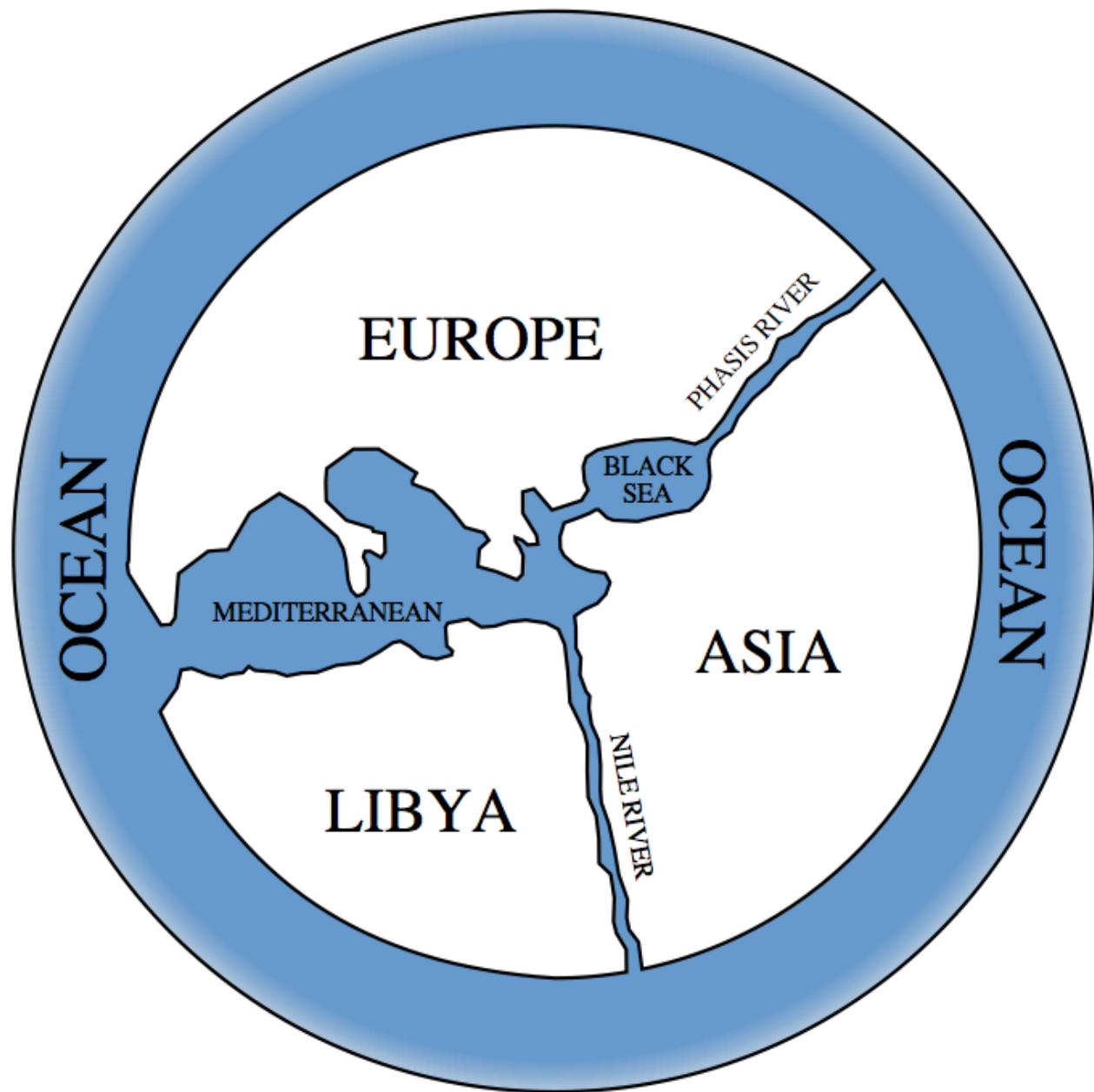

HOW TO MAKE SEXY MAPS

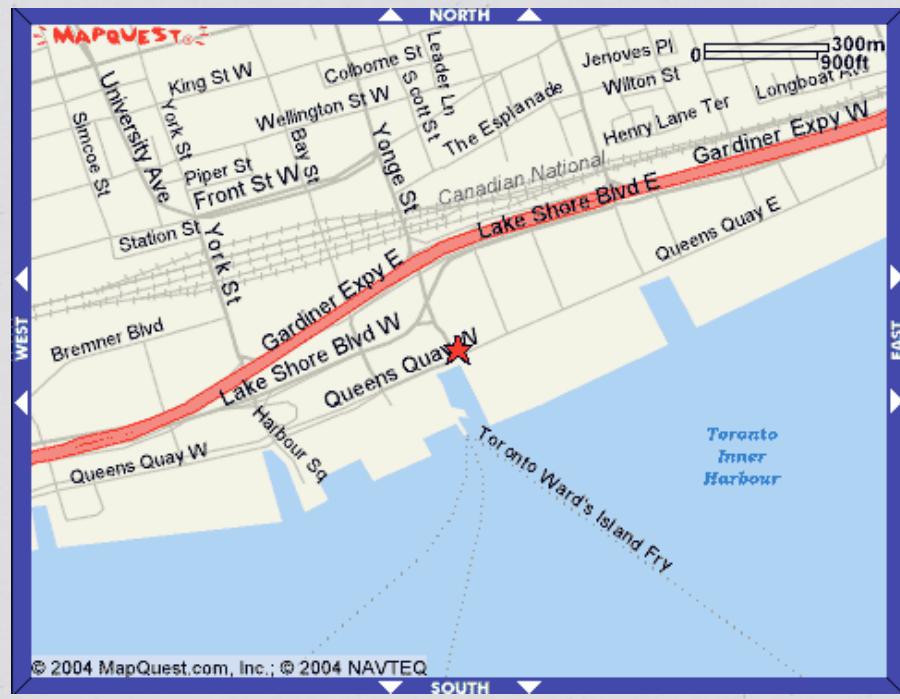
with Zain Memon



Since the beginning of time...



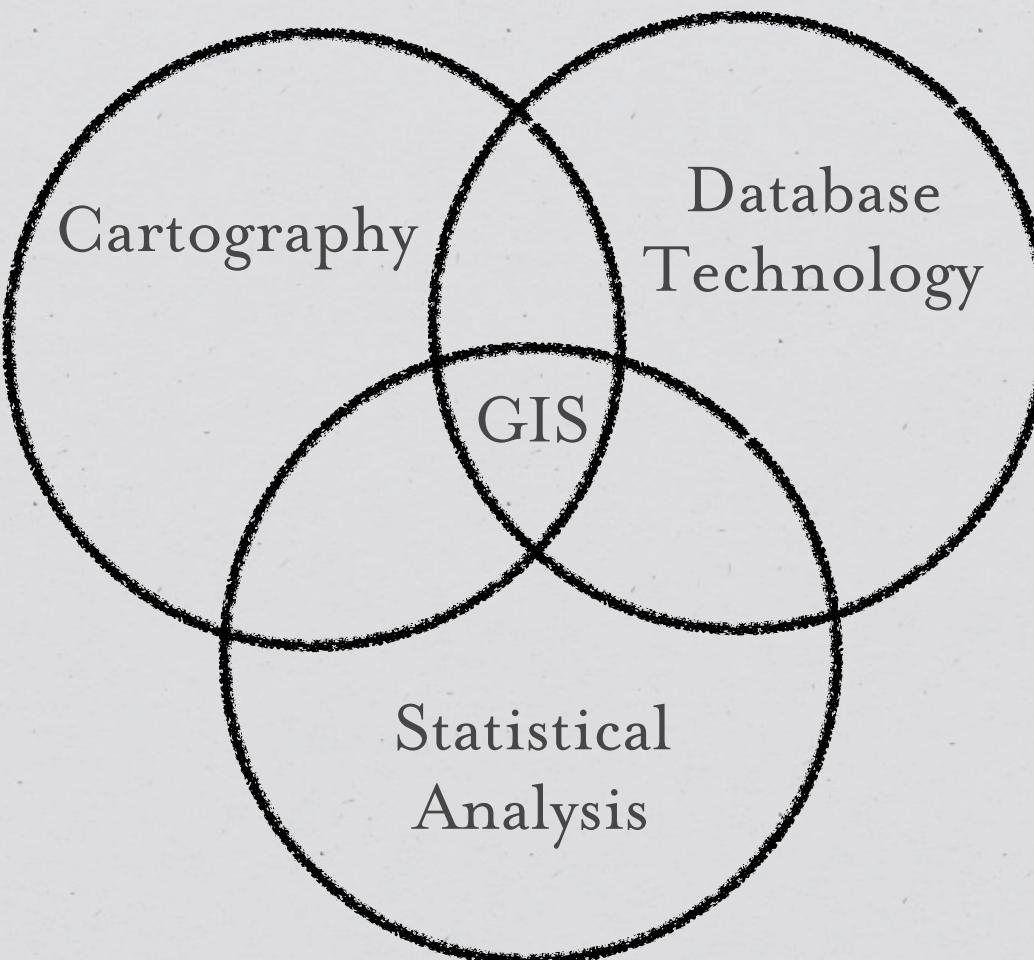




CARTOGRAPHY

Greek: *chartis* (map) + *graphein* (write)

Geographical Information Systems



50 0 50 100 150 200
Yards

X Pump

• Deaths From cholera



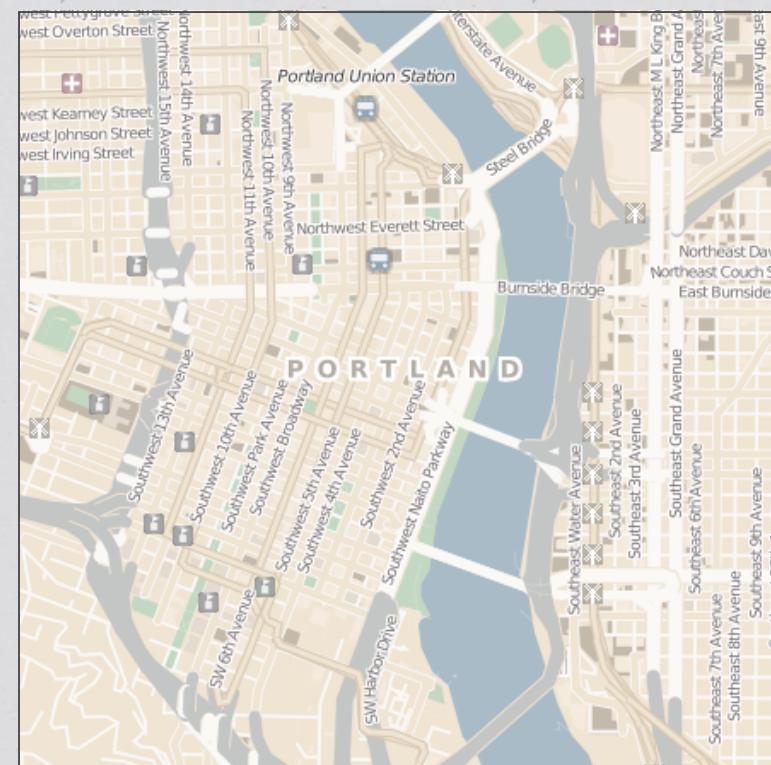


**I JOINED THE
NIGHT'S WATCH**

**BEFORE IT WAS
COOL**

Map Tiles

- * 256px by 256px images
- * 21 different zoom levels
- * Standard URL scheme:
`{zoom}/{x}/{y}.png`
- * A collection of map tiles
makes up a map layer



[This is where you show the demo]

TODO: Remove this slide



crime maps beta

Portland

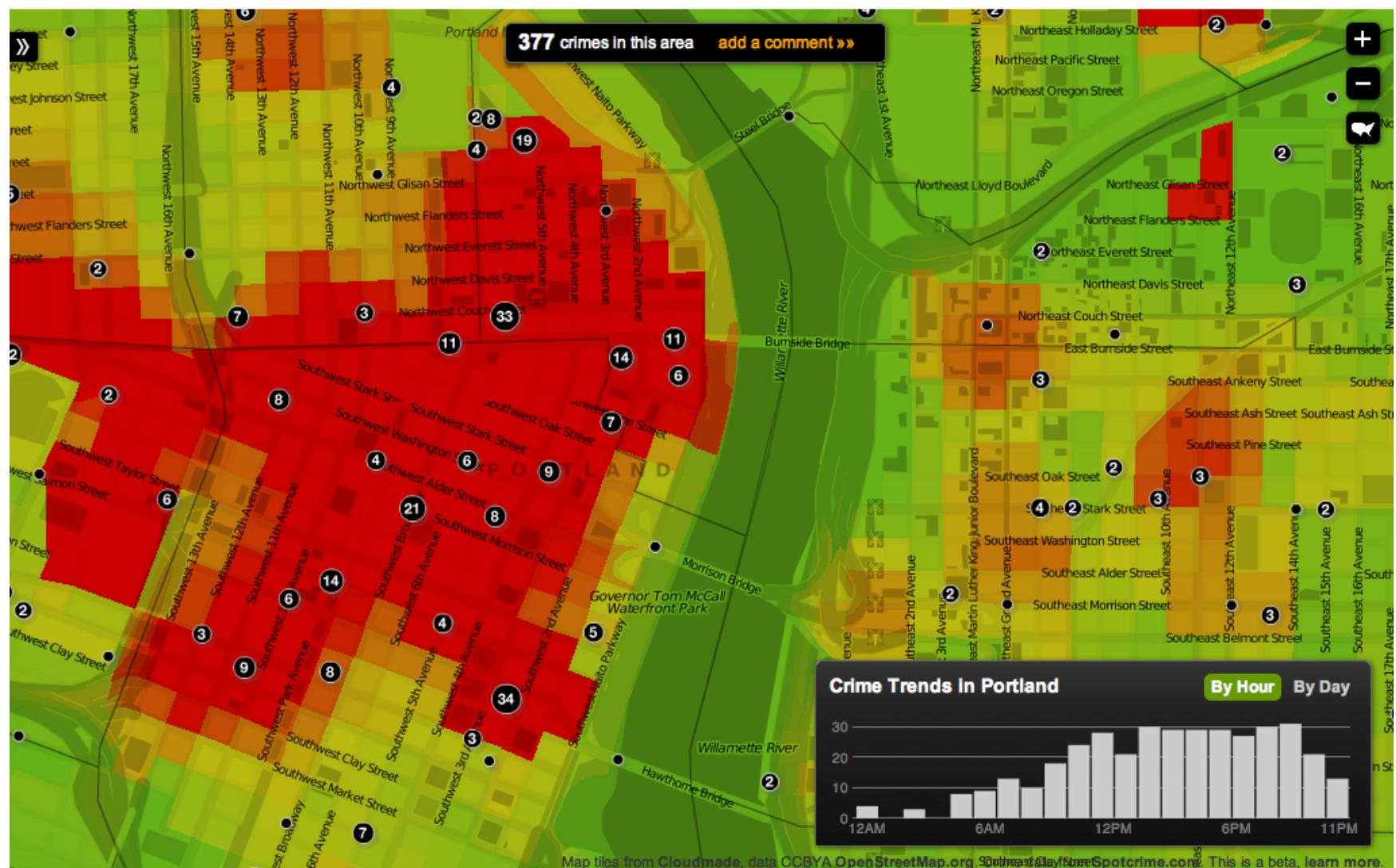
Like

4K

Tweet

0

Submit



<http://trulia.com/crime>

The Stack



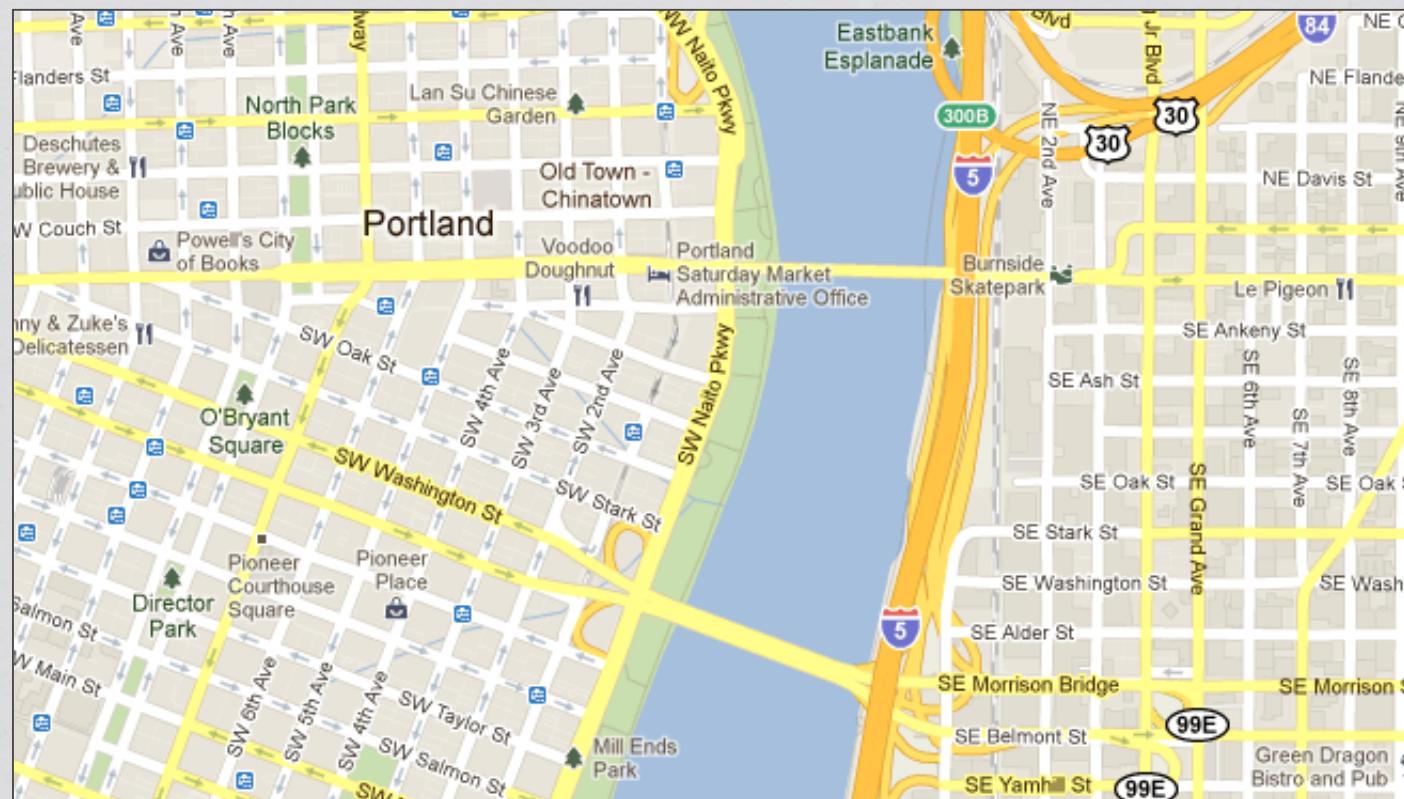
DB: PostgreSQL + PostGIS

ORM: GeoDjango

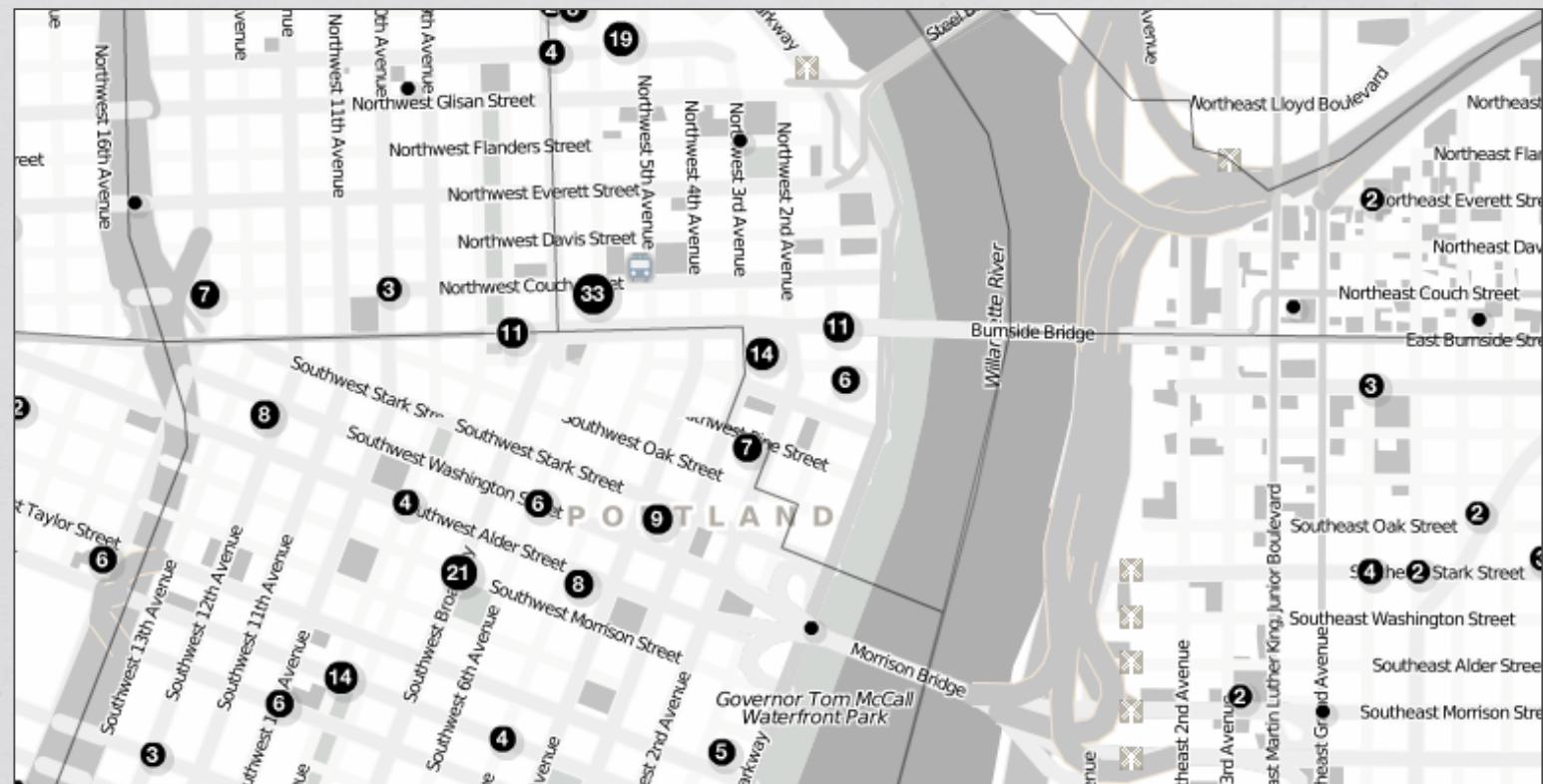
Front-end: TileStache

Slippy Map: PolyMaps

Base Map Layer



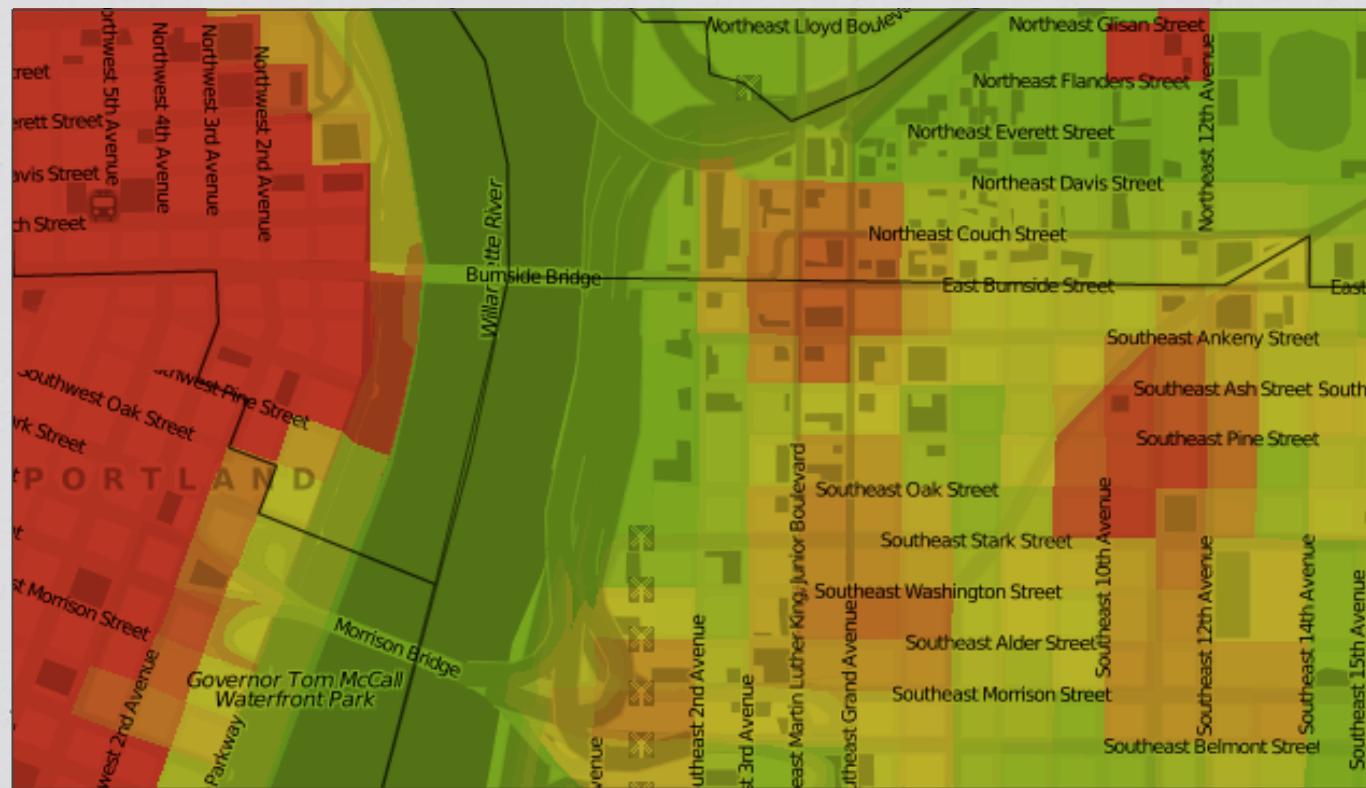
Crime Points



```
class Crime(models.Model):
    date = models.DateTimeField()
    description = models.TextField()
    pt = models.PointField()

bbox = request.GET['bounding_box']
return Crime.objects.filter(pt__within=bbox)
```

Heatmap



```
class Block(models.Model):
    poly = models.PolygonField()

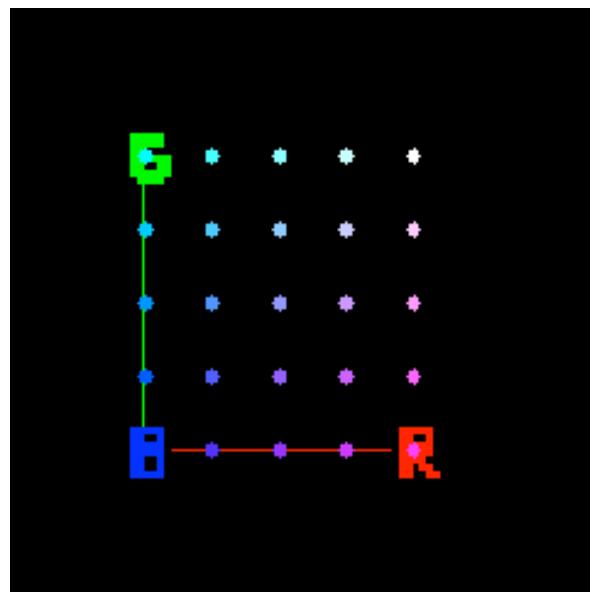
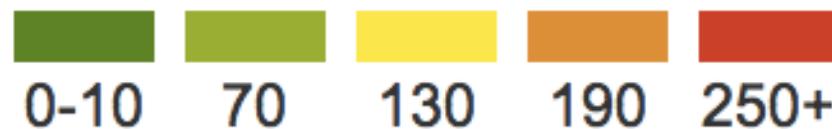
bbox = request.GET['bounding_box']
b = Block.objects.filter(poly__intersects=bbox)

# a single 256x256 heatmap tile
pil_map = Image.new("RGBA", (256,256))

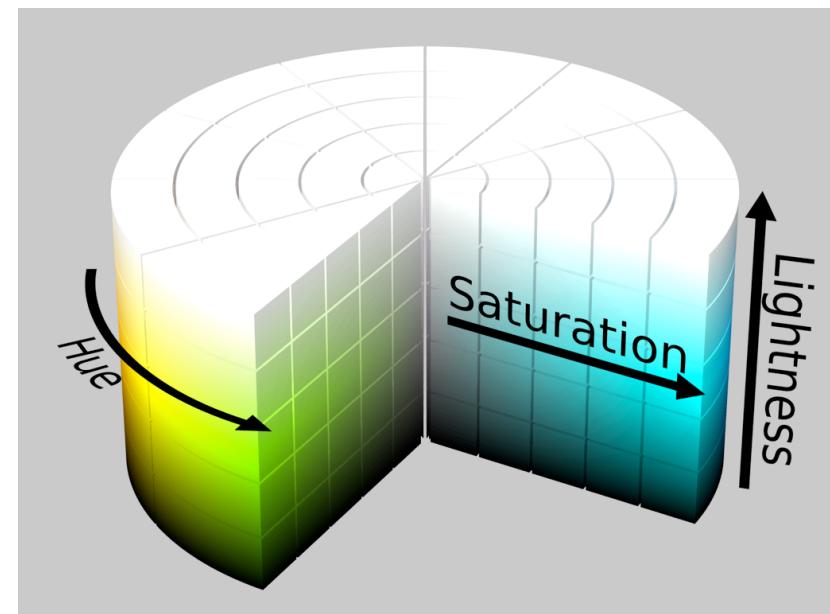
for block in b:
    draw_and_color(img=pil_map, shape=block.poly)

return pil_map
```

Heatmap Color Scales



RGB



HSL



crime maps beta

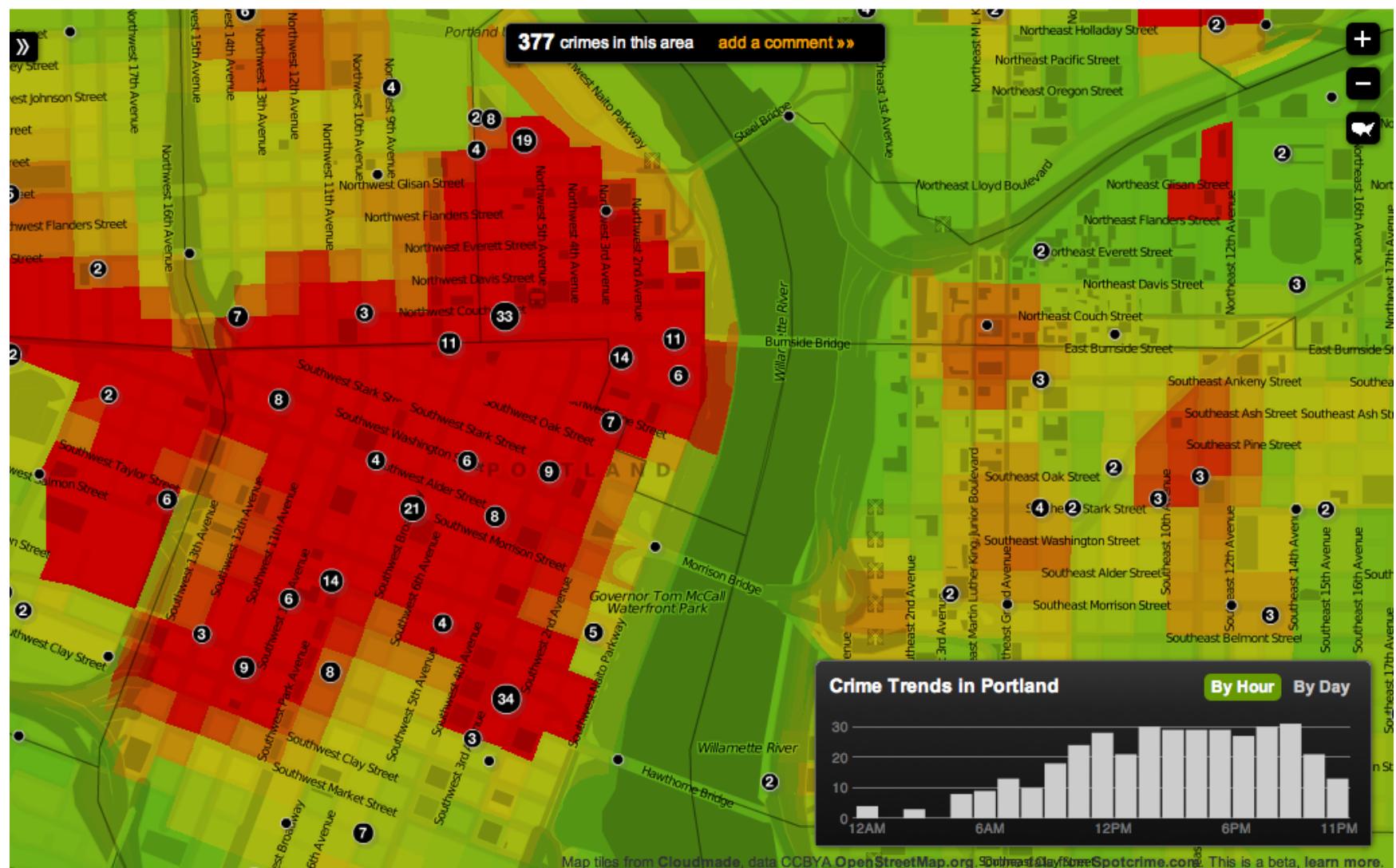
Portland

 Like

4K

 Tweet

0

 Submit

<http://trulia.com/crime>

Good maps are...

Attractive

Readable

Interactive

Fast

(like a good girlfriend)

Good maps are attractive.

**NOT
ATTRACTIVE**





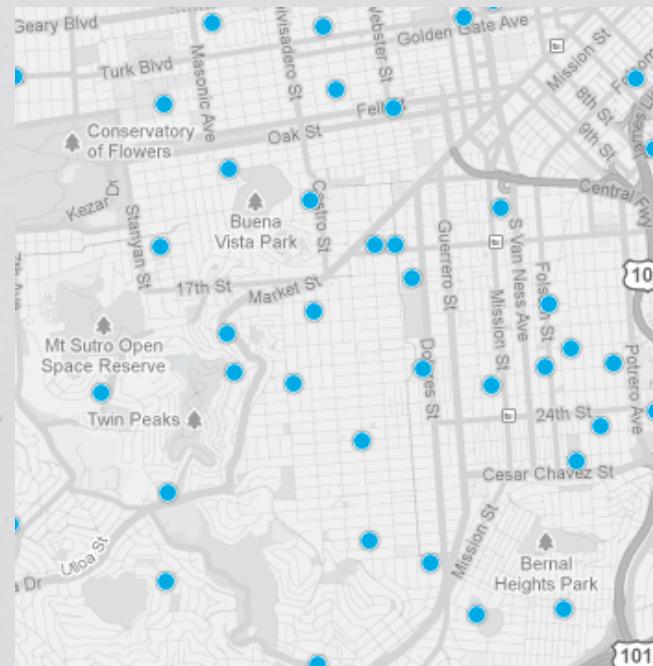
Pale Dawn via cloudmade.com



Midnight Commander via cloudmade.com

Use a different base layer

- * cloudmade.com
- * GMaps Styled Map Wizard





<http://tendernoise.com>

Good maps are fast.

Good maps are interactive.

[Hey Zain, switch to the browser]

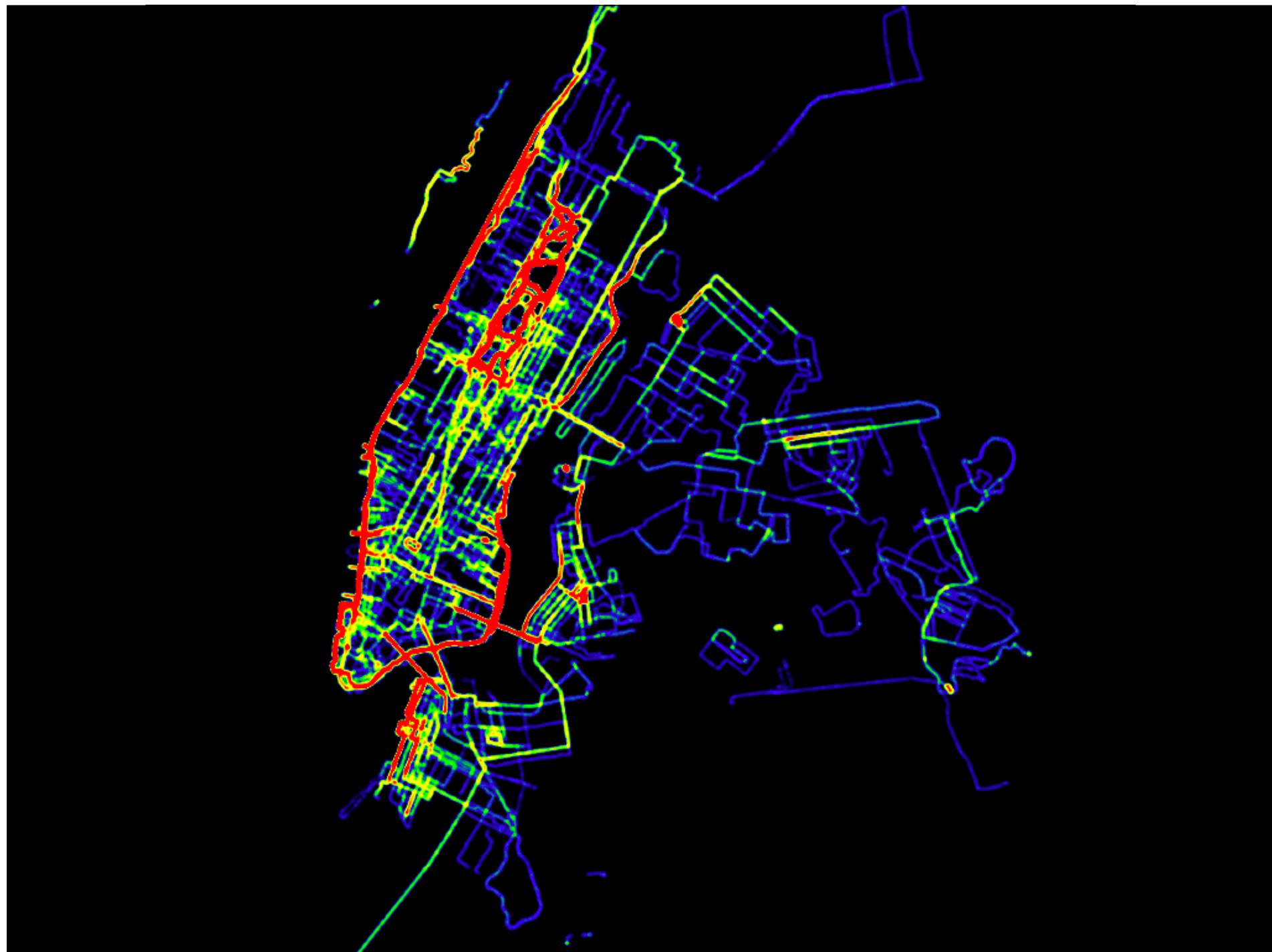
Sponsored message:
“Lab 305 removes the suck”

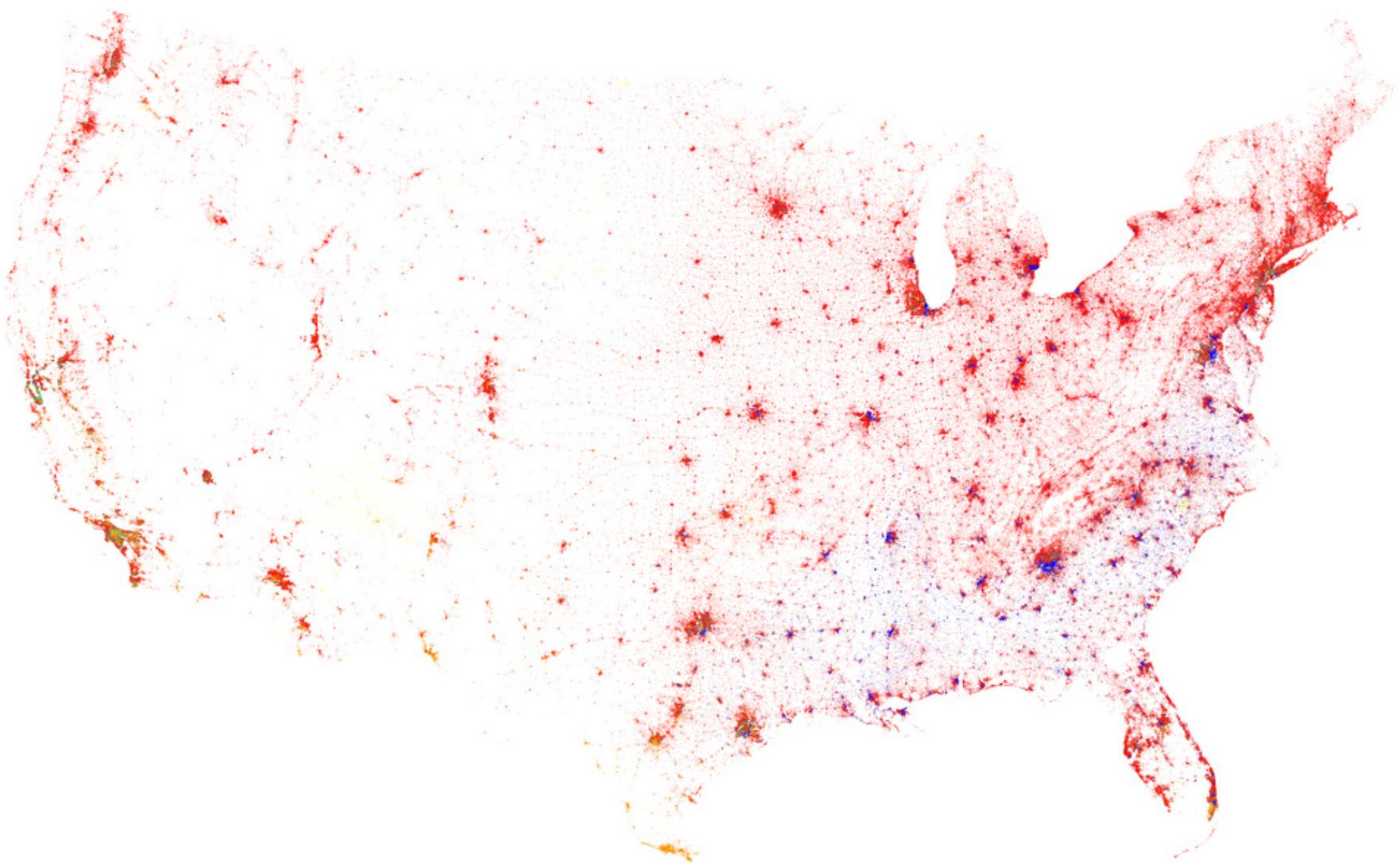
[Hey Zain, you probably forgot to show the other thing]

Sponsored message:
“ALL GLORY TO THE HYPNOTOAD!”

Good maps are readable.







QUESTIONS?

zain@inzain.net @zainy

