Transport Safety Commission

Written evidence

Media/Digital Democracy enquiry

Placr Ltd is the leading public transport data aggregator in the UK, serving users, developers and operators with timetables, departures, routes and performance information through its Transport Applications Programming Interface (TransportAPI) service. TransportAPI provides open transport data with over 800 developers signed up to use the platform ranging from BT Research, Ikea and Network Rail to Giraffe.co.uk and Plentific.com. TransportAPI solutions power transport operator sites and award-winning apps alike such as CityMapper, BusExpert and UK TravelOptions, services such as TfL's Overground Departure Boards, ELGIN's journeymapper.org travel portal and all of Heathrow Airport's public transport services in its sites and apps.

Transport API is based on open data feeds from key UK industry sources at Traveline, Network Rail and TfL, so we offer the most authoritative and best value sources for mobile apps, travel portals, information screens and hyperlocal sites in the sector. We also gather social media updates through our TransportBuzz.com service, which is a commuter sentiment analysis service. These feeds and services are now in use by over 800 developers and organisations in the UK to power their own transport information solutions.

TransportAPI does not engage directly in transportation safety work, and does not currently have any clients using our data in this area. However, at the request of the Transport Safety Commission secretariat we are providing this written evidence to indicate the potential of our data in this area.

TransportBuzz

The TransportBuzz.com service filters the Twitter public timeline to identify tweets that mention a corpus of transport keywords and that have geolocation enabled. The service identifies, publishes and archives between 30-40,000 tweets of this kind per day... and the archive extends back to February 2013. These tweets can be retrieved through the API by date, location or content, and so it is feasible to create services displaying tweets with specific content in real-time or to extract sets of tweets from the archive. TransportAPI collaborated with CommonPlace to develop a prototype transport sentiment analysis service that was showcased at the launch of the Transport Systems Catapult in June 2014.
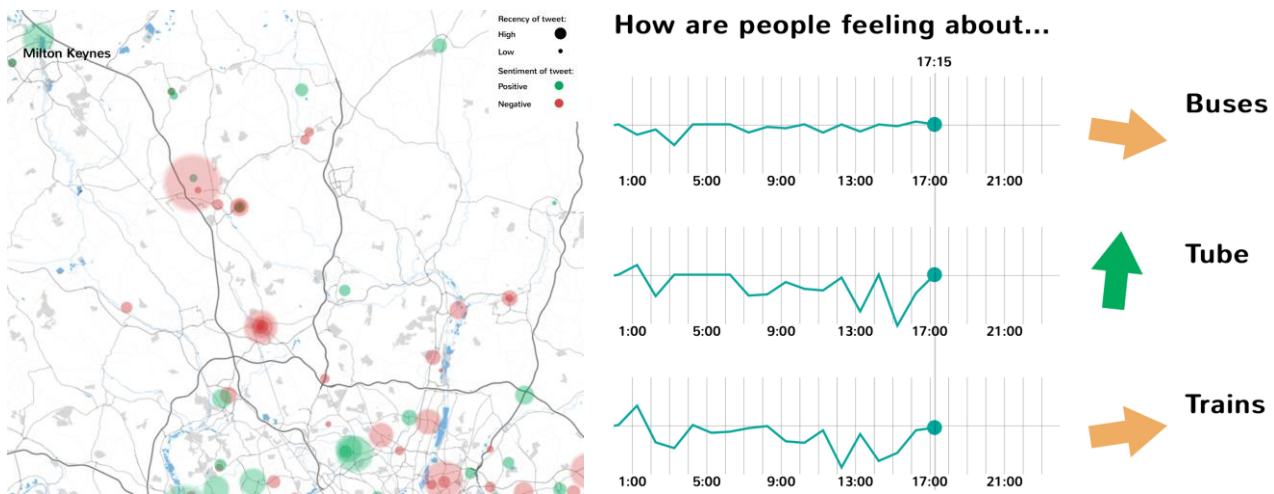
To give the TSC an indication of the use of this and other such services we can give some examples from a day of tweets extracted from the archive on 3rd September 2014. This day followed on from a social media rumour that the London tube might be the focus of a terror attack. From 12600 tweets we see high word frequencies on the following terms related to this

- Threat

- Terror

- Police

- Attack

Other general safety related terms that featured highly included:

- Watch

- Avoid

- Night

Some examples of the tweets that were captures from this set included:

- Social media contains lots of rumours regarding threats to tube network tomorrow. There is no specific threat so keep calm

- Happininess is a state of being when your tube, announced as terminating at Parsons Green, actually runs through to Wimbledon

- Question for Londoners, why at rush hour do you run for the tube door like your life depends on it, when they are every two minutes

There are several challenges to the widespread use of this technique. Only 5% of tweets have geolocation, making this a small sample of all tweets. The filtering of tweets to find the right meeting of 'tube' and 'train' required for the transport industry is still evolving and required further work on linguistic context. Finally, the derivation of sentiment from text snippets of 140 characters is prone to errors due to the subtleties of meaning. However, this technique clearly has future potential as a real-time indicator of sentiment and reporting tools for incidents.

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TransportAPI