

New Bus for London

10053

April 2011

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Research conducted by Accent



Executive Summary 1

- Very positive response from the general public, TFL stakeholders and non-TfL Stakeholders to overall bus design:
 - 93-94% liked or strongly liked exterior and only 0-2% disliked it
 - 82-89% liked or strongly liked overall design and environment and 1-7% disliked it
- For the 30 specific design aspects 62%-95% gave positive ratings and 0-16% gave negative ratings
- The five worst rated aspects were ⁽¹⁾:
 - Design of space for wheelchairs/buggies
 - Ease of getting into/out of raised seats
 - Seat personal space
 - Confidence in using stairs when bus is moving
 - Design of seats facing each other
- The relatively negative findings on ease of getting into/out of raised seats and design of seats facing each other are consistent with previous research into bus interiors:
 - Raised seats on can cause difficulties with respect to access to seats ⁽²⁾
 - Although bay seats are popular on trains, on buses row seats are preferred



Executive Summary 2

- The nine best rated design aspects across the three groups were*:
 - overall design of the exterior of the bus: 93-95% like/strongly like
 - design of the flooring at the rear platform: 87-91% good/very good
 - layout of the handrails and hand poles: 85-91% good/very good
 - the colour of the step edges in the doorways and on the stairs: 86-90% good/very good
 - general design of the stairs: 82-89% good/very good
 - overall design and environment of this bus: 81-86% like/strongly like
 - height of the seat from the floor: 80-86% about right
 - visibility of the handrails and hand poles: 79-88% clear/very clear
 - design of the open platform: 73-93% well/very well designed

Background and objectives

- Background
 - a mock up of the New Bus for London has been designed and was on display at TfL's Acton depot
- Objectives were to gauge the reaction and views of stakeholders and members of the general public towards the following aspects of the bus:
 - Overall look and feel
 - Seats (including layout and raised and priority seats)
 - Space for wheelchair and buggies
 - Handrails and hand poles
 - Stairs
 - Open platform
 - Bell push, Oyster reader and next stop sign locations
 - Colours of bus interior and step edges
 - Layout for standing passengers
 - Flooring

Method

- Self completion questionnaires
- Research was with the general public and stakeholders (TfL and non TfL)
 - Stakeholders were invited in groups to view the bus
 - The general public were recruited on street outside the venue
- In January 2011 there was a modification made to the wheelchair bay
 - 154 of the stakeholders questionnaires were completed **before** the modification and 36 **after**
 - All general public questionnaires were completed before the modification

Report Structure

- The report is structured as follows:
 - General public findings
 - Non TfL stakeholders findings
 - TfL stakeholders findings
 - Post wheelchair bay modification stakeholder research findings
 - Appendix A: general public data



New Bus
for
London
General
Public
Findings

Executive Summary 1

- Very positive response from the general public to overall bus design:
 - 93% liked or strongly liked exterior and only 1% disliked it
 - 89% liked or strongly liked overall design and environment and only 1% disliked it
- For 29 specific design aspects 69%-95% gave positive ratings and 0-13% gave negative ratings
- The six worst rated aspects were:
 - Upper deck ceiling height: 65% too low/35% about right
 - Design of space for wheelchairs/buggies: 25%-/55%+
 - Ease of getting into/out of raised seats: 20%-/57%+
 - Seat personal space: 19%-/52%+
 - Confidence in using stairs when bus is moving: 19%-/72%+
 - Design of seats facing each other: 17%-/58%+



Executive Summary 2

- The seven best rated design aspects* were:
 - overall design of the exterior of the bus: 93% like/strongly like (2% dislike)
 - layout of the handrails and hand poles: 91% good/very good (0% bad)
 - the colour of the step edges in the doorways and on the stairs: 90% good/very good (1% bad)
 - general design of the stairs: 89% good/very good (2% bad)
 - visibility of the handrails and hand poles: 88% clear/very clear (5% not clear/not at all clear)
 - the height of the seat from the floor: 85% about right (13% too high/too low)
 - the overall design and environment of the bus: 85% like/strongly like (1% dislike)

Background and objectives

- Background
 - a mock up of the New Bus for London has been designed and was on display at TfL's Acton depot
- Objectives were to gauge the reaction and views of stakeholders and members of the general public towards the following aspects of the bus:
 - Overall look and feel
 - Seats (including layout and raised and priority seats)
 - Space for wheelchair and buggies
 - Handrails and hand poles
 - Stairs
 - Open platform
 - Bell push, Oyster reader and next stop sign locations
 - Colours of bus interior and step edges
 - Layout for standing passengers
 - Flooring

Method

- Self completion questionnaires
- General public – four full days planned
 - Friday 10th December 10:00-15:00 42
 - Monday 13th December 15:00-18:00 6
 - Thursday 16th December 10:00-14:00 43
 - Monday 20th December 09:00-16:00 39
 - **Total** **130**

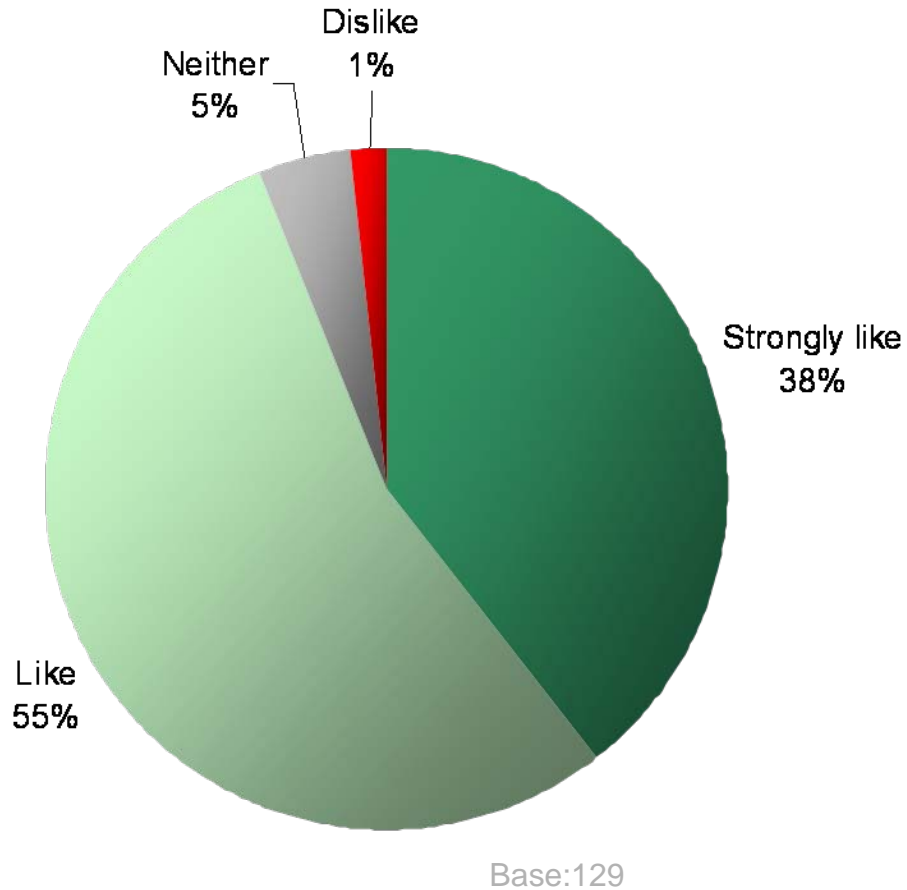
Characteristics

- 130 respondents
- Characteristics
 - 59% of sample was male
 - 26% were aged 17-24, 22% 25-34, 32% 35-59 and 20% over 60
 - 51% were employed, 18% retired, 15% students and 21% not working
 - 18% had a physical or mental impairment which limited daily activities or work they could do
 - 71% were white and 29% BAME
- Further details in Appendix A



Overall exterior

- Very positive response



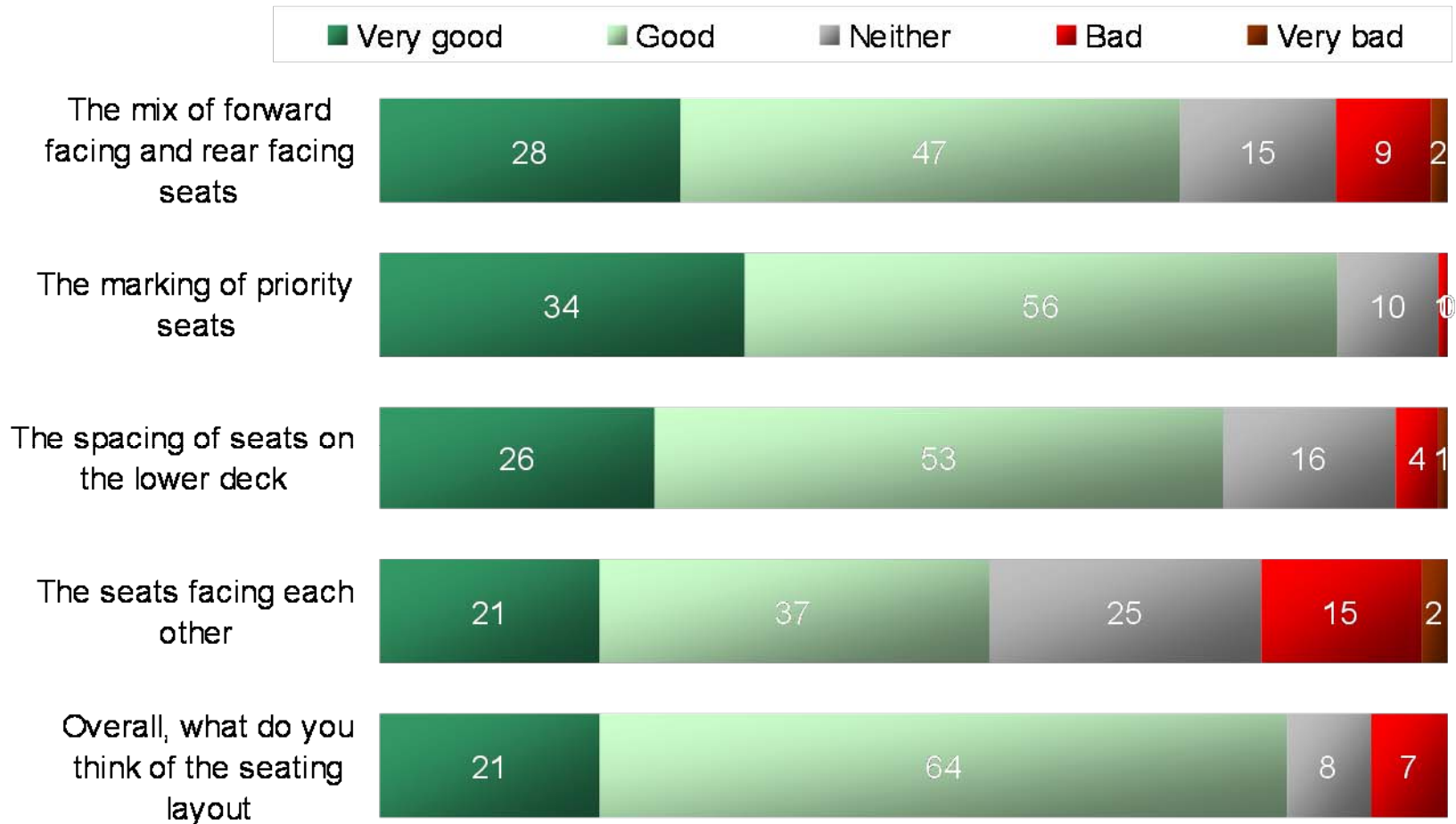


Overall exterior – Likes/dislikes

- Likes (104%)
 - 32% Modern, streamlined, futuristic design
 - 16% Window design - lots of light, glass, good visibility from within
 - 12% The rear entrance/staircase - hop on, hop off
 - 8% Colour - coordinated, appealing
 - 7% Interior size - roomy, spacious
 - 6% Reinvents the Routemaster - honouring tradition
 - 5% Everything - looks wonderful
 - 5% Three entrances - good access
 - 4% Two staircases
 - 2% The number of seats
 - 2% Seats are comfortable
 - 2% Headlights
 - 4% Other
- Dislikes (25%)
 - 5% Poor use of space inside - leg room, fewer seats, two staircases
 - 4% Too contemporary, flashy, gimmicky
 - 3% A bit square, box-like, unappealing
 - 3% Looks too big - the height
 - 2% Ceiling too low (upstairs)
 - 2% Windows don't open
 - 2% Rear door access (doors can close)
 - 2% The use of glass - safety issues, difficult to keep clean
 - 2% Seat cover design unappealing
 - 2% Other



Seating layout 1



Base:124-126



Seating layout 2

- Comments about the seat layout on the lower deck
 - 9% Raised seats too high - somewhat inaccessible, not enough headroom
 - 9% Not enough seating available
 - 9% Facing seats too close - more leg room required
 - 5% Too many rear-facing seats
 - 5% Seats not comfortable - too firm, narrow
 - 4% Insufficient luggage/bag space
 - 3% Good layout - interesting mix of seat type
 - 3% Comfortable seating
 - 2% Facing seats create a more social experience
 - 2% Spacious arrangement - more leg room, efficient use of space
 - 2% There should be side-facing bench-like seats
 - 2% Facing seats encourage people to put their feet up/behave anti-socially
 - 2% Aisle/gangway too narrow
 - 2% Insufficient wheelchair/buggy space
 - 2% Other



Seat design and comfort 1

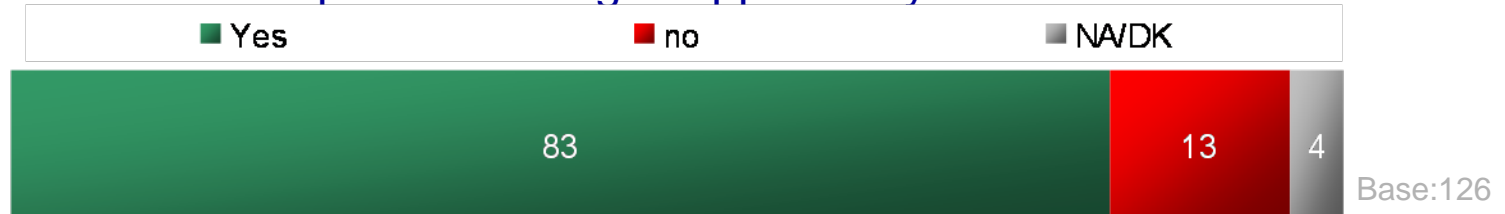
- Do you find the height of the seat from the floor too high or too low?



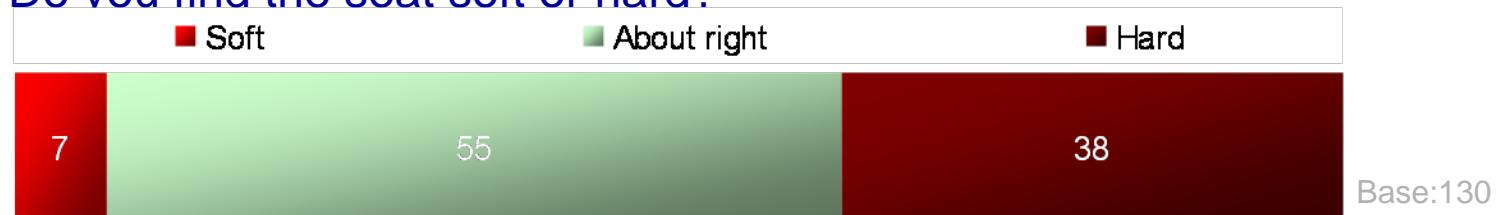
- Do you find the seat comfortable or uncomfortable?



- Does the seat provide enough support for your back?



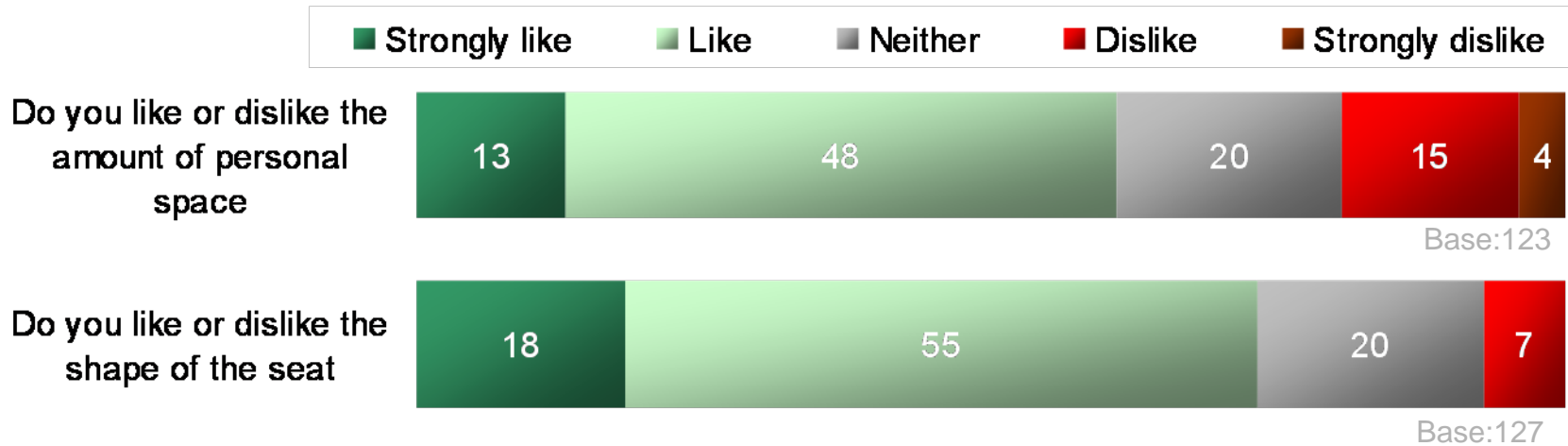
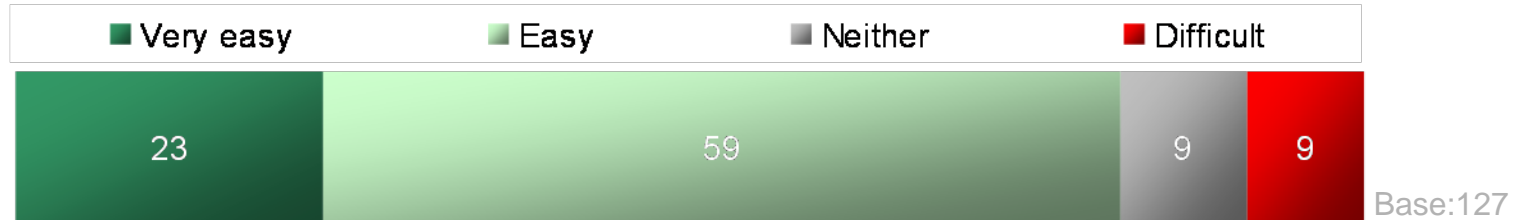
- Do you find the seat soft or hard?





Seat design and comfort 2

- Do you find it easy or difficult to get into and out of the seat?



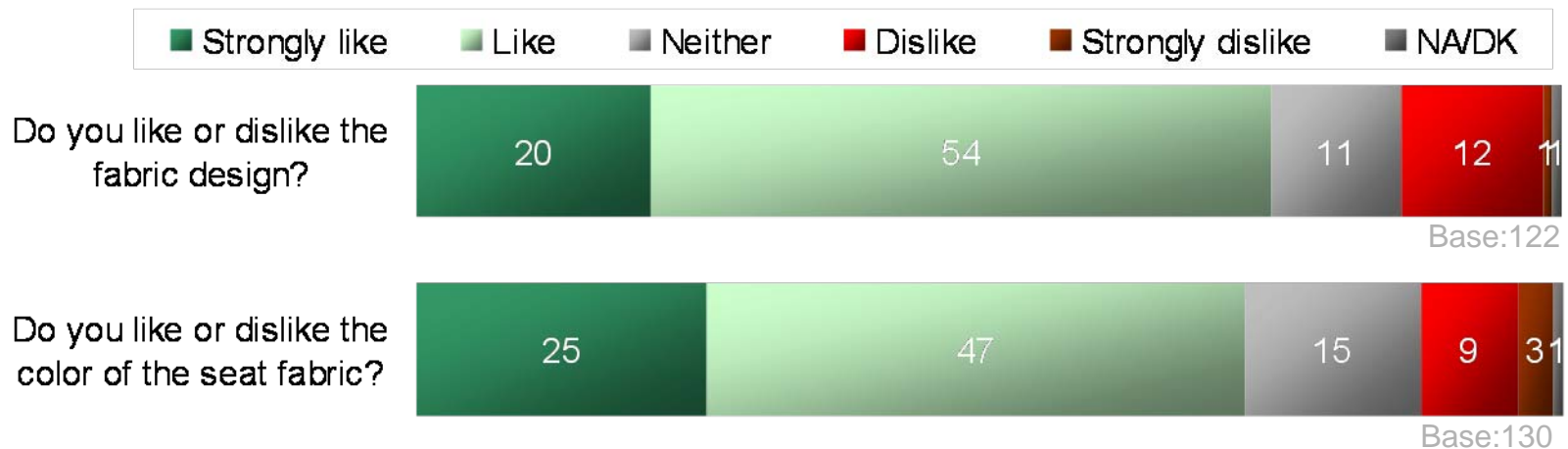


Seat design and comfort 3

- Further comments about the seats
 - 9% Insufficient leg room/knee room
 - 9% Uncomfortable - too hard, upright, not enough back support
 - 6% Seats too small/narrow - not suitable for larger folk, pregnant women
 - 5% More personal space needed - for belongings etc
 - 4% Too high (ceiling too low) - not suitable for taller people
 - 4% Good design - bold, colourful
 - 3% More seats needed (on lower deck)
 - 3% The seats are good, nice
 - 3% Seats are soft, comfortable
 - 2% Fabric design/colour unappealing
 - 2% Good leg room
 - 3% Other

Base:130

Seating colour and fabric



- Other positive comments
 - 7% Design is great, like very much (general)
 - 5% Appealing retro look - classical
 - 5% Attractive colour mix - warm
 - 5% Stylish patterning
 - 3% Practical - hard-wearing, easy to keep clean
 - 2% Texture of fabric - soft, comfortable
 - 2% Other

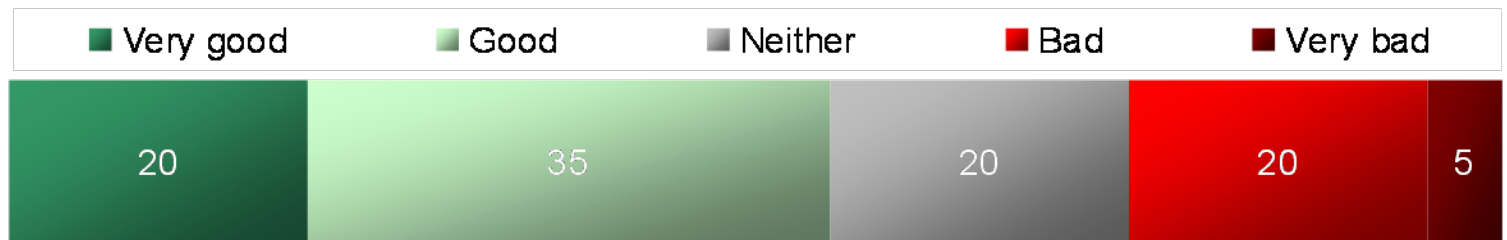
Base:130

- Other negative comments
 - 5% Too old-fashioned
 - 3% Design is too 'busy' - overly complex
 - 3% Colours unappealing - depressing
 - 2% Too much red incorporated within design - stuff, hot effect
 - 2% Other

General public

Space for Wheelchair & Buggies

- 15% (19 respondents) travel on buses with a wheelchair or buggy
- They were asked to rate the design of the dedicated space for wheelchairs and buggies



Base: 19

- Those who said bad or very bad were asked why
 - Not enough space - too restricted (3)
 - Available space could be better utilised - dedicated area too cluttered, use area beneath stairs for example (2)



Raised seats

- Do you find it easy or difficult to get into and out of these seats?

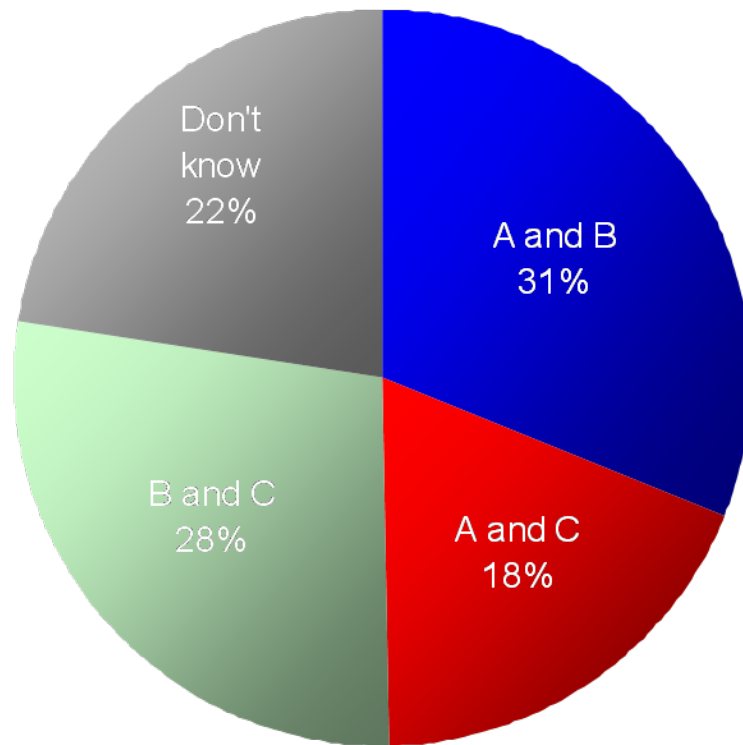


Base:126

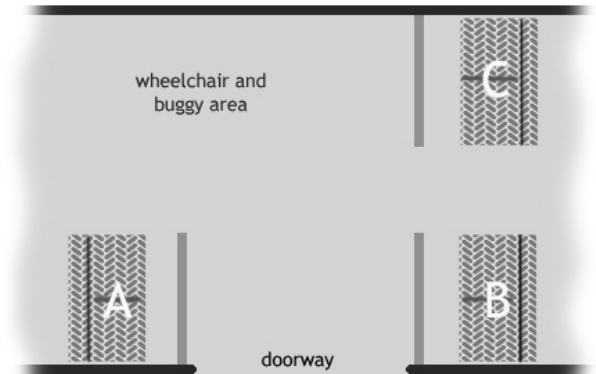


Priority Seats

- What would be your preference for the location of the priority seats?



Base:125





Handrails and hand poles 1

- Layout of the handrails and hand poles



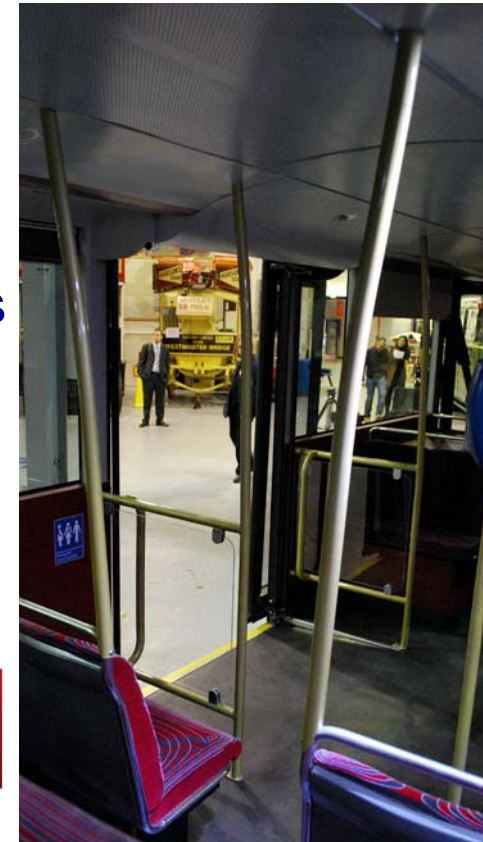
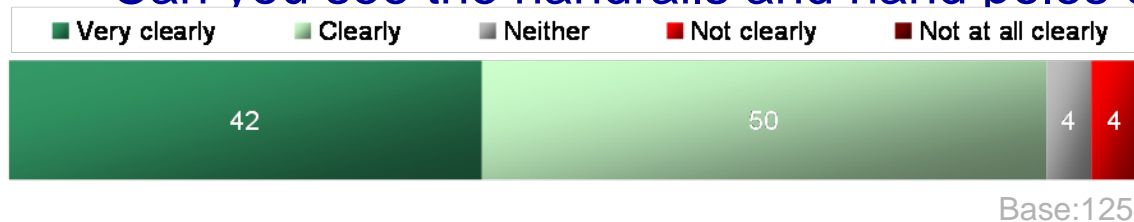
- The colours of the handrails and hand poles



- The locations of the bell push buttons



- Can you see the handrails and hand poles clearly?



Handrails and hand poles 2

- Further comments about the handrails and hand poles
 - 9% Should be a brighter colour - more visible
 - 5% Handrails etc good, functional, in the right place
 - 2% Should be more textured for better grip
 - 2% Should be handrail for roof(s)
 - 2% Stop buttons should be rearranged - better positioning
 - 2% Other

Base:130



The stairs 1

- How useful do you feel it is to have two sets of stairs on the bus?

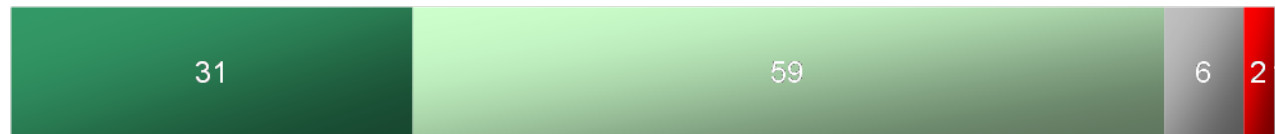
Very useful Quite useful Neither Not very useful Not at all useful NA/DK



Base:128

- How do you feel about the general design of the stairs?

Very good Good Neither Bad NA/DK



Base:127



The stairs 2



- How confident would you feel about the using the stairs when the bus is at a stand still?

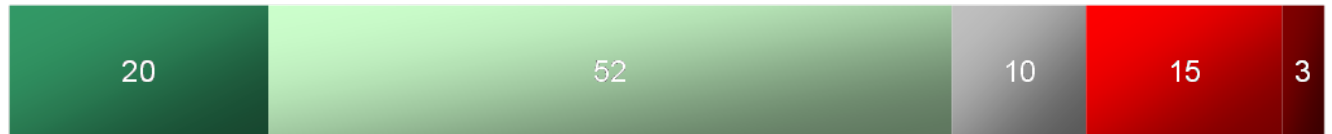
Very confident Quite confident Neither Not very confident



Base:128

- Imagine that the bus was moving and please indicate how confident you would feel about the using the stairs?

Very confident Quite confident Neither Not very confident Not at all confident



Base:127

The stairs 3

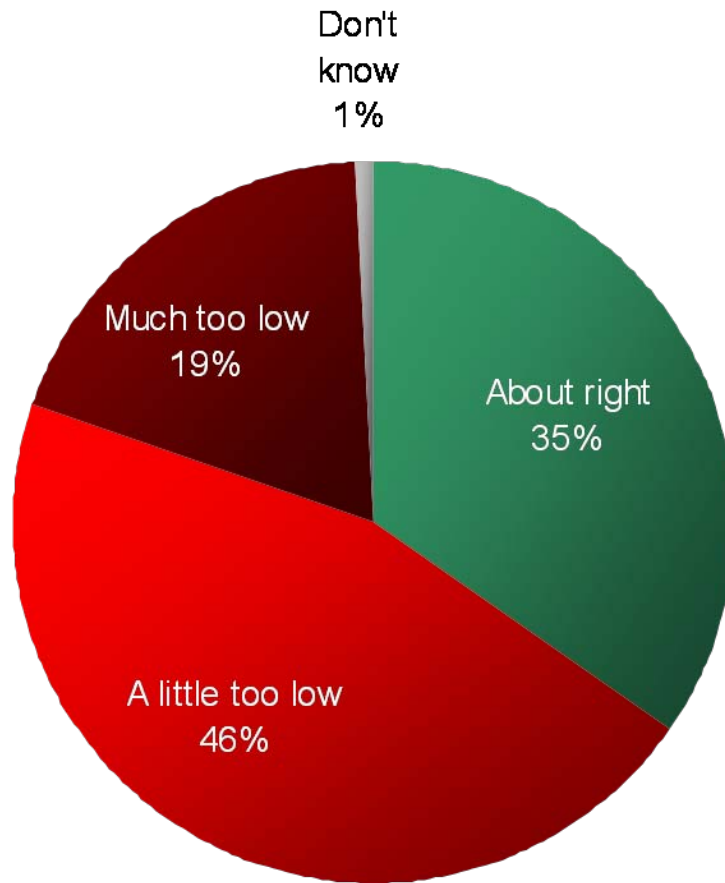
- Further comments about the stairs
 - 8% Exciting, innovative - the best part of the bus!
 - 5% Stairs are too narrow
 - 4% Wide, spacious, user-friendly
 - 4% Using stairs made difficult by poor driving
 - 3% Improved access to upper deck - more free flowing
 - 3% Suggest one stairs for upward traffic, one stairs for downward traffic
 - 3% Additional features required to facilitate usage - hand pole at top, protective panels etc
 - 2% Prefer back stairs - wider, easier to use
 - 2% Two sets of stairs not necessary
 - 2% Steps risers are too high, of uneven height
 - 2% Good handrail placement on stairs
 - 2% Front stairs easier to use than rear - straight, not too many bends
 - 2% Like the Art Deco styling on rear stairs
 - 2% Two sets of stairs limit seating capacity
 - 2% Other

Base:130



Upper deck

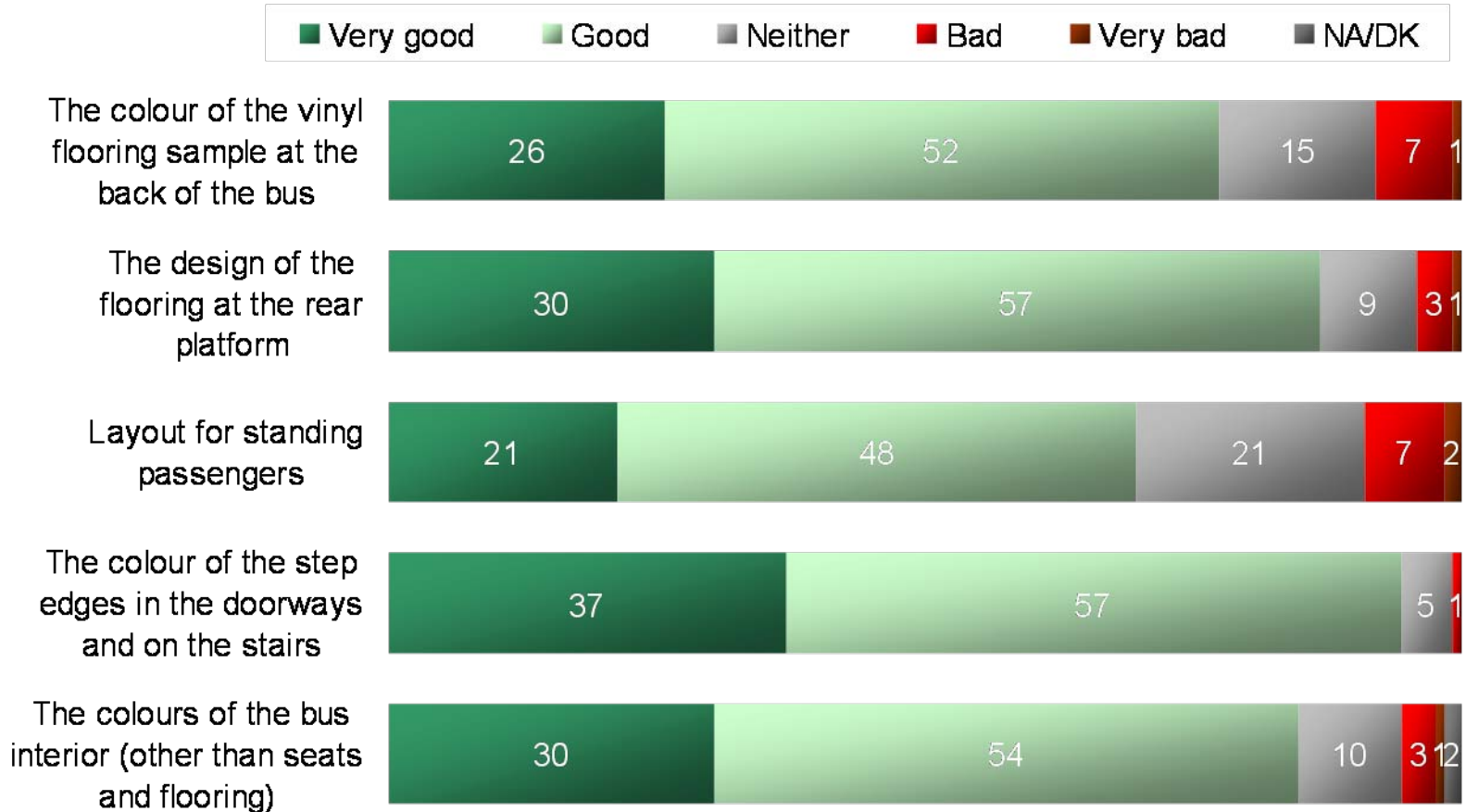
- How would you rate the ceiling height on the upper deck?



Base:127

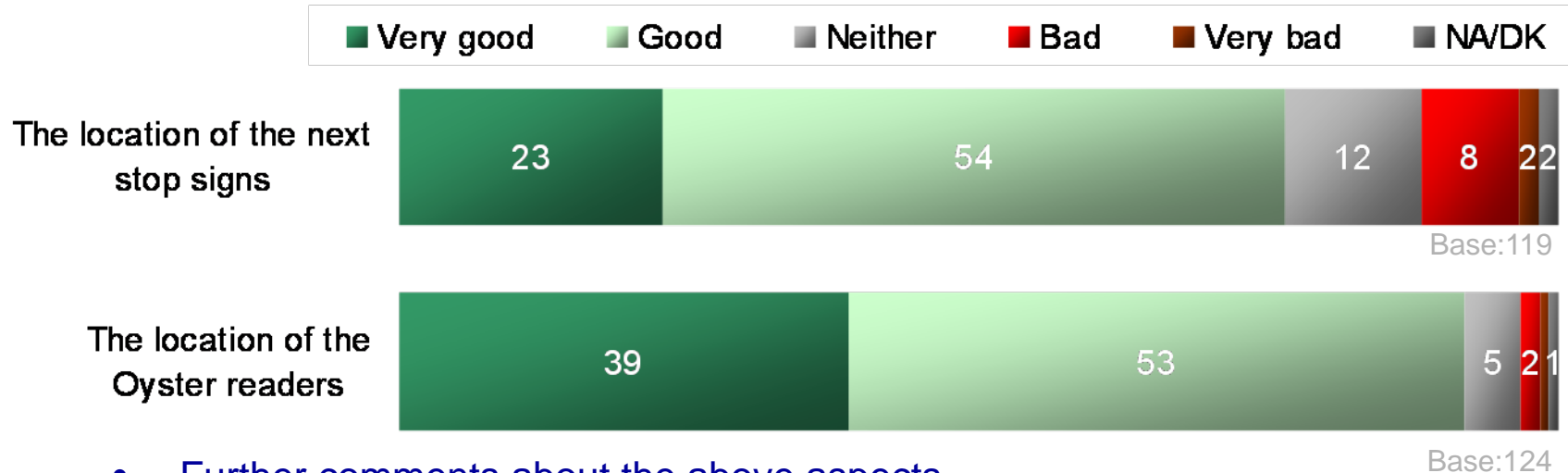


Other interior design aspects 1



Base:122-125

Other interior design aspects 2



- Further comments about the above aspects
 - 9% 'Next Stop' sign required for rear-facing seats at back
 - 8% More 'Next Stop' signs needed (general)
 - 4% Restricted space for those standing on lower deck - too cramped
 - 3% Sloping floor is hazardous - should be level
 - 3% Colour scheme seems cold, dreary, dull
 - 3% Better placement/provision of Oyster readers required
 - 2% 'Next Stop' sign too low
 - 2% Top deck ceiling is too low
 - 2% Better grip design of rear platform required
 - 2% Better provision of handrails etc required for standing passengers
 - 2% Good placement/provision of Oyster readers provided
 - 2% Other

Open platform

- What do you think of the design of the open platform?

■ Very well designed ■ Well designed ■ Neither ■ Poorly designed ■ Very poorly designed ■ NA/DK



Base:124

- Comments about the open platform

- 9% Great, well-designed, glad it's back
- 5% Entrance too narrow/small, a bottleneck
- 3% Not sure - would need to see it working in practice
- 3% It looks dangerous
- 2% Waste of space when not in use
- 2% Needs a conductor
- 2% Needs a door/strong door
- 2% Other

Base:130

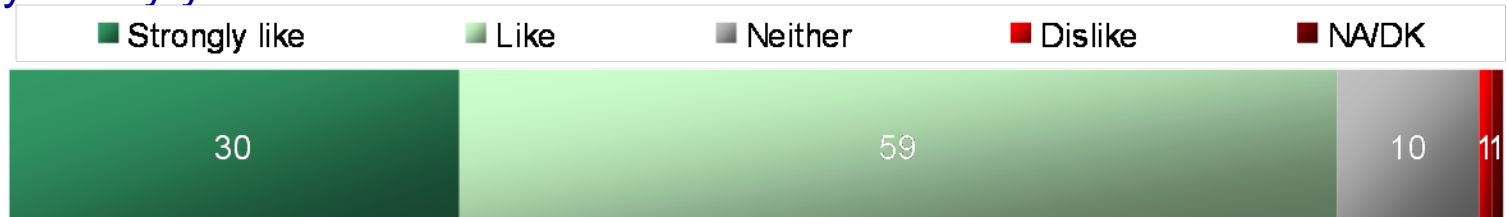


General public



Overall interior

- Thinking about the overall design and environment of this bus would you say you like or dislike it?



Base:126

- Further comments about the overall design and environment of this bus
 - 8% Very appealing - great design
 - 4% Seems more spacious than the current fleet
 - 4% Interior seems cramped, too compact
 - 4% Emphasis should be on the practical rather than the design-led
 - 3% Raised seating a drawback - too high
 - 2% Open platform - a brilliant idea
 - 2% Lots of large windows, lots of light
 - 2% Windows don't open (Is Air Con to be provided?)
 - 2% Upper deck ceiling is too low
 - 2% Interior looks dowdy, dreary - needs brighter colour scheme
 - 2% Attractive retro styling
 - 2% Safety screen required for the driver
 - 2% Remove rear-facing seats
 - 2% Not enough seats available
 - 2% Remove open platform
 - 3% Other

Base:130

General public



New Bus
for
London
Non TfL
Stake-
holder
Findings

Executive Summary 1

- Very positive response from non-TfL Stakeholders to overall bus design:
 - 94% liked or strongly liked exterior and only 2% disliked it
 - 86% liked or strongly liked overall design and environment and only 6% disliked it
- For 29 specific design aspects 63%-94% gave positive ratings and 2-16% gave negative ratings
- The six worst rated aspects were:
 - Ease of getting into/out of raised seats: 39%-/37%+
 - Design of space for wheelchairs/buggies: 26%-/48%+
 - The colours of the handrails and hand poles: 22%-/53%+
 - Design of seats facing each other: 21%-/46%+
 - Seat personal space: 17%-/58%+
 - Confidence in using stairs when bus is moving: 17%-/65%+

Executive Summary 2

- The seven best rated design aspects were:
 - overall design of the exterior of the bus: 95% like/strongly like (2% dislike/strongly dislike)
 - design of the flooring at the rear platform: 90% good/very good (2% bad)
 - the colour of the step edges in the doorways and on the stairs: 86% good/very good (1% bad)
 - general design of the stairs: 86% good/very good (4% bad)
 - overall design and environment of this bus: 86% like/strongly like (6% dislike)
 - design of the open platform 82% good/very good (5% bad)
 - height of the seat from the floor: 80% about right (16% too high/too low)

Background and objectives

- Background
 - a mock up of the New Bus for London has been designed and was on display at TfL's Acton depot
- Objectives were to gauge the reaction and views of stakeholders and members of the general public towards the following aspects of the bus:
 - Overall look and feel
 - Seats (including layout and raised and priority seats)
 - Space for wheelchair and buggies
 - Handrails and hand poles
 - Stairs
 - Open platform
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 - Colours of bus interior and step edges
 - Layout for standing passengers
 - Flooring

Method

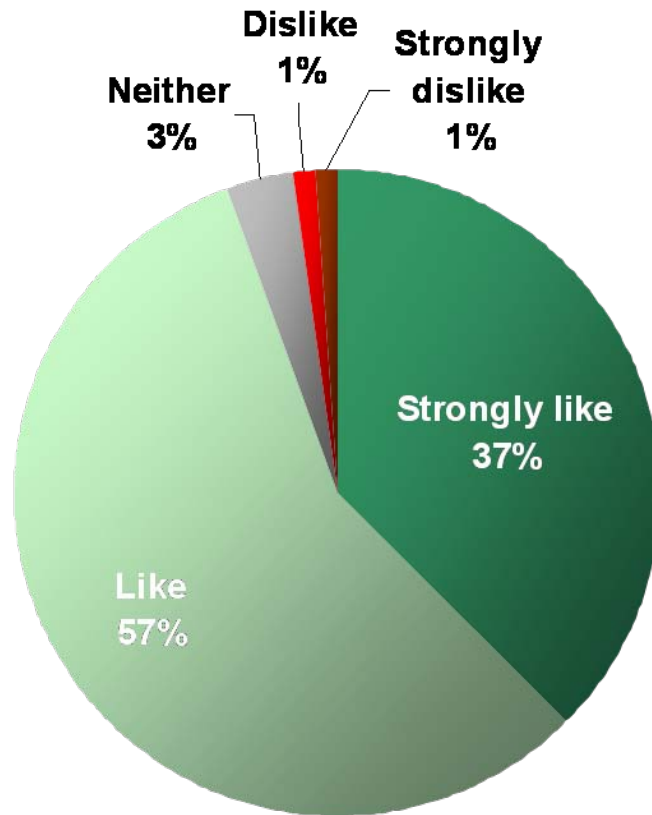
- Self completion questionnaires
- Stakeholders
 - 154 questionnaires from various stakeholder groups
 - 59 from TfL and London Buses staff
 - 95 from other stakeholders
- This report is on the 95 other stakeholders

Stakeholder group

- Stakeholder group (n)
 - Local authority/borough 36
 - Mobility Group 22
 - GLA 14
 - Mencap 6
 - Travelwatch 3
 - Operator 2
 - Other 10
 - **Total 95**
- Whether representing or personally have (n):
 - Mobility impairment 16
 - Hearing impairment 10
 - Mental health condition 7
 - Visual impairment 6
 - Serious long term illness 4
 - Learning disability 3
 - None 50

Overall exterior

- Very positive response



Base: 94





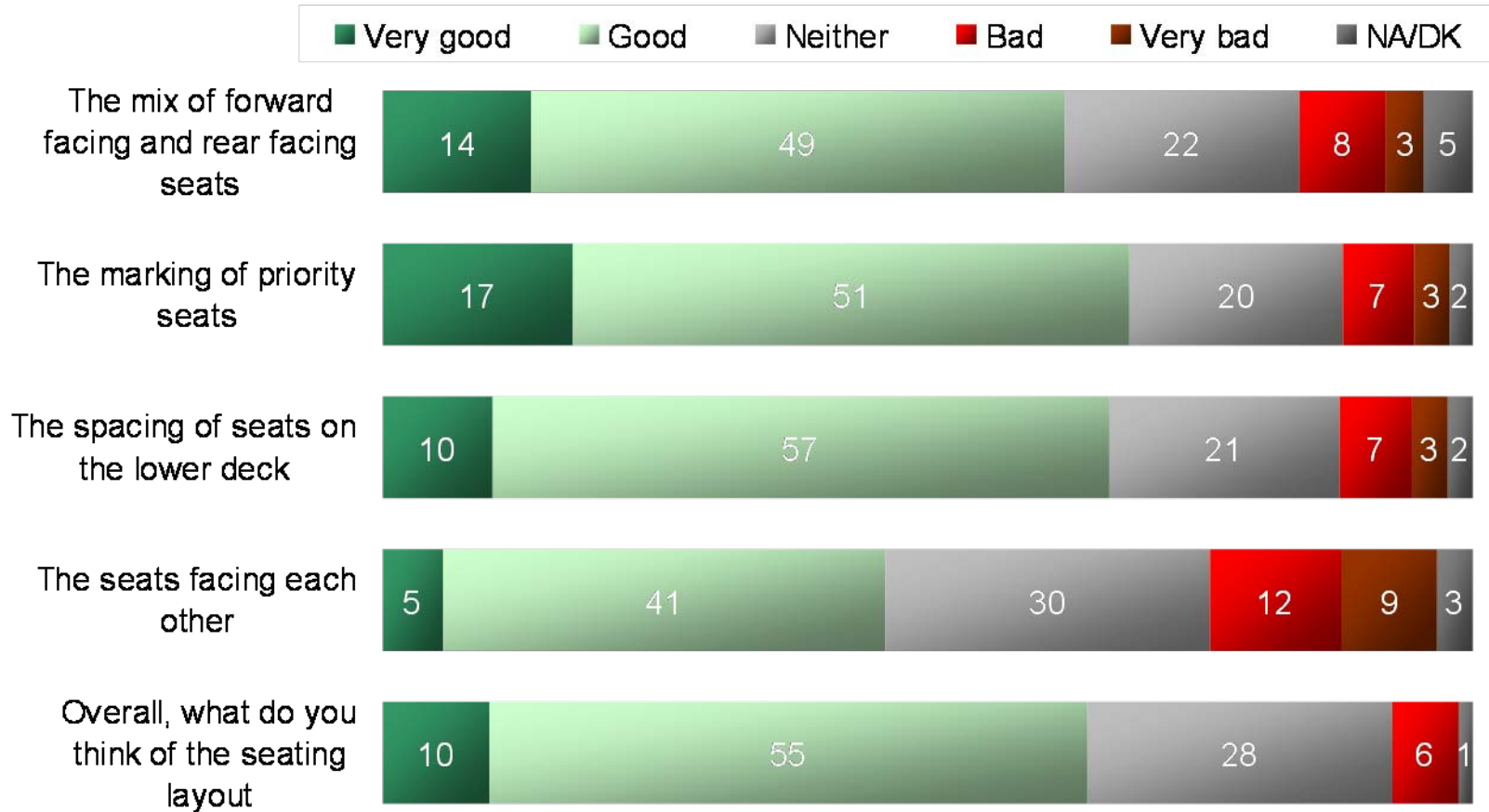
Overall exterior – Likes/dislikes

- Likes (85%)
 - 25% Like use of glass (light, open, increased visibility)
 - 19% Like curved design/contours
 - 18% Like staircase design (windows)
 - 13% Like aesthetics/feel (general)
 - 6% Like three doors/rear platform
 - 4% Like lights (general)
- Dislikes (29%)
 - 4% Dislike lack of indicators (side)
 - 4% Dislike interior design (cramped, lack of storage, uncomfortable seats)
 - 3% Dislike rear platform (safety concerns)
 - 3% Dislike tree guard (unattractive, after thought)
 - 3% Dislike aesthetics/feel (general)
 - 2% Dislike wheelchair access (ramp too long, disabled space inadequate)
 - 2% Dislike staircase design (too exposed, too much glass)
 - 2% Dislike aesthetics/shape of front
 - 2% Dislike headlights
 - 2% Dislike aesthetics/shape of rear
 - 1% Dislike upper deck design (limited windows, too shallow)

Base:95



Seating layout 1



Base:82-92



Seating layout 2

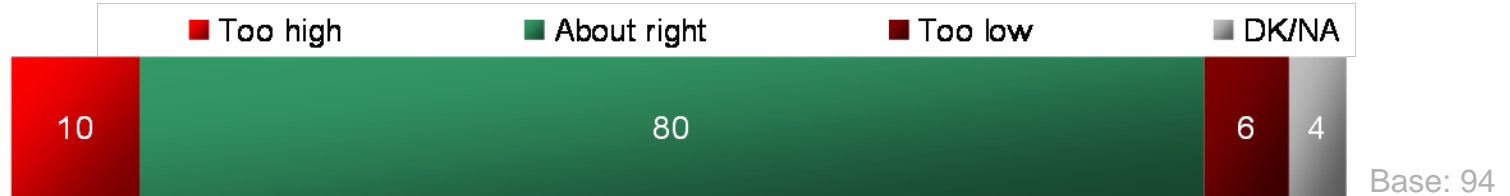
- Comments about the seat layout on the lower deck
 - 14% Concerns over rear facing seats (unpopular, dangerous, too many, limited leg room)
 - 12% Concerns over height of seats (uncomfortable, hard to access)
 - 11% Concerns over priority seat access (suggested alternative positions)
 - 5% Limited leg room in some seats (priority and forward facing)
 - 5% Happy with seating (comfortable, good views, nice design, etc)
 - 5% Priority seats should be better labelled (different colour, clearer signs)
 - 5% Concerns over wheelchair/buggy space (too limited, hard to access, Oyster reader too high)
 - 4% Limited headroom when standing up in rear seats
 - 3% Layout good/space used efficiently
 - 3% Concerns over passageway/aisle layout (narrow, sloped, handrails access)
 - 3% Concerns over pole/handrail design/positioning (hard to reach, lack of, not bright enough)
 - 2% Cramped/ lack of legroom (general)
 - 2% Concerns over seats facing each other being used as footrests.
 - 2% Other

Base: 95



Seat design and comfort 1

- Do you find the height of the seat from the floor too high or too low?



- Do you find the seat comfortable or uncomfortable?



- Does the seat provide enough support for your back?



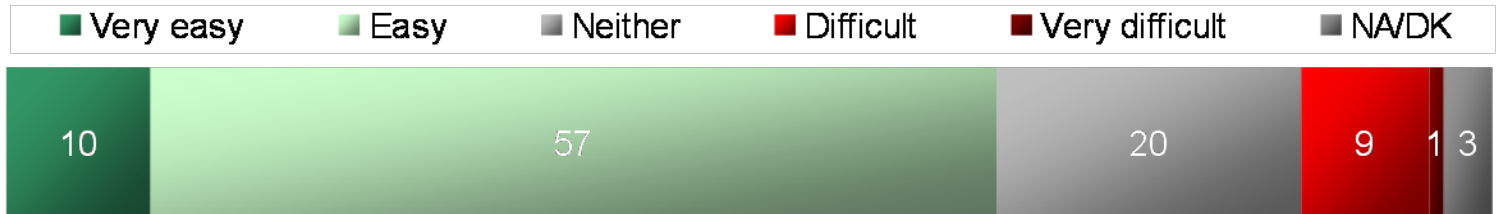
- Do you find the seat soft or hard?





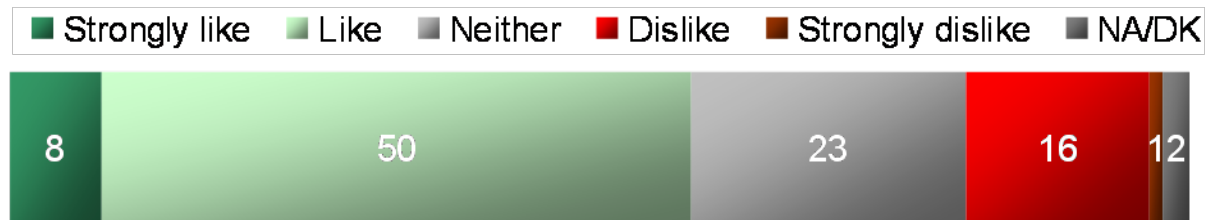
Seat design and comfort 2

- Do you find it easy or difficult to get into and out of the seat?



Base: 93

Do you like or dislike the amount of personal space



Base: 90

Do you like or dislike the shape of the seat



Base: 93

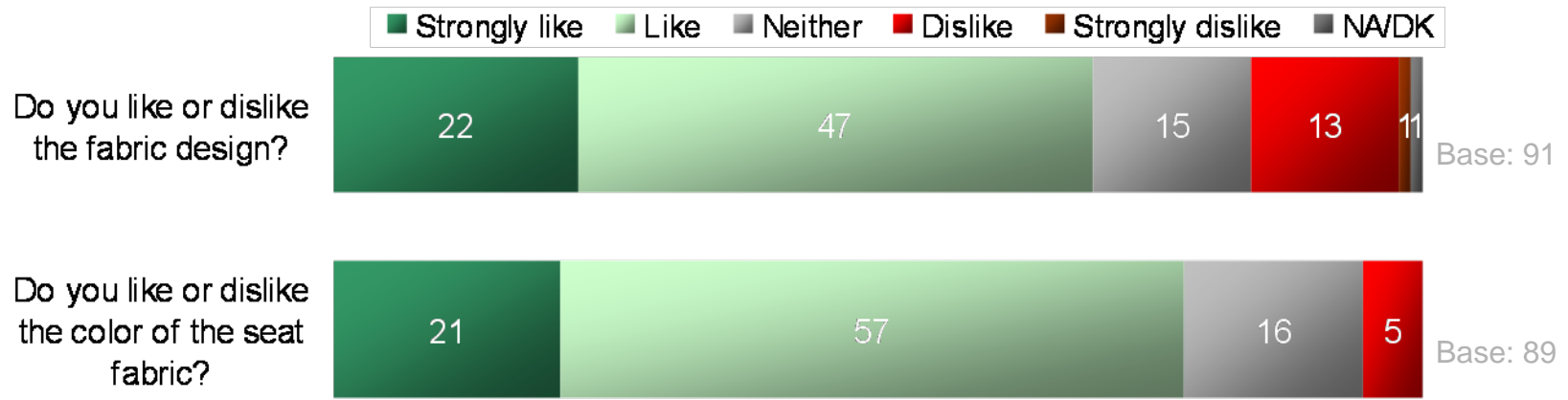


Seat design and comfort 3

- Further comments about the seats
 - 5% Too cramped/lack of legroom (general)
 - 4% Concerns over wheelchair/buggy space (too limited, hard to access, poorly designed)
 - 4% Concerns over priority seat access/design (insufficient, poorly placed, poorly labelled)
 - 4% Seating too high
 - 4% Good size/spacious
 - 4% Like the design/pattern
 - 3% Dislike shaped back of seat (uncomfortable, bad for back)
 - 3% Don't like the white lines/pattern
 - 3% Like the bench style seating
 - 2% Design should be more vandal/litter proof (no gaps between seats, fixed cushions)
 - 1% Concerns over seat cushion (too small in depth, too hard)
 - 7% Other

Base: 95

Seating colour and fabric

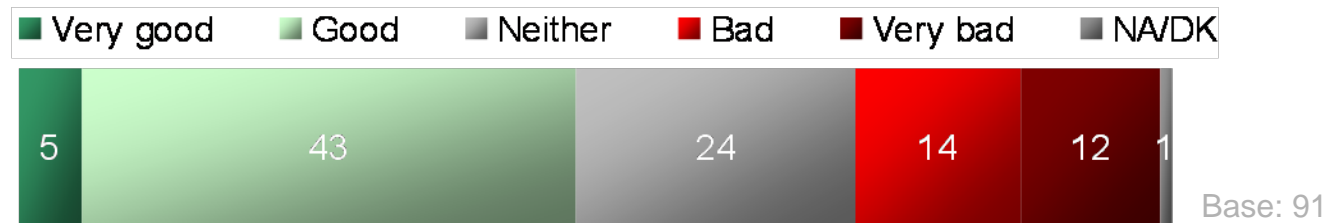


- Other positive comments
 - 15% Like the design/colour
 - 4% other
- Other negative comments
 - 7% Don't like the white lines/pattern (general)
 - 5% Pattern too intense (may cause migraines, epilepsy, dizziness)
 - 4% Too dark/lacks contrast
 - 3% Too old fashioned (clashes with modern design)
 - 5% Other



Space for Wheelchair & Buggies

- How would you rate the design of the dedicated space for wheelchairs and buggies?



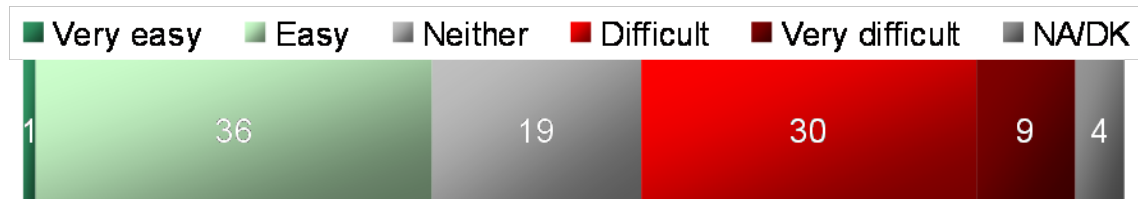
- Why is the design bad or very bad (n)
 - 10 Allotted space is too small (general)
 - 9 Hand poles in the way - make access difficult
 - 4 Insufficient space for two buggies/more buggy space required
 - 3 Difficult to access space in wheelchair/turn in space
 - 2 Grab rails are obstructive
 - 2 Would like an optional second space (one space for wheelchair, one space for buggies)
 - 2 Would need feedback from disability groups/would need further testing
 - 1 Those in priority seats are 'separated' from their children by barrier
 - 1 It should be clear(er) that priority is given to wheelchairs (over buggies)
 - 2 Other

Base: 24 who said neither, bad and very bad



Raised seats

- Do you find it easy or difficult to get into and out of these seats?



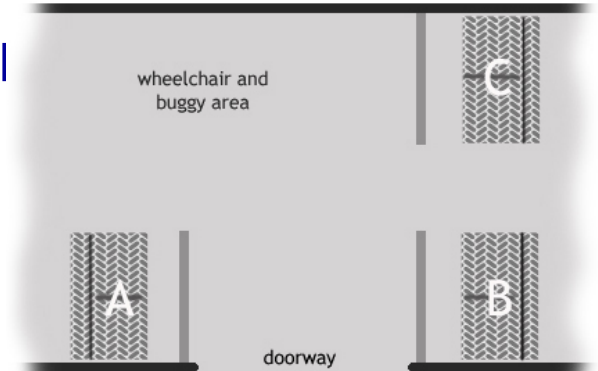
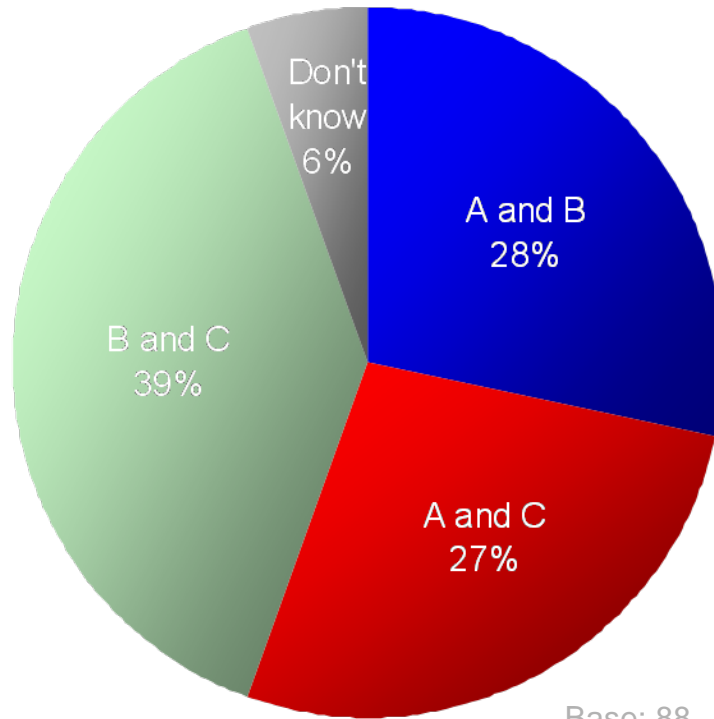
Base: 89





Priority Seats

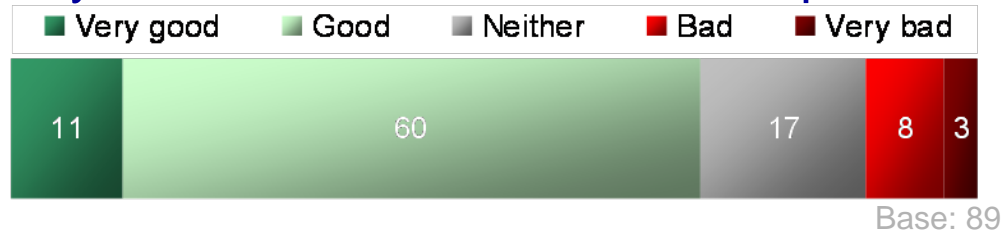
- What would be your preference for the location of the priority seats?



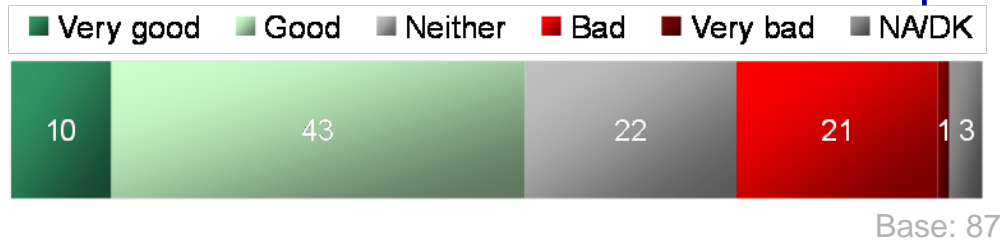


Handrails and hand poles 1

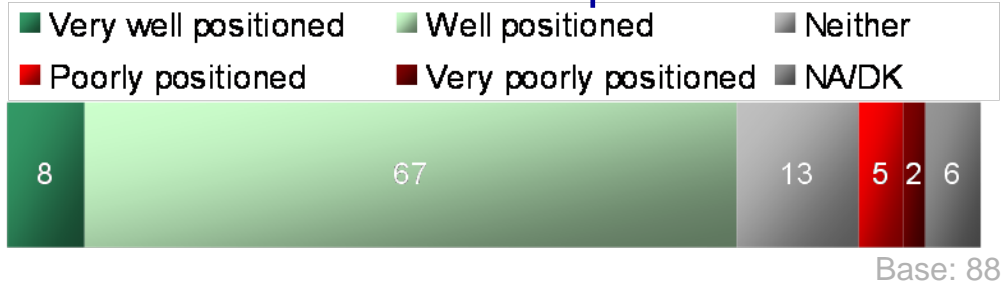
- Layout of the handrails and hand poles



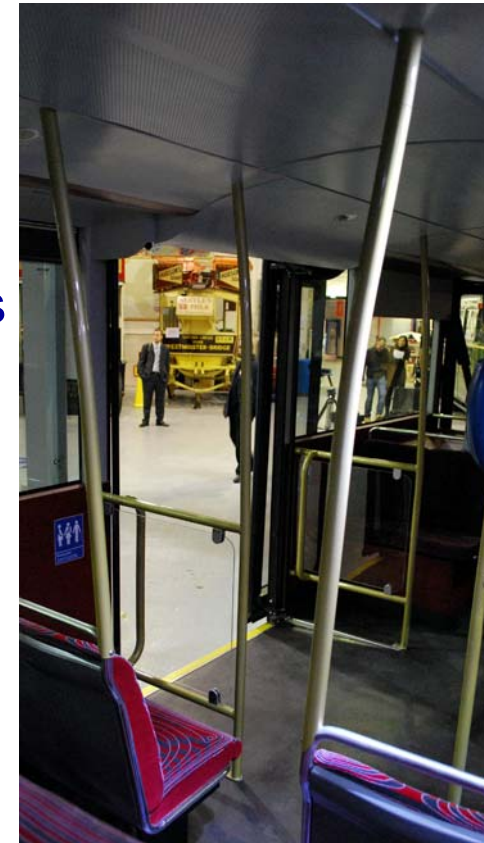
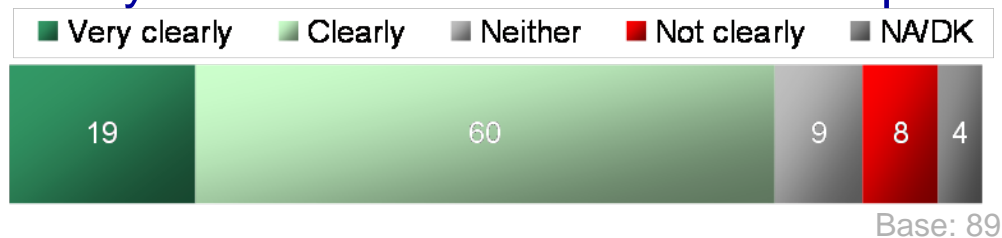
- The colours of the handrails and hand poles



- The locations of the bell push buttons



- Can you see the handrails and hand poles clearly?



Handrails and hand poles 2

- Further comments about the handrails and hand poles
 - 15% Handrails/bell buttons should be a brighter colour
 - 11% Concerns over handrails in wheel chair area (badly positioned)
 - 6% Some handrails need repositioning (higher, more practically positioned)
 - 4% Need more handrails (eg for rear facing seats, on ceiling)
 - 3% Need more bell push buttons
 - 3% Some bell push buttons need repositioning (unsafe, accidentally pushed)
 - 2% Happy with the handrail design/positioning
 - 2% Other

Base: 95



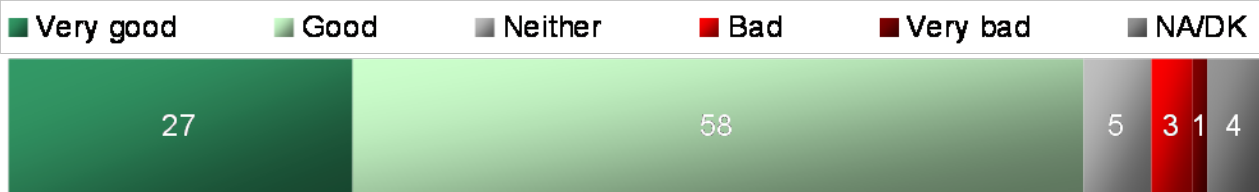
The stairs 1

- How useful do you feel it is to have two sets of stairs on the bus?



Base: 93

- How do you feel about the general design of the stairs?



Base: 91



The stairs 2

- How confident would you feel about the using the stairs when the bus is at a stand still?

Very confident Quite confident Neither Not very confident Not at all confident NA/DK



Base: 91

- Imagine that the bus was moving and please indicate how confident you would feel about the using the stairs?

Very confident Quite confident Neither Not very confident Not at all confident NA/DK



Base: 92

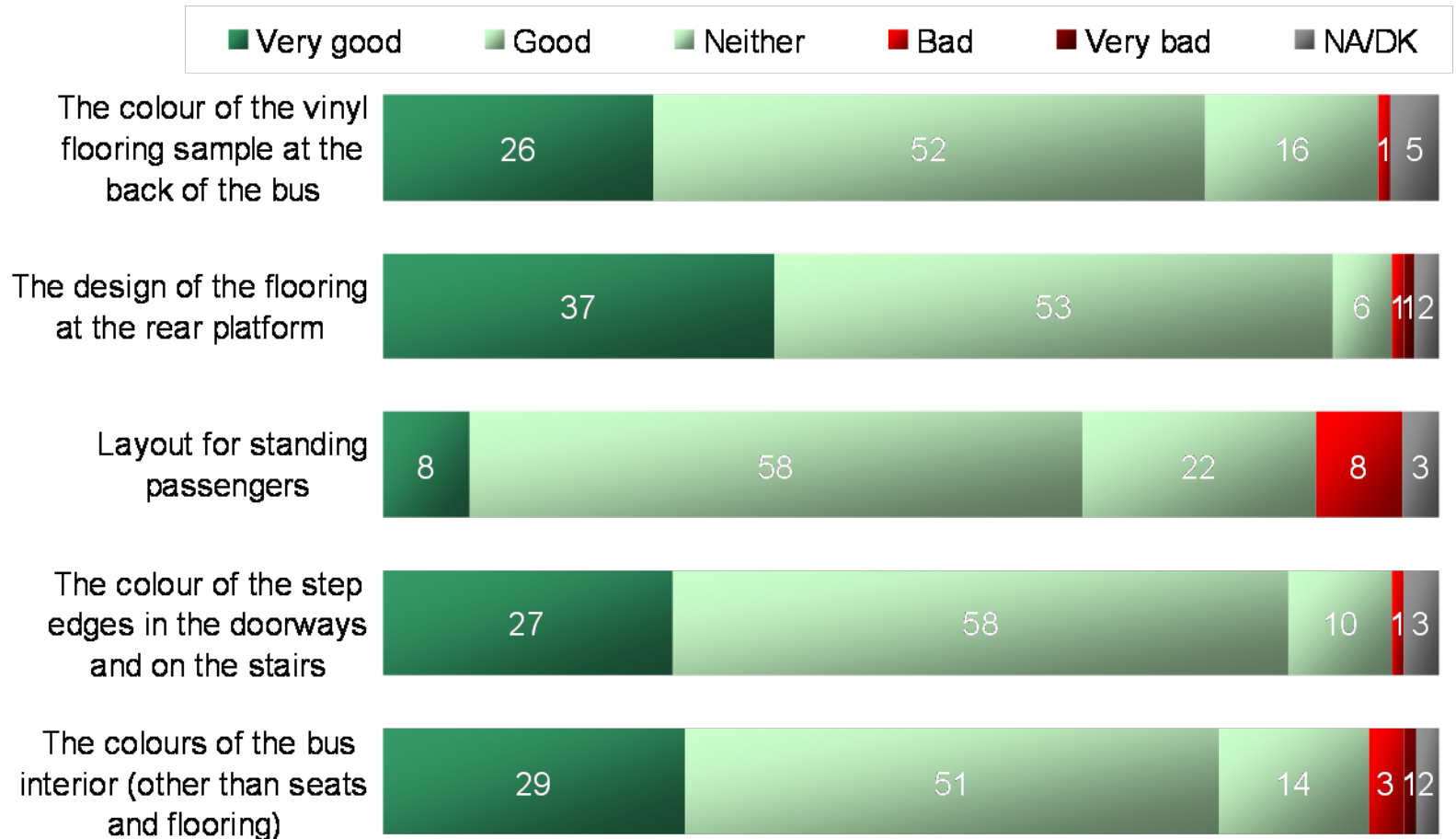
- Further comments about the stairs

- 10% Concerns about the design (too narrow, lack of headroom, steep)
- 6% Safety concerns (steps too shallow, straight design dangerous, etc)
- 6% Like the use of glass (openness, light, views)
- 4% Like the design (general)
- 3% Like the handrails (design, position etc)
- 3% Concerns over two sets of stairs (unsafe, pointless)
- 2% Concerns over stair rail (must be continuous, lower one needed)
- 2% Staircase traffic should be one-way (one up, one down)
- 6% Other

Base: 95



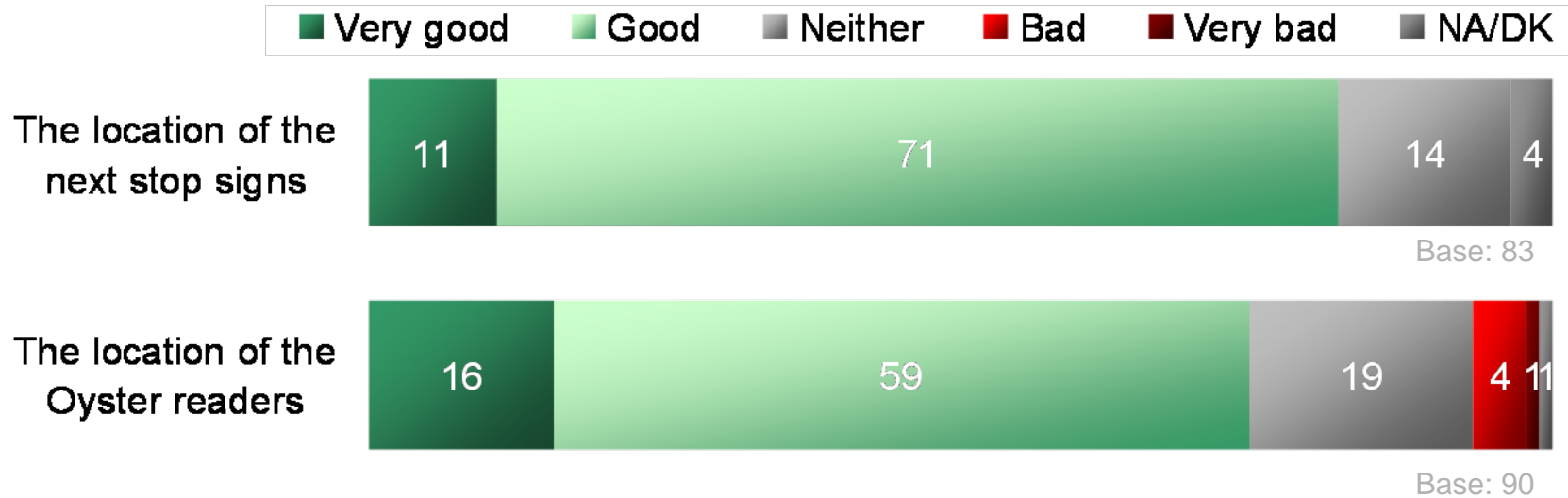
Other interior design aspects 1



Base: 86-91



Other interior design aspects 2



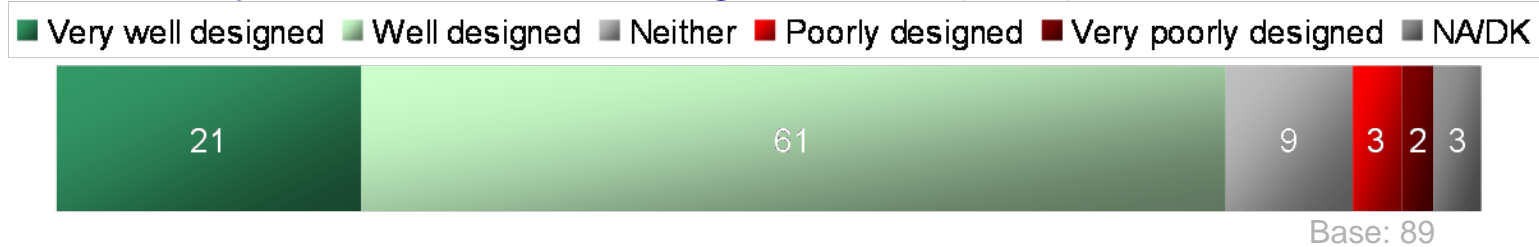
- Further comments about the above aspects
 - 14% ibus panel position issues (should be in rear/other suggested position)
 - 12% Oyster reader issues (too high, too obtrusive, poorly positioned)
 - 5% Design/colour scheme issues
 - 5% Concerns over passageway/interior layout (cramped, crowded, no standing room)
 - 6% Other

Base: 95



Open platform

- What do you think of the design of the open platform?



- Comments about the open platform

- 6% Open platform of dubious value (dangerous, better as door)
- 5% Concerns over platform design (too high, sloped floor, cramped)
- 5% Platform should always be open
- 4% Happy with design innovations (non-slip floor, use of glass)
- 3% Doubts over how often conductors will be in use
- 2% Concerns over buggy access
- 2% Concerns over robustness of design
- 1% Good access/plenty of space
- 1% Other

Base: 95

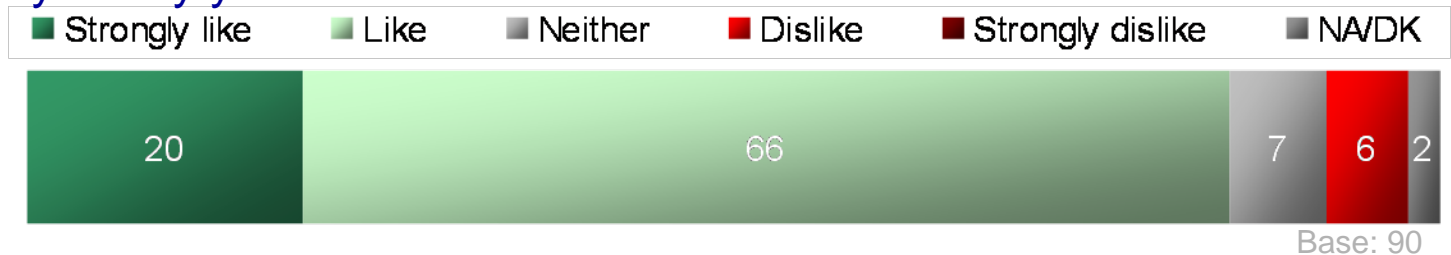


Non TfL Stakeholders



Overall interior

- Thinking about the overall design and environment of this bus would you say you like or dislike it?



- Further comments about the overall design and environment of this bus
 - 8% Interior design issues (needs improved luggage area/priority seating)
 - 8% Happy with design (general)
 - 6% Disabled user issues (priority seats too high, lack of ramp info, bell button not accessible)
 - 3% Concerns over upper deck (too dark, poor visibility, lack of headroom)
 - 3% Dislike the colour scheme
 - 3% Provides good accessibility
 - 3% Exterior design issues (easily damaged, needs side mirrors/indicators, improved bus number visibility)
 - 2% Safety concerns (design of stairs, position of Oyster readers)
 - 2% Lacks opening windows
 - 2% Need more bush bells
 - 1% Ceiling too low
 - 9% Other

Base: 95



New Bus
for
London
TfL
Stake-
holder
Findings

Executive Summary 1

- Very positive response from TFL stakeholders to overall bus design:
 - 93% liked or strongly liked exterior and none disliked it
 - 82% liked or strongly liked overall design and environment and only 7% disliked it
- For 30 specific design aspects 62%-93% gave positive ratings and 0-12% gave negative ratings
- The five worst rated aspects were:
 - Design of seats facing each other: 25%-/42%+
 - The seat fabric design: 24%-/61%+
 - Ease of getting into/out of raised seats: 19%-/55%+
 - Confidence in using stairs when bus is moving: 19%-/55%+
 - The mix of forward facing and rear facing seats: 18%-/57%+

Executive Summary 2

- The six best rated design aspects were:
 - overall design of the exterior of the bus: 93% like/strongly like (0% dislike)
 - the design of the open platform: 93% well/very well designed (2% poorly designed)
 - the design of the flooring at the rear platform: 91% good/very good (2% bad)
 - the colour of the step edges in the doorways and on the stairs: 86% good/very good (0% bad)
 - the height of the seat from the floor: 86% about right (11% too high/too low)
 - layout of the handrails and hand poles: 85% good/very good (6% bad)

Background and objectives

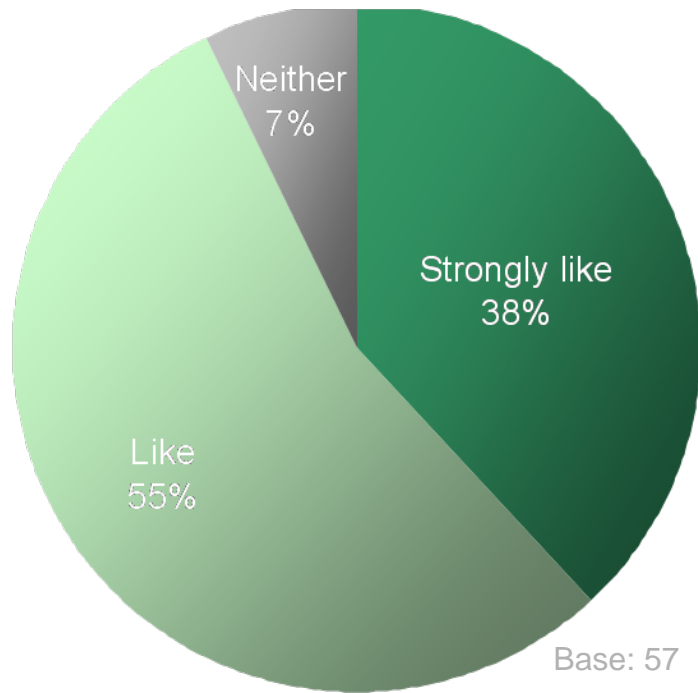
- Background
 - a mock up of the New Bus for London has been designed and was on display at TfL's Acton depot
- Objectives were to gauge the reaction and views of stakeholders and members of the general public towards the following aspects of the bus:
 - Overall look and feel
 - Seats (including layout and raised and priority seats)
 - Space for wheelchair and buggies
 - Handrails and hand poles
 - Stairs
 - Open platform
 - Bell push, Oyster reader and next stop sign locations
 - Colours of bus interior and step edges
 - Layout for standing passengers
 - Flooring

Method

- Self completion questionnaires
- Stakeholders
 - 154 questionnaires from various stakeholder groups
 - 59 from TfL and London Buses staff
 - 95 from other stakeholders
- This report is on the 59 TfL stakeholders (49 from TfL and 10 from London Buses)

Overall exterior

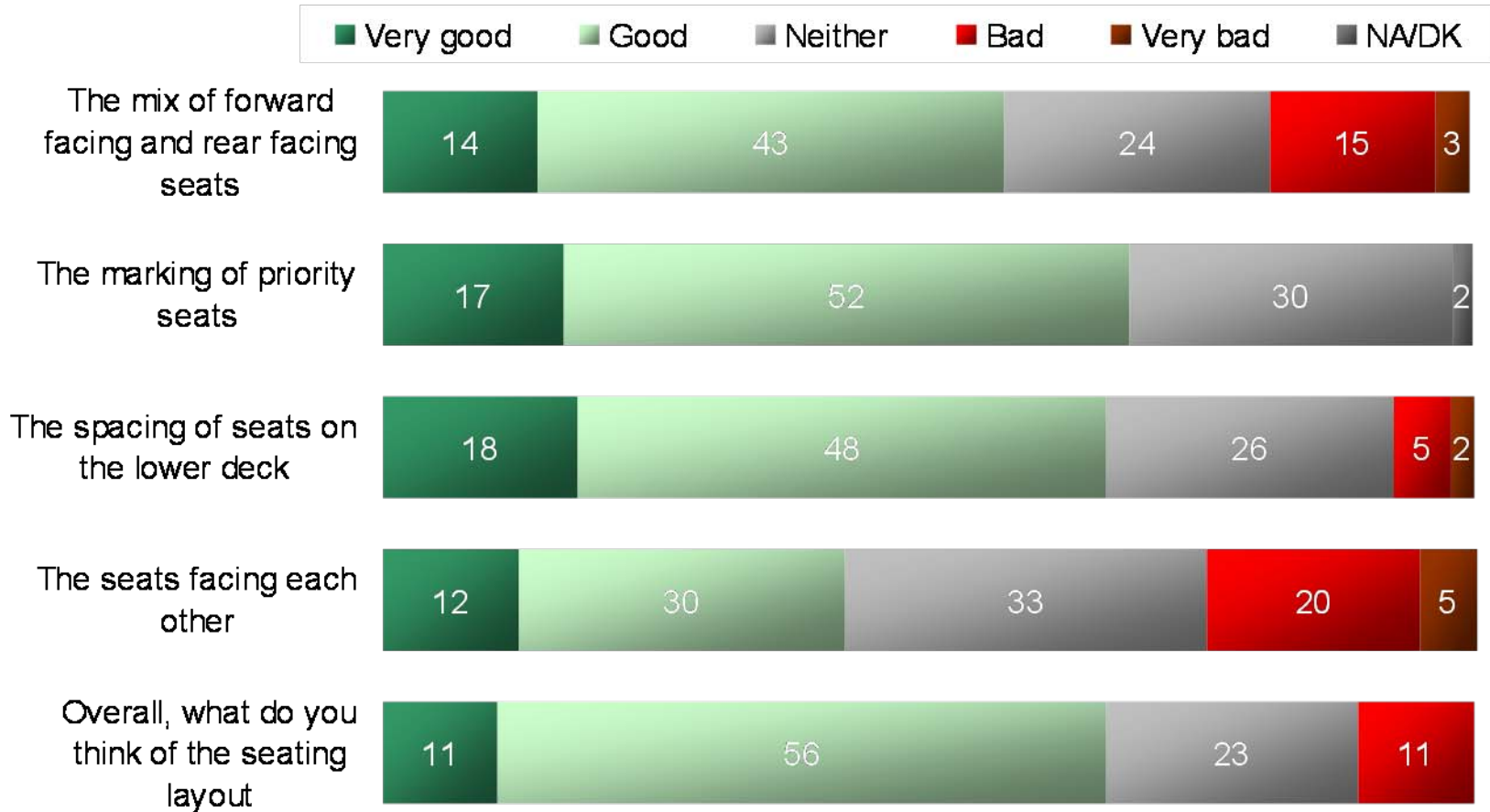
- Very positive response



Overall exterior – Likes/dislikes

- Likes (71%)
 - 24% Like use of glass (light, open, increased visibility)
 - 15% Like aesthetics/feel (general)
 - 15% Like curved design/contours
 - 12% Like staircase design (windows)
 - 4% Like three doors/rear platform
 - 1% Like lights (general)
- Dislikes (48%)
 - 10% Dislike tree guard (unattractive, after thought)
 - 7% Dislike aesthetics/shape of front
 - 7% Dislike upper deck design (limited windows, too shallow) 4% Dislike lack of indicators (side)
 - 5% Dislike rear design (dangerous for cyclists, expensive to repair)
 - 5% Dislike use of glass (not tinted, not curved)
 - 4% Dislike interior design (cramped, lack of storage, uncomfortable seats)
 - 4% Dislike rear platform (safety concerns)
 - 4% Dislike staircase design (too exposed, too much glass)
 - 1% Dislike aesthetics/feel (general)
 - 1% Dislike headlights

Seating layout 1



Base: 53-58

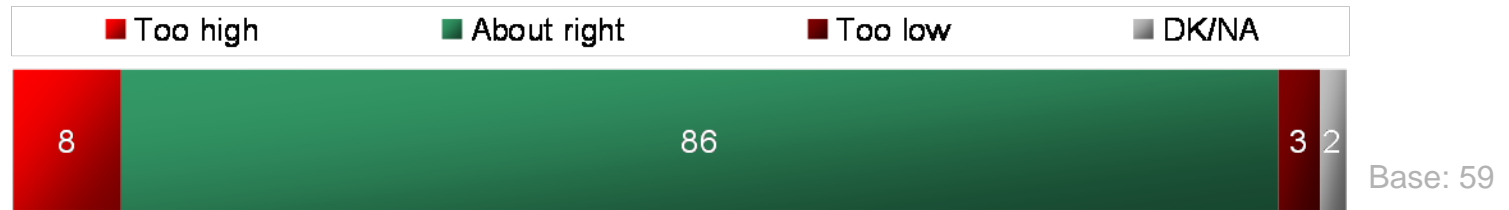
Seating layout 2

- Comments about the seat layout on the lower deck
 - 15% Concerns over rear facing seats (unpopular, dangerous, too many, limited leg room)
 - 7% Concerns over height of seats (uncomfortable, hard to access)
 - 5% Layout good/space used efficiently
 - 5% Happy with seating (comfortable, good views, nice design, etc)
 - 3% Priority seats should be better labelled (different colour, clearer signs)
 - 3% Limited leg room in some seats (priority and forward facing)
 - 3% Concerns over passageway/aisle layout (narrow, sloped, handrails access)
 - 1% Limited headroom when standing up in rear seats
 - 1% Concerns over seats facing each other being used as footrests.
 - 1% Cramped/ lack of legroom (general)
 - 1% Concerns over wheelchair/buggy space (too limited, hard to access, Oyster reader too high)
 - 1% Other

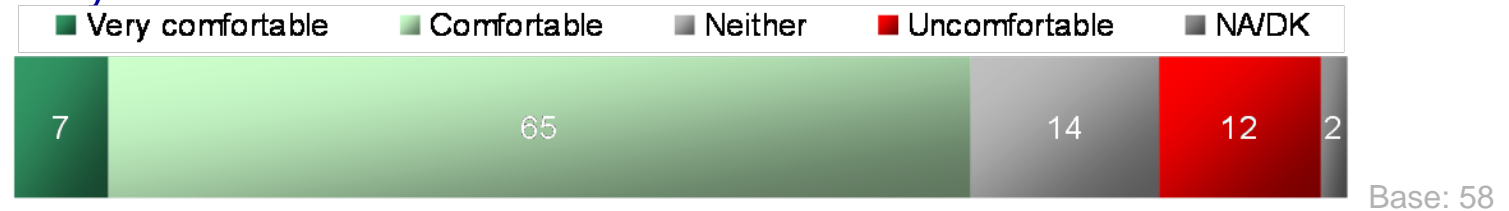
Base: 59

Seat design and comfort 1

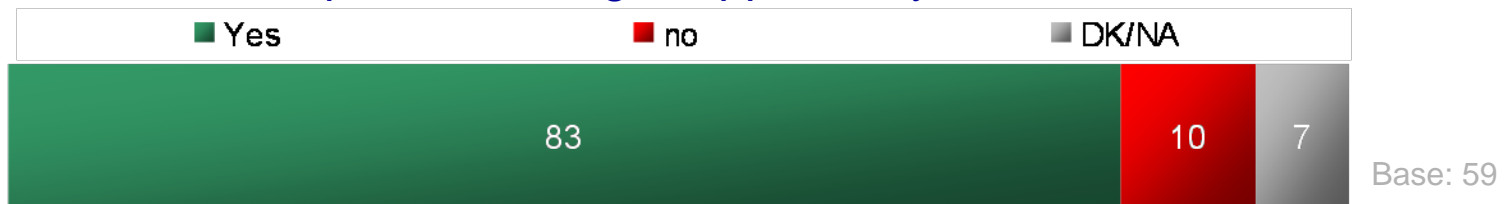
- Do you find the height of the seat from the floor too high or too low?



- Do you find the seat comfortable or uncomfortable?



- Does the seat provide enough support for your back?

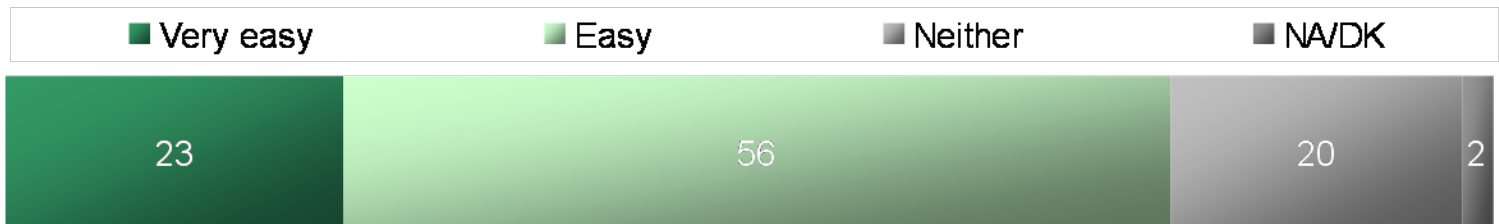


- Do you find the seat soft or hard?



Seat design and comfort 2

- Do you find it easy or difficult to get into and out of the seat?



Base: 57

Do you like or dislike the amount of personal space



Base: 57

Do you like or dislike the shape of the seat



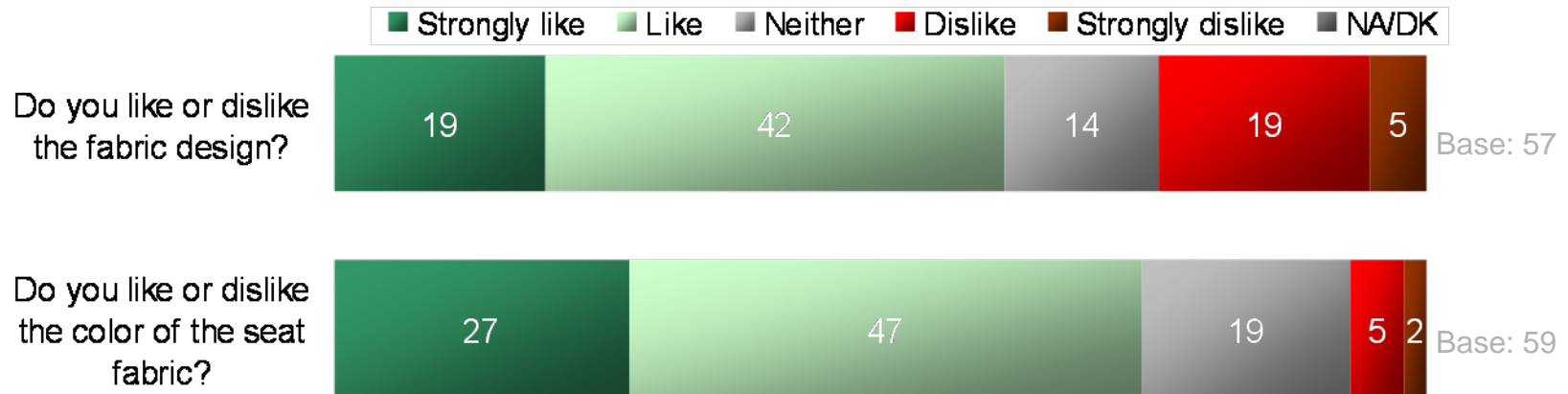
Base: 58

Seat design and comfort 3

- Further comments about the seats
 - 7% Dislike shaped back of seat (uncomfortable, bad for back)
 - 7% Concerns over seat cushion (too small in depth, too hard)
 - 7% Too cramped/lack of legroom (general)
 - 5% Dislike exposed metal seat frames (dangerous)
 - 4% Don't like the white lines/pattern
 - 2% Like the design/pattern
 - 2% Like the bench style seating
 - 2% Concerns over wheelchair/buggy space (too limited, hard to access, poorly designed)
 - 2% Concerns over priority seat access/design (insufficient, poorly placed, poorly labelled)
 - 2% Design should be more vandal/litter proof (no gaps between seats, fixed cushions)
 - 4% Other

Base: 59

Seating colour and fabric

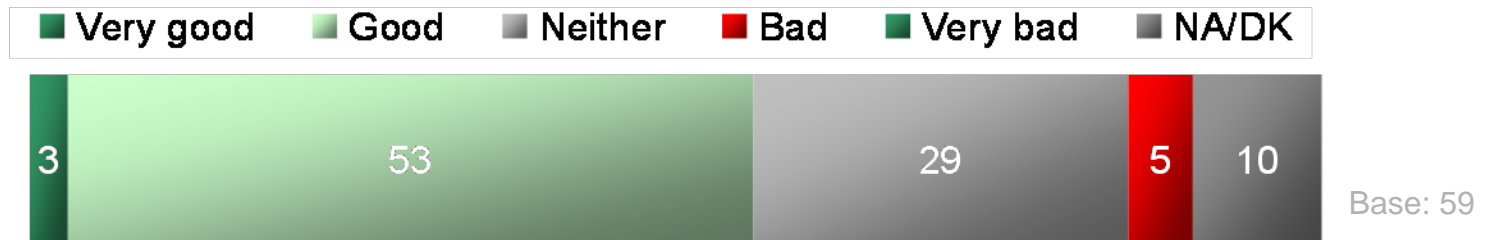


- Other positive comments
 - 7% Like the design/colour
 - 3% other
- Other negative comments
 - 9% Don't like the white lines/pattern (general)
 - 7% Pattern too intense (may cause migraines, epilepsy, dizziness)



Space for Wheelchair & Buggies

- How would you rate the design of the dedicated space for wheelchairs and buggies?

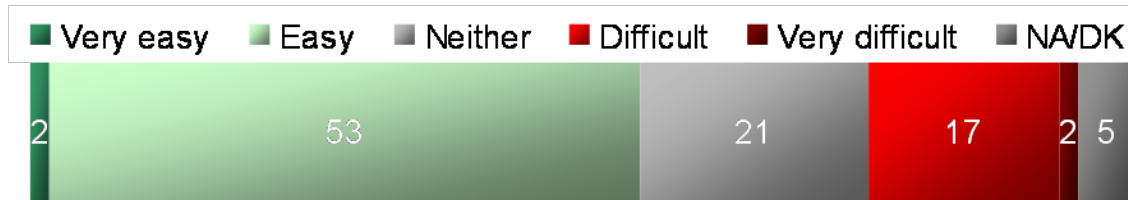


- Why is the design bad or very bad (n)
 - 3 Allotted space is too small (general)
 - 2 Hand poles in the way - make access difficult
 - 1 Insufficient space for two buggies/more buggy space required
 - 1 Difficult to access space in wheelchair/turn in space
 - 1 Those in priority seats are 'separated' from their children by barrier
 - 1 Should provide room for mobility scooters
 - 2 Other

Base: 20 who said neither or bad

Raised seats

- Do you find it easy or difficult to get into and out of these seats?

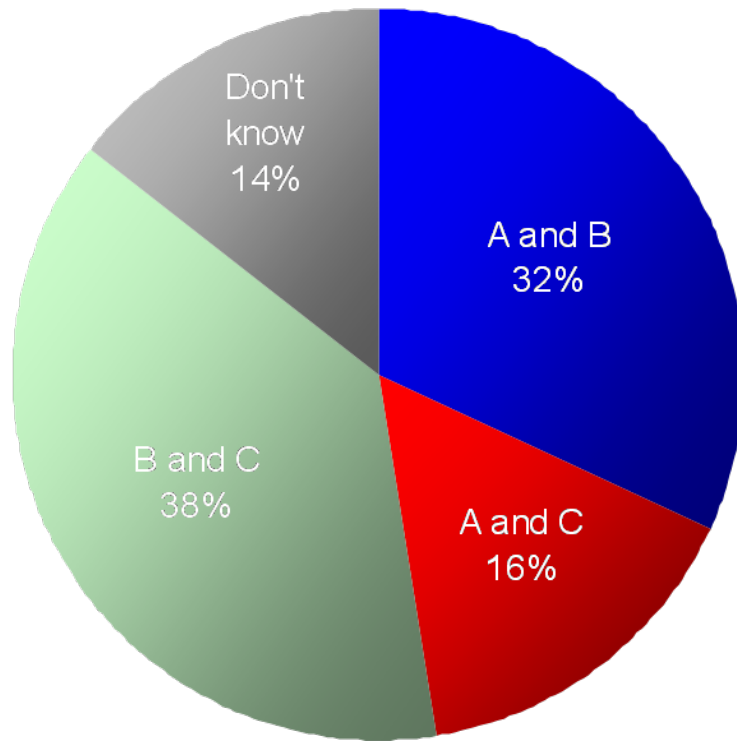


Base: 58

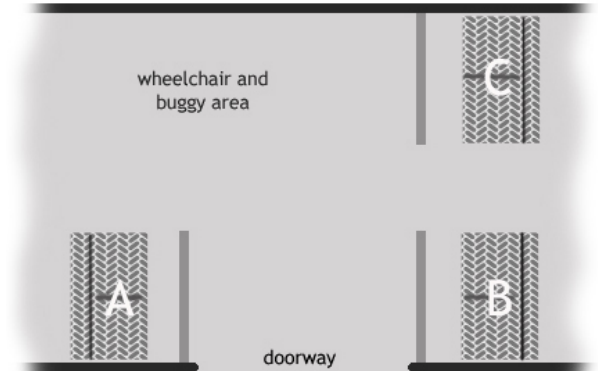


Priority Seats

- What would your preference be for the location of the priority seats?

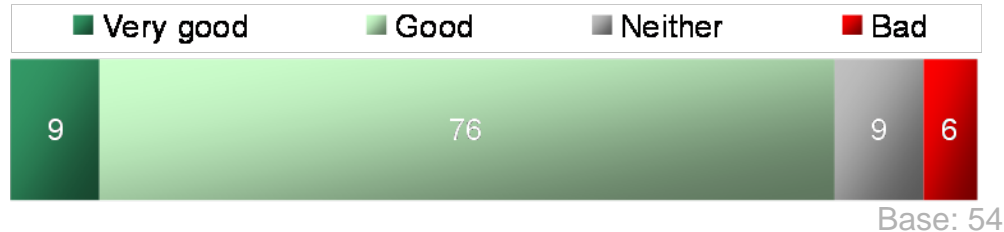


Base: 57

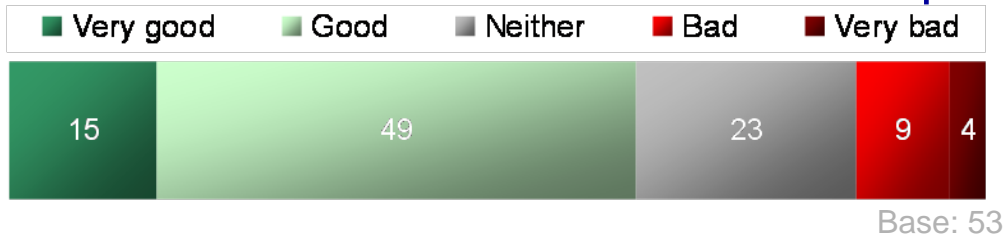


Handrails and hand poles 1

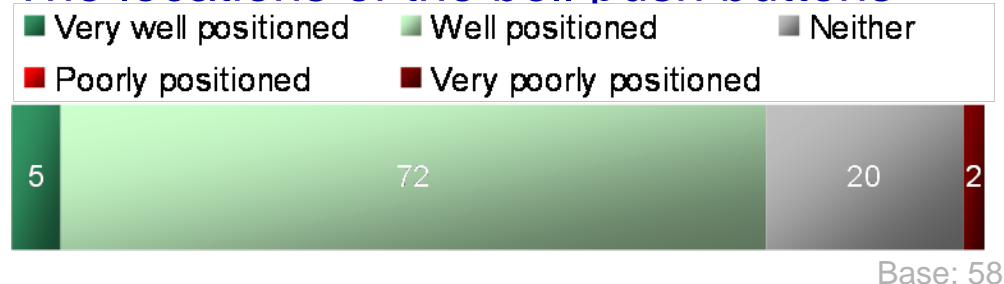
- Layout of the handrails and hand poles



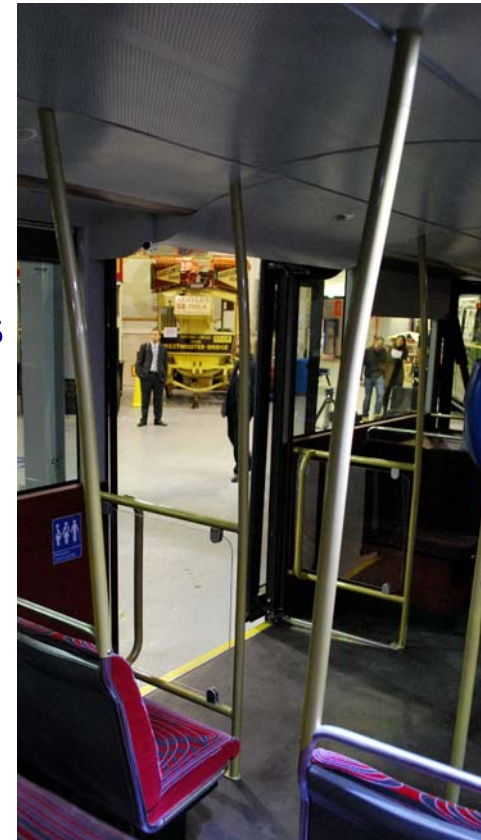
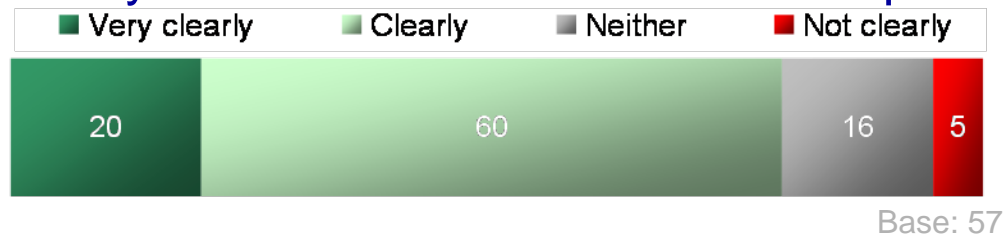
- The colours of the handrails and hand poles



- The locations of the bell push buttons



- Can you see the handrails and hand poles clearly?



Handrails and hand poles 2

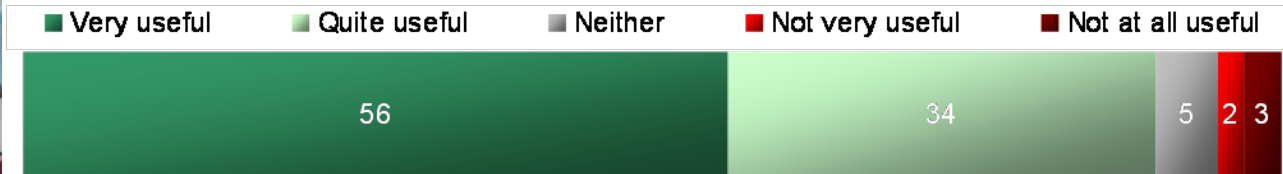
- Further comments about the handrails and hand poles
 - 12% Handrails/bell buttons should be a brighter colour
 - 5% Some handrails need repositioning (higher, more practically positioned)
 - 4% Need more handrails (eg for rear facing seats, on ceiling)
 - 4% Need more bell push buttons
 - 4% Some bell push buttons need repositioning (unsafe, accidentally pushed)
 - 2% Happy with the handrail design/positioning

Base: 59



The stairs 1

- How useful do you feel it is to have two sets of stairs on the bus?



Base: 59

- How do you feel about the general design of the stairs?



Base: 59

The stairs 2

- How confident would you feel about the using the stairs when the bus is at a stand still?

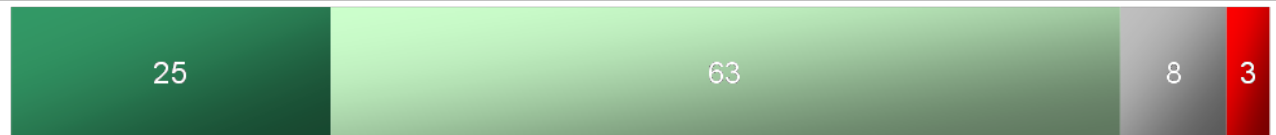
Very confident Quite confident Neither Not very confident Not at all confident NAVDK



Base: 59

- Imagine that the bus was moving and please indicate how confident you would feel about the using the stairs?

Very confident Quite confident Neither Not very confident Not at all confident NAVDK

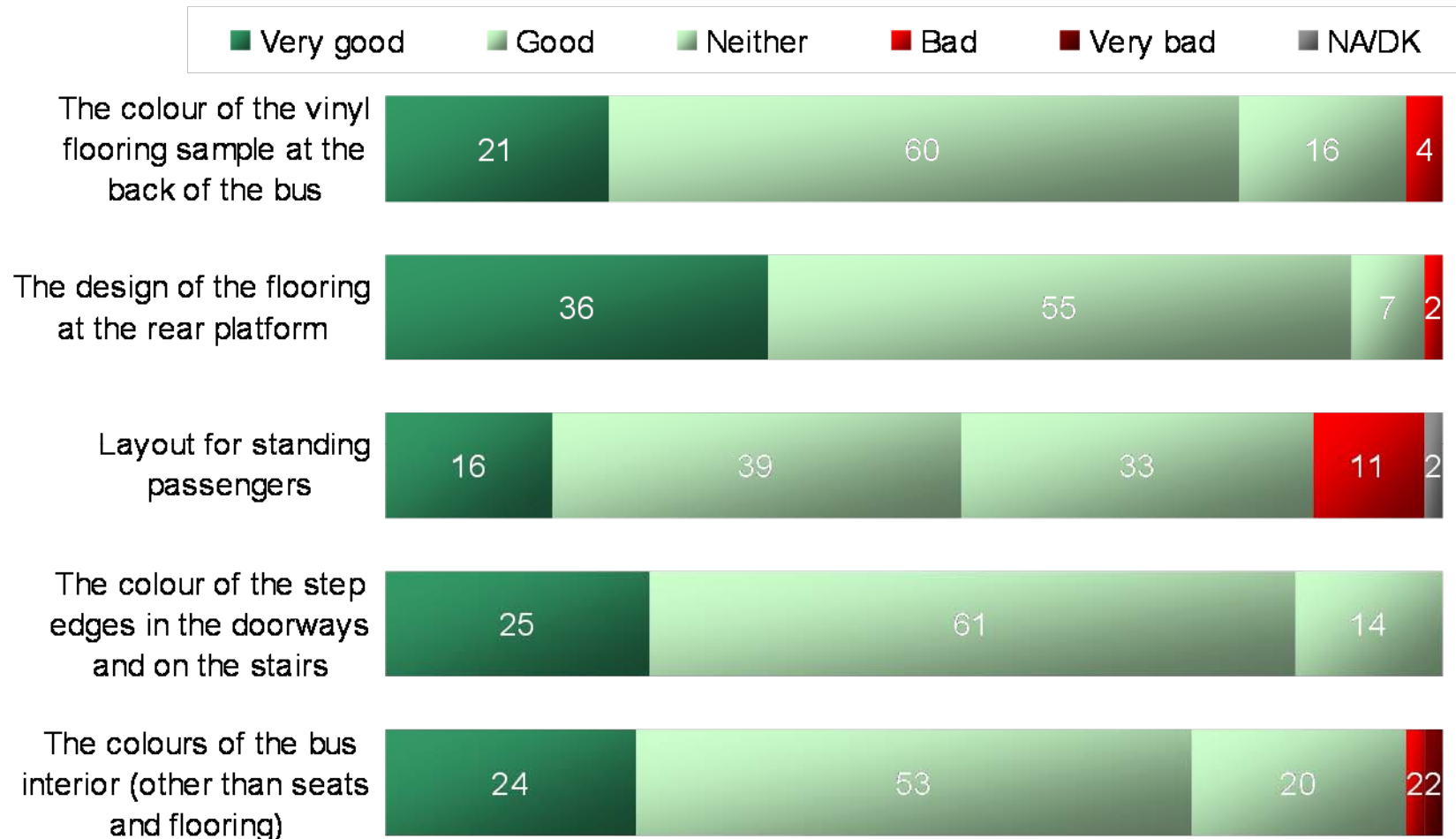


Base: 59

- Further comments about the stairs
 - 9% Like the use of glass (openness, light, views)
 - 7% Concerns about the design (too narrow, lack of headroom, steep)
 - 3% Concerns over openness/use of glass (exposing, modesty)
 - 3% Like the design (general)
 - 2% Concerns over stair rail (must be continuous, lower one needed)
 - 2% Other

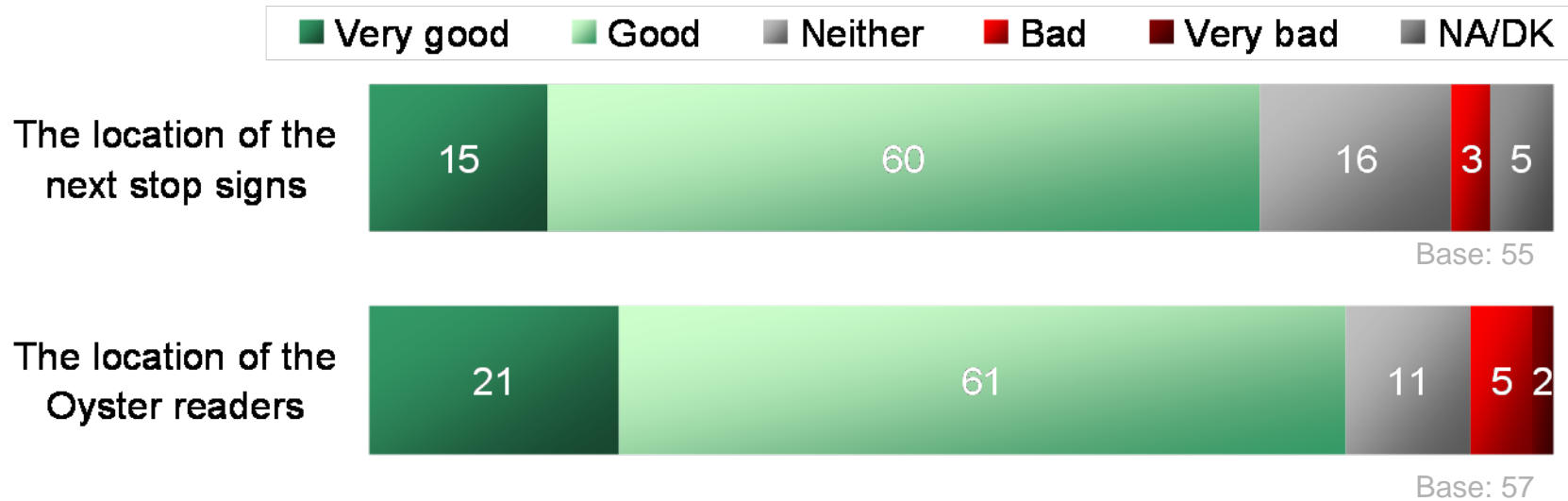
Base: 59

Other interior design aspects 1



Base: 57-59

Other interior design aspects 2

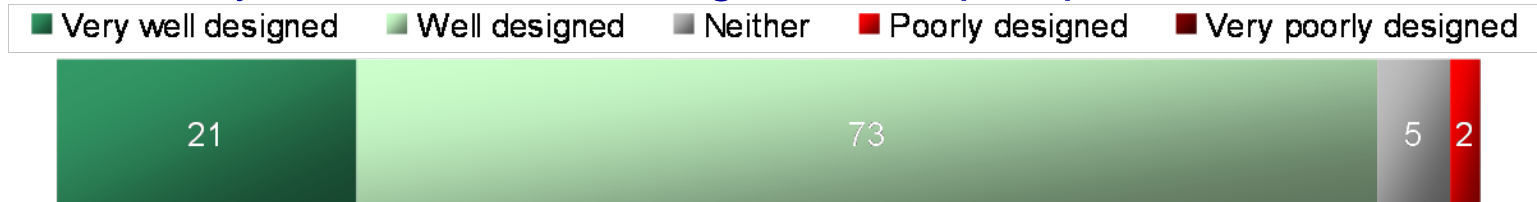


- Further comments about the above aspects
 - 15% ibus panel position issues (should be in rear/other suggested position)
 - 15% Oyster reader issues (too high, too obtrusive, poorly positioned)
 - 8% Design/colour scheme issues
 - 3% Handrail required at the rear of the bus
 - 3% Concerns over passageway/interior layout (cramped, crowded, no standing room)
 - 4% Other

Base: 59

Open platform

- What do you think of the design of the open platform?



Base: 56

- Comments about the open platform

- 7% Open platform of dubious value (dangerous, better as door)
- 7% Concerns over misuse of design (buggies parked in wrong place, stairs misused etc)
- 7% Concerns over platform design (too high, sloped floor, cramped)
- 4% Concerns over robustness of design
- 2% Good access/plenty of space
- 2% Platform should always be open
- 2% Happy with design innovations (non-slip floor, use of glass)
- 2% Other

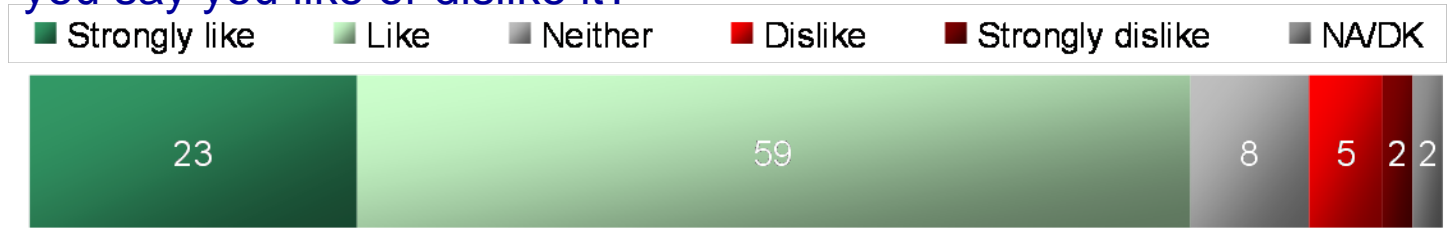
Base: 59



TfL Stakeholders

Overall interior

- Thinking about the overall design and environment of this bus would you say you like or dislike it?



Base: 56

- Further comments about the overall design and environment of this bus
 - 17% Concerns over upper deck (too dark, poor visibility, lack of headroom)
 - 7% Interior design issues (needs improved luggage area/priority seating, more)
 - 5% Happy with design (general)
 - 4% Seats at rear on lower deck too high
 - 4% Safety concerns (design of stairs, position of Oyster readers)
 - 4% Poor destination sign visibility at rear
 - 4% Dislike the colour scheme
 - 2% Lacks opening windows
 - 2% Exterior design issues (easily damaged, needs side mirrors/indicators, improved)
 - 7% Other

Base: 59



New Bus for
London

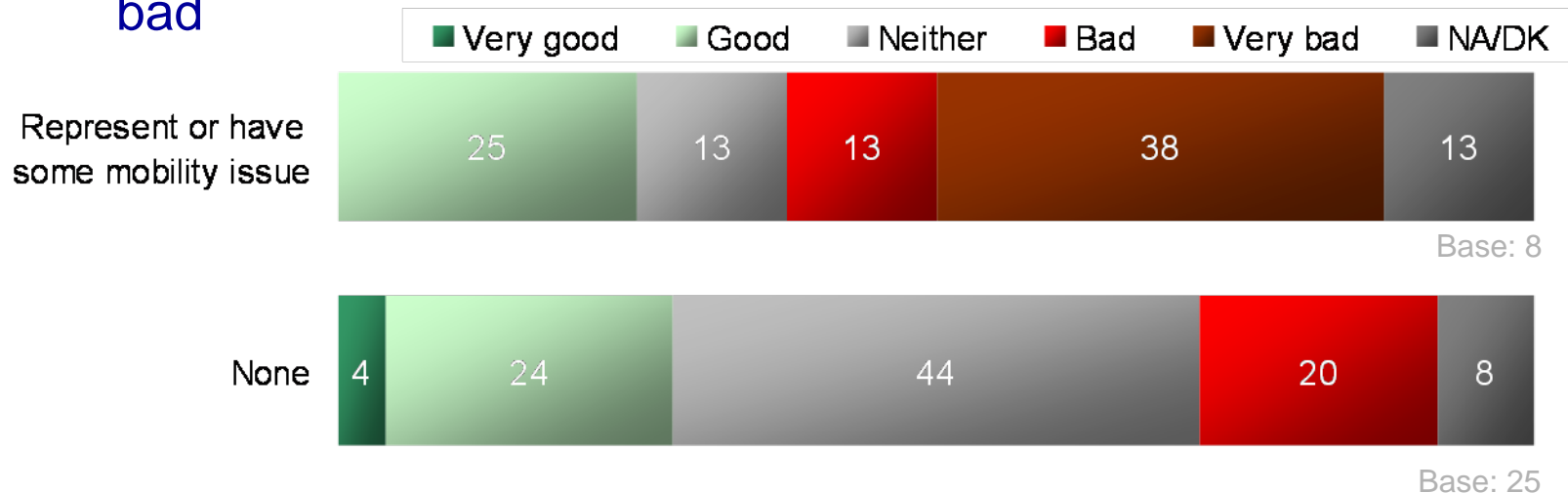
Post wheelchair
bay modification
stakeholder
research findings

Sample

- 36 Stakeholder interviews were completed after the change to the wheelchair bay
 - 8 represent or have some mobility issue
 - 6 TfL
 - 7 Local authority/borough
 - 3 GLA
 - 12 youth group
- Overall findings less positive than research before change, for example:
 - 86% liked or strongly liked exterior compared to 93-94% for respondents before
 - 68% liked or strongly liked overall design and environment compared to 82-89% for respondents before

Space for Wheelchair & Buggies

- Over half of those with mobility issues rated the design of the dedicated space for wheelchairs and buggies as bad or very bad



- The ten who said bad or very bad were asked why:
 - Allotted space is too small (general) (6 including 2 from mobility groups)
 - Would like an optional second space (one space for wheelchair, one space for buggies) (5 including 2 from mobility groups)
 - Difficult to access space in wheelchair/turn in space (2 including 1 from mobility groups)

Conclusions

Conclusions

- The prototype New Bus for London was very well rated by the general public and stakeholders:
 - over 90% liked or strongly liked the exterior
 - about 85% liked or strongly liked the overall design and environment
- Other aspects of the design which were particularly well rated were:
 - design of the flooring at the rear platform
 - the design of the stairs
 - height of the seats from the floor
 - design of the open platform
- The only areas where the design was less successful were with respect to the design of the space for wheelchairs/buggies and some seating issues:
 - ease of getting into/out of raised seats
 - seat personal space
 - design of seats facing each other



Appendix A: General Public Data



Bus Travel in London 1

- How often do you travel by bus in London (%)

– 5 or more days per week	38
– 3-4 days per week	25
– 2 days per week	12
– Once a week	14
– Once a fortnight and	3
– Once a month	4
– Less often	5

Base 130

- For what purposes do you make bus journeys in London (%)

– Shopping	74
– Visiting friends/relatives	59
– Work commuting	44
– Day out	40
– Personal business	39
– Sport/entertainment	28
– Education commuting	24
– Holiday	9
– Employer's business	5
– Other	2

Base 130

Bus Travel in London 2

- Whether travel by bus in central or outer London (%)
 - Central London 26
 - Outer London 16
 - Both Central and outer London 58

Base: 127
- Length of typical bus journey (%)
 - Less than 5 minutes 1
 - 5-10 minutes 13
 - 11-15 minutes 15
 - 16-20 minutes 31
 - 21-29 minutes 14
 - 30 minutes or longer 26

Base: 130
- Whether usually get a seat when travelling by bus in London (%)
 - I always get a seat 10
 - I usually get a seat 52
 - I sometimes get a seat 34
 - I rarely get a seat 4

Base: 129

Bus Travel in London 3

- When travelling on double decker buses in London, whether usually travel on the upper deck or lower deck (%)
 - I always travel on the upper deck 17
 - I usually travel on the upper deck 26
 - I sometimes travel on the upper deck 34
 - I rarely travel on the upper deck 14
 - I never travel on the upper deck 7
 - I don't travel on double decker buses in London 2

Base: 128

- When travelling on buses in London, whether ever sit on rear-facing seats (%)
 - Yes 49
 - No 33
 - Don't know 18

Base: 129

- **Those who don't:** If a rear facing seat was the only seat available whether would sit on it or stand in the aisle (%)
 - Sit on it 80
 - Stand 12
 - Don't know 8

Base: 66 who don't ever sit on rear facing seats

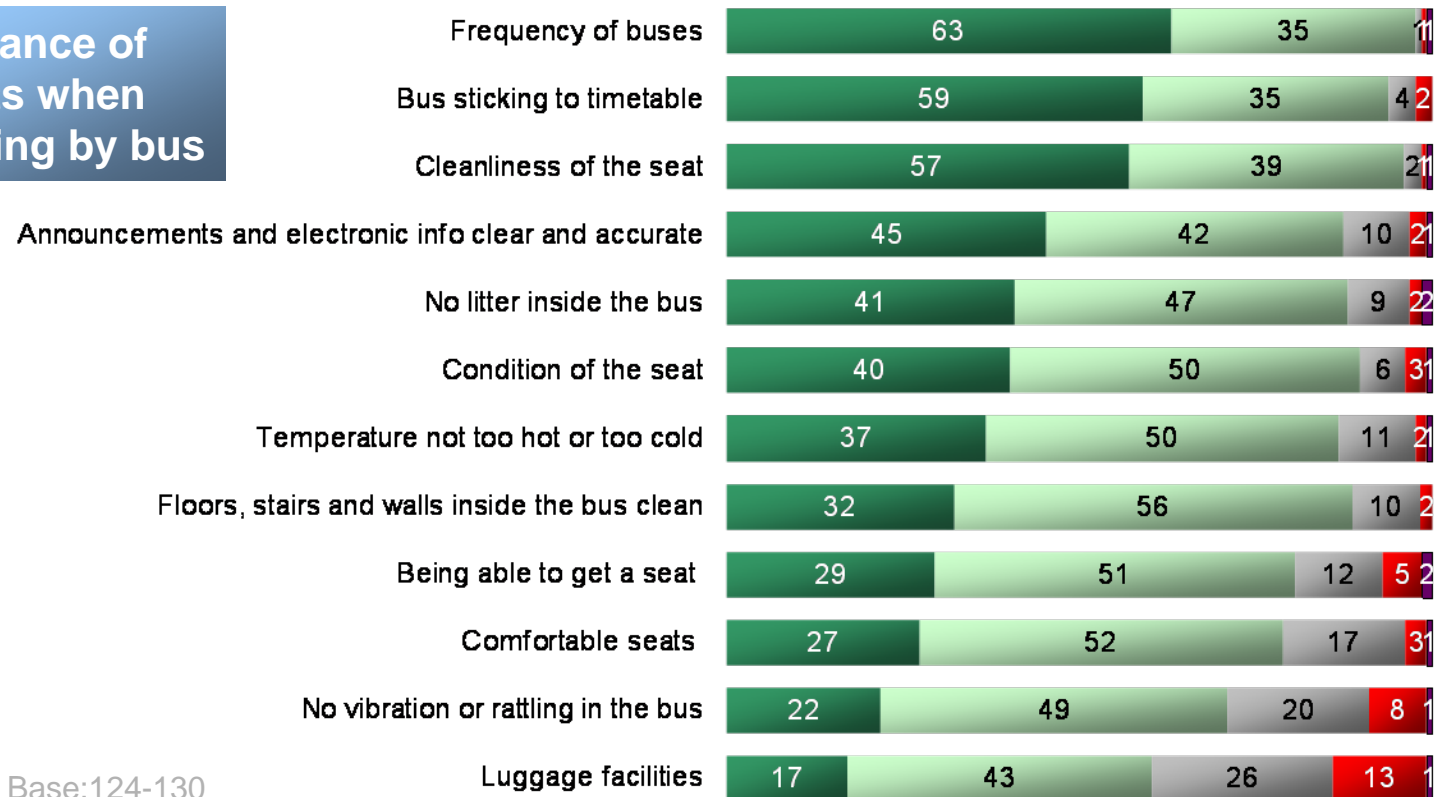
Bus Travel in London 4

- Whether carrying anything or had a buggy with them (%)
 - No 35 Yes, briefcase/computer 5
 - Yes, shopping bag(s) 22 Yes, have buggy 3
 - Yes, handbag 22 Yes, other 1
 - Yes, rucksack/suitcase 19

Base: 130



Importance of aspects when travelling by bus



Base:124-130



Respondent characteristics 1

- Employment status (%)
 - Work full time (30+ hours) 37
 - Work part time (8-29 hours) 14
 - Not working – seeking work 19
 - Not working – not seeking work 2
 - Retired 18
 - Voluntary work 1
 - Full-time student 13
 - Part-time student 2
 - Looking after family/home 3
 - Other 1

Base: 128
- Gender (%)
 - Male 59
 - Female 42

Base: 128
- Age (%)
 - 17-24 26
 - 25-34 22
 - 35-44 12
 - 45-54 11
 - 55-59 9
 - 60-64 8
 - 65+ 12

Base: 129



Respondent characteristics 2

- Physical/mental impairments which limit daily activities or work you can do (%)
 - No, none 82
 - Mental health condition 4
 - Learning difficulty 3
 - Serious long-term illness 3
 - Other 3
 - Mobility impairment 2
 - Age-related mobility difficulties 2
 - Visual impairment 2
 - Hearing impairment 2

Base: 130

- Ethnic group (%)
 - British 53
 - Irish 2
 - Any other White background 16
 - White and Black Caribbean 2
 - White and Black African 1
 - White and Asian 1
 - Any other Mixed background 4
 - Indian 3
 - Pakistani 1
 - Any other Asian background 2
 - Caribbean 7
 - African 4
 - Chinese 2
 - Any other ethnic group 2

Base: 123



Respondent characteristics 3

- Annual household income (%)
 - Under £4,999 6
 - £5,000 to £9,999 8
 - £10,000 to £14,999 10
 - £15,000 to £19,999 7
 - £20,000 to £29,999 18
 - £30,000 to £39,999 6
 - £40,000 to £49,999 6
 - £50,000 to £75,000 4
 - £75,000 or over 15
 - Don't know/prefer not to say 20

Base: 119