

## Graphics Guide - Understanding Resolution and Graphics Formats

### Resolution:

Graphic resolution is most commonly measured in DPI or Dots Per Inch. The higher the dots per inch, the better the image quality. For good quality print reproduction, the image should be at the proper size and be a minimum of 300 dpi. Lower resolution images can be used but the quality degrades. See samples below:



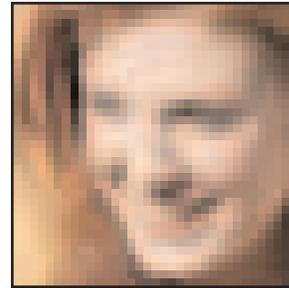
300 dpi



150 dpi



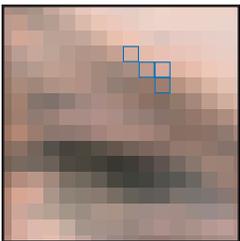
72 dpi



Detail of low resolution file.

### Graphics Formats: Raster and Vector:

**Raster Graphics:** Raster, or bitmap, graphics are composed of small pixels or dots (like those above). This type of graphic is the common format for photographs because they possess a lot of detail. Because raster graphics are made up of dots, they can tend to be grainy when used to reproduce illustrations like logos and diagrams. For these, the preferred format is vector graphics. Common file types for raster graphics are: jpeg, gif or tif.



Raster art showing some pixels outlined in blue.



Detail of Skytone logo as a raster image

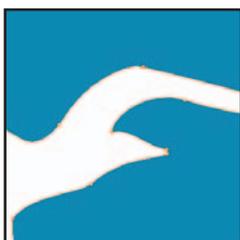


Closeup detail of Skytone logo as a raster image

#### Where do I get High Resolution Graphics?

For an image to be in high resolution, it must first have been photographed electronically or scanned electronically at the correct resolution. Simply increasing the resolution with a program like Photoshop will not clarify a low-res image. Thus, internet images (that are commonly 72 dpi) cannot be made to work as print graphics. Original, high resolution images should be found.

**Vector Graphics:** Vector graphics are images created from a series of dots that are joined together to form lines and smooth curves. The space between these dots is then assigned a fill colour. Because these dots, and their relationship to each other, is set in the file, these graphics can be sized from business cards to billboards and still retain their image clarity. This type of graphic is preferred for logos, diagrams, and designs where the artwork itself is fairly simple. Common file types are: eps, ai, and cdr.



Detail showing the vector dots and curves in orange..



Detail of Skytone logo as a vector image



Closeup detail of Skytone logo as a vector image

#### Where do I get Vector Graphics?

Most logos were created as vector graphics in programs like Illustrator, Freehand or Corel Draw. This original art will be available from your designer. If they do not have a copy - other common resources may be the printing or signage companies that have performed work for you in the past. If you are getting a new logo designed, remember to ask for vector format files to be burned to disk for future use!