# Properly Size Images

## Overview

Ideally, your page should never serve images that are larger than the version that's rendered on the user's screen. Anything larger than that just results in wasted bytes and slows down page load time.

## Recommendations

In the results of this audit, Lighthouse lists every image that failed. Refactor how you serve these images to pass the audit.

The main strategy for serving appropriately-sized images is called "responsive images". With responsive images, you generate multiple versions of each image, and then specify which version to use in your HTML or CSS using media queries, viewport dimensions, and so on. See Images in markup or Images in CSS to learn more.

Another strategy is to use vector-based image formats, like SVG. With a finite amount of code, an SVG image can scale to any size. See Replace complex icons with SVG to learn more.

Yet another strategy is called "client hints". With client hints, the browser advertises its viewport dimensions and device pixel ratio when requesting the image, and the server takes care of serving the correctly-sized image. Note however, that browser support is limited. See Automating Resource Selection With Client Hints to learn more.
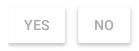
Tools like gulp-responsive or responsive-images-generator can help automate the process of converting an image into multiple formats. There are also image CDNs which let you generate multiple versions, either when you upload an image, or request it from your page.

## More information

For each image on the page, Lighthouse compares the size of the rendered image against the size of the actual image. The rendered size also accounts for device pixel ratio. If the rendered size is at least 25KB smaller than the actual size, then the image fails the audit.

# Feedback

Was this page helpful?

<span style="border:1px solid #ccc; padding:4px 12px;">YES</span>   <span style="border:1px solid #ccc; padding:4px 12px;">NO</span>

Great! Thank you for the feedback.

Sorry to hear that. Please [open an issue](#) and tell us how we can improve.

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