Transcripts - What does geographic analysis add to stories

Hi, this is module 3 part 1! This week we're going to take our map making to the next level and explore some simple techniques for summarizing and analyzing data to tell stories.

Good geographic analysis can be as simple as displaying data in a way that's not normally considered, such as this chloroplast map that shows areas where people who didn't vote outnumber those who did or this interactive map from Slate which puts population density into perspective by showing how many sparsely populated areas it takes to equal New York City or Texas, but that's just the beginning.

QGIS can help us count the number of points inside of any area. You can use points that you created yourself with geocoding or summarize data that already exists, like home locations. This New York Times piece from our readings this week shows how a subdivision built inside a reservoir in Houston was developed. The flexibility to make geographic summaries ourselves can help us tell stories that no one else has access to.

In the hands-on portion of class this week, Chris will show you how to use QGIS to count the number of airports in each country in the world. A similar technique was used by this piece by the pudding that explores what airport traffic tells us about the world's megacities, their analysis of connectivity tells us a lot about the world and how it works.

Chris will also show you how to build point buffers which are useful storytelling tools. For instance strict laws in Miami-Dade County in Florida mean sex offenders who abuse children under the age of 16 must live 2,500 feet from schools, daycare centers, parks and playgrounds.

The red circles are point buffers. This covers most of the county and this map that ran into Miami New Times. I couldn't confirm this for sure, but it looks like this map was made by someone else, such as a government agency or third-party. The map illustrates the first step of geographic analysis, finding out how many housing units are off limits for sex offenders.

With a bit of styling and a few city labels, this could be a good visual guide for showing how limiting that restriction can be. Another recent U.S. example of point buffer analysis is in this piece by The Chronicle for higher education, which goes step by step through its analysis to measure how far students have to travel to attend a public college.

Outside of the U.S. Writers' Singapore Team did a fabulous job with this piece combining aerial photos, buffer analysis and data to show where Muslims are living in Bangladesh. The satellite photos, maps and analysis in this piece add so much context to the photos of life in the camps. It shows you exactly why people living there are facing the health crisis.

After introducing you to the locations of latrines and water pumps in the camp they connect the dots to show you what this looks like on the ground.

A third technique that Chris will share is dot density maps. These Maps don't show you exactly how many people live in a given area. It's more of an approximation, one dot represent a hundred people and they also don't show you precisely where the people live, but they do show density and geographic distributions.

At the Washington Post I use dot density in this map of Alabama voting patterns to add a bit of population context and show where people live in a mostly rural state.

In the next video this week I'll introduce you to two of my former Post colleagues who created a much more complex dot density map. Stay tuned!