

Intro to Tactile Graphics with ViewPlus

Why are tactile graphics important? "A picture is worth a thousand words."

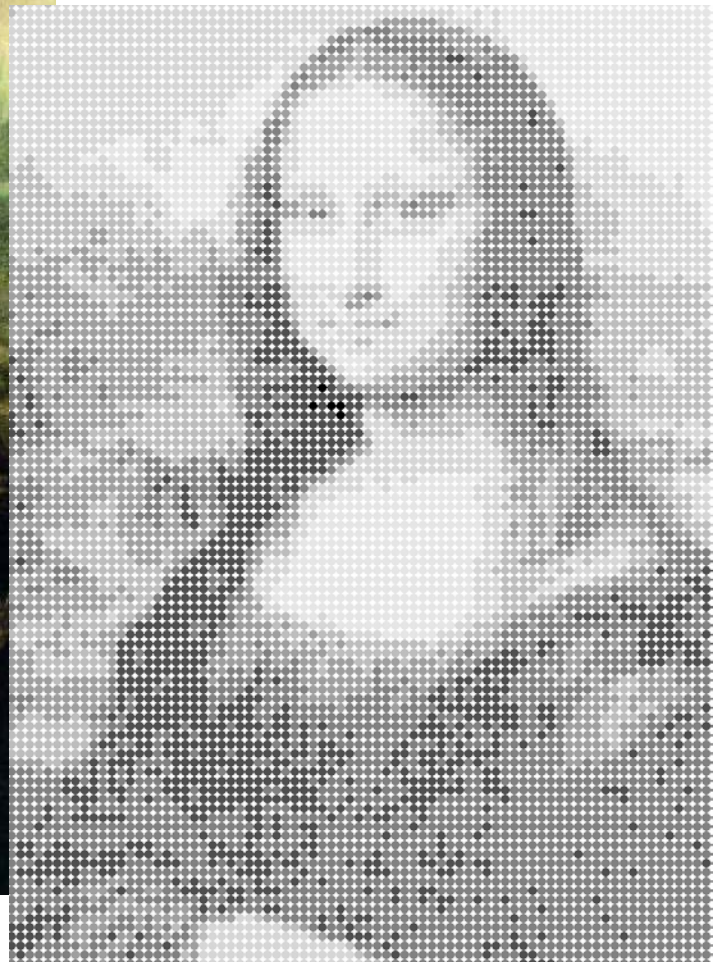
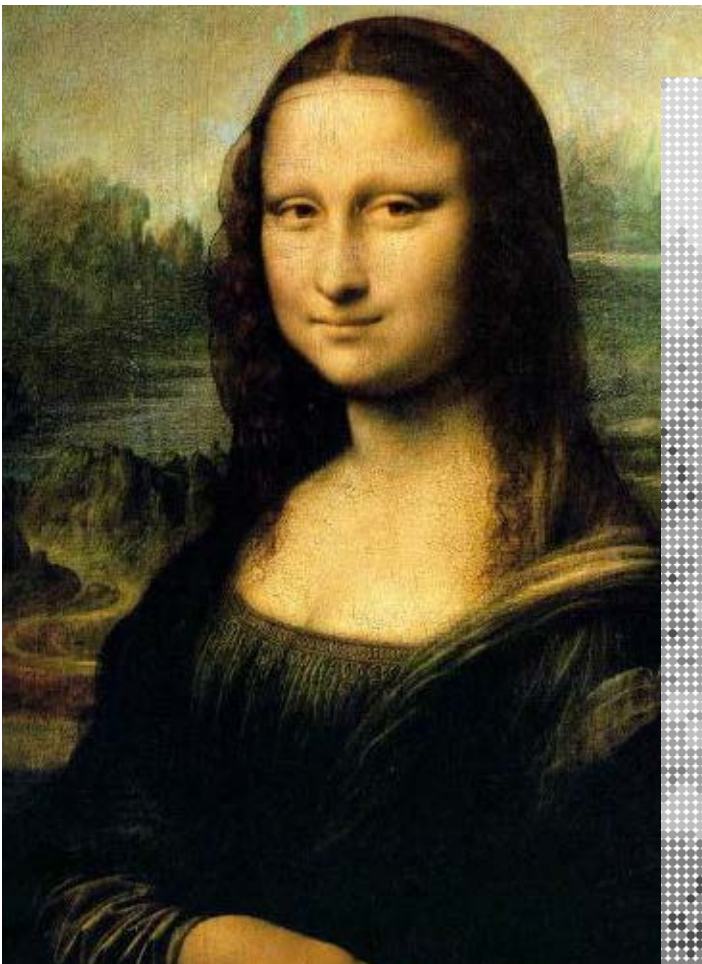
Access to data, like data charts, function graphs, electric circuit diagrams, maps, - just putting shapes to words - is helping many, many visually impaired in understanding the world through touch.

ViewPlus Technologies was founded by Dr. John Gardner after he went blind and wanted to continue with physics, <https://viewplus.com/about/>.

And now, it is so easy to create tactile documents with ViewPlus embossers.

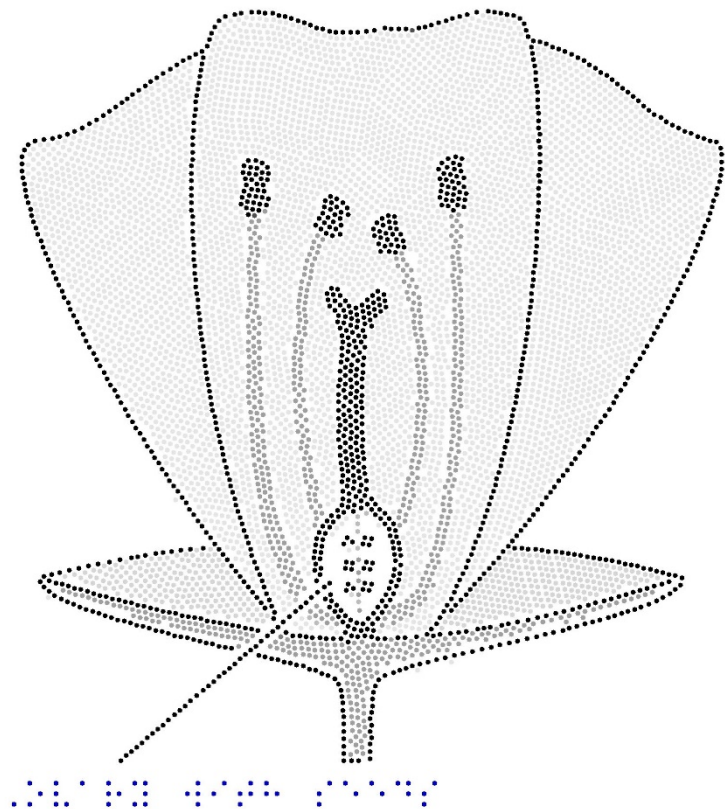
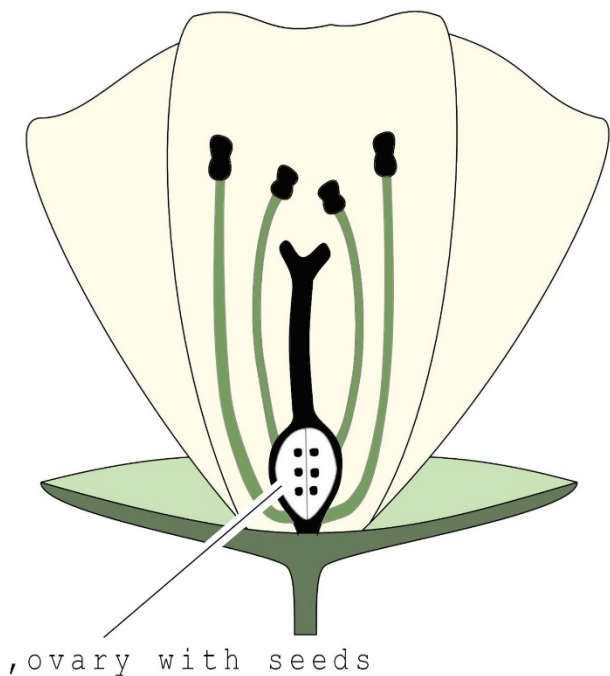
You don't even need any special software. You don't have to be a Braille expert. With the true Windows printer driver of our embossers, you can print from any Windows program like on mainstream color printers. What you see on the screen is what will be embossed on paper.

For example, a picture like the Mona Lisa here, printed from Windows photo viewer to the VP Columbia embosser would result to a tactile presentation like this ...



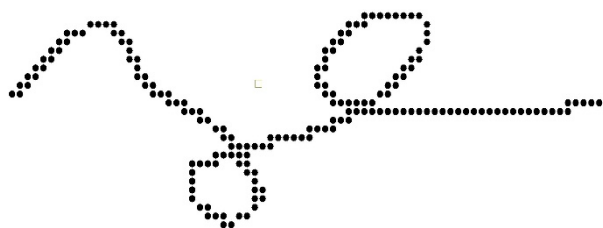
ViewPlus embossers will create tactile dots with variable height depending on the screen color of the corresponding image point. Darker colors will emboss in higher dots, and lighter colors will emboss in lower dots with white resulting in no dot. The resulting embossed output can be explored by touch like a relief.

You can use mainstream software, like CorelDraw, to create drawings for tactile output yourself, too. Insert Braille labels by using standard text boxes, where the text gets formatted to a ViewPlus Braille screen font that installs with the Windows printer driver. The text will be shown in ASCII characters on screen, but will emboss in Braille characters.

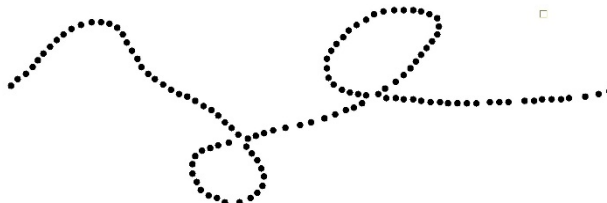


Do you notice the difference in dot placement on the Mona Lisa picture above versus the structure of a flower? Both embosser outputs were created with TigerPlus technology, featured in both VP Columbia and VP EmBraille embossers. The visualized embosser output on the Mona Lisa picture shows a square grid of dots, which are actually placed with a 17 DPI resolution. This is the draft quality mode of TigerPlus embossers. The structure of a flower was embossed with best quality mode, where dots are placed with an accuracy of 100 DPI, resulting in more random dot placement enhancing the true shape of outlines.

The same curved line out of MS Word, for example, would look like this in draft mode:



And would look like this in best mode:

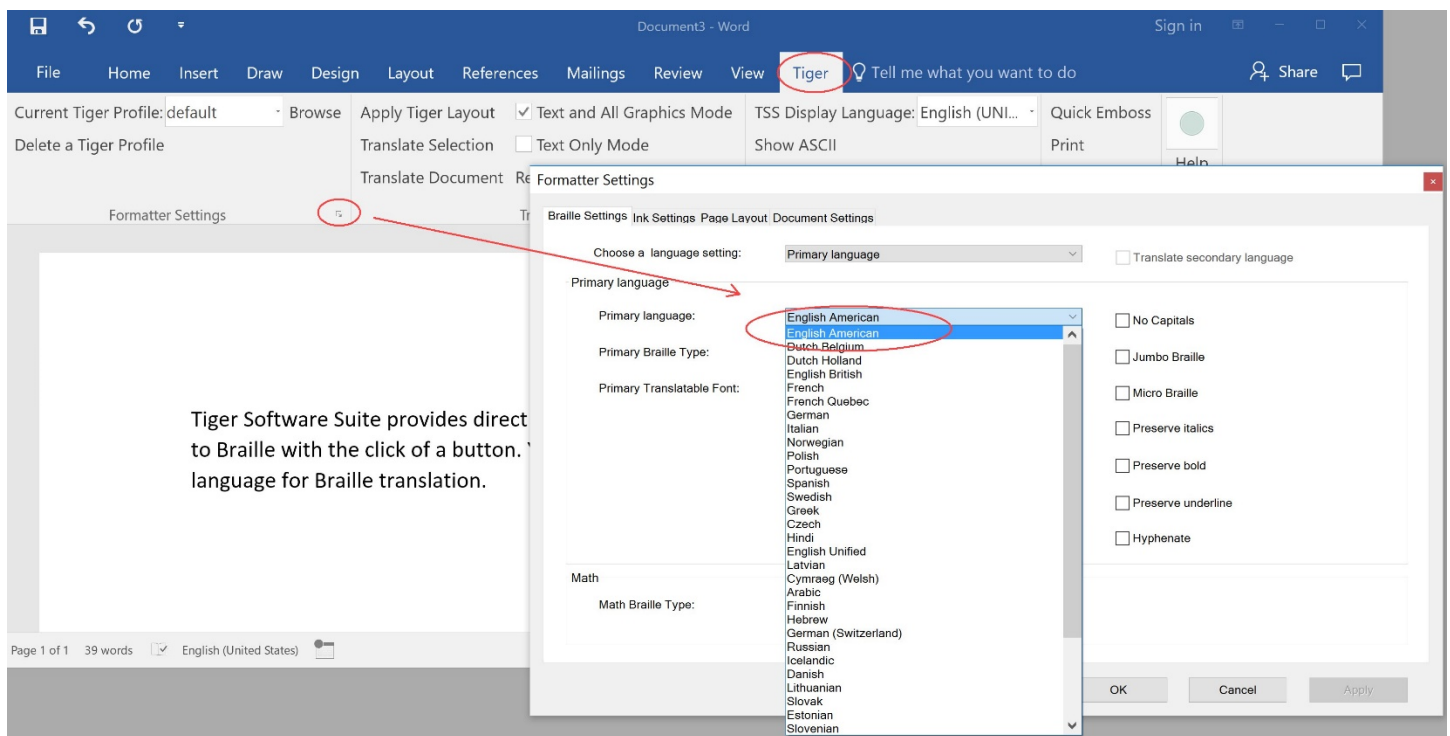


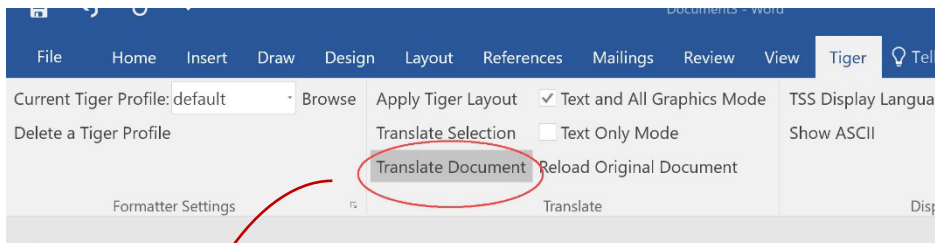
In addition to the ability to place dots with 100 DPI accuracy, our TigerPlus technology features smooth, rounded dots versus traditional Tiger dots being shaped more like pyramids.

For a visually impaired to be able to grasp information out of a tactile graphic, it is important that the tactile graphic has few details and high contrast coloring. Often a tactile graphic will also be accompanied by a text description explaining what the reader is supposed to feel and help form the imagination.

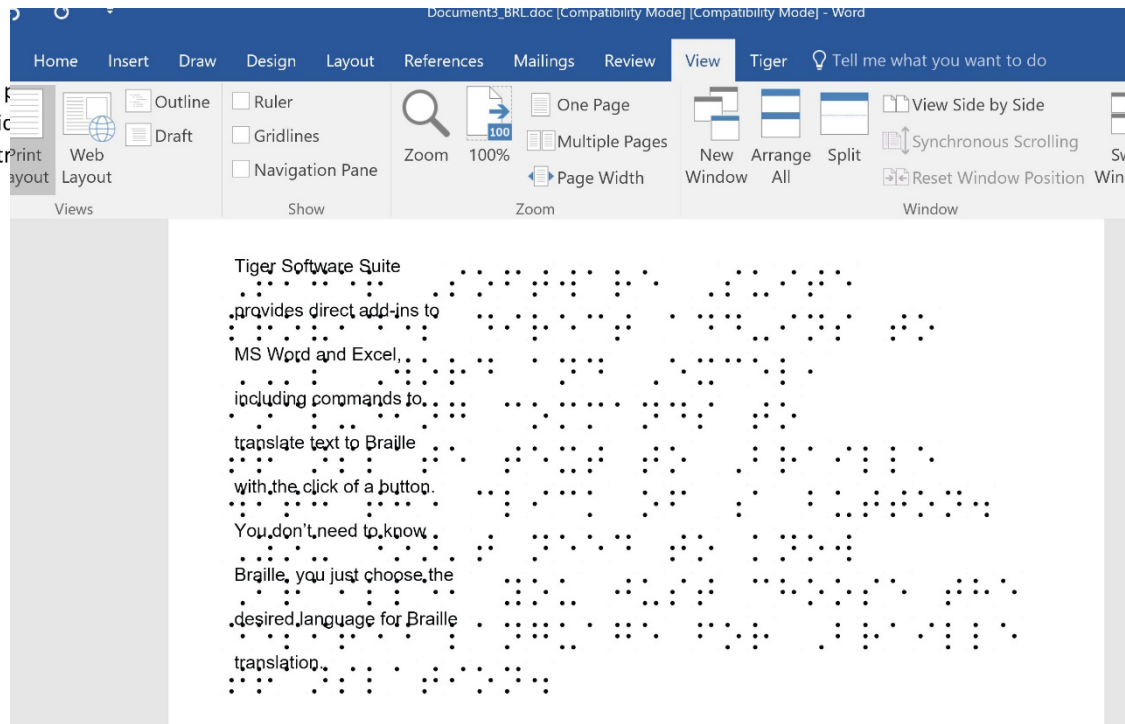
One option to combine tactile graphics with Braille text on ViewPlus embossers is to output Braille text from a third party product, like Duxbury Braille translation software, and combine with output of tactile graphic from another program after both have been printed. But if you want to keep document production as simple as possible, and close to mainstream Windows work flow, you can use the Tiger Software Suite, which allows users to create and emboss mixed documents with tactile graphics and Braille text directly out of MS Office Word, or Excel.

Tiger Software Suite provides direct add-ins to MS Word and Excel, including commands to translate text to Braille with the click of a button. You don't need to know Braille, you just choose the desired language for Braille translation.





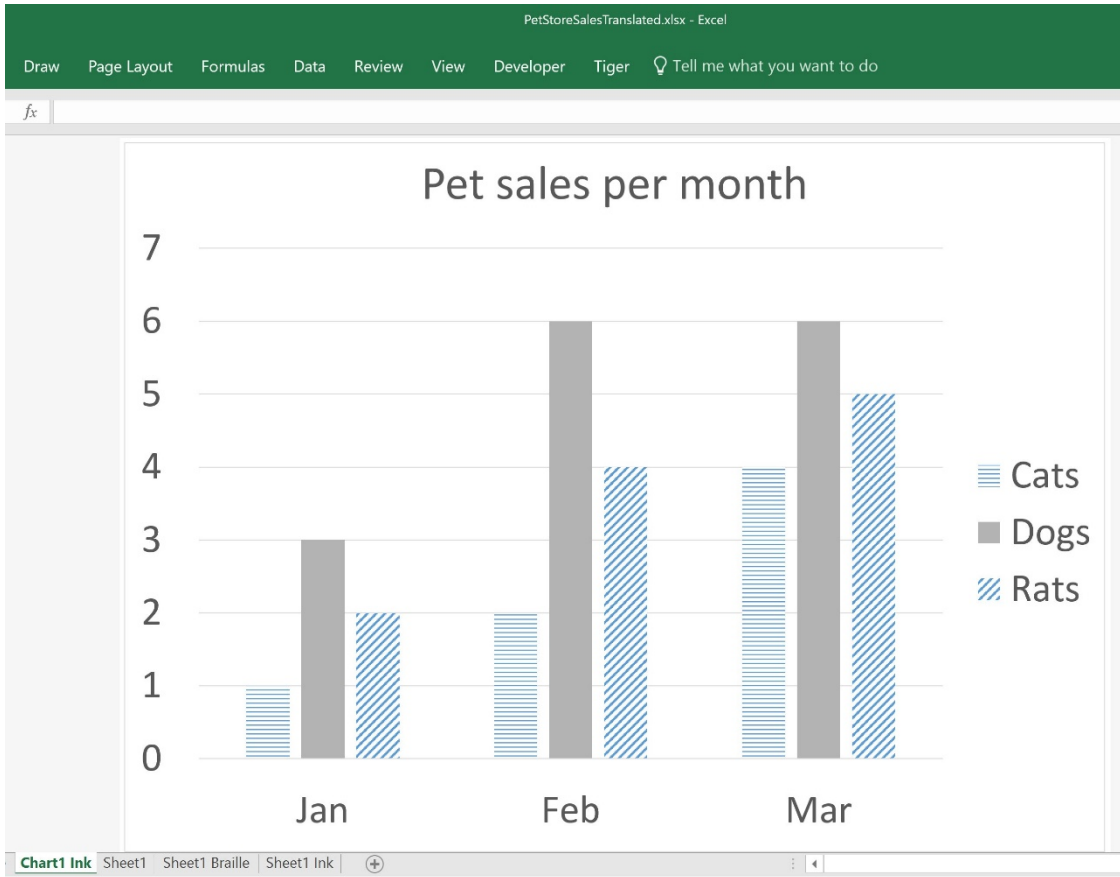
Tiger Software Suite provides direct add-ins to MS Word and Excel, including commands to translate text to Braille with the click of a button. You don't need to know Braille, you just choose the desired language for Braille translation.



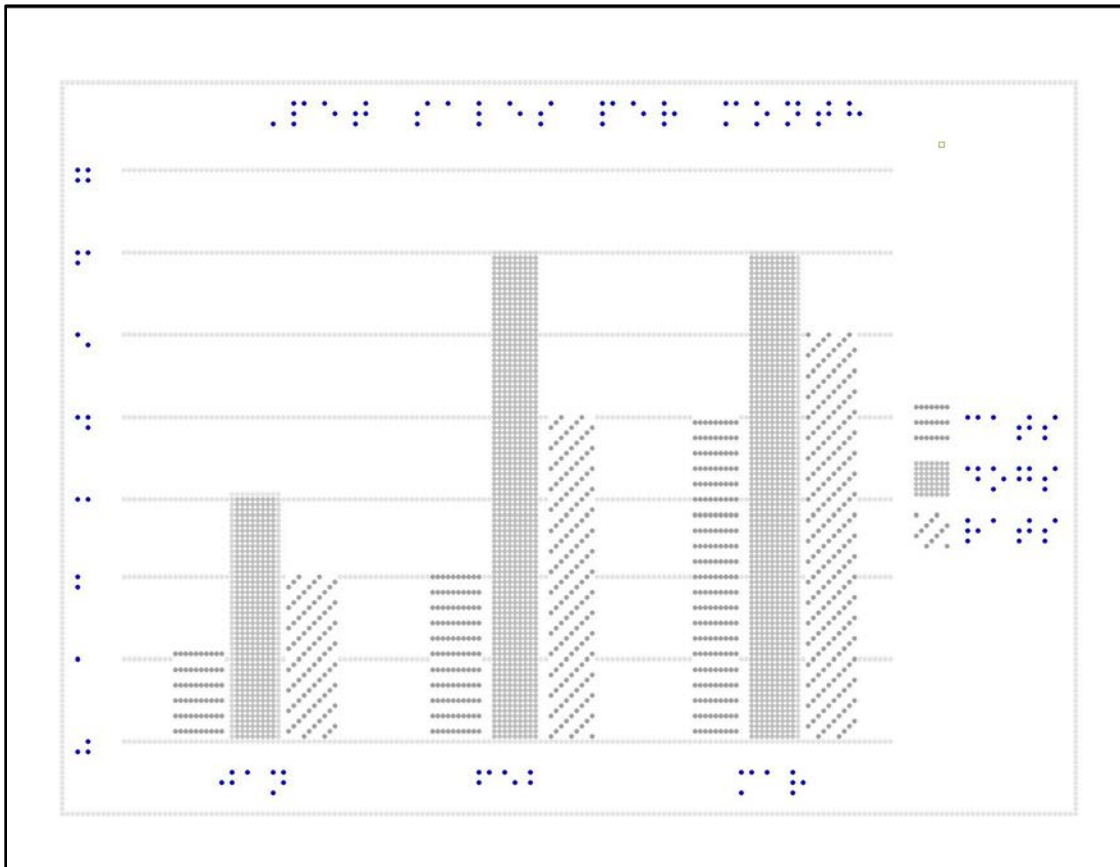
When embossing Braille, the VP Columbia and VP EmBraille support the micro, jumbo and other Braille standards from around the world.

The translated document will show on screen in Braille as well as standard black text for sighted to read along. From the same document you can print the color version to a color printer of your choice and combine this with the embossed Braille output of the VP Columbia or VP EmBraille.

Here is an example of what a translated chart in MS Excel would look like:



And what the visualized embosser output would look like:



The Tiger Software Suite also includes Tiger Designer, a stand-alone editor for ViewPlus embosser print files. Tiger Designer will visualize the embossed output on screen and further editing can be done before embossing on actual paper.

On the above chart, for example, patterns were applied instead of different solid colors for separate data series. Distinct patterns are easier to differentiate for tactile readers than solid areas of different dot heights. Since the fill patterns created in MS Excel did not come out nicely on the embossed output, the tactile patterns were edited with Tiger Designer after printing to file from MS Excel.

ViewPlus is a tactile graphics company, yet able to produce world class braille.