Transport for London

Countdown sign evaluation 08210

June 2009

MAYOR OF LONDON

Transport for London

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Research conducted by Accent

Key Findings (1)

- Decision-making process and, therefore, information requirements are very different depending on scenario, ranging from:
 - normal service to severe disruption
 - high frequency to low frequency services.
- Simplicity of information provision is key don't over deliver
- Normal service/high frequency information requirement is to provide reassurance, ie: bus will come in xx minutes
- Additional Information desired:
 - advance notice of buses not stopping
 - planned engineering works/service cancellation information for all services from that bus stop
 - delays/changes to service to onward journey
 - reassurance that more night buses to follow

Key Findings (2)

- Minor delays/medium frequency information requirement is to provide reassurance and information to assist if plans need to change, ie bus will come in xx minutes but onward delay will be xx minutes
- Additional Information desired:
 - when empty bus will arrive (not how crowded bus is)
- Severe delays/low frequency information requirement is to provide information to replan total journey, so delivery needs to be interactive to be able to provide tailored and specific advice
- Additional Information desired:
 - reason for disruption
 - service status of other modes
- At quieter stops greater need for reassurance as wait times can be much longer – greater emphasis on alternative bus options in disruption scenarios

Agenda

- Research Objectives
- Qualitative Methodology & Sample
- Decision-making Process
- Role of information for Normal Service, Minor Delays and Severe Disruption
 - Relative importance of information at different times/locations/scenarios
 - How the information can be displayed/accessed

Research Objectives

- To better understand the requirements for information that could be provided, unconstrained by format issues.
- To explore how signs are used and information requirements from the signs
- Explore relative importance of different types of information and how they may change in different situations and more specifically:
 - Information helping the decision-making process
 - Role of information in providing reassurance
 - Information on disruptions and need for decisions in unplanned circumstances
 - What people would like to see on signs in which situations

Qualitative Methodology & Sample

- 30 interviews at bus stops (approx 10 20 minutes long) amongst regular bus users (at least once a month)
- 4 locations Oxford Street Elephant & Castle, Croydon and Chiswick



Oxford Street

Oxford Circus – 33630 westbound

Great Titchfield Street – 15783 eastbound

Steady flow of passengers and buses

Mix of journey profile – some just up and down Oxford St/Regent St, some a small section of more complicated journey home

Many using just fixed routes centrally and other modes further out of town eg taxi, tube and car



Elephant & Castle

London Road – BP3718 northbound London Road – 33137 southbound Highest turnover of passengers of sample

Very frequent buses

Journeys typically were home to university/work both within the local area and into Central London

Bus users tended to be highly sophisticated – up to 2/3 times a day

Southbound much busier than northbound at 3pm



Croydon

Croydon Library – BP1548

Very frequent buses

Stop is a favourite place for school children to gather, which appears to deter other bus users; this was the case in term time (when there was also a strong police presence) and at half term, so stop mostly surveyed on a Saturday



Chiswick

Balfern Grove, served by just the 190

Hammersmith-bound stop has no shelter and narrow pavement, with little obvious room for information

Richmond-bound stop has shelter

Very few people waiting at the stop

All local people who know when the bus is due and who also know they have several alternative buses available on the Chiswick High Road, as well as tube services



Key Findings — Decision-making Process

Summary of Decision-Making Process

Normal Service/ daily basis Minor delay

Severely disrupted service





The decision-making process, information requirements and information provision altered across three distinct service experiences

Summary of Decision-Making Process

Normal Service/ daily basis



Minor delay



Severely disrupted service



- Decision-making process is very different across the spectrum of scenarios from simplistic (normal service) through to sophisticated (severely disrupted)
- Therefore information requirements differ across the spectrum
- And scenario type also alters expectations of how information is provided eg the higher frequency, daily routine information provision feels very different to the infrequent, severely disrupted scenario
- Simplicity of information provision is key. Taking the bus is considered a simple process and information provision needs to reflect and enhance that simplicity

Summary of Decision-Making Process

Normal Service/ daily basis Minor delay

Severely disrupted service

High frequency

Low frequency

Decision-making process simplistic – when will bus come?

Information requirements – how long to wait? Reassurance

Expect cost-effective, simplistic delivery eg bus will come in xx minutes



Summary of Decision-Making Process

Normal Service/ daily basis Minor delay

Severely disrupted service

High frequency

Low frequency



Decision-making still relatively simplistic – is there a delay and how long is the delay?

Information requirements – what is the total journey time with the delay? Reassurance & information to assist if plans need to change

More sophisticated information but delivery can be as simplistic as 'normal service' scenario. Bus will come in xx minutes but onward delay will be xx minutes

Summary of Decision-Making Process

Normal Service/ daily basis Minor delay

Severely disrupted service

High frequency

Low frequency



Complex decision-making – do I need to change my plans/mode of travel?

Information requirements – *how* do I get home? Information to help re-plan total journey

Highly sophisticated information as expect tailored and specific advice so delivery needs to be interactive

Decision-Making at Quieter Stops

- Decision-making process at quieter stops is very much in-line with busier stops apart from the following:
 - Greater need for reassurance as wait times can be much longer



- So greater need for Countdown-style information 'bus is coming in xx mins'
- Although perceptions are that information is less likely to be provided at quieter stops – expectations are low but need is higher
- Quieter stop users tend to be more reliant on buses than other modes (less options or less keen on other modes) so need greater emphasis on alternative bus options in disruption scenarios – even if it means going back to find alternative bus



Normal Service Story — Daily Basis



What questions need answering?

Why do buses go past without stopping?

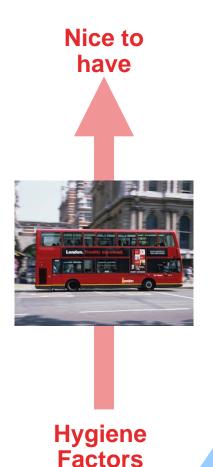
Can I rely on that timing?



When will my bus come?



Normal Service Story — Daily Basis



Current information provision

Why do buses go past without stopping?
Perception of no current information provision

Can I rely on that timing? Would like greater accuracy of timings but sympathetic of traffic issues



When will my bus come? Countdown extremely widely used and brings huge benefits

Critique of Current Countdown Information

positives

Countdown extremely widely used – quick and easy to access & understand

Becoming more reliable – service continually improving

Huge benefits – reassurance that bus running and coming soon

Countdown missed at bus stops without it – seems longer, more stressful wait

negatives

Some criticism of inaccurate timings – continually saying 2 mins

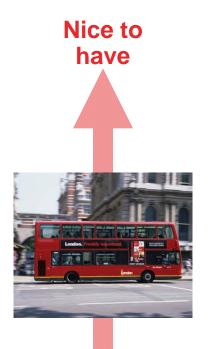
Not all bus stops have Countdown – seems longer, more stressful wait

Some bus numbers seem never to appear on Countdown

Some consistently not working eg South Ken. Will go so far as to call to report it

The majority of the sample were well aware of Countdown and used to using it. Quieter stop users were lower users since they were less likely to have Countdown but used it centrally

Normal Service Story — Daily Basis



Hygiene Factors

New information provision - what would they like?

If a bus is not going to stop, then passengers waiting are told before the bus passes by

Number of minutes until next bus will come at every stop (for all bus numbers servicing the stop) with greater accuracy



Emphasis is on getting you on the bus and to your end destination as quickly as possible

Normal Service Story — Weekends



What questions need answering?

Any service cancellations?

Are there engineering works

- how will my journey be
affected?

When will my bus come? Can I rely on that timing?

Normal Service Story — Weekends



Current information provision

Any service cancellations? Are there engineering works – how will my journey be affected?

Many check TfL website before they travel as they realise there will be no information at bus stop



When will my bus come? Can I rely on that timing?

Countdown will tell you how long you have to wait but will only show the buses that are operating

Normal Service Story — Weekends



Hygiene Factors

New information provision - what would they like?

Planned engineering works and service cancellation information for all services from that bus stops

Number of minutes until next bus will come at every stop (for all bus numbers servicing the stop) with greater accuracy

Less about speed and more about time wasted waiting for service which will be delayed or are not running as anticipated

Normal Service Story — Night

Buses

Nice to have Hygiene **Factors**

What questions need answering?

Have I missed the last bus?



When will I get home?

When will my bus come?



Normal Service Story — Night Buses

Current information provision



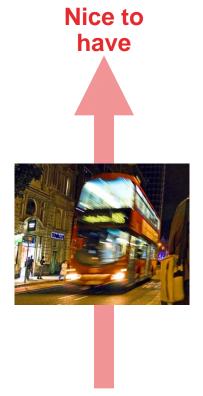
Factors

Have I missed the last bus? When will I get home? Many refer to the timetable information but this seems useless late at night - many have experienced changes in service which are not reflected in a static timetable. Many want reassurance that the timetable is still being adhered to

> When will my bus come? Countdown available at some stops but not all

Normal Service Story — Night Buses

New information provision - what would they like?



Hygiene Factors

Any delays/changes to service to the onward journey of the bus (traffic, detours, bus terminating before destination). Reassurance that more buses to follow. Time when the last bus will actually be passing through that stop that night

Number of minutes until next bus will come at every stop (for all bus numbers servicing the stop) with greater accuracy

About being reassured that they will get home via the bus network

Normal Service Story — Unfamiliar Location



What questions need answering?

Where am I? How can I carry on my journey?



When will my bus come?

Normal Service Story — Unfamiliar Location



Current information provision



Where am I? How can I carry on my journey?

Maps can be confusing to read in unfamiliar location. Many look at bus stop number to see orientation of bus stop (towards Tottenham Court Road) but would prefer 'you are here' map



When will my bus come? Countdown reassures them that the unfamiliar service is regular

Normal Service Story — Unfamiliar Location

New information provision - what would they like?



Hygiene Factors

Map at the bus stop which is easier to establish which stop you are at eg 'You are here'. Same orientation as bus stop to establish north/south/east/west

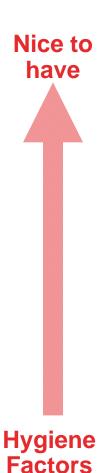
Route information from that stop (at every stop including quiet, more remote ones)



Number of minutes to next bus at every stop

Making the unfamiliar more accessible

Normal Service Story — New Information



Map at the bus stop which is easier to establish which stop you are at

Time when the last bus will actually be passing through that stop that night

Advance notice of buses not stopping

Planned engineering works and service cancellation information for all services from that bus stop

Any delays/changes to service to the onward journey of the bus

Reassurance that more night buses to follow

Number of minutes until next bus will come at every stop (for all bus numbers servicing the stop) with greater accuracy

Normal Service Information — what should it look like?

Could be doublesided with wait times on one side and additional information on other eg planned road works, crowded buses



Increased provision of countdown type displays. Could be smaller eg on posts at more remote stops

For normal service scenarios, passengers are unconcerned as to what the information provision could look like as long as it is quickly accessible

Minor Delays Story

What questions need answering?

Nice to have



Hygiene **Factors**

Does the bus need to make a detour/diversion – where, how long do they take and why?

> What is the total time impact of the delay (including onward journey)



(For some) Is next bus too crowded to get on? Are there now gaps in the service and how will that affect me getting on my next bus?

> When will my bus come? How long is the delay?

None of these questions are felt to be addressed by current information

Minor Delays — Crowded Buses

Next bus is crowded – empty bus xx minutes away



Useful information

Might choose to wait for next bus to travel in comfort

Useful in severe disruption as may sway decision to take alternative mode

Unhelpful information



Has potential to irritate waiting passengers

'crowded' has different meaning and impact on people – younger happier to 'crush in'

Would beg the question as to why aren't there more buses on this service

'all buses are crowded in central London' but frequency is good, so there is always a bus behind

Minor Delays Story

What questions need answering?

Does the bus need to make a detour/diversion.

Often not provided whilst on bus either



Total time impact of the delay – none provided at bus stop. Some use of iphones of TfL website via mobile



Crowded buses & gaps in service. No information provision apart from Countdown timings



When will my bus come? Countdown relied on but no information on 'delays'





None of these questions are felt to be addressed by current information

Minor Delays Story

New information provision - what would they like?

Nice to have

Description of planned detours/diversions and time impact – eg if over 5 minutes delay





Enough information to assess whether plans should be altered eg how long the delay is on top of normal ourney time. Information not excuses. Not reasons for delay - time impact of delay

Description of how crowded buses are but emphasis on when empty bus will arrive. Solution not problem

Hygiene **Factors**

Number of minutes to next bus 4 and timings of delays



At this stage the information is all about looking forward to total journey time

Minor Delays Information — what should it look like?

Motorway

Time to next junction is XX miles and xx minutes

Buses

Time to Shepherd's Bush is xx minutes – delays of xx minutes on top of normal journey time due to detour at Notting Hill and heavy traffic



Could be double-sided again with wait times on one side and additional information on other eg planned detours and time impacts

Comparison with motorway information – 'Cambridge xx miles in xx mins'



For minor delays passengers are seemingly happy to have the information displayed via similar displays to Countdown.

Decision-making process is still relatively simplistic and therefore information provision is assumed to be simplistic too

Severe Disruption Story

What questions need answering?



What has caused the disruption? Is the system shut down – when will it realistically start again?



Would other modes be quicker than waiting?

How long will it take to get home if I continue waiting for the bus?

Do I need to stop waiting for the bus and seek alternative mode?

Hygiene Factors

Current provision considered non-existent. Recent experience of the snow taught many to reply on news channels and web sites rather than bus stops

Severe Disruption Story

New information provision - what would they like?



Factors

Accepting responsibility that passengers need advice on how to travel

Reason for disruption so as to assess the severity of delay and therefore make decision



Service status of transport modes – most and least effective alternative options

Total journey time of bus to destination including any delays 'further down the road'

Empowering passengers to make informed choices about alternative options - without information they cannot make choices which is extremely frustrating. Shift from information provision to advice

Severe Disruption Information — what should it look like?

Since decision-making process highly sophisticated at this stage, most assume only interactive screen could provide level of information needed. 'what if I went by tube via xx?'





Access to all transport modes. Comparison to TfL website which some are accessing remotely in this scenario already

Assumption that only at large, central, busy stops and vandal proof

informed choices about alternative options = interactive screen

Recommendations

Recommendations

- The real challenge is providing appropriate information at the right time, through the most accessible channel
- Any information provision needs to be simple, clear and usable
- There is a potential danger of over-delivering which would not delight but just confuse
- Simplicity would delight especially in the most simplistic of decision-making scenarios
- Over-delivery would annoy 'who cares that the driver didn't turn up for work – where is my bus?'
- There is no difference in information provision at quieter stops since the decision-making process is identical, only greater reassurance is required

Normal Service Story — New Information



Map at the bus stop which is easier to establish which stop you are at

Time when the last bus will actually be passing through that stop that night

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Planned engineering works and service cancellation information for all services from that bus stop

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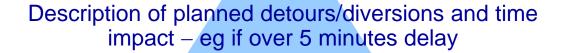
Reassurance that more night buses to follow

Hygiene Factors

Number of minutes until next bus will come at every stop (for all bus numbers servicing the stop) with greater accuracy

Minor Delays Story — New Information

Nice to have



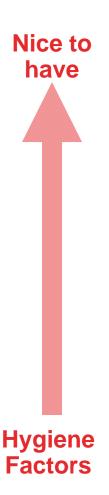
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Description of how crowded buses are but emphasis on when empty bus will arrive. Solution not problem.

Hygiene Factors

Number of minutes to next bus and timings of delays

Severe Disruption Story — New Information



Accepting responsibility that passengers need advice on how to travel

Reason for disruption so as to assess the severity of delay and therefore make decision

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