

PROJECT OVERVIEW

There is growing interest in the use of Twitter as a community policing tool. But there is little exploration of the engagement strategies police employ within this space. This project aims to build upon existing research by considering:

- Connections between precincts
- Differences in police account activity/public reaction to police activity
- The demographic composition of account audiences
- Content posted by the public, directed toward police

DESCRIPTION OF DATA

- This project includes data from **The Seattle Police Department** and the **New York Police Department**. Both cities are known to have a strong and varied presence on social media.
- Data include information on official Seattle PD and NYPD police accounts and users who mention these accounts .

Timelines of Police Accounts

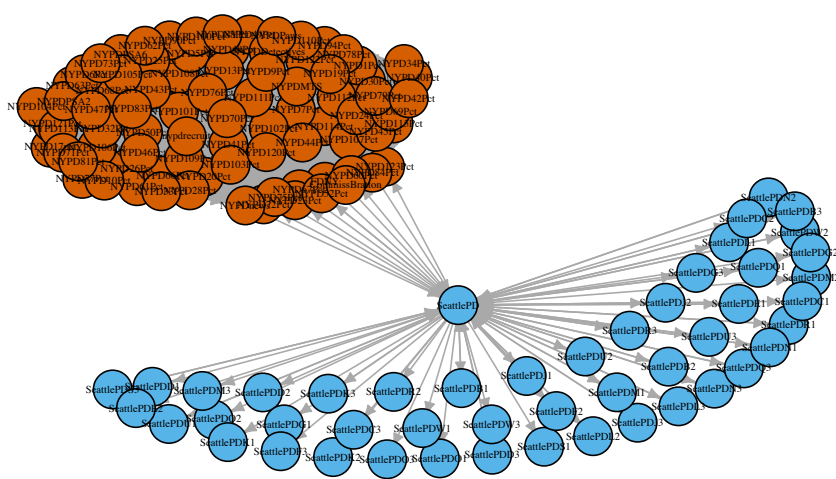
- Collected via REST API
- 135 total accounts
- 359,229 tweets

Mentions of Police Accounts

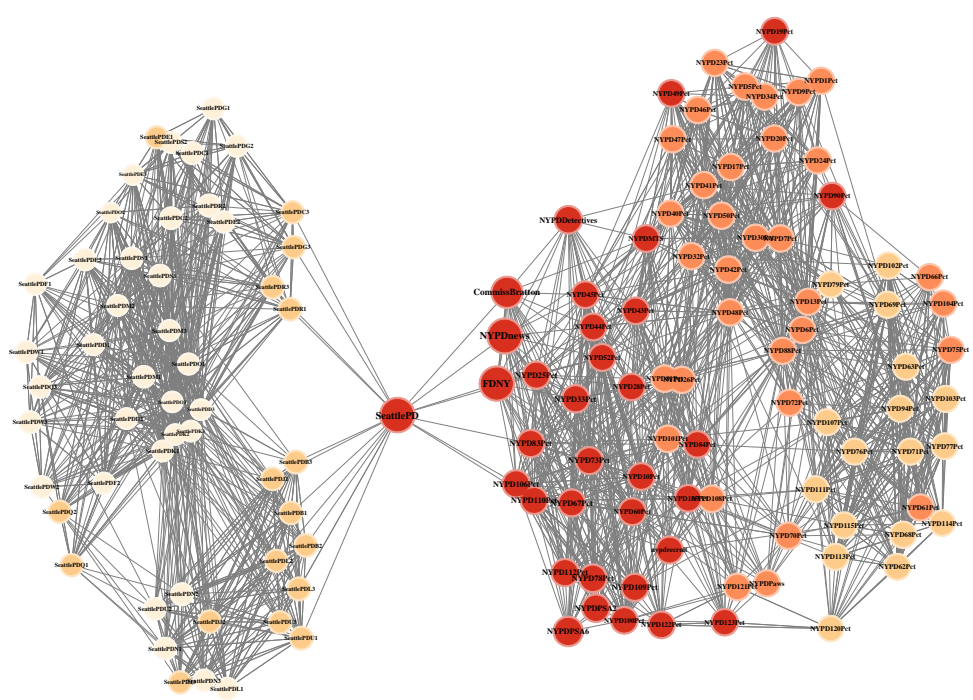
- Collected via Gnip Historical Powertrack API
- ~ 100 days of data
- 130,229 tweets (49,342 unique users)

CONNECTIONS BETWEEN PRECINCTS

- Focus of users’ attention is a core network consisting of NYPD oversight accounts and the Seattle PD.
- Seattle PD acts as a broker between Seattle and New York City.
- Seattle PD and NYPD oversight bodies seem to comprise the structural core of the accounts included in this analysis.



Connections between police accounts



Shared audience for police accounts

CONTACT INFORMATION

- This is supported by the University of Washington Department of Sociology, Information School, and eScience center. Data were provided through the UW by Gnip.
- For more information, contact Nina Cesare: ninac2@uw.edu

DIFFERENCES IN ACCOUNT ACTIVITY

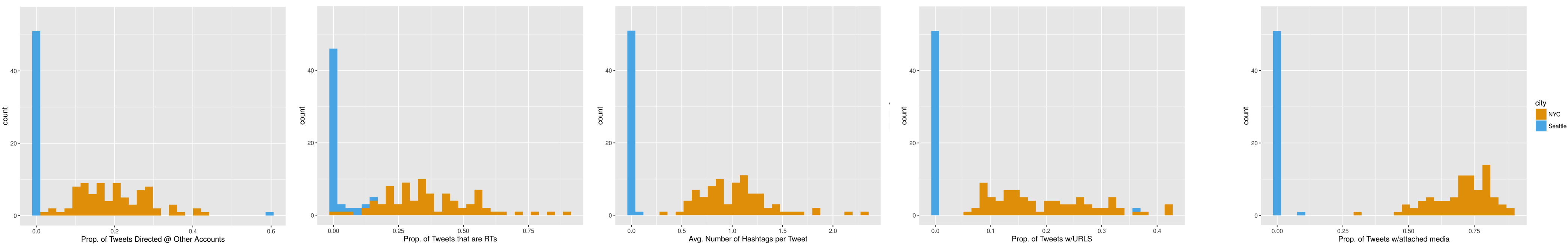
Due to the novelty of using Twitter as a policing tool, norms regarding this practice may be co-evolving. As they adapt to this space, questions may arise for precincts such as:

- How Frequently should they issue tweets? Should they mention other accounts?
- Should tweets include multimedia (i.e. images, videos)? Should they link to external information?

This section explores the Tweeting strategies of Seattle PD and NYPD accounts and public response to these strategies.

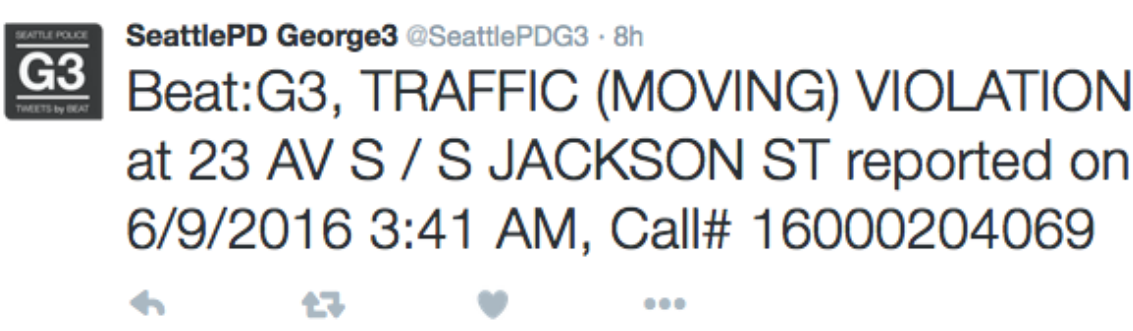
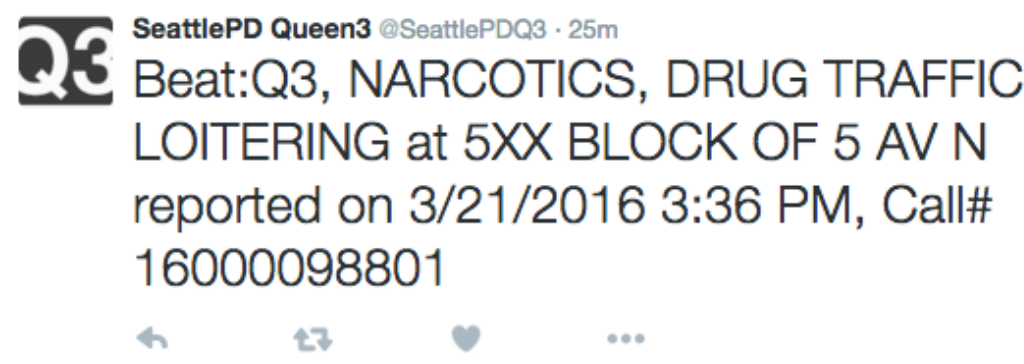
Tweet Content and Tweet Activity for Seattle PD and NYPD

We note significant variation between New York City and Seattle in regard to the structure and content of their tweets



The Presence of Seattle “Beat” accounts

Many accounts on Seattle Seem to be used primarily to track criminal instances rather than engage with the public



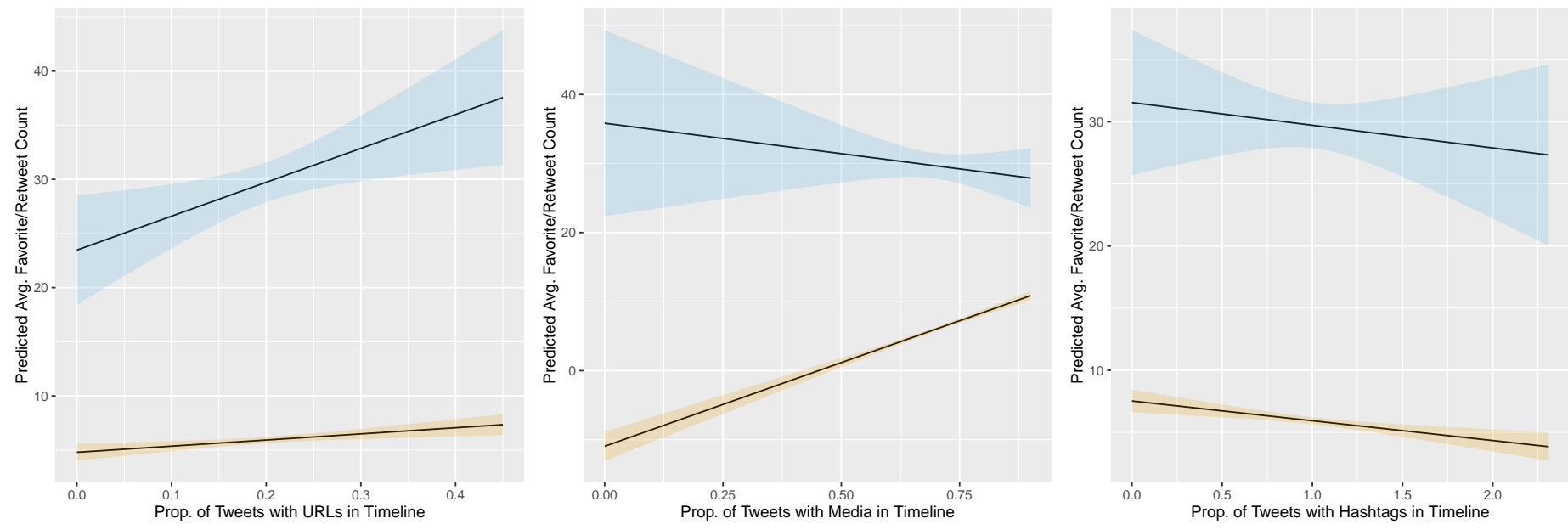
Account	@	RTs	URLs	Media	Hashtags
Seattle PD	0.596	0.123	0.365	0.106	0.100
Seattle Beat Accounts	0	0.015	0	0	0
NYPD	0.199	0.367	0.197	0.703	1.033

What do these differences mean?

- NYPD and Seattle PD have adopted very different behavioral patterns on Twitter.
- Of all Seattle PD accounts @SeattlePD most closely resembles @NYPD accounts and is most closely tied to NYPD accounts,
- Implies that law enforcement agencies are co-creating norms for behaviors and best practices within this space.

Reactions to Media and URL inclusion among non-beat accounts

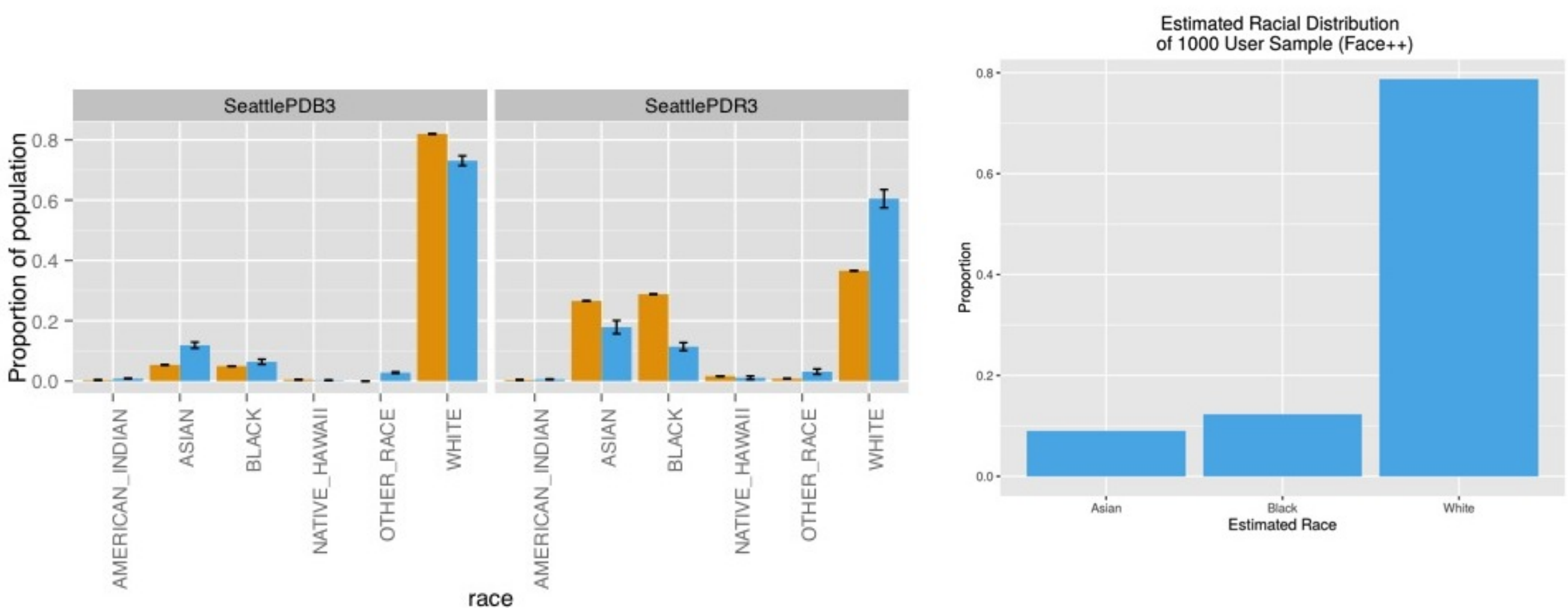
We note that accounts that tend to include more links in their tweet receive more retweets, while accounts that tend to include more media in their tweets receive more favorites. Users do not respond well to accounts that - on average - use many hashtags in their tweets.



EXAMINING THE AUDIENCE: THE CASE OF THE SEATTLE PD

Individuals *elect* to follow/receive messages from police accounts. Given this, *do account messages reach a diverse audience?* We examine: estimated demographic composition of those who follow, mention police accounts

- Demographic estimate of followers created using geotagged tweets/census data.
- Demographic estimate of users mentioning accounts created using Face++.
- Results indicate racial imbalance in connection to police accounts.

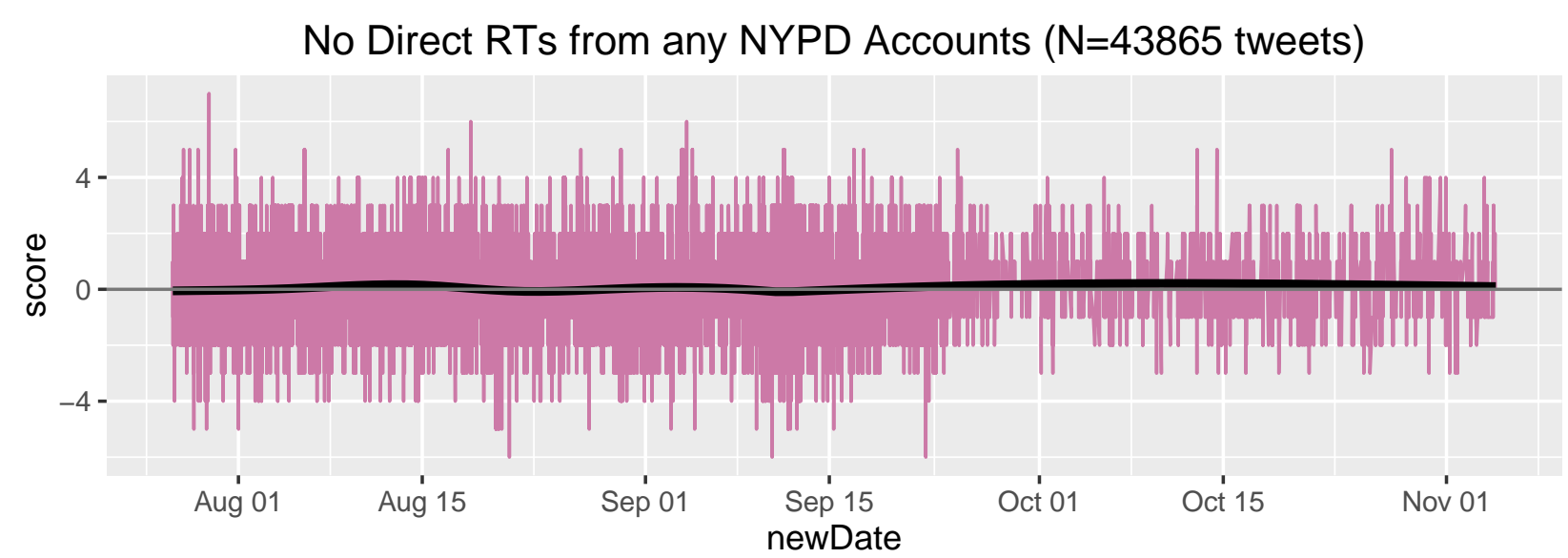
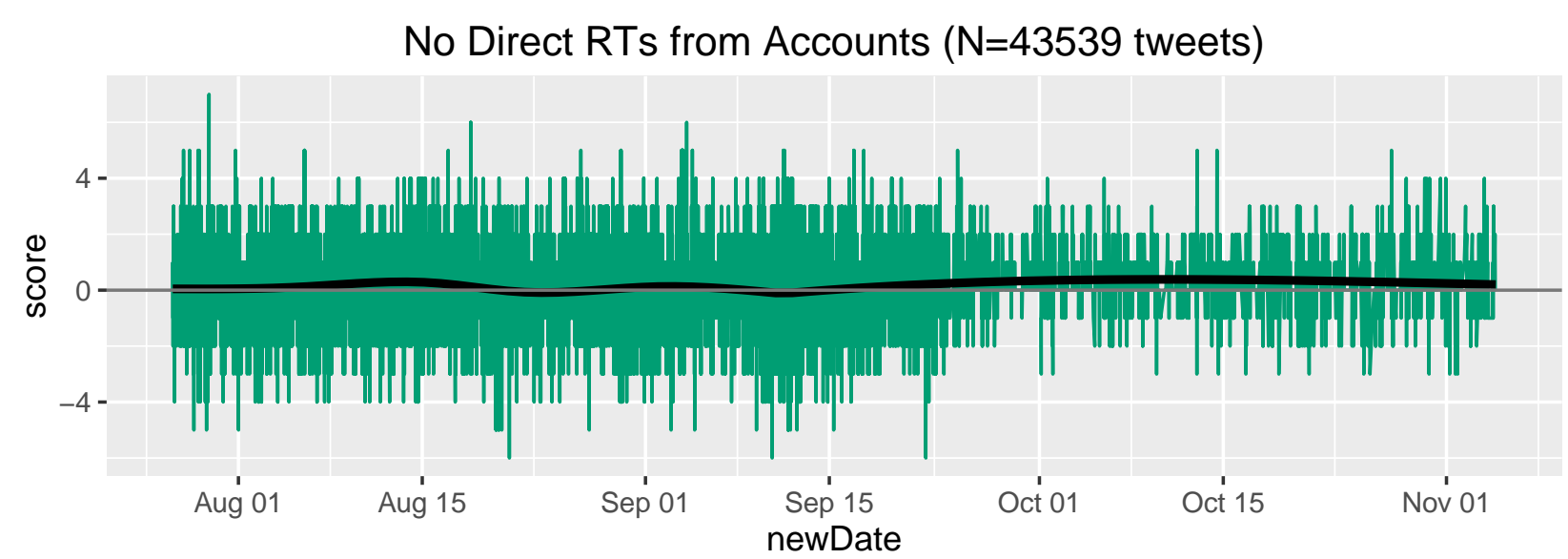
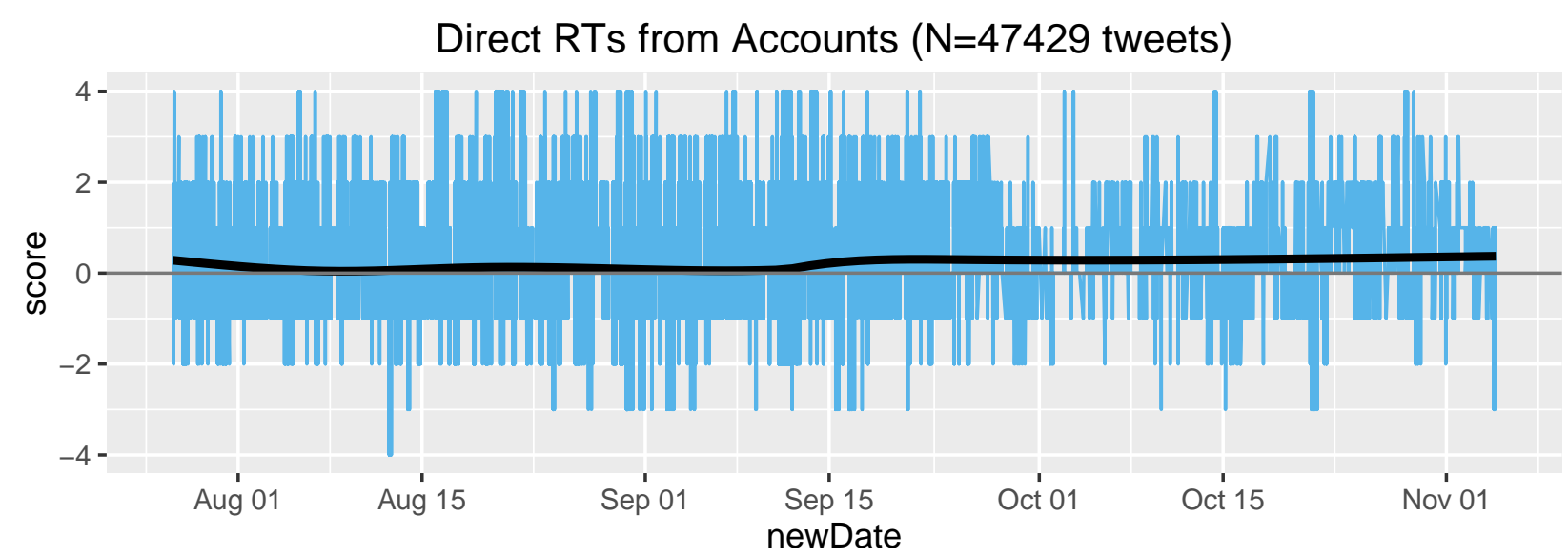
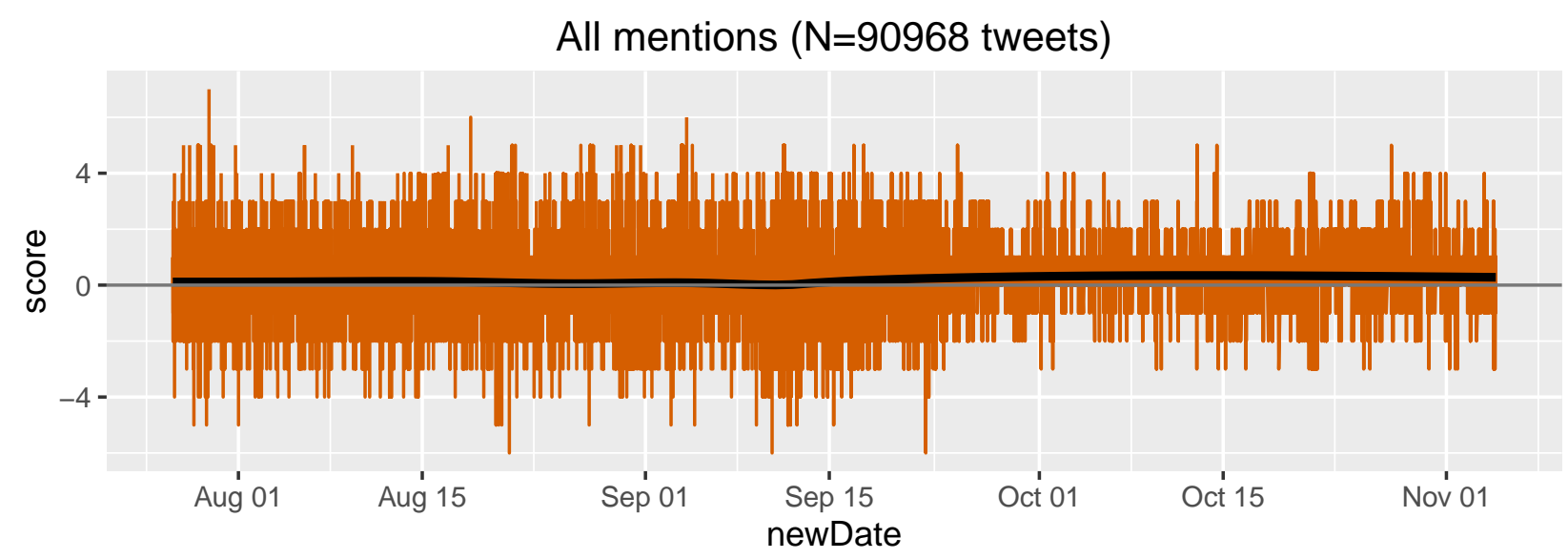


CONVERSATION WITH THE PUBLIC

- We may also consider content posted by public that mentions police accounts.
- Given tweet volume, we focus on the *top 10 most frequently mentioned accounts* within the sample.

Account	Description	Mentions in Public Corpus
NYPDNews	The official Twitter of the New York City Police Dept.	36167
FDNY	The official New York City Fire Department feed	28912
CommissBratton	Commissioner of the New York City Police Department	12897
SeattleFD	Seattle Police news/events	8664
NYPD19Pct	Deputy Inspector James M. Grant, Commanding Officer. The official Twitter of the 19th Precinct #UpperEastSide #UES	3770
NYPD108Pct	Captain John Travaglia, Commanding Officer. The official Twitter of the 108th Precinct	2592
NYPD78Pct	Captain Frank DiGiacomo, Commanding Officer. The official Twitter of the 78th Precinct	2546
NYPD1Pct	Captain Mark Iocco, Commanding Officer. The official Twitter of the 1st Precinct	1855
NYPDDetectives	NYPD Chief of Detectives	1791
NYPD104Pct	Captain Mark Wachter, Commanding Officer. The official Twitter of the 104th Precinct	1658

- The following display tweet sentiment over time within total sample, select sub-samples.
- While independently generated content has semi-frequent negative dips, people respond well to and retweet positive content posted by police accounts.



- Word frequencies confirm that voluntary rather than retweeted info is more critical (mention of James Blake).

Corpus	Most frequently occurring terms
Top 10 accounts	343, 800577tips, call, commissbratton, end, fdny, members, neverforget, nyc, nypd, nypdnews, officer, police seattlepd, today, tour, will
Direct Retweets	343, 800577tips, ago, call, commissbratton, end, fdny, members, neverforget, nyc, nypd, nypdnews, officer, police, today, tour, wanted, will, years
No Direct Retweets	bildeblassio, blake, commissbratton fdny, get, james, nyc, nydailynews, nypd, nypdnews, police, remember, seattlepd, thank, today, will, wwe
No NYPD Retweets	bildeblassio, blake, commissbratton, fdny, get, james, nyc, nydailynews, nypd, nypdnews, police, seattlepd, thank, today, wwe