

**Mike Fontaine**  
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# Evaluation of Waze Data



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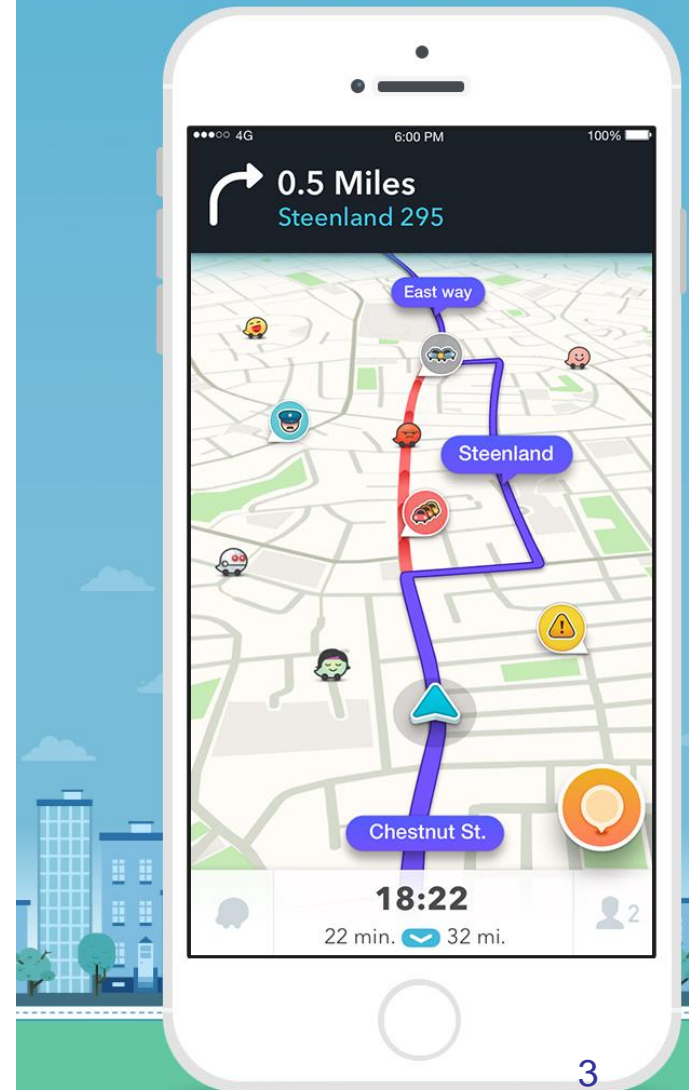
I-95 Corridor Coalition Crowdsourcing Summit

Philadelphia, Pennsylvania, September 14, 2017

# Waze

- Navigation app that allows users to report road conditions
- 55 million active users
- 360 thousand crowd sourced map editors
- 55 municipal/government partners

**OUTSMART TRAFFIC WITH  
THE WORLD'S LARGEST  
COMMUNITY OF DRIVERS**

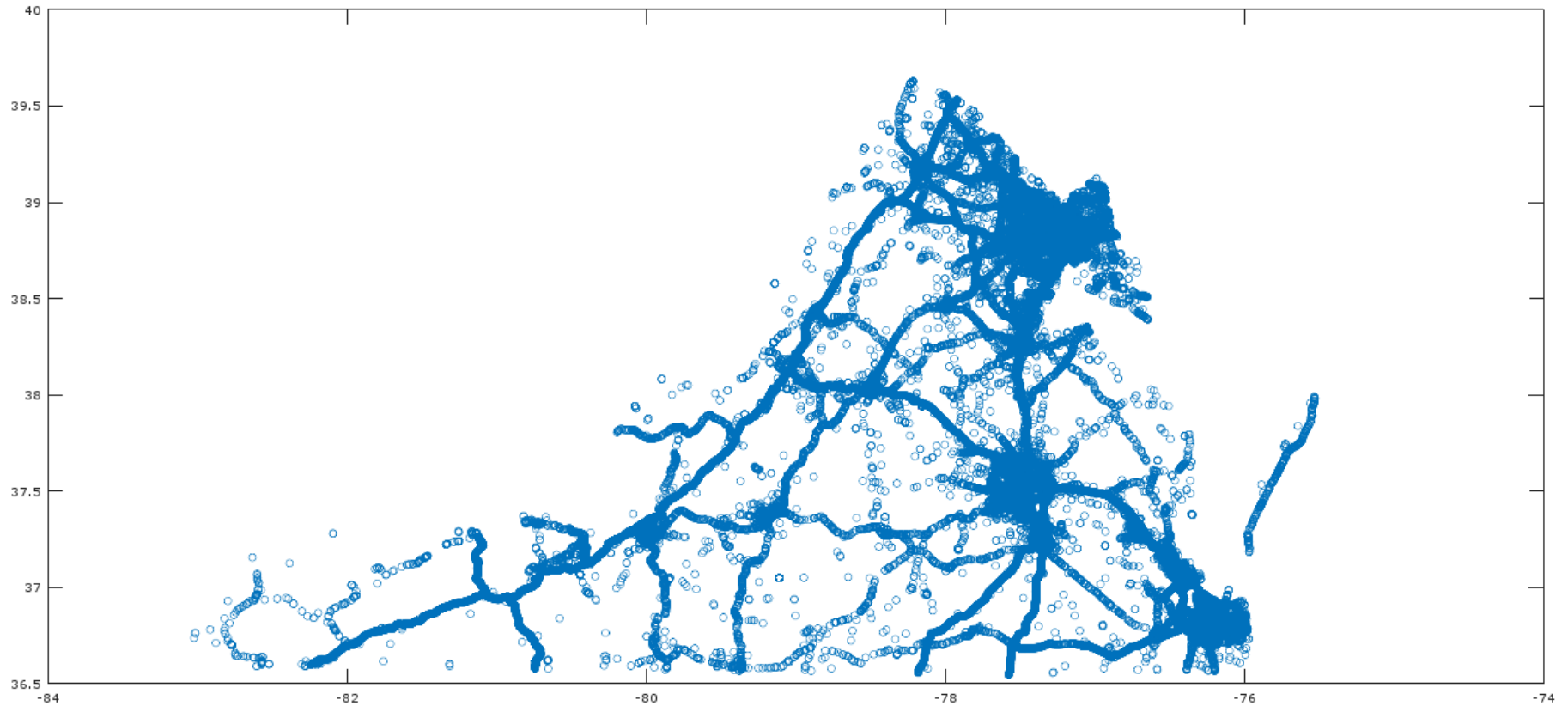


# Initial Analysis

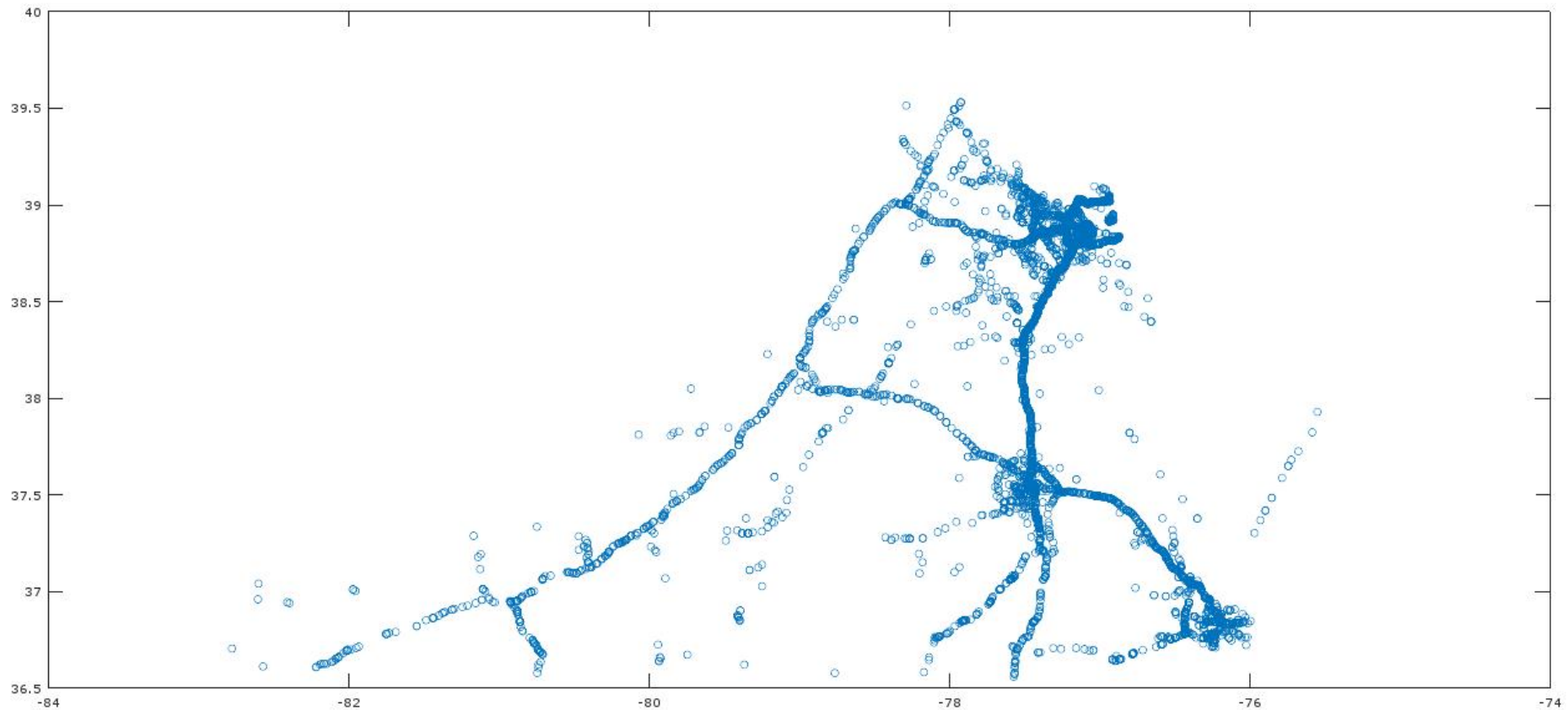
- Analysis period February 5 – 25, 2017
- All roadways in Virginia, all types of Waze data
- 329,368 incidents during this time, or ~16,000 per day.
  - About 20 times more incidents than VaTraffic over the same roads and incident types



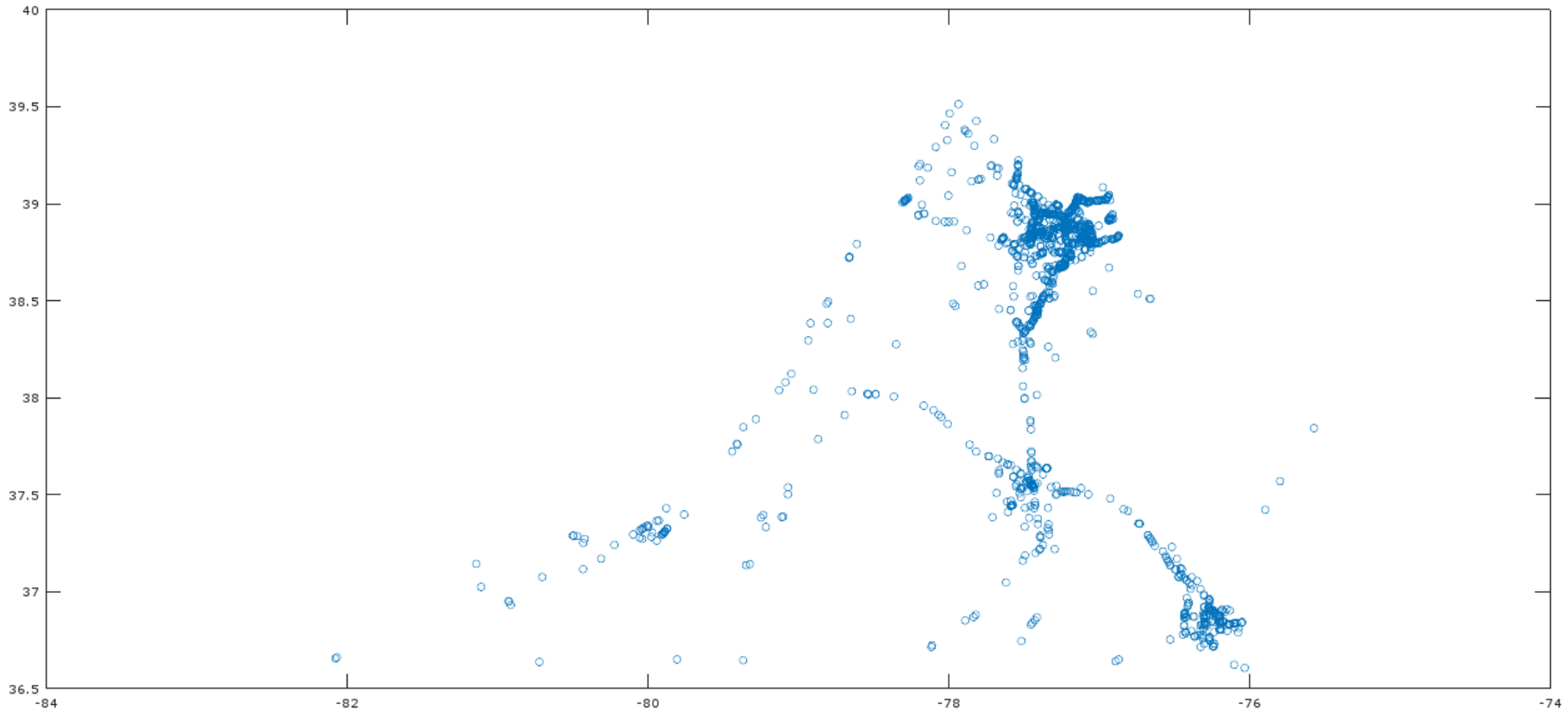
# All Three Weeks



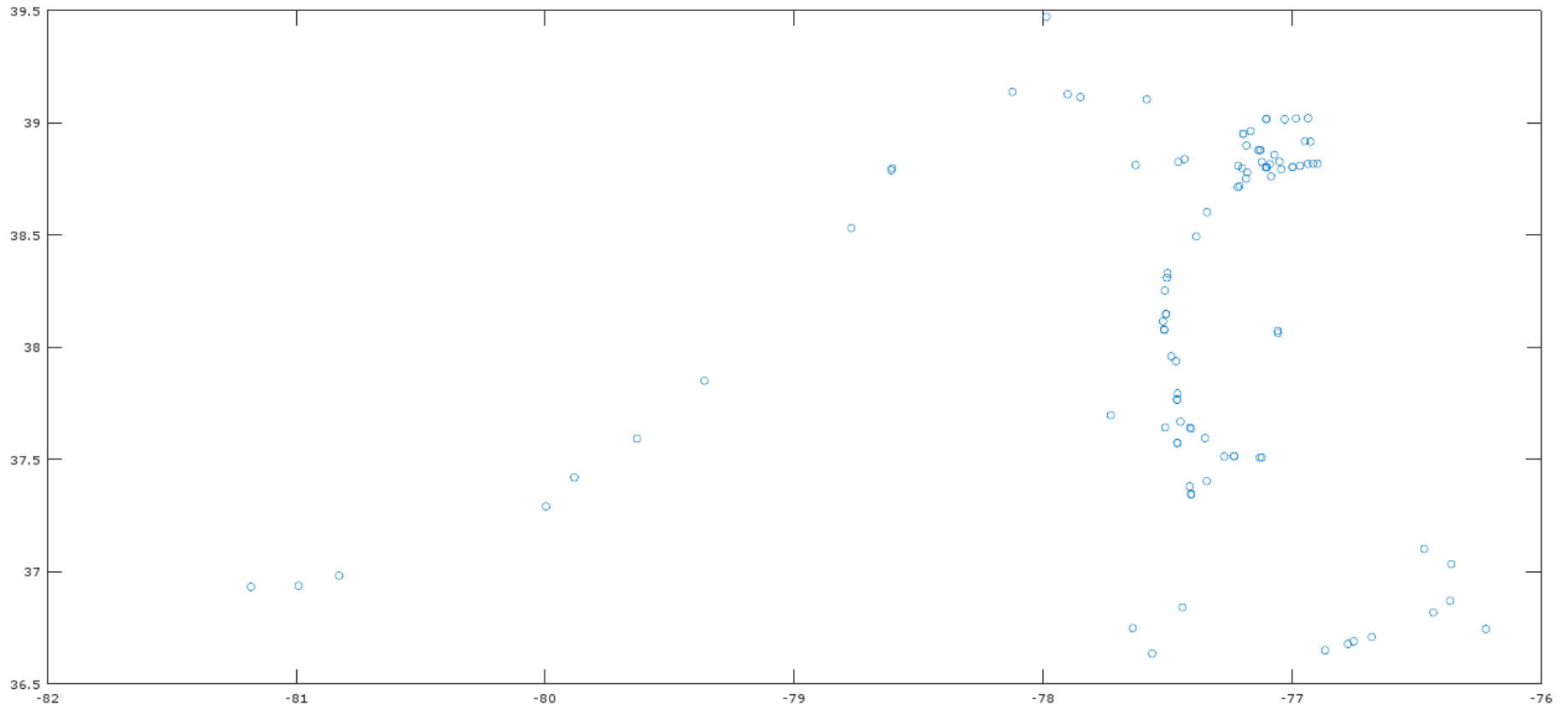
# One Full Weekday



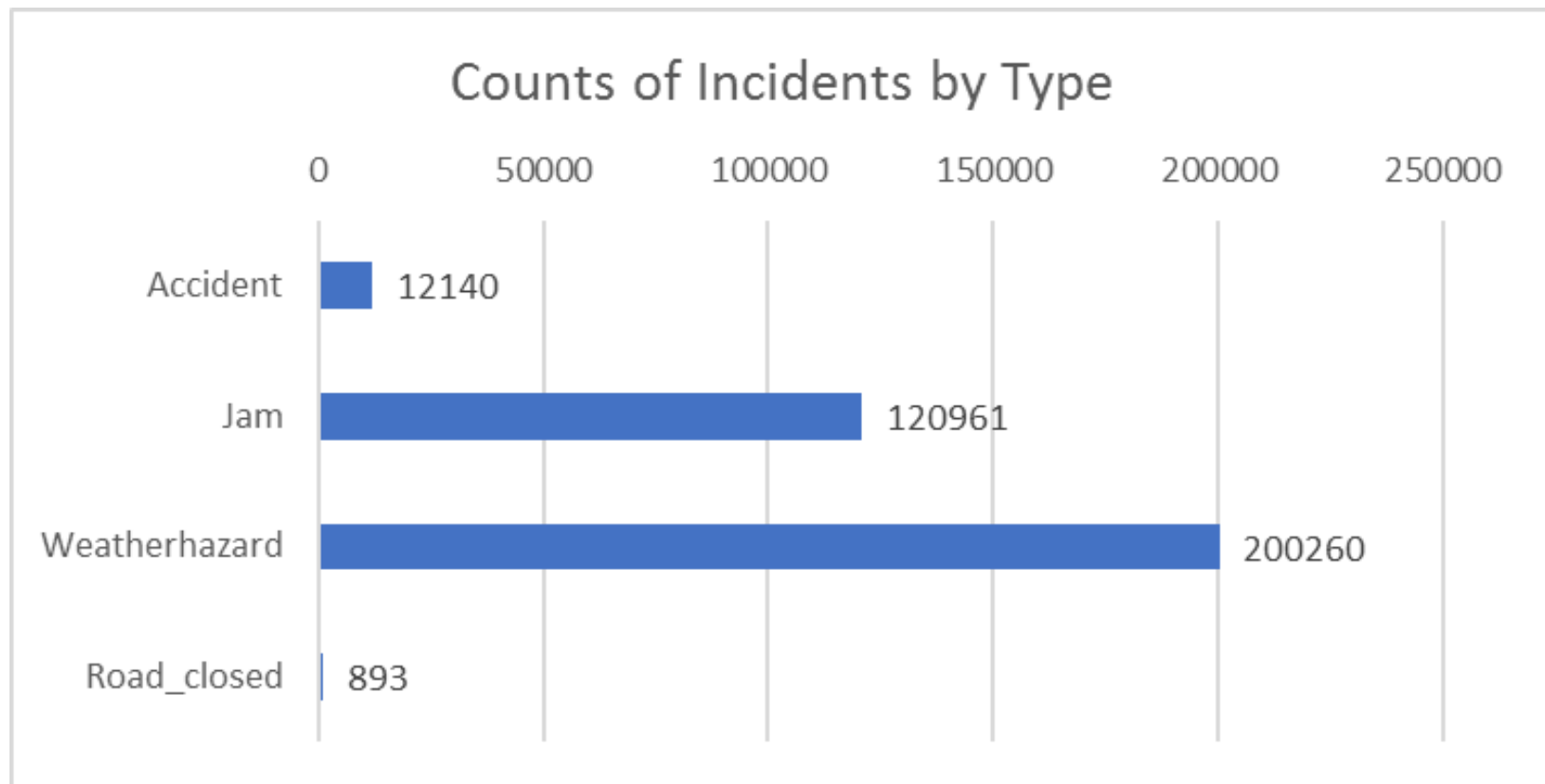
# One Hour, Peak Period



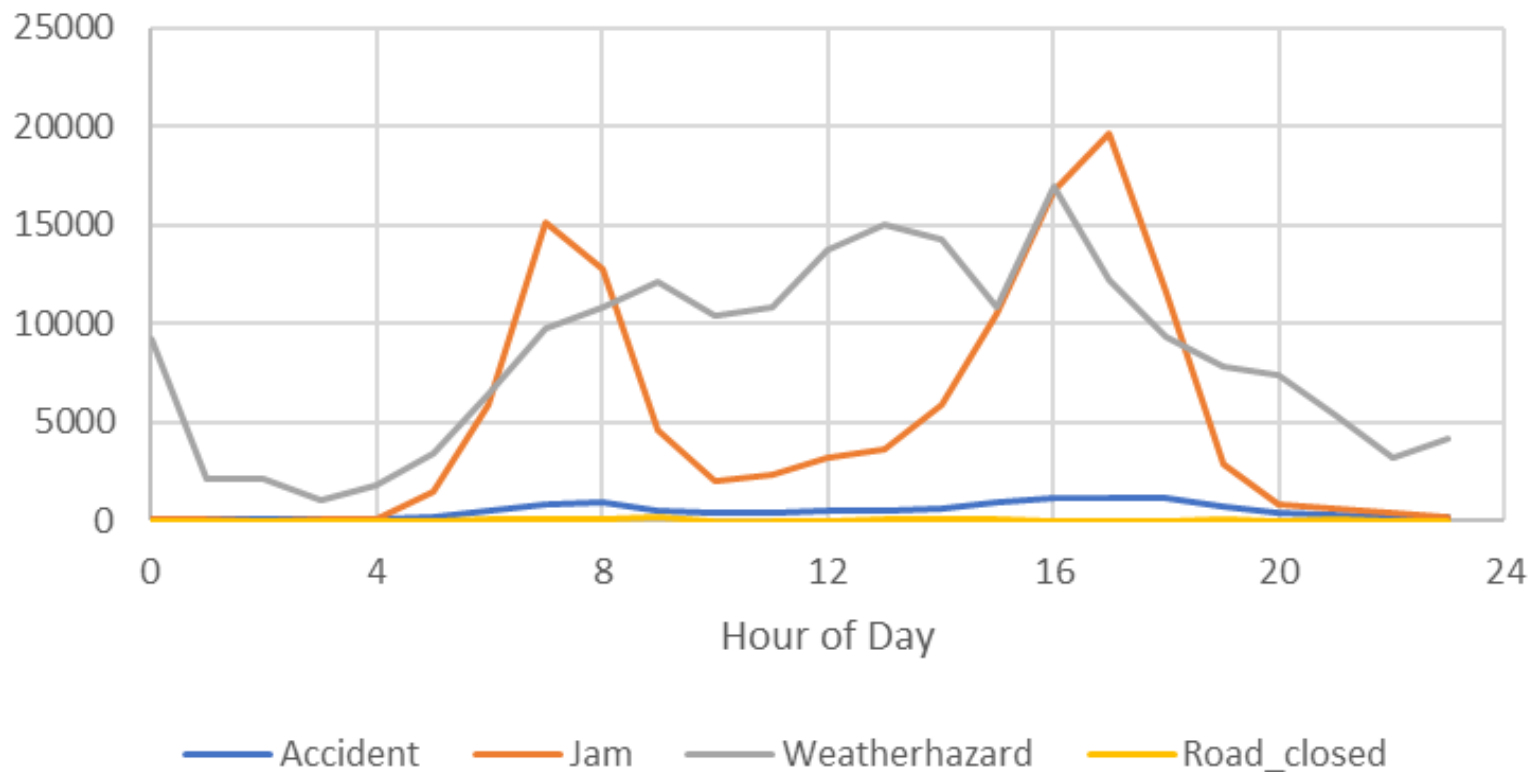
# One Hour, Off Peak

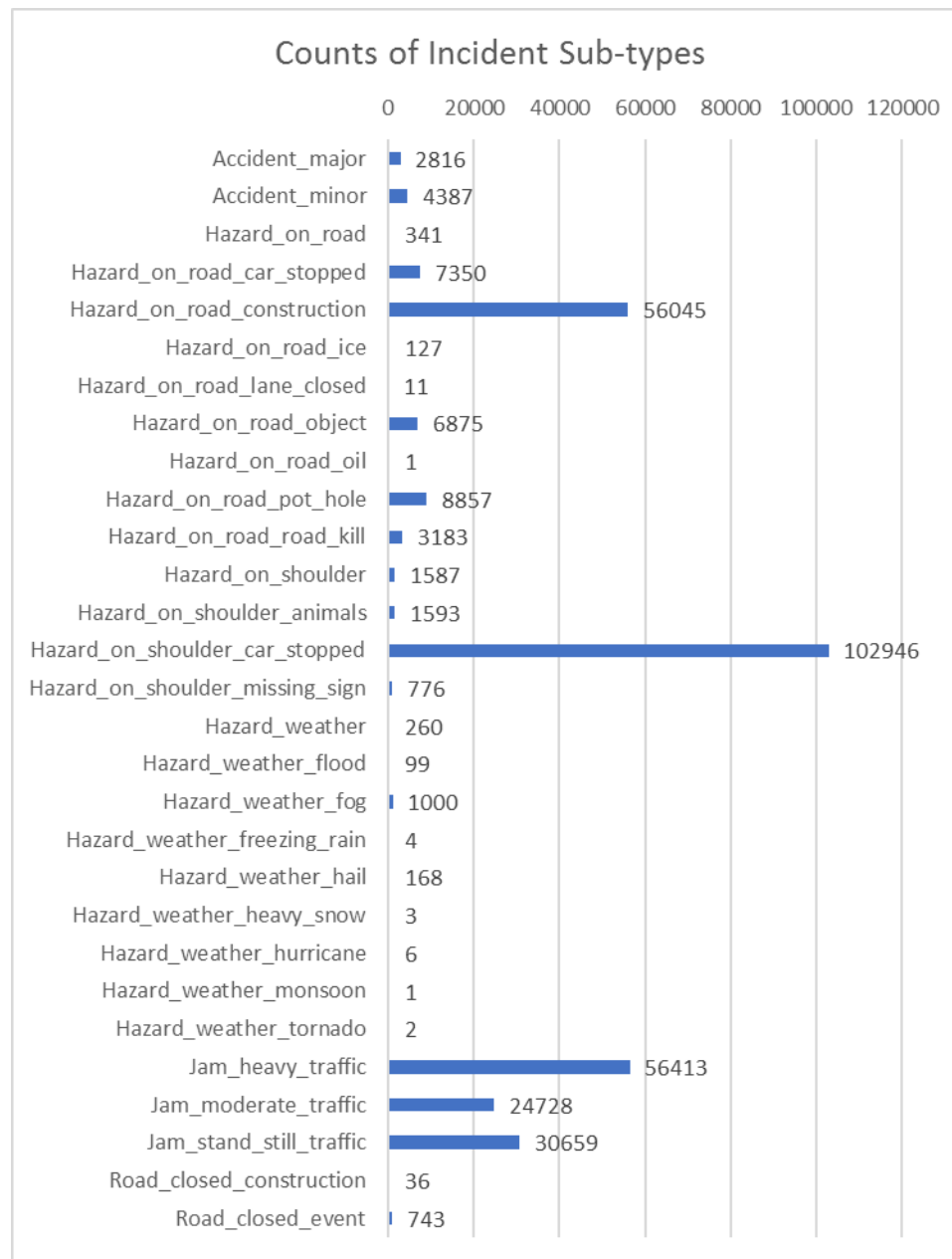




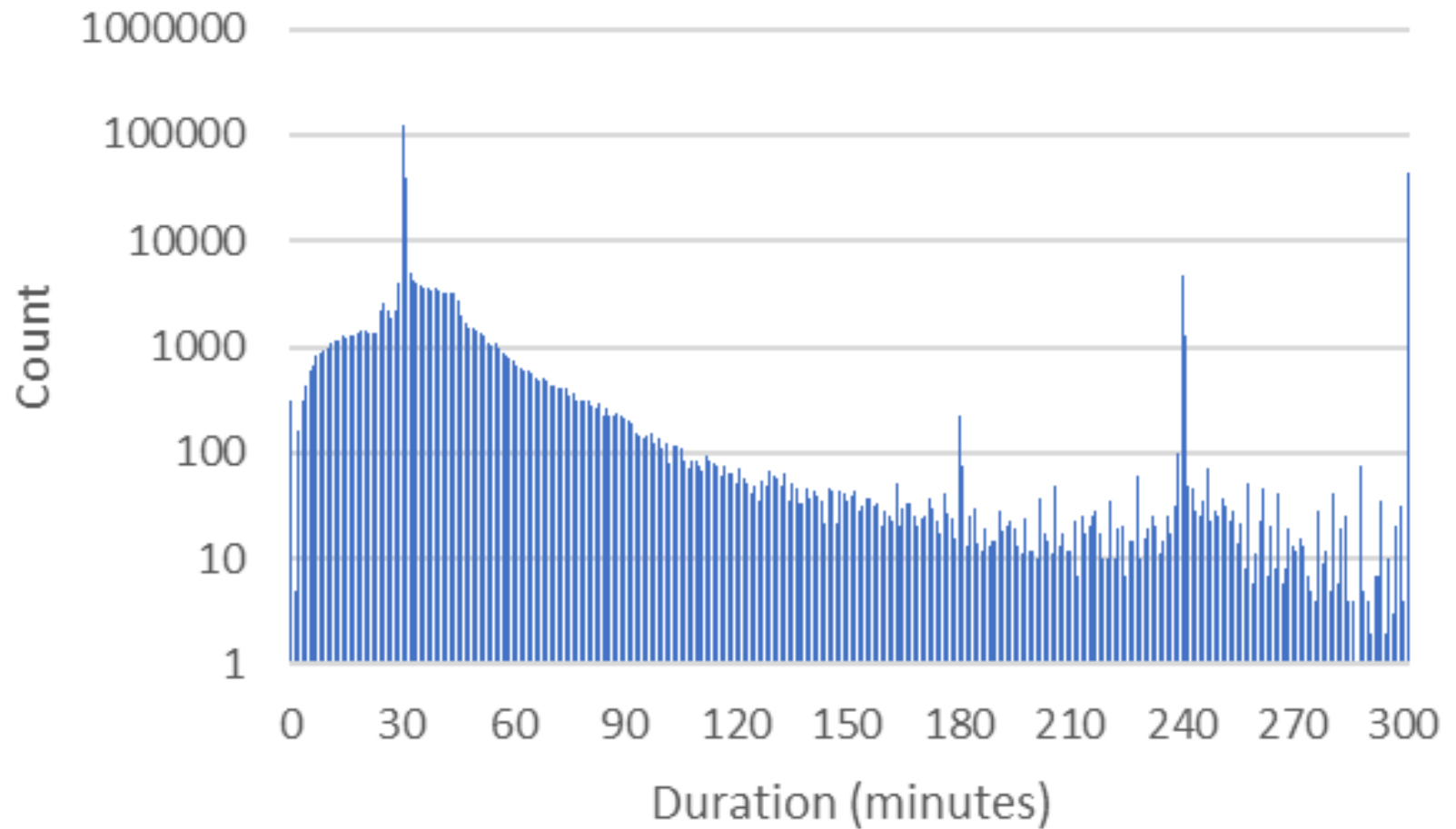


## Incident Type by Time of Day





## Durations of Incidents



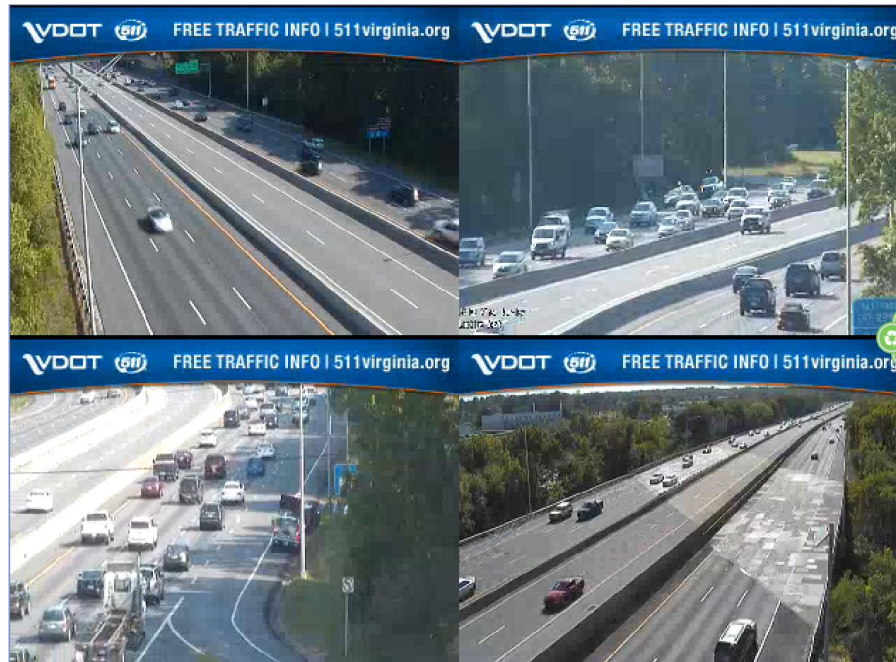
# Incident Reliability Rating

- Waze users are ranked based on reporting accuracy, from 1-6.
- Based on ranks of reporting Waze users and other factors, Waze assigns a 1-10 reliability score to an incident.
  - No scores below 5
  - 98% of incidents were either 5 or 6



# Ground Truth

- To assess ground truth incident timelines, captured screenshots at one minute intervals from four traffic cameras on I-64 in Norfolk, VA for three weeks



# Ground Truth

- Important to consider both the time the incident is logged into TOC database, as well as time when camera repositions onto the incident
  - TOC operator is often aware of an incident several minutes before entering it into the database



# Roadkill and Potholes

- Ongoing analysis of Waze roadkill and pothole reports
  - Daily drive-by confirmation of all reports within previous 24 hours in Charlottesville area





# Questions?

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Noah Goodall

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# Additional Questions?

Remaining Questions from the CHAT Box



# Open Discussion



# Reminder

- ***All Participants – in-person and via webcast***

- Please give your name and agency before asking your question (at least the first time)

- ***Participation in-person***

- Please get the attention of a support staff member for a roving microphone

- ***Participation via webcast***

- Your phone line has now been opened.
- Please keep your phone muted until asking a question or speaking (press \*6 to mute/unmute individual phone lines)
- Please do not place call “on hold” as your hold music will be heard by the group

# Wrap Up



# Contact Information

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# Thank You!



**I-95 CORRIDOR  
COALITION**