Pretty Maps Without the Price Tag: Cartography with Just QGIS

Emily Eros
American Red Cross
emily.eros@redcross.org

My ROLE AT the American Red Cross is to provide mapping and data management support for international activities. On any given day, this can involve training Liberian volunteers on how to use cell phones for data collection, remotely analyzing earthquake damage in Haiti, or mapping immunization rates in Malawi to help eradicate measles.

By the time I joined the American Red Cross in 2014, I'd been using GIS for analysis and mapping for almost ten years but I'd only really been exposed to proprietary software packages. I'd heard of QGIS, and even tried to use it once, but back then I found it counterintuitive and frustrating.

At the Red Cross, we try to use free and open source software whenever possible. Partly this supports a collaborative software environment, and partly this is just more practical for our needs: using free tools means that I can train local staff or community members and point them to a software download that doesn't require a license.

Adapting to the Red Cross team meant that I had to shift my whole workflow into QGIS. Moreover, our team needed a process to balance rapid deadlines—"We're sending someone to Nepal in an hour and we need 10 maps"—with visual aesthetics and good cartographic design principles.

At first, I kept hitting roadblocks, or would end up spending an hour trying to solve a minor problem. Over the past couple of years, though, the Red Cross mapping team has come up with a collection of tricks that make it easy to get started in QGIS and quick to make print-ready maps

ACCOMPANYING VIDEO (14:35)
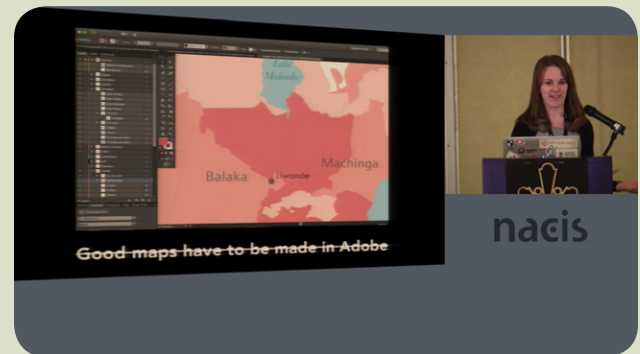
NACIS 2016 Practical Cartography Day
Colorado Springs, CO • October 19, 2016

Click to watch, or visit
youtube.com/watch?v=MjL2O3Oow60

(ex: **github.com/AmericanRedCross/workflows/blob/ emily/qgis_print_composer_tricks.md**). We've also leveraged and extended the work of others to create styles and symbologies for our maps. We've worked out a lot of the kinks and have built tutorials to train new staff. Rather than feeling frustrated by QGIS, everyone on our team has come to love it.

I was interested in sharing our experience with others at NACIS because I wanted to spread awareness about the different resources that cartographers have at their disposal. Open source tools were not part of my formal GIS education, and I didn't realize that they offered a viable option for making production-quality maps. Also, QGIS has

excellent documentation for all its technical features, but I hadn't come across a resource that would guide someone through the practicalities of working with the print composer and that would answer the types of questions our team had to figure out, such as:

- How come what I see in the composer doesn't match what's on my screen?

- How can I zoom in without going overboard?

- Why does my map disappear when I save and re-open it? How do I get it back?

Everyone's cartographic needs are different and QGIS may not be a great fit for everyone, but the goal of this presentation is to introduce it as an option that some people may not have considered.