

**Adobe Illustrator** is the business-standard graphic editing program for creating vector graphics. Used worldwide, Illustrator is the go-to program for creating sharp, scalable artwork, whether the output is print or digital. It differs from Adobe Photoshop, which is limited to bitmap imaging only (think of a grid of tiny squares). Using the mathematics of points and lines (vectors), the output of a vector image in Illustrator is crisp no matter the size. Illustrator lends itself very well to the creation of maps, infographics, and diagrams, as well as business logos and wordmarks.

While Illustrator is a tremendously complicated and feature-rich program, it is possible to learn to make simple graphics quickly using a few basic tools. Like just about anything, it makes sense once you start actively doing. If you get frustrated, remain calm, and I'll help you asap. Don't forget to experiment while you're here: it is (probably) impossible to break anything. No one is going to get hurt. The purpose of this week in the Mac lab is not to master anything or make museum-ready graphics. It is to introduce you to a resource that you may or may not find useful someday.

Don't fear the Illustrator. (Or the Mac.)

*FYI: As a graphic designer, I use Illustrator, InDesign, and Photoshop in tandem every day. Illustrator is for the illustrations, logos, graphs, and maps. Photoshop is for adjusting and sizing photos. It's all brought together in the page-layout software InDesign (which is what I am using to put together this very document, btw.)*

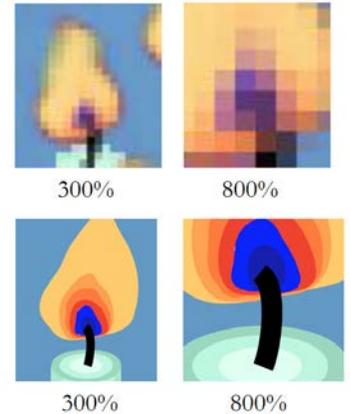
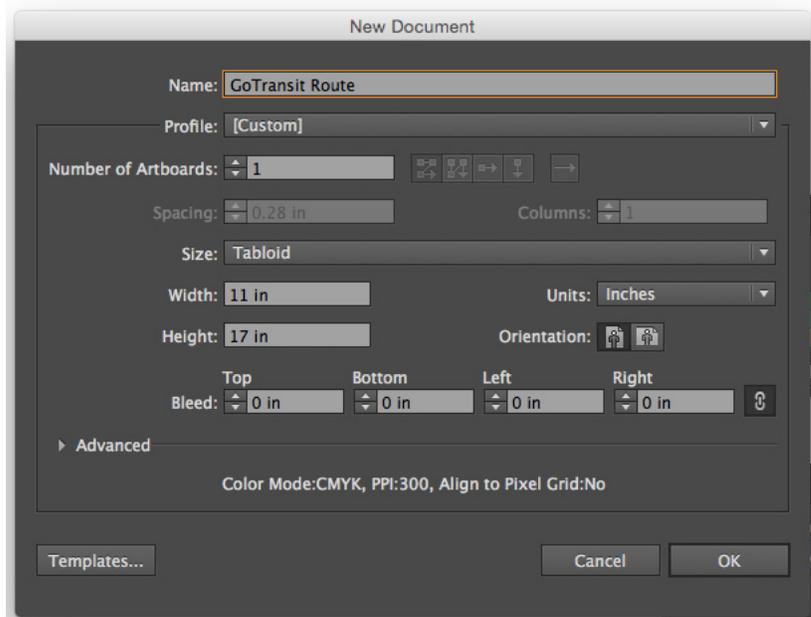
Let's go.



Open Illustrator by clicking on its icon, which looks like this:

Depending on lab preferences, you may or may not get a "Welcome" screen offering to help. You can click the red dot in the upper-left corner to make this go away, though you may also find it to be useful. If you ever want it to come back, select **HELP>WELCOME**.

To open a new file, select **FILE>NEW** (or Command-N). Fill it out to look something like this, and hit OK (or press return):



Top: What happens when you scale a **raster** image in Photoshop. Bottom, what happens when you scale a **vector** image in Illustrator. (Image credit: University of Michigan Library Instructional Technology Workshop)

*Have a look at your workspace.* Here are some of its most important features:



Above: Control panel at the top of your screen (changes depending on the tool selected: in this case, the selection tool).

Left: Tools. You can move this around. Essentials noted.

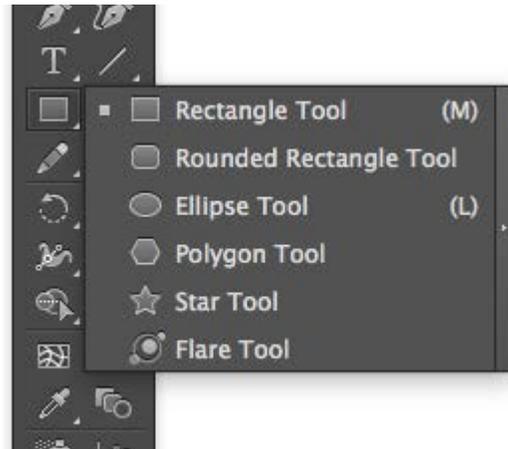


• **SELECTION TOOL** (Do not confuse with the Direct Selection tool to its right.)

• **PEN TOOL** (Draw by placing & connecting points.)

• **TYPE TOOL** (Use it to create a frame & type away.)

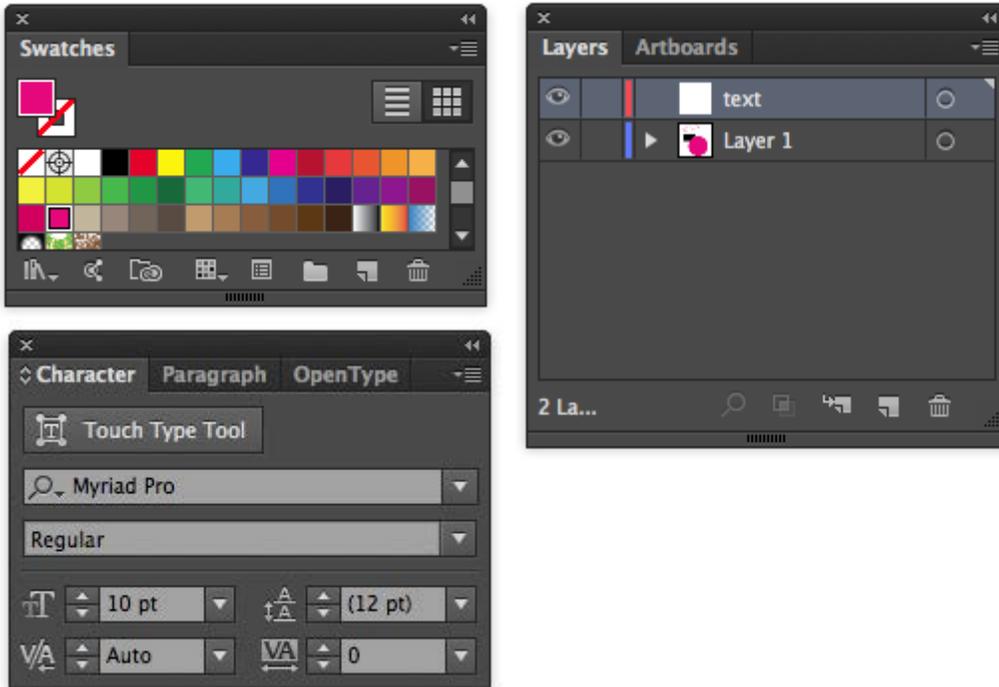
• **SHAPE TOOLS** (Other shapes are nested under triangle. Hold shift to make square or circle)



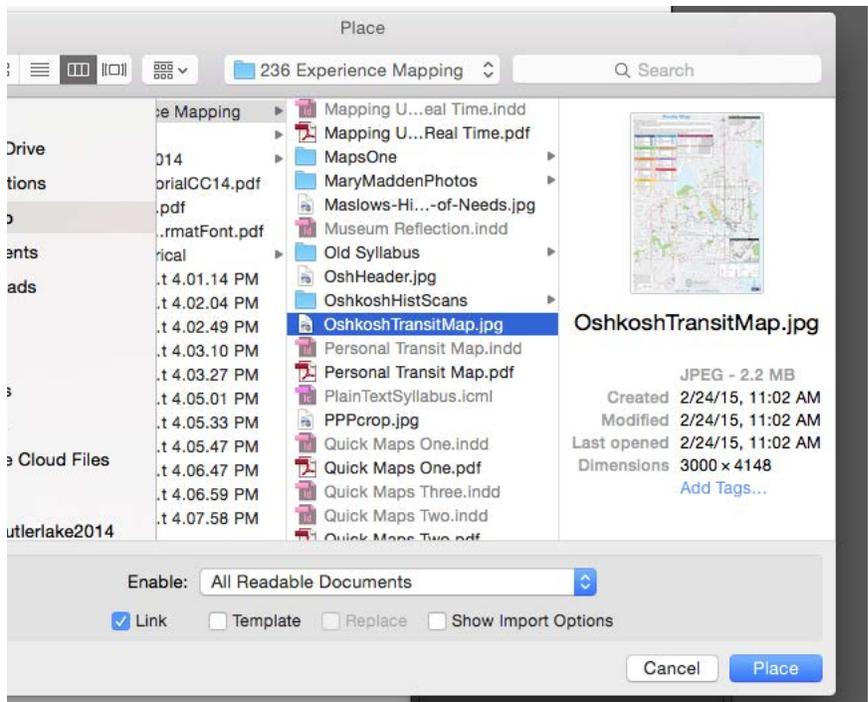
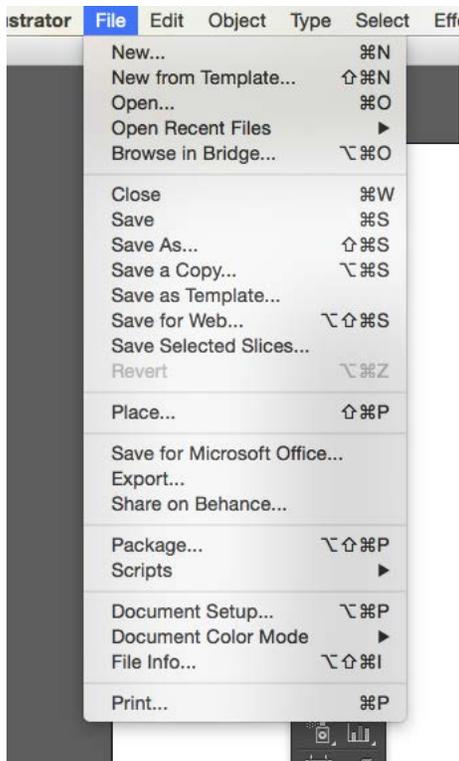
• **STROKE & FILL COLOR CHANGE** (Use in tandem with swatches window)

\* *Good to know: if you hover over a tool with the mouse, the tool will label itself.*

*Important Windows.* Here are the most useful ones (I think). Find them under **WINDOWS** on the top bar.

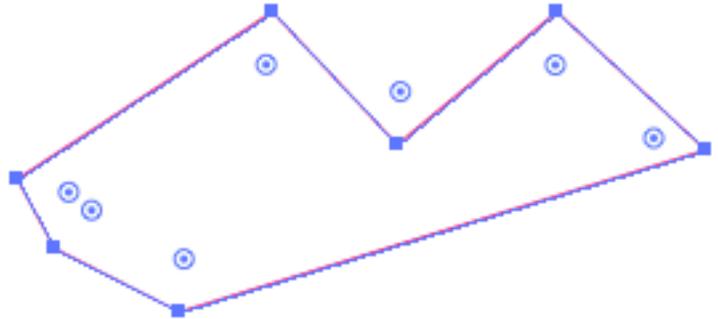
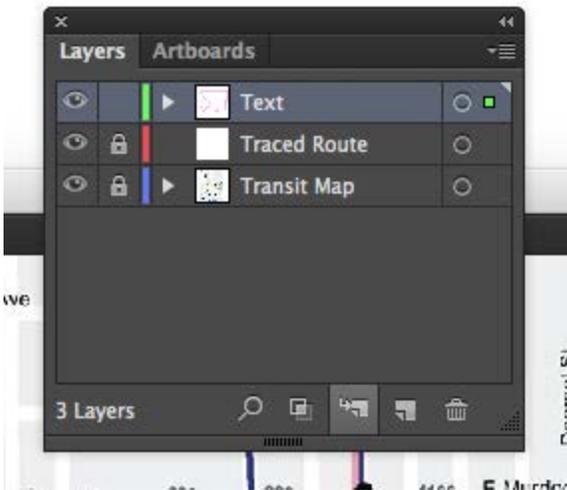


Let's **PLACE** the existing bus map so we can trace it. **FILE>PLACE**



Find your existing map wherever it is, select, and hit **PLACE**. If it is still in your email, you might have to download it to either the desktop or the downloads folder (on your dock).

Now we will **LOCK** its layer so we may work on top of it more easily. Find the **LAYERS** panel. Lock the layer the map is on by clicking on the padlock. Next, create a new layer ("Traced Route") using the drop-down menu at the top right of the Layers window. Create another new layer ("Text") on top of it. If the Eye is showing, that layer is visible.



**Time to try out the PEN TOOL.** Let's just play for a few minutes, ok? Select it and click anywhere to make a point. Click somewhere else to make a line segment. Make more points. Go back to the first point and click it: you've made a closed path that can be filled—as above. (Use fill icon on tools to actually do the filling.) Want to stop drawing points? Just choose the selection tool. Want to erase that last point? **COMMAND Z** will undo what you just did.

Actually, **COMMAND Z** is probably the most useful thing ever. I use it countless times a day, and I often wish **UNDO** worked in real life.

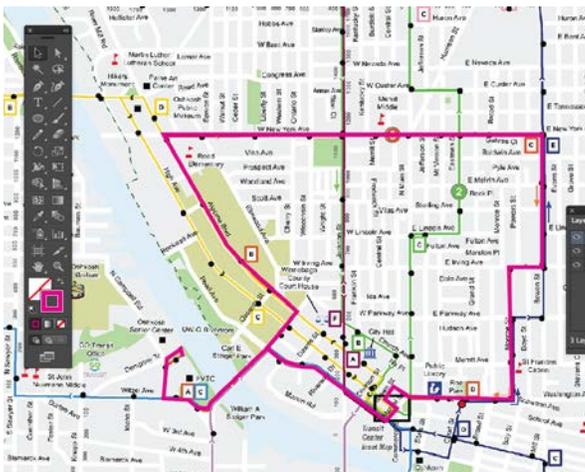
This would be a good time to remind you to also **SAVE** often. Let's do just that: **COMMAND S** will get you there.

Take a few more minutes to experiment with the pen tool. Keep in mind that it takes people years to master it. Practice changing the **STROKE WEIGHT** on the control panel at the top of the document.

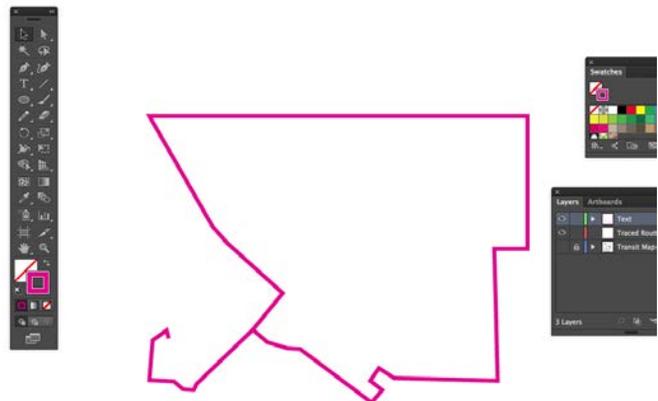
**Now we are going to trace your bus route.** Find it and trace it using the pen tool, similar to what's shown below. Choose the color and stroke weight that seem right to you. I'll walk around and help.

**COMMAND +** or **COMMAND -** are helpful here (and always) to enlarge or reduce your view.

Once it is traced, click off the layer visibility (eye) of the original placed transit map. Your artwork should look something like what you see on the right. (When you're done with the image later, you can simply delete the layer.)



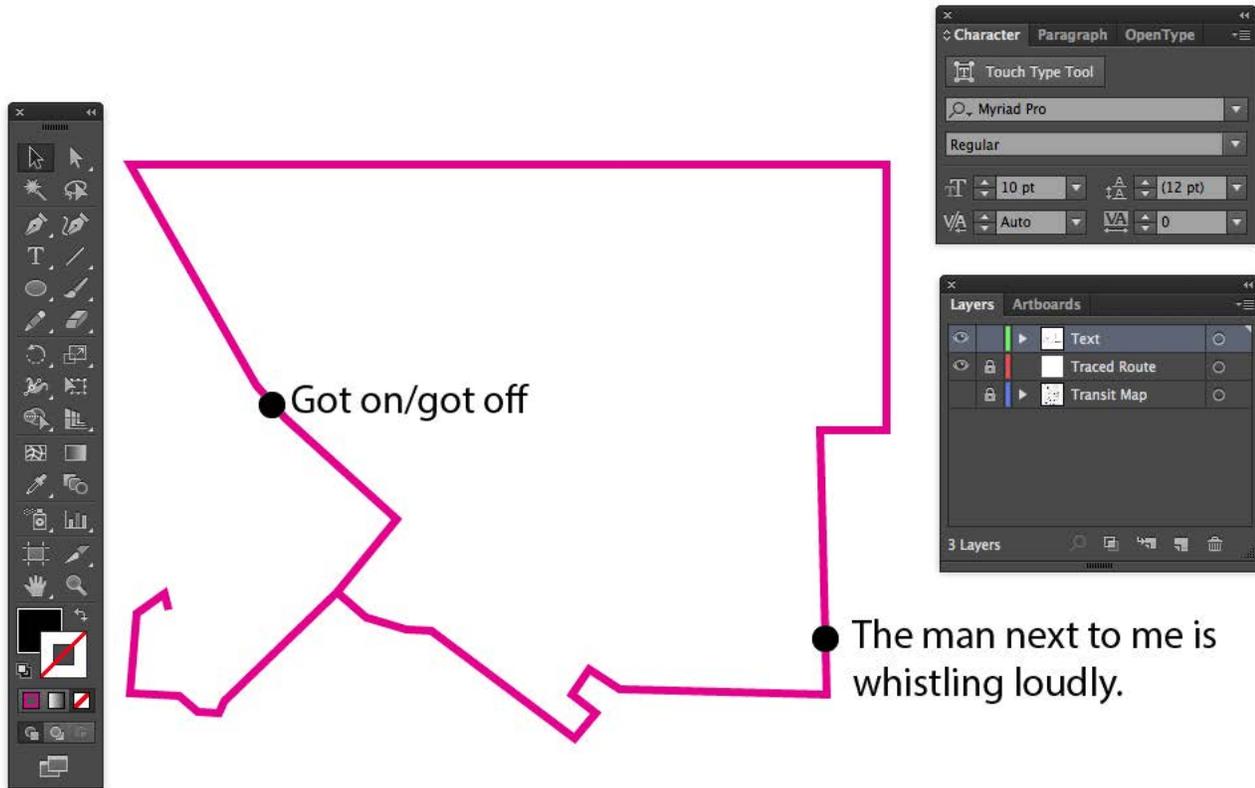
Original map layer visible.



Original map layer not visible.

**Let's add text.** Lock the bottom two layers and select the **TEXT** layer you made earlier. Select the **TEXT TOOL**. Either click a spot or draw a frame with it. Start typing. If you want to change the type itself, select (highlight) what you've written and use the Character window (**WINDOW>TYPE>CHARACTER** or simply **COMMAND-T**). I'm also using the **ELLIPSE SHAPE TOOL** to make the little black dots. (Use the **FILL COMMAND** at the bottom of the tool bar to fill.)

The text you add is dependent on what you observed on your bus ride. So put it *all* in. We've got time.



When you're done, under please **SAVE AS** an Adobe PDF. (Not as an Illustrator .ai file—D2L won't accept it.) You can do this using the drop-down menu under **FORMAT** in the Save As window. And by the end of the week, please submit it (and the map we make on Thursday) to the D2L dropbox file "Illustrator Maps."

