Low Emission Zone

Final report

Research Study Conducted for Transport for London

Transport for London

4 July 2006

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Introduction

Transport for London is proposing to introduce a Low Emission Zone (LEZ) to improve air quality in Greater London and to help London work towards meeting its 2010 targets to reduce nine main air pollutants. To comply with the proposed LEZ, operators will be required to reduce their emissions by either replacing or modifying their older diesel-engined vehicles that do not meet the proposed emission standards. Operators not complying with the proposed standards will have to pay a substantial daily charge to drive within the zone.

Surveys amongst businesses within Greater London (545 interviews), transport operators currently travelling within Greater London (482 interviews), and Greater London residents (1,000 interviews) were conducted via telephone from a centrally located Ipsos MORI telephone interviewing centre during March 2006.

The primary aim of this study was to identify attitudes and opinions of residents in Greater London, as well as the wider business community, towards the proposal and to assess how representative the findings of the public and stakeholder consultation on the Revisions to the Mayor's Transport and Air Quality Strategies are.

Residents

Nearly half of residents (45%) think that air quality in London is poor and half believe that air pollution affects them or their family.

Once informed of the proposal, the majority of residents (79%) support the proposed LEZ and think that it is a good idea. Most residents (82%) believe that the proposal for older vehicles to require modification is reasonable, with support for the LEZ to apply to all vehicles, even cars. Two-thirds of Londoners support the proposed charge, with a slightly greater preference for the option of a daily charge (43%), rather than an outright ban on older vehicles which do not meet the proposed LEZ emission standards (35%). Previous awareness of the LEZ among residents is low. Six in ten Londoners have not heard of the LEZ, with 78% unaware of TfL's consultation on it.

Residents who have health problems that are aggravated by air pollution are more likely to support the proposed LEZ (83%) and think that it should be applied to all types of vehicles. 92% of residents think it should be applied to lorries. Residents are also more likely to think that London's air quality is poor (62%) and that better/improved /affordable public transport would help reduce road traffic pollution (28%).

There are some differences of opinion among residents by area of Greater London in which they live. For example, residents from inner north London are more likely to support the proposed LEZ and a daily charge for non-compliant vehicles than residents in outer south London.

Residents with cars in their household, especially diesel cars, are more aware of the LEZ and more aware of the consultation. Residents with diesel engine vehicles are more likely to think that the proposal is too severe (16% compared with 10% overall).

Businesses

Once informed of the proposal, the majority of businesses (65%) support the proposed LEZ, with 73% believing that the proposal requiring older vehicles to be modified is reasonable. There is support for the scheme to apply to all types of diesel vehicles, ranging from 82% for large lorries through to 54% for cars. Businesses, though supporting the proposed charge, are divided on its implementation, with 40% preferring an outright ban and 30% opting for payment of a daily charge. Only four in ten businesses (43%) within Greater London were previously aware of the LEZ, with 21% aware of TfL's consultation.

Smaller businesses, and those without any vehicles, are more supportive of the LEZ and the charge. Nearly half of businesses (44%) think that they will be affected by the charge, irrespective of business size, with their main concern being increased delivery costs (43% of those stating they will be affected).

Transport Operators

Awareness of the proposed LEZ among operators is high (78% at least *vaguely aware*), although fewer (43%) are aware of the consultation. Operators are also significantly more likely to have heard of Euro emission standards (66%) than businesses (37%).

Operator opinion is divided over the LEZ, with 46% of operators supporting it and 37% in opposition. Half (52%) think that the proposal for all diesel lorries, buses and coaches manufactured before 2001 to require modification to meet the proposed emission standard is reasonable, while 41% feel it is too severe. Operator opinion is also divided over extending the standard from 2010 to cover Euro IV for particulates (PM_{10}), with 44% of operators supporting it and 43% in opposition.

Nearly two thirds of operators (64%) think that they will be affected by the daily charge, with concern over increased cost to make deliveries and that they will no longer be able to operate non-compliant vehicles within Greater London (both 28%).

The view of operators towards the LEZ are consistent, irrespective of whether they are based outside or within Greater London, with those outside London being more aware of Euro emission standards.

Overview

Overall, operators are the most knowledgeable about both the LEZ proposal and the consultation, with residents least knowledgeable. Both residents and businesses are much more supportive of the LEZ than operators and are more likely to think that the proposal that older vehicles would need to be modified is reasonable. There is support for the proposed LEZ to apply to all types of vehicles, though there is less support for it to apply to cars and LGVs than buses and HGVs. Additionally, support for the proposed charge is higher among businesses and residents than among operators.

Checked & Approved:

Carole Lehman

Checked & Approved:

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Introduction

Background

The Government has set objectives to reduce nine main air pollutants. Two of these pollutants, ozone and polycyclic aromatic hydrocarbons, are being tackled at national and European level but, within London, the Mayor has a statutory duty to take steps towards achieving the objectives for the seven locally managed pollutants. London is expected to meet the objectives for five of these seven pollutants, namely benzene, 1,3-butadienem, carbon monoxide, lead and sulphur dioxide. However on current trends, and without further action, it is predicted that London will exceed its 2010 targets for PM_{10} (particulate matter) and NO_2 (nitrogen dioxide) which are two of the most harmful pollutants to human health. The proposed Low Emission Zone (LEZ), therefore, is felt to represent the most effective option for helping London work towards meeting its 2010 targets.

The objectives of the proposed LEZ are two-fold:

- to move London closer to achieving the Air Quality objectives (and EU limit values) for 2010, in support of the Government's National Air Quality Strategy and the EU's Air Quality Framework and daughter Directives.

- to improve the health and quality of life of people who live and work in London, through improving air quality.

The introduction of the proposed LEZ requires revisions to the Mayor's Transport and Air Quality Strategies. The Mayor delegated to TfL responsibility for preparing and consulting on these Strategy Revisions and the public and stakeholder consultation ran from 30 January to 24 April 2006.

The documentation accompanying the public and stakeholder consultation set out the LEZ proposals, including which vehicles would be affected by the proposed LEZ emission standards. The LEZ would apply to all vehicles entering Greater London, including vehicles registered outside the UK. There is no intention to target cars within the LEZ. From early-2008, the proposed LEZ would affect Heavy Goods Vehicles (HGVs) over 7.5 tonnes. From mid-2008, the proposed LEZ would affect all HGVs over 3.5 tonnes, buses and coaches. The proposed LEZ could potentially be extended to cover diesel-engined Light Goods Vehicles (LGVs) from 2010, although further analysis is required to understand the potential impacts of this.

From 2008 it is proposed that emission standards would be set for HGVs, buses and coaches. The proposed LEZ emission standards are based on 'Euro standards', which are standards applicable to all vehicles sold in the European Union. The standards run from Euro 0 upwards, and are progressively more stringent.

In 2008, the proposed emission standard for the LEZ is Euro III for PM_{10}, which came into force in January 2001. This would allow all Euro III and above vehicles to operate in the proposed LEZ without a charge. In addition, pre-Euro III vehicles would be allowed to operate in the zone without charge if they had taken steps to meet the Euro III standard, for example, by fitting appropriate abatement equipment.

In 2010, the proposed emission standard is Euro IV for PM_{10}, which will come into force from October 2006. This would allow all Euro IV and above vehicles to operate within the zone without charge. Once again, pre-Euro IV vehicles would be allowed to operate in the zone without charge if they had taken steps to meet the Euro IV standard for particulates.

TfL is currently assessing the feasibility of extending the 2010 standard to Euro IV for both PM_{10} and NO_x, in order to make more progress towards meeting national and European targets for NO_2 concentrations. This would require pre-Euro IV vehicles to fit NO_x abatement equipment. TfL will consider the practical and financial implications of this before making a final decision.

Operators wishing to drive vehicles in the zone that did not meet the proposed emission standards of the LEZ could still enter but would be required to pay a substantial daily charge. This would be set at a rate to encourage operators to upgrade or replace their vehicles to meet the emission standards rather than pay the charge. Operators with non-compliant vehicles that did not pay the daily charge for driving within Greater London would incur a significant penalty charge.

Research objectives

This attitudinal study was carried out during the consultation period on revisions to the Mayor's Transport and Air Quality Strategies to allow for a LEZ in London.

The primary aim is to identify attitudes and opinions of residents in Greater London, as well as the wider business community, towards the proposal and to assess how representative the consultation findings are.

Methodology

A survey amongst businesses within Greater London[1], transport operators currently travelling within Greater London, and Greater London residents was conducted via telephone from a centrally located Ipsos MORI telephone interviewing centre. All interviews were conducted between 4th and 24th March 2006.

Residents

Residents were defined as young people and adults who currently live within Greater London. Respondents were asked their postcode and this was used to automatically check which London borough they lived in. One thousand interviews were conducted in total and quotas were set by gender, age and ethnicity to reflect the known population profile of Greater London. (See Appendix I for the profile by gender, age and ethnicity.)

Businesses

Businesses were defined as businesses that have their company headquarters or any regional offices within Greater London. Respondents were asked their postcode and this was used to automatically check which London borough the business was located in. In each case, Ipsos MORI interviewed the person involved in making financial decisions that could affect the company or the services that they offer. Five hundred and forty-five interviews were conducted with businesses and quotas were set by business type and number of employees within the business. (See Appendix I for the profile by business type and number of employees.)

Operators

Operators were defined as organisations that operate HGVs, buses, coaches or LGVs in Greater London at least once every two weeks. In each case, the person involved in making financial decisions that could affect their company or the services that they offer was interviewed. Four hundred and eighty-two interviews were conducted amongst operators, with quotas set by type of operator and fleet size. (See the Appendix I for the profile by operator type and fleet size.)

Questionnaire design

Two questionnaires were designed by Ipsos MORI in consultation with TfL (one for residents and one for businesses/operators). The public questionnaire is provided in Appendix II and the business questionnaire provided in Appendix III. Both questionnaires show the topline, aggregate findings from the surveys.

A pilot study was conducted on 28th February to test both questionnaires, with some changes made to the questionnaire following the pilot study.

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[1] Within this survey Greater London is defined as any of the 33 London Boroughs

Weighting

Weighting is carried out at the analysis stage to overcome the problem of possible biases in aggregate results. Such biases may result from the over-representation of certain sub-groups (e.g. men, older people etc) and the under-representation of others. Weighting is necessary to iron-out any potential biases in the results, which exist despite sample selection being balanced to ensure that the sample profile equates to the population profile.

Weighting has been applied to the residents' survey by gender, age and ethnicity. Data was weighted by the profile of adults in Greater London at the 2001 census, as in the table below.

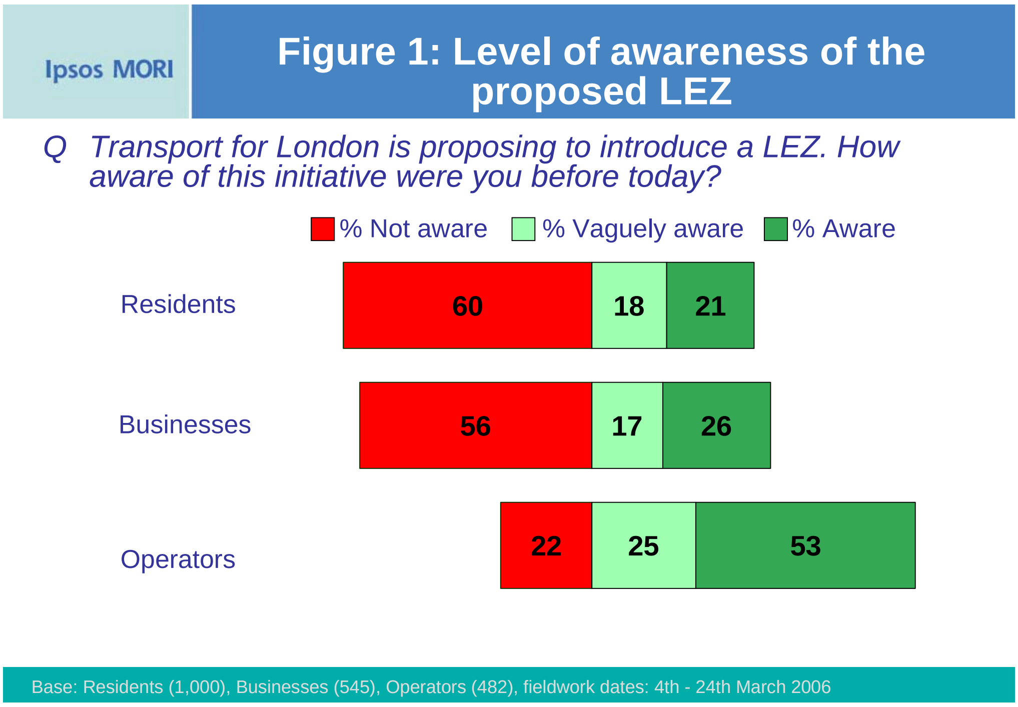
Weighting applied by 2001 census in London	
Men (16+)	47.69%
Women (16+)	52.31%
16-24	15.11%
25-44	44.25%
45-64	25.06%
65 plus	15.58%
White	71.15%
BAME	28.85%

Source: Census 2001

Main comparative findings

Awareness of the proposed LEZ

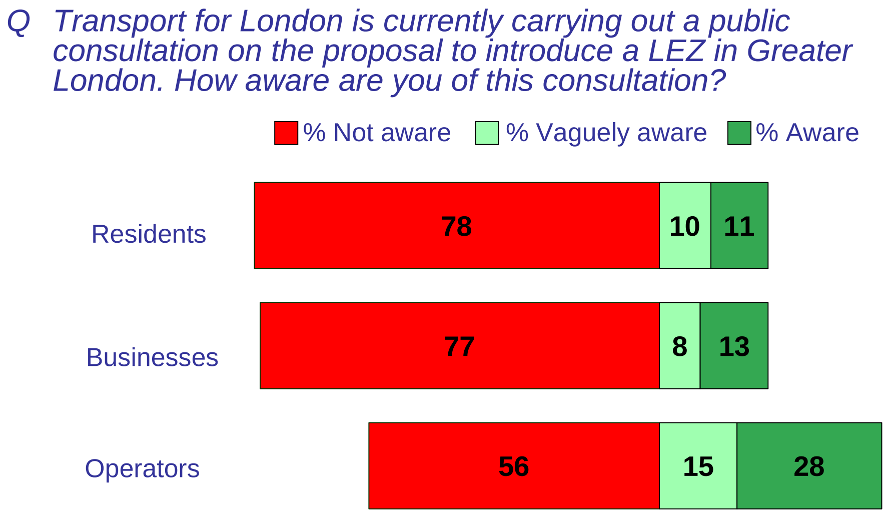
Half of operators (53%) are aware of the proposed LEZ and a further quarter (25%) are vaguely aware. This is consistent, irrespective of whether they are based inside or outside Greater London (54% inside Greater London are aware and 53% outside Greater London are aware). As can be seen in Figure 1, awareness of the LEZ amongst Greater London residents and businesses is much lower, with around four in ten being aware or vaguely aware of it.



Awareness of the consultation

A majority of respondents were not aware of TfL's consultation on the proposed LEZ. A fifth of residents (21%) and businesses (21%) are aware or vaguely aware, rising to 43% amongst operators. Operators situated within Greater London are most likely to be aware (51%).

Ipsos MORI **Figure 2: Level of awareness of the Consultation**

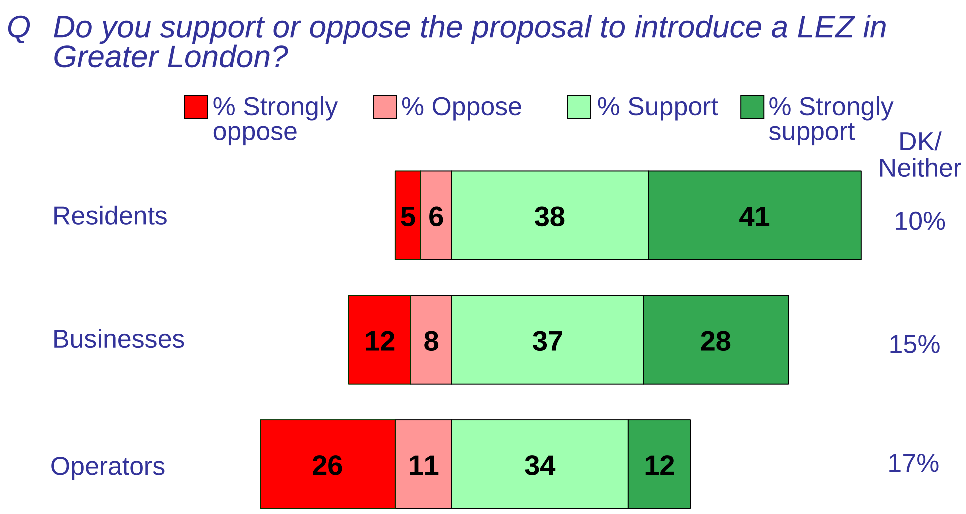


Base: Residents (1,000), Businesses (545), Operators (482), fieldwork dates: 4th - 24th March 2006

Support for the proposed LEZ

The majority of Greater London residents support the proposal (79%), with 41% offering strong support. Sixty-five percent of businesses within Greater London support the LEZ, with 28% supporting it strongly.

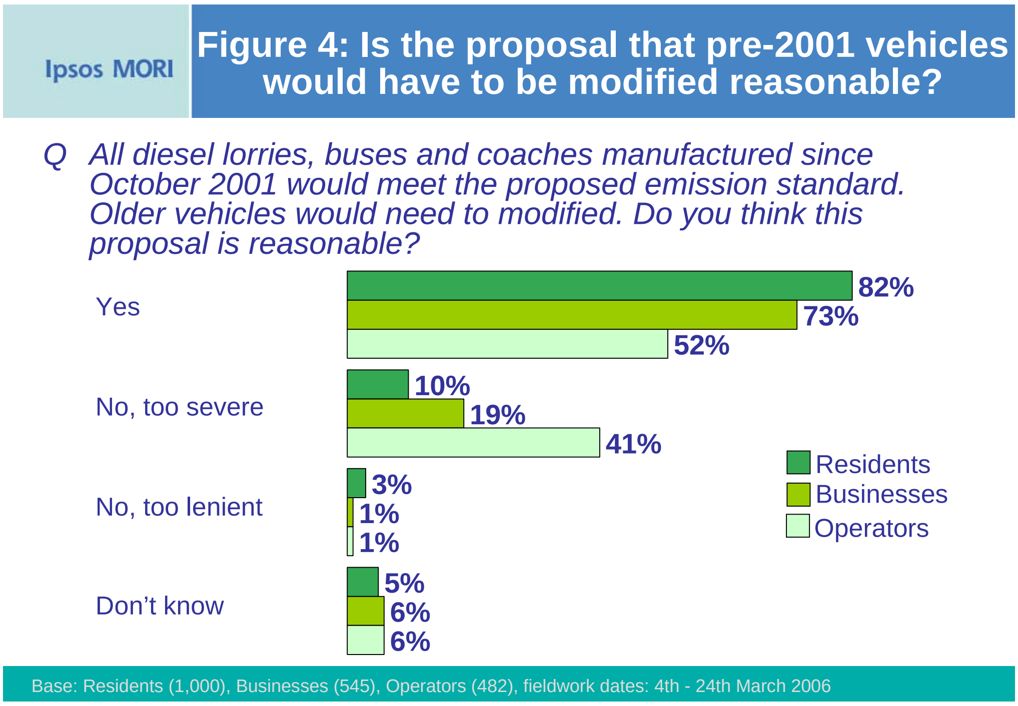
Ipsos MORI **Figure 3: Level of support or opposition to the proposed LEZ**



Base: Residents (1,000), Businesses (545), Operators (482), fieldwork dates: 4th - 24th March 2006

Fewer operators are supportive overall (46%), with only 12% indicating strong support.

Greater London residents (82%) and businesses (73%) are more likely to think that it is reasonable for the proposed LEZ to require all diesel lorries, buses and coaches manufactured before October 2001 to be modified to meet the proposed LEZ emission standard. Conversely, while half of operators agree with the proposal (52%), 41% think that this is too severe.



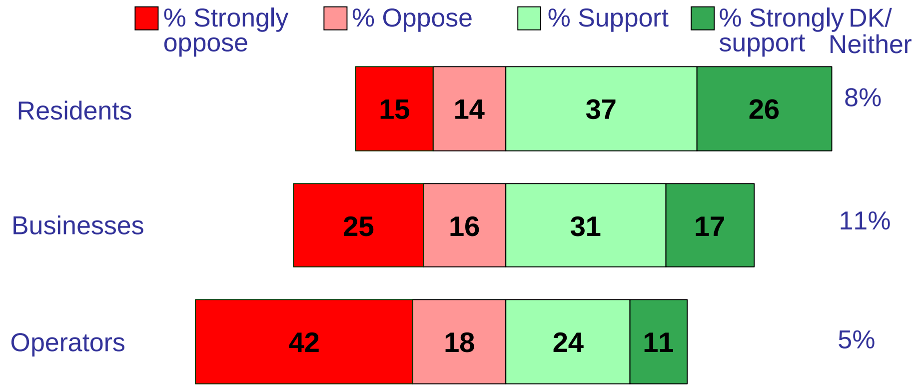
Support for the proposed charge

Mirroring support for the LEZ overall, residents are most likely to support the charge to drive vehicles which do not comply with the proposed LEZ emission standards (63%), with operators least likely to support it (35%).

Ipsos MORI

Figure 5: Level of support or opposition for a charge on non compliant vehicles

Q The current proposal is that vehicles that do not comply with the proposed emission standards should be obliged to pay a substantial charge to drive in Greater London. Do you support this proposal?



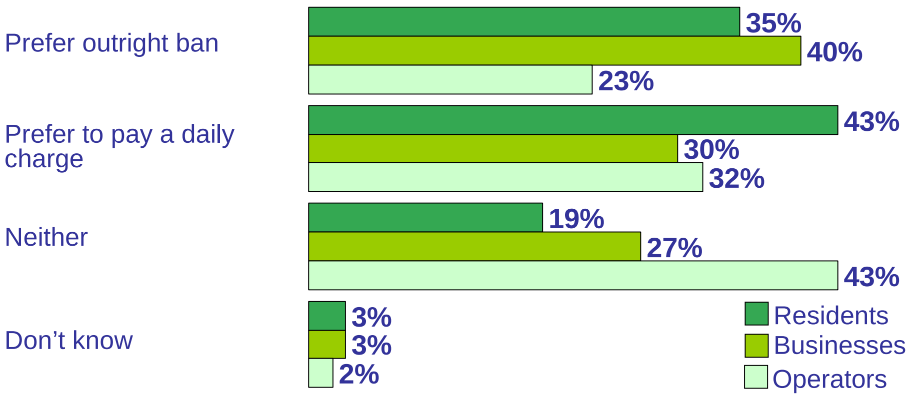
Base: Residents (1,000), Businesses (545), Operators (482), fieldwork dates: 4th - 24th March 2006

Around a third of businesses (30%) and operators (32%), rising to 43% of residents would prefer a daily charge to drive a non-compliant vehicle within Greater London to an outright ban. Slightly over a third of residents and businesses prefer an outright ban on non-compliant vehicles, rather than allowing them to pay a charge to drive within Greater London. Operators are more likely to support neither option (43%) and are less likely to be inclined towards an outright ban (23%).

Ipsos MORI

Figure 6: Preference for an outright ban or daily charge

Q Do you think that diesel lorries, buses and coaches that do not meet the proposed emission standard in 2008 should be banned from driving in Greater London altogether or pay a substantial daily charge to drive within Greater London?



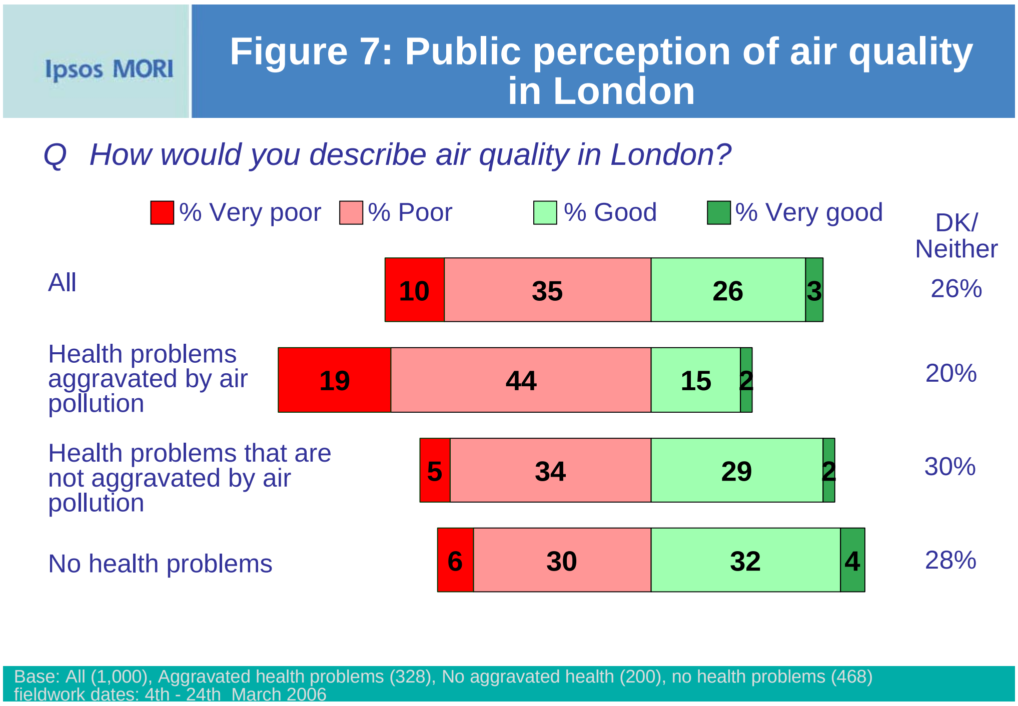
Base: Residents (1,000), Businesses (545), Operators (482), fieldwork dates: 4th - 24th March 2006

Main findings: Londoners

Air quality in London

Just under half of London residents think that air quality in London is poor and half think that air pollution affects them or their family.

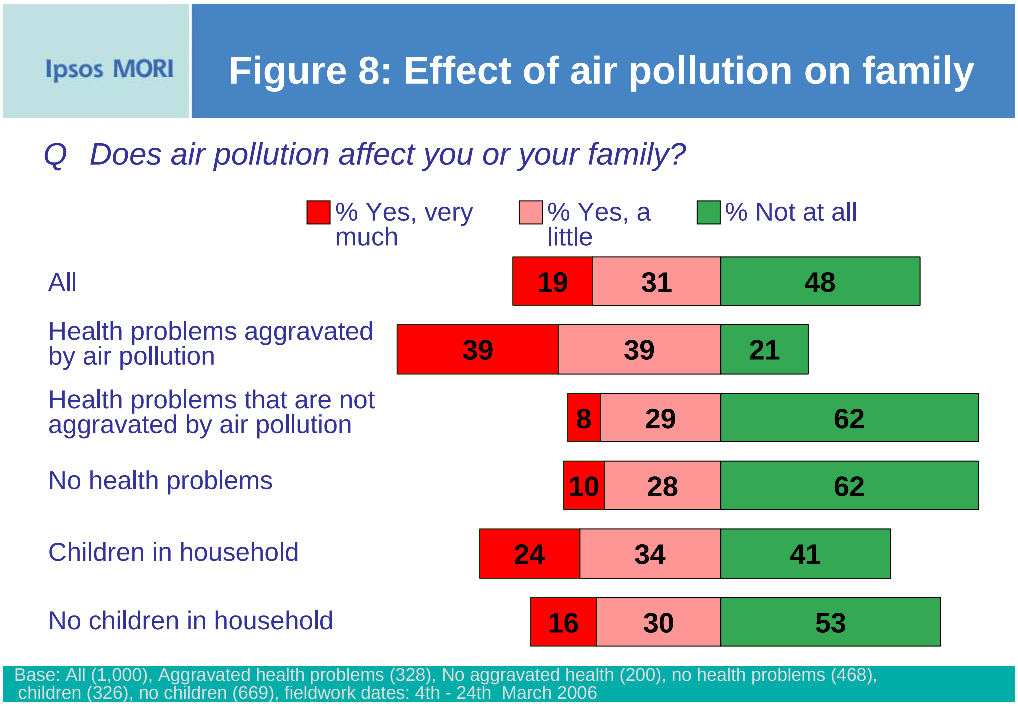
Nearly half (45%) of residents in Greater London think that air quality in London is poor, with one in ten overall thinking it is very poor. As Figure 7 shows, almost a third (29%) of residents think that London's air quality is good.



Perception of air quality is consistent across London, regardless of where residents live within Greater London.

Half of residents believe that air pollution affects them or their family, and one in five (19%) believe that it affects them very much. However, as Figure 8 shows, half of residents (48%) do not believe that they are affected at all.

Residents most likely to think that air quality is poor are those who have health problems aggravated by air pollution (62%) such as asthma, allergies and hay fever. (See Figure 34 in Appendix I for prompted list.)



Among those with health problems which could be aggravated by air pollution, 78% state that air pollution affects them or their family.

Residents with children are also more likely to think that air pollution affects them or their family (24%) than those without children (16%).

Younger (16-24) and older (60 plus) residents are most likely to think that air quality in London is good and are least likely to think that air pollution affects them or their family.

- 39% of 16-24 year olds and 40% of residents aged 60 plus think that air quality is good compared to 22% of residents aged 25-59
- 56% of 16-24 year olds and 61% of residents aged 60 plus think they or their family are not affected at all by air pollution compared to 40% of residents aged 25-59

Black, Asian and Minority Ethnic (BAME) residents are also more likely to think that air quality in London is good than white residents. However white residents are least likely to think that air pollution affects them or their family.

- 36% of BAME residents think that air quality is good compared to 27% of white residents
- 52% of white residents think they or their family are not affected at all by air pollution compared to 42% of BAME residents

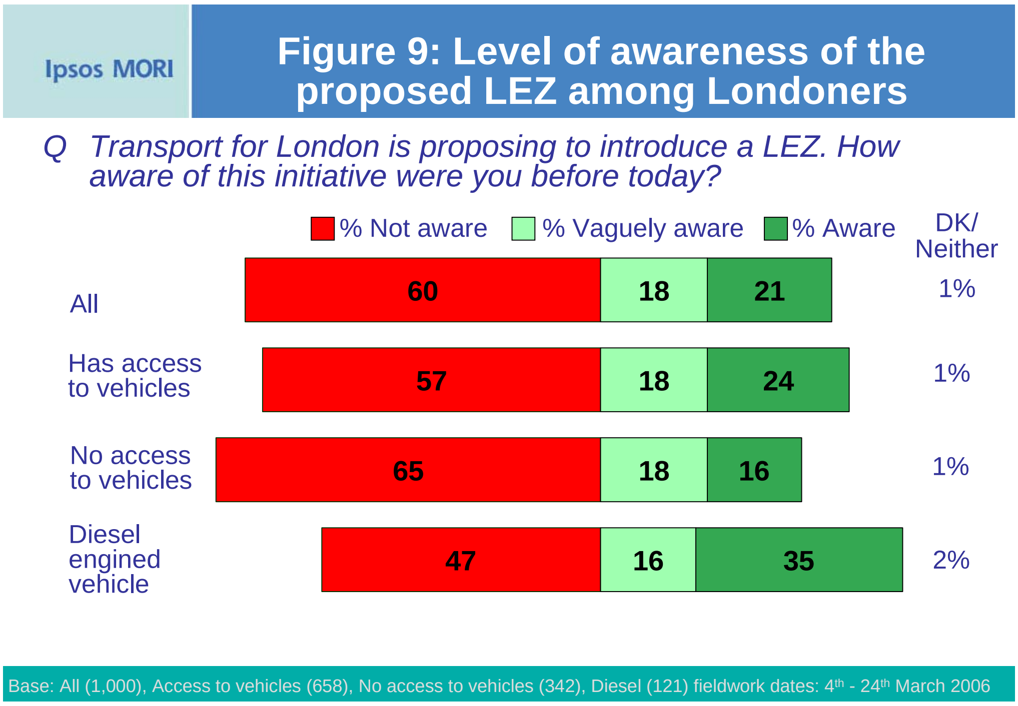
There is a direct correlation between opinion of air quality in London and whether the resident believes that air pollution affects them or their family directly:

- 68% of residents who think that air quality is poor also think that air pollution affects them or their family compared to 30% of residents who think that air quality in London is good

Awareness of the proposed LEZ

Four in ten residents are at least vaguely aware of the LEZ proposal.

Four in ten residents surveyed (39%) are at least vaguely aware of the proposed LEZ, with 60% unaware of the LEZ before completing the survey.



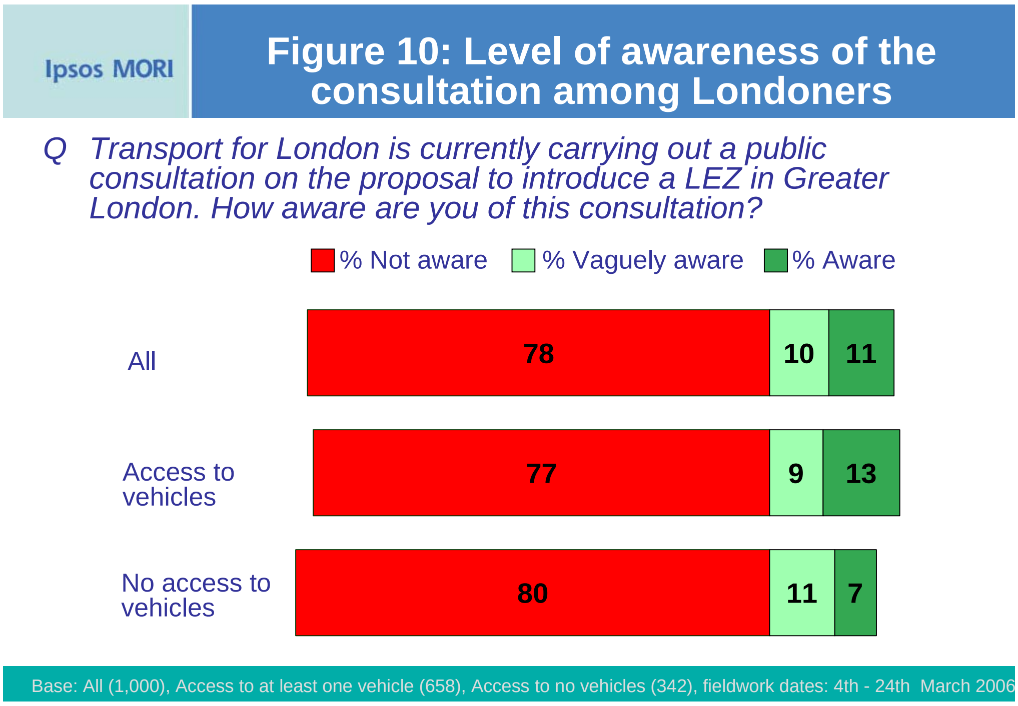
Residents with at least one vehicle in the household are more aware of the LEZ (42%) than residents with no vehicles in the household (34%). Awareness rises further for residents with diesel engine vehicles in the household, half of whom are at least vaguely aware of the LEZ.

Four in ten (43%) white residents are at least vaguely aware of the LEZ compared to 30% of BAME respondents.

Awareness of the consultation

Awareness of the consultation is low for residents; however, this rises for those with a vehicle in the household, especially a diesel engine vehicle.

One in five residents surveyed (21%) were at least vaguely aware of TfL's consultation on the proposed LEZ with 78% of residents unaware.



Residents with at least one vehicle in the household were more aware of the consultation (13%) than residents with no vehicles in the household (7%).

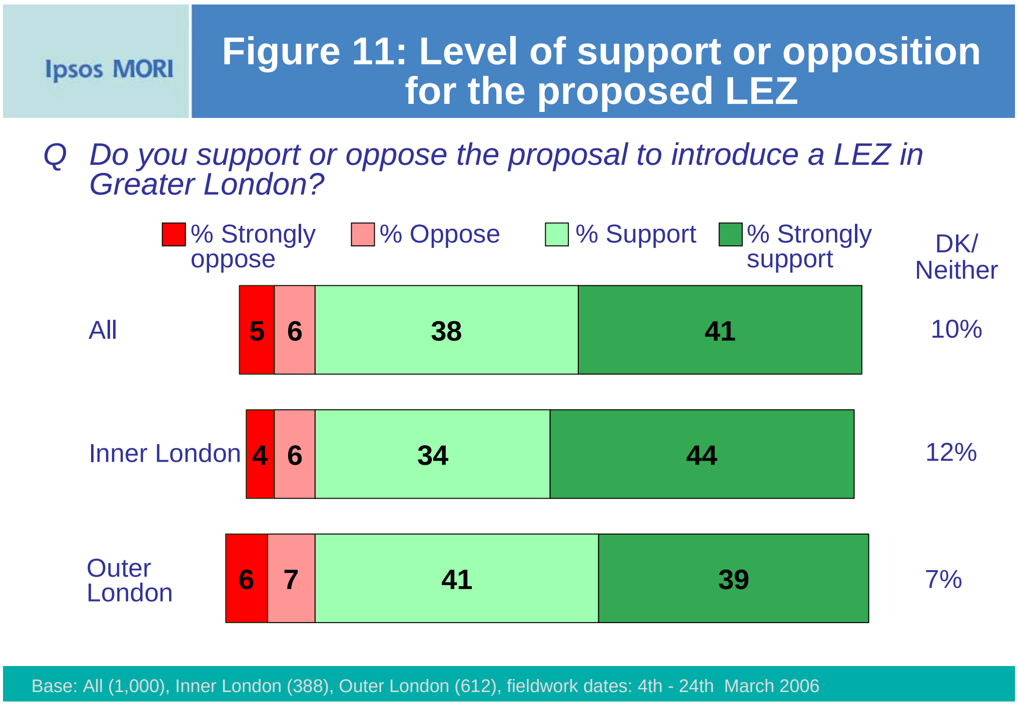
Awareness rises further for residents with diesel engine vehicles, 18% of whom are aware of the consultation.

Factors such as borough of residence, age and ethnicity do not affect awareness of the LEZ consultation.

Support for the proposed LEZ

Eight out of ten residents support the proposed LEZ. A similar proportion believe that the proposal that older vehicles would need to be modified to drive without charge within Greater London is reasonable.

On informing research participants about the LEZ proposal, support for it is high, with nearly eight in ten (79%) saying they would support its introduction. Just over four in ten (41%) would strongly support this, with only 11% of Greater London residents opposed to the LEZ.



The overall level of support for a LEZ (combined strongly support and support) is consistently high across all areas of London. However, there is variation between areas by strength of support, with residents in inner north London (47%) being more likely to strongly support the LEZ than residents in outer south London (32%).

BAME residents (35%) and those aged 16-24 (30%) are less likely to strongly support the LEZ. As can be seen in Figure 12, those who think that air quality in London is poor are more likely to strongly support the LEZ (49%) than those who think that air quality is good (33%).

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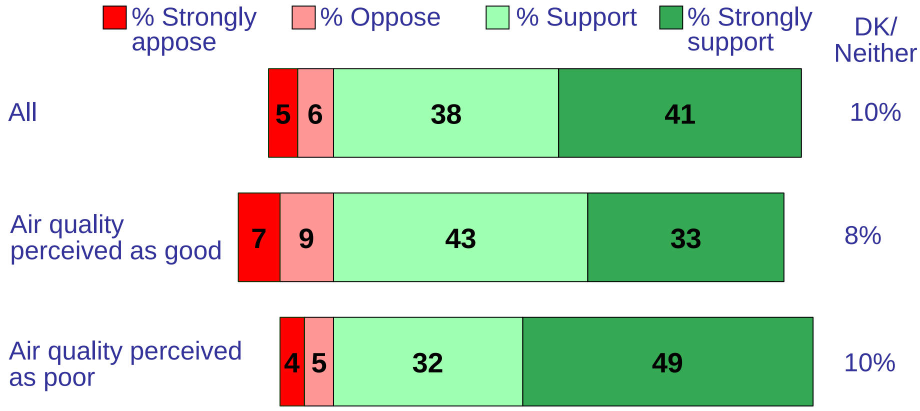
Figure 12: Level of support or opposition for the proposed LEZ

Q Do you support or oppose the proposal to introduce a LEZ in Greater London?



Base: All (1,000), Perceives good air quality (289), Perceives poor air quality (450), fieldwork dates: 4th - 24th March 2006

Residents with no vehicles in the household (83%) are more likely to support the proposed LEZ, compared to 77% with at least one vehicle in the household.

As Figure 13 shows, most residents in Greater London (82%) believe that the proposal for all diesel lorries, buses and coaches manufactured before October 2001 to be modified to meet the proposed LEZ emission standards is reasonable. However, 10% state that it is too severe.

Those who have a diesel engined vehicle in the household are more likely to think that the proposal is too severe (16%).

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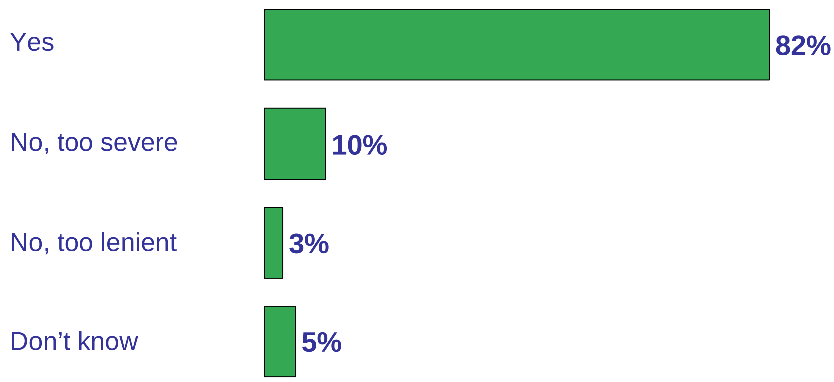
Figure 13: Is the proposal that pre-2001 vehicles would have to be modified reasonable?

Q All diesel lorries, buses and coaches manufactured since October 2001 would meet the proposed emission standard. Older vehicles would need to modified. Do you think this proposal is reasonable?



Base: All (1,000), fieldwork dates: 4th - 24th March 2006

Vehicles to which the LEZ should apply

Nine out of ten residents think the proposed LEZ should apply to HGVs and three quarters believe it should apply to buses and coaches.

The majority of Greater London residents (87%) think the LEZ should apply to lorries and 75% believe it should apply to buses. Two thirds (64%) think it should apply to LGVs. Even though there is currently no proposal for the LEZ to apply to cars, 58% believe it should do so.

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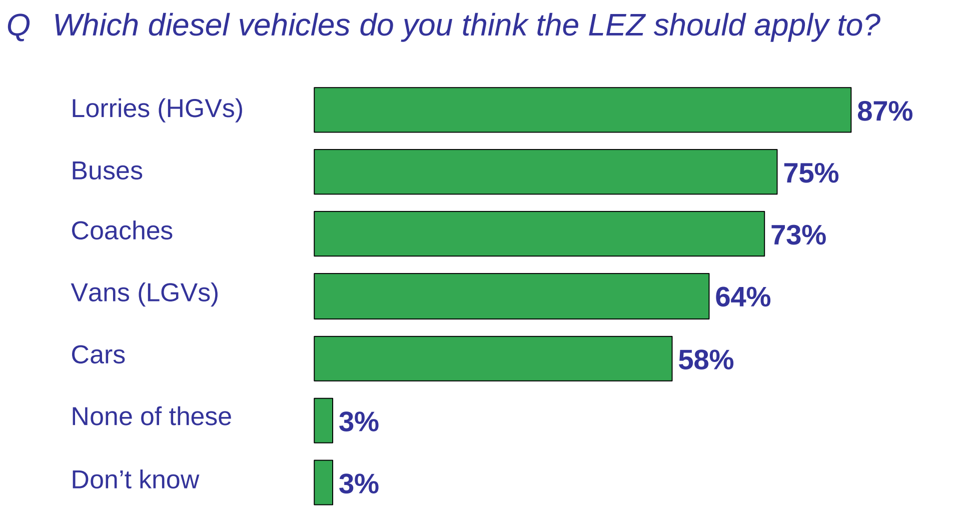
Figure 14: Diesel vehicles the LEZ should apply to

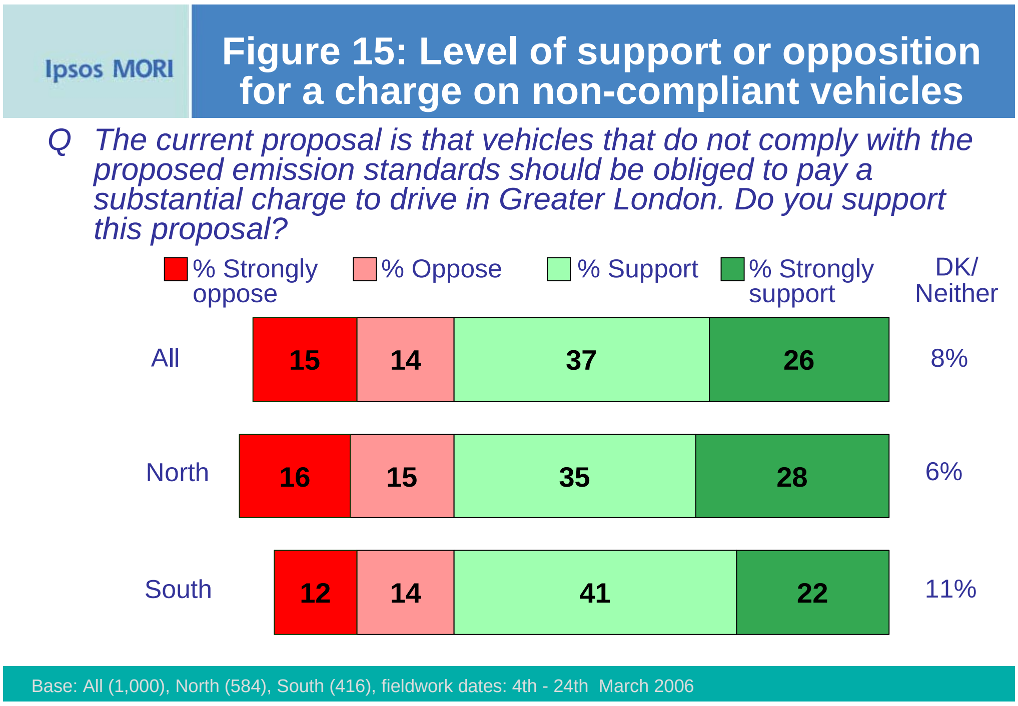


Base: All (1,000), fieldwork dates: 4th - 24th March 2006

Support for the proposed charge

Two-thirds of residents support the proposed charge and residents are slightly more likely to prefer the daily charge rather than an outright ban.

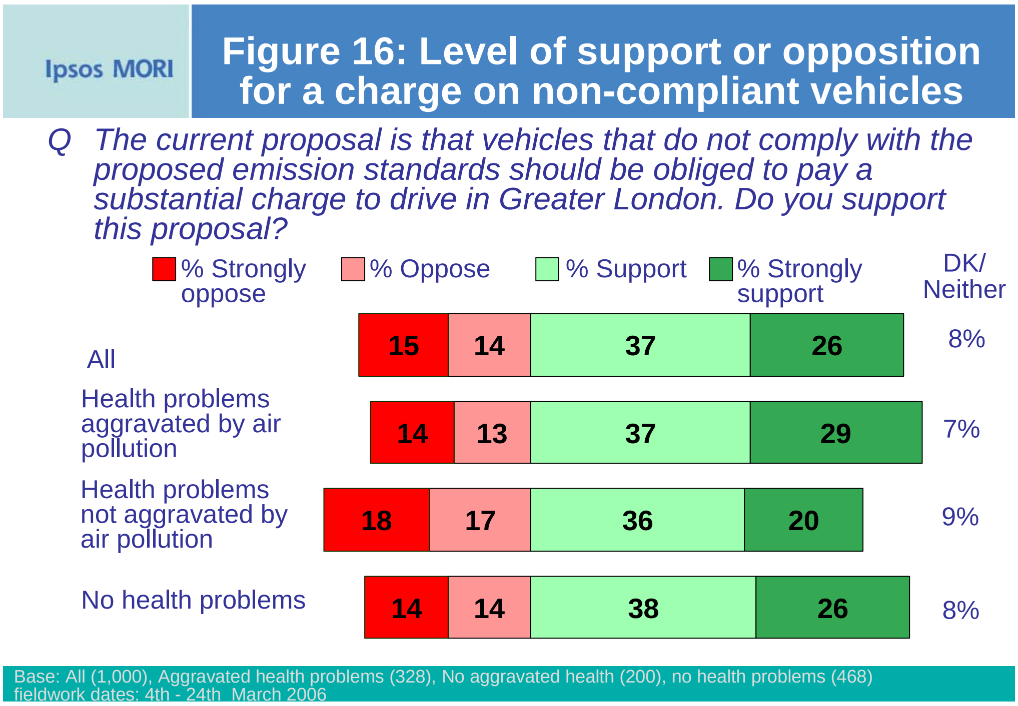
Residents were informed that vehicles not complying with the proposed emission standards would be required to pay a substantial daily charge to drive within Greater London. As Figure 15 shows, nearly two-thirds (63%) would support this proposal.



Overall support for the charge is similar across all areas in London. However, there is variation by borough in the strength of support expressed for the charge. Residents in north London are more likely to say they strongly support the charge (28%) than residents in south London (22%).

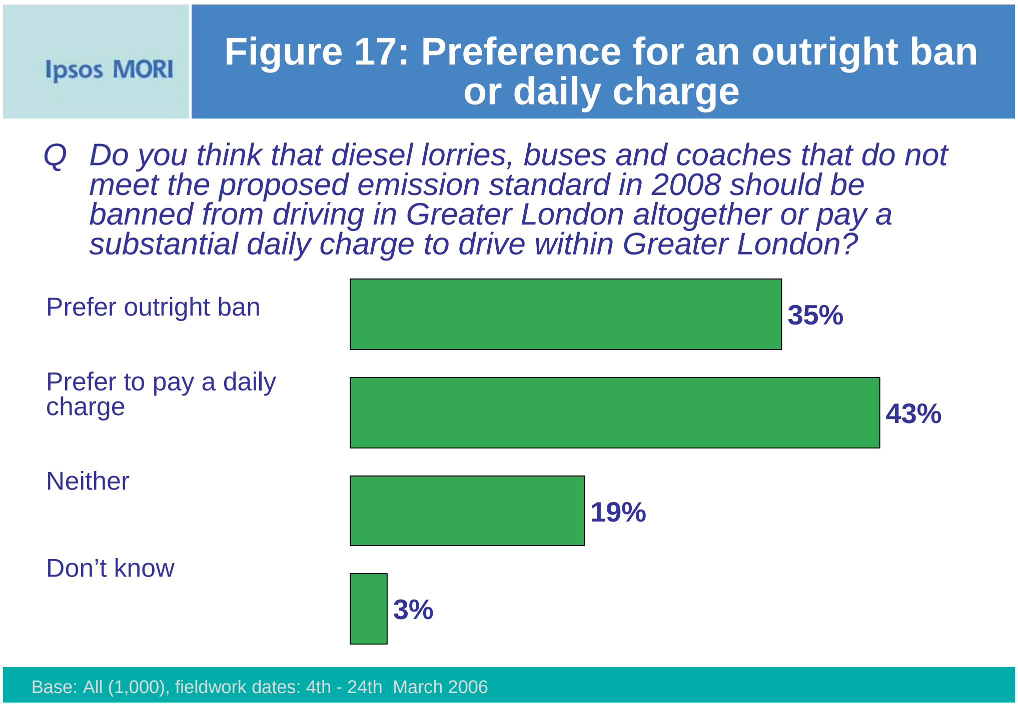
Residents aged 25-44 are more likely to support the charge (68%) than older residents (58%).

As Figure 16 shows, residents with health problems that are not aggravated by air pollution are less likely to support the charge (56%) than residents with health problems which are aggravated by air pollution (66%) or residents without health problems (64%).



Residents who support the LEZ are also more likely to support the charge (72%).

Figure 17 shows that residents have mixed opinions about options for vehicles which do not comply with the proposed LEZ emission standards, with 43% preferring a daily charge, 35% preferring an outright ban and 19% opting for neither.



Young residents (under 25) are most in favour of the daily charge (63%) while middle aged residents (45-49) are least in favour of the daily charge (29%).

Other ways to reduce road traffic pollution

A quarter of residents feel that better/improved/affordable public transport could also help to reduce road traffic pollution in London.

Residents were asked what else could be done to help to reduce road traffic pollution in London. A quarter of residents think that better/improved/affordable public transport would help to do this. Having fewer cars on the road (13%) and encouraging more sustainable modes of transport (7%) were also mentioned, with 6% advocating encouragement to attract more cyclists.

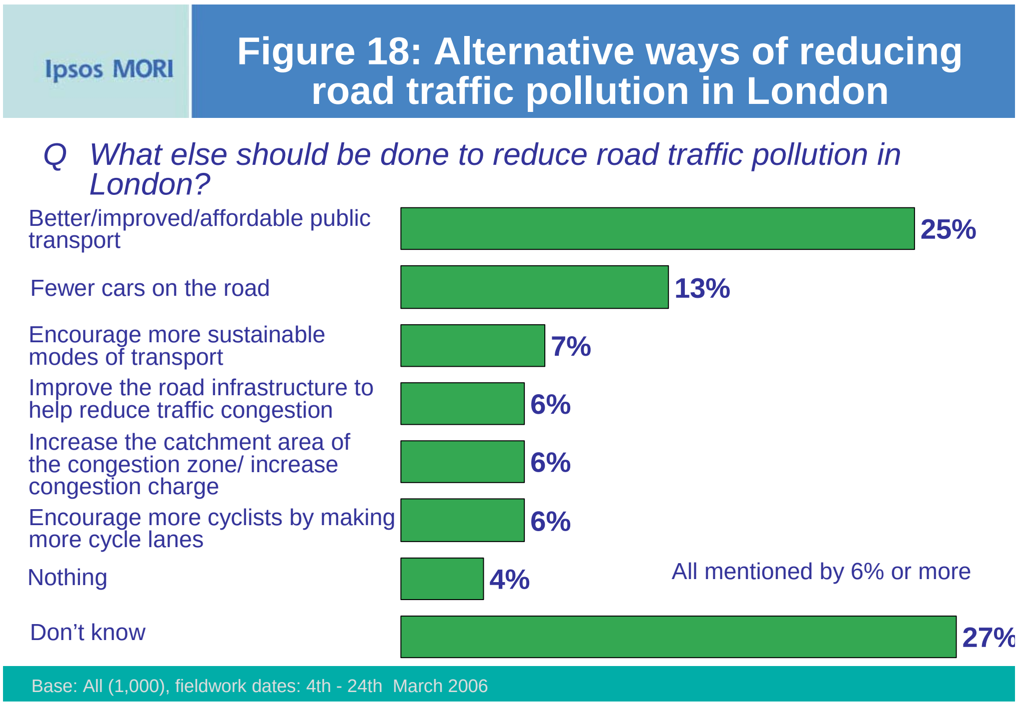


Figure 18: Alternative ways of reducing road traffic pollution in London

Main findings: Businesses and Operators

Air quality in London

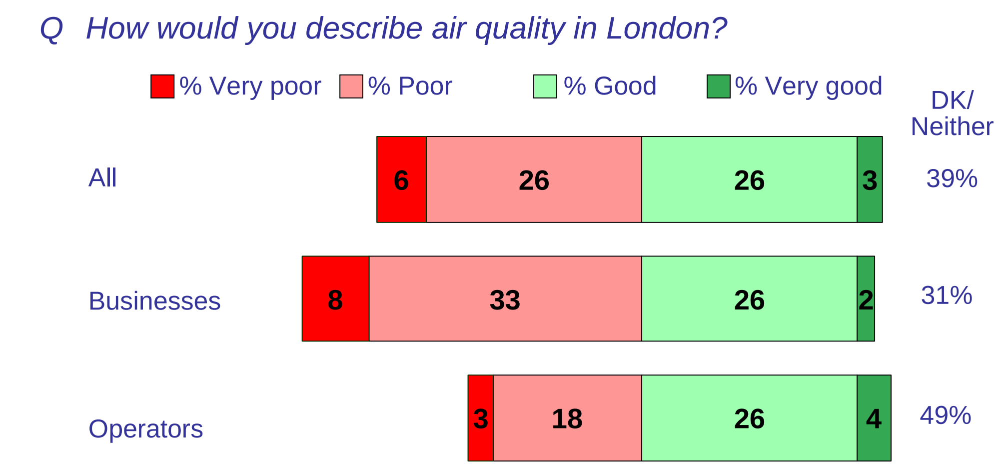
Businesses are more likely than operators to believe that air quality in London is poor.

Three out of ten businesses and operators think that air quality in London is good (28% of businesses and 30% of operators). However, whilst 41% of businesses think that air quality is poor, only 21% of operators share that opinion. This varies by location. Operators inside Greater London are more likely to think air quality is poor (29%) compared to 18% of those outside Greater London.

Operators with vans (30%) are more likely to believe that air quality in London is poor than operators with HGVs over 7.5 tonnes (19%).

Ipsos MORI

Figure 19: Business and Operator perception of air quality in London

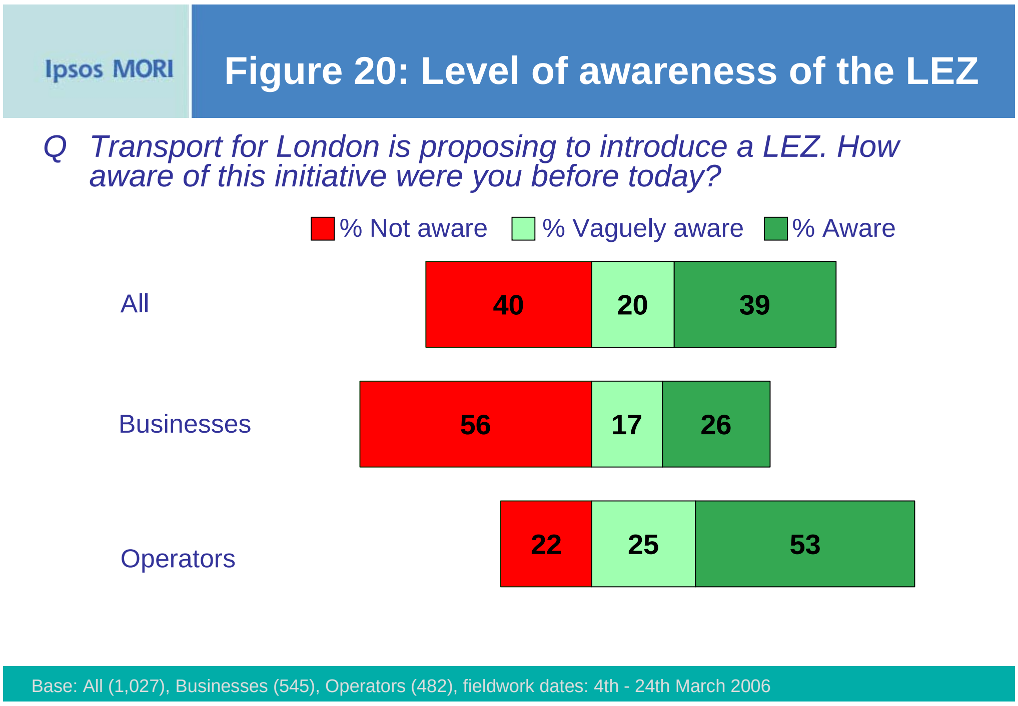


Base: All (1,027), Businesses (545), Operators (482), fieldwork dates: 4th - 24th March 2006

Awareness of the proposed LEZ

Operators are more aware of the LEZ proposal than businesses.

Over three quarters of operators (78%) are at least vaguely aware of the proposed LEZ, compared to 43% of businesses.



Nearly half (46%) of small businesses (those with 1-9 employees) are at least vaguely aware of the LEZ compared to 32% of businesses with 10 or more employees.

Businesses in the construction/manufacturing/transport sectors are more likely to be aware of the LEZ proposals (33%) than businesses in the business/finance sectors (20%).

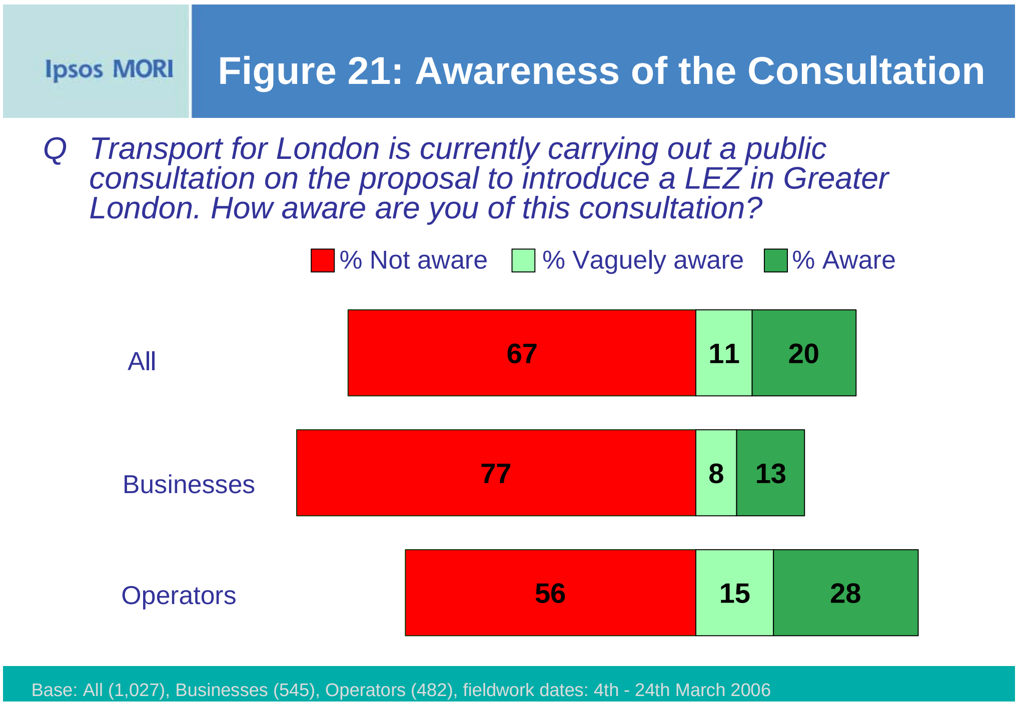
Small operators (those with only one vehicle in their fleet) are more likely to be unaware of the LEZ (35%) compared to 20% of large operators with more than one vehicle in their fleet. There are no significant differences between operators with more than one vehicle in their fleet; 55% of operators with 2 to 19 vehicles are aware of the LEZ compared to 49% of operators with 20 to 99 vehicles and 60% of operators with 100+ vehicles in their fleet.

Operators with small and large HGVs (55%) are more likely to have heard of the LEZ proposals than those using vans (47%).

Awareness of the consultation

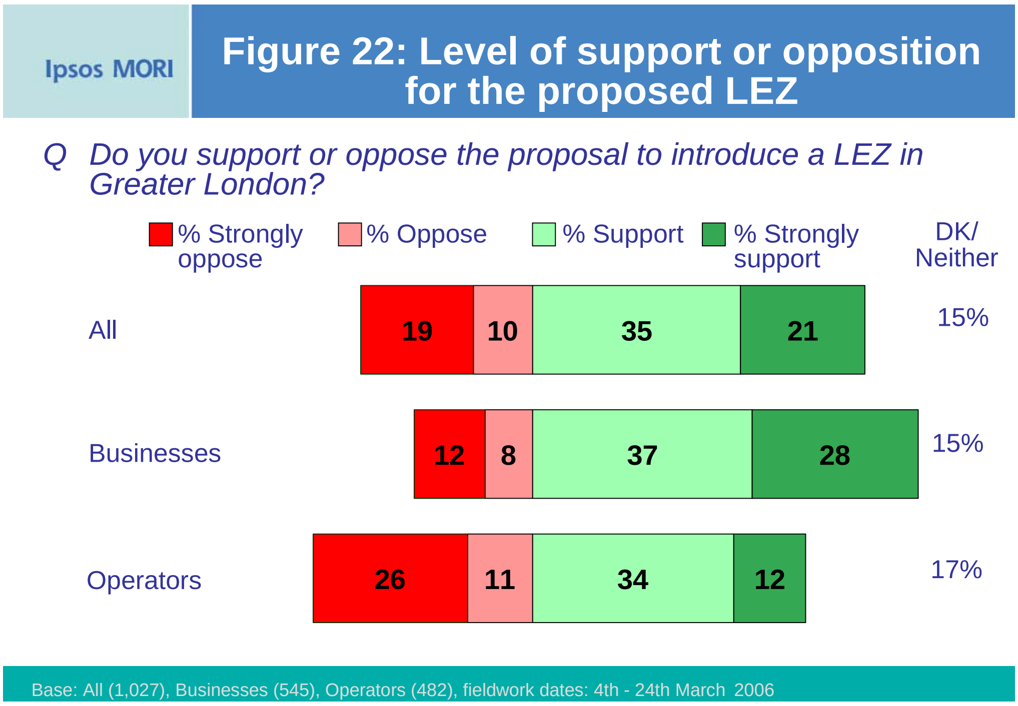
Operators are more aware of the consultation than businesses; this rises further for operators based within Greater London.

Operators are more likely to be aware of TfL's consultation on the LEZ (43%) than businesses (21%). Two thirds (67%) of businesses and operators are not at all aware of the consultation.



Support for the proposed LEZ

Businesses are more supportive of the LEZ proposals than operators and are more likely to think that the proposal that older vehicles would need to be modified to drive within Greater London is reasonable.



Two-thirds of businesses (65%) support the LEZ, including 28% who strongly support it. Operators, however, are more divided with 46% in support and 37% opposed.

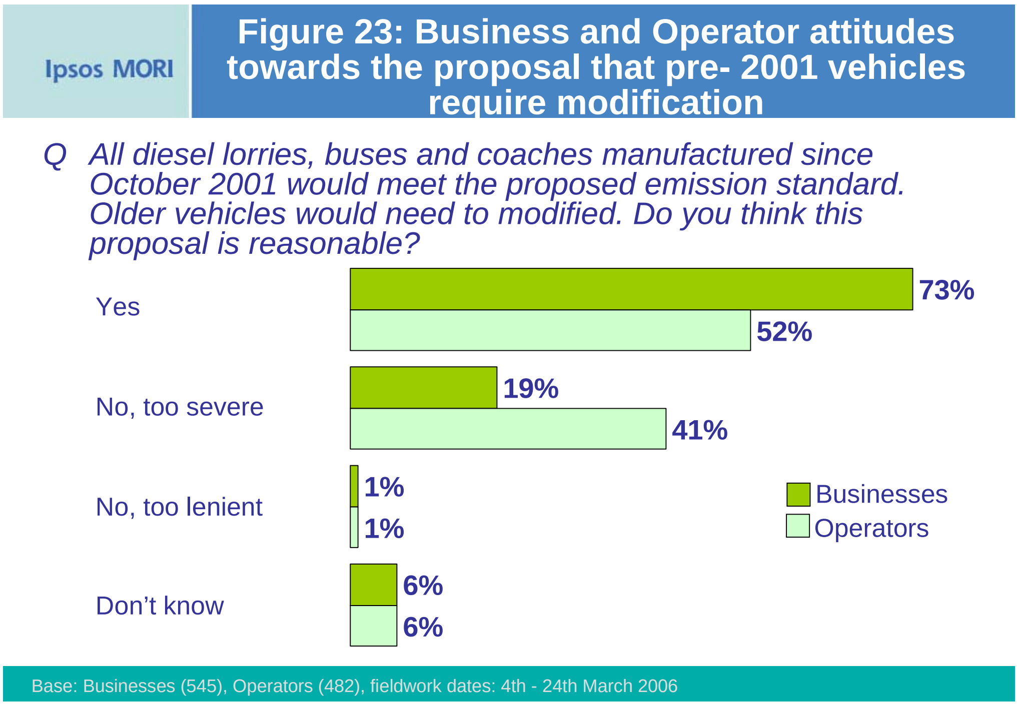
Support among businesses is strongest amongst businesses in the public services and business/finance sectors (71%), compared to 57% in the retail/ wholesale sectors:

- 30% of businesses with 1-9 employees strongly support the LEZ compared to 20% with 10 or more employees
- 69% of businesses that do not own or lease any vehicles support the LEZ compared to 53% with at least one vehicle
- 31% of businesses in north London strongly support the LEZ compared to 21% in south London

Support for the LEZ among operators is similar regardless of whether they are located inside or outside Greater London.

However, operators are more likely to strongly oppose the LEZ if they own/lease vehicles manufactured before 2001 (30% strongly oppose). Opposition is also highest among operators with large HGVs in their fleet (40% oppose), compared to 33% of operators with vans.

Regarding the proposal for non-compliant vehicles to be modified to meet the proposed LEZ emission standard, three-quarters (73%) of businesses think that the proposal is reasonable compared to half (52%) of operators. Operators are more likely to believe that the proposal is too severe (41% compared to 19% of businesses).



Half of operators believe the scheme is reasonable, with those based outside Greater London as likely to think that the proposed standard is reasonable as those within the Capital. However, operators are more likely to think that the proposal is too severe if they own/lease vehicles manufactured before 2001 (48%) compared with operators who own newer fleets (22%).

Businesses are most likely to believe that the proposal is reasonable if they are in the public services sector (82%). Fewer businesses in the food/drink, construction/manufacturing and transportation sectors think the scheme is reasonable (64%).

While 78% of businesses that do not own or lease any vehicles think that the proposal is reasonable, this falls to 60% amongst those with at least one vehicle.

Businesses/operators that support the LEZ are more likely to think that the standard is reasonable (82%) compared with those who oppose the LEZ (29%).

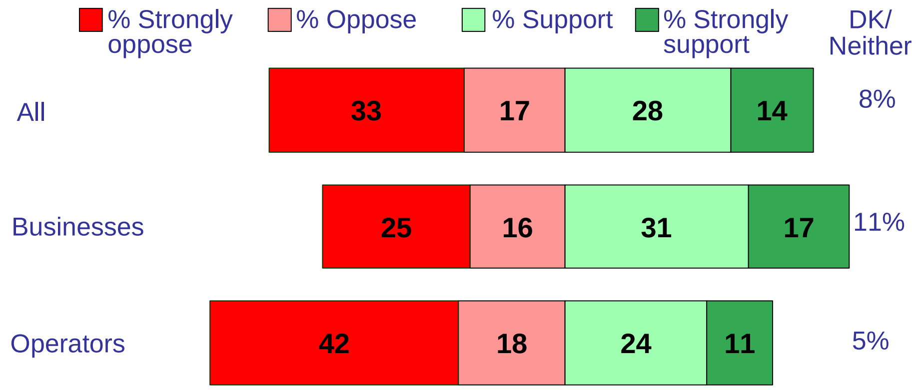
Support for the proposed charge

Support for the proposed charge is higher for businesses than operators. Businesses are also more likely to prefer an outright ban, while operators' views are mixed

Businesses and operators were informed of the proposition that vehicles not complying with the proposed emission standards would be required to pay a substantial charge to drive in Greater London. Nearly half (46%) of businesses support this proposal, falling to a third amongst operators (35%).

Figure 24: Business and Operator support or opposition for a charge on non-compliant vehicles

Q The current proposal is that vehicles that do not comply with the proposed emission standards should be obliged to pay a substantial charge to drive in Greater London. Do you support this proposal?



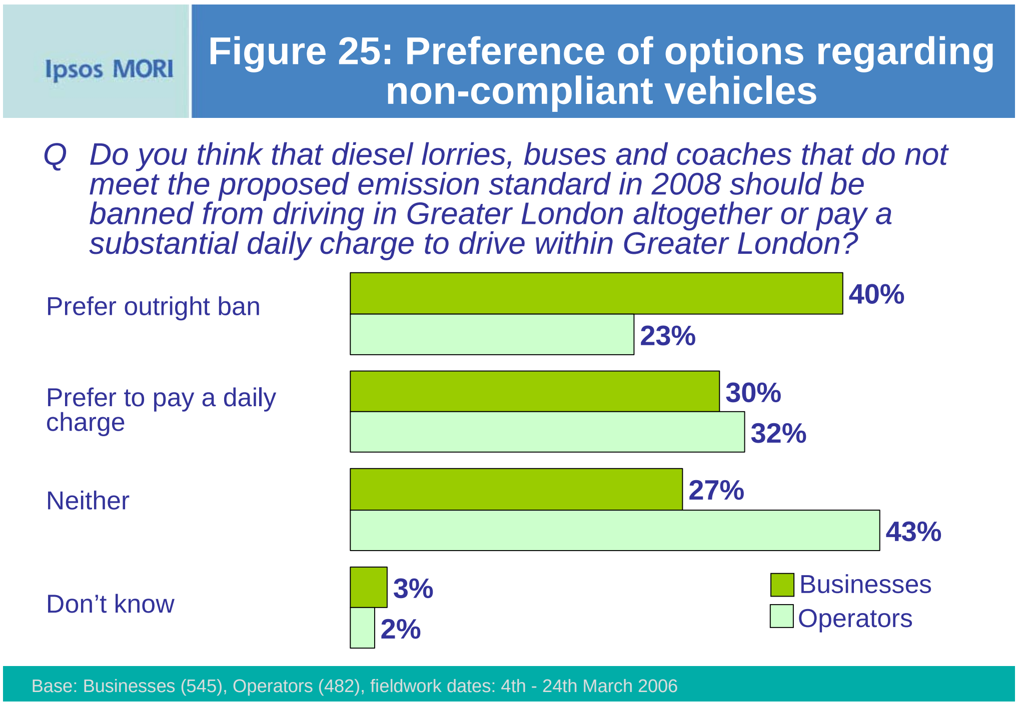
Base: All (1,027), Businesses (545), Operators (482), fieldwork dates: 4th - 24th March 2006

Operators are more likely to support the proposed charge if they do not have any vehicles in scope of the charge in their fleet manufactured before 2001 (49%) compared with 31% that do own or lease any in-scope vehicles manufactured before 2001.

Support for the proposed charge is strongest among businesses in the public services (53%) and business/finance sectors (60%), compared to those in the food/drink (39%) and the construction/manufacturing and transportation sectors (35%). Support is lower amongst companies with at least one vehicle in-scope of the proposed charge (36%). One in five businesses (20%) with fewer than 10 employees strongly support the proposed charge compared to 11% with 10 or more employees.

In considering the options of a daily charge or outright ban, opinions are divided. As can be seen in figure 25, around a third of business and operators would prefer a daily charge. Operators are more likely to support neither option (43%) and are less inclined towards an outright ban (23%) than businesses (40%).

However, businesses with at least one vehicle in-scope of the proposed charge (40%) are more likely to say they want neither option than businesses without any commercial vehicles at all (22%).



Vehicles to which the LEZ should apply

Over three quarters of businesses and operators believe that the proposed LEZ should apply to HGVs, buses and coaches. Over half also believe that the LEZ should apply to LGVs and cars.

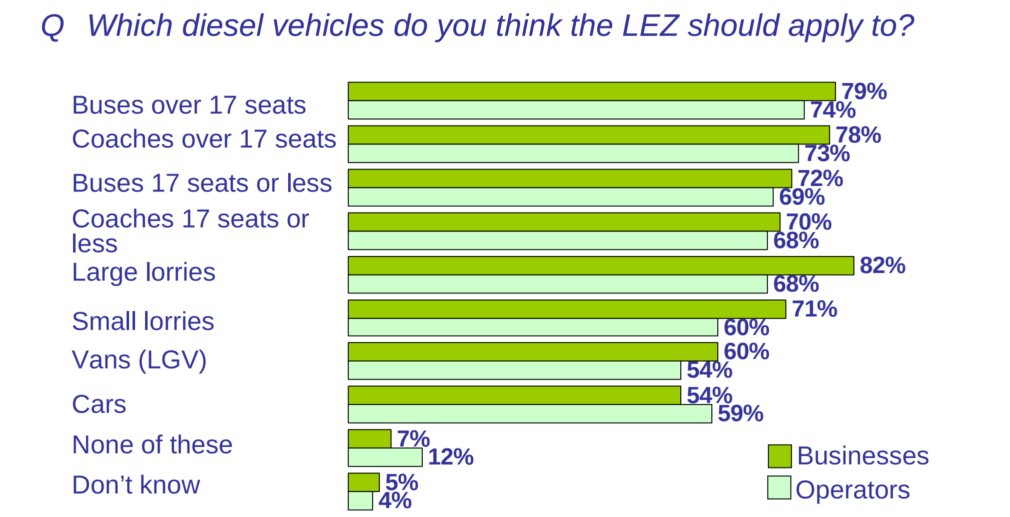
Overall, businesses and operators are most likely to think that the LEZ should apply to:

- Buses over 17 seats (77%)
- Large HGVs (75%)
- Coaches over 17 seats (75%)

Although businesses and operators are less likely than residents to think that the LEZ should apply to vans and cars (54% compared to 60%), over half still think that it should apply to these vehicles.

Businesses are more likely than operators to think that the LEZ should apply to large HGVs (82% compared to 68%).

Figure 26: Vehicles regulated by the LEZ



Base: Businesses (545), Operators (482), fieldwork dates: 4th - 24th March 2006

Businesses in public services (79%) and business/finance sectors (75%) are more likely to think that the LEZ should apply to small HGVs than those in the food/drink sector (64%).

Businesses in public services (66%) and business/finance sectors (65%) are also more likely to think that the LEZ should apply to vans than those in the food/drink sector (42%).

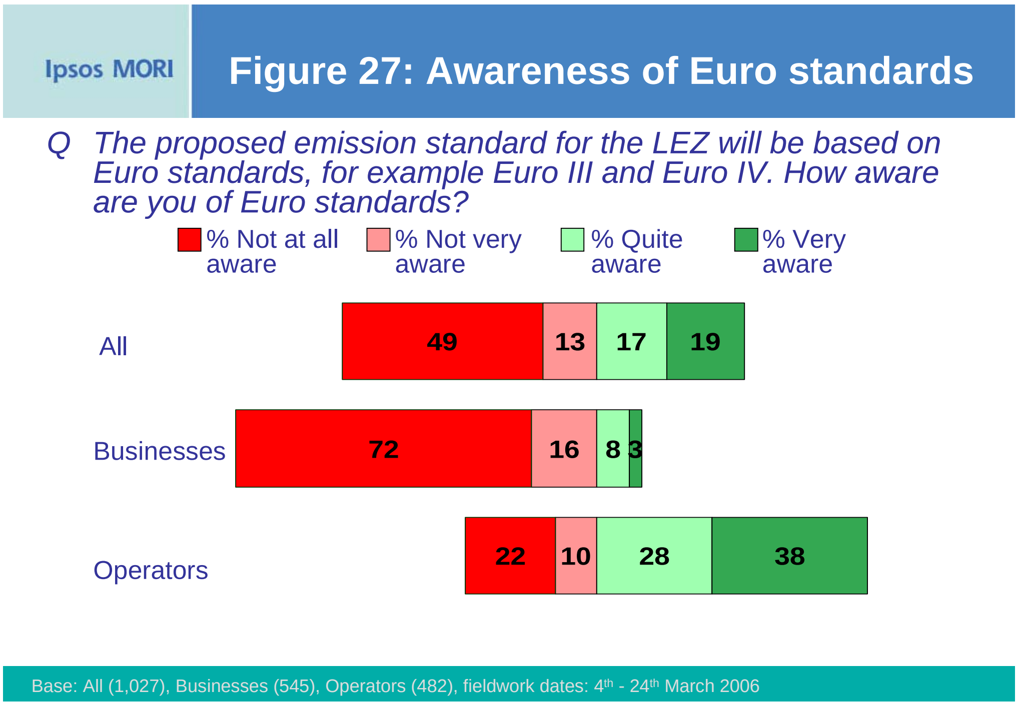
Businesses that do not own or lease any vehicles are more likely to think that the LEZ should apply to small HGVs and vans (64%) than businesses with at least one vehicle (48%) such as a van, HGV, coach or bus.

There are no significant differences between business size and the type of vehicles (including LGVs) that they think the LEZ should apply to.

Operators with large (13%) or small (12%) HGVs are more likely than operators with vans (8%) to think that the LEZ should not apply to any of the prompted vehicles.

Awareness of Euro Standards

Operators are significantly more likely to have heard of Euro standards (66%) than businesses (11%).



The proposed LEZ emission standards are based on Euro Standards, which are standards applicable to all vehicles sold in the EU. Standards run from Euro 0 upwards.

Operators outside Greater London are most likely to be aware of Euro standards (75%), compared to 43% of operators in Greater London.

Within Greater London itself there is considerable variation. Over half (59%) of operators in south London are aware of Euro standards compared to 34% in north London. Also 27% of operators in outer London are very aware of Euro standards compared to 10% in inner London.

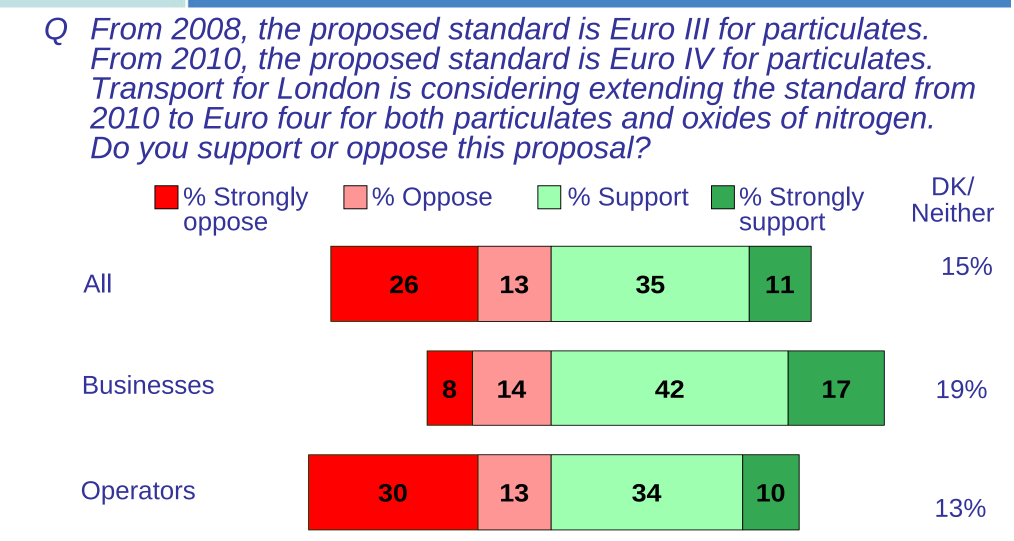
Operators are more likely to be aware of Euro standards if they have large HGVs in their fleet (80%). Operators with more than one vehicle in their fleet are also more likely to be at least vaguely aware of Euro standards (69%), than operators with only one vehicle in their fleet (40%). Very large operators (with 100+ vehicles in their fleet) are more likely to be at least vaguely aware of Euro standards (90%), than operators with fewer vehicles in their fleet (68% of operators with 2 to 99 vehicles are at least vaguely aware). There are no significant differences for operators with between 2 and 99 vehicles in their fleet.

Support for extension to Euro IV Emission Standard for NOx

Businesses (59%) are more likely to support an extension to the LEZ standard to Euro IV for both PM_{10} and NOx than operators (44%).

Businesses and operators who were aware of Euro standards were asked if they would support extending the standard to Euro IV for both PM_{10} and NOx from 2010. Nearly six in ten (59%) businesses and 44% of operators would support this.

Figure 28: Support for NOx standard from 2010



Base: All who were aware (375), Aware businesses (59), Aware operators (316), fieldwork dates: 4th - 24th March 2006

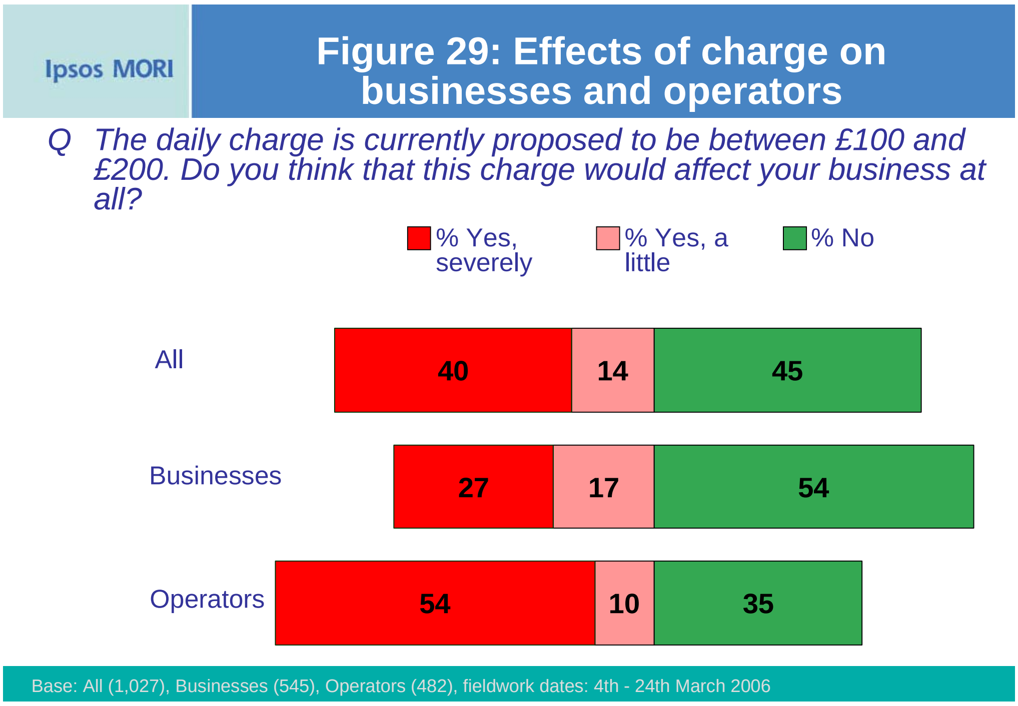
Operators with vans are more likely to strongly support the proposal (18%) than operators with other types of vehicles (for example 9% with large HGVs). Operators without any vehicles manufactured before 2001 are also more likely to support the proposal (55%), than operators with vehicles manufactured before 2001 (40%).

There are no significant differences between business type, size of business and vehicles owned or leased by businesses relative to support for the NOx proposal.

Effect of the charge on businesses

Less than half of businesses (44%) and around two-thirds of operators (64%) think that their business will be affected by the charge.

Operators are twice as likely to think that they will be affected severely by the proposed LEZ charge to drive non-compliant vehicles within Greater London (54% compared to 27% of businesses).



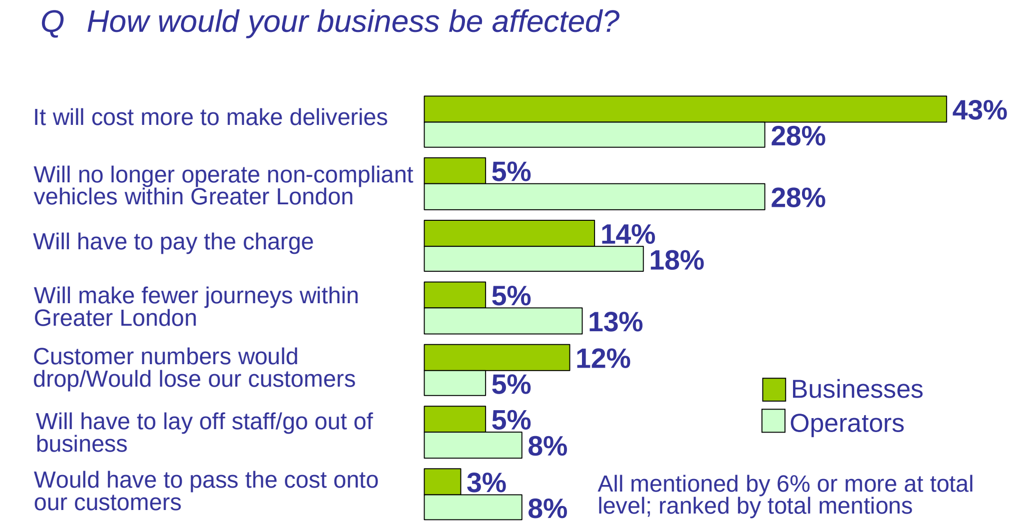
Businesses operating in the food/drink sector are most likely to feel they would be affected severely (64%) as are operators with vehicles manufactured before 2001 (62%).

Operators with more than one vehicle in their fleet are more likely to think that they will be severely affected by the charge (56%), than operators with only one vehicle in their fleet (38%). There are no significant differences between operators with more than two vehicles in their fleet, regardless of size of fleet.

As can be seen in figure 30, the main anticipated impact of the charge is increased delivery costs, cited by 43% of businesses and 28% operators. Overall, one-in-three businesses and operators (34%) think that it will cost more to make deliveries.

Of those businesses and operators who indicated that they would be affected by the LEZ daily charge, 34% said that it would cost more to make deliveries but only 9% indicated that they would make fewer journeys within Greater London.

Figure 30: How businesses and operators will be affected



Base: All businesses affected (238), all operators affected (310), fieldwork dates: 4th - 24th March 2006

Businesses in the retail/wholesale sector (56%) are more likely to state that it will cost more to make deliveries than businesses in other sectors (31-37%). Large businesses (ten or more employees) are more likely to think that they will have to pay the charge (24%) than businesses with only one to nine employees (11%).

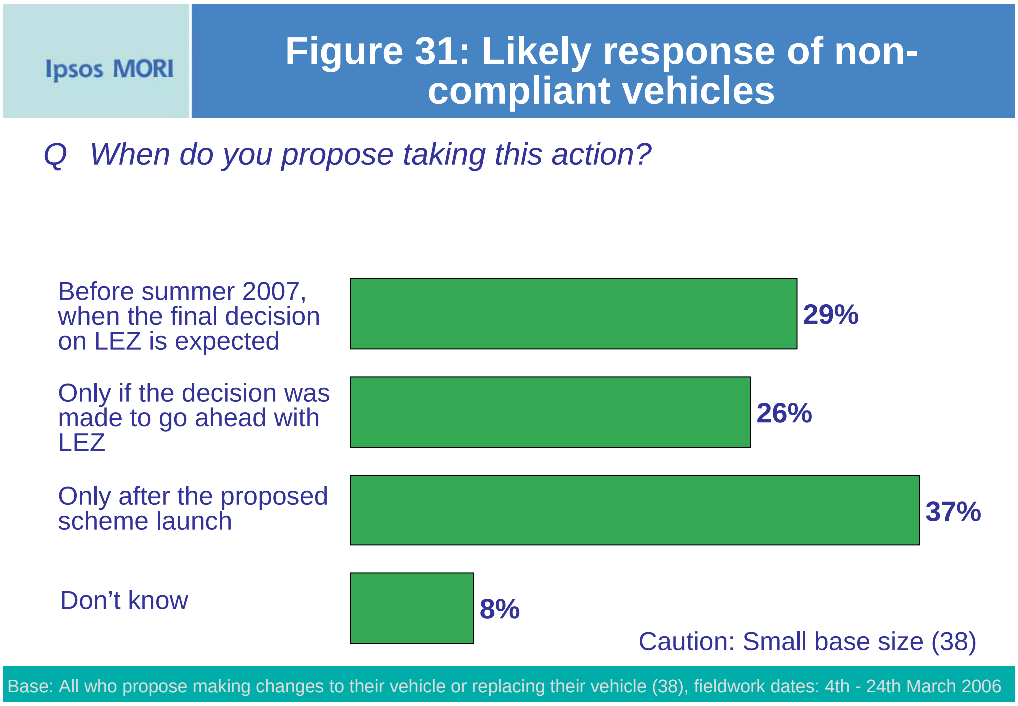
Operators also note that that they will no longer be able to operate non-compliant vehicles within Greater London (28%).

When compared to operators based inside Greater London, operators outside Greater London are more likely to think that they will no longer be able to operate non-compliant vehicles in Greater London (31% compared with 19%) and will make fewer journeys as a result (16% compared with 4%).

Operators based inside Greater London are more likely to think that they will have to lay off staff or will go out of business (15%) than operators outside Greater London (6%).

There are no significant differences between operator fleet sizes and how they think that their business will be affected.

Businesses and operators who think they will make changes to their vehicles or replace their vehicles were asked when they would do this. As can be seen in figure 31, a variety of timeframes were reported for this, the most popular being after the proposed launch in 2008 (37%).



Other ways to reduce road traffic pollution

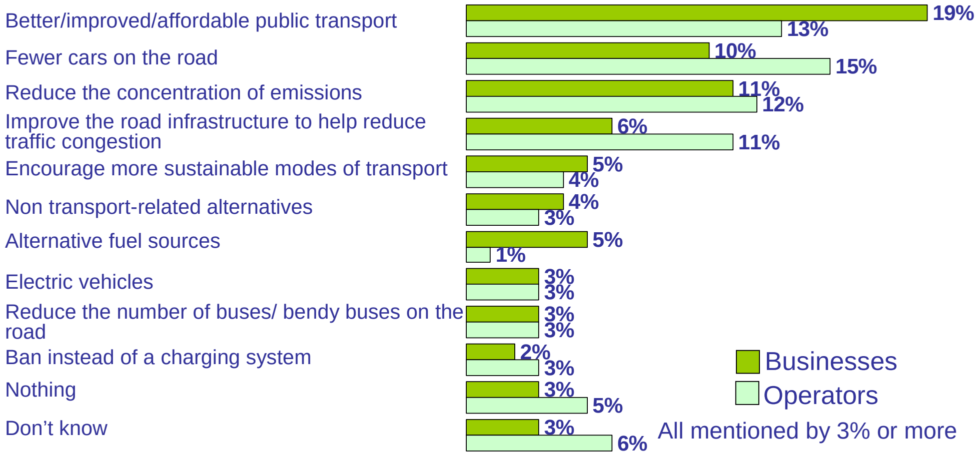
Better/improved/affordable public transport could also help reduce road traffic pollution in London.

When asked whar else could be done to reduce road traffic pollution in London, businesses and operators are most likely to mention that better/improved/ affordable public transport would help reduce road traffic pollution in London (16%). Fewer cars on the road (12%) and reducing the concentration of emissions (12%) are cited as ways to help reduce road traffic pollution in London.

Ipsos MORI

Figure 32: Alternative ways of reducing road traffic pollution in London

Q What else should be done to reduce road traffic pollution in London?



Base: All (1,027), Businesses (545), Operators (482), fieldwork dates: 4th - 24th March 2006

Appendices

Appendix I Sample profiles

Public demographic profile

Quotas were set for gender, age and ethnicity against the profile of adults within Greater London and the data were weighted to reflect this profile.

Ipsos MORI

Figure 33: Gender, Age & Ethnicity

Gender	%
Male	48
Female	52

Age	%
16-24	15
25-44	44
45-59	20
60-64	5
65-74	9
75 +	6
Refused	1

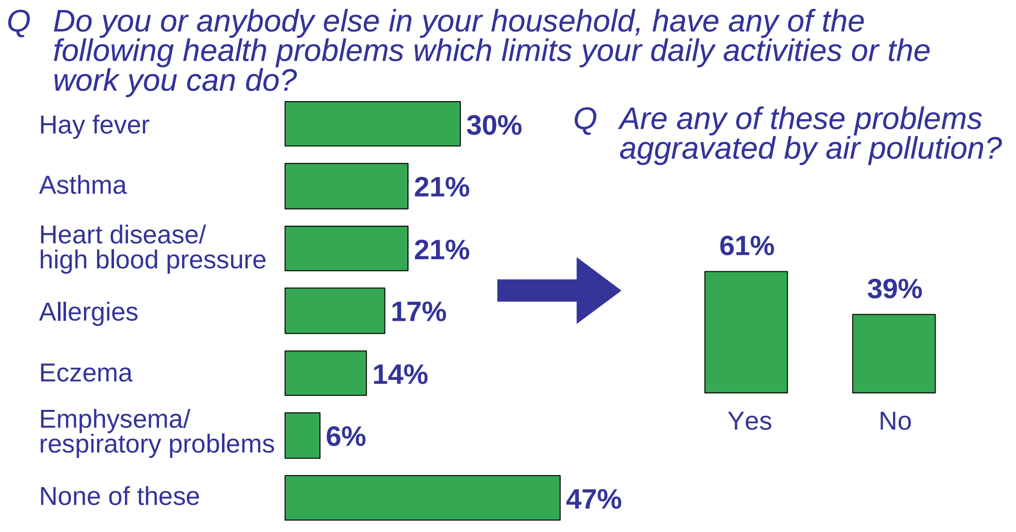
Ethnicity	%
White	71
Asian	12
Black	11
Mixed race	3
Chinese	*
Other	3
Refused	1

Base: All respondents (1,000) fieldwork dates: 4th - 24th March 2006

Six different health problems were read out to residents. Of these, 53% suffer from at least one, with the most common being hay fever (30%). Three-fifths of residents (61%) said that their health problems were aggravated by air pollution.

Ipsos MORI

Figure 34: Health problems

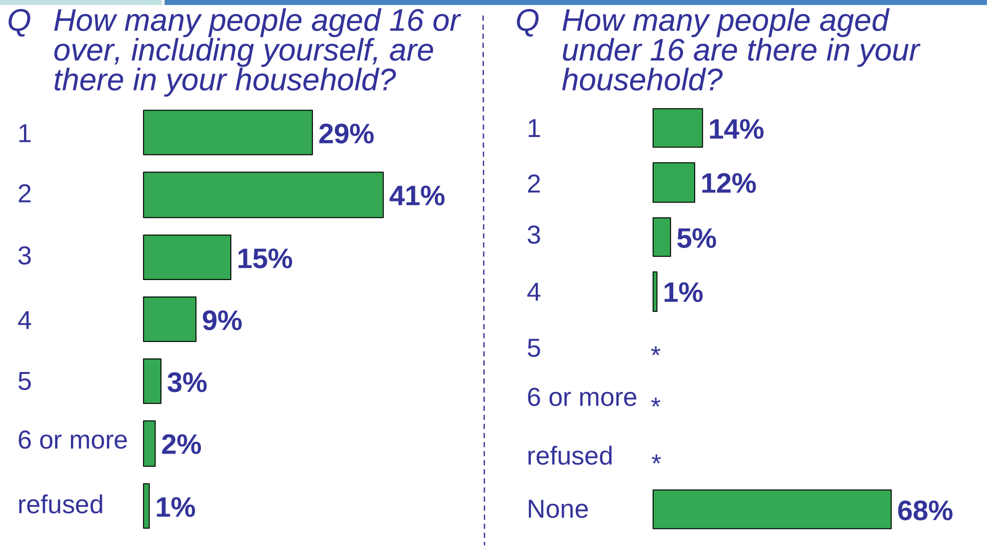


Base: All respondents (1,000). With health problems (328), fieldwork dates: 4th - 24th March 2006

Three in ten residents (29%) interviewed have only one adult living in the household and 32% have at least one child living in the household.

Ipsos MORI

Figure 35: Number in household



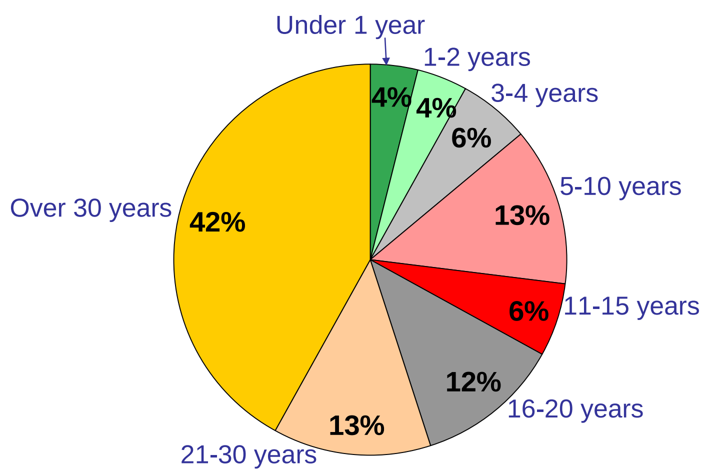
Base: All respondents (1,000) fieldwork dates: 4th - 24th March 2006

Seventy-three percent of residents interviewed have lived in Greater London for over ten years.

Ipsos MORI

Figure 36: Length of time in Greater London

Q How long have you lived within Greater London?

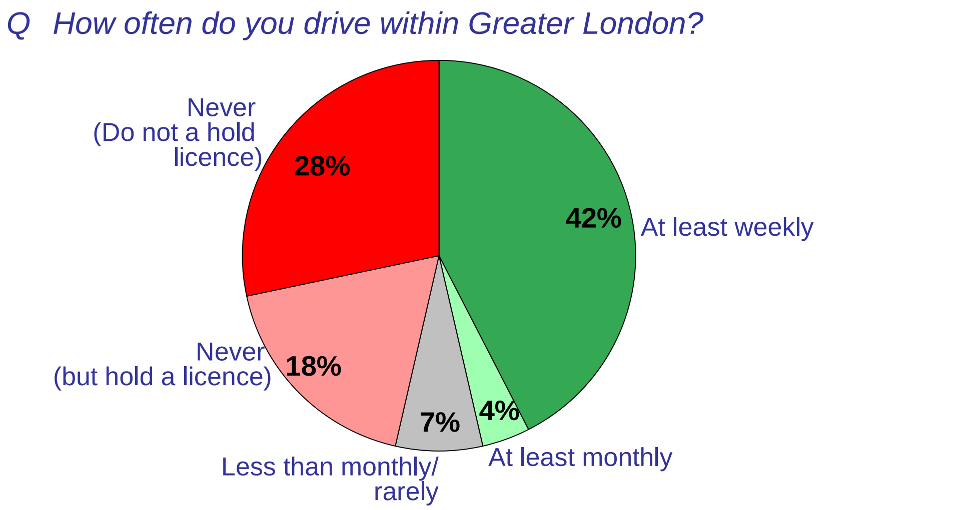


Base: All respondents (1,000) fieldwork dates: 4th - 24th March 2006

Fifty-three percent of residents interviewed drive in Greater London and 42% drive within Greater London at least weekly.

Ipsos MORI

Figure 37: Driving in Greater London

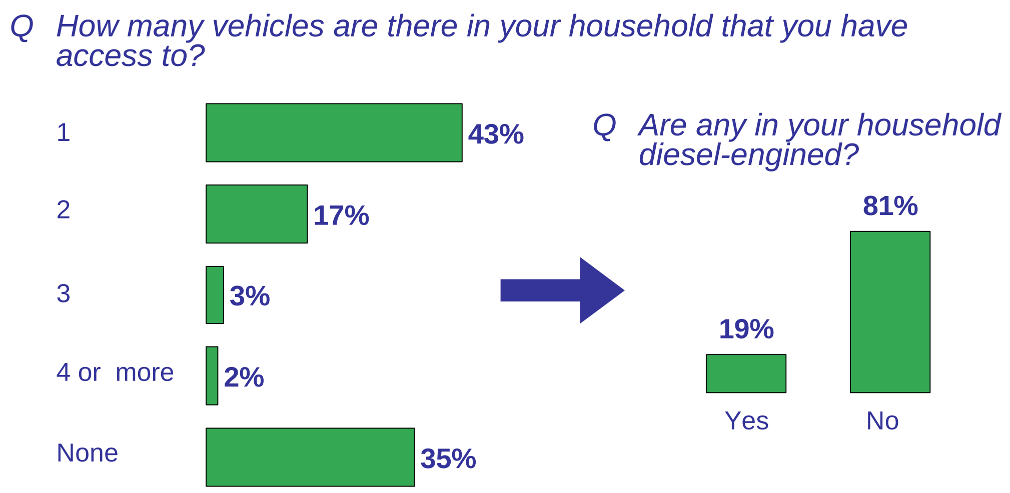


Base: All respondents (1,000) fieldwork dates: 4th - 24th March 2006

Two-thirds of residents interviewed have access to at least one vehicle in the household. One in five residents (19%) with access to a vehicle have a diesel engine vehicle.

Ipsos MORI

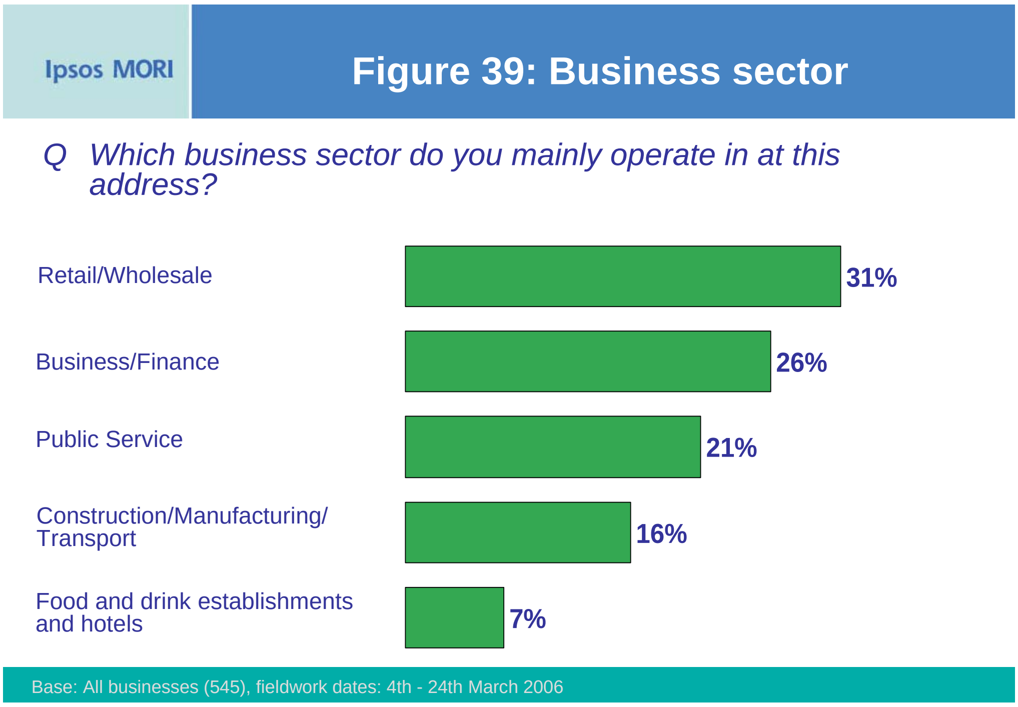
Figure 38: Vehicles in household



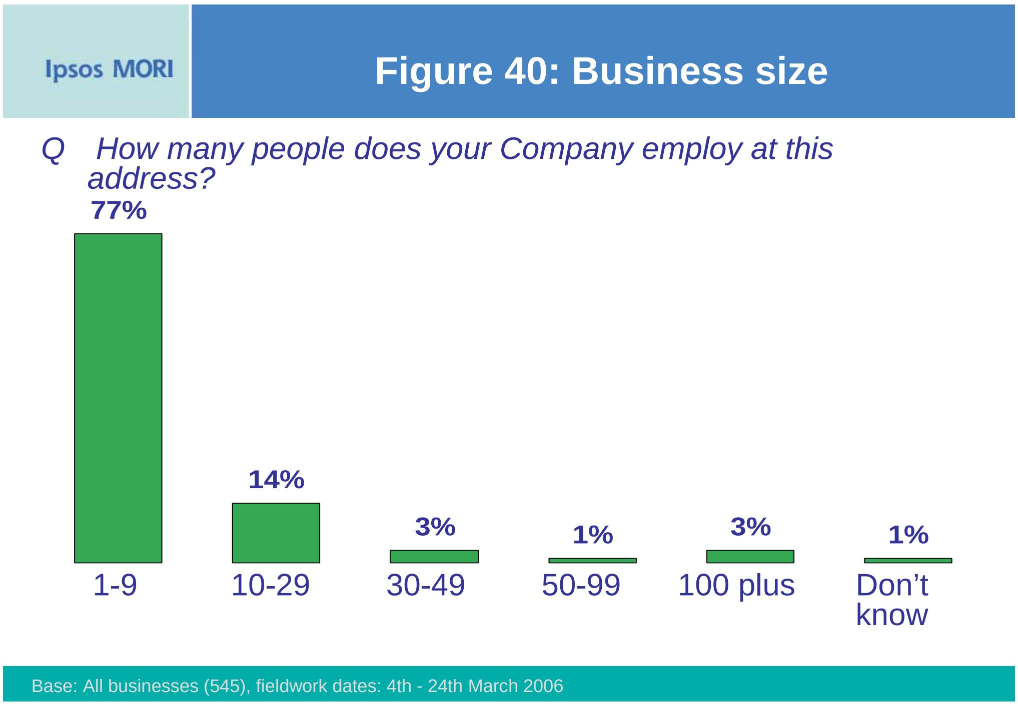
Base: All respondents (1,000), Those who have access to at least one vehicle (658), fieldwork dates: 4th - 24th March 2006

Business profile

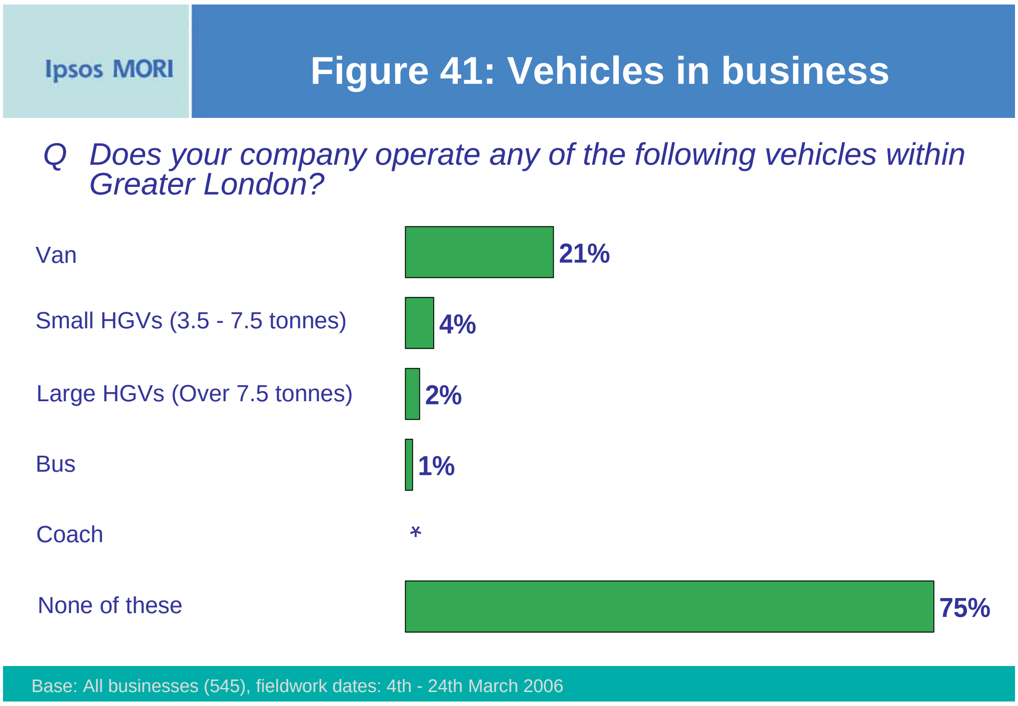
Quotas were set on business sector to reflect businesses within Greater London, the most common being businesses in the retail/wholesale sector (31% of interviews).



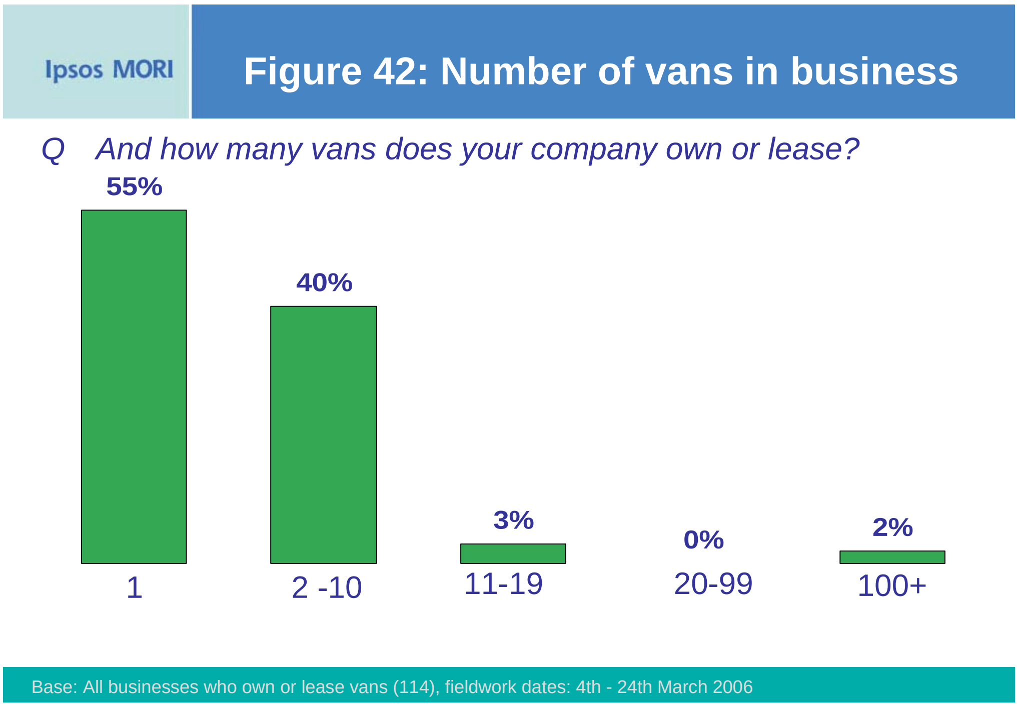
Three-quarters (77%) of businesses interviewed employ 1 to 9 employees.



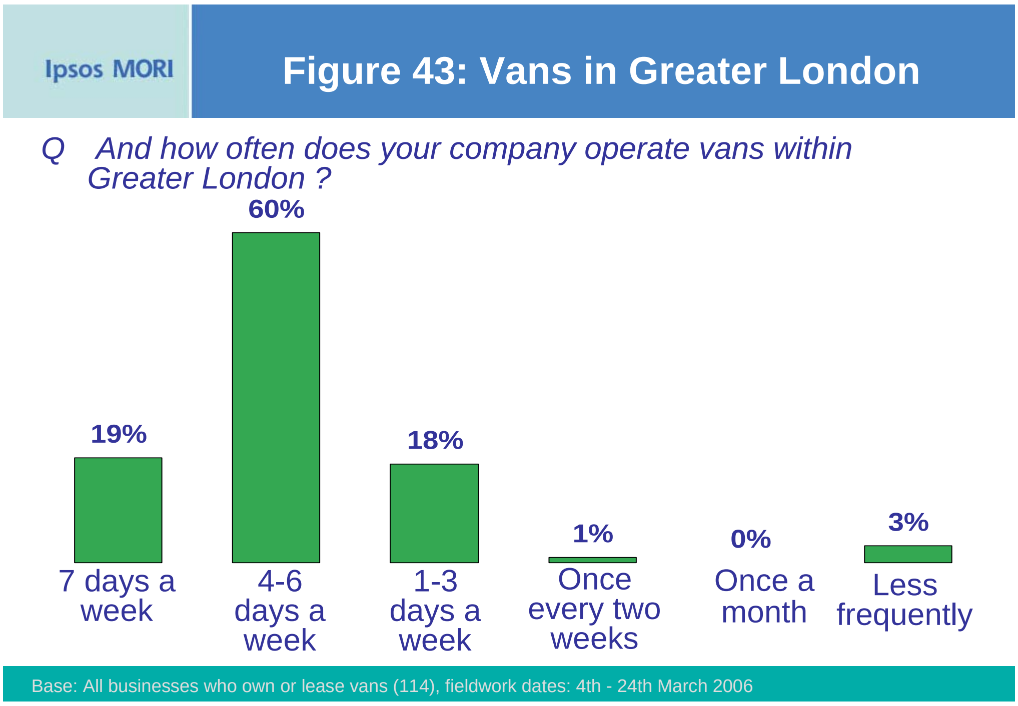
Three-quarters of businesses surveyed do not operate any vehicles within Greater London. For businesses that do operate vehicles, most (21%) operate vans.



Most businesses that operate vans have ten vans or less (95%).

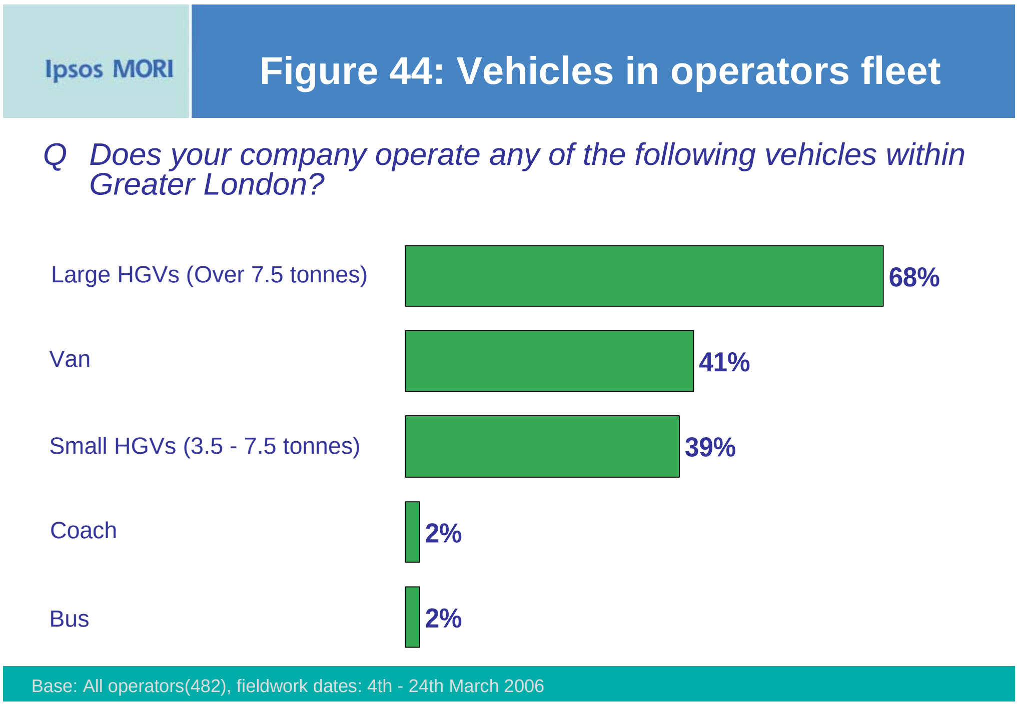


Nearly all businesses that operate vans do so at least weekly (97%). One in five (19%) operate them daily and a further three in five (60%) operate them at least four to six days a week.

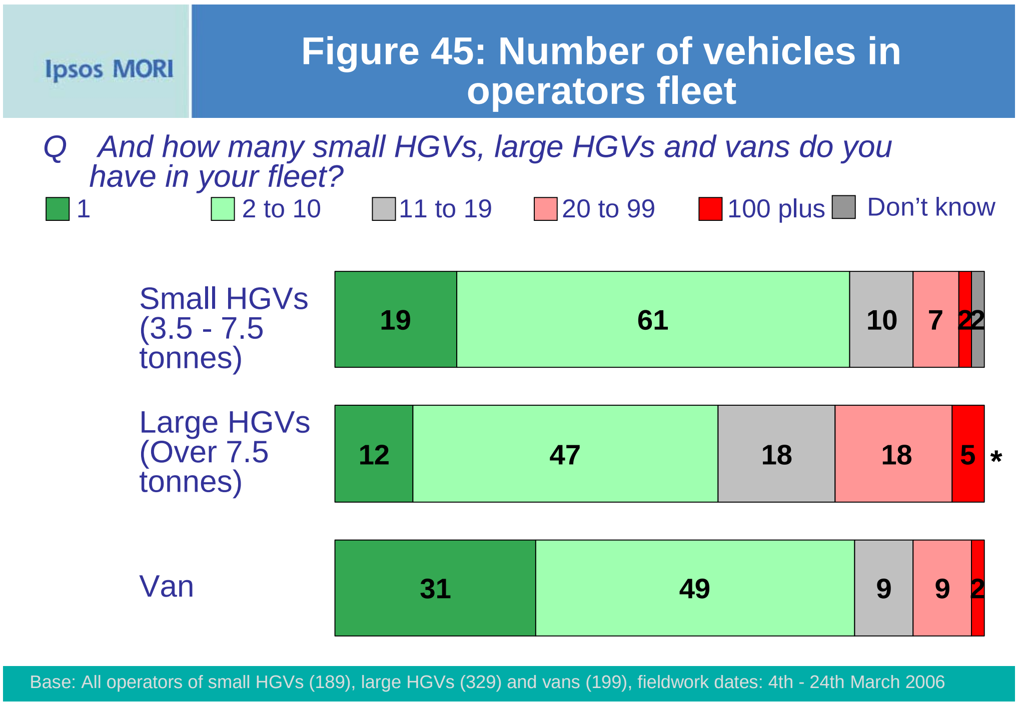


Operator profile

Operators surveyed are most likely to operate Large HGVs (68%), small HGVs (39%) and vans (41%) within Greater London.



Most operators have ten or less vehicles in their fleet, regardless of vehicle type.



Three quarters of operators own all their vehicles, rather than leasing them

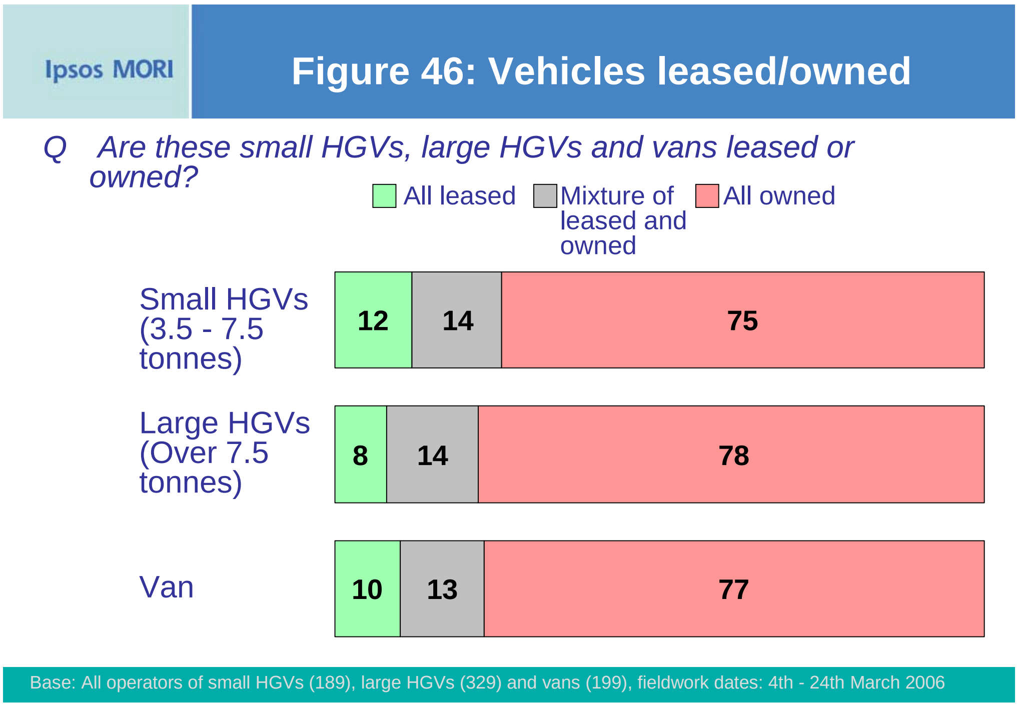
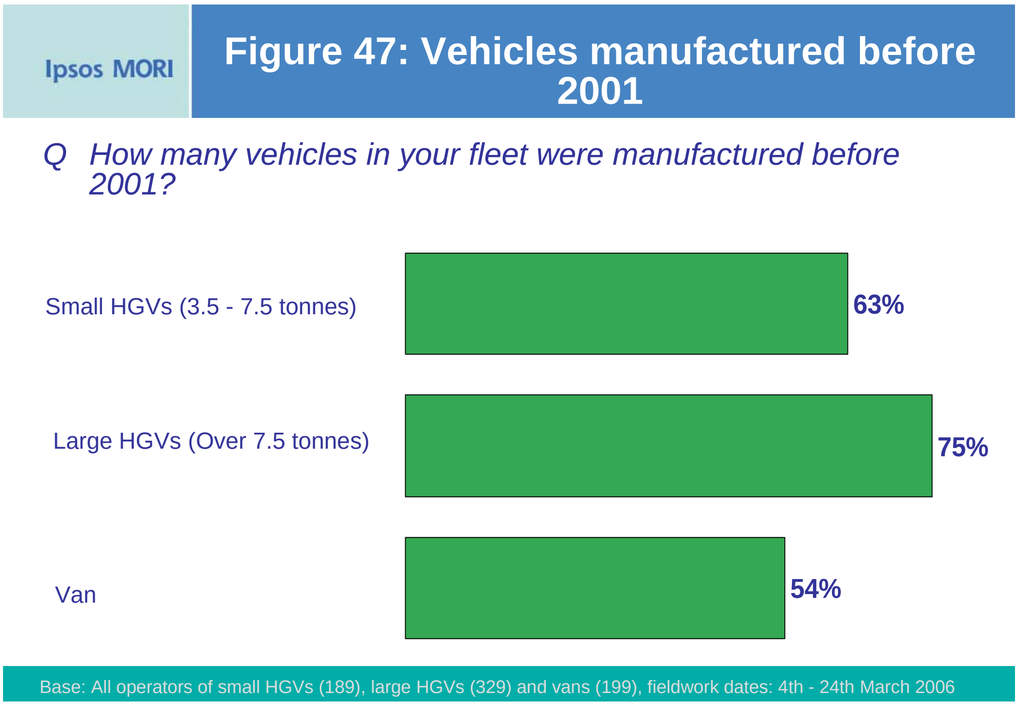
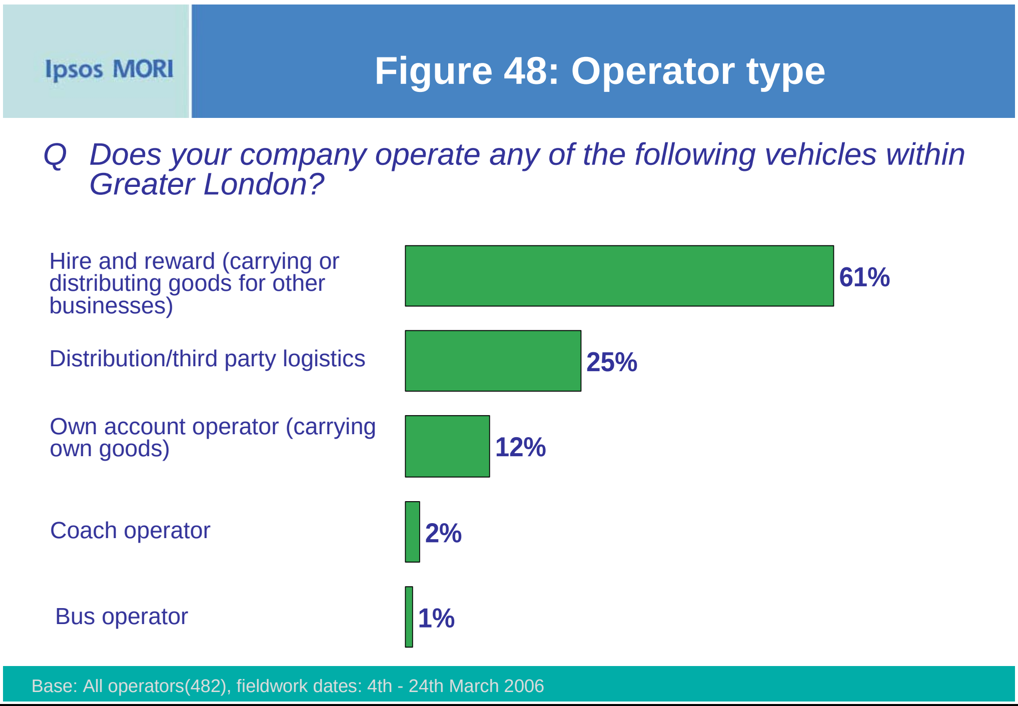


Figure 47 shows the number of operators who have at least one vehicle in their fleet which was manufactured before 2001. Three-quarters of operators who have large HGVs have at least one that was manufactured before 2001.



Of the operator sample, nearly two thirds (61%) operate on a 'hire and reward' basis, with a third operating on a distribution/ third party logistics basis.



Appendix II London residents topline results

- Results are based on 1,000 responses for fieldwork between 4th – 24th March 2006
- Where results do not sum to 100, this may be due to multiple responses or computer rounding
- Results are based on all respondents unless otherwise stated
- An asterisk (*) represents a value of less than one half of one percent, but not zero
- Results are weighted by gender, age and ethnicity according to the 2001 census in Greater London

Q1. **Firstly could I please check your Post Code, this is purely for classification purposes and we will not pass this information onto anyone else?** USED TO CLASSIFY BOROUGH

	Public %
Barking and Dagenham	2
Barnet	5
Bexley	4
Brent	3
Bromley	4
Camden	3
Croydon	4
Ealing	5
Enfield	3
Greenwich	3
Hackney	3
Hammersmith and Fulham	1
Haringey	3
Harrow	2
Havering	2
Hillingdon	3
Hounslow	3
Islington	2
Kensington and Chelsea	2
Kingston upon Thames	1
Lambeth	4
Lewisham	5
Merton	3
Newham	5
Redbridge	3
Richmond upon Thames	3
Southwark	3
Sutton	3
Tower Hamlets	3
Waltham Forest	4
Wandsworth	4
Westminster	2
North Greater London (North of the river)	**58**
South Greater London (South of the river)	**42**
Inner Greater London	**39**
Outer Greater London	**61**

Q2. **How would you describe air quality in London?** READ OUT. SINGLE CODE. IF NEEDS CLARYFYING PROMPT FOR WITHIN GREATER LONDON

Base: All Respondents (1,000)

	Public %
Very good	3
Good	26
Neither good nor poor	23
Poor	35
Very poor	10
Don't know	2

Q3. **Does air pollution affect you or your family?** READ OUT. SINGLE CODE.

Base: All Respondents (1,000)

	Public %
Yes, very much	19
Yes, a little	31
Not at all	49
Don't know	1

Q4. **Transport for London is proposing to introduce a LEZ in Greater London from 2008. This LEZ would seek to improve air quality and the health of Londoners by deterring the most polluting diesel vehicles from driving in Greater London. These vehicles would typically be older lorries, buses and coaches and they would be charged to drive within the zone. How aware of this initiative were you before today?** READ OUT. SINGLE CODE.

Base: All Respondents (1,000)

	Public %
Aware	21
Vaguely aware	18
Not aware	60
Don't know	1

Q5. **Do you support or oppose the proposal to introduce a LEZ in Greater London?** READ OUT. SINGLE CODE.

Base: All Respondents (1,000)

	Public %
Strongly support	41
Support	38
Neither support nor oppose	7
Oppose	6
Strongly oppose	5
Don't know	3

Q6. **Transport for London is currently carrying out a public consultation on the proposal to introduce a LEZ in Greater London. How aware are you of this consultation?** READ OUT. SINGLE CODE.

Base: All Respondents (1,000)

	Public %
Aware	11
Vaguely aware	10
Not aware	78
Don't know	1

Q7. **All diesel lorries, buses and coaches manufactured since October 2001 would meet the proposed emission standard and would be able to operate in the proposed LEZ without a charge. Older vehicles would need to be modified to meet the standard. Do you think this proposal is reasonable?** READ OUT. SINGLE CODE.

Base: All Respondents (1,000)

	Public %
Yes	82
No, too severe	10
No, too lenient	3
Don't know	5

Q8. **It is proposed that from 2008 the LEZ would apply to diesel lorries, buses and coaches. Which diesel vehicles do *you* think the LEZ should apply to?** READ OUT. MULTICODE

Base: All Respondents (1,000)

	Public %
Lorries (HGVs – heavy goods vehicles)	87
Buses	75
Coaches	73
Vans (LGVs – light goods vehicles)	64
Cars	58
None of these	3
Don't know	3

Q9. **The current proposal is that vehicles that do not comply with the proposed emission standards should be obliged to pay a substantial charge to drive in Greater London. Do you support this proposal?** READ OUT. SINGLE CODE.

Base: All Respondents (1,000)

	Public %
Strongly support	26
Support	37
Neither support nor oppose	5
Oppose	14
Strongly oppose	15
Don't know	4

Q10. **Do you think that diesel lorries, buses and coaches that do not meet with the proposed emission standard in 2008 should be banned from driving within Greater London altogether or pay a substantial daily charge to drive within Greater London?** READ OUT. SINGLE CODE

Base: All Respondents (1,000)

	Public
	%
Prefer outright ban	35
Prefer to pay a daily charge	43
Neither	19
Don't know	3

Q11. **What else should be done to reduce road traffic pollution in London?** OPEN ENDED

Base: All Respondents (1,000)

	Public %
Better/Improved/Affordable public transport	25
Less cars on the road	13
Encourage more sustainable modes of transport	7
Improve the road infrastructure to reduce traffic congestion	6
Increase the catchment area of the congestion zone/Increase congestion charge	6
Encourage more cyclists by making more cycle lanes	6
Non transport related alternatives	5
Alternative fuel sources	5
Reduce the concentration of emissions	3
Increase roadside testing of vehicles	2
Ban/Impose restrictions on lorries coming into Greater London	2
Encourage more people to use public transport	2
Extend it to include all forms of transport	2
Impose fines for vehicles that fail to comply with regulations	2
Electric vehicles	2
More advertising / make public more aware	2
LEZ is best option	1
HGV vehicles should operate within certain times e.g. early mornings/evenings	1
Grants for cleaner vehicles	1
Make it expensive to use cars e.g. increase taxation for roads/fuel	1
Reduce the number of buses/Bendy buses on the roads	1
Ban instead of charging system	1
Apply the same guidelines/Regulations to taxis/Black cabs	1
Better parking facilities	1
Use of road user charging incentives	1
Tighter MOT controls/standards	1
Disagree with the scheme/Just a money making scheme	1
Don’t limit the scheme to London extend it nationwide	*
Reduce bus lanes	*
The proposals need to be phased in over time	*
Put DVLA in charge	0
Other	4
None/Nothing	4
Don’t Know	27

We would lastly like to ask you a few questions for classification purposes

Q12. **Gender?** DO NOT ASK. SINGLE CODE
Base: All Respondents (1,000)

	Public %
Male	48
Female	52

Q13. **How old were you on your last birthday?** SINGLE CODE
Base: All Respondents (1,000)

	Public %
16-24	15
25-44	44
45-59	20
60-64	5
65-74	9
75 plus	6
Refused	1

Q14. **How would you describe your ethnic background?** SINGLE CODE
Base: All Respondents (1,000)

	Public %
White	71
Asian	12
Black	11
Mixed race	3
Chinese	*
Other	3
Refused	1

Q15. **Do you, or does anybody else in your household, have any of the following health problems which limits your daily activities or the work you can do?** READ OUT. MULTICODE OK
Base: All Respondents (1,000)

	Public %
Asthma	21
Eczema	14
Heart disease / High blood pressure	21
Allergies	17
Hay fever	30
Emphysema / respiratory problems	6
None of these	47
Refused	*

Q16. **Are any of these health problems aggravated by air pollution?** SINGLE CODE
Base: All Respondents who have a health problem (525)

	Public %
Yes	61
No	39

Q17. **How many people aged 16 or over, including yourself, are there in your household?**
Base: All Respondents (1,000)

	Public %
1	29
2	41
3	15
4	9
5	3
6 or more	2
Refused	1

Q18. **How many people aged under 16, are there in your household?**
Base: All Respondents (1,000)

	Public %
1	14
2	12
3	5
4	1
5	*
6 or more	*
None	68
Refused	*

Q19. **How long have you lived within Greater London?** SINGLE CODE
Base: All Respondents (1,000)

	Public %
Under 1 year	4
1-2 years	4
3-4 years	6
5-10 years	13
11 – 15 years	6
16 – 20 years	12
21 – 30 years	13
Over 30 years	42
Don't Know	*

Q20. **How often do you drive within greater London?** SINGLE CODE.
Base: All Respondents (1,000)

	Public %
5 or more times a week	25
2-4 times a week	11
Once a week	6
At least twice a month	2
At least monthly	2
Less than monthly	2
Rarely	6
Never (But hold a driving licence)	18
Never (Do not hold a driving licence)	28
Don't know	*

Q21. **How many vehicles are there in your household that you have access to?** SINGLE CODE
Base: All Respondents (1,000)

	Public %
1	43
2	17
3	3
4 or more	2
None	35

Q22. **Are any vehicles in your household diesel-engined?** SINGLE CODE
Base: All who have at least one vehicle in the household (651)

	Public %
Yes	19
No	81
Don't Know	1

Q23. **Thank you very much for taking part in this survey. Transport for London often wish to speak to Londoners to obtain their opinion on transport issues. Would you be happy to take part in any future research?** SINGLE CODE
Base: All Respondents (1,000)

	Public %
Yes	79
No	20
Don't Know	1

Appendix III Business/Operator Top Line Results

- Results are based on 1,027 responses – 545 businesses and 482 operators
- Fieldwork between 4th – 24th March 2006
- Where results do not sum to 100, this may be due to multiple responses or computer rounding
- Results are based on all respondents unless otherwise stated
- An asterisk (*) represents a value of less than one half or one percent, but not zero

BUSINESS SCREENER

S2a **Which busniess sector do you mainly operate in at this address?**
SINGLE CODE
Base: All Businesses (545)

	Business %
Construction (including builders and contractors)	2
Manufacturing	7
Repair services	4
Garages	1
Transport and Distribution	1
Agriculture	0
Wholesale	6
Retail (shops and petrol stations)	24
Pubs, restaurants and cafes	6
Hotel / B&B / Guest Houses / camp sites	1
Tourism (Tourist attractions such as museums and art galleries and Tourist information)	1
Social services / education services / health services	11
Utilities (Gas / electric / water services / telecommunications)	1
Other services for the public (for example post offices, libraries, citizen advice)	8
Finance (Banks, investment offices, stock brokers)	9
Insurance	1
Estate Agents	2
Other small office based businesses	14
Other	*
Retail / Wholesale	**31**
Construction/Manufacturing/Transportation	**16**
Food and drink establishments and hotels	**7**
Public services	**21**
Business/Finance	**26**

S3a **Is your company headquarters or any regional offices situated within Greater London?**

Base: All Businesses (545)

	Business %
Yes	100
No	0

S4a **Does your company operate any of the following vehicles within Greater London?** READ OUT. MULTICODE

Base: All Businesses (545)

	Business %
Small HGV (3.5-7.5 TONNES)	4
Large HGV (Over 7.5 tonnes)	2
Van	21
Bus	1
Coach	*
None of these	75

S5a **And how many HGVs, buses, coaches and vans does your company own or lease?**

Base: All who operate type of vehicle

	Small HGV (3.5-7.5 tonnes) Business (23) %	**Large HGV (Over 7.5 tonnes)** Business (11) %	**VAN** Business (114) %	**BUS** Business (5) %	**COACH** Business (2) %
0	0	0	0	0	50
1	57	45	55	0	0
2-10	39	27	40	60	0
11-19	0	9	3	20	0
20-99	4	9	0	20	50
100+	0	9	2	0	0

S6a **And how often does your company operate HGVs, buses, coaches or vans within Greater London?**

Base: All who operate type of vehicle

	Small HGV (3.5-7.5 tonnes)	Large HGV (Over 7.5 tonnes)	VAN	BUS	COACH
	Business (23) %	Business (11) %	Business (114) %	Business (5) %	Business (2) %
7 days a week	9	18	19	20	50
4-6 days a week	52	45	60	80	50
1-3 days a week	22	18	18	0	0
One every two weeks	9	9	1	0	0
Once a month	4	0	0	0	0
Less frequently	4	9	3	0	0
Never	0	0	0	0	0

OPERATOR SCREENER

S2b **Does your company operate any of the following vehicles within Greater London?** READ OUT. MULTICODE

Base: All Operators (482)

	Operator %
Small HGV (3.5-7.5 TONNES)	39
Large HGV (Over 7.5 tonnes)	68
Van	41
Bus	2
Coach	2
None of these	0

S3b **How many vehicles of the following size do you have in your fleet?** SINGLE CODE

Base: All who operate type of vehicle

	Small HGV (3.5-7.5 tonnes)	Large HGV (Over 7.5 tonnes)	VAN	BUS	COACH
	Operator (189) %	Operator (329) %	Operator (199) %	Operator (9) %	Operator (9) %
1	19	12	31	0	11
2 to 10	61	47	49	44	22
11 to 19	10	18	9	11	33
20 to 99	7	18	9	22	22
100 plus	2	5	2	22	11
Don't Know	2	*	0	0	0

S4b **How often does your company operate Small HGVs (3.5-7.5 tonnes), large HGVs (over 7.5 tonnes), vans, buses and coaches within Greater London?** SINGLE CODE

Base: All who operate type of vehicle

	Small HGV (3.5-7.5 tonnes)	Large HGV (Over 7.5 tonnes)	VAN	BUS	COACH
	Operator (189) %	Operator (329) %	Operator (199) %	Operator (9) %	Operator (9) %
7 days a weeks	13	14	18	33	22
4-6 days a week	28	29	33	0	11
1-3 days a week	26	21	23	11	22
Once every two weeks	8	8	8	11	0
Once a month	11	13	5	11	22
Less frequently	14	16	14	33	22
Never	0	0	0	0	0

S5b **Are these vehicles leased or owned?** SINGLE CODE FOR EACH

Base: All who operate type of vehicle

	Small HGV (3.5-7.5 tonnes)	Large HGV (Over 7.5 tonnes)	VAN	BUS	COACH
	Operator (189) %	Operator (329) %	Operator (199) %	Operator (9) %	Operator (9) %
All leased	12	8	10	0	0
All owned	75	78	77	78	67
Mixture of leased and owned	14	14	13	22	33

S6b **How many vehicles in your fleet were manufactured before 2001?** SINGLE CODE FOR EACH

Base: All who operate type of vehicle)

	Small HGV (3.5-7.5 tonnes)	**Large HGV (Over 7.5 tonnes)**	**VAN**	**BUS**	**COACH**
	Operator (189) %	Operator (329) %	Operator (199) %	Operator (9) %	Operator (9) %
0	32	23	43	33	22
1	20	12	24	11	0
2-10	40	51	28	22	33
11-19	1	6	1	11	33
20-99	2	4	1	11	11
100+	1	2	1	11	0
Don't Know	5	2	3	0	0

S7b **Which of the following best describes the nature of your company? If you have more than one of the following please tell me which covers the most mileage.** READ OUT. SINGLE CODE.

Base: All Operators (482)

	Operator %
Hire and reward (Carrying or distributing goods for other businesses)	61
Own account operator (Carrying own goods)	12
Distribution/ third party logistics	25
Bus operator	1
Coach operator	2
Other	0
Don't Know	0

MAIN QUESTIONNAIRE

Q24. **How would you describe air quality in London?** READ OUT. SINGLE CODE.

Base: All Businesses (545) / Operators (482)

	Business %	Operator %	Total %
Very good	2	4	3
Good	26	26	26
Neither good nor poor	25	21	23
Poor	33	18	26
Very poor	8	3	6
Don't know	7	28	17

Q25. **Transport for London is proposing to introduce a LEZ in Greater London from 2008. This LEZ would seek to improve air quality and the health of Londoners by deterring the most polluting diesel vehicles from driving in Greater London. These vehicles would typically be older lorries, buses and coaches and they would be charged to drive within the zone if they did not meet the prescribed emission standards. How aware of this initiative were you before today?** READ OUT. SINGLE CODE.

Base: All Businesses (545) / Operators (482)

	Business	Operator	Total
	%	%	%
Aware	26	53	39
Vaguely aware	17	25	20
Not aware	56	22	40
Don't know	1	*	1

Q26. **Do you support or oppose the proposal to introduce a LEZ in Greater London?** READ OUT. SINGLE CODE.

Base: All Businesses (545) / Operators (482)

	Business	Operator	Total
	%	%	%
Strongly support	28	12	21
Support	37	34	35
Neither support nor oppose	11	15	13
Oppose	8	11	10
Strongly oppose	12	26	19
Don't know	3	3	3

Q27. **Transport for London is currently carrying out a public consultation on the proposal to introduce the LEZ. How aware are you of this consultation?** READ OUT. SINGLE CODE.

Base: All Businesses (545) / Operators (482)

	Business	Operator	Total
	%	%	%
Aware	13	28	20
Vaguely aware	8	15	11
Not aware	77	56	67
Don't know	1	*	1

Q28. **All diesel lorries, buses and coaches manufactured since October 2001 would meet the proposed emission standard and would be able to operate in the proposed LEZ without a charge. Older vehicles would need to be modified to meet the standard. Do you think this proposal is reasonable?** READ OUT. SINGLE CODE.

Base: All Businesses (545) / Operators (482)

	Business	Operator	Total
	%	%	%
Yes	73	52	63
No, too severe	19	41	30
No, too lenient	1	1	1
Don't know	6	6	6

Q29. **It is proposed that from 2008 the LEZ would apply to diesel lorries, buses and coaches. Which diesel vehicles do *you* think the LEZ should apply to?** READ OUT. MULTICODE

Base: All Businesses (545) / Operators (482)

	Business %	Operator %	Total %
Small lorries (3.5 tonnes to 7.5 tonnes HGVs)	71	60	66
Large lorries (Over 7.5 tonnes HGVs)	82	68	75
Buses 17 seats or under	72	69	71
Buses over 17 seats	79	74	77
Coaches 17 seats or under	70	68	69
Coaches over 17 seats	78	73	75
Vans (Light Goods Vehicle)	60	54	57
Cars	54	59	56
None of these	7	12	9
Don't know	5	4	5

Q30. a **The proposed emission standard for the LEZ will be based on Euro standards for example Euro three and Euro four. How aware are you of Euro standards?** READ OUT. SINGLE CODE

Base: All Businesses (545) / Operators (482)

	Business %	Operator %	Total %
Very aware	3	38	19
Quite aware	8	28	17
Neither aware nor unaware	2	2	2
Not very aware	16	10	13
Not at all aware	72	22	49

Q7. b **From 2008, the proposed standard is Euro three for particulates. From 2010, the proposed standard is Euro four for particulates. Transport for London is considering extending the standard from 2010 to Euro four for both particulates and oxides of nitrogen. Do you support or oppose this proposal?** READ OUT. SINGLE CODE.

Base: All aware of Euro standards (375)

	Business (59) %	Operator (316) %	Total (375) %
Strongly support	17	10	11
Support	42	34	35
Neither support nor oppose	3	9	8
Oppose	14	13	13
Strongly oppose	8	30	26
Don't know	15	4	6

Q31. **The current proposal is that vehicles that do not comply with the proposed emission standards should be obliged to pay a substantial charge to drive in Greater London. Do you support this proposal?**

Base: All Businesses (545) / Operators (482)

	Business	Operator	Total
	%	%	%
Strongly support	17	11	14
Support	31	24	28
Neither support nor oppose	8	4	6
Oppose	16	18	17
Strongly oppose	25	42	33
Don't know	3	1	2

Q32. **Do you think that diesel lorries, buses and coaches that do not meet with the proposed emission standard in 2008 should be banned from driving within Greater London altogether or pay a substantial daily charge to drive within Greater London?** READ OUT. SINGLE CODE

Base: All Businesses (545) / Operators (482)

	Business	Operator	Total
	%	%	%
Prefer outright ban	40	23	32
Prefer to pay a daily charge	30	32	31
Neither	27	43	34
Don't know	3	2	3

Q33. **The daily charge is currently proposed to be between £100 and £200. Do you think that this charge would affect your business at all?** READ OUT SINGLE CODE

Base: All Businesses (545) / Operators (482)

	Business	Operator	Total
	%	%	%
Yes, severely	27	54	40
Yes, a little	17	10	14
No	54	35	45
Don't know	3	1	2

Q34. **How would your business be affected?** DO NOT READ OUT. MULTICODE OK

Base: All whose business will be affected (548)

	Business (238) %	Operator (310) %	Total (548) %
Will make fewer journeys within Greater London	5	13	9
Will have to make changes to existing vehicles	1	5	3
Will have to replace vehicles	1	7	5
Will have to pay the charge	14	18	16
Will no longer operate non-compliant vehicles within Greater London	5	28	18
Relocate	1	*	1
It will cost more to make deliveries	43	28	34
Will have to lay off staff / will go out of business	5	8	7
Would have to pass the cost onto our customers	3	8	6
Customer numbers would drop/would loose customers	12	5	8
It will cost more to receive deliveries	6	0	3
Increased expense/Cost to the company	8	2	4
It will affect profit margins	*	1	1
Public transport costs will rise	1	0	1
Will have to move the business out of London	1	0	*
Other	11	5	7
Don't Know	3	1	2
None / won't affect us	*	1	1

Q35. **When do you propose taking this action?** READ OUT. SINGLE CODE ONLY

Base: All who propose making changes to vehicles or replacing vehicles (38)

	Business (4) %	Operator (34) %	Total (38) %
Before summer 2007, when the final decision could be made on whether or not to go ahead with a LEZ	0	32	29
Only if the decision was made to go ahead with the LEZ proposal, currently expected in summer 2007	75	21	26
Only after the proposed scheme launch in January 2008	0	41	37
Don't know	25	6	8

Q36. **What else should be done to reduce road traffic pollution in London?** OPEN ENDED

Base: All Businesses (545) / Operators (482)

	Business %	Operator %	Total %
Better/Improved/Affordable public transport	19	13	16
Less cars on the road	10	15	12
Reduce the concentration of emissions	11	12	12
Improve the road infrastructure to help reduce traffic congestion	6	11	8
Encourage more sustainable modes of transport	5	4	5
Non-transport related alternatives	4	3	3
Alternative fuel sources	5	1	3
Electric vehicles	3	3	3
Reduce the number of buses/Bendy buses on the road	3	3	3
Ban instead of a charging system	2	3	3
Use of road user charging incentives	3	2	2
Increase roadside testing of vehicles	2	2	2
Tighter MOT controls and standards	3	2	2
HGV vehicles should operate within certain times early mornings / evenings	2	3	2
Encourage more people to use public transport	2	2	2
Impose fines/Restrictions for vehicles that fail to comply with regulations	2	3	2
Encourage more cyclists by making more cycle lanes	3	1	2
Make it expensive to use cars e.g. increase taxation for roads / Fuel	2	2	2
LEZ is best option	2	2	2
Apply the same guidelines/Regulations to taxis/Black cabs	2	2	2
Ban / Impose restrictions on lorries coming into Greater London	1	2	2
Better parking facilities	2	1	2
Increase the catchment area of the congestion zone/Increase congestion charge	3	1	2
Don't limit the scheme to London extend it nationwide	1	2	1
The proposals should be phased in overtime	1	2	1
Grants for cleaner vehicles	1	1	1
Extend it to include all forms of	1	1	1

transport			
More advertising/More public awareness	1	*	1
Disagree with the scheme/Just a money making scheme	*	1	1
Reduce bus lanes	*	*	*
Put DVLA in charge	0	0	0
Other	6	7	6
Don't Know	3	6	4
None/Nothing	3	5	4
Refused	0	1	*

We would lastly like to ask you some questions about your business for classification purposes

Q37. **What is the post code of the address where you work?**

Base: All Businesses (545) / Operators (482)

	Business %	Operator %	Total %
Barking and Dagenham	1	1	1
Barnet	2	1	1
Bexley	1	2	2
Brent	2	*	1
Bromley	3	1	2
Camden	6	1	4
City of London	2	0	1
Croydon	2	*	1
Ealing	3	1	2
Enfield	3	1	2
Greenwich	1	1	1
Hackney	3	0	1
Hammersmith and Fulham	3	*	2
Haringey	4	0	2
Harrow	1	1	1
Havering	*	1	1
Hillingdon	1	1	1
Hounslow	2	1	1
Islington	4	0	2
Kensington and Chelsea	5	1	3
Kingston upon Thames	1	1	1
Lambeth	3	*	2
Lewisham	2	*	1
Merton	1	1	1
Newham	2	*	1
Redbridge	1	1	1
Richmond upon Thames	3	*	2
Southwark	4	*	3
Sutton	1	1	1
Tower Hamlets	3	1	2
Waltham Forest	2	*	1
Wandsworth	4	*	2
Westminster	15	1	8
Not in Greater London	0	54	25
Don't know	7	24	15

Q38. **How many people does your Company employ at this address?** SINGLE CODE

Base: All Businesses (545) / Operators (482)

	Business %	Operator %	Total %
1-9	77	42	61
10-29	14	33	23
30-49	3	9	6
50-99	1	7	4
100 plus	3	7	5
Don't know	1	2	2

Q39. **Thank you very much for taking part in this survey. Transport for London often wish to speak to Londoners to obtain their opinion on transport issues. Would you be happy to take part in any future research?** SINGLE CODE

Base: All Businesses (545) / Operators (482)

	Business %	Operator %	Total %
Yes	76	73	75
No	24	26	25
Don't Know	*	1	*

Appendix IV Statistical Reliability

When interpreting the findings it is important to remember that the results are based on a sample of secondary school population, and not the entire population. We cannot therefore be certain that the figures obtained are exactly those we would have if everybody had been interviewed (the 'true' values). However, we can predict the variation between the sample results and the 'true' values from a knowledge of the size of the samples on which the results are based and the number of times that a particular answer is given.

The confidence with which we can make this prediction is usually chosen to be 95% - that is, the chances are 19 in 20 that the 'true' value will fall within a specified range. The table below illustrates the predicted ranges for different sample sizes and percentages results at the '95% confidence interval', based on a random sample. For example, with a sample size of 1,000 where 30% give a particular answer, the margin of error/specified range will be plus or minus three per cent.

Sample Size	**Approximate sampling tolerances applicable to percentages at or near these levels**		
	10% or 90%	30% or 70%	50%
	±	±	±
50	8	13	14
100	6	9	10
500	3	4	4
1,000	2	3	3

Source: Ipsos MORI

Thus, the confidence interval (or margin of error) is the amount by which the survey result could increase or decrease and still be considered to reflect the 'true' result that would have been recorded if everyone in the population had been surveyed.

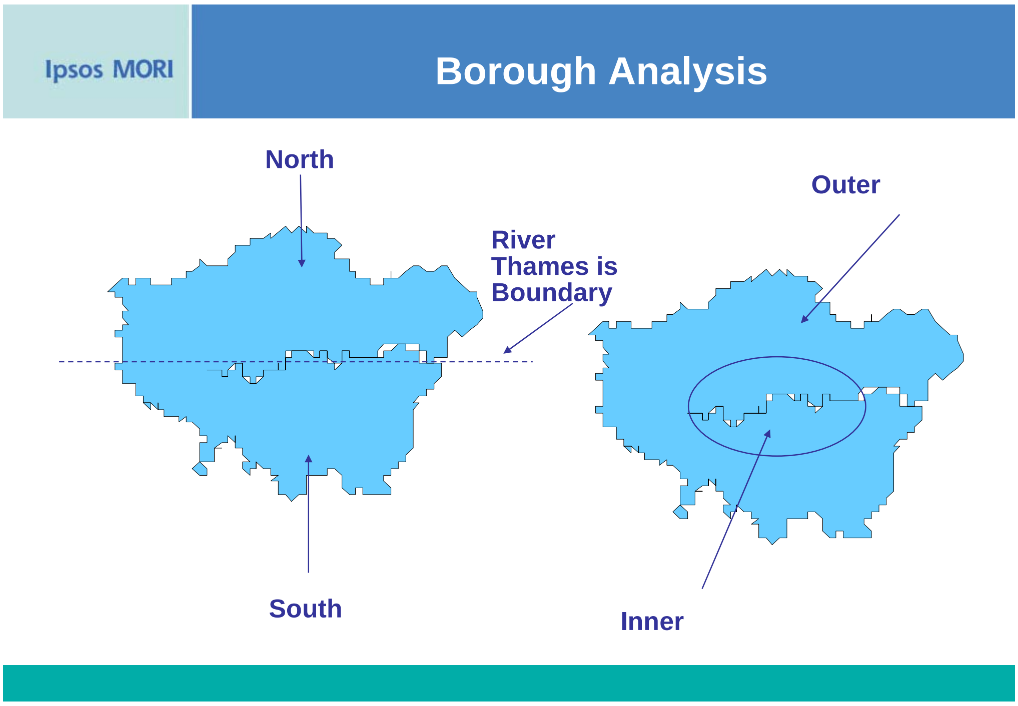
In addition, when comparing subgroups, if we assume a "95% confidence interval", the differences between the results of two samples must be greater than the values given in the table below:

Size of sample on which survey result is based	**Approximate sampling tolerances applicable to percentages at or near these levels**		
	10% or 90%	30% or 70%	50%
	±	±	±
584 residents in north London *versus* 416 residents in north London	4	6	6
289 residents who rate air quality as good *versus* 460 residents who rate air quality as poor	4	7	7
545 businesses *versus* 482 operators	4	6	6
420 businesses with 1-9 employees *versus* 119 businesses with 10 or more employees	6	9	10
140 operators in Greater London *versus* 340 operators outside Greater London	6	9	10

Source: Ipsos MORI

Appendix V Borough Analysis

For analysis purposes Greater London was split into North and South London and inner and outer London as follows:



North London	South London
Barking & Dagenham	Bexley
Barnet	Bromley
Brent	Croydon
Camden	Greenwich
City of London	Kingston-upon-Thames
City of Westminster	Lambeth
Ealing	Lewisham
Enfield	Merton
Hackney	Richmond-upon-Thames
Hammersmith & Fulham	Southwark
Haringey	Sutton
Ealing	Wandsworth
Havering	
Hillingdon	
Hounslow	
Islington	
Kensington & Chelsea	
Newham	
Redbridge	
Tower Hamlets	
Waltham Forest	

Inner London	Outer London
Camden	Barking & Dagenham
City of London	Barnet
City of Westminster	Bexley
Greenwich	Brent
Hackney	Bromley
Hammersmith & Fulham	Croydon
Haringey	Ealing
Islington	Enfield
Kensington & Chelsea	Harrow
Lambeth	Havering
Newham	Hillingdon
Southwark	Hounslow
Tower Hamlets	Kingston-upon-Thames
Wandsworth	Lewisham
	Merton
	Redbridge
	Richmond-upon-Thames
	Sutton
	Waltham Forest