

# Advocating for public policy change

*Because y'all have “superpowers”*

# We have a unique skill set and way of thinking

- Maybe 20-30 million people in the world can program
- You are solidly in the top 1%
- The talks, presentations, and posters this week have been incredible

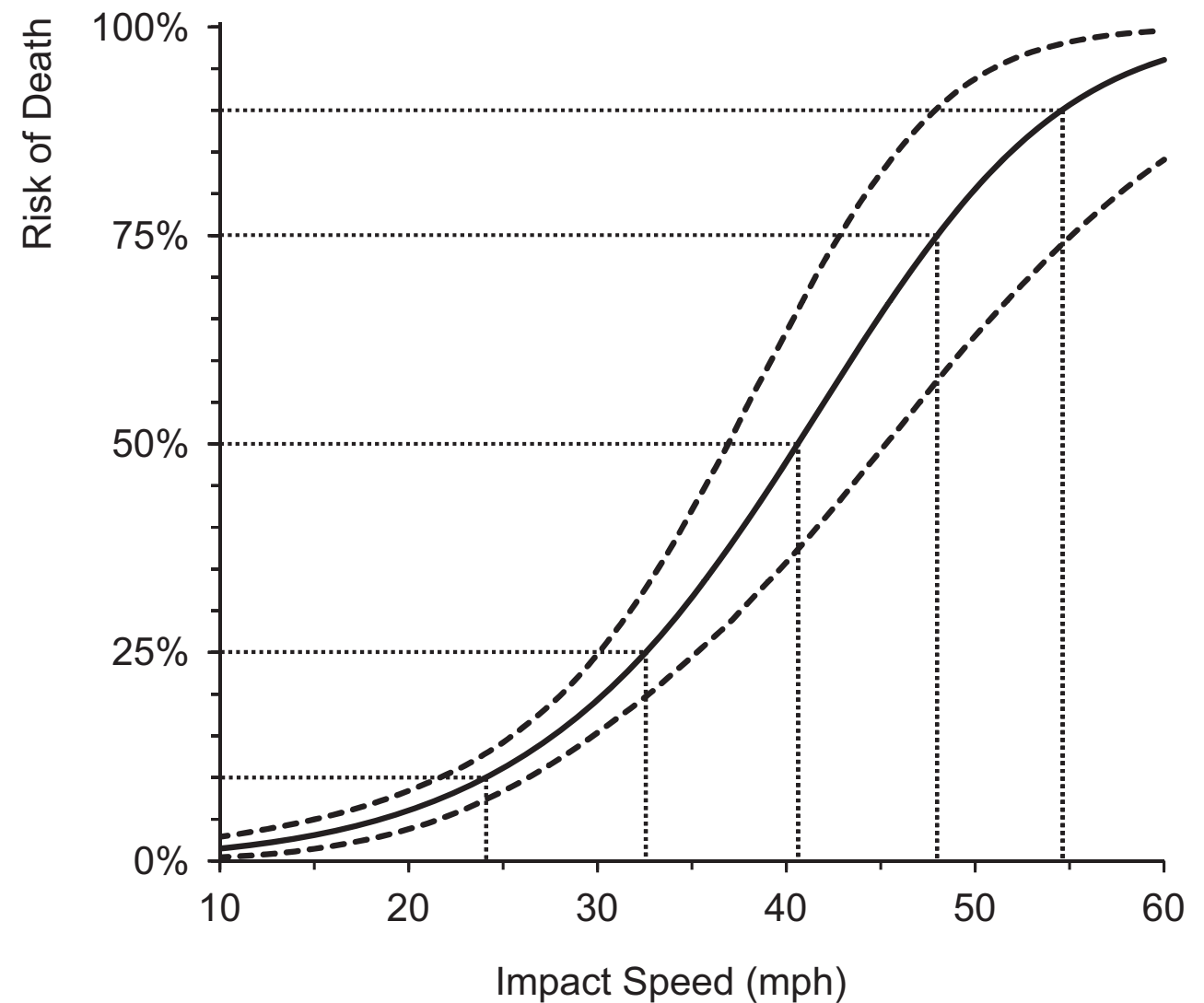
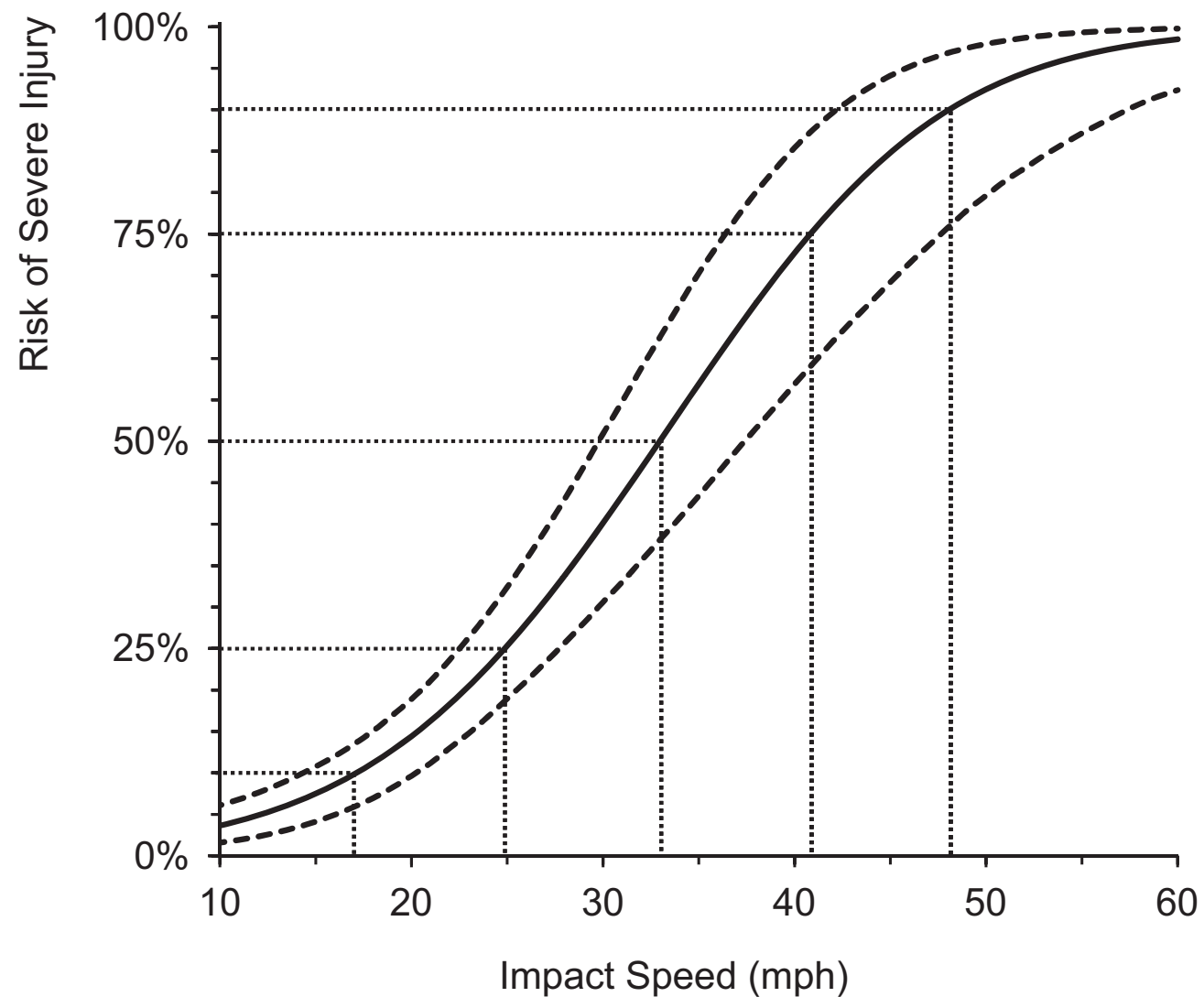
In other words...

Y'all have superpowers!

# The problem



# On everyone's mind: speeding



# Frustration

- City and University didn't seem to be taking action
- Improvements were two-three years out
- Community was up in arms — lots of talk about speed...
- But nobody knew if speed was a factor
- Could I collect empirical data to help light a fire?



# The Cathedral of Learning

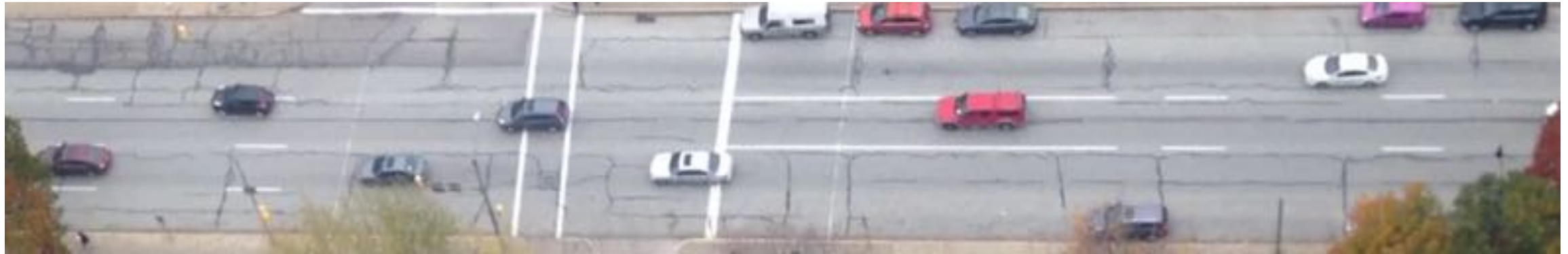


# Could I use Julia to process video and extract speeds?

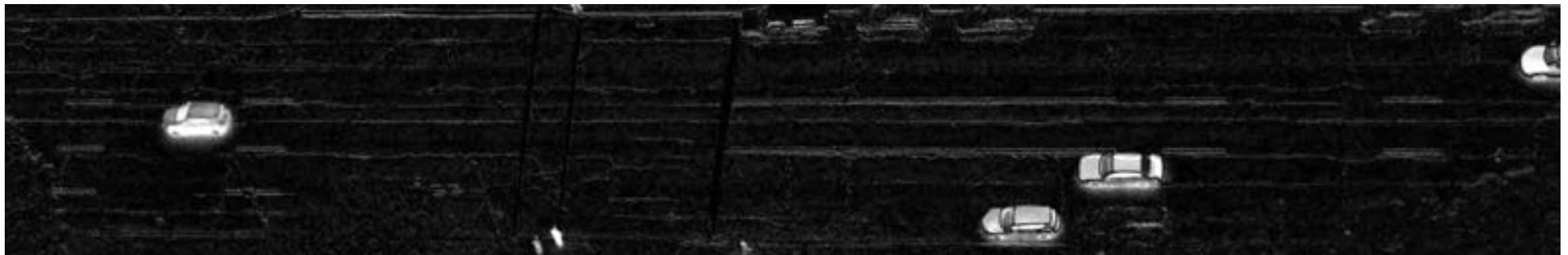
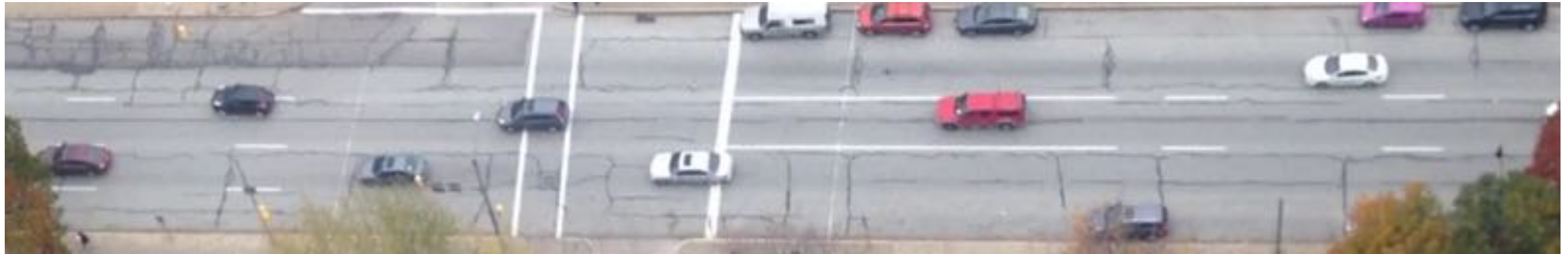




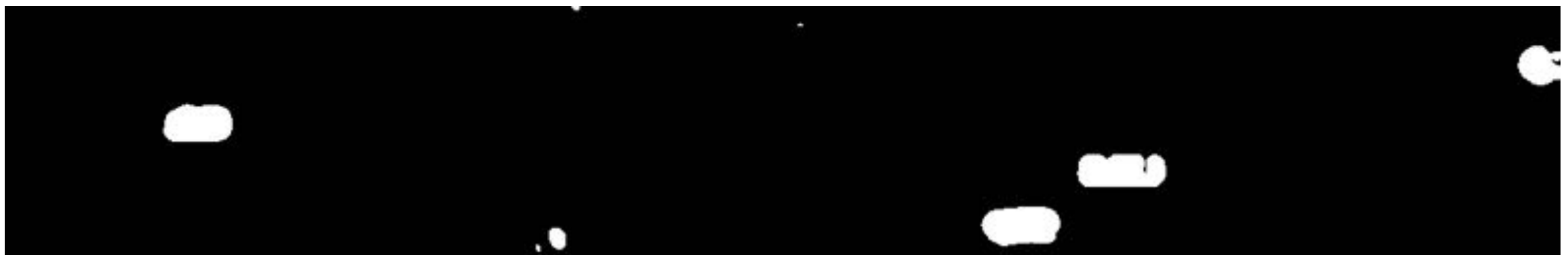
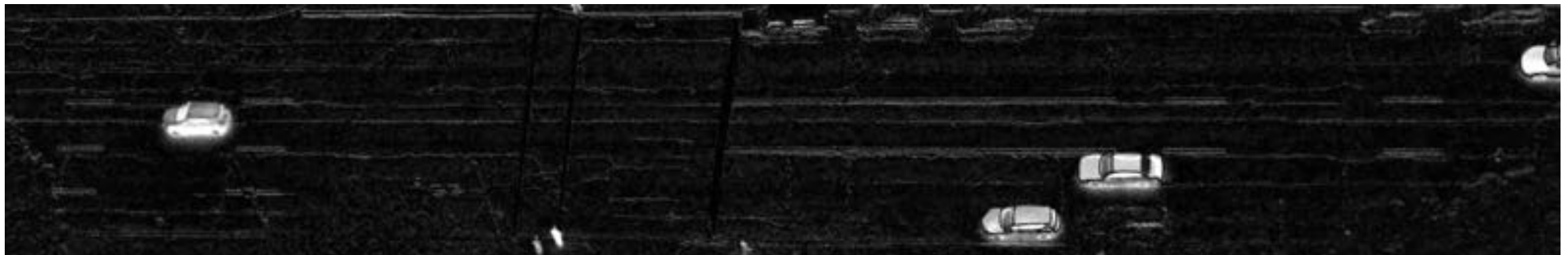
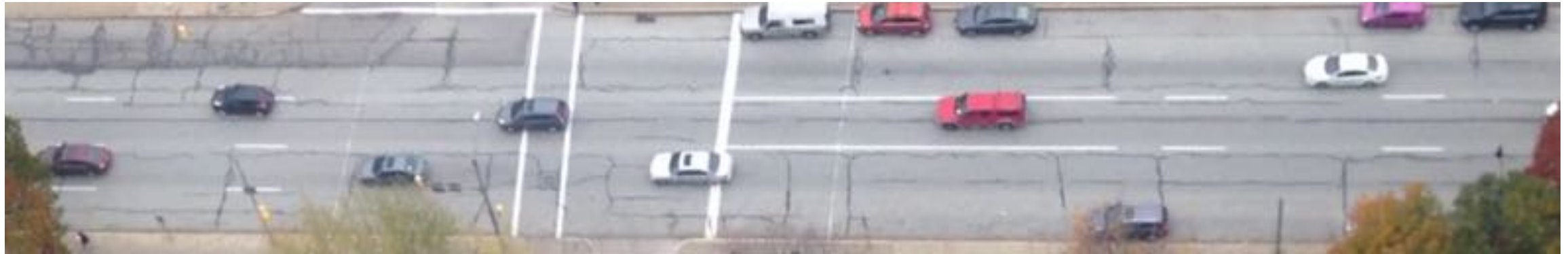
# Primitive 'pipeline'



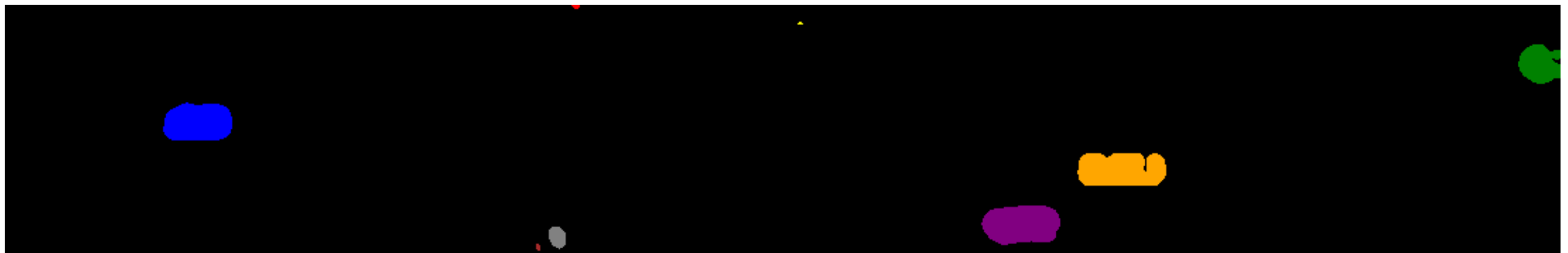
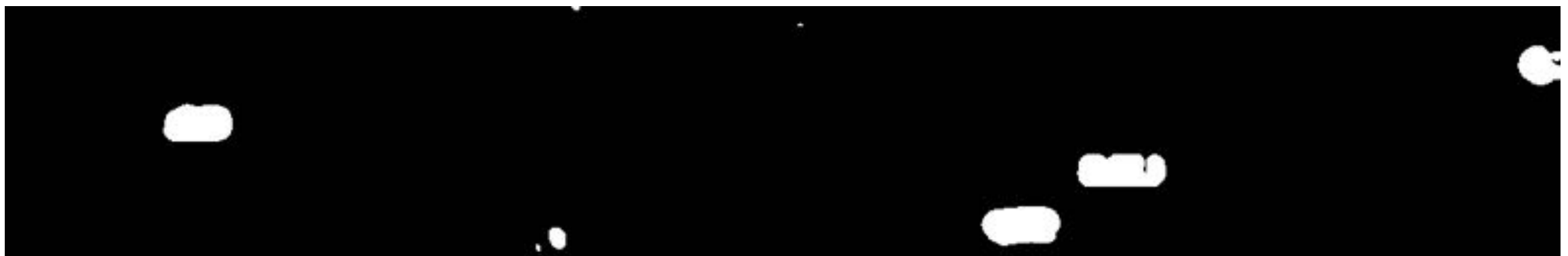
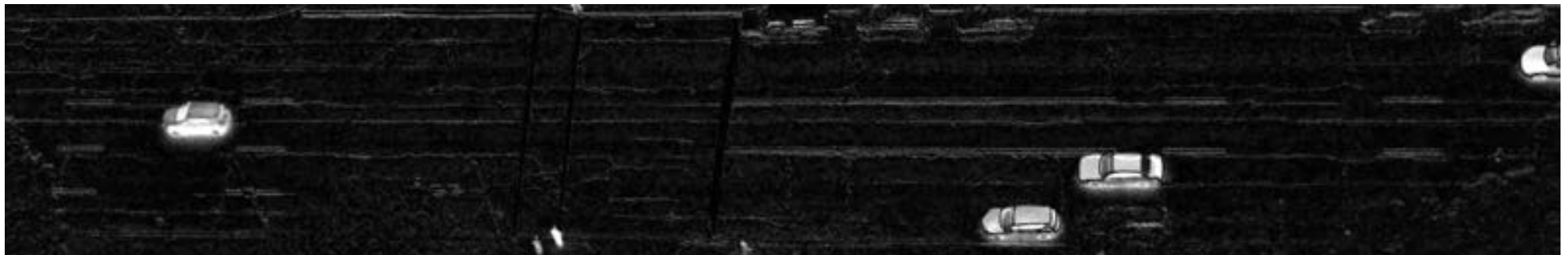
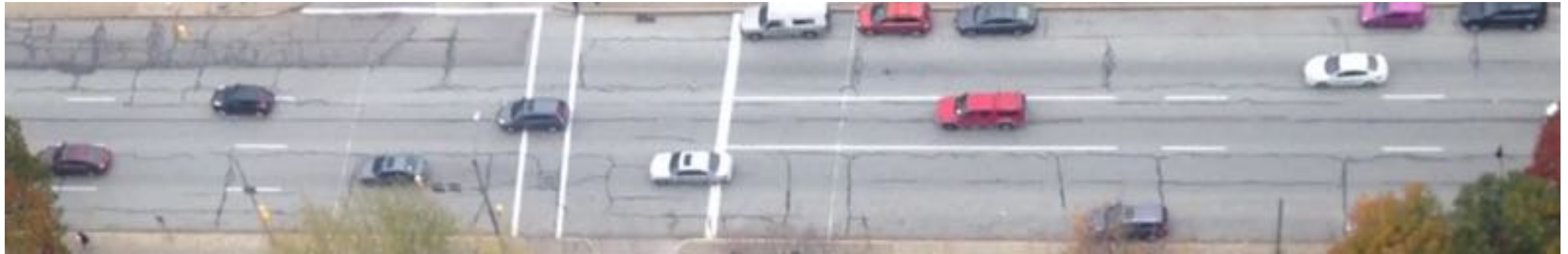
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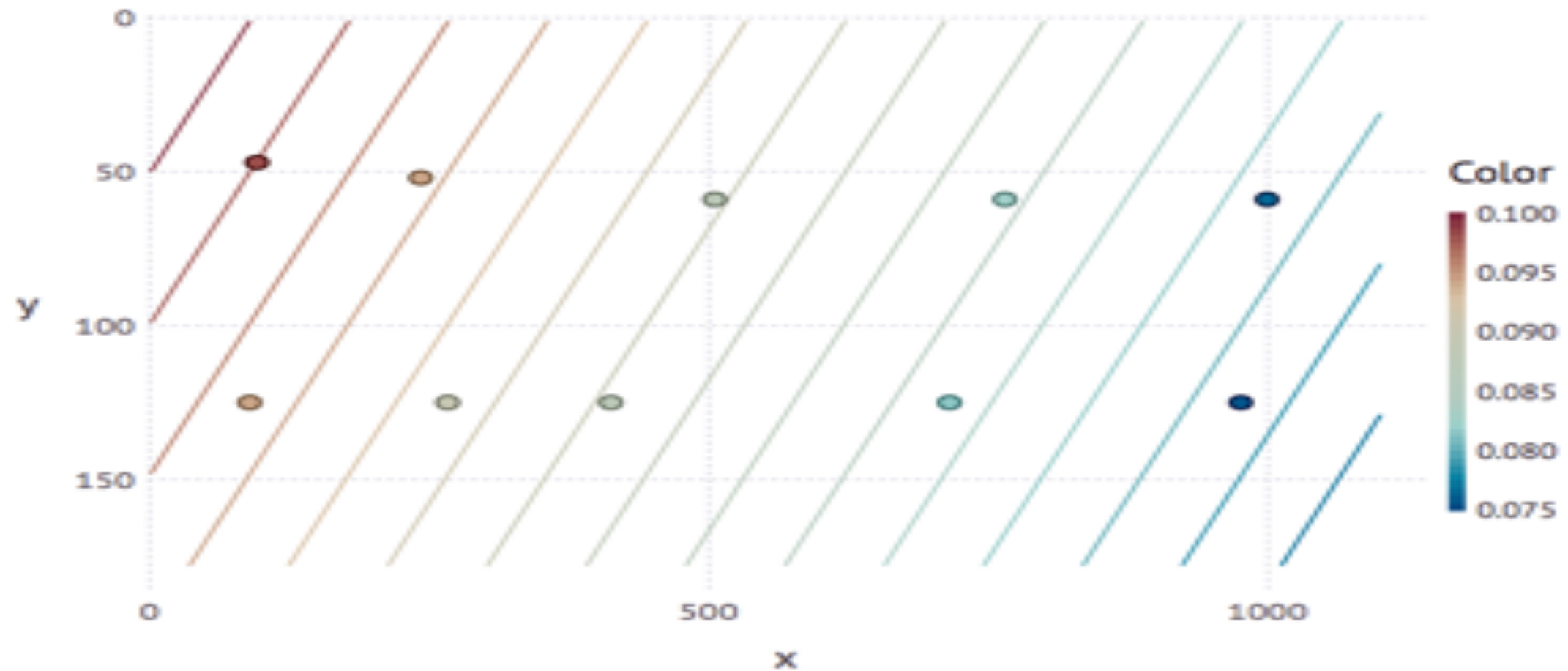


# Primitive 'pipeline'





# Scale?





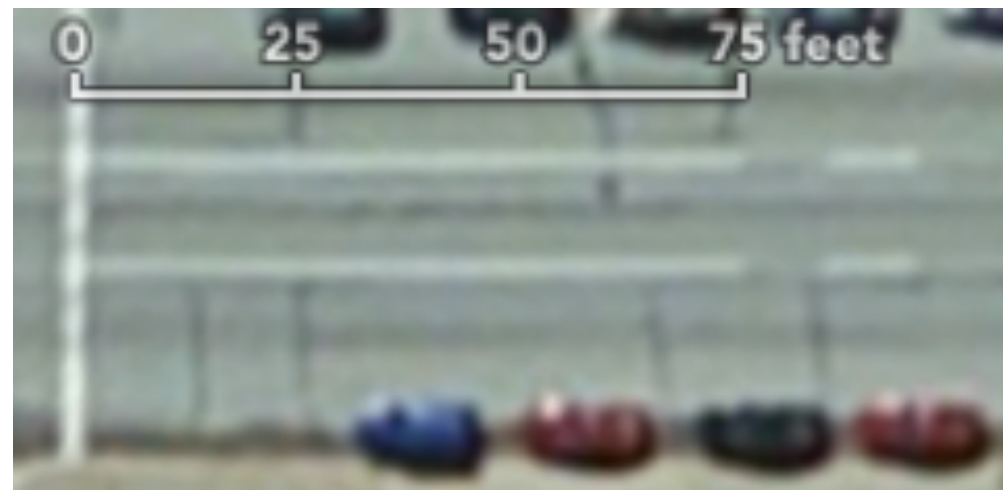
# Scale?



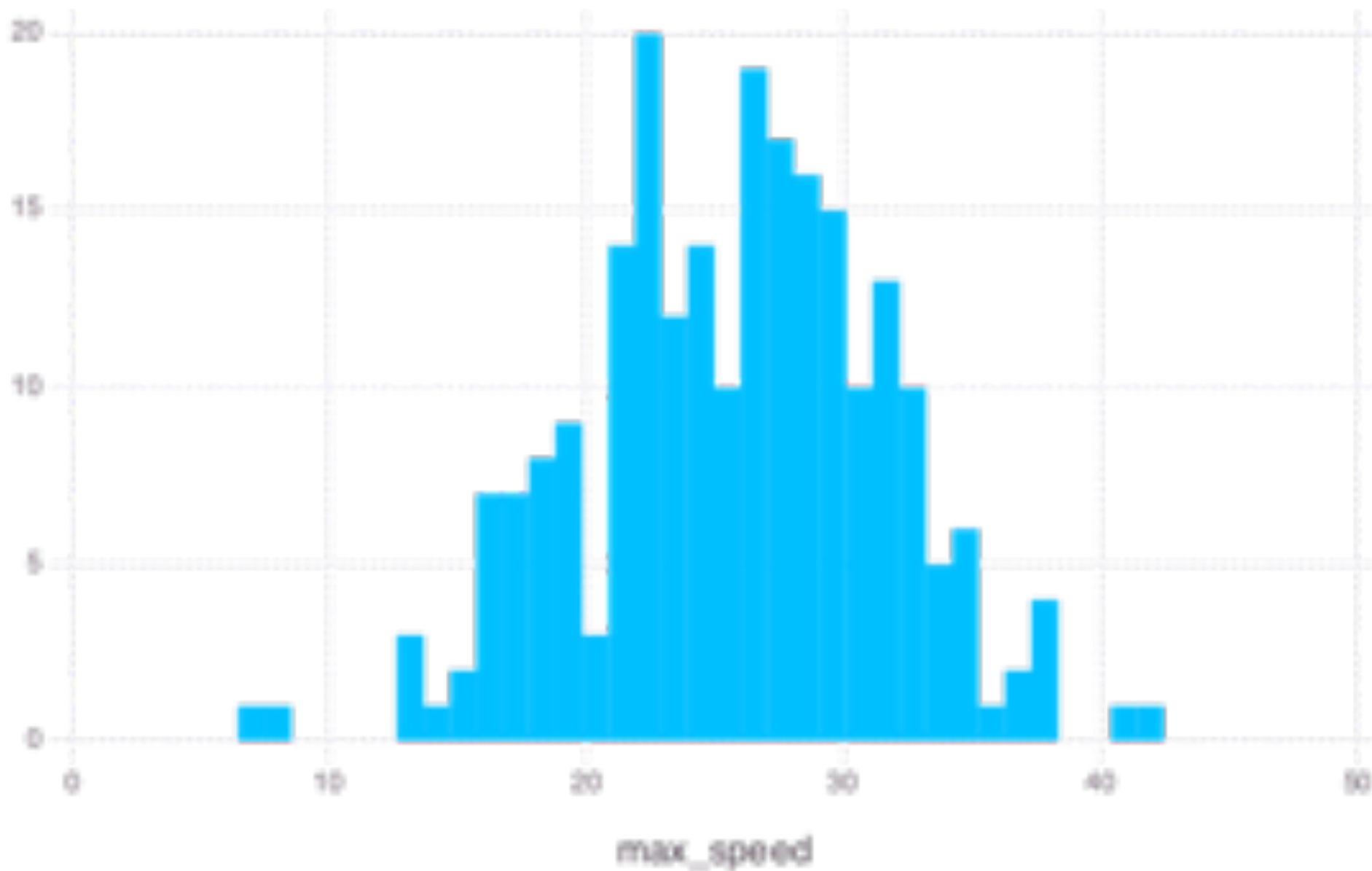
Approximately 30.63 meters, or 100.5 feet



Approximately 22.86 meters, or 75.02 feet



# Final answer\*



# So what happened?

- I sent a cold email to a local advocacy group that had already been pushing for change
- They loved it; posted their own story about it
- Picked up traction in local newspaper, radio, coding groups





The road has been redesigned...  
three years later as planned



# What worked?

- The connection to the non-profit **advocacy** group
- An **existing energy**/interest/appetite
- Bare minimum product — but **animations** sold it
- News loved that this **wasn't my day job**
- They loved that it was **open source** and that I just used my **phone** to collect data
- I think the **mid-size city** also helped



# The challenges

- Data, data, data
- Often the most interesting/useful data is locked up: private, personal, and protected
- Rising above the noise
- Time and energy
- Finding a clear message and visualization

# Collaborations

- Check in your local area for open data meetups
- My guess is that many non-profit advocacy groups don't know what's possible... but connecting there can be a challenge

# Finding open data

- Open portals are often limited and have been stripped of the most impactful/interesting things... and what is there is often already being worked on!
- Collect it yourself (but be careful)
- One potential option: FOIA
  - This takes work, but really anyone can submit a FOIA. Treat it like a database and count on failures. First ask about the existence of a database. Then ask for its tables. Pick an interesting sounding one and ask for its columns and data types. Then its size. Then (finally!) ask for a subset of the rows.

*What ways can we  
creatively examine issues  
we care about?*

<https://github.com/mbauman/TrafficSpeed>