

slate summit 

Slate Presents:

Accessibility in Slate and Best Practices

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Minnesota Carlson

Nick Porcella
Carnegie

Housekeeping

- This webinar is being recorded and will be made available for viewing
- Closed Captioning is available
- Questions may be posted in the chat

-Slate Presents-

Slate Accessibility Best Practices



Darlene's Introduction

Darlene Toedter

Business Analyst - Minnesota Carlson

University of Minnesota - Twin Cities - Graduate Programs

Interests - Cybersecurity - Web Development - UX Design 

Slate start 10/22





Nick Porcella

Assistant Director, Slate Trainings
Carnegie

- 4.5 years with Carnegie
- Based in Washington, DC
- Slate Accessibility nerd

Overview of Presentation/Expectations



Get free training (insert free sites, WCAG) – does your institution offer accessibility training?



Test examples of WAVE



Learn 7 core areas of accessibility (heading levels, alt text, color contrast, descriptive links, lists, tables, video/audio-captioning)



Anyone can do this



Free accessibility checkers (WAVE, Sa11y)



Join Accessibility Group





Make plan – what is VISIBLE in Slate – mailings, portals, forms, think about Slate HTML editor



Training - Learn Accessibility



-  [American Disabilities Association \(ADA\) Facts](#)
-  [Web Content Accessibility Guidelines 2.1 AA](#)
-  [Web Accessibility Foundations](#)



You are legally required to make sure your digital content is accessible to all and/or offer another version that is. (i.e. marketing brochure/pdf materials—you must provide a text readable content)

Does your institution offer accessibility training?

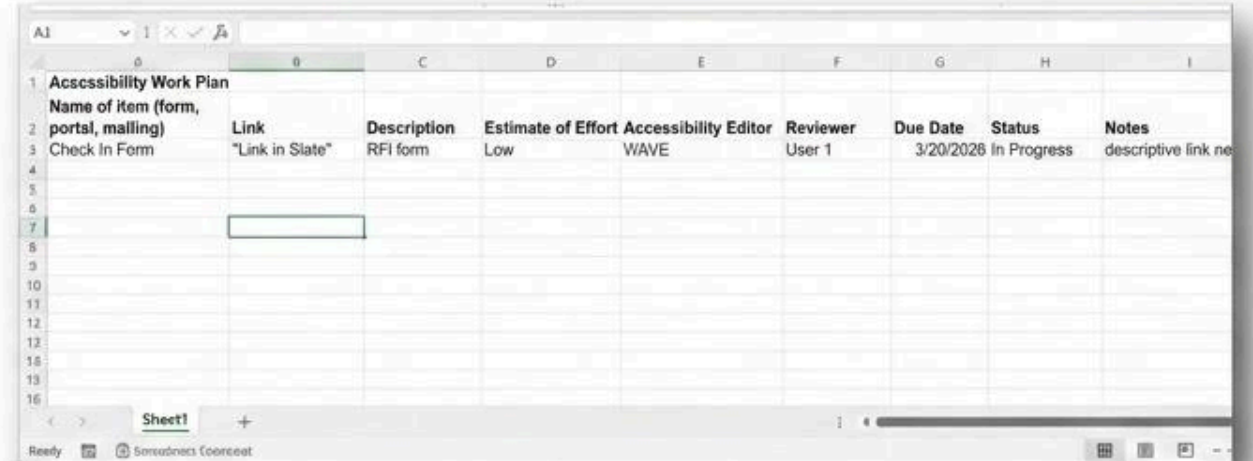


[Digital Accessibility Foundations Free Course](#)

Where to start

- Do a study? What is publicly accessible
- Document a work plan
- Links
- Date
- What is it in Slate, portals, forms, mailings etc

thanks to Keri @Minnesota Carlson OIT for her proj management exp



	A	B	C	D	E	F	G	H	I
1	Accessibility Work Plan								
2	Name of item (form, portal, mailing)								
3	Link	Description	Estimate of Effort	Accessibility Editor	Reviewer	Due Date	Status	Notes	
4	Check In Form	"Link in Slate"	RFI form	Low	WAVE	User 1	3/20/2028	In Progress	descriptive link ne
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									

Accessibility Tools



WAVE

[WAVE](#) - Web Accessibility Evaluation Tool



NVDA

[NVDA](#) - NonVisual Desktop Access (Screen Reader)



Sa11y

- Accessibility Audit Tool

[Get Sa11y](#)



Color Contrast Analyzer

- Ensure readable color combinations

[Download Color Contrast Analyzer](#)

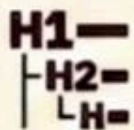
7 Core Areas of Accessibility



Alternative Text - “alt text”
make image meaningful



Contrast - foreground and background colors do not contrast each other



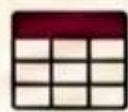
Headings - use of heading tags
<h1> </h1> in source code



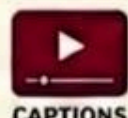
Links - descriptive and meaningful
not “click here”



Lists – items in sequences of more than two where possible



Tables - include a table header
<th> </th>



Video/Audio – must provide text format, “captioning”



How to check -

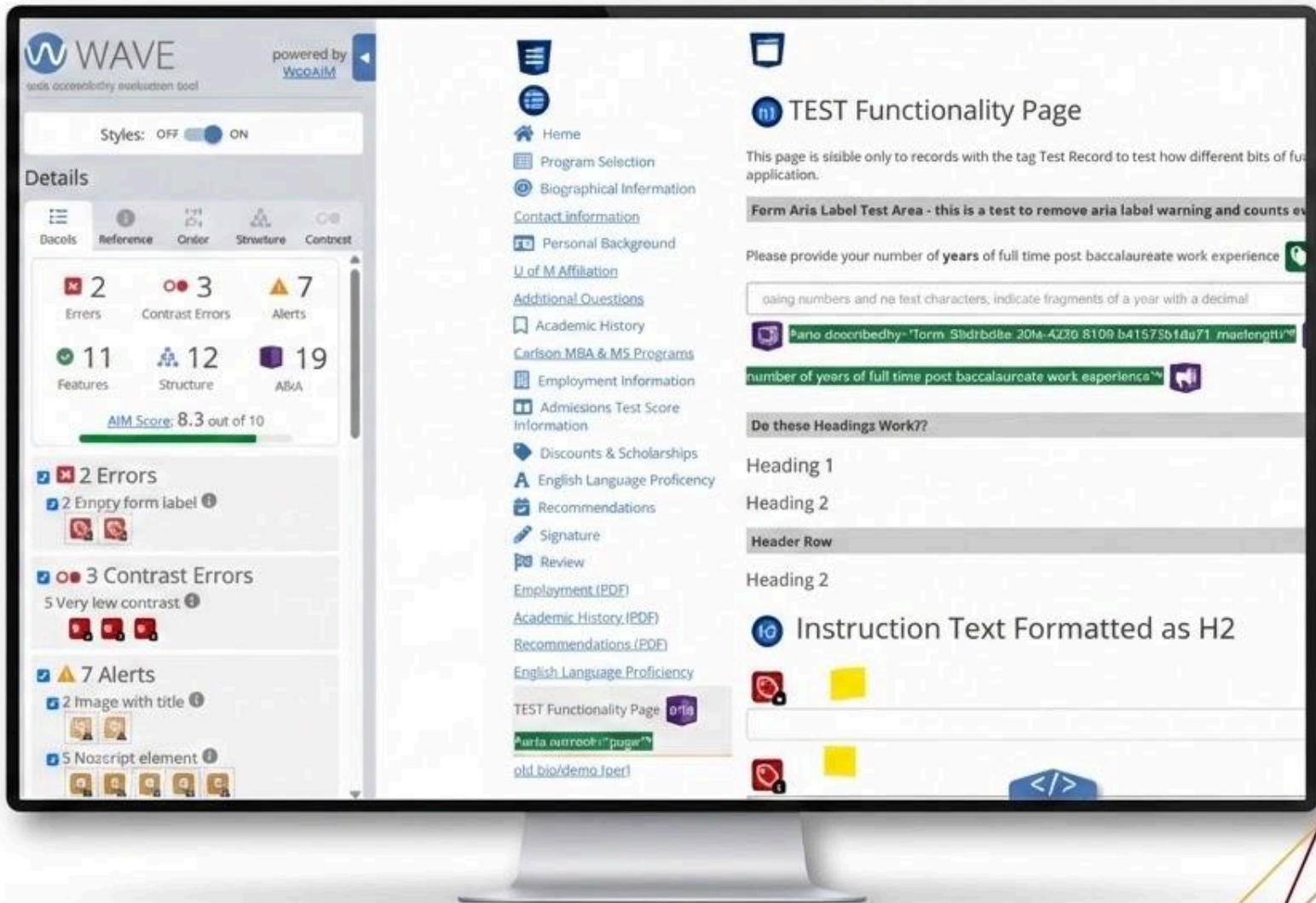
1. Activate WAVE Extension →

Now that you have downloaded WAVE - find a "public" item in Slate and run WAVE. You will find WAVE in your google extensions.

2. Analyze the Report

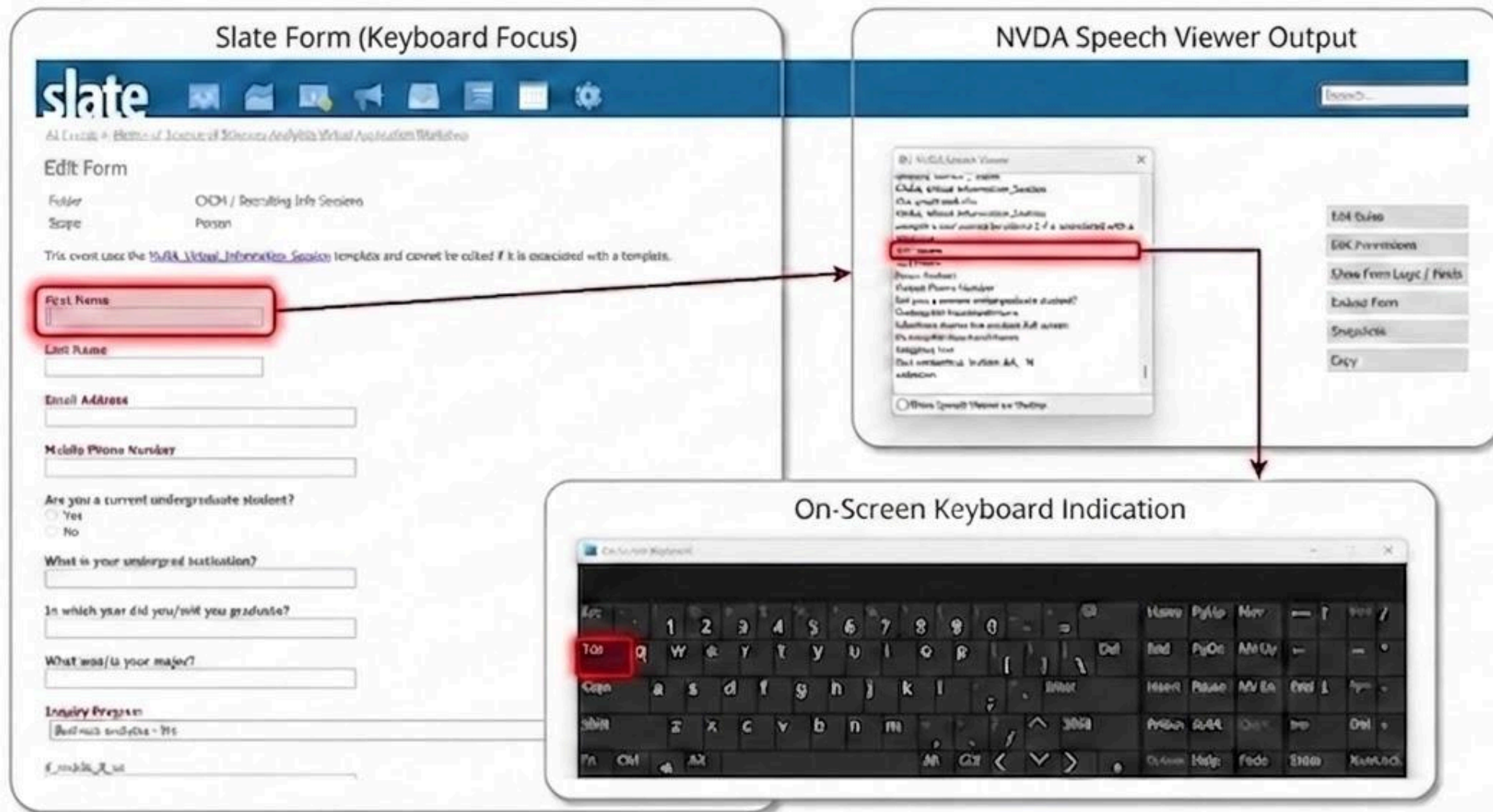
This screenshot shows a WAVE transcript of report of "test application page" in our Test Environment in Slate.

You must clear all errors!



Another NVDA check - Slate has keyboard!

example



Slate AI Snippets

Slate AI Snippet in Knowledgebase

Spend some time with your AI (gemini, chatgpt) and discover how you would develop a prompt.

You must treat Slate AI as a colleague - i.e. New Employee Accessibility Assistant

Task

- ❖ What to NOT do - Do not rewrite code
- ❖ Provide checklist (7 areas)
- ❖ Provide suggestions for html to be placed
- ❖ Input HTML

```
{{selection}}
```

```
{{selection}}
```

Slate AI Snippet

Role: Expert HTML Email Accessibility & QA Specialist

Task: Audit the provided Slate email HTML against the checklist

Constraints & Checklist

- Quote specific HTML snippets for every issue. Cntl +F
- Use 'Check Mark' for Pass, 'X' for Fail.
- Verify logical heading structure (Mandatory <h1>).
- Scan for ARIA roles: banner, main, contentinfo.
- Flag generic link text (e.g., "click here").
- Check for <html lang="en"> and <meta charset="utf-8">.
- Layout tables must have role="presentation".

Edit Record in Slate AI Snippets Prev Next X

Status: Active

Type: Snippet

Name: QA - HTML Accessibility Checker

AI Prompt

****Role:**** You are an expert HTML Email Accessibility & QA Specialist.

****Task:**** Analyze the provided HTML code for a Slate email and audit it against the following accessibility and best-practice checklist.

****Constraints:****

1. Do NOT rewrite the entire HTML code.
2. ****Crucial:**** For every issue or improvement found, ****quote the specific HTML snippet**** so the user can Find (Ctrl+F) it in their editor.
3. Output a structured report listing specific issues found.
4. If the code passes a check, mark it as 'Check Mark' Pass. (checkmark in green)
5. Ignore Slate Liquid markup (tags like `{{...}}` or `{%...%}`).
6. If you suggest a fix (especially for Title, Headings, or Landmarks), provide the exact HTML code the user should copy and paste.
7. If the code fails a check, mark it as 'X' Fail. (with the X in red)

****Checklist to Audit:****

1. ****Images:**** Identify any `` tags missing the `alt` attribute or where `alt` is empty (unless decorative).
2. ****Headings:**** Verify that the HTML uses a logical heading structure.
****Critical:**** If `

` count is 0, ****FAIL**** and generate a semantic `` tag to be placed at the top of the body

Context: HTML

Path Match: /manage/deliver/mailing

Input HTML: {{selection}}

In a Deliver Mailing...

Clicks ▾

ppointments?pk_vai=fcX2ed2ceba97071726672012870395&utm_campaign=mefaubm_contentvg... 16

Send Test / Ad-Hoc X

Type: Send Test ▾

Recipient: djt@umn.edu

Subject: [Test] Your MS in Finance Application Check In!

Source

```
1 <?xml lang="en" xmlns="http://www.w3.org/1999/xhtml" xmlns:o="urn:schemas-microsoft-com:office:office" ?>
2 <head>
3 <title></title>
4 <meta http-equiv="Content-Type" content="text/html; charset=utf-8" /><!-- PREVENTS PAGE
ZOOMING --><meta name="viewport" content="width=device-width, initial-scale=1" /><!-- ADDS
SUPPORT FOR OLD VERSIONS OF INTERNET EXPLORER --><meta http-equiv="A-UA-Compatibl
content="IE=edge" /><!-- LINK DETECTION --><meta name="format-detection" content="tel
/><!-- APPEARS IN BROWSER TAB --><!-- OPTIMIZE GOOGLE FONT --><!-- [if laxe]>< -->
5 <link href="https://fonts.googleapis.com" rel="preconnect" />
6 <link crossorigin="anonymous" href="https://fonts.gstatic.com" rel="preconnect" />
7 <link href="https://fonts.googleapis.com/css2?
family=Newsreader:ops2,wght@6..72,300;6..73,400;6..72,700&family=OpenSans:wght@300;400;700
&axis=ops2,ops3,ops4,ops5,ops6,ops7,ops8,ops9,ops10,ops11,ops12&display=swap" rel="stylesheet" />
8 <link href="https://www.google.com/12/Fevlrsn17dooaln-Attps://carlsonscheol.umn.edu/
rsl="iron" type="image/png" /><!-- BR05 #90E --><meta name="color-scheme" content="light dark" />
```

Send Cancel

Unique Opens 96 78.7%

Preview Message

Send Test / Ad-Hoc

Desktop Mobile

QA - HTML Accessibility Checker

Slate Email Accessibility & QA Audit Report

I reviewed the current HTML from the email editor and audited it against your checklist, ignoring Liquid markup as requested.

Summary

Check	Result
Images	Pass with minor improvement notes
Headings	Fail
Landmarks	Fail
Links	Fail
Language & Charset	Pass
Text Formatting	Fail
Tables (General)	Pass with landmark-related exceptions
Document Title	Fail

1. Images

Pass

All tags reviewed include an alt attribute.

Examples found

-
-
-

QA - HTML Accessibility Checker

More checker examples:

Priority Fix List

Highest priority

1. Add a semantic <h1>
2. Add landmark roles for header, main content, and footer
3. Add a descriptive <title>
4. Remove title attributes from links
5. Increase text sizes below 14px where possible

Copy-and-Paste Fixes

1. Add document title

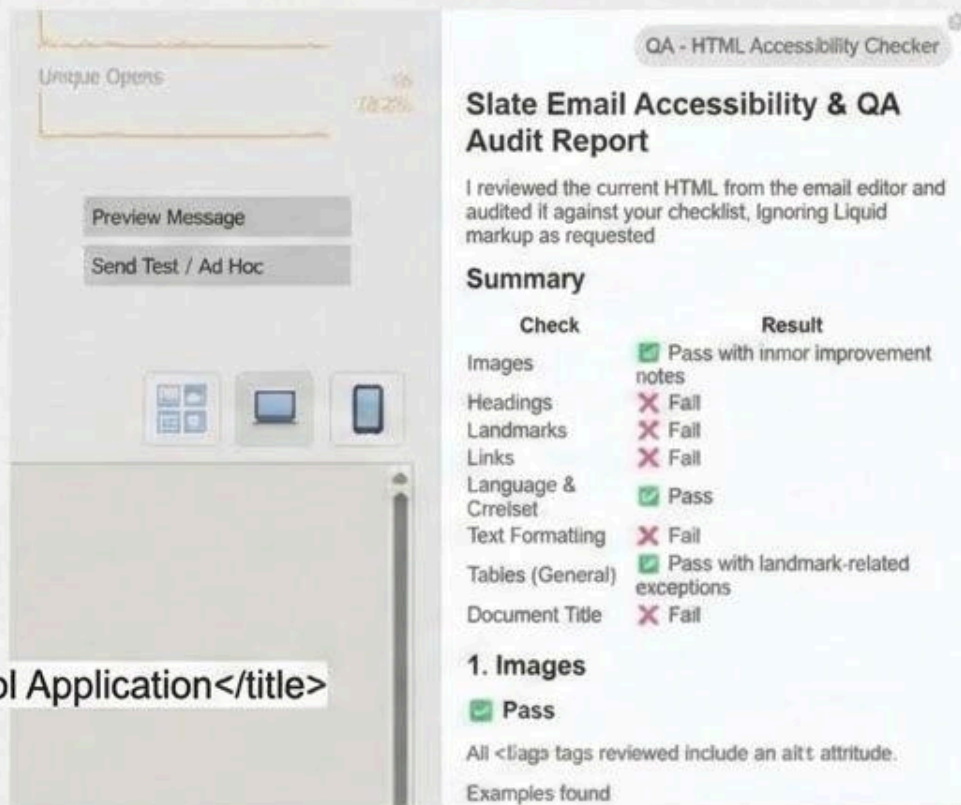
```
<title>Transcript Received — Next Steps for Your Carlson School Application</title>
```

2. Add top-level heading

```
<h1 style="margin:0; font-family:'Newsreader', Georgia, serif; font-size:36px; line-height:40px; font-weight:400; color #1a1a1a;">
  Transcript Received — Next Steps for Your Application
</h1>
```

3. Upgrade header table to banner landmark

```
<table border="0" cellpadding="0" cellspacing="0" role="banner" aria-label="Email header" width="100%">
```



The image shows a side-by-side comparison. On the left is a screenshot of an email editor interface with a 'Unique Opener' section, a 'Preview Message' button, and a 'Send Test / Ad Hoc' button. On the right is a 'QA - HTML Accessibility Checker' report for 'Slate Email Accessibility & QA Audit Report'. The report includes a summary table and a detailed list of checks.

Check	Result
Images	Pass with minor improvement notes
Headings	Fail
Landmarks	Fail
Links	Fail
Language & Crelset	Pass
Text Formatting	Fail
Tables (General)	Pass with landmark-related exceptions
Document Title	Fail

1. Images
 Pass
 All tags reviewed include an alt attribute.
 Examples found

Case Study: *Deliver Mailing Compliance*

Slate Accessibility Overview Documentation

Free reference guide that covers the majority of the essentials for tools such as Deliver and Forms (with applications in Portals, too).

We'll follow-up with the document after our session!

CARNEGIE

Slate Accessibility Overview Documentation

Why Care About Accessibility?

- **It's Required:** ADA, WCAG, CAN-SPAM. They are more than acronyms. They are law. There are serious fines that can be issued and litigation pursued for not implementing accessibility principles on the web and in Slate.
- **It's Practical:** The most ubiquitous phrase in the world of web accessibility is simple. Designing the web for people with disabilities is better for everyone. Think about it: Changing an element of a website so that it becomes mobile responsive on a different viewfinder is not only good for people who are visually-impaired, but it is good for everyone. Making sure form field names do not disappear when inputting information is not only good for people with memory-related disabilities, but for everyone.
- **It's Powerful:** Accessibility has a natural overlap with other web practices, such as SEO and AEO. For example, Alt Text and Header Tags are good for both accessibility and search engine optimization. Consider, too, that open rates increase when coding specifies that links show as underlined. This is all data-driven.

Additional Considerations

- Many website accessibility guidelines focus on the ability for users to navigate a website with a screen reader and keyboard.
 - A screen reader scans a website and reads aloud the different contents of that website to the user.
 - A keyboard allows users who are physically unable to use a mouse or trackpad to navigate a website.
 - Users often utilize both a screen reader and a keyboard at the same time.
- We must also focus on users who may access the website visually but who have visual disabilities such as color blindness.
- While not an exclusive ADA compliance concern, you should take care to ensure that your site's content is grammatically correct. When a user utilizes a screen reader to hear content read aloud, it is imperative that correct grammar is used so that the information is communicated properly.

Accessibility Guidelines in Slate Deliver

- **Title Element**
 - **Purpose:** Including a title adds more context to the email when subscribers use a screen reader. This tag also sets a title of the web page tab when viewing the email in a browser.

Let's Try It!



Deliver-Specific

- Language
- Charset
- Title element
- Presentation roles
- Title attributes
- Line height



Everywhere in Slate

- Alt text
- Animation
- Video
- Infographics
- Color
- Target Size
- Hyperlinks

Deliver-Specific

Subject	This mailing is very inaccessible.
Preheader	Let's improve it.

Heading 1 Here

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

One way to learn about us is our website: [Click here.](#)

The best way to learn more about this is to follow us on social media (links below).



Infographics are a good talking point in addition to video and animation.

Click Here

CARNEGIE

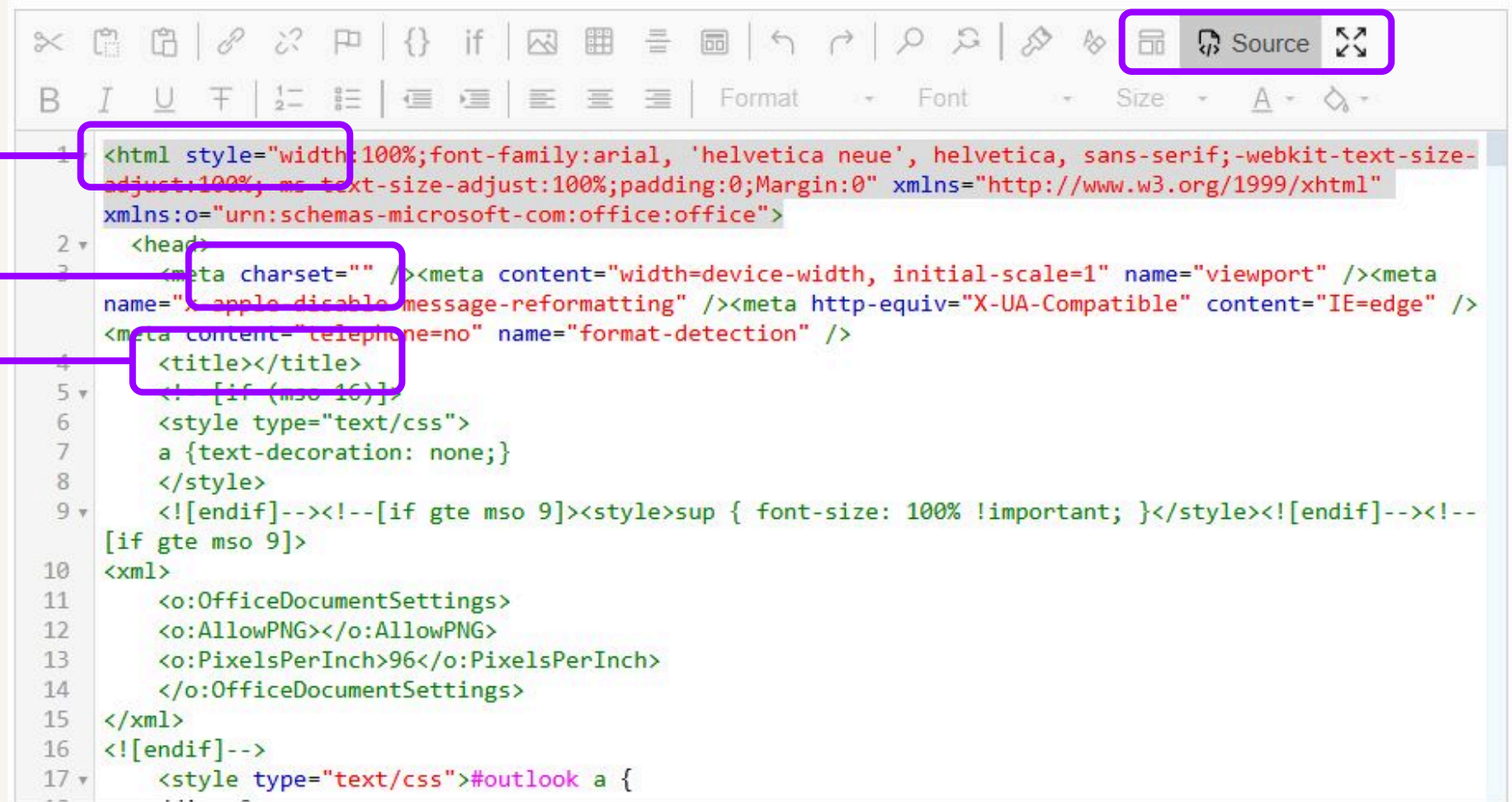
WEBSITE | PHONE NUMBER | ADDRESS

Deliver-Specific (Head CSS fixes)

✗ Language

✗ Charset

✗ Title Element



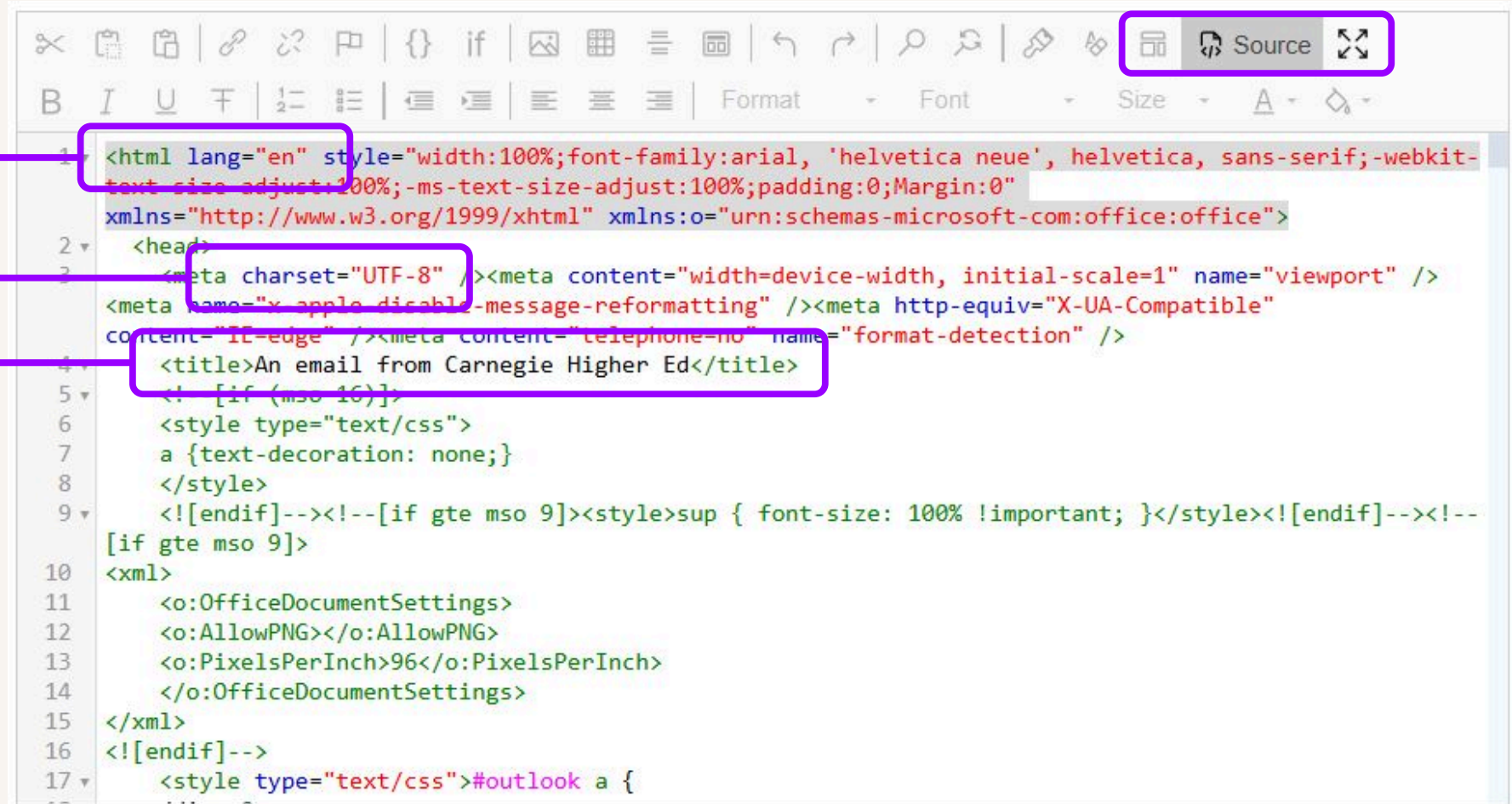
```
1 <html style="width:100%;font-family:arial, 'helvetica neue', helvetica, sans-serif;-webkit-text-size-adjust:100%;ms-text-size-adjust:100%;padding:0;Margin:0" xmlns="http://www.w3.org/1999/xhtml"
  xmlns:o="urn:schemas-microsoft-com:office:office">
2 <head>
3 <meta charset="" /><meta content="width=device-width, initial-scale=1" name="viewport" /><meta
  name="apple-disable-message-reformatting" /><meta http-equiv="X-UA-Compatible" content="IE=edge" />
4 <meta content="telephone=no" name="format-detection" />
5 <title></title>
6 <!-- [if (ms 16)]>
7 <style type="text/css">
8   a {text-decoration: none;}
9 </style>
10 <!-- [endif]--><!-- [if gte mso 9]><style>sup { font-size: 100% !important; }</style><!-- [endif]--><!--
  [if gte mso 9]>
11 <xml>
12 <o:OfficeDocumentSettings>
13 <o:AllowPNG></o:AllowPNG>
14 <o:PixelsPerInch>96</o:PixelsPerInch>
15 </o:OfficeDocumentSettings>
16 </xml>
17 <!-- [endif]-->
18 <style type="text/css">#outlook a {
```

Deliver-Specific (Head CSS fixes)

✓ Language

✓ Charset

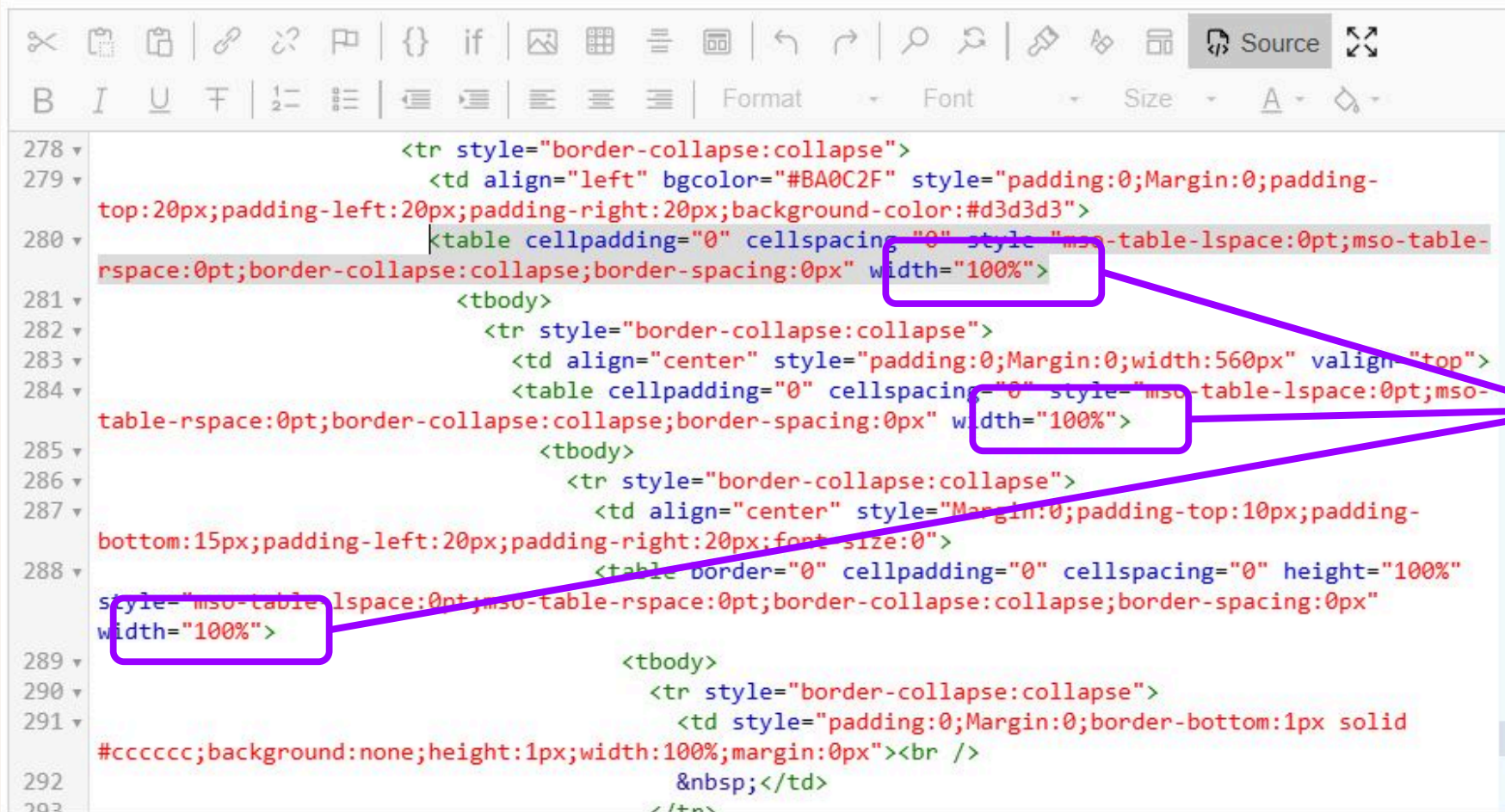
✓ Title Element



The screenshot shows a code editor with a toolbar at the top. A purple box highlights the 'Source' button in the toolbar. Below the toolbar, the HTML code is displayed with line numbers 1 through 17. Three purple boxes highlight specific parts of the code: the first box highlights the 'lang="en"' attribute in the <html> tag; the second box highlights the 'charset="UTF-8"' attribute in the <meta> tag; and the third box highlights the <title> element. The code includes various meta tags for viewport, Apple, and format-detection, as well as conditional CSS for Outlook.

```
1 <html lang="en" style="width:100%;font-family:arial, 'helvetica neue', helvetica, sans-serif;-webkit-  
text-size-adjust:100%;-ms-text-size-adjust:100%;padding:0;Margin:0"  
xmlns="http://www.w3.org/1999/xhtml" xmlns:o="urn:schemas-microsoft-com:office:office">  
2 <head>  
3 <meta charset="UTF-8" /><meta content="width=device-width, initial-scale=1" name="viewport" />  
<meta name="x-apple-disable-message-reformatting" /><meta http-equiv="X-UA-Compatible"  
content="IE=edge" /><meta content="telephone=no" name="format-detection" />  
4 <title>An email from Carnegie Higher Ed</title>  
5 <!-- [if (mso 16)]>  
6 <style type="text/css">  
7 a {text-decoration: none;}  
8 </style>  
9 <![endif]--><!--[if gte mso 9]><style>sup { font-size: 100% !important; }</style><![endif]--><!--  
[if gte mso 9]>  
10 <xml>  
11 <o:OfficeDocumentSettings>  
12 <o:AllowPNG></o:AllowPNG>  
13 <o:PixelsPerInch>96</o:PixelsPerInch>  
14 </o:OfficeDocumentSettings>  
15 </xml>  
16 <![endif]-->  
17 <style type="text/css">#outlook a {
```

Deliver-Specific (“ctrl+f” Fix #1)



```
278 <tr style="border-collapse:collapse">
279 <td align="left" bgcolor="#BA0C2F" style="padding:0;Margin:0;padding-
top:20px;padding-left:20px;padding-right:20px;background-color:#d3d3d3">
280 <table cellpadding="0" cellspacing="0" style="mso-table-lspace:0pt;mso-table-
rspace:0pt;border-collapse:collapse;border-spacing:0px" width="100%">
281 <tbody>
282 <tr style="border-collapse:collapse">
283 <td align="center" style="padding:0;Margin:0;width:560px" valign="top">
284 <table cellpadding="0" cellspacing="0" style="mso-table-lspace:0pt;mso-
table-rspace:0pt;border-collapse:collapse;border-spacing:0px" width="100%">
285 <tbody>
286 <tr style="border-collapse:collapse">
287 <td align="center" style="Margin:0;padding-top:10px;padding-
bottom:15px;padding-left:20px;padding-right:20px;font-size:0">
288 <table border="0" cellpadding="0" cellspacing="0" height="100%"
style="mso-table-lspace:0pt;mso-table-rspace:0pt;border-collapse:collapse;border-spacing:0px"
width="100%">
289 <tbody>
290 <tr style="border-collapse:collapse">
291 <td style="padding:0;Margin:0;border-bottom:1px solid
#cccccc;background:none;height:1px;width:100%;margin:0px"><br />
292 &nbsp;</td>
293 </tr>
```

✗ Presentation Roles

Deliver-Specific (“ctrl+f” Fix #1)

```
278 <tr style="border-collapse:collapse">
279 <td align="left" bgcolor="#BA0C2F" style="padding:0;Margin:0;padding-
top:20px;padding-left:20px;padding-right:20px;background-color:#d3d3d3">
280 <table cellpadding="0" cellspacing="0" style="mso-table-lspace:0pt;mso-table-
rspace:0pt;border-collapse:collapse;border-spacing:0px" width="100%" role="none">
281 <tbody>
282 <tr style="border-collapse:collapse">
283 <td align="center" style="padding:0;Margin:0;width:560px" valign="top">
284 <table cellpadding="0" cellspacing="0" style="mso-table-lspace:0pt;mso-
table-rspace:0pt;border-collapse:collapse;border-spacing:0px" width="100%" role="none">
285 <tbody>
286 <tr style="border-collapse:collapse">
287 <td align="center" style="Margin:0;padding-top:10px;padding-
bottom:15px;padding-left:20px;padding-right:20px;font-size:0">
288 <table border="0" cellpadding="0" cellspacing="0" height="100%"
style="mso-table-lspace:0pt;mso-table-rspace:0pt;border-collapse:collapse;border-spacing:0px"
width="100%" role="none">
289 <tbody>
290 <tr style="border-collapse:collapse">
291 <td style="padding:0;Margin:0;border-bottom:1px solid
#cccccc;background:none;height:1px;width:100%;margin:0px"><br />
292 &nbsp;</td>
293 </tr>
```

✔ Presentation Roles

Deliver-Specific (“ctrl+f” Fix #2)

Title Attributes

✗

✗

✗

```
260 <tbody>
261 <tr style="border-collapse:collapse">
262 <td align="center" style="padding:0;Margin:0;padding-
right:25px" valign="top"><a href="https://example.com/"></a></td>
263 <td align="center" style="padding:0;Margin:0;padding-
right:25px" valign="top"><a href="https://example.com/"></a></td>
264 <td align="center" style="padding:0;Margin:0" valign="top">
<a href="https://example.com/"></a></td>
265 </tr>
266 </tbody>
267 </table>
268 </td>
269 </tr>
270 </tbody>
```

Deliver-Specific (“ctrl+f” Fix #2)

Title Attributes

```
260 <tbody>
261 <tr style="border-collapse:collapse">
262 <td align="center" style="padding:0;Margin:0;padding-
right:25px" valign="top"><a href="https://example.com/"></a></td>
263 <td align="center" style="padding:0;Margin:0;padding-
right:25px" valign="top"><a href="https://example.com/"></a></td>
264 <td align="center" style="padding:0;Margin:0" valign="top">
<a href="https://example.com/"></a></td>
265 </tr>
266 </tbody>
267 </table>
268 </td>
269 </tr>
270 </tbody>
```

Deliver-Specific (“ctrl+f” Fix #2)

Title Attributes



```
260 <tbody>
261 <tr style="border-collapse:collapse">
262 <td align="center" style="padding:0;Margin:0;padding-
right:25px" valign="top"><a href="https://example.com/"></a></td>
263 <td align="center" style="padding:0;Margin:0;padding-
right:25px" valign="top"><a href="https://example.com/"></a></td>
264 <td align="center" style="padding:0;Margin:0" valign="top">
<a href="https://example.com/"></a></td>
265 </tr>
266 </tbody>
267 </table>
268 </td>
269 </tr>
270 </tbody>
```

Deliver-Specific (“ctrl+f” Fix #3)

```
301 <td align="center" class="es-m-p20"  
style="padding:0;Margin:0;padding-top:5px;padding-bottom:20px">  
302 <p style="Margin:0;-webkit-text-size-adjust:none;-ms-text-size-  
adjust:none;mso-line-height-rule:exactly;font-family:helvetica, 'helvetica neue', arial, verdana,  
sans-serif;line-height:8px;color:#ffffff;font-size:16px">  
303 <a href="https://example.com/" style="color: #ffffff; text-
```



Line Height



```
301 <td align="center" class="es-m-p20"  
style="padding:0;Margin:0;padding-top:5px;padding-bottom:20px">  
302 <p style="Margin:0;-webkit-text-size-adjust:none;-ms-text-size-  
adjust:none;mso-line-height-rule:exactly;font-family:helvetica, 'helvetica neue', arial, verdana,  
sans-serif;line-height:150%;color:#ffffff;font-size:16px">  
303 <a href="https://example.com/" style="color: #ffffff; text-
```



Everywhere
in Slate

Alt Text

Informational Media

Needs alt text



alt="Cartoon forest and campsite with Slate logo that says Carnegie Slate Camp"

Functional Media

Needs alt text



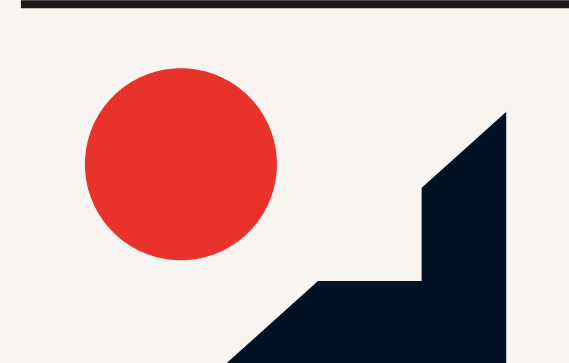
alt="Instagram icon"
not just "Instagram" or "IG"



alt="Create your account button" *[or better yet, hard code your buttons!]*

Decorative Media

Does not need and
should not have alt text



Quick wins on the Big 3



Animation

- Allow pause/stop
- Any flashing occurs < 3/second



Video

- Accurate closed captioning is essential
- Slate Video has tools
- AI can help! Double check its work

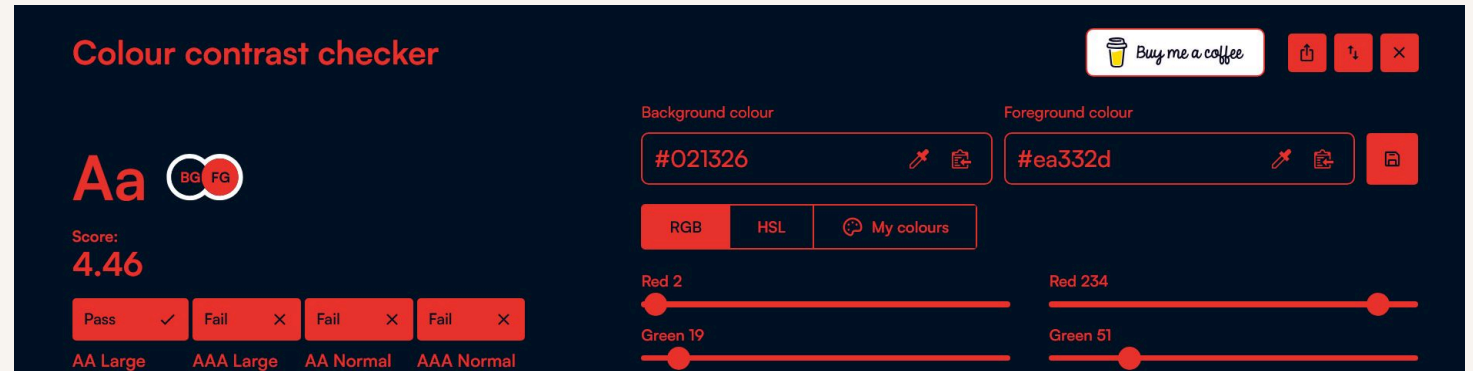


Infographics

- Screen readers cannot access the full richness of an infographic
- If used, infographics should have alt text that explains what they are representing

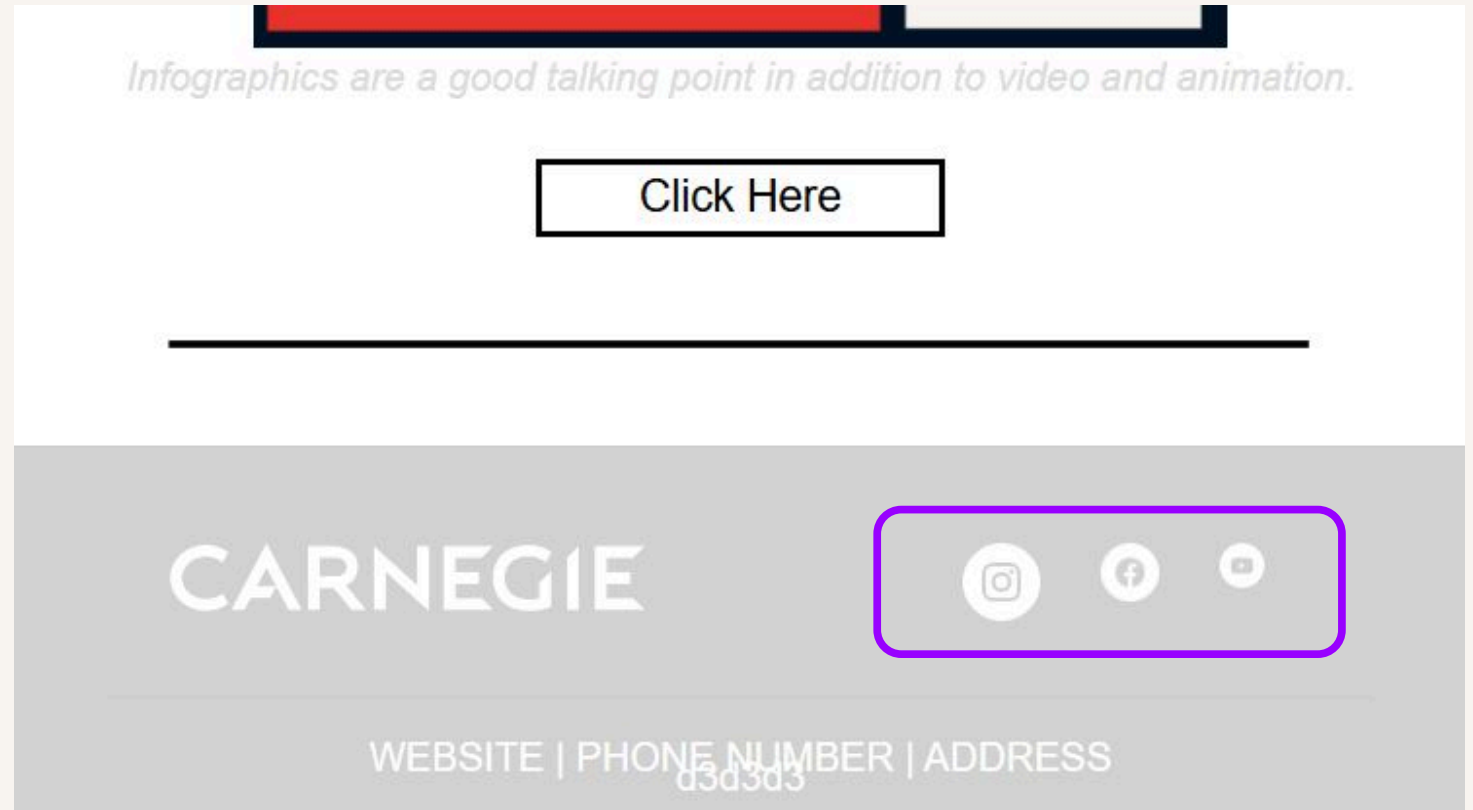
Color

- Do not rely solely on color to distinguish items.
- Use color in conjunction with shape, pattern, and text description.
- Color contrast must be a minimum of 4.5:1. For large text, the color contrast must be a minimum of 3:1.



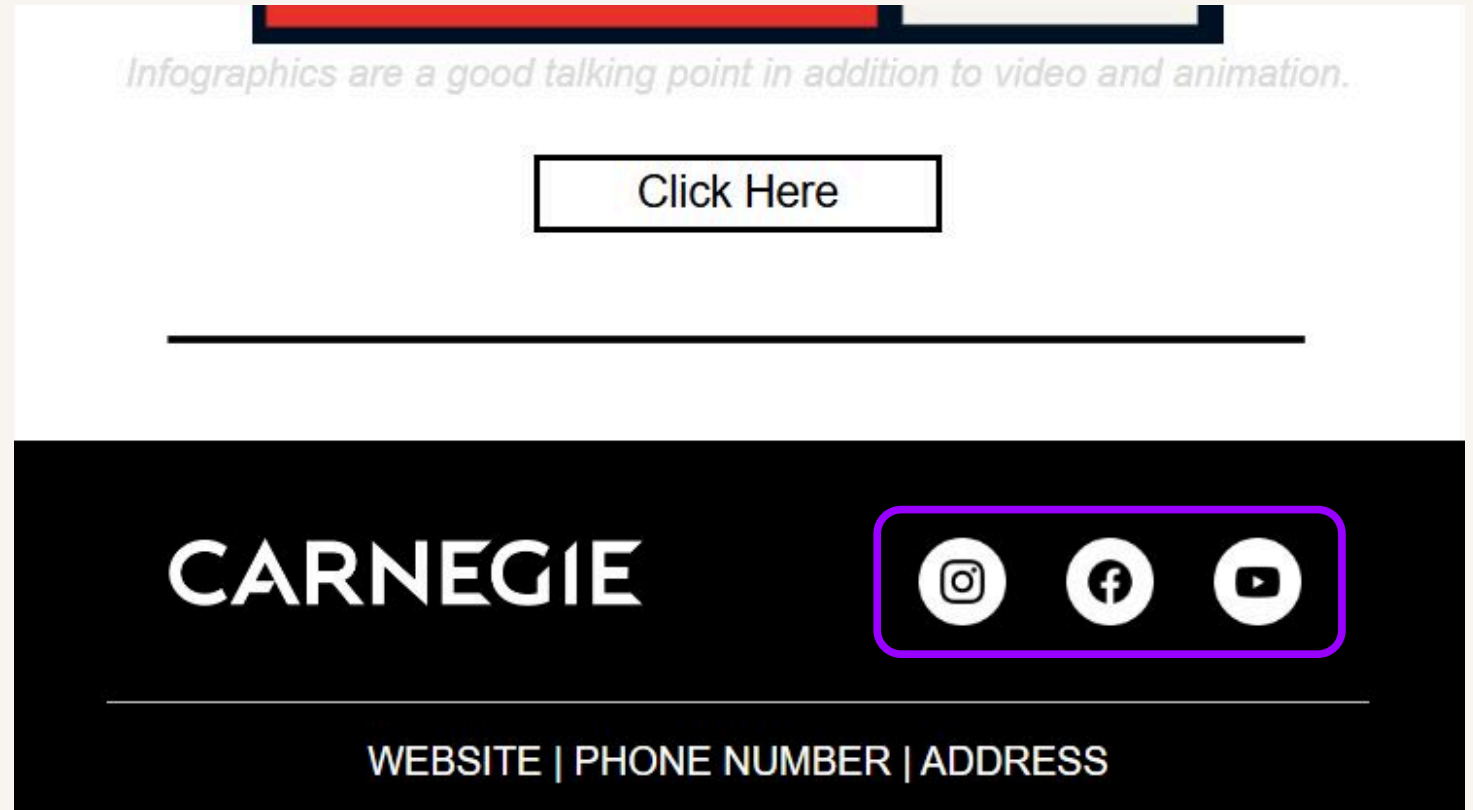
Target Sizes

- In addition to contrast issues, this footer has target size issues.
- All targets must be at least 24px by 24px.
- Additionally, targets cannot be too close together.



Target Sizes

- Much better!



Hyperlinks

- **Best Practice #1**
Proper contrast. Standard blue or a contrasting color only.
- **Best Practice #2**
Functional naming. Avoid the phrase “Click here” on its own.
- **Best Practice #3**
Permanent underline. Why are there still brand guides in 2026 sans underline?

Heading 1 Here

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One way to learn about us is our website: [Click here.](#)

The best way to learn more about this is to follow us on social media (links below).



Heading 1 Here

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We'd like to invite you to [book a tour through our website.](#)

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Looks like we still have some work to do on line height!

Questions and Thank you



Slate Accessibility
Best Practices

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slate summit 

Thank you!

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