Mapping the Surveillance State (to Kill it)

So-called Georgia is a military occupation of indigenous lands that has lasted three centuries. Today, manufacturing, aerospace and technology are among its largest industries. And so-called Atlanta is used as a testing grounds for the settler project's militarization of policing, with companies like Flock Safety, Grayshift, and many others hedging to set a lucrative blueprint in the rapidly expanding techno-fascist landscape in occupied Turtle Island. These technologies significantly increase analytic capacity for policing bodies and borders, and facilitate the gentrification of major cities.

Gentrification in so-called Atlanta today looks a lot like an automated open-air prison. APD's surveillance program, "Operation Shield," is a network of 20,000+ public and private sector cameras throughout the metro area that uses AI analytics to stalk its inhabitants. This is the logical conclusion of Jeremy Bentham's panopticon in the digital age- an eye that follows you wherever you go.

These forms of control are not omnipotent, but they are and will continue to proliferate if they are not interrupted at their point of access to bodies and movements. We feel it is necessary to revolt against the infrastructure of mass surveillance and all forms of domination without consideration to the concept of "winning" because the unchallenged proliferation of this technology has and will continue to have a considerable role in repressing our political bodies, bolstering carceral systems, and facilitating mass deportations.

This mapping project was conceived as a point of intervention on the city's AI-powered panopticon. We collected and recorded thousands of surveillance cameras over the course of months with the hope that this information might give people more agency in their movements: to increase the ability to evade and take offensive approaches to this nefarious technology of social control that is rapidly expanding across the US settler project as the state wrestles for control amid its certain collapse.

We made the following guide with the intention that people might benefit from our experience and develop their own methods. While this type of

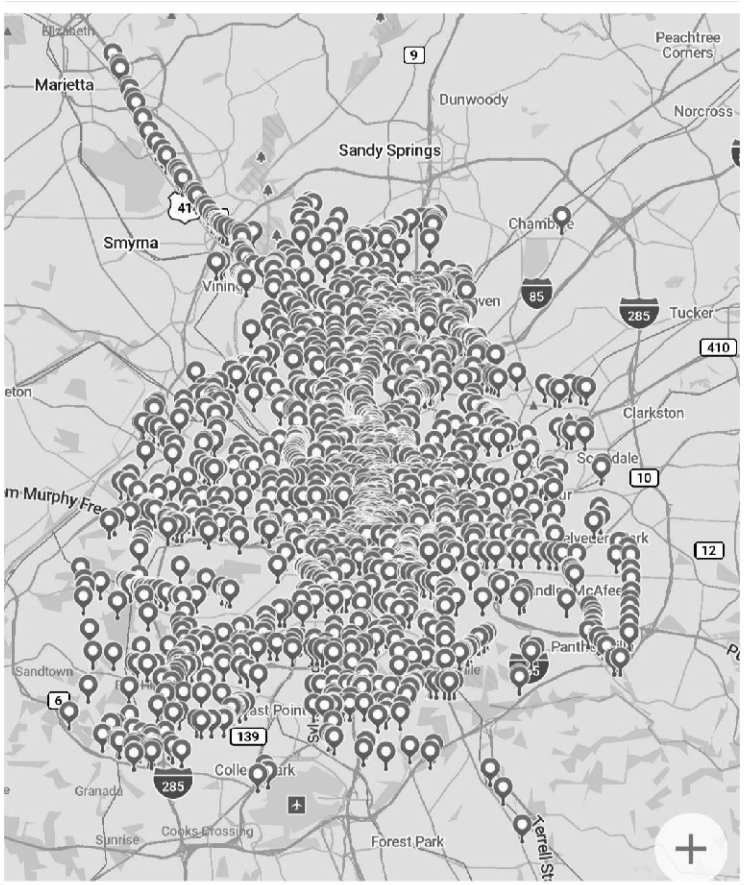

Image 4: all camera layers viewed in Organic Maps

KML file, open the KML file with libre office writer or a similar word processor. It will open the file as an XML file (it will appear in coding language). If there is any identifiable information (i.e. IP address, etc), it most likely will appear in the first few lines of text. Additionally, another place you can check for potential metadata is in the file properties. Right click on the file and select “properties.” Make sure there no identifiable information shows up in the properties box. :)

8. SHARE! Wipe metadata using a tool like Metadata Cleaner, which comes with Tails. Send it to your friends, enemies, blogs, distros, etc. Send it to DeFlock*. Use the points for evasion and destruction or use them for awareness. You have now completed some tedious tasks of counter-surveillance!

*While we decided not to input our camera data, which would have entailed entering over 2,000 individual data points into OSM or platforms that use OSM like DeFlock, we would encourage anyone interested in making the data more accessible to do so. We thought it might have been possible to do a mass import on OSM but we soon learned that this is discouraged and, at a certain point, against their terms, which is fine besides that they often choose to de-publish submitted data.

Additional resources on ALPRs and Surveillance Cams:
Automatic License Plate Readers, Threat Model No.2
Birds of a Feather Flock Together (zine)
Blinding the Cyclops, Wrecking the Panopticon: Camera Hunting in the Metropolis (zine)
Deflock.me
Street Level Surveillance Project, Electronic Frontier Foundation, sls.eff.org

project can be tedious and time-consuming, it does not require much technical know-how or specialization. We hope that others will do this work in their area and that the data from such efforts can be made as accessible as possible. While projects like DeFlock.me have aggregated a large amount of such data, we think it wise to publish data and maps across different platforms.

Fuck borders. Fuck ICE. Fuck mass surveillance.

GUIDE TO MAPPING

Familiarize yourself with the different kinds of cameras and the types of mass surveillance systems used in your area:

Our goal was to map as many surveillance cameras as possible, with Automatic License Plate Readers (ALPRs) being prioritized. Motorola and Flock are two of the most common brands of ALPRs in Atlanta, often mounted on free-standing poles with a solar panel, utility poles or stoplights (which can be harder to spot).

We also documented APD’s shield network cameras. These are made up of Point-Tilt-Zoom (PTZ) and Quad (beefed-up PTZ) cameras, shotgun-style and other directional cameras. There are miscellaneous cameras that may also be part of this network, including Gridsmart’s bell cameras (that hang over intersections), speed cameras (captures speed and license plate data), red light cameras, etc. Before going out to record data, we talked about the differences between these devices and how to tell them apart.

Planning Routes
Paper maps are useful for planning routes and making notations for what’s been covered. Street maps can often be found on a transit department’s website.

If you are planning to scout a large area, consider breaking the map up into sections and have groups of friends take different routes. In planning our routes, we tried to make sure we covered all major roads, and roads that would likely be more surveilled (e.g. cop shops, business districts, highway exit-ramps, etc.). We drew routes by hand and differentiated them using a color-coded and numbered system.

We also tried to consider how long a route might take when mapping it out. Sitting in a car for 6-hours to map cameras might be some people's idea of a good time and not others. These considerations also helped determine the scope of the area we could realistically cover. The metro atlanta area spans several counties-- we managed to cover all of fulton county but only some of dekalb and none of clayton, gwinnett or cobb.

Organize a team to go scouting with you. If you plan to use a vehicle, we recommend having 3-4 people per car: a driver, someone to navigate, and 1-3 people to record cameras.

If you are going to survey using paper maps, it might be useful to print the maps larger and have a legible, consistent notation system between groups. If you choose to record data on a phone, Organic Maps (OG) is an offline mapping app based on OpenStreetMaps (OSM) that can be used to navigate and record data.

If you have a large group of people scouting, it may be helpful to plan for how everyone's data will be aggregated afterwards. Data collected on OG can be exported as a KMZ file (explained in the next section). These files can be emailed to a throwaway proton email, a work phone could be passed around to each group as they drive around to survey, etc.

How to map cameras using Organic Maps:

1. Using GPS on a route is optional but extremely helpful for this task, both for navigating and capturing coordinates. Make your own security

6. IMPORT your CSVs to QGIS. After organizing all of the data, you might want to plot them on QGIS and share them with others in Organic Maps format (KML files). Importing CSV is the same as importing KMZ files so please consult Step 2 for review. All of your camera types should now have their own layers (listed on the bottom left). The points in each layer can be customized via "layer preferences" on the map toolbar.

7. Export as a KML. (optional). Depending on what you want to do with your data, having a .CSV, .ODT or a .GIS file may be enough. However, if you want to make it downloadable/shareable on Organic Maps you may want to export the data as a KML or "Keyhole Markup Language" file. To do this, right click the layer you want to export, click "export," then "save layer as…"

A box will appear, choose "KML," and name your file. In the "encoding" box, make sure only the columns that contain information you want to be displayed are checked (i.e. the name and description categories. This is the text you will see when you click on each point in Organic Maps). Deselect the "persist layer metadata" (for KMLs, file metadata is often exported as its own file; a QMD file. This step will stop the creation of a metadata, or QMD file). Scroll down to "datasource options." Change the "DescriptionField" box to match the name of the description category and the "NameField" to match the name of the name category (ours didn't, so when we initially exported our files into Organic Maps, the names of the cameras and the information about the orientation didn't display at all. Our description field was named "direction" or "description" and the names were "device" or "camera". By imputing these fields *exactly,* the information could be found in Organic Maps.)

Then press " OK." When the KML is opened on a phone that has the OG app, it should open directly into OG and appear as a list layer. The file can be easily imported into QGIS by dragging and dropping it.

8. Check for metadata. KML files should not have metadata in the file. It should only include the information in your attribute table, as well as the date and time accessed, created and modified. However, to check for metadata in a

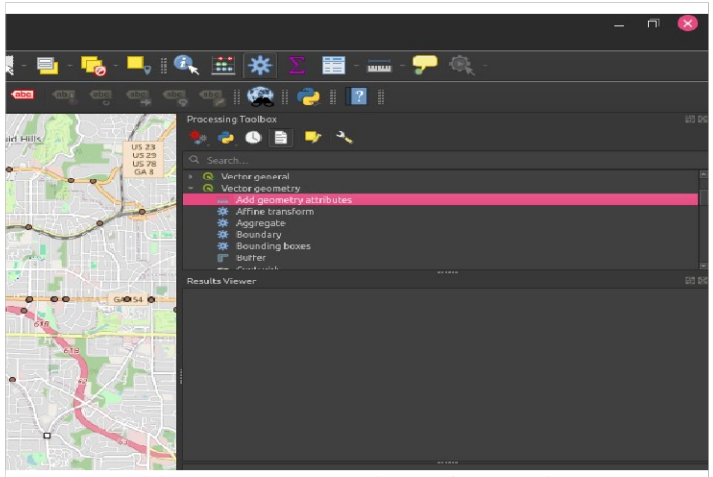

Image 3: Adding geometry attributes for coordinates

4. **EXPORT that layer as a CSV.** Right click on the "added geometry data" layer and click "export" then "save data as". Select "COMMA SEPARATED VALUE (CSV)", name the file, pick a folder, and and press "OK". It is now a CSV.

5. Organize your Data (optional). First, we deleted metadata, blank and unnecessary columns on the CSV. We were left with a NAME column, and DESCRIPTION column, X and Y Columns. In the name column, we edited the data to make the labels consistent (i.e. correct misspellings, move descriptions to the description column, make sure all names for the same type of camera are the same). The description column included camera attributes, model, and direction facing. We alphabetized them to separate them by type. We then separated each camera type into its own spreadsheet and sorted into master folders (e.g. flock cameras went into the flock camera spreadsheet, motorola cameras into the motorola spreadsheet, and so on and so forth…). Save your work.

considerations. You can also notate on paper and transcribe the data into OG or another mapping program afterwards.
2. Be sure to download the map of the area you will be surveying beforehand.
3. Tap on the approximate place on the map where a camera is located, a blue or grey circle should appear
4. Press the star icon on the middle-bottom to save the location. A pin should appear in the circle.
5. Pull up on the tab and press the "edit bookmark" tab. Change the name of the bookmark to the describe what is being observed. Write the type of camera and direction it's facing (e.g. Flock N) *.
6. Create a list for a particular route by tapping the drop down arrow under the "list" heading. "select list" menu will appear. At the bottom, open "add a new list". Click to label the route list. Then save coordinates to the list.
7. To view collected points for a route, make sure nothing on the map is selected and click the star at the bottom of the screen. This will pull up your bookmarks list, and you should see all of the lists you've created. You can click on the list you would like to look at.
8. TO EXPORT. At the end of your route, visit your bookmarks menu, click on the three dotted line next to the bookmark you've saved your coordinates to. Click "export KMZ." BE SURE NOT TO PRESS THE "DELETE" BUTTON AS IT IS RIGHT UNDER "EXPORT KMZ" OPTION.

*We found it very helpful to have a consistent set of descriptors for each data point. For example, we wrote "omnidirectional" when cameras were pointing in every direction at an intersection.
*A compass can be helpful to orient on winding roads

Importing organic maps data into QGIS

QGIS is a free, open-source, and offline GIS mapping software that could be helpful for compiling, organizing, and analyzing collected data.
Here is how we did it!

1. Create a map using Open Street Maps (OSM) data as a base map. You do this by opening a new project. On the top left-hand side of the screen is a scroll-down menu. Scroll down and click the option “XYZ tiles,” then click the Open Street Map option (image 1, below). Great!

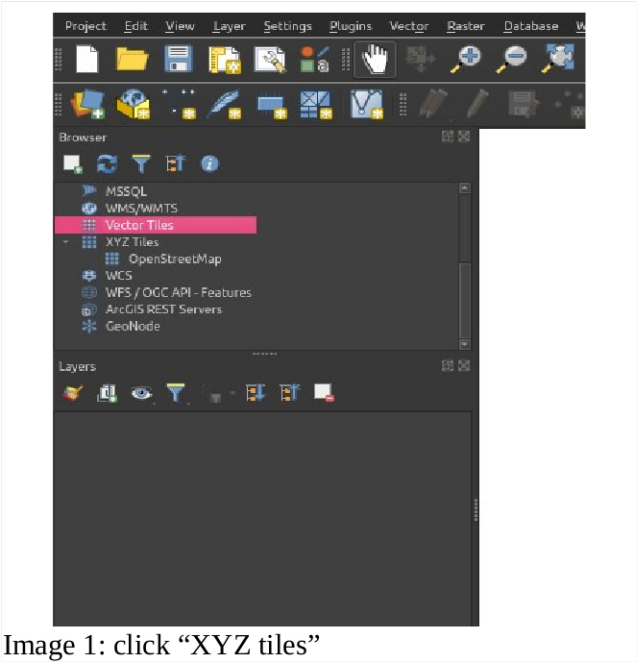

Image 1: click “XYZ tiles”

2. Import your KMZ data from Organic Maps. Go to drop-down menu at the top of the screen. Go to **Layer→ Add layer → Add delimited text layer..** or **ctrl, shift, T.** A box will appear. Find your downloaded file, name the layer, click “custom delimiter” box, make sure “tabs,” “semicolon,” and “commas” are selected. In the “geography definition box,” select “point coordinates,” and make sure X coordinate and Y coordinates are selected in your X and Y coordinate boxes (note: for some inexplicable reason we had to flip the x and y?? So, try that if it doesn’t work. If you can’t find your data, look somewhere around the atlantic ocean or the african continent, that is where we found our’s.) Then press ADD (image 2, below). Hopefully, by the grace of god, your data will be where you want it. If not, try changing your projection settings. **Or we have had luck just dragging and dropping the data file into the GIS map straight from the folder.**

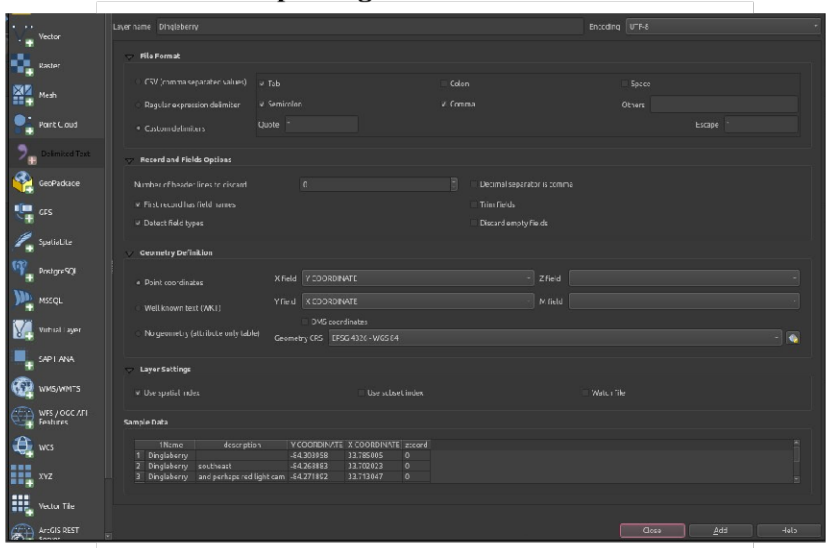
Image 2: Adding Delimited Text Layer

3. Great, now you need to define the coordinates for your data set. You’ll notice that for some reason, when you click on a data point, the coordinates are no longer there. To get them back, you'll have to fight for them. Go the top toolbar and select **Processing → Toolbox** or **ctrl, alt, T.** A menu will appear on the right side of your screen called “the processing toolbox.” Scroll down to and click “vector geometry.” Then click on “add geometry attributes” (image 3, below). Select your layer, and “calculate using layer CRS” and press **RUN**. This will create a new layer called “**ADDED GEOMETRY INFO”.**