# Web Accessibility - Some Goals and Tools (08/15/2017)

## Why Web Accessibility?

* Socially responsible
* Pages are easier to maintain & update
* Streamlined markup = faster loading
* Search engine optimization
* Anti-discrimination laws

## Web Accessibility Guidelines

### **Section 508** (1998)

* Anti-discrimination law
* 16 Guidelines
* Drawn from draft WCAG 1.0

### **WCAG 1.0** (finalized 1999)

* W3C – World Wide Web Consortium, an international group that presents standards for the Web
* WAI – Web Accessibility Initiative, subgroup of W3C
* WCAG – Web Content Accessibility Guidelines presented by WAI
* (W3C [ WAI { WCAG } ] )
* 14 Guidelines
* 3 Levels of Priority

### **\*\* WCAG 2.0** (finalized December 2008) **\*\***

* Principle-centered rather than technique-centered
* Success Criteria are (POUR):
  + **P**erceivable
  + **O**perable
  + **U**nderstandable
  + **R**obust

### **Section 508 Refresh** (finalized January 2017)

* Effective date for enforcement and compliance will begin January 18, 2018

## Web Accessibility Considerations

May not always be able to evaluate Web Accessibility with a binary qualitative question such as, **“Is it or is it not accessible?”**.

A good start may be to focus on fundamental principles that can be implemented by Web developers to make Web sites ***more* accessible to *more* people**.

We aim to make Web sites *more* accessible to users with the following disabilities:

* Visual (blindness, low vision, color blindness)
* Auditory (deaf, hard of hearing)
* Motor (unable to use mouse)
* Cognitive (learning disabilities, attention disorders)

### **We can make web sites *more* accessible to users with disabilities by incorporating the following:**

1. **Alt Text** - Provide appropriate Alternative Text for images
2. **Link Text** - Use Link Text that is descriptive and unique
3. **Semantic Markup** - Utilize Semantic Markup effectively (title, headings, quote, block quote, emphasis, lists)
4. **Colors** - Use Colors with sufficient luminosity contrast, brightness difference, and color difference
5. **Forms** - Create accessible Forms (<http://www.webaim.org/techniques/forms/>)
6. **Captions & Transcripts** - Provide Captions or transcripts for media.
7. **Use CSS** - Separate Content (HTML) and Presentation (CSS)
8. **Validate** HTML

### **Additional considerations**

* + 1. **Can you navigate page without a mouse!?**
    2. **Non-HTML Content** - Ensure accessibility of PDF, MS Office, Flash, etc.
    3. **Skip Navigation** - Provide link to “skip navigation”
    4. **Data Table Headings** - provide headings for data tables
    5. **ARIA** - incorporate Accessible Rich Internet Applications)
    6. **JavaScript** - Web page should function with JavaScript disabled (or accessible JavaScript)

## Resources & Some Tools

(Remember that tools are not people! Web accessibility requires human evaluation.)

1. Accessible Information Technology at Amherst College  
   [www.amherst.edu/go/thinkaccessible](http://www.amherst.edu/go/thinkaccessible)
2. WebAIM WAVE Chrome Extension  
   [wave.webaim.org/extension/](http://wave.webaim.org/extension/)
3. WebAIM WAVE Firefox Toolbar  
   [wave.webaim.org/extension/](http://wave.webaim.org/extension/)
4. Paciello Colour Contrast Analyser (generates reports by selected color pairs)  
   [www.paciellogroup.com/resources/contrastanalyser/](http://www.paciellogroup.com/resources/contrastanalyser/)
5. Paul Adam Bookmarklets for Accessibility Testing  
   <http://pauljadam.com/bookmarklets.html>
6. W3C WAI Before and After Demonstration Web Pages  
   [www.w3.org/WAI/EO/2005/Demo/Overview](http://www.w3.org/WAI/EO/2005/Demo/Overview)  
   [www.w3.org/WAI/demos/bad/](http://www.w3.org/WAI/demos/bad/)