

Responsive Images, <picture>, srcset/sizes and WordPress

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Responsive Images

- Why we need a solution for this
- What: srcset, sizes, w, x and <picture>
- New in WordPress 4.4 (and 4.4.1)

Responsive

'Quick to react in a way that is needed, suitable or right for a particular situation'

Responsive

'Quick to react in a way that is needed, suitable or right for a particular situation'

Speed is part of
responsive

The problem with images

Average Bytes per Page by Content Type

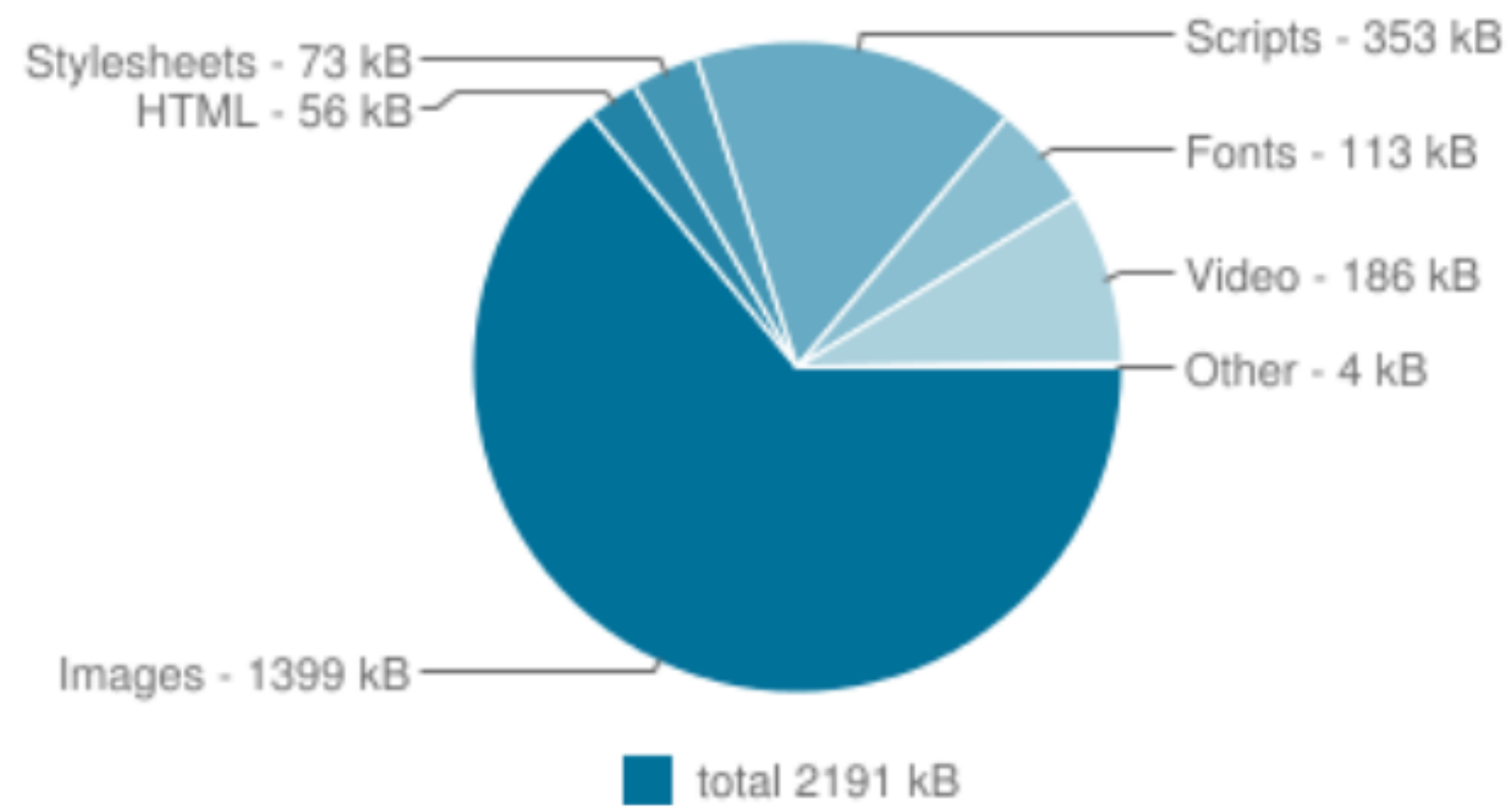
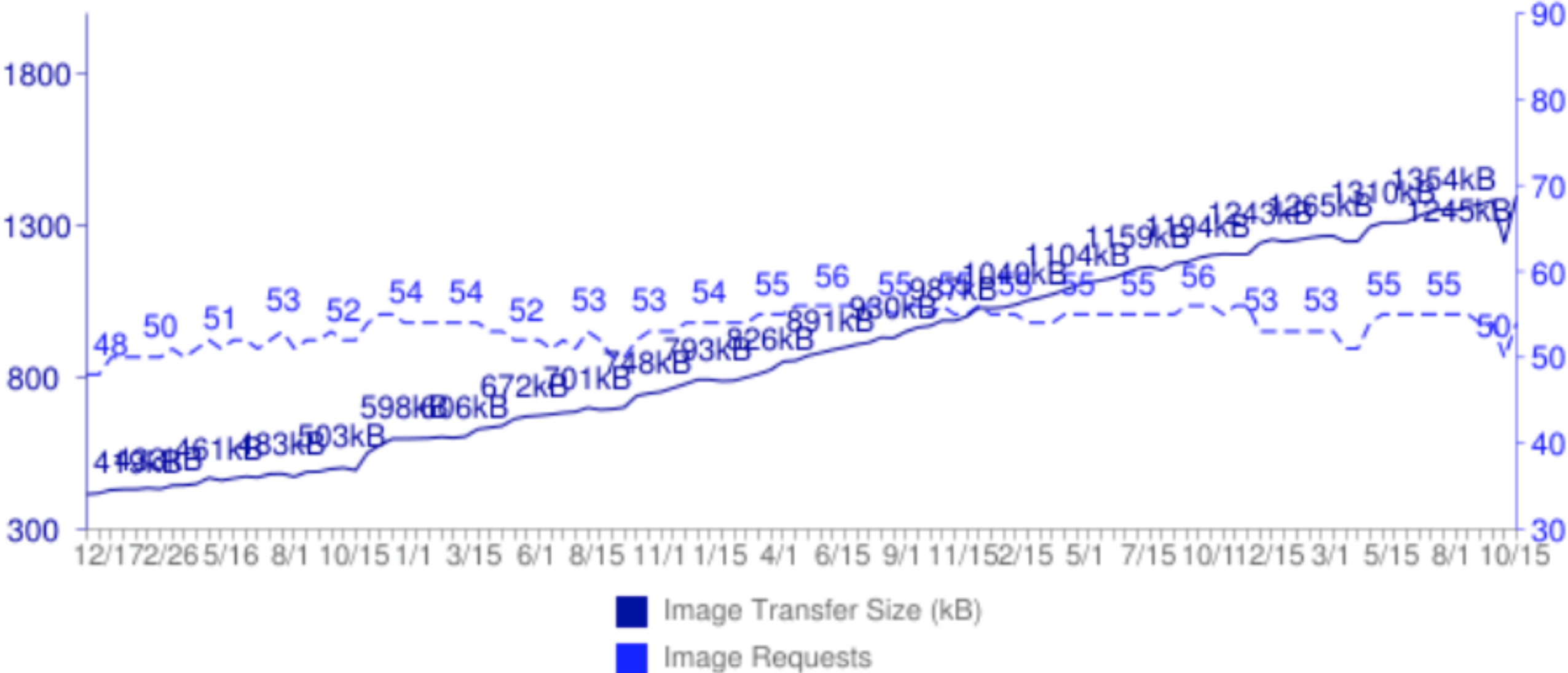


Image Transfer Size & Image Requests



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Movie posters for Mockingjay Part 1, Catching Fire, Maya the Bee Movie, Teenage Mutant Ninja Turtles, Transformers: Age of Extinction, Astro Boy, and Little Giants.

Holiday Home & Garden Gift Guide

Small circular icons for various product categories.

- Computer & tablets
- Telefonie
- Beeld & geluid
- Speelgoed & games
- Huishouden & wonen
- Foto & video
- Koken & tafelen
- Printers & netwerk
- Sport & reizen
- Tuin & klussen
- GPS & auto
- Verzorging
- Aanbiedingen

Tot 10% korting op alle spellen.



[Meer informatie](#)

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 <p>39,-</p>	 <p>aanbieding 499,- 449,-</p>	 <p>239,-</p>	 <p>aanbieding 18,99 15,99</p>	 <p>64,99</p>
<p>Google Chromecast</p> <p>★★★★☆ (549)</p> <p>Bekijk alle mediaspelers</p>	<p>HP 15-af144nb Azerty</p> <p>★★★★☆</p> <p>Bekijk alle laptops</p>	<p>Motorola Moto G 4G (Gen 3) 16 GB Zwart</p> <p>★★★★☆ (130)</p> <p>Bekijk alle mobiele telefoons</p>	<p>Apple Lightning USB Kabel 1 m</p> <p>★★★★☆ (245)</p> <p>Bekijk alle datakabels</p>	<p>HP ENVY 4504 e-All-in-One</p> <p>★★★★☆ (615)</p> <p>Bekijk alle printers</p>

Larger images



More images

The retina problem

The retina problem

Q: How do I serve the best quality image (= huge files) for retina devices but normal quality images (= smaller files) to non-retina devices?

The retina problem

Q: How do I serve the best quality image (= huge files) for retina devices but normal quality images (= smaller files) to non-retina devices?

A: You can't.

The css way

```

```

```
@media all and (max-width:320px) {  
  #banner {content: url(espresso.jpg);}  
}
```


Classic 'strechtty' responsive design

Classic 'stretchy' responsive design

Making things fit:

```

```

```
img {  
    max-width: 100%;  
    height: auto;  
}
```

Responsive images with <picture>, srcset and sizes



Responsive Images Community Group

- For and by web developers
- Started in 2012
- Chaired by Mathew Marquis (Bocoup, @wilto)
- <https://www.w3.org/community/respimg/>

Use cases

→ pixel ratio

→ sizes

→ types

→ art direction

New elements

→ srcset

→ sizes

→ x

→ w

→ <picture>

srcset and the x descriptor

```

```

- medium.png for normal screens
- large.png for retina (2x) screens
- largest.png for 3x screens

sizes and the w descriptor

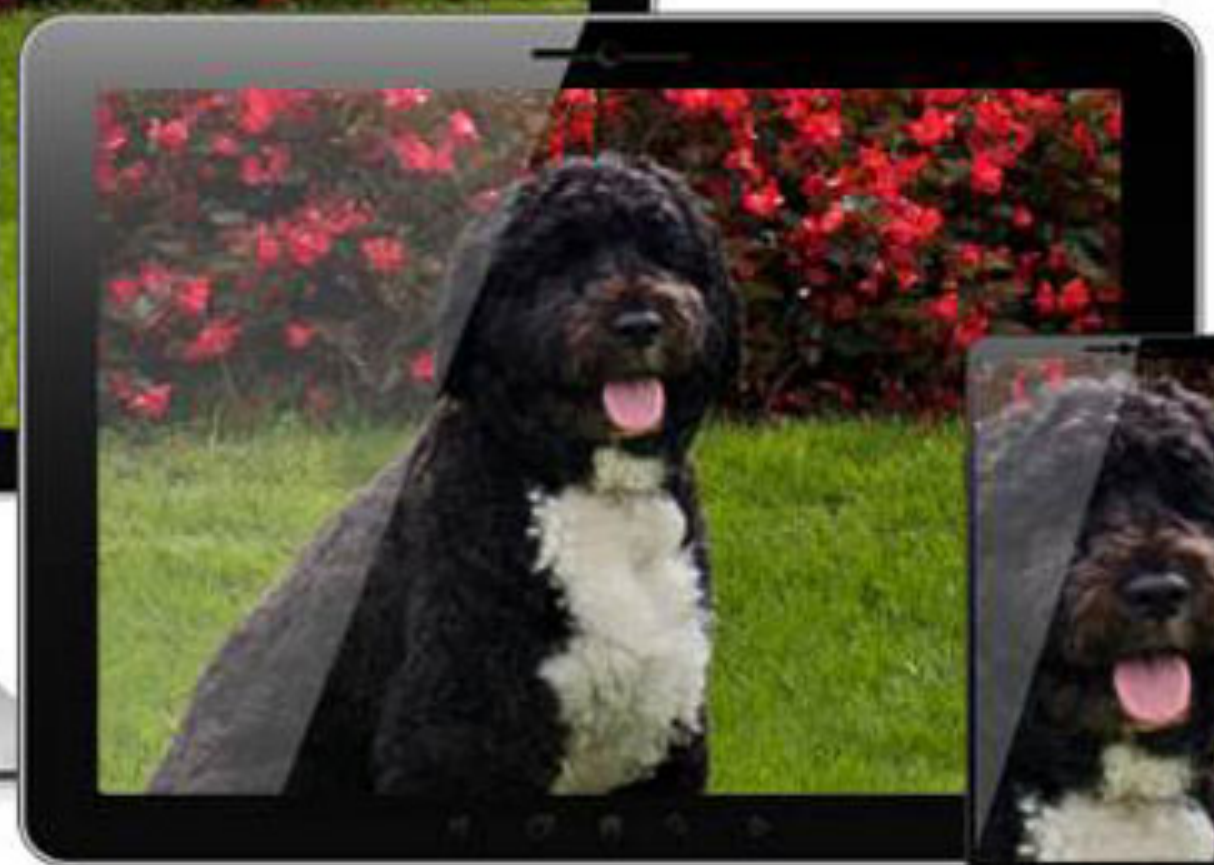
```

```

- **w descriptor** requires the **sizes** attribute
- **sizes**: media queries + how the image should be displayed
- **srcset**: lists images by their width

<picture> for art direction

```
<picture>
  <source
    media="(min-width: 900px)"
    srcset="images/house-with-dog-landscape.png">
  <source
    media="(min-width: 465px)"
    srcset="images/dog-sitting.png">
    <source
      media="(max-width: 465px)"
      srcset="images/dog.png">
  
</picture>
```



<picture> for type selection

```
<picture>
```

```
  <source srcset="radwolf.webp" type="image/webp">
```

```
  
```

```
</picture>
```

- Browsers that support image/webp will use that image
- Other browsers will use the 'regular' tag

When can I use this?

When can I use this? **Now!**

Browser support for <picture> & srcset

- Chrome/Opera/Blink & Firefox: <picture> & srcset shipped
- Webkit/Safari: srcset shipped, <picture> unconfirmed
- Microsoft Edge: srcset under development, <picture> under consideration

Progressive enhancement

```

```

<picture> & srcset/sizes work with the src="" element =
🚀 Progressive enhancement.

Or: polyfill it with Picturefill



WordPress 4.4

Responsive images in core

- Started by Tim Evko, Chris Coyier and Joe McGill
- Supported by the **Responsive Images Community Group**
- adds `<srcset>` and `<sizes>` support
- Merged into core for 4.4 since 6/10
- Merge ticket [#33641](#)



RICG Responsive Images

Bringing automatic default responsive images to WordPress.

[Download Version 2.5.2](#)

[Description](#) [Installation](#) [Changelog](#) [Stats](#) [Support](#) [Reviews](#) [Developers](#)

Responsive images in core

- Automagically for featured images, galleries, post images
- No extra interface or UI. 👍
- Filters the_content with
`wp_make_content_images_responsive`
- Includes the registered `add_image_size` sizes
- No polyfill/picturefill included in core

Extra's

- New image size: `medium_large`
(768px wide, no height set, not visible or selectable)
- `wp_get_attachment_image_srcset` & `wp_get_attachment_image_sizes`
- `wp_calculate_image_srcset` & `wp_calculate_image_sizes`
- `max_srcset_image_width`

➡ <https://make.wordpress.org/core/2015/11/10/responsive-images-in-wordpress-4-4/>

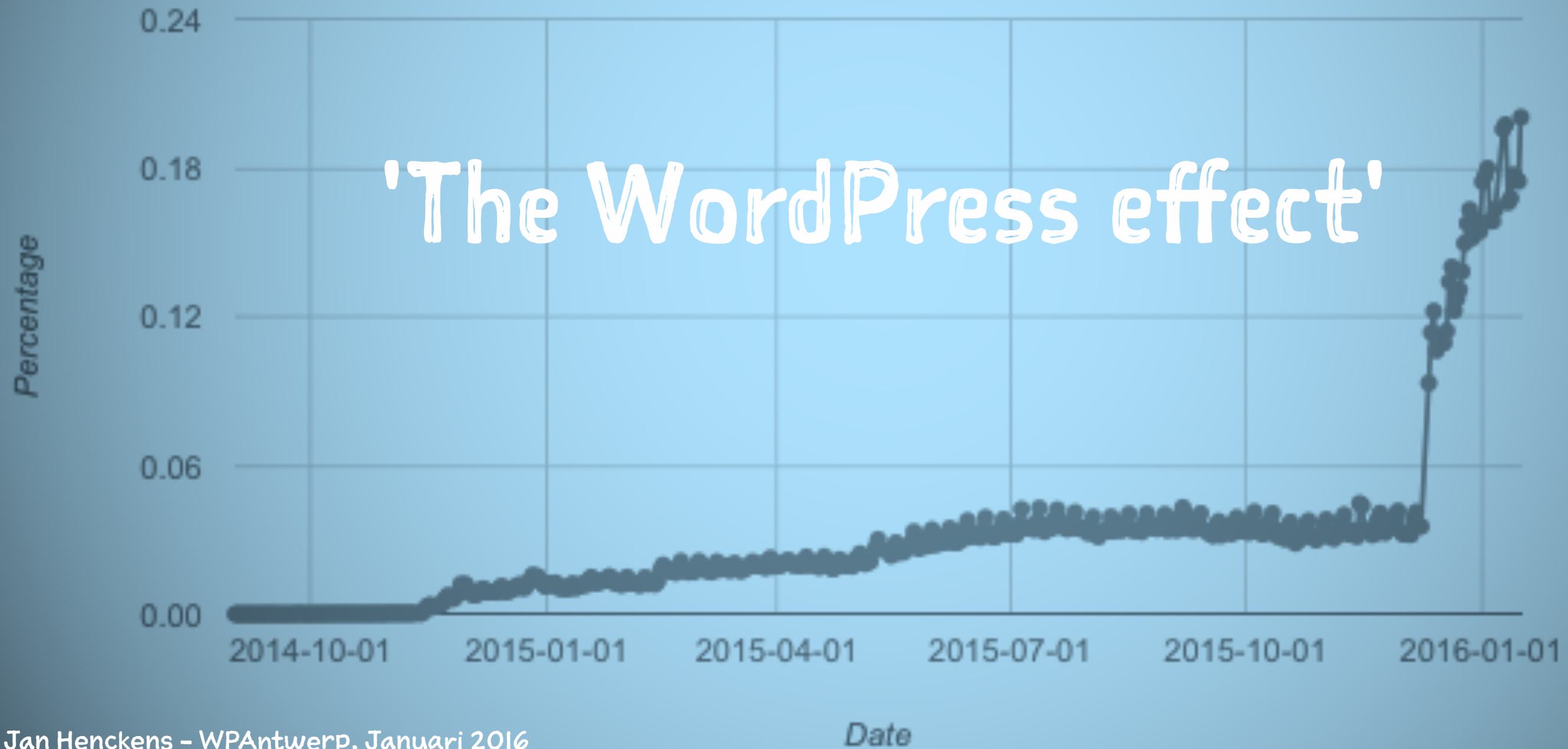
Gotcha's

- No <picture> support (yet?)
- Regenerate thumbnails for new images sizes
- Refresh the page to see the new image

25% of the web?

SrcsetWDescriptor

Percentage of pages surveyed that use this feature

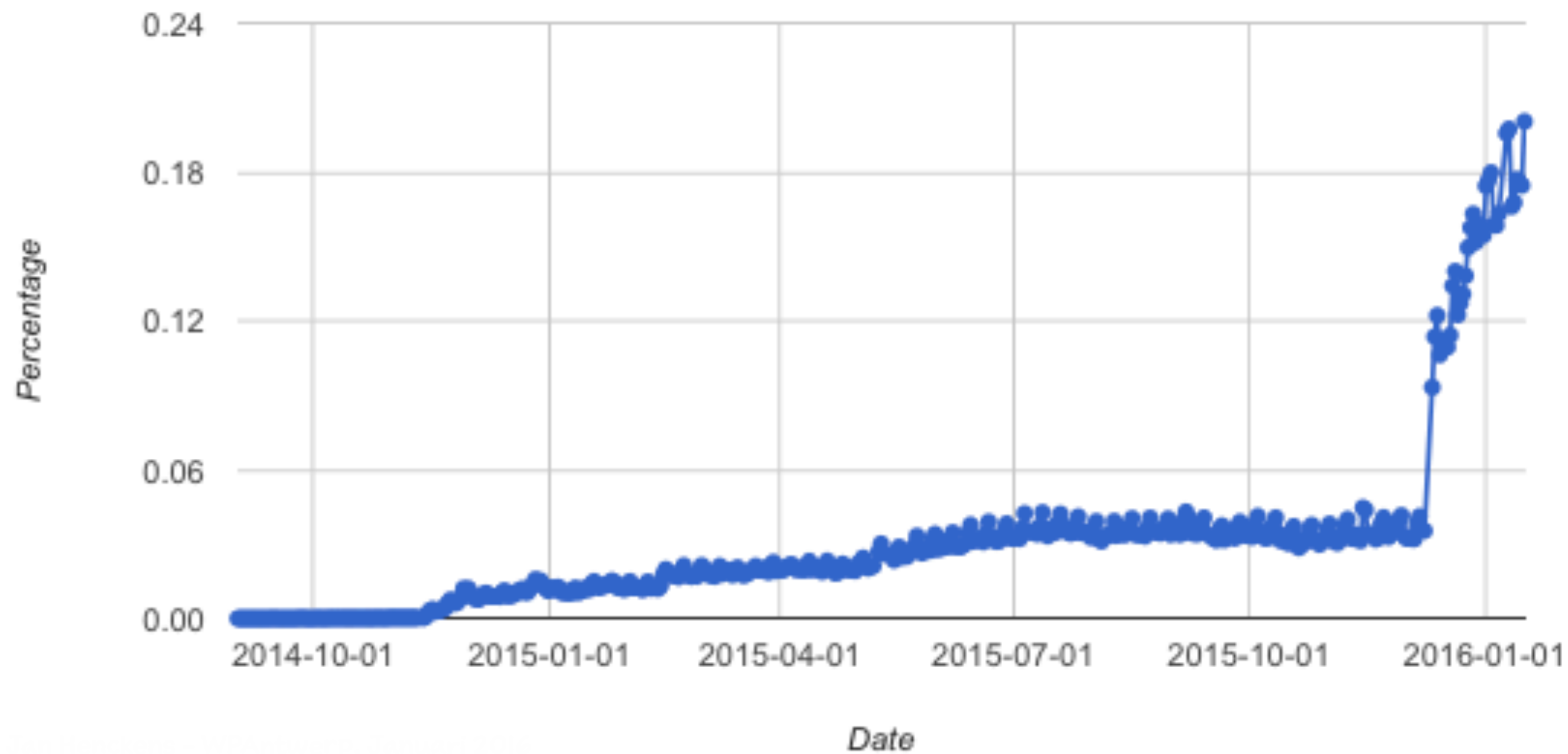


'The WordPress effect'

SrcsetWDescriptor



Percentage of pages surveyed that use this feature



Round up

- This works in your/most browsers today
- srcset & sizes are coming to WordPress
- Use this in your projects today



Feedback & questions:
twitter.com/jannemans

Resources

- [Smashing magazine: "Responsive Images Done Right: A Guide To <picture> And srcset"](#)
- [Jason Grigsby: "Responsive Images 101"](#)
- [Jake Archibald: The anatomy of responsive images](#)
- [Eric Portis on srcset & sizes](#)
- [Bruwe Lawson: "Why we can't do real responsive images with CSS or JavaScript"](#)

