



Modernising the  
***National Rail Passenger Survey***  
(*NRPS*)

**Ian Wright**

**Head of insight**

**Keith Bailey**

**Senior insight advisor**

**Welcome!**

**Ian Wright, Head of Insight**

# Agenda

- 14.00 Welcome and introduction – Ian Wright
- 14.10 *NRPS* Consultation feedback – Keith Bailey
- 14.45 Shortened questionnaire and enhanced online pilot – Keith Bailey
- 15.00 Q & As – Ian Wright
- 15.10 Social media tracking – Ping Teo
- 15.20 Emotional tracking – Emma Bramwell
- 15.30 Q & As – Ian Wright
- 16.00 Close

# A reminder of the benefits of change

- Better quality
  - Better response rates
  - Better interview experience for passengers
  - Better sampling/weighting
- Better value
  - Focussed core *NRPS*
  - Collaborative approach to measuring passenger satisfaction
- Future-proofed
- Doing nothing is not an option...!

# Stakeholder engagement

- 41 organisations responded
- Positive level of engagement across the industry
- Mixed levels of understanding of how *NRPS* operates, statistics, etc
- Varied level of detail in feedback
- Thank You!

# *Department for Transport's support for our proposals*

- Passengers at the heart of everything
- First step in modernising passenger satisfaction metrics
  - Fully support current pilot of shortened core questionnaire/enhanced online approach
  - Have requested proposals for additional fieldwork waves/continuous monitor
  - Keen to expand on trust and emotional experience
  - Open to additional/supplementary data collection
- Fully support reduced pre-release access

# ***NRPS* Consultation feedback**

**Keith Bailey**, Senior Insight Advisor

# Five categories of proposed changes

- The questionnaire
- Data collection
- Immediate technical changes
- Medium term technical changes
- Governance

## 1.1 - Reduce the 'core' questionnaire length, by focussing on core metrics, and improve its presentation

- Basic agreement to the reasons for the proposal
- Concerns centre around:
  - Valued questions
  - *DfT* franchise agreements
  - Time series data continuity
  - Linkage of core and supplementary questionnaires
- Demand to improve the design
- Core questionnaire drafted with design input and use of coloured cover image
- Pilot running in parallel with Spring 2016 wave
- Looking to examine mitigations for time series data continuity and franchise commitments

## 1.2 - Review and update the core questionnaire including station and train factors

- Basic agreement to the concept, but...
- ...concerns centre around:
  - Valued questions
  - Time series data continuity
- Strong views on retaining disability/accessibility module
- Mixed reaction to addition of a 'Trust' question
- Core and example supplementary questionnaires drafted
- Includes Trust and Emotional Tracker questions
- Pilot running in parallel with Spring 2016 wave

## 1.3 - Introduce a short supplementary questionnaire (or questionnaires) to be handed to selected participants to complete after the core questionnaire, if willing

- Basic agreement to the concept
- Concerns centre around:
  - Linkage of core and supplementary questionnaires
  - Time series data continuity
- Potential topic areas:
  - Disability/Accessibility [NB: *ATOC* Assisted Travel survey]
  - Fares & Ticketing
  - Personal safety/policing
  - Passenger Information During Disruption [NB: *ATOC/ORR* PIDD survey]
  - Delays & Compensation [NB: *ORR* complaint handling survey]
  - Travel to/from origin/destination stations
- Example supplementary questionnaires drafted
  - Station access and egress
  - Fares & Ticketing
- Pilot running in parallel with Spring 2016 wave

## 1.4 - Explore options for separate additional surveys to 'fill the gaps' where questions are displaced from the 'core' questionnaire

- Basic agreement to the concept
- Concerns centre around:
  - Linkage to core/supplementary questionnaires
  - Time series data continuity
- Potential topic areas – similar to supplementary questionnaires
- Continuing to look at possible options – further suggestions welcome

## 2.1 - Pilot the offer of a refreshed on line option for completion of the questionnaire (while retaining the paper option for those preferring that mode)

- Basic agreement to the reasons for the proposal
- Concerns centre around:
  - Time series data continuity
  - Matching paper and on line questionnaires
  - Availability on smartphones/tablets
  - Loss of 'immediacy'
- Some TOCs offering to promote on line survey (Not acceptable to us)
- A few consultees anticipate increased samples and speedier reporting... (Not envisaged by us)
- Pilot running of online option (in parallel with core/supplementary questionnaire trial)
- Building on experience with our *Tram Passenger Survey*

## 2.2 - Increase the number of waves of fieldwork or move to continuous data collection and monthly reporting

- Majority in support; majority favour four waves over continuous
- *DfT* has asked us to table detailed proposals
- Several TOCs suggesting additional waves might replace their own additional fieldwork
- Some concern over cost implications and inability to react quickly enough for improvements to be measured in next wave...
- **Formulating detailed proposals for discussion with *DfT***

### 3.1 - Generally move to a standardised definition of routes ('Building Blocks') based on train origin and destination rather than groups of stations

- Basic agreement to the proposal
- Concerns centre around:
  - *DfT* franchise agreements
  - Time series data continuity
  - Maintaining TOC sample sizes and comparability
- Will be implemented for Autumn 2016 wave
- Detail to be discussed with affected TOCs as part of two-yearly review of sample

## 3.2 - Provide a more representative GB sample by moving to a more equitable sample distribution by TOC

- Basic agreement to the proposal
- Concerns centre around:
  - Time series data continuity
  - *FGW/GWR*: no longer fully representative
- Minimal appetite for boost samples
- Will be implemented for Autumn 2016 wave
- Detail to be discussed with affected TOCs as part of two-yearly review of sample
- Boost samples remain an option

### 3.3 - Provide greater sensitivity in the data by highlighting 'very satisfied'/'very dissatisfied' ratings (rather than amalgamating 'very'/'fairly' as at present)

- Opinion divided
- Key concern is how media will interpret this
- Full breakdown of 5-point scales already published in individual TOC reports
- We are minded to add this to Stakeholder report as a next step moving forward

## 4.1 - Two stage sampling: Random sample at stations to provide representative sample of GB passengers plus top-up (boost) samples at stations and on train to achieve TOC and route ('Building Block') targets

- Seen as positive or having no impact (lack of understanding?)
- Support for more on train distribution
- Concerns centre around:
  - *DfT* franchise agreements
  - Time series data continuity
  - TOC level sample representativity
- Minimal appetite for boost samples
- Further work required on sampling/weighting for discussion with Experts Group
- Plan to proceed from Spring 2017
- Boost samples remain an option

## 4.2 - Sample and weight journeys by time of day and adjust distribution of fieldwork shifts across the day

- Broad support (maybe limited understanding in some quarters...)
- Concerns centre around:
  - Reliance on *DfT* for *NRTS* update
  - Time series data continuity
- *NRTS* update will not be available
- Looking to examine whether historical *NRTS* data can be validated for current purposes (or identify alternative source)
- Plan to proceed from Spring 2017

## 4.3 - Separate design and non-response weighting processes and weight by ticket type rather than journey purpose as currently

- Broad agreement to split design and non-response (or no view)
- Majority support non-response (or no view) but some concerns:
  - *ORR*: need to understand profile of non-responders and impact overall
  - *NR*: in designing perfect survey are we jeopardising what's gone before...?
  - Is *NRTS* fit for purpose/will it be available?
- Weighting by ticket type somewhat controversial:
  - Several not fully appreciative that journey purpose is often derived from ticket type
  - Ticket types in state of flux at present
- *NRTS* update will not be available and historical data inappropriate
- Explore sources for appropriate demographic/journey purpose data
- Consider implications of ticketing developments
- Plan to proceed from Spring 2017
- Discuss with Experts Group and model effects of changes before proceeding

## 5.1 - Establish a *Stakeholder Advisory Group (SAG)* for an initial period of two years

- Overwhelmingly supported
- Concern that *ATOC* unable to represent all *TOCs*
- Representation of passengers? Disability groups? User groups etc? Stats experts?
- Two groups set up to reflect stakeholders' concerns
  - 'Experts Group' (*Transport Focus, DfT, Transport Scotland, agency (BDRC Continental), technical review author (RMA), statistical expert (Real Research)*)
  - 'Stakeholder Forum' for broader dissemination of information

## 5.2 - Review and reduce list of stakeholders with pre-release access to *NRPS* results

- Contentious! Evidence of (inclination to) abuse...
- Agreement over 'level playing field' but want time to prepare external and internal comms and agree actions...
- *DfT* supportive
- One large TOC already significantly reduced its list
- To be implemented from Spring 2016 reporting
- Max two nominees per TOC for QA pre-release
  - Names to be requested during March
  - Shall require signed undertaking to abide by *ONS* rules
  - (24-hour media pre-release access unaffected)

# So, where are we at?

- Consultation Feedback report published (<http://www.transportfocus.org.uk/research/national-passenger-survey-introduction/national-rail-passenger-survey-consultation>)
- Pilot in field
  - Shorter core questionnaire
  - Example Supplementaries
  - Choice of paper/online
- Experts Group has met
- Further work in progress on
  - Technical changes – in particular, usability of *NRTS*
  - Additional fieldwork waves/continuous monitoring
  - Alternative sources of information
- Stakeholder Forum is meeting!

# Timeline

- Spring/Autumn 2016 *NRPS* waves run (virtually) ‘as is’
- Spring 2016 reporting
  - Stakeholder report to show ‘very’ satisfied in addition to total
  - Pre-release QA access restricted to two named contacts per TOC
  - Signed commitment to *ONS* rules required
- Summer 2016
  - Pilot results to be reviewed by Experts Group and presented to next Stakeholder Forum (July?)
  - ITT for new fieldwork contract issued based on pilot results
- Autumn 2016 fieldwork
  - Implement new ‘Building Block’ definition and revised sample distribution (as part of regular two-yearly review)
- Spring 2017
  - New contract commences with intention to implement all questionnaire, data collection and remaining technical changes

# Shortened questionnaire and enhanced online pilot

**Keith Bailey**, Senior Insight Advisor

# New approach to passengers

- *“Would you like to take this paper questionnaire, or would you prefer to give me your e-mail address and we can send you a link to the survey online?”*

# National Rail Passenger Survey

Thank you for agreeing to take part in our survey. Transport Focus is the official, independent consumer watchdog that represents rail, bus, and tram passengers. To help us represent the views of passengers in your area we would appreciate a little of your time to complete this survey. It asks about the rail journey you made when given this questionnaire.

The rail industry and governments pay close attention to the survey's results which provide Transport Focus with the evidence to seek improvements on behalf of passengers.

- Please comment on National Rail services only. Do not comment on Underground or tram services.
- To answer the questions please tick the box next to the answer(s) that apply or write your answer in the space provided. Unless the question allows you to tick several answers please just tick one box per question.
- When you have completed your questionnaire please return it to us in the envelope provided.

## 1 Your journey today

The journey you were making when given this questionnaire

Q1a Please fill in the scheduled departure time of the train you caught after being given this questionnaire.  
Please use the 24 hour clock e.g. 17:25

		:		
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Q1b You were given this questionnaire before boarding a train at Yeovil Pen Mill. At which station did you get off this train?  
Please write in the name of the station

Q1c Did this journey involve you travelling on a rail replacement bus or coach service today?

Yes .....

No .....

Q2 Which train company was operating the train which you boarded at Yeovil Pen Mill station?

Great Western Railway .....       South West Trains .....

Other: Please write in

Don't know .....

Continued overleaf

THIS SECTION IS FOR OFFICE USE ONLY

Route: 

4001	2821	001						1	6
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TCL 

1	2	3						M
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- New questionnaire design
- Incorporates picture and colour on front page
- Your opinion counts

# Core questions (1/3)

- **Your journey today**
  - Departure time
  - Destination
  - Replacement bus/coach
  - TOC
  - Journey purpose
  - Ticket type
- **Your opinion of the station**
  - Rating of station factors
  - Asked for help/information
  - Satisfaction with request
  - **Overall satisfaction with station**

# Core questions (2/3)

- **Your opinion of the train**
  - Rating of journey factors
  - Rating of train factors
  - **Overall satisfaction with train**
  - **Did you get a seat on the train?**
  - Delay experienced
  - Rating of delay handling (overall and elements)
- **Overall opinion of your journey**
  - **Overall satisfaction** (station and train)
  - **Trust**
  - Other passengers' behaviour
  - Reasons for behaviour concerns
  - Any further comments (open-ended)

# Core questions (3/3)

- **A little bit about you**
  - Age
  - Sex
  - Ethnicity
  - Disability
  - Travelling with encumbrances
- **And finally...**



# Station access supplementary

- Transport to origin station
- Whether continued journey by train
  - Final destination/interchanges
- Transport from destination station
- Whether approached on outward/return
- Length of whole journey
- Availability of alternative transport

# Fares & ticketing supplementary

- How checked times of train
- Organisation used to check (phone/online)
- When ticket purchased
- How ticket purchased
- Ticket format
- Railcard use
- Rating of ticket purchase
- Class of ticket
- Reserved seat

# Q & A

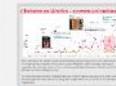
**Ian Wright, Head of Insight**

# Social Media Tracking

**Ping Teo, Policy & Insight Assistant**

# Social Media

## Benefits and Limitations of Social Media Monitoring



# A new way to gather passenger feedback?



Pilot - Passenger Satisfaction 2 Feb – 13 April 14

Kings Cross Train Disruption 27 Dec 14

Bath – Pre summer disruption report

On going social media monitoring July – Dec 15

Christmas Engineering Works - GTR & Southeastern

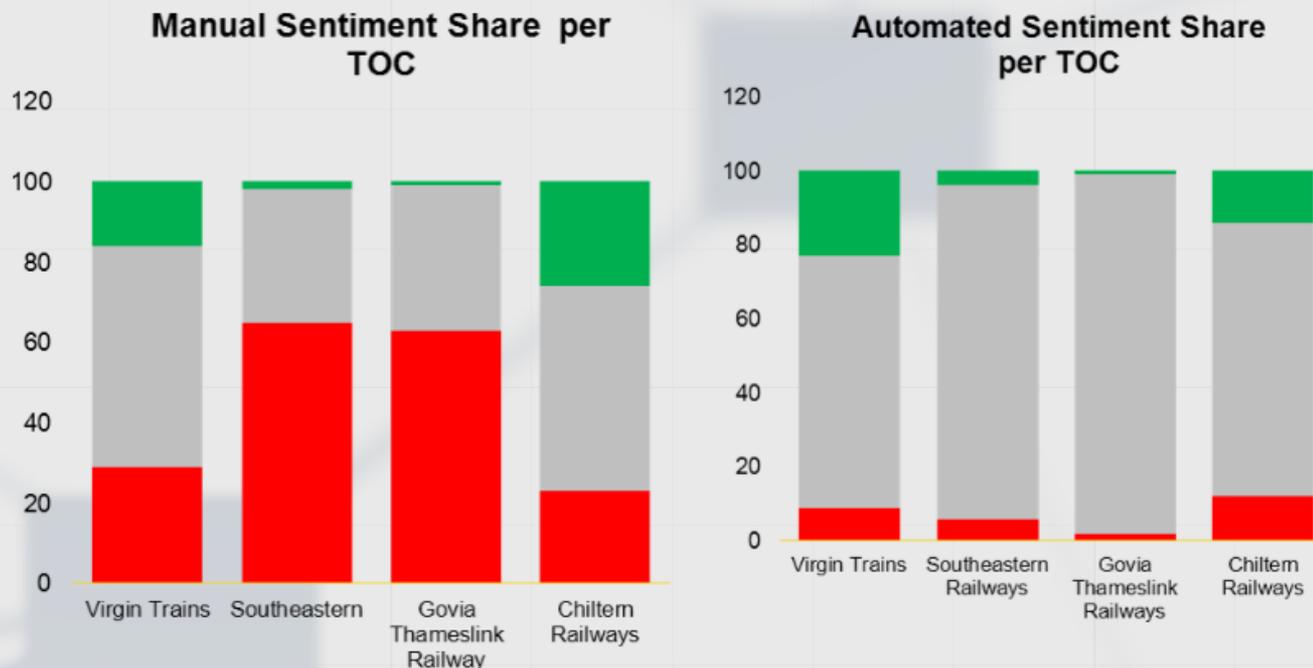
# How can social media be useful?

- its always 'on'
- fast feedback
- look at any time period
- listen to 'in the moment' comments
- news articles are being read and shared/ retweeted
- inexpensive
- potentially complementary to survey research such as NRPS



# Pilot - Passenger Satisfaction 2 February - 13 April 2014

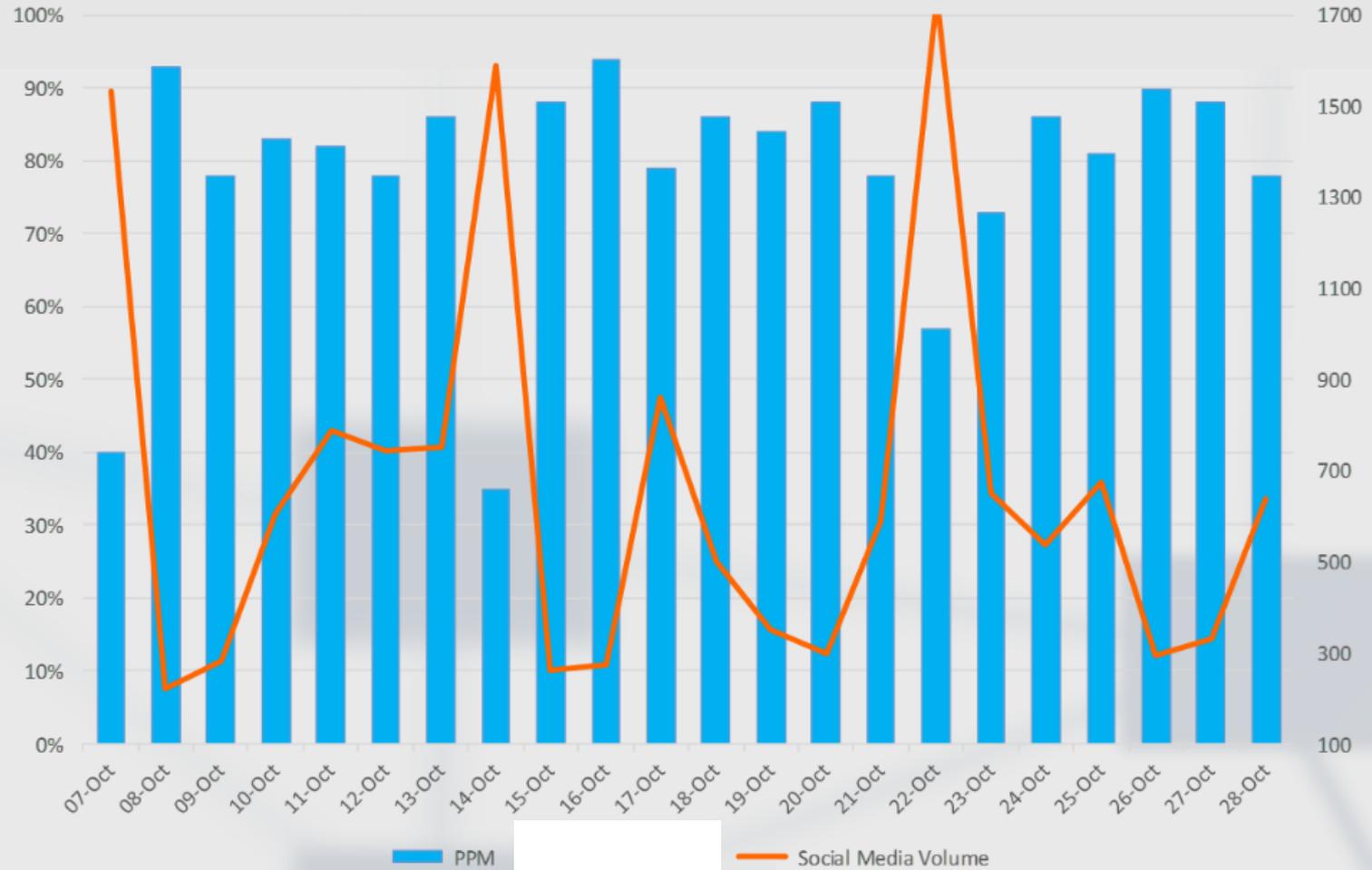
Overall volumes and sentiment analysis



- We manually validated a random sample of 100 items for each TOC to check the automated tools level of accuracy in terms of sentiment. Across all four TOCs 46% of items were found to be correct.
- Automated tools require regular assistance and validation in order to return higher levels of accuracy.

# PPM and Social Media Volume

PPM vs Social Media



\* Dummy data has been used on this page

# NRPS and social media scores

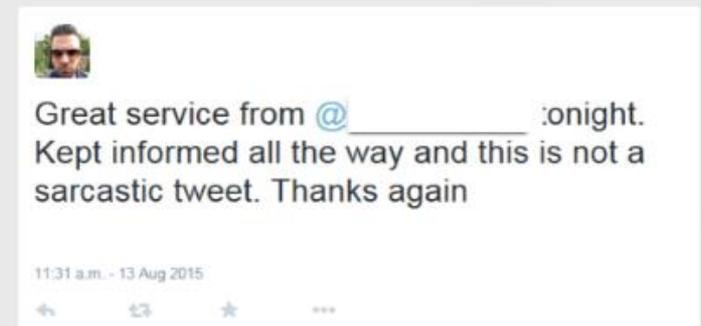
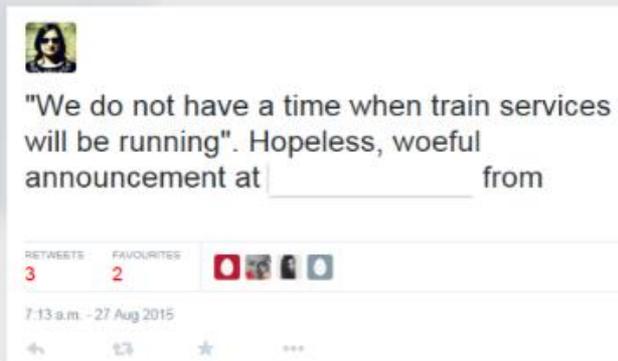
	NRPS Spring 2014 Net Satisfaction		Social Media Satisfaction
Chiltern	89%	Chiltern	0.14
Virgin	86%	Virgin	-0.03
Arriva	77%	FCC	-0.55
Northern	73%	Northern	-0.62
FGW	72%	FGW	-0.78
FCC	68%	Southeastern	-1.05
Southeastern	60%	Arriva	-1.1

An analysis of comments from passengers in social media shows similar results and some differences to the National Rail Passenger Survey (NRPS).

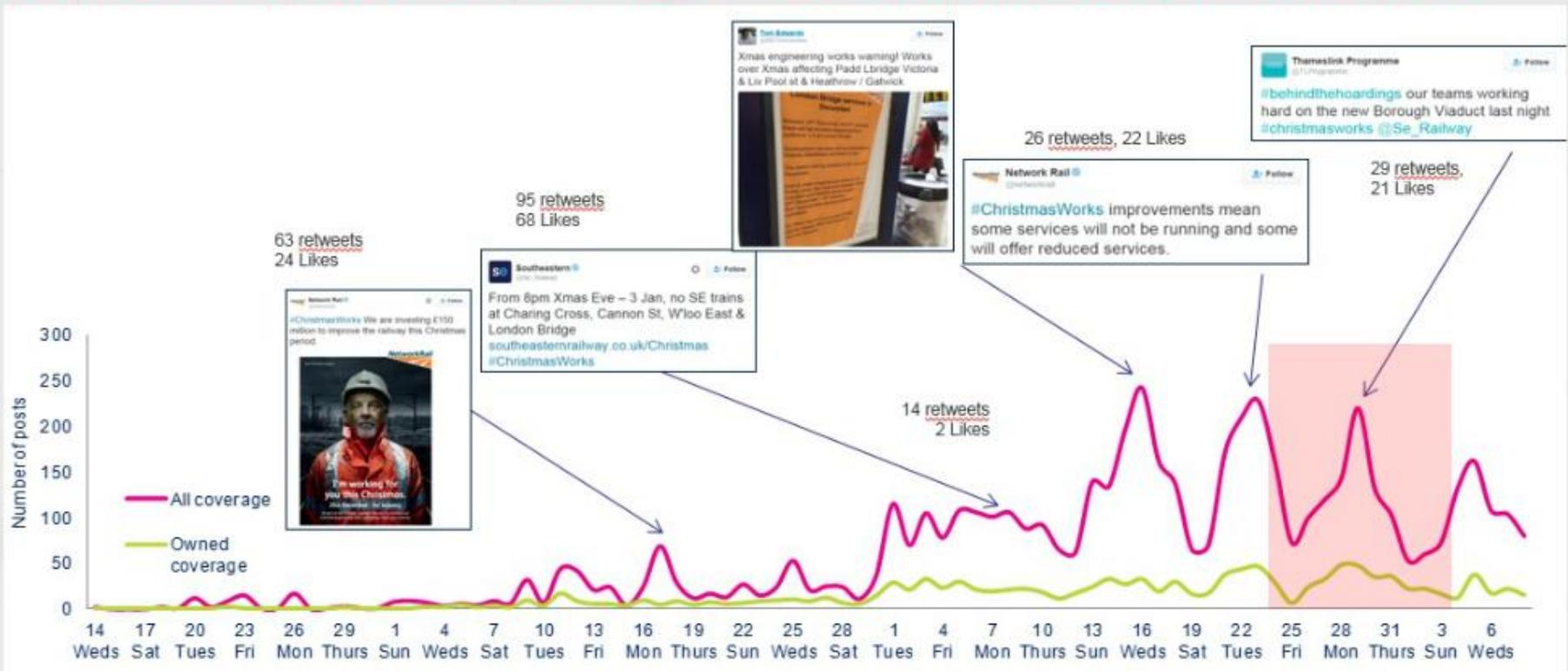
Arriva performed well on the NRPS but performed poorly on social media. This could be explained by the higher proportion of younger passengers, who are more active on social media and may be more prone to using social media as a platform for complaining or reporting issues.

# Understanding the issues

However, Social media monitoring helps you to understand the issues and is best used qualitatively. It helps to bring to life what passengers are feeling and experiencing.



# Christmas Works - communication



When assessing the overall success of the Christmas engineering works, it is evident that the Train Operating Companies (TOCs) were largely effective in communicating information regarding the scale and impact of the works. Key posts by Southeastern, Southern and Network Rail were all shared widely by users.

The official Twitter handles of Network Rail and Gatwick Express were the most ardent users of the dedicated #Christmasworks hashtag, which appeared in 84% and 75% of all owned posts respectively.

# Social media lessons learnt

It is difficult to use social media to understand sentiment, it has to be manually coded and a lot of time is spent reviewing the codes.

There is correlation between PPM scores and twitter volume. This is mainly due to passengers seeking information on twitter when their train is delayed or canceled.

Looking at the Christmas Works campaign showed us that looking at how information is spread over social media is useful. Able to look at the effectiveness of the communication and how issues were dealt with.

Social media monitoring helps you to understand the issues and is best used qualitatively. It helps to bring to life what passengers are feeling and how they understand disruption.

# Emotional Tracking

**Emma Bramwell**, Senior Insight Advisor

*People will forget what you said,  
people will forget what you did,  
but people will never forget how you  
made them feel.*

- Maya Angelou

# Emotional tracking: background

- NRPS - a comprehensive measure of mainly transactional performance on a rational basis, but ignores 'emotional' dimension and how passengers 'feel' about their experience
- Non-rational, emotional considerations are critical to trust. So strong case for measuring passengers' emotions on their rail journeys
- Alongside this, interest in testing a more continuous approach to data collection using a modern, passenger-friendly methodology

# Development: how did we do it?

Theoretical foundation

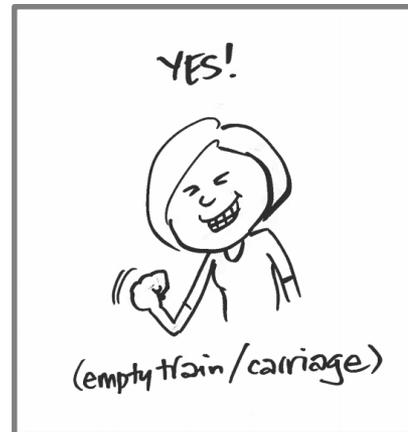
- Paul Ekman – nonverbal behaviour
- Geneva emotions wheel
- Passengers' relationship with the rail industry research



Qualitative research

- Two focus groups of commuters
- Visual artist capturing emotions

*"A seat makes you feel amazing!"*



# How did we do it?

Omnibus  
validation



Questionnaire  
design &  
technology

- Testing of non-verbal visual representations

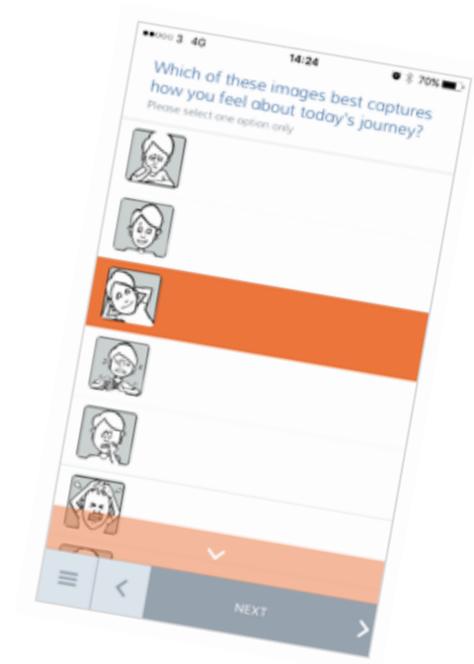


Bored

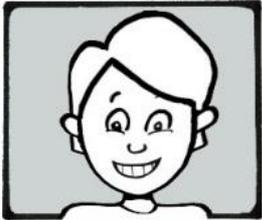


High occurrence  
High spontaneous  
High prompted

- App-based diary
- Short, snappy survey



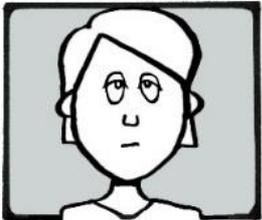
# Our emotions scale



- Happy



- Relaxed



- Indifferent



- Bored

# Our emotions scale



- Worried



- Stressed



- Frustrated



- Angry

# What have we learned so far?

- A broad range of emotions can be felt by the same individual on the same rail journey over a period of time
- Strong relationship between getting a seat and passengers being 'happy' or 'relaxed'
- Commuters quickly move from being 'happy' or 'relaxed' to 'indifferent' when delayed, even by less than five minutes
- Indifferent = mixture of positive and negative comments

# What's next?

- Analysis alongside NRPS satisfaction to look at how different emotions relate to the NRPS satisfaction scale – to be tested in pilot study
- Further pilots across different modes currently being considered

# Q & A

**Ian Wright, Head of Insight**



# Modernising the *National Rail Passenger Survey* (NRPS)

- Consultation documentation available at:  
<http://www.transportfocus.org.uk/research/national-passenger-survey-introduction/national-rail-passenger-survey-consultation>