

All Iowa Department of Transportation (DOT) Web sites (internal and external) should contain the following elements.

## 1. Page dimensions

Graphic safe areas = 800 X 600 (if applicable) on the home page and subsequent pages of the DOT's Web sites  
Maximum width = 760 pixels  
Maximum height = 600 pixels (visible without scrolling)

## 2. DOT logo

The Iowa DOT logo should not be altered or manipulated in any manner. The DOT logo should appear on all external DOT Web pages and link back to the Iowa DOT's home page.

## 3. Color values

The colors below represent the hexadecimal and Red Green Blue (RGB) values of the colors that appear on the external Iowa DOT's Web site.

Color	R	G	B	Hex Value
	0	33	91	00215b
	232	125	29	E87d1d
	127	165	58	7fa53A
	246	186	133	f6ba85
	229	228	227	e5e4e3
	134	164	216	86a4d8

## 4. Computer fonts/typeface, type size and color

- Sans-serif typefaces, such as Arial, Century Gothic, Verdana and Helvetica
- Regular paragraph text and links 0.75em\*
- Color is black

\* **em**: The em unit displays type size based on the size set in the user's browser preferences. For example, if the user has specified 12 point as their default size, then the em unit is based off of 12 point type. This measurement allows the user to scale the type as needed for their legibility, and you still control the hierarchy of the type because the size is relative.

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## 5. Images

### **File types/extensions**

GIF – best for solid color regions and transparent backgrounds

JPG – best for photographs and gradated color

PNG – new file format not fully supported yet; great to use with Flash 8 and above

Optimize images for quicker load time. Use the “Save for Web” option in Photoshop or ImageReady. All images should have alt tags.

### **Resolution**

All Web graphics should be prepared at 72 dpi.

Image pixels map to monitor pixels, so graphics will appear smaller on high-resolution screens.

Beware of overly wide graphics that breakup the layout.

### **JPEG tips**

Don't save a JPEG multiple times. Because JPEG is "lossy" the quality degrades each time it's saved.

Use the "unsharp mask" feature after sizing the image to its final size.

Always size the image to the final size, rather than letting the browser resize it.

Avoid sizing up, which will distort the image.

Always save a copy of the original image.

Compress the image only as far as necessary to balance quality and size.

### **GIF tips**

GIF was formulated when most users had only 256 colors.

Dithering an image combines two colors to approximate an intermediate color, but results in larger file sizes.

The "selective" color palette is generally the best choice. It favors large areas of flat color and the (limited) Web palette.

If a GIF will require a transparent background create it with a canvas that matches the color it will overlay.

## 6. Cascading Style Sheets (CSS) – external and embedded

The master\_template.html page, in the MASTER\_TEMPLATE folder and root directory, imports four style sheets. For usage guidelines on using the MASTER\_TEMPLATE, see <W:\OperationsFinance\MediaMarketingServices\Web policies\Master Template Design.doc>.

1. base.css
2. content\_(1,2 or 3)\_column.css
3. office.css
4. menu.css

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### Base Style Sheet (base.css)

This style sheet is the Iowa DOT's Web page design. This page is located only in the root directory/css folder and is not included in the master template folder. When designing pages for the DOT Web site, this is the style sheet that needs to be changed.

*\* This file is not to be altered, unless the Web team is doing a total redesign or adding base styles to all DOT pages. As of December 2007, the base style sheet has been W3C validated. Proof of validation is with the Web team leader.*

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### Content\_(1,2 or 3)\_Column Style Sheet

This style sheet creates either a one-, two- or three-column layout within the content area of master\_template.html.

Most pages will have at least a two-column layout. The first column is for navigation and the second for content. These three files do not need to be changed, unless there is an overall problem with our global design.

Style sheets are located:

- **Root directory/CSS folder**
  1. content\_1\_columnn.css (1 column)
  2. content\_2\_columnn.css (2 column)
  3. content\_3\_columnn.css (3 column)

The following example is the code for the content style sheet

```
@import url("http://www.iowadot.gov/css/content_2_columnn.css");
```

To change the number of columns in your master template Web page, simply retype the column number "2" to another column number.

### Office Style Sheet (office.css)

This style sheet is located in the MASTER\_TEMPLATE/css folder. This is the style sheet for each individual office site. Add additional styles to the office.css sheet or override existing base style designs.

There are two items already in place:

- Two-column set up (Use when you need)
- Orange Title Header

*To grab the html for the two-column design, go to /Library/CSS Library/inner\_2\_column.html. There are three sets of DIV tags that you will need to use.*

When redesigning a page in the root directory, take the office.css in the root directory/css folder and rename the file with the office name (e.g. construction.css).

### Embedded style sheets

If possible, try not to embed styles in the Web page, unless it will never be changed; it's only one page or for an easy way to quickly test your design.

The bolded text below is an embedded style.

```
<html>

  <head>

    <title>title goes here</title>

    <style type="text/css">

      p {text: 20px; color: blue; text-decoration: underline;}

    </style>

  </head>

</body>
```

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### Menu Style Sheet (menu.css)

This style sheet is located in the root directory/css folder. This is a global menu style sheet for all offices.

## 7. Accessibility

The Iowa DOT's external Web site is currently being designed to be easy to use and accessible to the most people possible, including people with disabilities.

It is the goal of the department to achieve 100 percent compliance with paragraphs A through P of Subpart B - Technical Standards, section 1194.22 of Section 508 for all new Web pages, unless an undue burden would be imposed on the department. For more information about accessibility, visit [www.section508.com](http://www.section508.com).

See [W:\OperationsFinance\MediaMarketingServices\Webpolicies\Accessibility\check\\_list.doc](W:\OperationsFinance\MediaMarketingServices\Webpolicies\Accessibility\check_list.doc) for the Iowa DOT Web Accessibility Checklist and Guide for Web Design.

### **More information on Web accessibility is available at:**

- World Wide Web Consortium (WC3) Web Accessibility Initiative: <http://www.w3.org/WAI/>
- WC3 Resources: <http://www.w3.org/WAI/Resources/>
- WC3: <http://www.w3.org>

## 8. Directory names

Uniform Resource Locators (URLs) should not include hyphens, spaces, underscores, capital letters or any additional special characters. The best file names are a complete word or two that relates to the page and could be guessed by the user; for example, a page for highway would be named "highways.html."

Use the .html extension, rather than the .htm extension.

## 9. Links

Use relative links within a site, and absolute links for external links and links to documents. With a relative link, the search engine spiders and browsers already know where the current document is located. Thus, if you link to another document in the same directory, you will not need to write out the full URL.

Relative paths refer to file locations based on the current directory.

```
<a href="autotrails/pagename.html"></a>
```

An absolute link defines a specific location of the Web file or document including: the protocol to use to get the document, the server to get it from, the directory it is located in, and the name of the document itself.

```
<a href="http://www.iowadot.gov/autotrails/pagename.html"></a>
```

## Absolute links and PDF files

People commonly e-mail PDF files to each other or download PDF files to their desktops. If you place a relative link in your PDF files and try to click on that link from your desktop (or E-mail), the Web page will not load.

For the page to load properly from your desktop or E-mail, the PDF-file links should be absolute links.

## 10. Page titles

Page titles will be added to each page using the following format.

Motor Vehicle Division – Iowa DOT (64 character maximum)

## 11. Meta tags

The most valuable feature meta tags offer the Web site owner is the ability to control, to some degree, how their Web pages are described by some search engines.

### Example of what can happen when no meta tag is used

#### [Iowa Motor Vehicle Division](#)

Iowa DOT Header ... For comments or questions about the Iowa Motor Vehicle Division website, contact Sonya.Willis@dot.iowa.gov Last Update: October 25, 2007.

[www.dot.state.ia.us/mvd/](http://www.dot.state.ia.us/mvd/) - 14k - [Cached](#) - [Similar pages](#)

The search result is for the MVD homepage. The first line, "Iowa DOT Header," is from an alt tag. It reads this way because there is no description in the header tags. Thus, Google indexed the first phrase it came upon. From the description above, one would think that it is a search result for a "contact us" Web page.

### An example using a meta description tag

```
<meta name="description" content="The Iowa Motor Vehicle Division Web site provides information on driver's license issuance, station location and hours, vehicle services and motor vehicle enforcement">
```

## **12. Best practices on the Web**

To create a satisfying user experience, all Iowa DOT Web sites should follow best practices.

- Keep navigation consistent throughout the site. Users should always be able to return easily to the office home page and other major navigation points in the site, including the main Iowa DOT Web site page.
- Ensure that all images include an "ALT" tag, and height and width information.
- Use CSS to create the layout and style. The "font" tag should no longer be used.
- Links should be created using text that makes sense when read out of context. For example, avoid "click here."
- Always check your work using a validator, such as the W3C Markup Validation Service at <http://validator.w3.org>.