company A and Corporation X's studies indicated that the new system would offer significant advantages in cost savings, productivity, and candidate quality over the previous, mostly manual processes.

Then....

Hiring the Right Person



A Few Example Areas of an Organization Where ICT Accessibility Impacts Can Occur

- Internet site and applications development
- Intranet site and applications development
- Procurement
- Sales
- Legal / civil rights
- Executive management
- Internal / external communications / PR
- Department / class required IT
- HR (employees)
- Learning systems (hw/sw)
- System admin user interfaces
- Student services
- Business controls / compliance office
- Etc.



IT Accessibility Regulations

There are IT accessibility laws and regulations in

- Many countries around the world
- Most cite accessibility technical standards
- US federal procurement regulations (Section 508)
- Americans with Disabilities Act (TS not currently codified)
- Many US states



US Section 508 Refresh became effective in Jan 2018 for compliance by federal agencies

- **References WCAG 2.0 AA as the technical standard**

Texas statutes and rules

- Apply to all Texas state agencies and institutions of higher education
 - Texas Government Code [2054 Subchapter M](#)
 - Texas Administrative Codes
 - [1 TAC 206: State Websites](#)
 - [1 TAC 213: Electronic & Information Resources](#)



Accessibility-related Complaints / Legal Inquiries on the Rise

- 37% increase in accessibility Lawsuits in 2016
- 2016 – 17 also saw the introduction of high volume demand letters by several law firms across public and private sectors in the form of demand letters Includes complaints filed
- DOJ SAMPRM published in 2016 and withdrawn in 2017; **however, little impact on litigation moving through the courts, with settlements using WCAG2.0AA as the TS for compliance**



Even with Increased Regulatory Push and Litigation, Adoption Still Slow

Technical challenges

- Continued investments in inaccessible legacy products and platforms
- Technology gaps due to omission of accessibility criteria during the creation of new, ICT technology

Organizational Challenges

- Lack of awareness of accessibility and its technical standards
- Accessibility deemed unnecessary or optional
- Accessibility understood too late in project / program to be addressed
- Lack of technical skills, tools, or training programs
- No organizational policies or objectives related to IT accessibility
- No one responsible or accountable for accessibility



IT Accessibility is a Complex Topic

Requires a holistic approach with organizations

- Many moving parts = many challenges
 - Governance
 - Technical
 - Organizational
 - Legal
 - Cultural
- Touches many areas of an organization in different ways
- Multi year initiative
- Speed, scope, and success of strategy execution dependent on
 - Skills and training
 - Tools and processes
 - Budget
 - Level of management commitment / support



Be Strategic- IT Accessibility Policy

Policy is the foundation on which accessibility programs are built

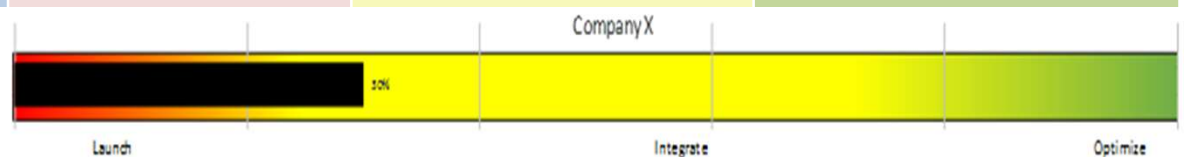
- Ensures continuity of accessibility initiatives and processes by supporting strategic rather than tactical efforts.
- Allows people in different roles across the organization to appropriately implement ICT accessibility as applicable to their areas / responsibilities.

The Policy Driven Adoption for Accessibility(PDAA) Model

	Core Criteria
Policy Creation	1. Develop, implement, and maintain an ICT accessibility policy.
Organization	2. Establish and maintain an organizational structure that enables and facilitates progress in ICT accessibility.
Business Process	3. Integrate ICT accessibility criteria into key phases of development, procurement, acquisitions, and other relevant business processes.
Compliance Planning	4. Provide processes for addressing inaccessible ICT.
Training	5. Ensure the availability of relevant ICT accessibility skills within (or to) the organization.
Communication	6. Make information regarding ICT accessibility policy, plans, and progress available to customers.

Policy Driven Adoption for Accessibility (PDAA) - Maturity Model

	Core Criteria	Launch	Integrate	Optimize
1.	Develop, implement, and maintain an ICT accessibility policy.	Have an ICT accessibility policy.	Have appropriate plans in place to implement and maintain the policy.	Establish metrics and track progress towards achieving compliance to the policy.
2.	Establish and maintain an organizational structure that enables and facilitates progress in ICT accessibility.	Develop an organization wide governance system.	Designate of one or more individuals responsible for implementation.	Implement reporting/decision mechanism and maintain records.
3.	Integrate ICT accessibility criteria into key phases of development, procurement, acquisitions, and other relevant business processes.	Identify candidate processes for criteria integration.	Implement process changes.	Integrate fully into all key processes.
4.	Provide processes for addressing inaccessible ICT.	Create plans that include dates for compliance of inaccessible ICT.	Provide alternate means of access until the ICT is accessible; implement corrective actions process for handling accessibility technical issues and defects	Maintain records of identified inaccessible ICT, corrective action, and tracking.
5.	Ensure the availability of relevant ICT accessibility skills within (or to) the organization.	Define skills/job descriptions.	Identify existing resources that match up and address gaps.	Manage progress in acquiring skills and allocating qualified resources.
6.	Make information regarding ICT accessibility policy, plans, and progress available to customers.	Make Launch level information available.	Make Integrate level information available.	Make Optimize level information available.



Prioritize what needs to be done



High # of EIR users = higher impact / risk:

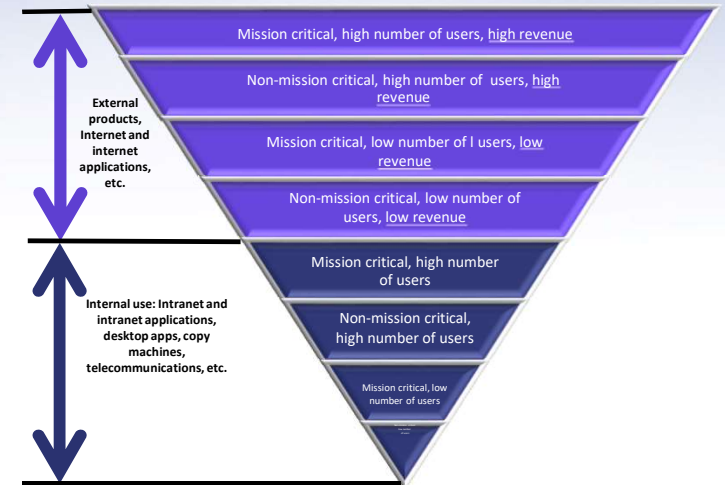
- Public facing websites and web applications
- Intranet sites and internal applications
- Desktop applications

Evaluate your agency's application portfolio

- What EIR is not accessible?
- What would it take to fix or replace inaccessible EIR?

Weave EIR Accessibility into your organizations culture

- Integrate accessibility criteria into key business process
- Make EIR accessibility awareness training a requirement



Simple things to help make web sites more accessible



1. Delete obsolete web pages and documents!

- Probably not accessible and less to deal with later



2. Fix things that can be fixed without a lot of technical effort

- Add alternate text (alt text) to images that the blind can't see
- Label search boxes and other "form fields" to identify what they are
- Caption or add transcripts to videos or podcasts



3. Utilize web scanning services for public facing and internal websites

- Scans web pages for accessibility issues
- Provides information on how to correct
- Not comprehensive, but highly scalable

Making an accessible product / service inaccessible

Scenario 1: How to screw up products that are “Out of the Box” compliant (MS SharePoint example)

1. Procured and installed
2. Internal teams or service providers lack governance, knowledge or tools to maintain / ensure customization and content are accessible
3. Internal teams or service providers produce inaccessible customization and content

Scenario 2: How to screw up a vendor developed accessible website (Main university website example)

1. New website developed by an accessibility savvy vendor and delivered to customer as compliant
2. Internal teams take control of the newly installed site but lack governance, knowledge or tools to maintain / ensure the accessibility integrity of the site
3. Accessibility compliance levels deteriorate in short order

Accommodations and Exemptions

Reasonable accommodations AND effective accommodations are not mutually exclusive

- **How does undue burden fit in?**
 - Does it create a significant hardship to the organization? Examples:
 - Financial hardship
 - Issues / risks of non procurement of a vital offering
 - Does it require a fundamental alteration to the primary features / function of the product or service?
 - A video camera for use by a blind person
 - Hands free controls for a commercial aircraft
- **What is a “back office exemption”?**
 - Typically defined as equipment installed and serviced by specially trained personnel
 - Does NOT include administrative or management interfaces operated by admins / end users

Accessibility in IT Procurements

1. How are accessibility levels validated?

- Commercial off the Shelf (COTS) products
 - VPATs
- Development services (websites / web apps, app customization, etc.)
 - No standard approach

PASSED

FAIL

2. How is vendor commitment to future accessibility improvements gauged?

Validating Accessibility of Vendor Offerings

“Show me”

- Burden of proof belongs to the vendor not the customer.
 - Credible evidence
 - Contractual language
 - Statement of compliance
- Can significantly reduce the customer accessibility validation efforts and risk
 - Engage accessibility professionals to assess vendor documentation
- Be skeptical! Many vendor accessibility documents may contain false, inaccurate, or misleading information.
 - Red Flags not difficult to spot to the qualified eye.

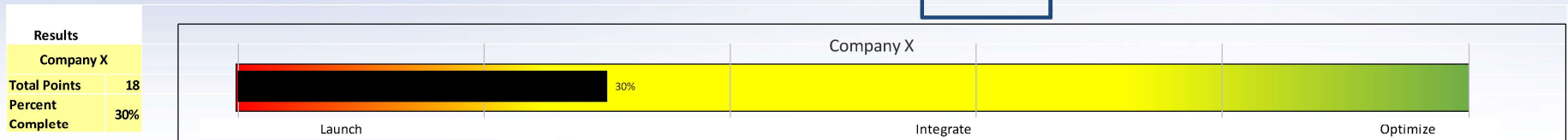
Follow Up Questions for COTS Vendors about their VPATs

Accuracy varies from vendor to vendor and product by product. After reviewing VPATs, asking for additional information is key:

- What tools / methods were used to test and complete the VPAT?
- What client platforms (operating systems (including mobile), browsers, assistive technologies, and versions of all of those) were used as test environments?
- Can the vendor provide a copy of the accessibility test plan for the product?
- Can the vendor provide the results of the accessibility testing?
- What issues were found and are there corrective actions in place to resolve them in this or a subsequent release...and when?


PDAA Self Assessment Tool

The PDAA Self-Assessment Tool



- Questionnaire for assessing organizational ICT accessibility policy maturity as measured against PDAA Core Criteria.
- Results can be used by:
 - Public / private sector organizations
 1. Guide the implementation of organization wide accessibility programs / initiatives
 2. Help achieve more accessible ICT and offerings over the long term
 - Procurement staff
 1. Help assess a vendor's ability to produce accessible offerings
 2. Gauge confidence in vendor's VPAT or other accessibility documentation
 3. Track vendor progress and improvement in ICT accessibility initiatives
 4. Use as part of vendor selection decisions

Vendor ICT Accessibility Development Services Info Request

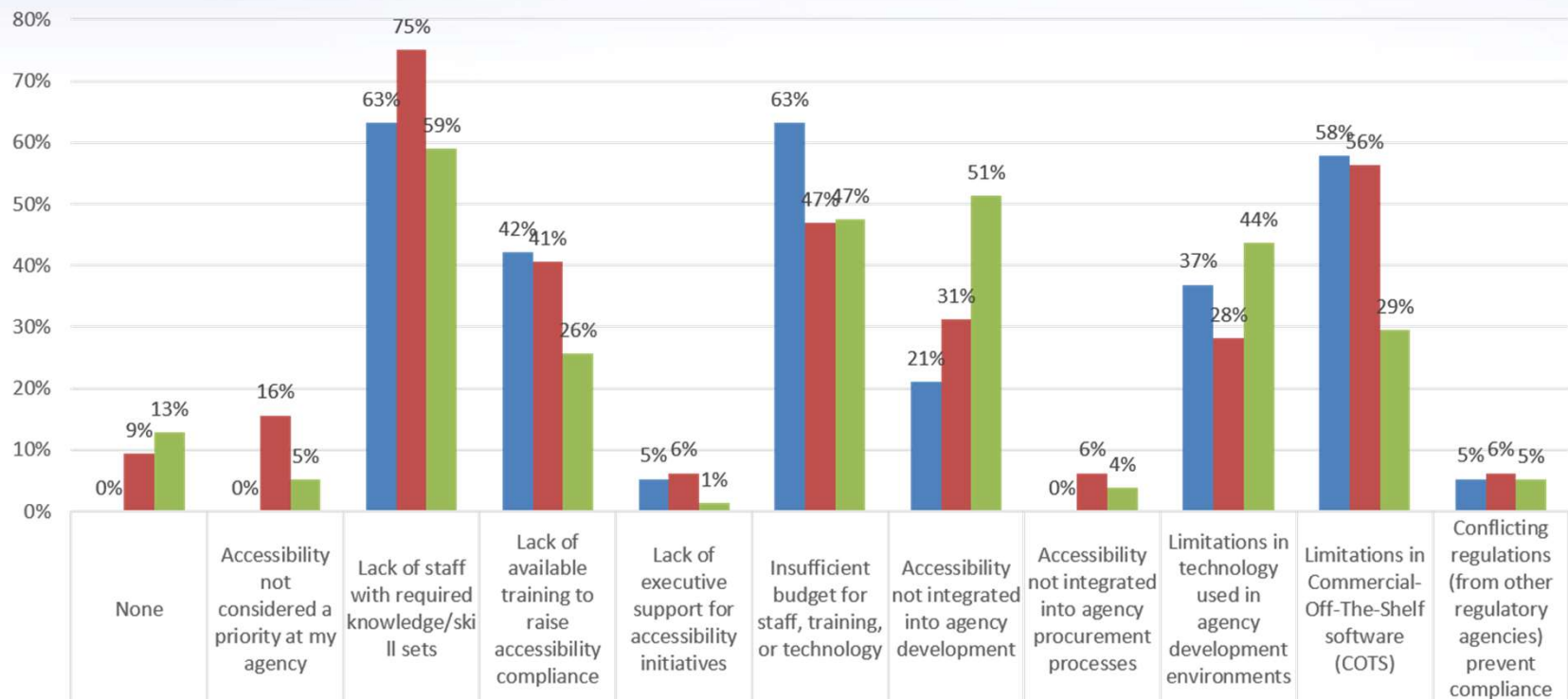
 Vendor Accessibility Development Services Information Request			
1. Vendor Information			
Vendor Name:	Submitter Name :		Date:
Email:	Phone: ()		
Address:	City:	State:	ZIP:
2. Instructions			
<p>Complete this form if your company or organization is responding to a Texas Agency solicitation that includes one or more of the following Information and Communications Technologies (ICT) offering types:</p> <ul style="list-style-type: none"> • Website development services • Web Application Development Services • Custom development services as part of an integrated solution. • Client based software application development services • Other software development services containing one or more user interfaces (end user, admin, etc.) <p>Please direct any questions regarding this request to the DIR Procurement Office.</p>			
3. Please respond to the questions below as applicable			
1. Describe or provide documentation regarding your organization's key business processes that include the integration of ICT accessibility activities. (Examples are product development, procurement, HR, etc.):			
2. Describe the skills and training resources that your organization uses (internal or third party) to develop and produce accessible ICT offerings:			
3. Describe the development and test tools used within your organization to produce accessible ICT offerings. Provide examples of typical project test cases for accessibility and examples of how test results are documented:			
4. Describe your organizations corrective actions process(es) or system(s) for documenting, tracking, and resolving accessibility issues / defects:			
5. Describe alternate methods for ICT products that are not compliant with accessibility technical standards. (example: 24hour / 7day/week toll free phone support number):			
6. Provide links to example websites or other examples of ICT work that your organization has produced that meet accessibility technical standards such as US Section 508, or WCAG 2.0 AA:			

Contract Inclusions for COTS / Development Services

Contract Inclusions	COTS	Development Services
The accessibility technical standard that you want the deliverable to meet such as WCAG 2.0 AA	Yes	Yes
Review / approval of accessibility plans / designs at designated checkpoints throughout the development cycle		Yes
Review / concurrence of accessibility platforms used for testing		Yes
Delivery of accessibility test results documentation and dates to be provided		Yes
Corrective actions criteria (prioritization of accessibility defects / issues, and resolution plans / dates)	Yes	Yes
Accessibility related remedies and warranties	Yes	Yes
Statement that you may request additional information as needed in support of the vendor deliverables	Yes	Yes
Pre delivery letter stating that accessibility documentation (VPATs, etc.) provided during solicitation activities was accurate, supported by and testing performed in accordance with generally accepted accessibility practices (including visual inspection and with an assistive technology.	Yes	
Pre deliverable letter stating that accessibility documentation provided during solicitation activities was accurate, and that the deliverable(s) development and testing were performed in accordance with generally accepted accessibility practices (including visual inspection and with an assistive technology), and that the development test results and other documentation for the contracted deliverable(s) supplied to your organization are accurate, and that the deliverable complies with the specified accessibility standards (or cites exceptions where it doesn't with a corrective actions plan)	Yes	Yes

DIR Accessibility Survey Results

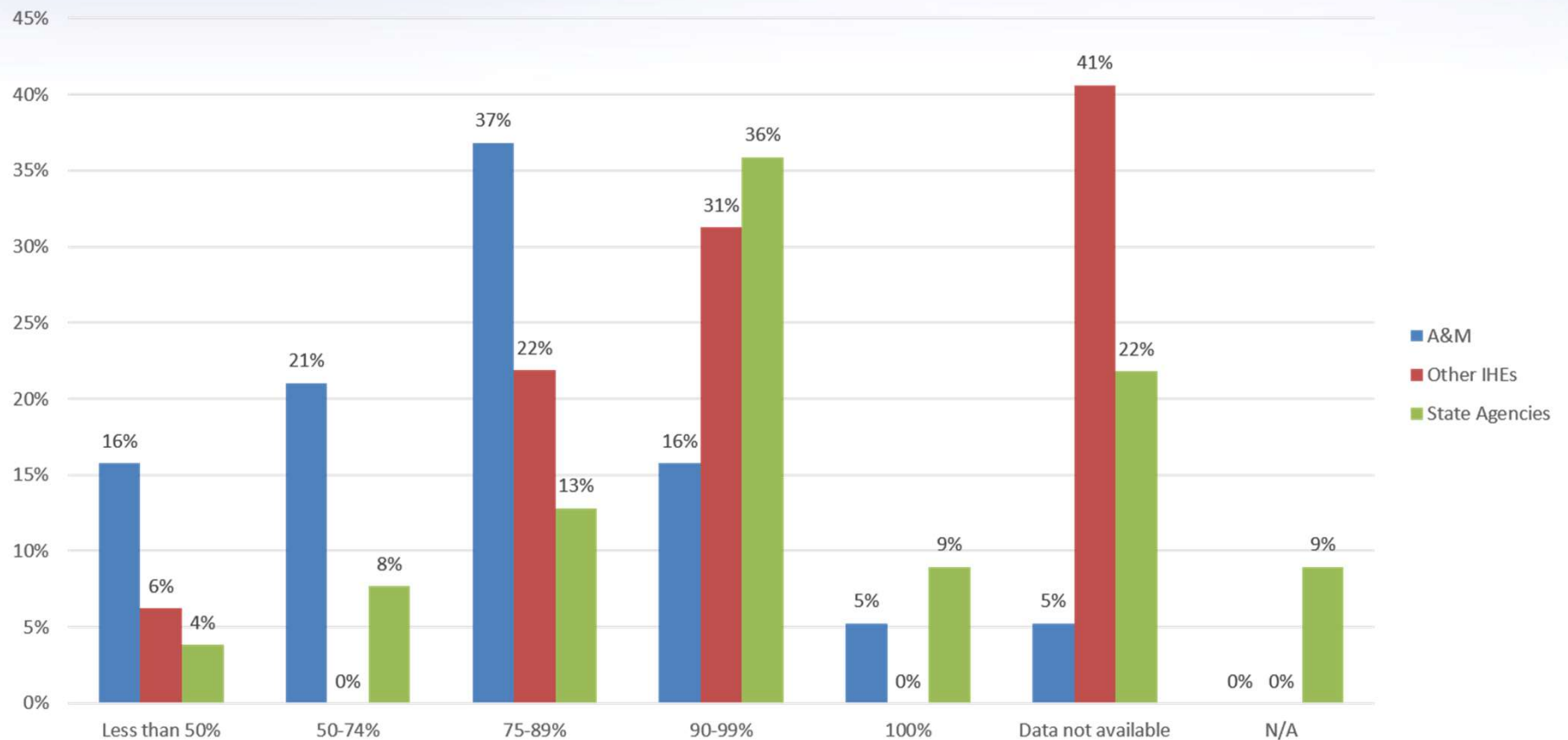
What types of challenges has the agency faced when attempting to achieve compliance with state accessibility requirements? Select up to five.



■ A&M	0%	0%	63%	42%	5%	63%	21%	0%	37%	58%	5%
■ Other IHEs	9%	16%	75%	41%	6%	47%	31%	6%	28%	56%	6%
■ State Agencies	13%	5%	59%	26%	1%	47%	51%	4%	44%	29%	5%

DIR Accessibility Survey Highlights

What percentage of the agency's externally facing web pages are in full compliance with state accessibility requirements, 1 TAC 206 and 213?



Reference Information



[Techcheck](#) – On Line Assessment Tool developed by the [Partnership on Employment and Accessible Technology \(PEAT\)](#) and sponsored by the [Office of Disability Employment Policy \(ODEP\)](#), U.S. Department of Labor



[W3C – Web Accessibility Initiative - Planning and Implementing Web Accessibility](#)



[British standard BS-8878 Implementation Guide](#) - by Hassell Inclusion - Accessibility business process integration



[Strategic IT Accessibility: Enabling the Organization](#) – Reference book on organizational accessibility enablement, strategy, and implementation



[Policy Driven Adoption for Accessibility \(PDAA\) Papers from NASCIO](#)



[Accessibility Implementation Framework](#), Texas Department of Information Resources - A comprehensive framework and project plan to guide an organization's IT accessibility program and initiatives

Putting it All Together

Accessibility is an ongoing initiative

- Ensure accessibility policies are in place
- Prioritize the accessibility work
- Apply simple fixes to your websites
- Provide access to accessibility training
- Integrate accessibility into procurement and other key processes
- Utilize online accessibility resources



WRAP-UP / QUESTIONS?