Simulated Diffusion Filters in Photoshop

Sometimes an image is too sharp, or you want to make it look softer—not blurry or out of focus, but less crisp. Photographers have a number of tricks to accomplish this, includingso-called soft-focus lenses and diffusion filters. Simulating the look of either in Photoshop is very easy.

When a diffusion filter is added to the lens when taking a picture, the highlights bleed into the shadows, lightening them and blurring the edges somewhat. If that same filter is used in the darkroom when printing a negative, the shadows bleed into the highlights. We can do either of those tricks using the Gaussian Blur filter and the Fade... command for filters.

Because I don't have any photographs appropriate for this, I used an image from Nova Development's 525,000 clip art collection.

At 240 dpi, I used Filter > Gaussian Blur on the each blurred sample using a radius of 5, then used the Filter > Fade command to set the mode to Lighten or Darken as desired. (Note that the choice of blur radius is very much related to final output resolution. This may take some experimentation.) The results are below: Original, Lighten, then Darken.



Original Photograph

Blurred with Lighten

Blurred with Darken