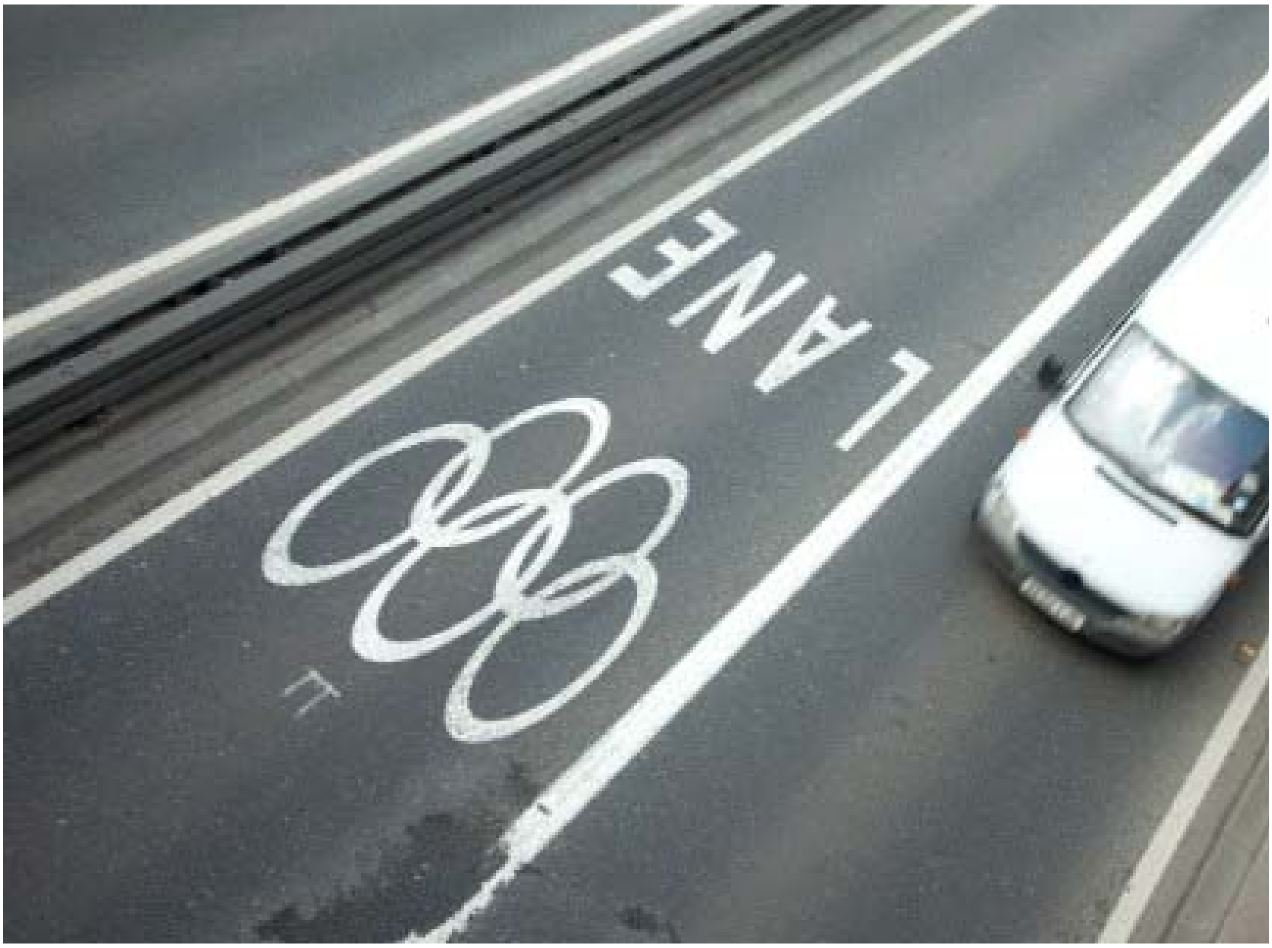


Olympic Legacy Monitoring: Adaptations to deliveries by businesses and freight operators during the Games

Travel in London Supplementary Report

MAYOR OF LONDON

Transport for London

Olympic legacy monitoring:

Adaptations to deliveries by businesses and freight operators during the Games

Travel in London supplementary report

May 2013

Table of Contents

Executive summary

Purpose of the report

This report presents the results of the Olympic Legacy Freight Monitoring Programme undertaken by Transport for London (TfL) in 2012. The monitoring aims to understand the impact of the Road Freight Management Programme and gives an insight into the ways businesses and freight operators in London adapted their operations during the Games. It also highlights the lessons learnt about the opportunities for changes under normal conditions.

The Road Freight Management Programme aimed to ensure businesses and freight operators were able to continue to operate effectively during the Games while at the same time minimising the impact these businesses had on the road network in order to support a successful Games. It included a number of engagement activities and campaigns designed to inform the industry of the likely impact of the Games and provide advice on adaptations for Games time operations.

An extensive Olympic Legacy Monitoring Programme was undertaken in 2012 which sought to understand how the adaptations by individuals and organisations worked during the Olympics Games and what could be learnt from the experience.

The main source of information was the Olympic Business and Freight Survey, a large scale survey with businesses and freight operators in London aimed at establishing the impact the Games had on business activity, the effectiveness of their plans to minimise disruption and to identify any long term impacts. The survey included three waves: Pre-Games (undertaken in May 2012); Games time (undertaken in August 2012); and Post-Games (undertaken in November 2012). Each wave involved telephone interviews with 1,000 general businesses located in the areas most likely to be affected by the Games: in Central London, on the ORN/PRN and around Games venues and with 1,000 freight operators who did business in London (but were not necessarily based in London).

Freight activity was also explored in the Olympic case studies – a series of interviews with organisations in London providing detailed information about their Games adaptations – and through ANPR cameras which gave network-based evidence showing changes in freight activity in London.

Planning for the Games

The overwhelming majority of businesses and freight operators were ready for the Games. Much of the planning and preparation took place in the weeks immediately prior to the start of the Games. Ninety-one per cent of businesses and 85 per cent of freight operators said they were ready for the Games in August 2012, compared with 65 per cent of businesses and 73 per cent of freight operators in May 2012.

Many businesses and freight operators put plans in place to minimise the impact of the Games: around two-thirds had made plans. Bigger businesses and those in the hotel and catering and wholesale and retail sectors were more likely to have planned for the Games. Most freight operators, irrespective of size, planned for the Games. Freight operators in the food and drink sector were most likely to have planned.

Overall, the plans put in place were successful in minimising the impact of the Games on businesses and freight operators – nearly 9 in 10 organisations who made plans said this was the case.

The industry clearly reacted effectively to the Games and the risk it posed to the smooth running of their business. Both businesses and freight operators took the challenge seriously and considered the impacts they should plan for and the possible adaptations they should make, showing that business continuity and resilience is important to them. This indicates that for future events or planned disruptions, the industry, if engaged adequately, can make adaptations to help minimise any negative impacts on the business community and to help manage the transport implications by adjusting their behaviour.

Working with the industry

Businesses and freight operators were largely aware of information available about the impact of the Games: 89 per cent of businesses and 84 per cent of freight operators said they were aware of the information available. Larger organisations tended to be aware of the available information earlier than smaller organisations.

Freight operators sought out information about the likely impact of the Games on their operations more proactively than businesses. For many businesses and freight operators, direct mailings and advertising raised their awareness levels, while information also filtered through the supply chain with many discussing the Games with their customers and suppliers. Just over half of freight operators and 28 per cent of businesses actively sought out information due to their concern about the impact of the Games. Forty-two per cent of freight operators and 50 per cent of businesses received information in the post. Thirty-four per cent of freight operators and 21 per cent of businesses found out about the likely impact of the Games through clients or suppliers.

TfL's London 2012 website was one of the most well known sources of information amongst businesses and freight operators with three-quarters of operators and half of businesses being aware of it. Other well known information sources included the Get Ahead of the Games website, maps of the ORN/PRN and other road specific information on access restrictions and closures. Overall the information available was found to be useful by the industry in helping them minimise the impact of the Games on their operations. One suggestion for future improvement was related to the provision of information on the road network, which was not as detailed as the public transport information. This is something the industry would have liked to have been able to make more use of when planning their adaptations.

Collaboration between organisations was quite common in the lead up to the Games and this led to better planning and improved relationships. Around three fifths of businesses liaised with their suppliers prior to the Games while just over 1 in 10 businesses also liaised with neighbouring businesses. Almost 7 in 10 freight operators liaised with their customers ahead of the Games.

Going forward, both businesses and freight operators would be interested in transport information bulletins covering road and public transport operations – almost three-quarters of freight operators and just over half of businesses would be interested in receiving these. Freight operators would also be keen – more so than businesses – on workshops about specific subjects and generic face-to-face meetings.

There is a clear role for transport information to help businesses and freight operators adjust their operations as necessary and react to events which are likely to affect them. Future campaigns, with a similarly clear message and focus as those introduced during the Games, can help manage the impact of events on the transport network while at the same time minimising the effects on London businesses.

What changes were made during the Games?

A large proportion of businesses (57 per cent) and freight operators (58 per cent) introduced at least one change to their operations during the Games. Larger businesses were more likely to have made changes compared with smaller ones, while medium-sized freight operators were the most likely to have implemented changes compared to small or large operators.

Measures under the 'Reduce' umbrella were adopted by 48 per cent of businesses and 45 per cent of freight operators. The most popular measures adopted included ensuring that deliveries were right the first time, postponing non-essential deliveries and stockpiling.

'Re-time' measures were adopted by 41 per cent of businesses and 45 per cent of freight operators. Pre-ordering and pre-delivery and changing delivery and collection times were the most popular re-timing measures for businesses. Popular 're-timing' measures amongst freight operators included change of delivery and collection time and conducting operations out of hours.

'Re-route' measures were more popular amongst freight operators with 42 per cent adopting these types of measures, compared to just 1 in 4 businesses. Measures included using alternative routes in order to avoid congestion hotspots and traffic management restrictions, and the use of alternative locations, such as using depots outside affected areas.

The least popular measures related to options to revise the mode of transport used with only five per cent of businesses and freight operators changing the mode for deliveries during the Games. These mainly involved walking and cycling deliveries.

Many of the measures used were short term measures applicable to a special period such as pre-ordering/stockpiling, postponing deliveries or using temporary stockrooms. Similarly, there were measures which responded to a particular situation during the Games such as changing routes to avoid restrictions. Other measures could be applicable long term, such as ensuring deliveries were right first time and possibly consolidating deliveries.

There was quite a significant volume of change made during the Games. The types of changes indicate that these were in reaction to the particular situation of the Games period, i.e. potential difficulties with access, increased congestion, uncertainty over the feasibility of making some journeys. The motivation for the industry was to ensure they could continue to operate and didn't suffer, in financial terms, as a result of the Games. This suggests that if we would like the industry to adopt delivery behaviours in similar ways under normal operations, then the policies introduced would need to create similar motivations as those in place during the Games.

Opportunities for reducing deliveries

A small number of businesses and freight operators sustained changes after the Games resulting in a reduced number of deliveries (1.7 per cent of all businesses who make deliveries and 1.6 per cent of all freight operators). The reduction of deliveries was mainly achieved through fewer, larger deliveries and ensuring deliveries were right first time, thus preventing the need for return journeys.

Most businesses and freight operators who reduced deliveries during the Games did not experience any impact on costs as a result. Similarly, they would not expect any cost implications if they reduced the number of deliveries during normal operations. Six in ten businesses and freight operators said that they expected no cost savings or increases from reducing deliveries in normal operations, while 13 per cent expected costs to increase to similar levels as during the Games.

Businesses said some of the barriers which prevented them from reducing the number of deliveries came from their customers not being supportive of initiatives to reduce deliveries, and the fact that customers needed constant deliveries (because of perishable goods). For freight operators, the barriers included having limited opportunities for making deliveries by other modes (52 per cent) and the cost of other modes and vehicles.

It is reasonable to expect that unless there is a benefit to the organisation, and a direct or indirect cost benefit would clearly be the most powerful benefit, there is no clear motivation for businesses or freight operators to sustain the measures adopted for the Games. Those measures were adopted as a mitigation strategy to cope with potential disruption during the Games period and therefore stopped once that risk was gone. As cost plays an important role in determining how deliveries are made, unless organisations are convinced there is a financial benefit to them from reducing the number of deliveries, they are unlikely to introduce measures to do so during normal operations.

Opportunities for re-timing deliveries

There was a small amount of sustained change in delivery times by businesses and freight operators. Five per cent of businesses who make deliveries as part of their work and three per cent of freight operators said that they have continued to make deliveries at revised times following the end of the Games.

Night time deliveries were used by many during the Games. Fifteen per cent of businesses and 33 per cent of freight operators made or received night time deliveries during the Games – and 11 per cent of businesses and 10 per cent of freight operators had introduced night time deliveries for the first time during the Games. The main reasons for introducing or intensifying night time deliveries were because this was the only viable option with the Games restrictions in place or because they wanted to avoid Games traffic congestion. Feedback from the Olympic case studies suggests that businesses found night time deliveries worked well.

The majority of organisations normally make deliveries between 07:00 and 19:00, although asignificant proportion make deliveries early in the morning, overnight or at all times. The most common period for deliveries is between 07:00 and 14:00.

The changes in the times of deliveries during the Games did not bring cost implications for most. Fifty-three per cent of businesses and 51 per cent of freight operators said that they did not experience any cost implications from changing the time they made deliveries during the Games while 38 per cent of businesses and 32 per cent of freight operators reported cost increases. Most businesses and freight operators expected costs to increase if they changed their delivery times during normal operations.

Cost increases, support from customers and night time delivery restrictions are the main barriers to both businesses and freight operators changing the times they make deliveries. So, although a significant amount of change was made during the Games it would be difficult for that change to be replicated during normal operations, especially if it is likely to increase costs for businesses. Only if the appropriate conditions are created or the introduction of new policies push businesses and freight operators to change their behaviour are we likely to see large-scale changes to delivery times.

Opportunities for re-routing deliveries

Re-routing deliveries during the Games, which was mainly done to avoid restrictions and increased congestion, mainly resulted in longer journeys and therefore higher costs for businesses and freight operators. The use of the most efficient route for deliveries is something most organisations will aim for in their day-to-day operations. Although they are somewhat constrained by the knowledge and familiarity drivers have of routes, in general they are keen to make sure they use the shortest routes, appropriate for their vehicles, as this will lead to cost savings.

Most organisations either already use or would be interested in using resources to help them plan their delivery routes. Over half of businesses and freight operators use information from other drivers or Sat-Nav to plan delivery routes while other popular resources also include live traffic information, information from other operators, and 'journey planners' including the TfL Freight Journey Planner. A significant proportion of respondents in businesses and freight operators said that they would consider using some or all of these resources. This is clearly an area where TfL could take the lead and develop route planning tools to influence the routes used by businesses and freight operators for deliveries in London.

Conclusions

Businesses and freight operators will always be keen to maintain business continuity and ensure that their daily operations are not negatively impacted by transport or other disruptions. This appeared to be one of the key motivations behind the industry's extensive engagement with the planning process for the Games and the introduction of many adaptations for that period. This is a key route for engaging businesses and convincing them of the need to change.

The industry is keen to receive and utilise information about the transport network which will help them plan and when necessary adapt their operations. A clear role TfL can play to help businesses and freight operators adapt their operations is to provide clear and accurate information about the public transport and road networks. This could cover general operational information as well as information about planned events, such as the London Marathon, Wimbledon etc or disruption arising from infrastructure construction and improvements, such Crossrail or the Hammersmith Flyover.

Businesses and freight operators made significant changes for the duration of the Games to their delivery activity because there was a clear need for them to do so. This could have been a specific restriction in place or the risk of not being able to carry out their business. As soon as the need was removed at the end of the Games, the majority of organisations reverted to their previous arrangements. If we would like to see these changes implemented under normal operations we need to motivate the industry in a similar way.

Changes which are likely to result in cost increases for businesses and freight operators are unlikely to be sustained. Many changes could be introduced for a short period of time for business continuity purposes but it is unlikely that changes will remain in place in the long term if they result in increased operating costs. For many, making overnight deliveries is likely to result in increased costs as it would mean extending their operating hours and introducing additional staff shifts. It is therefore difficult to see night time deliveries being used extensively by the industry without any other motivational factor in place.

Chapter 1 – Introduction

The Road Freight Management Programme and the Olympic Legacy Monitoring Programme

This report presents the results of the Olympic Legacy Freight Monitoring Programme undertaken by TfL in 2012. The monitoring, which aimed to understand the impact of the Road Freight Management Programme, gives an insight into the ways businesses and freight operators in London adapted their operations during the Olympic Games. It also highlights the lessons learnt about opportunities for changes under normal operations.

The Road Freight Management Programme

The Road Freight Management Programme was devised in order to manage freight activity in London during the Olympic and Paralympic Games in 2012, reducing the negative impact of freight activity on the Games, while allowing London to function effectively. It was originally developed by the Olympic Delivery Authority but was transferred to TfL in April 2011, along with the Travel Demand Management Programme concerned with managing the demand for people movement during the Games. The success of both programmes was integral to the delivery of a successful Olympic Games in London.

Freight activity makes up 17 per cent of London's traffic, rising to 25 per cent in the central area and the interaction between freight traffic, background (normal) traffic and Games specific traffic needed to be managed carefully, given the large number of traffic restrictions and the fact that certain areas would be difficult to access at certain times. The Games resulted in a number of Local Area Traffic Management and Parking Plans (LATMPs) around venues, the Olympic and Paralympic Route Networks (ORN & PRN), including training and alternate routes, Olympic Road Events and Movement Management Areas (MMA) to deal with pedestrian safety, live sites, cultural events, national houses and security requirements.

The objectives of the Road Freight Management Programme were:

- To help ensure targeted businesses and operators were able to continue to operate effectively during the Games
- To minimise the impact these businesses had on the road network so as to support a successful Games

To achieve these objectives, adaptations by freight operators and their customers (businesses and residents) were needed. The proposed adaptations were grouped under the '4 Rs', the principles developed by the ODA and TfL in order to help communicate the behavioural change messages. These were: Reduce, Re-time, Re-route and Re-mode.

The programme disseminated information and offered advice to the industry using a number of avenues. A number of freight forums and workshops were held in the run up to the

Games, information was distributed through direct mailing and email bulletins while an extensive advertising campaign including television, radio and billboard advertising was used to disseminate messages. A specific website for freight advice was created which included examples of adaptations in the form of case studies, road specific information and other resources to help businesses and freight operators plan for the Games. Finally, a freight journey planner was created which aimed to help route planning of deliveries during the Games.

The level of activity continued to be intense during the event itself with bulletins sent out regularly during the Games containing information about transport operations to help organisations make last minute adaptations as necessary, as well as a dedicated email and telephone help line.

The Olympic Legacy Monitoring Programme

TfL devised an extensive Olympic Legacy Monitoring Programme to understand how the adaptations by individuals and organisations worked during the Olympics Games and what can be learnt from the experience. The monitoring covered the Personal Travel Demand Management Programme, including the Active Travel Programme, and the Road Freight Management Programme.

Regarding freight, the objective of the monitoring activity was to understand what TfL could learn from the Road Freight Programme implemented for the Games and from the choices businesses made during Games Time, in order to understand the likely effectiveness and impact of similar programmes during normal operations. It would also deliver benefits in terms of knowledge about travel patterns, as understanding goods and servicing is a particular gap in TfL's knowledge base, and in terms of improved working relationships with industry and other partners, which TfL can capitalise on in future.

The main element of the freight monitoring was the Olympic Business and Freight Survey, which is described in detail below. Other sources of information on freight activity included Olympic case studies – a series of interviews with organisations in London providing detailed information on their Games adaptations – and ANPR cameras which gave network-based evidence about changes in freight activity in London.

Olympic Business and Freight Survey

The Olympic Business and Freight Survey was a large scale survey with businesses and freight operators in London which aimed to establish the impact the Games had on business activity, the effectiveness of their plans to minimise disruption, and identify any long term impacts. The survey was conducted by AECOM of behalf of TfL during 2012. It involved three survey waves:

- Pre-Games Wave – undertaken in May 2012, it focused on establishing the level of awareness about the Games and the information available to minimise their impact and the extent to which the industry was establishing plans on how to adapt operations during the Games period

- Games time Wave – undertaken in August 2012, during the transition period between the Olympic and Paralympic Games, it aimed to understand the level of adaptation by businesses and freight operations and any immediate impact the Games had on operations
- Post-Games Wave – undertaken in November 2012, well after the end of the Paralympic Games when business as usual was expected to have resumed. This wave focused in understanding in more detail some of the Games adaptations and find out if any of the changes were sustained long term. It also focused on the possible cost implications of changes and the barriers from making changes under normal operations

Each survey wave involved telephone interviews with 1,000 general businesses located in the areas most likely to be affected by the Games: in Central London, on the ORN/PRN and around Games venues and with 1,000 freight operators who did business in London (but were not necessarily based in London). Respondents at each wave were asked to participate in the next wave (if willing), providing a panel element to survey. The total of 1,000 businesses and 1,000 operators was retained by substituting respondents who dropped out with a fresh sample.

The main sampling source was the Experian National Business Database for both businesses and freight operators. The freight operator sample was boosted with in-house databases including the FORS (Freight Operator Recognition Scheme) database, the Freight Advice Programme attendance list and attendees from freight workshops.

Quotas were set in order to obtain a range of different sized businesses and freight operators. Annual turnover was used for businesses with small enterprises being those with a turnover of up to £10m per year (quota was 70 per cent) and large enterprises being those with an annual turnover more than £10m (quota was 30 per cent). Fleet size was used for freight operators with small operators having up to 10 vehicles (quota was 60 per cent), medium operators having between 10 and 100 vehicles (quota was 30 per cent) and large operators owning more than 100 vehicles (quota was 10 per cent). Apart from the quotas adopted by size, a minimum of 10 per cent per industry sector was also adopted for both businesses and freight operators to enable detailed analysis by sector.

Structure of the report

Following this introductory chapter, which describes the Road Freight Management Programme, the monitoring and the outline methodology of the main survey, the remainder of the report is structured as follows:

Chapter 2 describes the planning effort made by businesses and freight operators in the run up to the Olympic Games and how successful these plans were in minimising the impact of the Games on their operation.

Chapter 3 presents findings on the level of awareness of information sources on the Games and how useful these were for businesses and freight operators. It also describes the level of cross-industry collaboration before the Games and the appetite for further communication from TfL in the future.

Chapter 4 outlines the level of change adopted by businesses and freight operators during the Games under the '4Rs'; Reduce, Re-time, Re-route and Re-mode.

Chapter 5 describes in more detail the opportunities for reducing the number of deliveries made by businesses and freight operators beyond the Games – what the cost implications are likely to be and what are the perceived barriers.

Chapter 6 describes the opportunities for re-timing deliveries made by businesses and freight operators under normal operations, including undertaking deliveries out of hours. Again cost implications and barriers for changing delivery times are explored.

Finally, Chapter 7 describes in more detail the opportunities for re-routing deliveries in London and the use of resources to inform and help with route planning.

Chapter 2 – How did the industry plan for the Games?

Introduction

This chapter summarises findings about how businesses and freight operators planned for the Games. It looks at the level of planning activity that took place amongst various types and sizes of organisations, whether plans were tested prior to implementation and how effective they were in minimising the impact of the Games on business.

This chapter mainly presents analysis of the second, Games time, wave of the Olympic Business and Freight Survey.

Key findings

- The overwhelming majority of businesses and freight operators were ready for the Games – 91 per cent of businesses and 85 per cent of freight operators said they were ready for the Games when asked in August 2012

- Much of the planning and preparation took place in the weeks prior to the Olympics starting as the increase in the number of businesses and freight operators who thought they were ready implies – in May 2012, 65 per cent of businesses and 73 per cent of freight operators considered themselves ready

- Many businesses and freight operators put plans in place to minimise the impact of the Games. Two-thirds of businesses and freight operators had made plans. This compares with 30 per cent of businesses and 45 per cent of freight operators who had made plans when first asked in May 2012

- Bigger businesses, those with a turnover over £10m per year, were more likely to have planned for the Games with 83 per cent having done a little or a lot of planning. Businesses in the hotel and catering and wholesale and retail sectors were the most likely to have made plans for the Games

- Freight operators, irrespective of size, planned for the Games. Two-thirds of small operators (those with fewer than 10 vehicles), made plans while 69 per cent of medium operators (those with 10 to 100 vehicles) and 62 per cent of operators (those with over 100 vehicles) also made plans for the Games

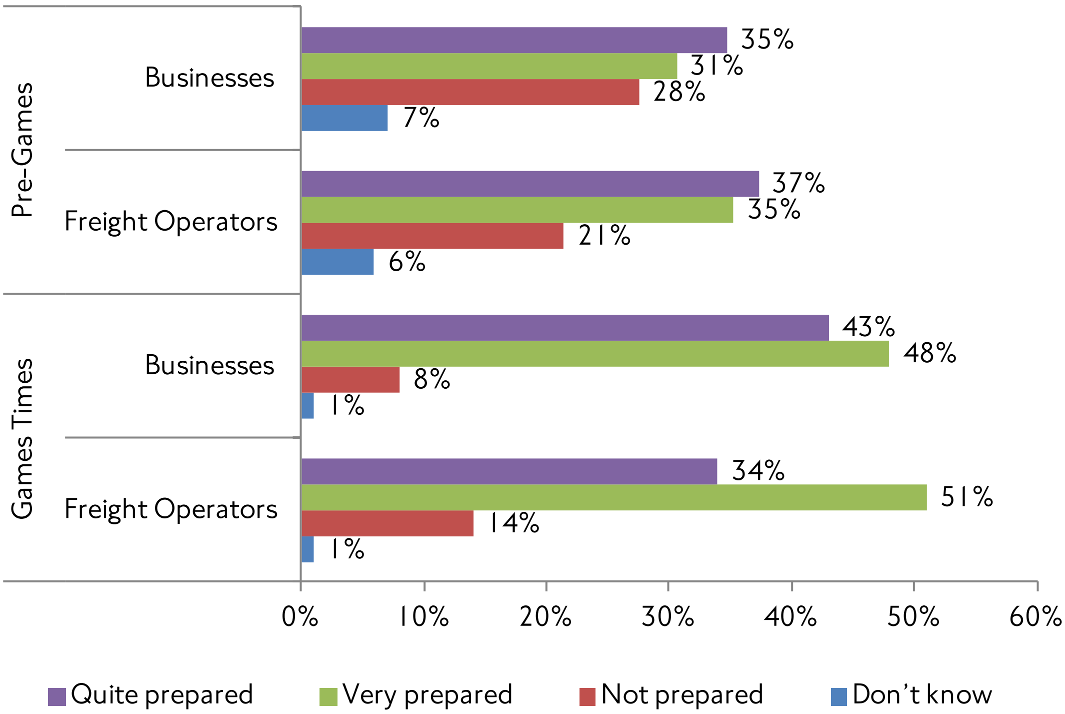
- Freight operators in the food and drink sector were more likely to have planned. Eighty-seven per cent of freight operators in the food and drink sector planned, with 65 per cent saying that they had planned a lot

- Overall the plans put in place were successful in minimising the impact of the Games for businesses and freight operators – nearly 9 in 10 organisations who made plans said this was the case

How ready were businesses and freight operators for the Games?

London's businesses and freight operators were ready for the Games and the plans they had put in place helped them minimise the impact of the Games on their operations. Ninety one per cent of businesses and 85 per cent of freight operators said that they were ready for the Games. For some businesses, planning started long before 2012 but for many it was something took place in the months or even weeks preceding the event itself. In the pre-Games wave in May 2012, the percentage of businesses and freight operators who considered themselves ready for the Games was 65 per cent and 73 per cent respectively. This indicates that the two months leading up to the Games made a significant difference in the planning and preparation activities across the industry.

Figure 2.1 How well prepared organisations were for the Games, pre- and post-Games comparison



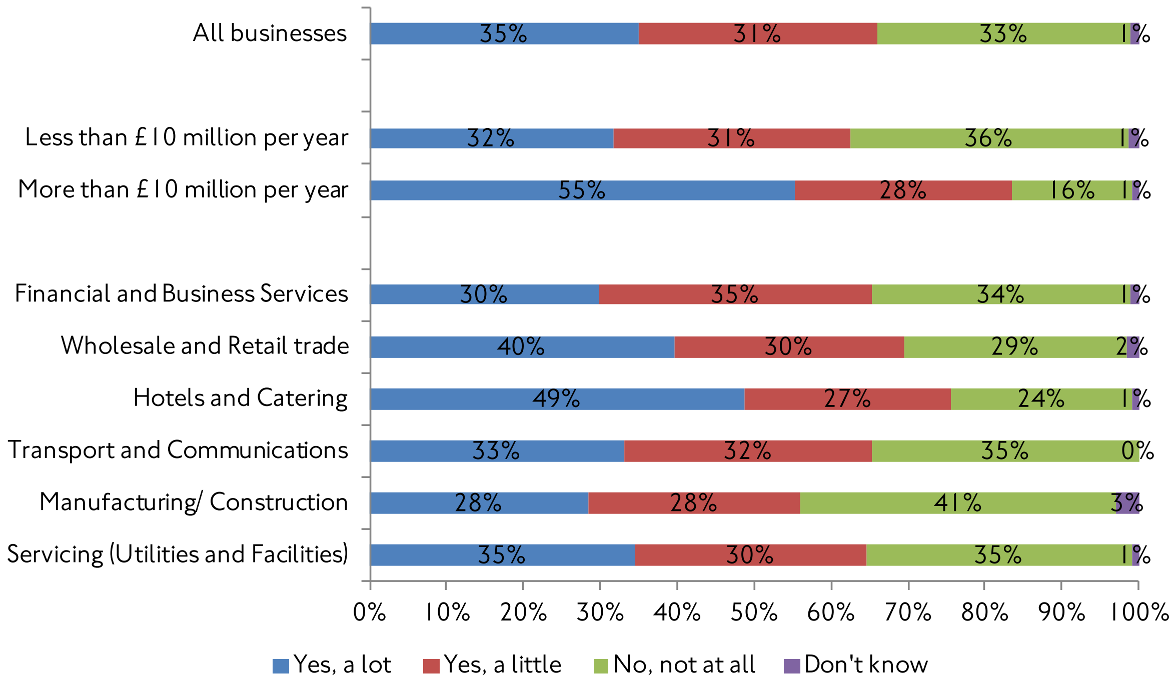
Base: 1068/1002 (All Businesses), 1003/1000 (All Freight operators).
Source: Olympic Business & Freight Survey, Pre-Games Wave and Games time Wave, TfL 2012.

Planning for the Games

Two-thirds of businesses and freight operators had made plans in order to minimise the impact of the Games. This compares with 30 per cent of businesses and 45 per cent of freight operators who had made plans when first asked in May 2012. Bigger businesses, those with a turnover over £10m per year, were more likely to have planned for the Games with 83 per cent having done a little or a lot of planning. The majority of businesses across all sectors did plan for the Games, however, there is evidence that some sectors planned more than others. Around one in two businesses in the hotel and catering sector planned a lot, while a further 27 per cent planned a little. Seven in ten businesses in the wholesale and retail trade sector made some plans, while in the manufacturing and construction sector the smallest percentage of businesses had made plans, although this was still a high proportion at 56 per cent.

Of the businesses that hadn't planned, almost three fifths said that this was because they didn't think the Games would affect their business, while 17 per cent said that it wasn't possible or practical to plan and seven per cent said that they didn't plan because they didn't have the time.

Figure 2.2 Planning for the Games by size and sector - Businesses



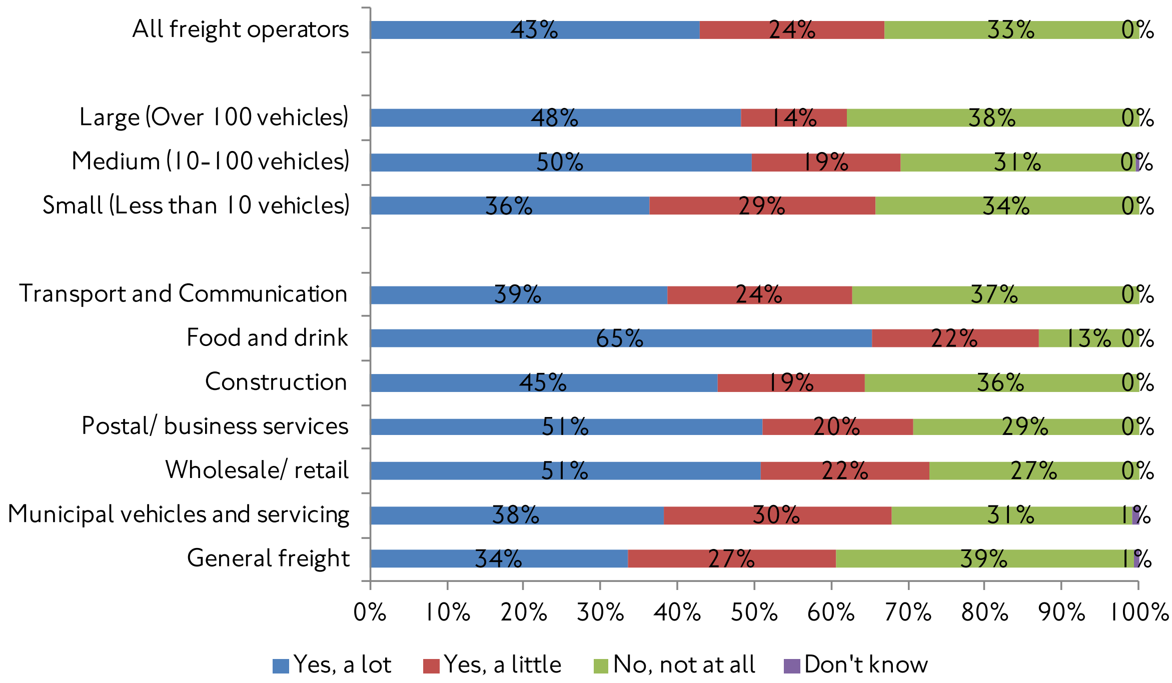
Base: 1002 (All Businesses).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

There wasn't a significant difference between the size of freight operators in terms of the amount of planning effort which they undertook in preparation for the Games period. Two-thirds of small operators, those with fewer than 10 vehicles, made plans while 69 per cent of medium operators, owning between 10 and 100 vehicles, and 62 per cent of operators with over 100 vehicles also made some plans for the Games.

In terms of the different sectors, the notable difference was in the food and drink sector where an overwhelming majority of 87 per cent of freight operators made some plans, with 65 per cent saying that they had planned a lot.

Of the freight operators who hadn't planned, two-thirds said that this was because they didn't think the Games would affect their business, while a further nine per cent said that it wasn't possible or practical to plan, they didn't have time to plan or it never occurred to them to plan.

Figure 2.3 Planning for the Games by size and sector – Freight operators

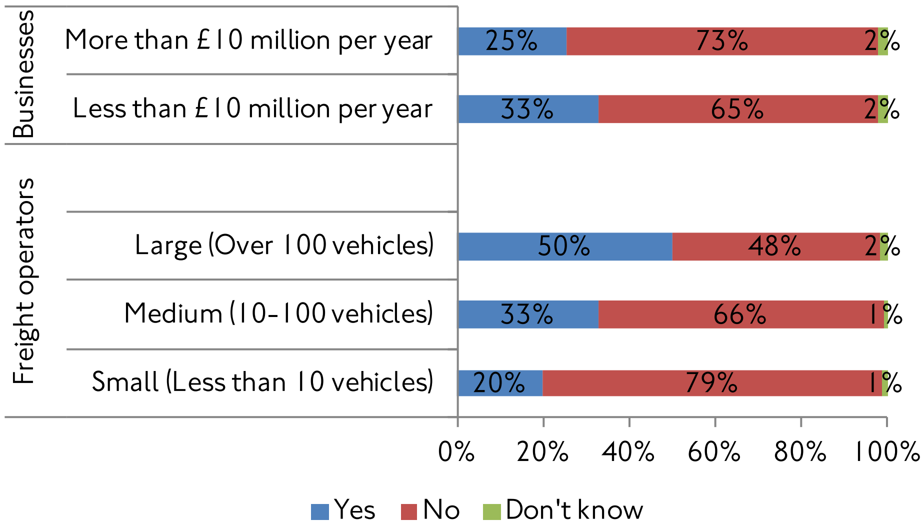


Base: 1000 (All Freight operators).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Testing plans prior to the Games

Around three in ten businesses and freight operators who planned for the Games had tested their plans prior to implementing them. Larger organisations were more likely to have tested their plans with 33 per cent of businesses with a turnover of over £10m having tested their plans, while a quarter of businesses with a turnover of under £10m had done the same. Equally, freight operators with larger fleets were more likely to have tested plans prior to implementation. Half of the operators with over 100 vehicles who made plans also tested these while a third of medium-sized operators and one in five small size operators did the same.

Figure 2.4 Plans tested by organisation size

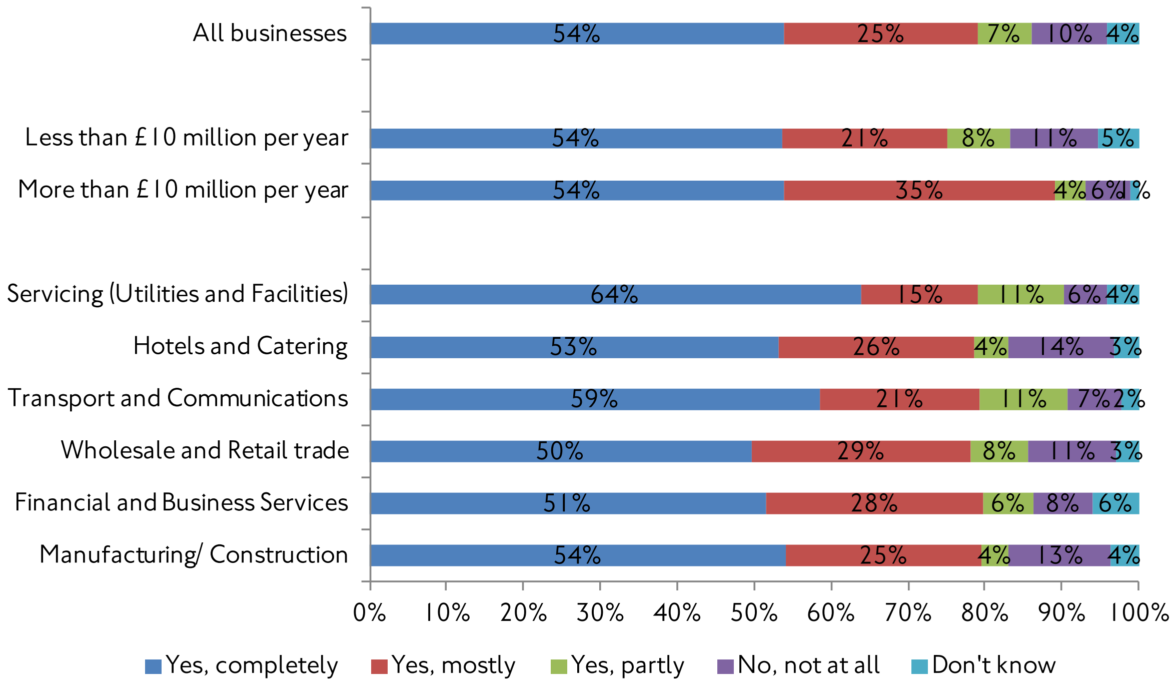


Base: 673 (Businesses who planned), 673 (Freight operators who planned).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Were plans effective in minimising the impact of the Games?

Of the organisations who did plan, nearly 9 in 10 said that their plans were successful in minimising the impact of the Games on their operations. Although there are no significant differences overall, larger businesses tended to think that their plans were more successful. Ninety three per cent of businesses with a turnover over £10m said that their plans were at least partly successful, while 83 per cent of businesses with a turnover under £10m thought the same. Businesses in the servicing and transport and communications sectors were slightly more likely to say that their plans were successful.

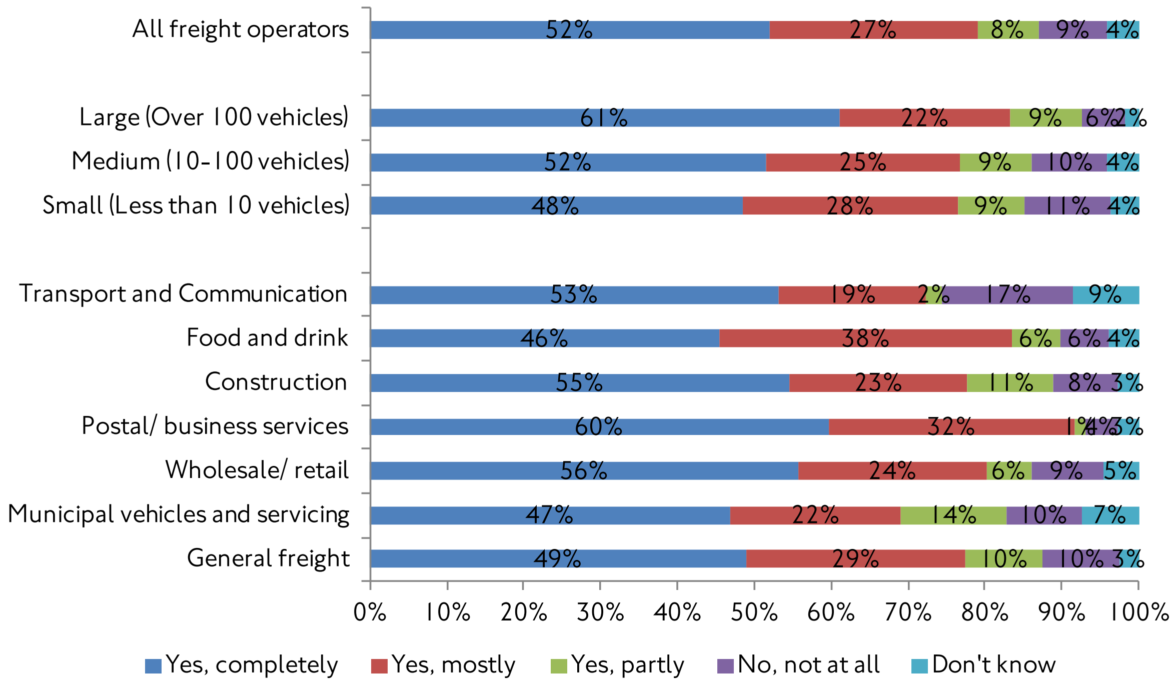
Figure 2.5 How successful were plans for businesses



Base: 673 (Businesses who planned).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Similarly, the larger freight operators, those operating over 100 vehicles, were slightly more likely to consider their plans to minimise the impact of the Games on their business successful. Ninety-three per cent of large freight operators found their plans at least partly successful, while 86 per cent of medium sized operators and 85 per cent of small operators felt the same.

Figure 2.6 How successful were plans for freight operators



Base: 673 (Freight operators who planned).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Conclusion

The Games resulted in quite a lot of planning activity by both businesses and freight operators in order to minimise the impact of the Games on their operations. The industry clearly reacted to a big event, such as the Olympics Games, especially given the risks it posed on the smooth running of their business and the potential for problems and disruptions. Both businesses and freight operators took the challenge seriously and considered the impact and the possible adaptations they should plan, proving that business continuity and resilience is important. This probably means that if in future organisations are faced with a challenging situation, they are likely to take appropriate action to minimise any impact they might suffer as a consequence. This indicates that for future events or planned disruptions the industry, if engaged adequately, can make adaptations to minimise any negative impacts.

Chapter 3 – Working with the industry

Introduction

This chapter is looking at the awareness and the use of information about the impact of the Games by businesses and freight operators in planning and preparing for the Olympic period. It also looks at collaboration in the supply chain and collaboration between neighbouring businesses in the run up to the Olympics. It also looks at further communication between the industry and TfL.

The analysis presented in this chapter is drawn from all three waves of the Olympic Business and Freight Survey.

Key findings

- Businesses and freight operators were largely aware of information available about the impact of the Games. Eighty-nine per cent of businesses and 84 per cent of freight operators were aware of information available. Many organisations became aware of it in the last few weeks before the Games, however, as when asked in May 2012 59 per cent of businesses and 68 per cent of operators knew that information was available
- Larger organisations were more likely to be aware of the available information earlier, compared with smaller organisations. In May 2012, 69 per cent of large businesses said they were aware of information compared with 58 per cent of smaller businesses, and 94 per cent of larger freight operators were aware compared with 80 per cent of medium sized operators and 57 per cent of smaller operators
- Freight operators sought out information on the impact of the Games on their operation more proactively compared to businesses. For many businesses and freight operators, direct mailing and advertising raised their awareness level while information filtered through the supply chain with many discussing it with their customers and/or suppliers. Just over half of freight operators and 28 per cent of businesses actively sought information as they were concerned, while 42 per cent of freight operators and 50 per cent of businesses received information in the post. Thirty-four per cent of freight operators and 21 per cent of businesses found out through clients or suppliers who highlighted the impact of the Games
- TfL's London 2012 website was one of the most well known sources of information amongst businesses and freight operators with three-quarters of operators and half of businesses being aware of it. Other well known information sources included the Get Ahead of the Games website, maps of the ORN/PRN and other road specific information on access restrictions and closures
- Overall, the information available was found to be useful by the industry in helping them minimise the impact of the Games on their operations. Almost 9 in 10 businesses and freight operators said that the available information at least partly met their needs in the Pre-Games wave while at Games time this dropped to just under 8 in 10 businesses and 85 per cent of freight operators. Many who did not find

the information useful said this was because the Games did not have an impact on them. This explains the drop seen between the Pre-Games and Games time wave satisfaction levels on information

- Collaboration between organisations was quite common in the lead up to the Games and this led to better planning and improved relationships. Around three fifths of businesses liaised with their suppliers prior to the Games while just over 1 in 10 businesses also liaised with neighbouring businesses. Almost 7 in 10 freight operators liaised with their customers ahead of the Games
- Both businesses and freight operators would be interested in transport information bulletins covering road and public transport operations – almost three-quarters of freight operators and just over half of businesses would be interested in receiving these. Freight operators would also be keen – more so than businesses – in workshops on specific subjects and generic face-to-face meetings

Awareness of information about the Games

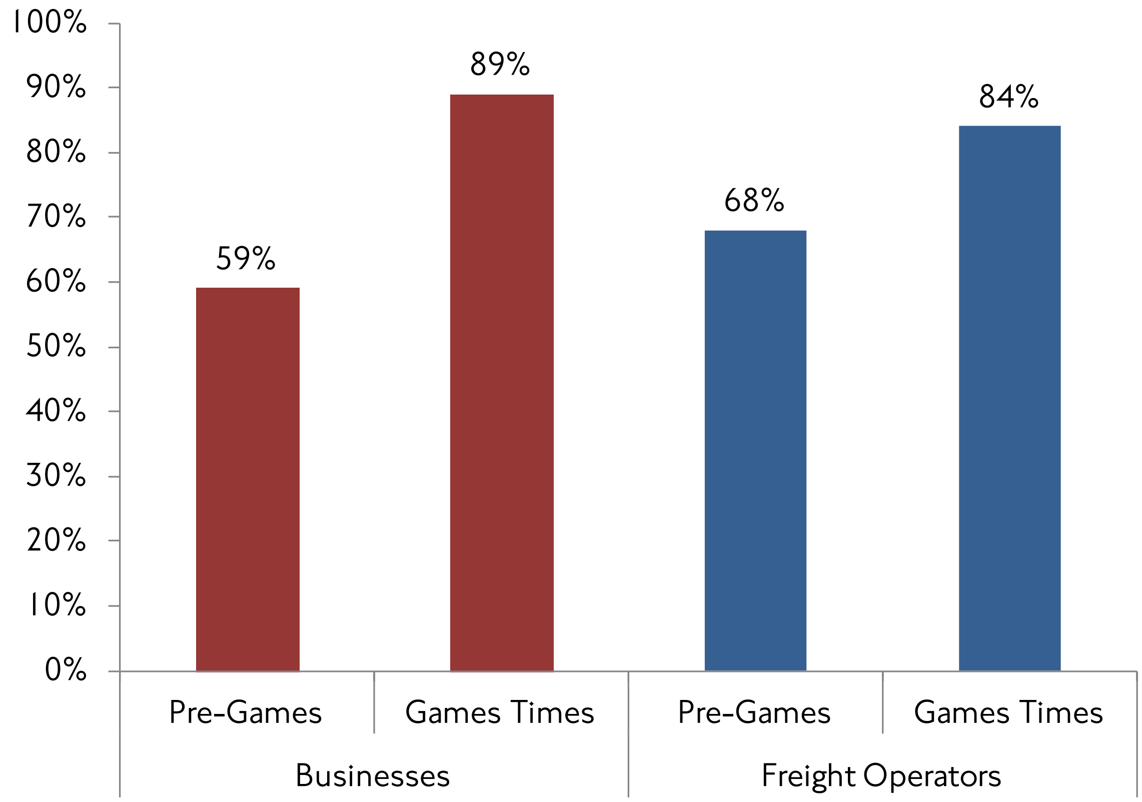
Businesses and freight operators were largely aware of information available about the impact of the Games. When comparing the responses from the Pre-Games wave with those from the Games time wave, it shows that some organisations only learnt about the availability of information within weeks of the Olympics starting. Before the Games, 59 per cent of businesses were aware of information compared with 89 per cent during Games time, while freight operators increased from 68 per cent aware to 84 per cent aware.

Larger organisations were more likely to be aware of the available information earlier compared with smaller organisations. Sixty-nine per cent of businesses with a turnover of over £10m said they were aware in the Pre-Games wave compared with 58 per cent of businesses with a turnover of less than £10m. Similarly, 94 per cent of larger freight operators (those with over 100 vehicles) were aware of information when asked in May 2012 compared with 80 per cent of medium sized operators (those with 10-100 vehicles) and 57 per cent of smaller operators (those with up to 10 vehicles).

Awareness levels increased as we got nearer to the Olympic Games for all organisations, irrespective of size, with the exception of freight operators with over 100 vehicles for whom awareness appears to have declined from 94 per cent to 75 per cent. This result is likely to have been affected by the relatively small sample size of the operators in this category and it is unlikely to have a more significant meaning.

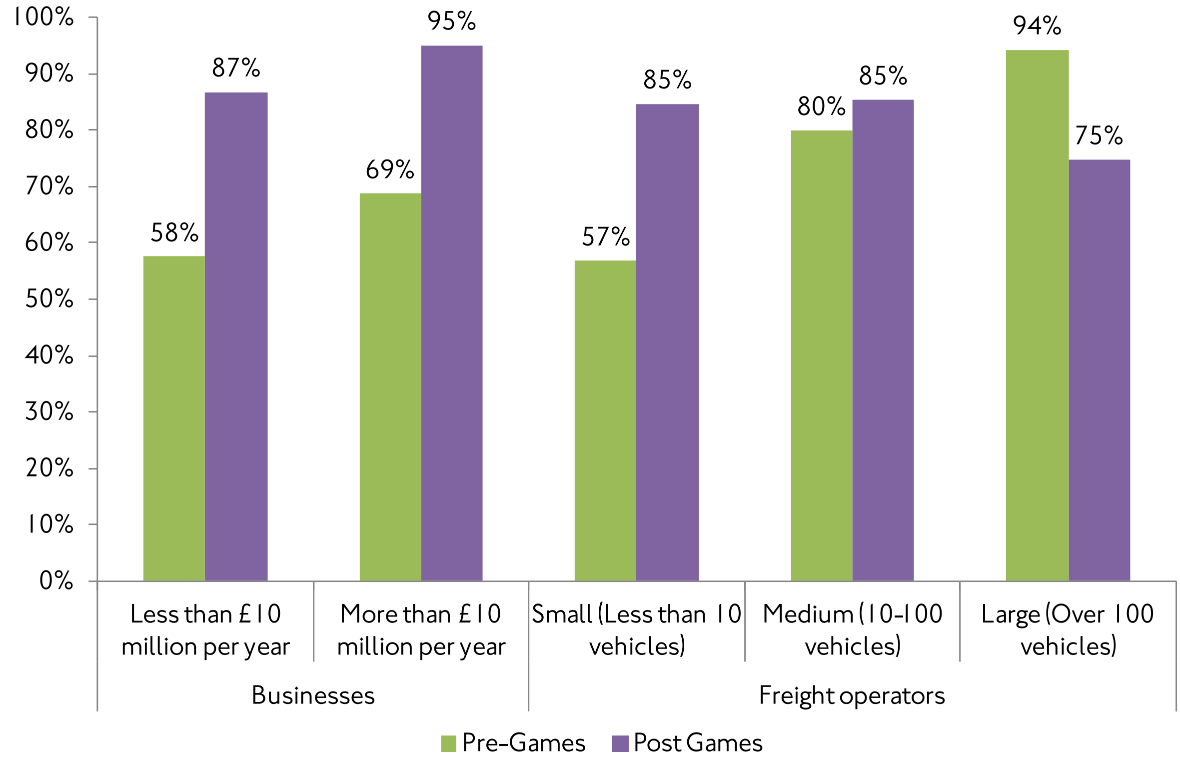
In May 2012, businesses in the financial and business services sector were more likely to be aware of information available about the Games. Amongst freight operators on the other hand, those in the food and drink/catering and construction sectors were more likely to be aware of information at this earlier time. In the Games time wave, there were no significant differences between different sectors as the information clearly had filtered through to all.

Figure 3.1 Awareness of information about the Games – businesses and freight operators



Base: 1068/1002 (All Businesses), 1003/1000 (All Freight operators).
Source: Olympic Business & Freight Survey, Pre-Games Wave and Games time Wave, TfL 2012.

Figure 3.2 Awareness of information about the Games by organisation size – businesses and freight operators



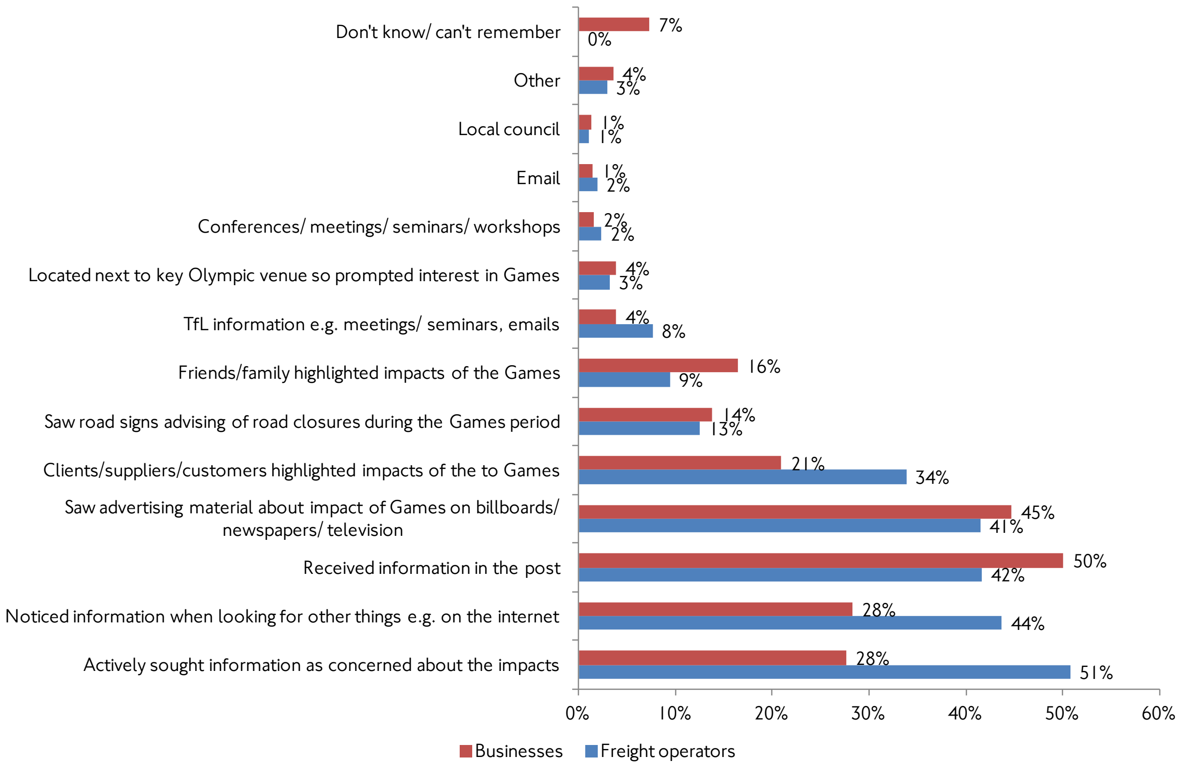
Base: 1068/1002 (All Businesses), 1003/1000 (All Freight operators).
Source: Olympic Business & Freight Survey, Pre-Games Wave and Games time Wave, TfL 2012.

Just over half of freight operators actively sought information as they were concerned about the impact of the Games, while 44 per cent noticed information when looking for other things, 42 per cent received information in the post, 41 per cent saw advertising material about the impact of the Games and 34 per cent found out through clients or suppliers who highlighted the impact of the Games.

Half of businesses received information in the post, while 45 per cent saw advertising material about the impact of the Games, 28 per cent noticed information when looking for other things, 28 per cent actively sought information as they were concerned about the impact of the Games and 21 per cent found out through clients or suppliers who highlighted the impact of the Games.

Freight operators appear to have sought out information more proactively compared to businesses, perhaps as they feared the impact of the Games on their operations. For many businesses and freight operators however, the direct mailing and advertising seemed to have worked in making them aware of the available information. It is worth noting that many had information fed through their own supply chain. This is an interesting finding and it shows that the multi-targeted approach of the Road Freight Management Programme worked well in making organisations aware of the material that was available about the Games. One of the messages was about talking to suppliers and clients and this seems to have actually happened. This meant that the number of organisations reached by the campaigns and engagement programme multiplied as the messages filtered through the supply chain.

Figure 3.3 How businesses and freight operators found out about the information relating to the Games



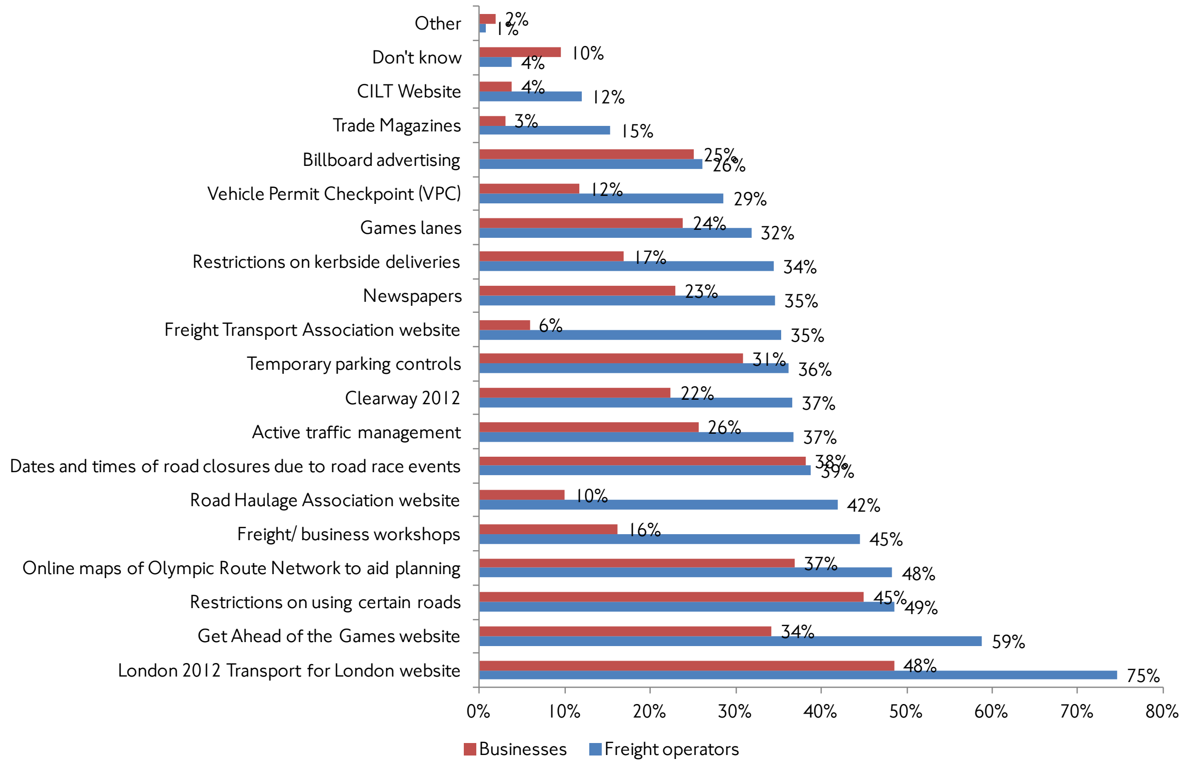
Base: 685 (Freight operators aware of information), 629 (Businesses aware of information).
Respondents could give more than one answer.
Source: Olympic Business & Freight Survey, Pre-Games Wave, TfL 2012.

When asked about the type of information respondents were aware of, three-quarters of freight operators said they were aware of the London 2012 TfL website, while almost 6 in 10 were aware of the Get Ahead of the Games website. Information relating directly to the road network, such as access restrictions and maps of the ORN/PRN were known to around half of freight operators. Workshops, run specifically for the industry, were something else a large proportion of freight operators were aware of (45 per cent).

Around half of businesses were aware of the London 2012 TfL website and 34 per cent of the Get Ahead of the Games website. Road network specific information such as the ORN/PRN, access restrictions and closures were known by over a third of businesses.

Overall, the industry was aware of much of the information, and many of the resources available, to help them understand what impact the Olympic Games might have on their operations. The fact that information was available over internet websites, distributed directly through mailings or workshops, seems to have worked well as the information was successfully distributed to those who would benefit from having it. This is obviously the result of the great effort and significant investment in creating the information (websites, maps, advice etc) but it also shows it reached as many organisations as possible through the advertising campaigns, workshops, emails and bulletins.

Figure 3.4 Resources relating to the Games businesses and freight operators were aware



Base: 685 (Freight operators aware of information), 629 (Businesses aware of information).
Respondents could give more than one answer.
Source: Olympic Business & Freight Survey, Pre-Games Wave, TfL 2012.

How useful was the available information about the Games?

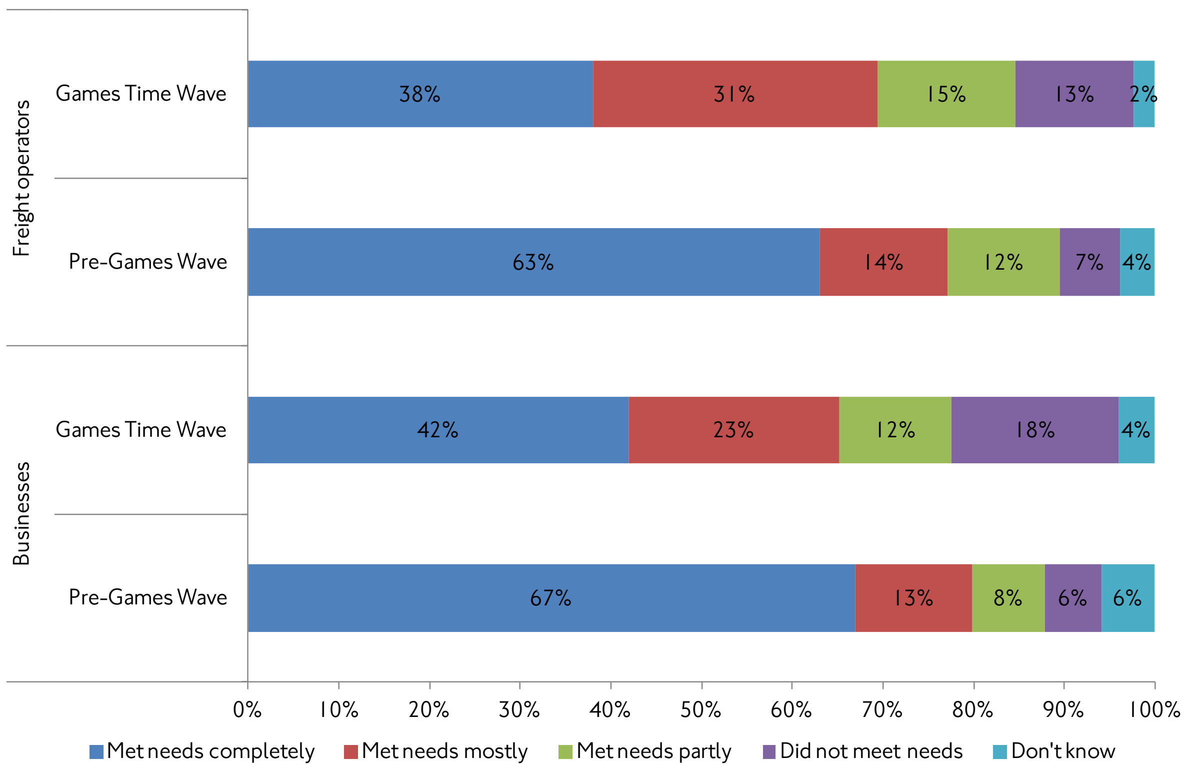
Respondents were asked whether the information available met their needs in both the Pre-Games wave of the survey in May 2012 and the Games time wave in August 2012. Almost 9 in 10 businesses said that the available information at least partly met their needs in the Pre-Games wave while at Games time this dropped to just under 8 in 10 businesses. The 18 per cent of businesses who said that the information did not meet their needs were asked why and just over a third said that this was because the Games did not have an impact on them and that nothing had changed. A third of businesses who didn't find the information helpful in minimising the impact said that this was because it wasn't specific enough to their business.

Almost 9 in 10 freight operators said that the information met their needs in the Pre-Games wave and this dropped to 85 per cent at Games time. 13 per cent of freight operators said that the information did not meet their needs and the reasons they gave were that the information was not specifically helpful to their business or that nothing had changed for them during the Games.

For the majority of respondents, the information was helpful as it enabled them to plan effectively for the Games period and potentially adapt the way they worked to cope with the changes on the transport network and the additional demand and congestion. The information on the websites and email were found to be beneficial overall.

One criticism that came out quite strongly in the Olympic case studies was the fact the quality and level of detail of information relating to the road network was not as good as the public transport information and it was made available much later. The feedback suggests that some of the information was not very detailed, was confusing and that it seemed to change often. This is an area organisations would like TfL to do more on.

Figure 3.5 Has the information on impact of the Games met the needs of organisations – businesses and freight operators



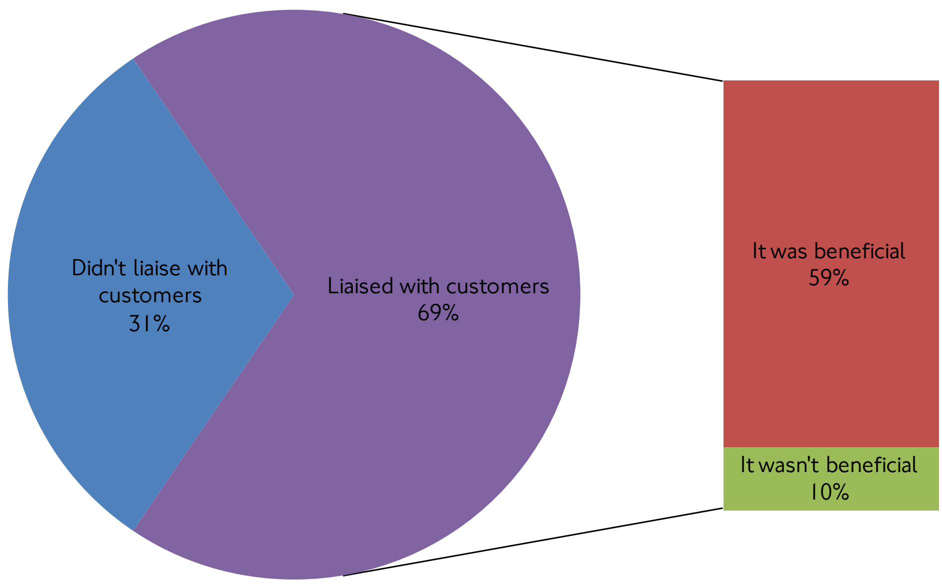
Base: 629/839 (All Businesses aware of information), 685/839 (Freight operators aware of information).
Source: Olympic Business & Freight Survey, Pre-Games Wave and Games time Wave, TfL 2012.

Collaboration in the supply chain

Around three fifths of businesses said that they liaised with their suppliers prior to the Games and the vast majority of these found it beneficial. The reasons businesses gave for why they found it beneficial include facilitating changes to delivery times, planning ahead, pre-ordering and stockpiling in advance of the Games, identifying potential problems and understanding the effect of the Games. Sixteen per cent of businesses who liaised with their suppliers said that this led to improved relationships. The majority of businesses who did not liaise with their suppliers said that there was no need to do so, while smaller proportions said that they were unable to plan or that they did not want to change their working patterns or they had no choice due to fixed orders/deliveries.

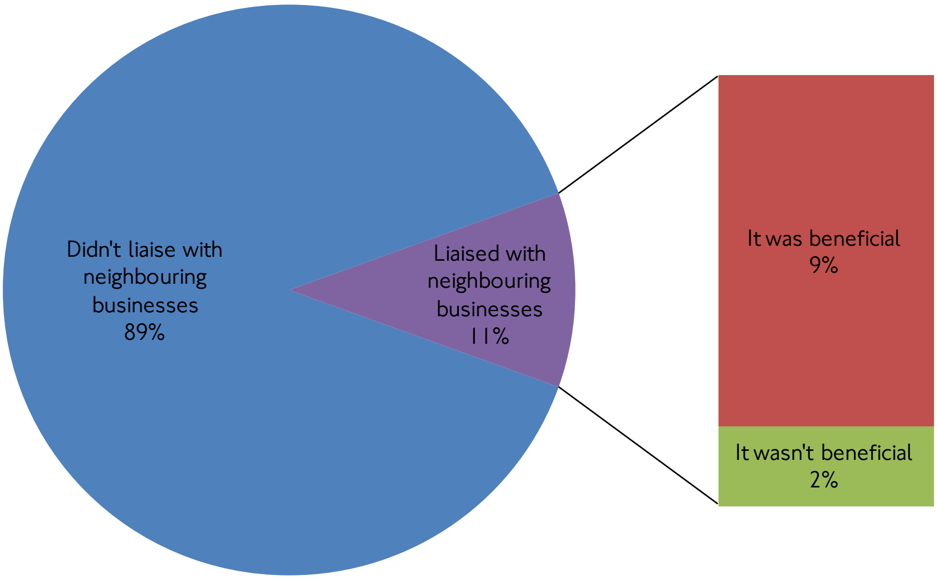
Just over 1 in 10 businesses also liaised with neighbouring businesses in order to help their planning prior to the Games and most found it beneficial. The reasons businesses found it beneficial included helping other businesses by taking in goods, it enabled better planning or improved understanding of the potential impact and it led to better communication, improved relations and better advice and information sharing. One in five businesses who liaised with neighbouring businesses said that this has improved their relationships. The majority of businesses who did not liaise with their neighbours said that this was because there was no need to.

Figure 3.6 Whether businesses liaised with their suppliers



Base: 1004 (All Businesses).
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

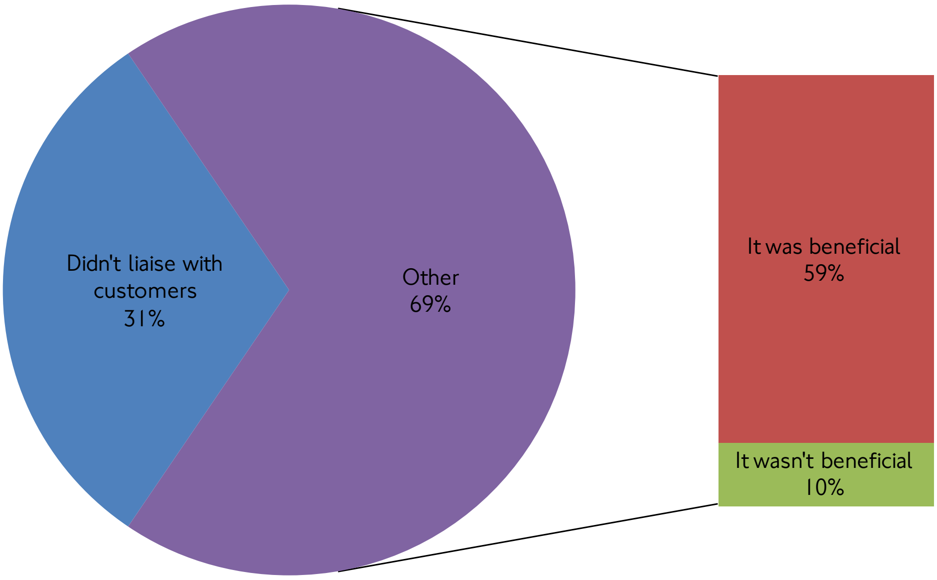
Figure 3.7 Whether businesses liaised with neighbouring businesses



Base: 1004 (All Businesses).
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Almost 7 in 10 freight operators said that they liaised with their customers ahead of the Olympic Games and most of them thought that this was beneficial. Over half of freight operators who did liaise with their customers said that it was beneficial because it allowed them to plan ahead, while around a third said that it allowed them to inform customers of changes. One in ten said that liaising with their customers allowed them to make changes to deliveries and delivery times. Twelve per cent of freight operators who liaised with their customers thought that this had improved their working relations. Just over 6 in 10 freight operators who did not liaise with their customers said that there was no need to do so while one in five said that they were unable to plan.

Figure 3.8 Whether freight operators liaised with their customers



Base: 1001(All Freight operators).
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Case Study – Central London Borough

One of the central London boroughs had long been aware of the scale and impact of the Games and started planning as early as 2009. The aim was to continue to deliver services while simultaneously assisting the Games organisers with delivering a successful Game. Concerns over reputation and publicity were also important and added to the momentum. Senior management was fully supportive and made specific post appointments to facilitate planning. The borough worked closely with TfL and other parties, including LOCOG, London Councils, other London Boroughs and various liaison groups (such as Highway and Utilities, Cleansing Officers etc). The borough facilitated communication between businesses in the borough and TfL to aid the planning for the Games. And each department had to confirm resilience planning with suppliers ahead of the Games. The borough was very happy with how the Games went and how well the planning effort worked and it is planning to continue using a similar model for future major events.

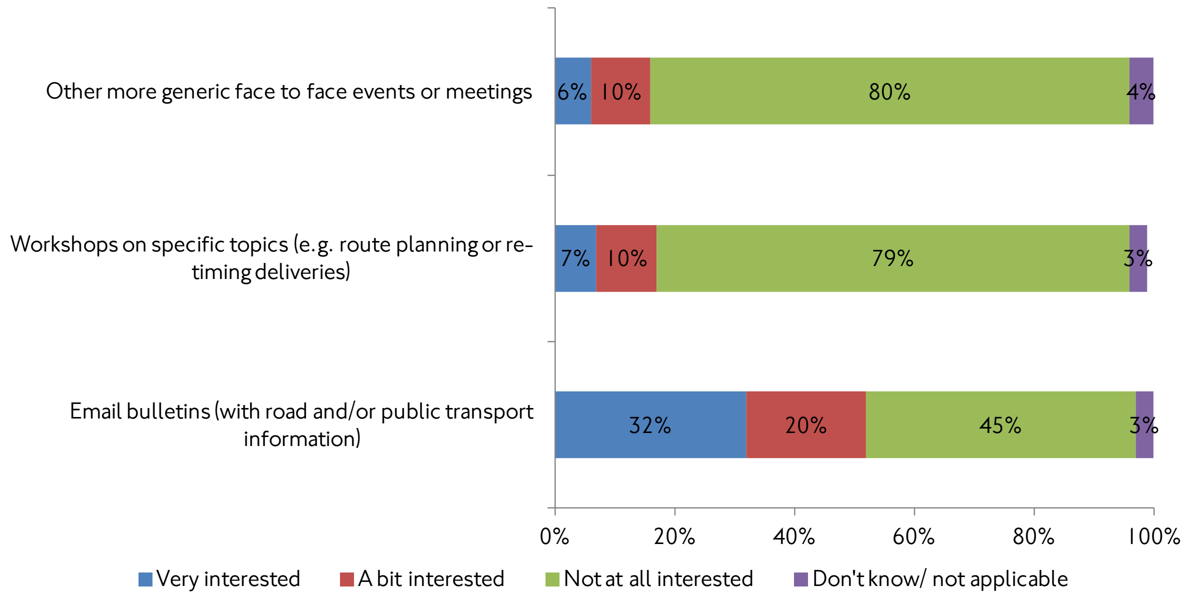
Future communication between the industry and TfL

TfL is keen to keen to continue to proactively engage with the industry, building on from the successful links created during the planning for the Games and the event itself. TfL's continued communication in 2012 included workshops, seminars and email bulletins with transport information. Business and freight operator respondents were asked about the type of communication they would be interested in.

Just over half of businesses would be interested in email bulletins with road or public transport information. However, only 17 per cent were interested in workshops on specific topics and 16 per cent in generic face-to-face meetings. Almost three-quarters of freight operators said that they would be interested in email bulletins with road or public transport information, while 41 per cent were interested in workshops on specific topics e.g. route planning or re-timing deliveries. Around a third of freight operators were interested in generic face-to-face events.

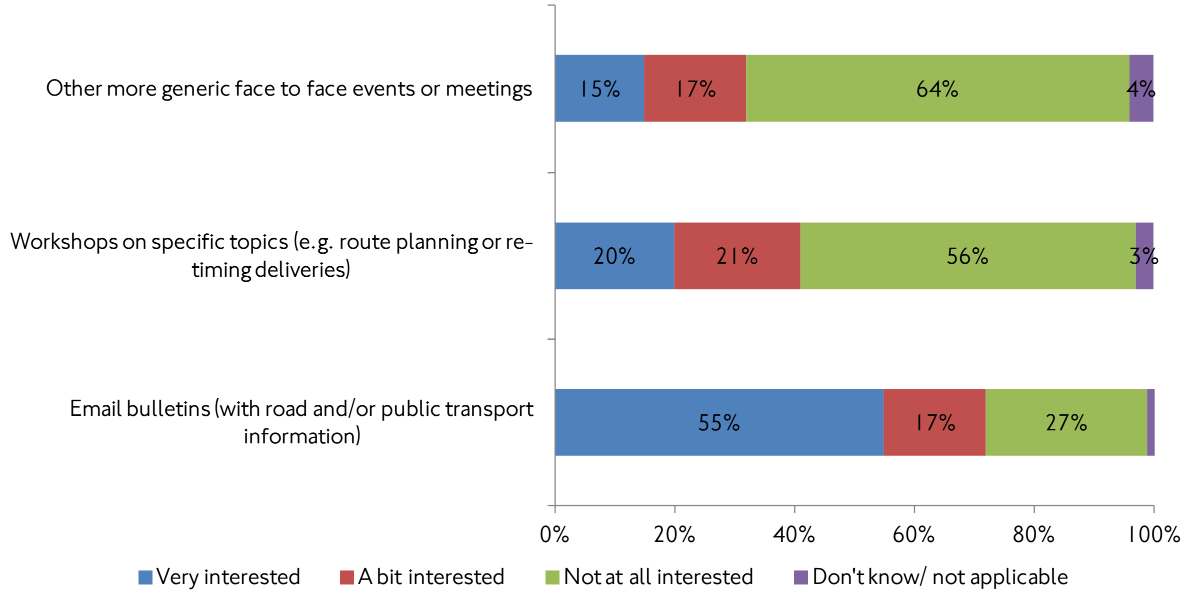
Freight operators appear more interested in TfL's future engagement, showing interest in workshops and face-to-face meetings. Both businesses and freight operators, however, are keen to receive information through email bulletins which contain transport information covering road and public transport.

Figure 3.9 How interested businesses are on future communication with TfL



Base: 1004 (All Businesses).
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Figure 3.10 How interested freight operators are on future communication with TfL



Base: 1001(All Freight operators).
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Conclusion

There was a wealth of information available about the Games and the impact it could have on businesses in London. Both businesses and freight operators were aware of these and made good use of them. The channels of dissemination used overall seemed to have worked, as did the advice to discuss the impact with clients and suppliers as the information appeared to have filtered through the supply chain. The industry utilised the available resources and this helped them mitigate any negative impacts of the Games. One suggestion for future improvement was on the provision of information on the road network which was not as detailed as the public transport information. This is something the industry would have liked to make more use of when planning their adaptations. The engagement programme and campaigns had a clear focus and were successful. In future similar campaigns, with similar focus, could expect to have an effect on how businesses and freight operators go about their business if there is a clear message that adaptations are needed. The industry overall is keen to receive information about transport operations and would most likely use these to make their deliveries more efficient and avoid unnecessary disruption.

Chapter 4 – What changes happened during the Games?

Introduction

This chapter presents analysis on the measures introduced by businesses and freight operators in order to minimise the impact of the Olympics on their operations. The changes adopted by businesses and freight operators are assessed against the '4 Rs', the principles developed by the ODA and TfL in order to help communicate the behavioural change messages. These were: Reduce, Re-time, Re-route and Re-mode.

The analysis mainly comes from the data collected during the Games time wave of the Olympic Business and Freight Survey. Findings from the analysis of ANPR camera data observations showing vehicle flows are also presented here, providing evidence that the behavioural adaptations had an impact on the road network.

Key findings

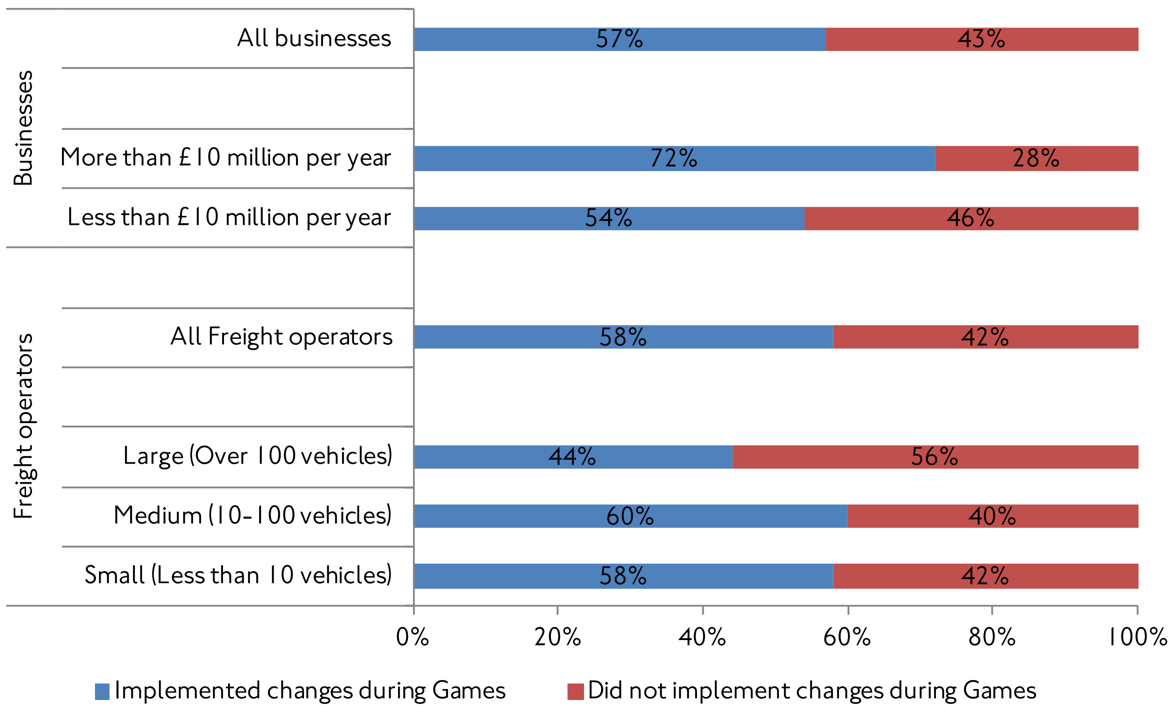
- A large proportion of businesses introduced at least one change to their operations during the Games. 57 per cent of businesses introduced at least one change to their operations during the Games period. Larger businesses were more likely to have made changes compared with smaller ones – 72 per cent of businesses with over £10m turnover made changes compared with 54 per cent of those with a turnover of under £10m
- The majority of freight operators introduced at least one change to their operations during the Games. Fifty-eight per cent of freight operators working in London made changes during the Games. Medium sized operators, those with 10 to 100 vehicles, were the most likely to have implemented changes with 6 in 10 having done so compared with 58 per cent of operators with up to 10 vehicles and 44 per cent of operators with over 100 vehicles
- Measures under the 'Reduce' umbrella were adopted by 48 per cent of businesses and 45 per cent of freight operators. The most popular measures adopted included ensuring that deliveries were right the first time, postponing non-essential deliveries and stockpiling
- 'Re-time' measures were adopted by 41 per cent of businesses and 45 per cent of freight operators. Pre-ordering and pre-delivery and changing delivery and collection times were the most popular re-timing measures for businesses. Popular 're-timing' measures amongst freight operators included change of delivery and collection time and conducting operations out of hours.
- 'Re-route' measures were more popular amongst freight operators with 42 per cent adopting these types of measures while around one in four businesses did the same. Measures included using alternative routes in order to avoid congestion hotspots and traffic management restrictions and the use of alternative locations, such as depots outside affected areas

- The least popular measures related to the options to revise the mode of transport used with only five per cent of businesses and freight operators changing the mode for deliveries during the Games. These mainly included walking and cycling deliveries
- Analysis of ANPR data from cameras at sample locations across Greater London and at a cordon around the central London Congestion Charging Zone show evidence of increased overnight activity by vans and more so of lorries during the Olympics period

Who introduced changes during the Olympics?

A large proportion of businesses and freight operators introduced at least one change to their operations during the Games. Fifty-eight per cent of freight operators and 57 per cent of businesses made some sort of change to their operations. Larger businesses were more likely to have changed with 72 per cent of businesses with a turnover over £10m having made a change compared with 54 per cent of those with under £10m turnover. Within freight operators, medium sized businesses with 10-100 vehicles were the most likely to have implemented any changes at all (6 in 10). Fifty-eight per cent of operators with up to 10 vehicles implemented changes, while the larger operators, those with over 100 vehicles, were slightly less likely to have made changes (44 per cent).

Figure 4.1 Proportions of businesses and freight operators who made changes during the Games



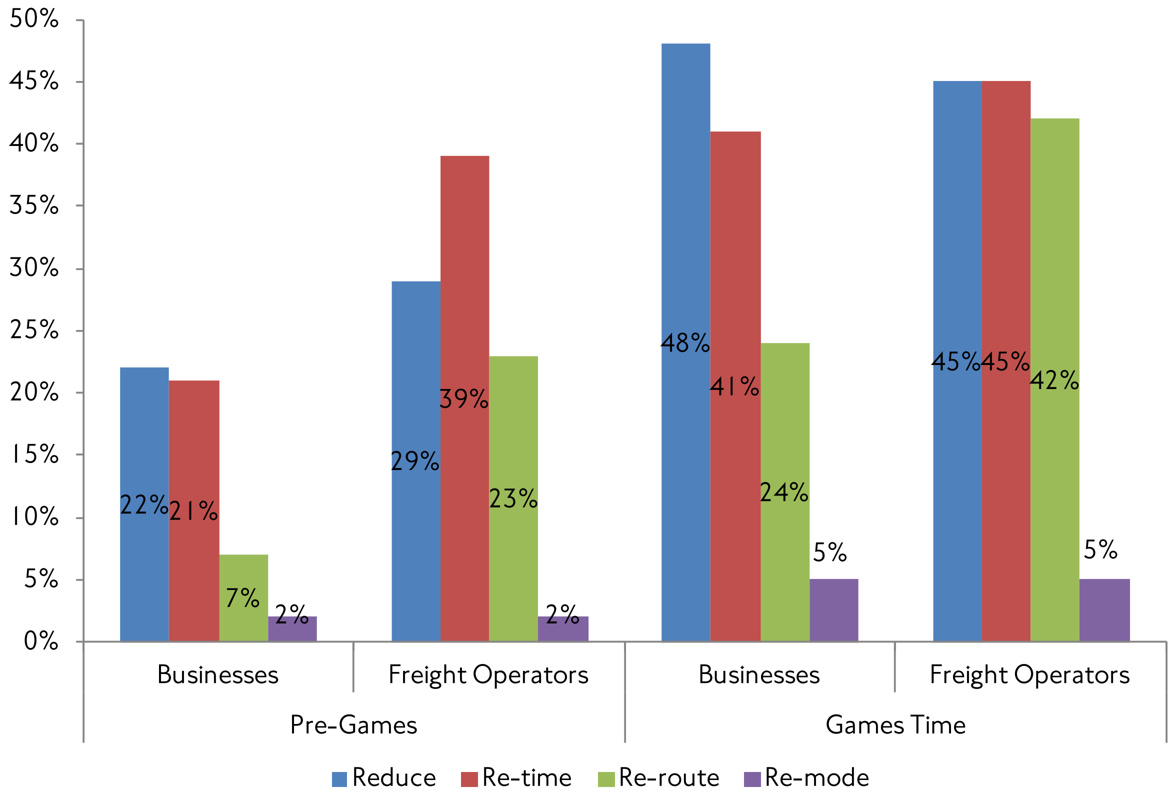
Base: 1000 (All Freight operators), 1002 (All Businesses).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Adopting the '4 Rs'

The most popular were the 'Reduce' and 'Re-time' options with 'Reduce' measures adopted by 48 per cent of businesses and 45 per cent of freight operators, while 'Re-time' measures were adopted by 41 per cent of businesses and 45 per cent of freight operators. 'Re-route' was more popular amongst freight operators with 42 per cent adopting those measures, while around one in four businesses did the same. The least popular options were revising the mode of transport used with only five per cent of businesses and freight operators changing the mode used for transporting goods and servicing.

The percentage of people who considered making changes under any of the 4 Rs when asked in the Pre-Games wave in May 2012 was significantly lower than the percentage who actually implemented them. This further strengthens the view that the planning and preparation for the Olympics only happened very close to the actual event for many organisations. It is however evident that freight operators were more likely to consider actions against the 4 Rs in May 2012 compared with businesses, indicating that freight operators started planning earlier.

Figure 4.2 Proportion of businesses and freight operators who said they were planning each of the 4 Rs and the percentage who implemented changes against each of the 4 Rs.



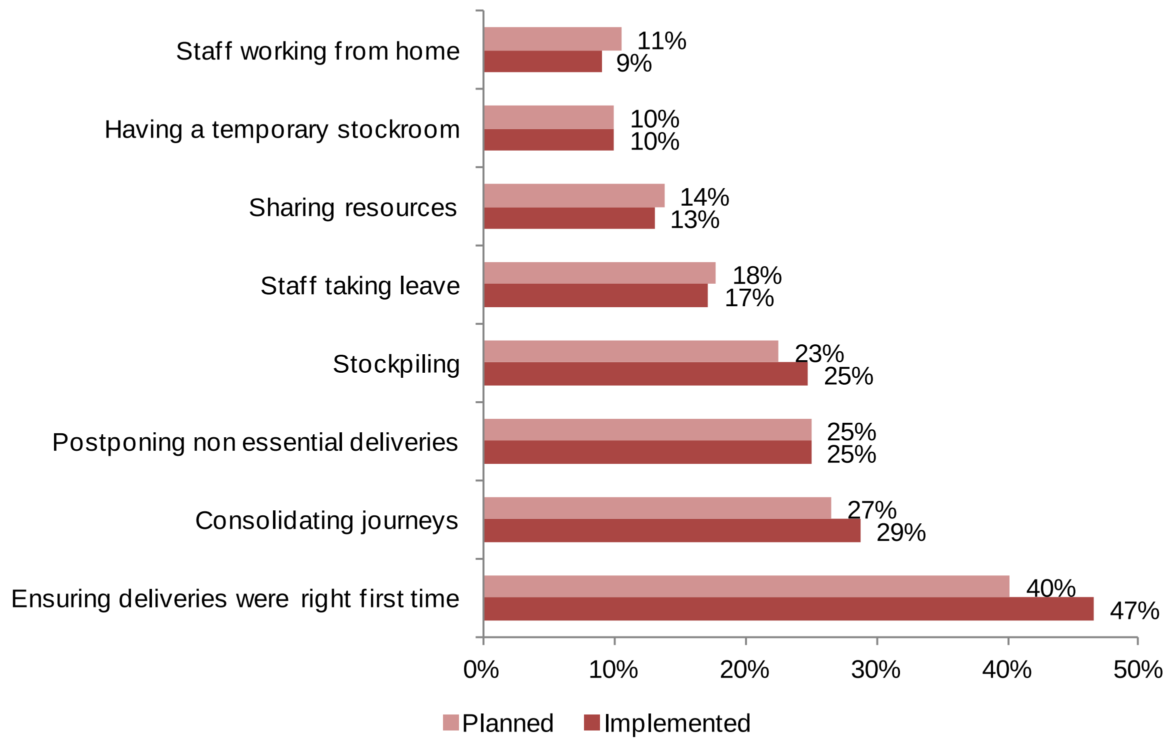
Base: 1068/1002 (All Businesses), 1003/1000 (All Freight operators).
Source: Olympic Business & Freight Survey, Pre-Games Wave and Games time Wave, TfL 2012.

Reduce

The most popular measures adopted to reduce the number of journeys included ensuring that deliveries were right the first time, adopted by 38 per cent of businesses and 47 per cent of freight operators, postponing non-essential deliveries, adopted by 37 per cent of businesses and 25 per cent of freight operators and stockpiling, adopted by 34 per cent of businesses and 25 per cent of freight operators. Other popular measures included consolidating journeys, staff taking leave, sharing resources, staff working from home and having a temporary stockroom.

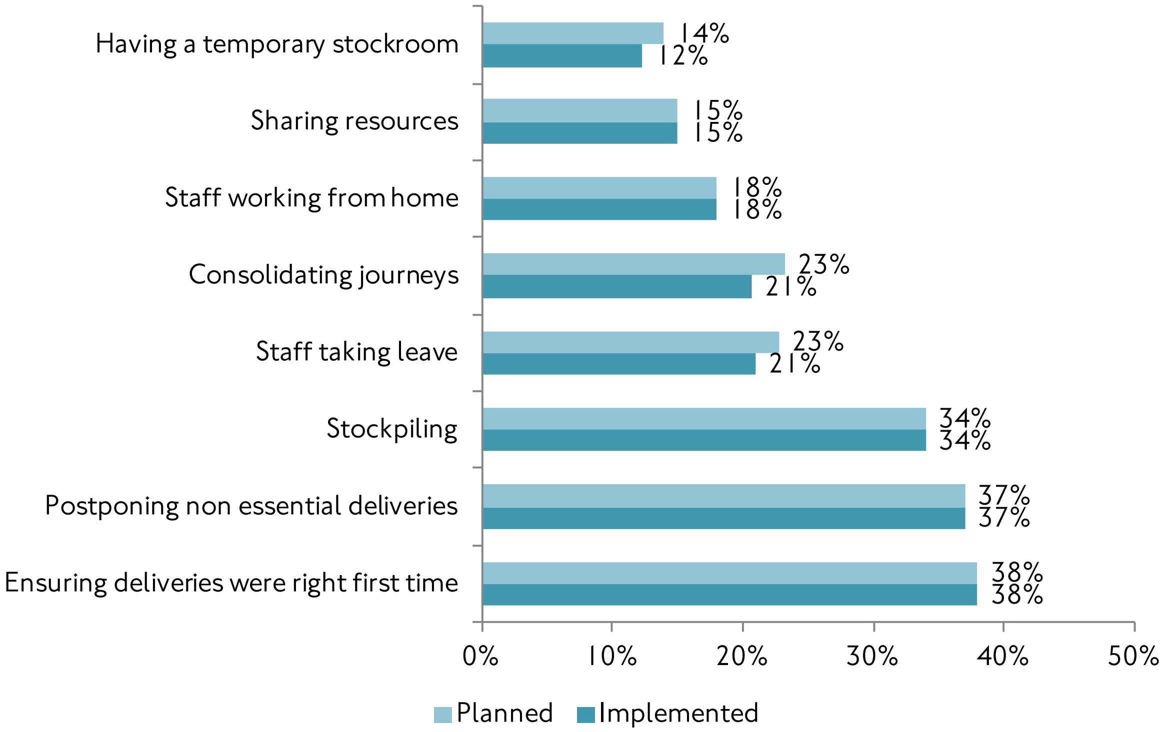
Overall, both businesses and freight operators implemented the measures they had planned. One measure which was implemented by more freight operators than those who had planned to implement it was ensuring deliveries were right first time, thus avoiding repeat journeys.

Figure 4.3 Proportion of businesses who planned and adopted 'Reduce' measures.



Base: 674 (Businesses who made a change).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Figure 4.4 Proportion of freight operators who planned and adopted 'Reduce' measures.



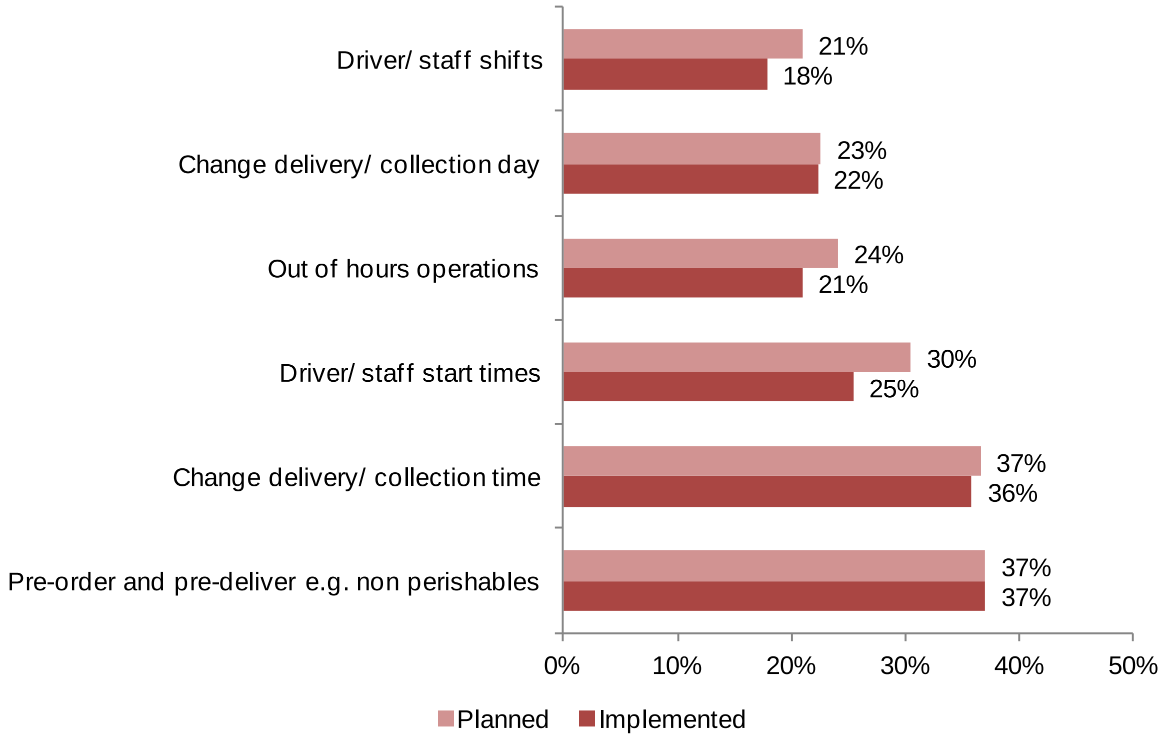
Base: 674 (Freight operators who made a change).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Re- time

Pre-ordering and pre-delivery and changing delivery and collection times were the most popular re-timing measures for businesses - adopted by more than a third. The change of delivery and collection time was the most popular measure amongst freight operators with nearly half of the sample adopting it. Conducting operations out-of-hours was another popular option, more so for freight operators, with 36 per cent saying they implemented it. Just over a fifth of businesses also said they adopted out-of-hours operations during the Games.

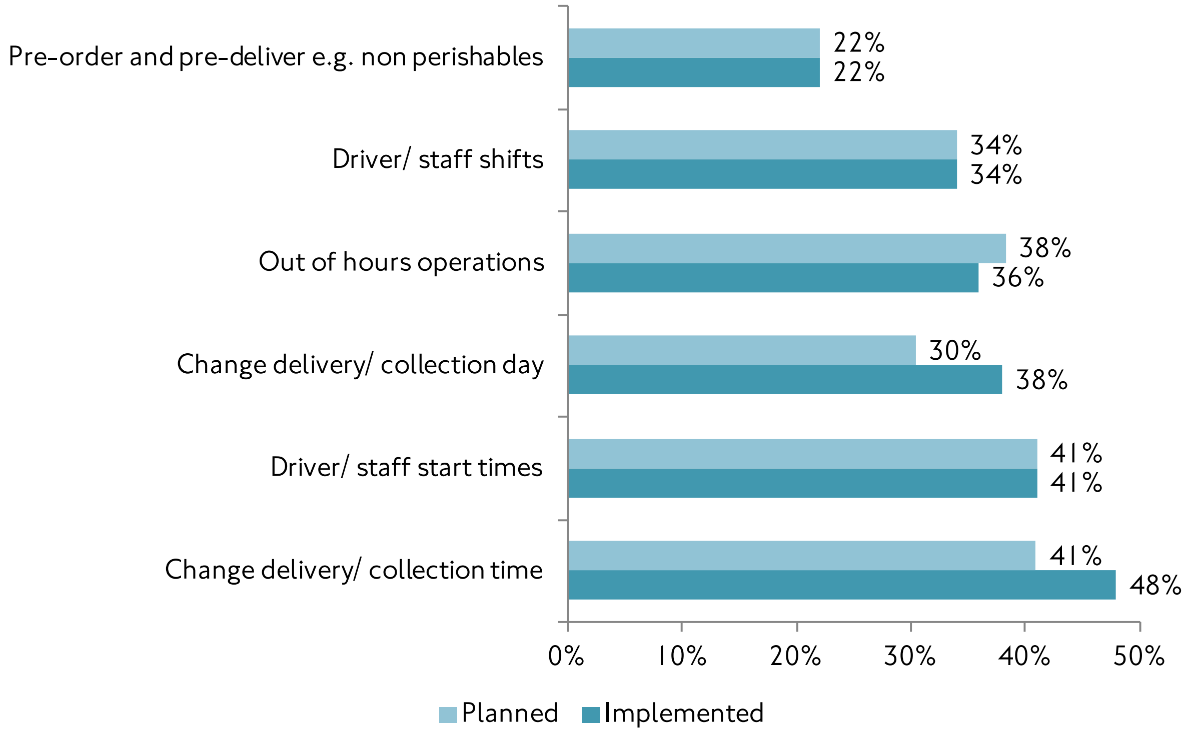
More businesses were actually planning to implement changes to driver or staff times (3 in 10) than those who actually implemented it (one in four). Perhaps this was not taken up to the same extend as a result of the transport network operating quite well during the Olympic period. On the other hand, more freight operators changes the day and time of deliveries and collections compared to those who were planning to do so.

Figure 4.5 Proportion of businesses who planned and adopted 'Re-time' measures.



Base: 674 (Businesses who made a change).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Figure 4.6 Proportion of freight operators who planned and adopted 'Re-time' measures.



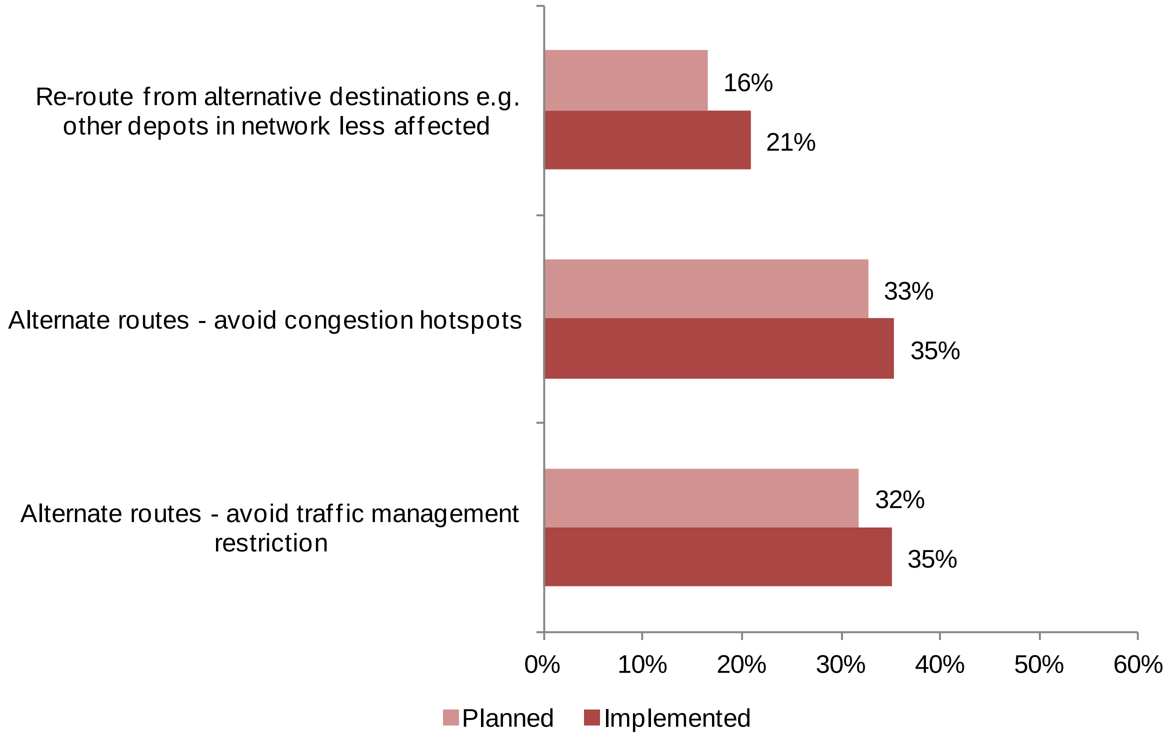
Base: 674 (Freight operators who made a change).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Re-route

Thirty five per cent of businesses, and almost 6 in 10 freight operators, said that they used alternative routes in order to avoid congestion hotspots and traffic management restrictions. The use of alternative locations, such as depots outside the affected areas, was another popular measure that led to the use of different routes.

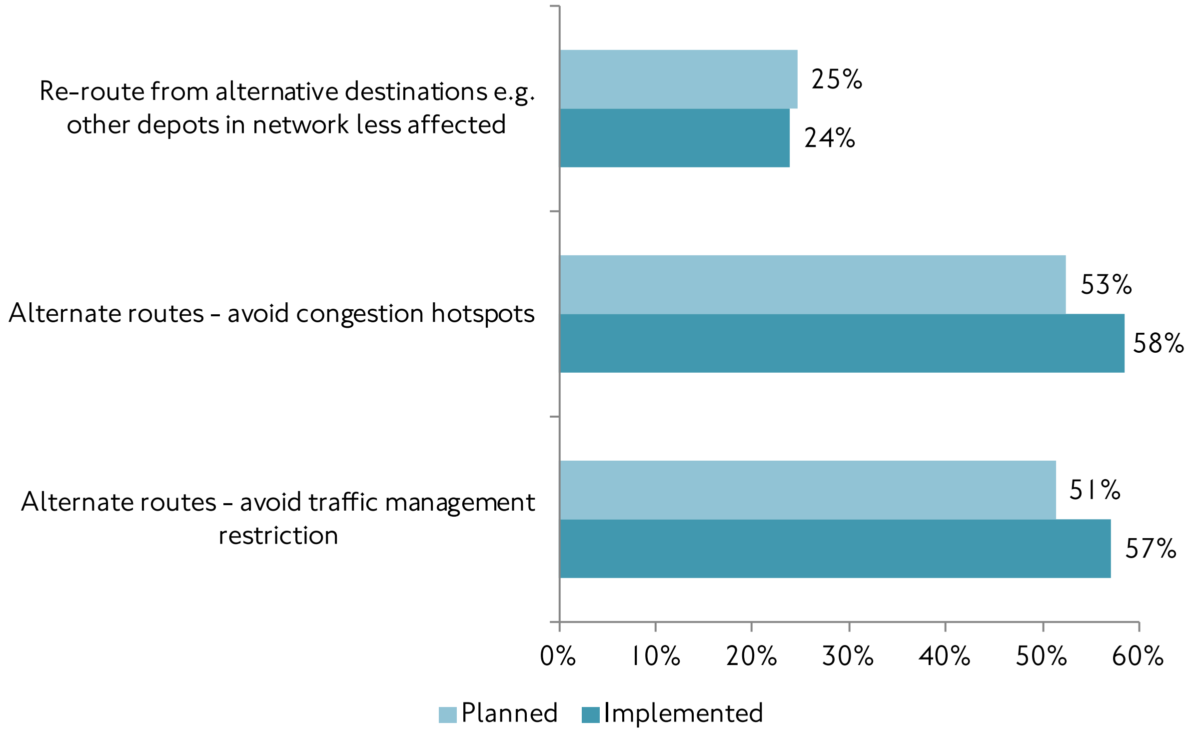
Overall more businesses and freight operators used alternative routes to avoid traffic management restrictions and congestion hotspots than those who originally planned to do so. This was maybe influenced by the information that was made available to businesses and operators which helped them plan for using alternative routes where necessary.

Figure 4.7 Proportion of businesses who planned and adopted 'Re-route' measures.



Base: 674 (Businesses who made a change)l.
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012

Figure 4.8 Proportion of freight operators who planned and adopted 'Re-route' measures.

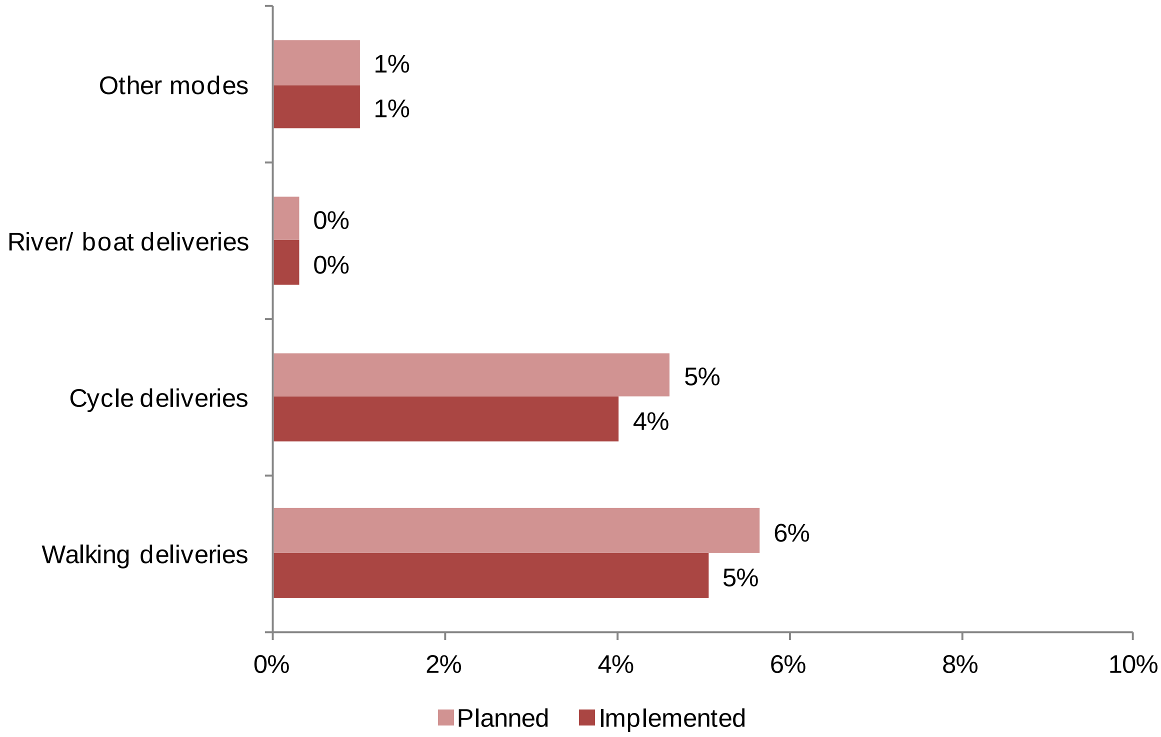


Base: 674 (Freight operators who made a change)
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012

Re-mode

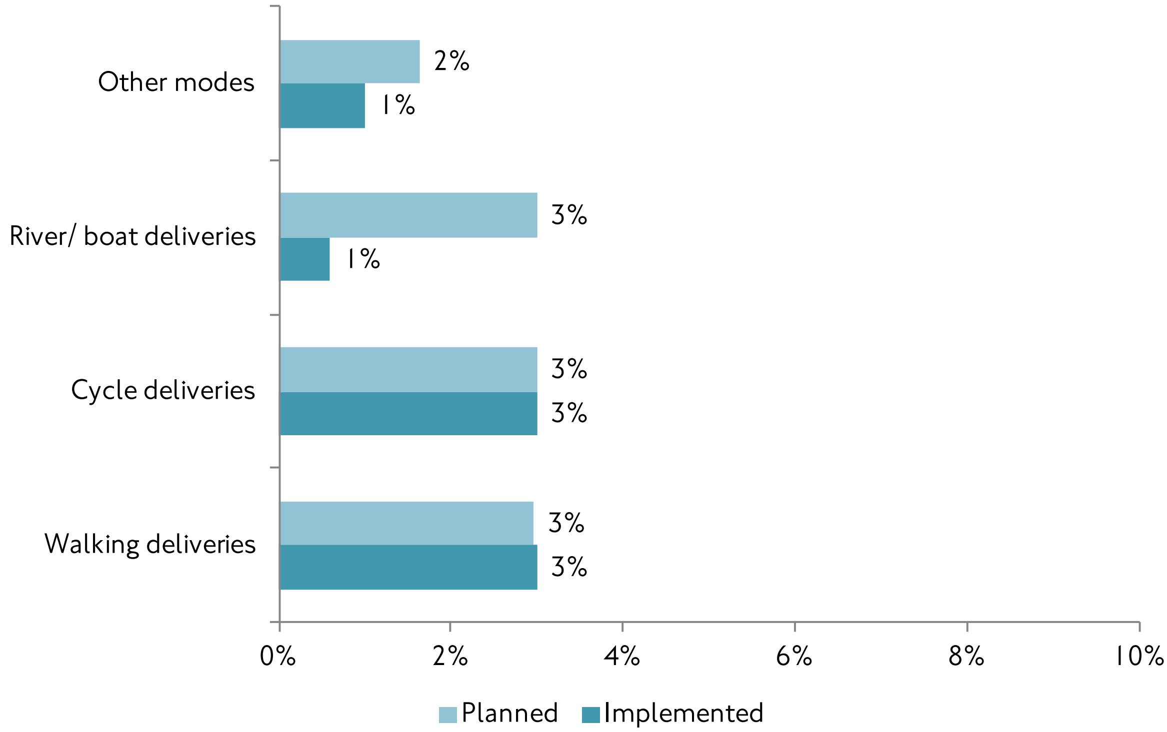
Walking and cycling deliveries were the most popular measures introduced when revising the mode of transport used, adopted in some part by up to five per cent of businesses/operators. Overall, both businesses and freight operators did adopt the measures they planned to prior to the Games. There were, however, three per cent of freight operators who planned to use river or boat deliveries during the Games but in fact only one per cent implemented it.

Figure 4.9 Proportion of businesses who planned and adopted 'Re-mode' measures.



Base: 674 (Businesses who made a change).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Figure 4.10 Proportion of freight operators who planned and adopted 'Re-mode' measures.



Base: 674 (Freight operators who made a change).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Evidence of changes in van flow traffic on the network

Analysis of ANPR data from cameras at sample locations across Greater London shows evidence of an increase in the proportion of van journeys made in the overnight period during the Games. However, the proportion of van journeys during the morning peak period did not see a corresponding reduction during the Games. Some small relative reductions in van traffic were observed in the afternoon peak period.

For larger vehicles, i.e. those with gross weight over 3.5 tonnes a substantial relative proportionate increase was observed in the overnight period during the Olympics. This is coupled with evidence of reductions in the proportion of lorry flows across the working day. During the Olympics, the proportion of lorry traffic occurring overnight was 15.6 per cent of all daily lorry traffic compared with 12.4 per cent prior to the Games and 11.4 per cent post Games.

Analysis of ANPR data from cameras forming a cordon around the central London Congestion Charging Zone shows that during the Olympics van traffic was higher during the overnight period and lower during the day. No change in van flows was observed during the Paralympics period. Lorry traffic crossing the same cordon was again higher during the overnight period and lower during the day, something that was evident during both the Olympic and Paralympic Games (albeit the changes were more pronounced during the

Olympic period). The proportion of total daily lorry flows during the overnight period increased by 44 per cent during the Olympics and by 39 per cent during the Paralympics. During the late evening period (between 22:00 and 24:00), the increases were 24 per cent during the Olympics and 25 per cent during the Paralympics.

More details of this analysis can be found in TfL's Travel in London Report 5 (http://www.tfl.gov.uk/assets/downloads/corporate/travel-in-london-report-5.pdf)

Conclusion

Most businesses and freight operators made adaptations to their deliveries during the Games period. Reducing the number of deliveries, changing the delivery time and changing the routes used were all done to help organisations cope with the uncertainty and restrictions during that period. Many of the measures used were short term measures applicable to a special period such as pre-ordering/stockpiling, postponing deliveries or using temporary stockrooms. Similarly there were measures which responded to a particular situation during the Games such as changing routes to avoid restrictions. Other measures could be applicable long term, as well such as ensuring deliveries are right first time and possibly consolidating deliveries.

The volume of changes made during the Games suggests that the level of adaptation required by the industry was achieved. The types of changes indicate that these were in reaction to the particular situation of the Olympic period i.e. potential difficulties with access, increased congestion, uncertainty over the feasibility to make some journeys. This is what acted as the motivation for the industry which wanted to ensure they could continue to operate their businesses and didn't suffer, in financial terms, as a result of the Games. This suggests that if we would like the industry to adopt delivery behaviours in similar ways under normal operations, then the policies introduced would need to create similar motivations to those during the Olympics.

Chapter 5 – Opportunities for reducing deliveries

Introduction

This chapter looks at whether businesses and freight operators continued with measures which resulted in the reduction in the amount of delivery activity by road following the end of the Olympic Games. It also explores the cost implications arising from such measures and the barriers which the industry perceives as key in stopping them reducing the number of deliveries they make by road.

This chapter draws heavily on the data collected from the third, Post Games, wave of the Olympic Business and Freight Survey which was undertaken in November 2012. In this wave respondents were asked to reflect more on the measures adopted during the Olympic Games.

Key findings

- A small number of businesses made sustained changes resulting in a reduced number of deliveries. Ten per cent of businesses who made deliveries and purposely reduced them during the Games said that they continued with the changes post Game (this equates to 1.7 per cent of all businesses who make deliveries)
- Equally, a small number of freight operators continue to take measures which reduced the number of deliveries they make. Seven per cent of freight operators who had reduced the number of deliveries they made during the Games said that they continued post Games (this equates to 1.6 per cent of all freight operators)
- The reduction in the number of deliveries post Games was mainly achieved through fewer larger deliveries and by ensuring deliveries were right first time, thus preventing the need for return journeys
- Most businesses who reduced deliveries did not have any impact on costs as a result. 52 per cent of businesses said that they did not experience any cost changes from reducing deliveries during the Games, while 31 per cent said that they experienced cost increases and eight per cent cost reductions (a further eight per cent answered don't know)
- Similarly, most freight operators who reduced deliveries did not see any cost changes. Fifty-five per cent of freight operators said they did not experience any cost changes during the Games as a result of reducing deliveries, while 25 per cent said they saw cost increases and six per cent cost decreases (a further 14 per cent said don't know)
- No cost changes would be expected from a reduction in the number of deliveries during normal operations. Six in ten businesses and freight operators said that they expected no cost savings or increases from reducing deliveries in normal operations, while 13 per cent expected costs to increase to a similar level to those during the Olympics. One in ten businesses thought that they would incur cost increases despite not having

experienced any during the Games and 12 per cent of freight operators said that they expected costs to increase more that they did during the Olympics

- Businesses mentioned the lack of customer support and the fact that customers need constant deliveries (because of perishable goods) as some of the barriers preventing a reduction in the number of deliveries. Freight operators said that barriers for reducing road deliveries included limited opportunities by other modes (52 per cent) and the cost of other modes and vehicles

Sustained change in reducing deliveries

In the Post-Games wave conducted in November 2012, businesses and freight operators were asked whether any changes they implemented to reduce deliveries during the Games remained when they returned to normal operations. Amongst businesses who purposely reduced their deliveries during the Games, one in ten said that they continued with the changes post Games – this equates to 1.7 per cent of businesses in the survey sample who make deliveries as part of their work. From the freight operators who had reduced the amount of deliveries they made during the Games, seven per cent said that they continued using these measures post Games – this equates to 1.6 per cent of freight operators overall. Although the numbers of businesses and freight operators who reduced the number of deliveries long term is not high, it shows that for some organisations the Games instigated new ways of working.

The measures that businesses continued with include having fewer larger deliveries and ensuring deliveries were right first time, thus preventing the need for return journeys. On top of these measures, freight operators also mentioned the use of preventative vehicle maintenance and the sharing of resources.

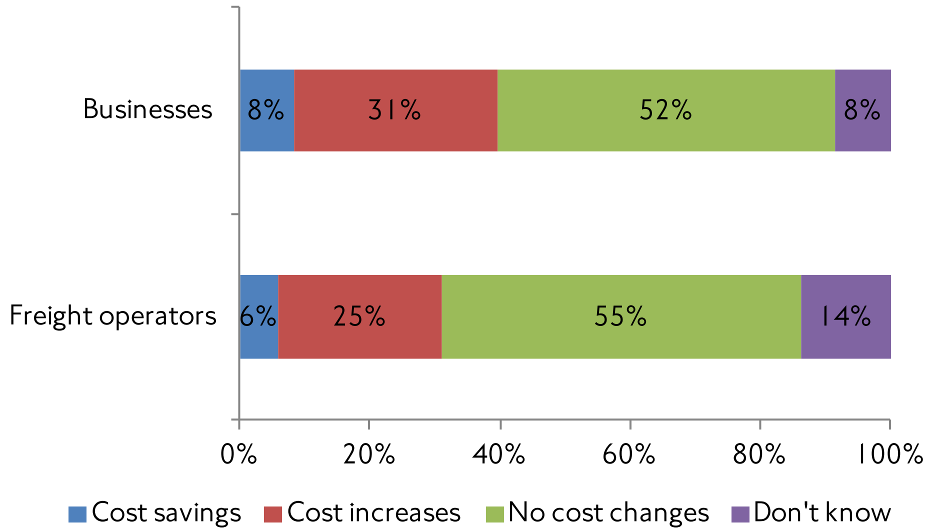
The reasons given by businesses and freight operators for continuing with these measures post Games included reduction in costs, both evidential and expected, customer preference and environmental reasons. Although the measures during the Games were taken in order to manage a special period, where organisations found a benefit they continued with these ways of working when they returned to normal operations.

Cost implications from reducing deliveries

When asked about the cost implications from reducing deliveries during the Games, just over half of businesses (52 per cent) said that they did not experience any, while 31 per cent said that they experienced increases in cost and eight per cent cost reductions (a further eight per cent answered don't know). A similar picture emerges amongst freight operators with 55 per cent saying they did not experience any cost changes during the Games as a result of reducing the number of deliveries. A quarter of freight operators said that they saw costs increase, while six per cent cost decrease. A further 14 per cent of freight operators who reduced their deliveries did not know whether there were any cost implications from this.

The majority of respondents who said they experienced cost savings indicated that these were less than 10 per cent. Respondents who reported cost increases they said that these varied from less than 10 per cent for some businesses and freight operators to over 50 per cent for some others. Given the small number of the sample who reported cost changes, it is however not advisable to draw any major conclusions from this.

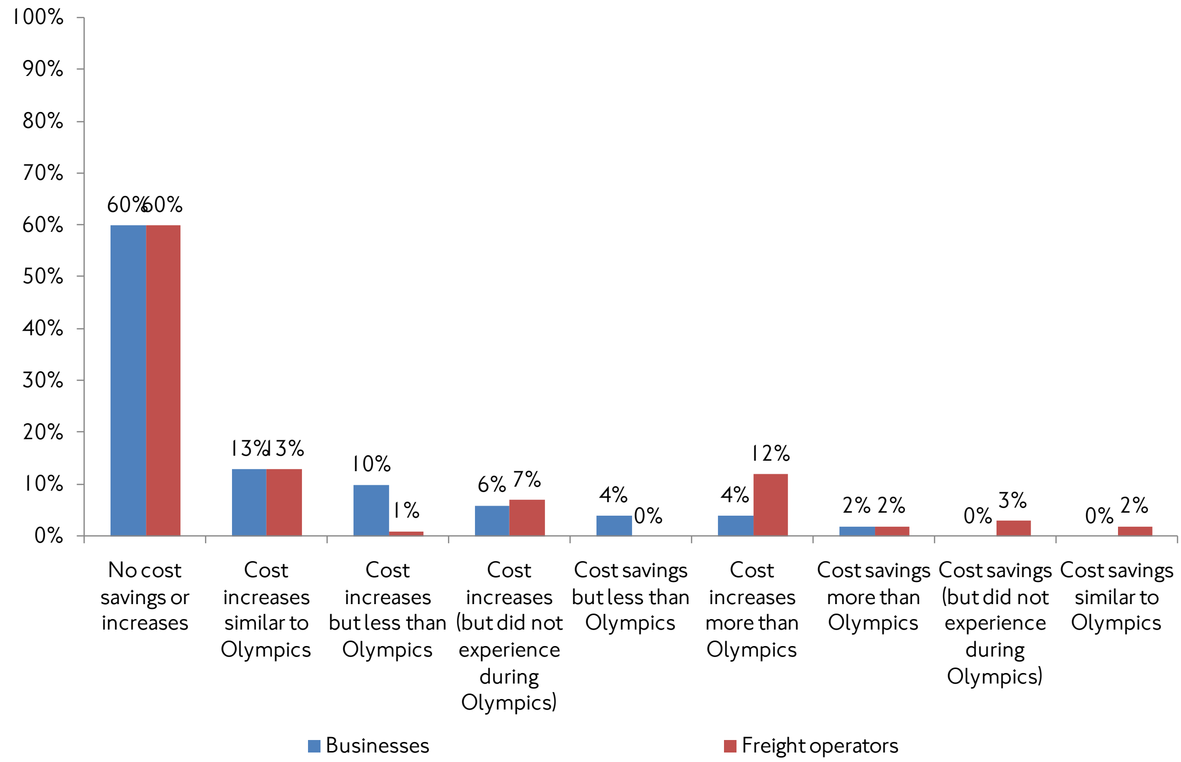
Figure 5.1 Cost implications from reducing deliveries during the Games for businesses and freight operators



Base: 220 (Freight operators who reduced deliveries), 48 (Businesses who reduced deliveries).
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Businesses and freight operators who had tried to reduce the number of deliveries they made during the Games were asked what the impact would be on their costs if they tried to roll out the same measures during normal operations. Introducing changes for a short period, and for a special event, is likely to have a different cost impact compared to the same change long term. Six in ten businesses and freight operators said that they expected no cost savings or increases, while 13 per cent expected cost increases similar to those during the Olympics. One in ten businesses thought that they would incur cost increases despite not having experienced any during the Games and 12 per cent of freight operators said that they expected costs to increase more than they did during the Olympics.

Figure 5.2 Cost implications from reducing deliveries during normal operations – Businesses and Freight operators



Base: 220 (Freight operators who reduced deliveries), 48 (Businesses who reduced deliveries).
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Evidence from the Olympic case studies suggests that most businesses undertook some stockpiling in order to avoid unnecessary deliveries, for example offices ordering enough stationary for the duration of the Games. This did not generally have cost implications for businesses apart from the initial outlay for the larger deliveries which was evened out in the long term. Some organisations introduced more innovative measures to reduce deliveries. One such example is a financial services firm using a fridge lorry parked in an on-street parking space outside one of its London offices to store food so that regular food deliveries from its head office would not be required during the Games.

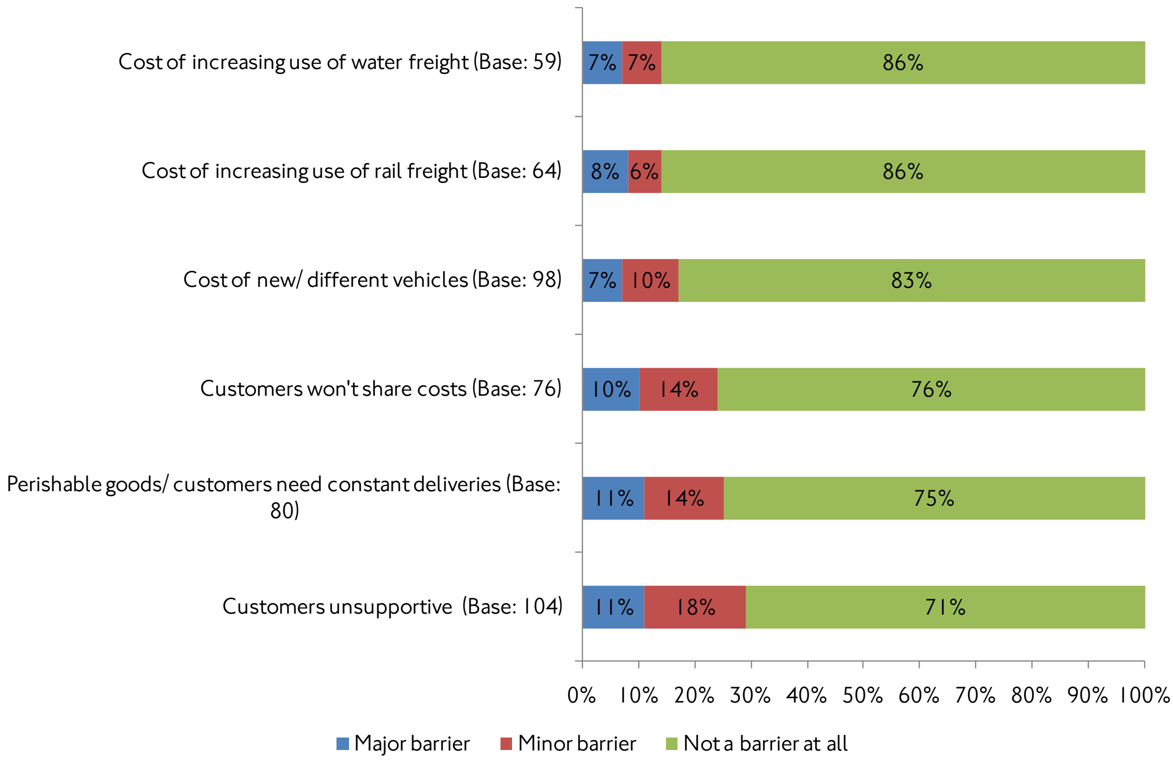
Case study – financial services firm

A financial services firm, with two offices in central London – the head office near London Bridge and a West End office - made extensive plans for the Games period. Although senior management was not convinced initially about the need to plan material on the expected impact, they were persuaded that planning was needed. A regular delivery that is made on a daily basis between the two London offices is transporting food that is cooked in the kitchen at the head office site to the West End office at lunch time. For the duration of the Games, a fridge lorry was parked on an on-street bay outside the West End office where food could be stored and therefore the daily deliveries were not necessary.

Barriers to reducing deliveries

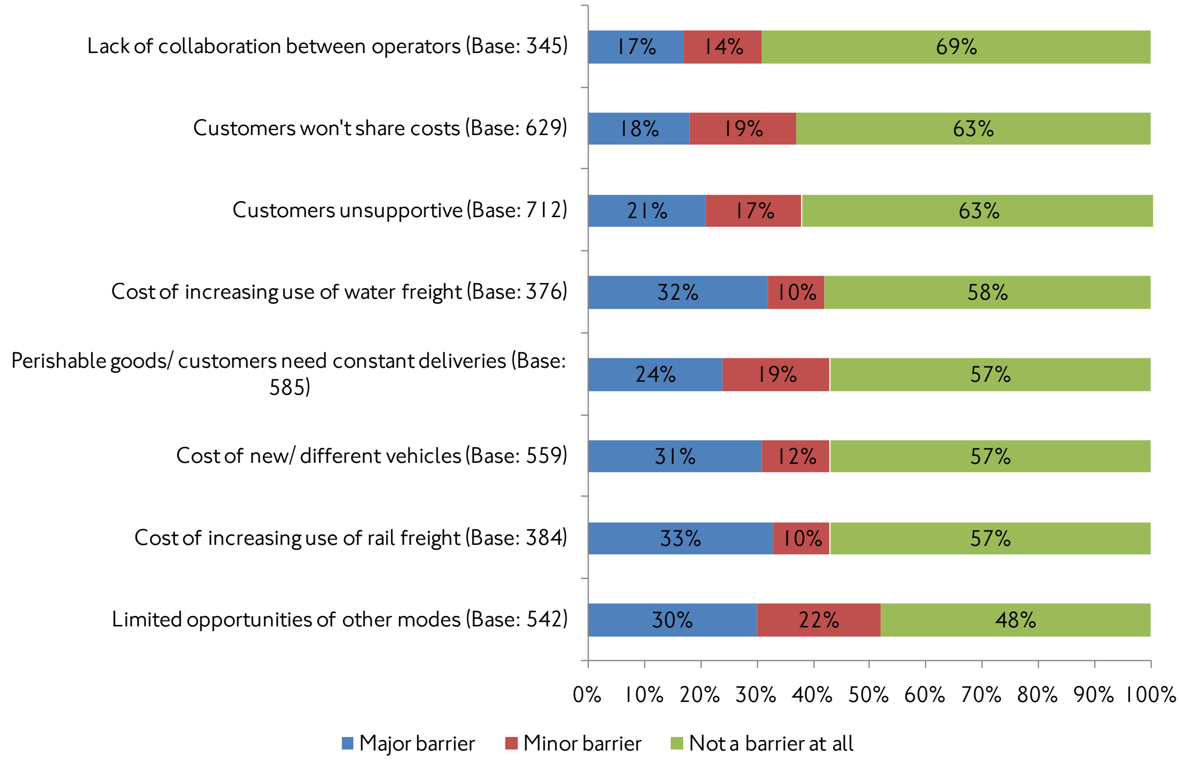
When asked to identify the barriers to reducing the number of road deliveries, respondents from businesses mentioned lack of customer support and the fact that customers need constant deliveries (because of perishable goods). Freight operators said that barriers for reducing road deliveries included limited opportunities by other modes (52 per cent) and the cost of other modes and vehicles. Overall, this analysis is not conclusive enough to identify key barriers to reducing the number of deliveries made by businesses and freight operators. The majority of respondents did not think that any of the barriers suggested were actual barriers and therefore it is hard to tell whether any changes to these would encourage a reduction in the number of deliveries.

Figure 5.3 Barriers to reducing deliveries - Businesses



Excludes don't know.
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Figure 5.4 Barriers to reducing deliveries – Freight operators



Excludes don't know.
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Conclusion

A small number of businesses and freight operators have continued with measures that reduce the number of deliveries they make following the end of the Games because they saw a cost benefit from it. It is reasonable to expect that unless there is a benefit to the organisation, and a direct or indirect cost benefit would clearly be the most powerful one, there is no clear motivation to continue with the measures adopted for the Games. Those measures were adopted as a mitigation strategy to the potential business disruption during the Games period and therefore were stopped once that risk was removed. As cost plays an important role in determining how deliveries are made, unless organisations are convinced there is a financial benefit to them from reducing the number of deliveries they are unlikely to introduce measures which achieve it during normal operations.

Chapter 6 – Opportunities for re-timing deliveries

Introduction

This chapter presents analysis on changes made by businesses and freight operators to the time of deliveries. It was one of the key measures which was used by many organisations to ensure they could continue to operate without experiencing any impact associated with the Games. This chapter looks at the times when deliveries are made, the changes made during the Olympic period and overnight deliveries more specifically. It also looks at the whether any of the changes introduced during the Games have been kept in place and what are the barriers for re-timing deliveries.

The analysis presented in this chapter is utilising data collected at the Games Time and Post Games Waves of the Olympic Business and Freight Survey undertaken in August and November 2012 respectively. It also presents examples of re-timing deliveries from the Olympic case studies.

Key findings

- There was a small amount of sustained change in the delivery times by businesses and freight operators. Five per cent of businesses who make deliveries as part of their work and three per cent of freight operators said that they have sustained the changed times following the end of the Games
- Night time deliveries were used by many during the Games period. Fifteen per cent of businesses and 33 per cent of freight operators made or received night time deliveries during the Games – with 11 per cent of businesses and 10 per cent of freight operators only introducing them then for the first time
- The main reasons for introducing or intensifying night time deliveries was because this was the only viable option with the Olympic restrictions in place or they wanted to avoid Olympic traffic congestion
- The majority of organisations make deliveries normally between 07:00 and 19:00 although significant proportions make deliveries early in the morning, overnight or at all times. The most frequent period for deliveries is between 07:00 and 14:00
- The changes in the times of deliveries during the Games did not come with cost implications for most. Fifty-three per cent of businesses and 51 per cent of freight operators said that they did not experience any cost implications from changing the time they made deliveries during the Games, while 38 per cent of businesses and 32 per cent of freight operators reported cost increases
- A cost increase was the expected implication from most businesses and freight operators if they changed their delivery times during normal operations
- Cost increases, support from customers and night time delivery restrictions are the main barriers for both businesses and freight operators which prevent changes in the times they make deliveries.

Sustained change in re-timing deliveries

When asked whether they had retained any of the changes made to the time that deliveries were made, three per cent freight operators and five per cent of businesses who make deliveries as part of their work said that they have sustained the changed times following the end of the Games.

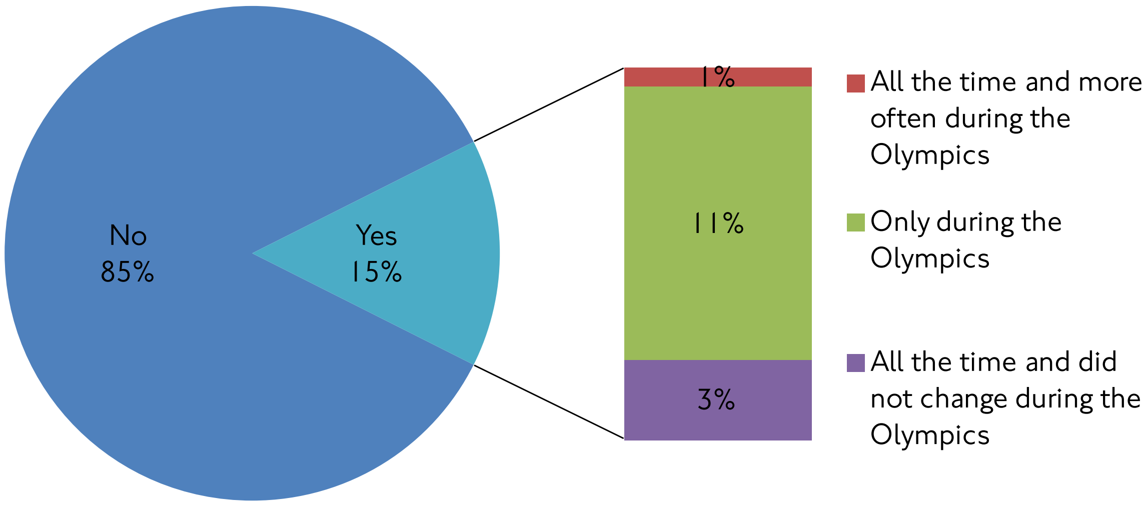
Although the percentages are not high they show that at least for some organisations the Olympics triggered a change in the way they make their deliveries.

Night time deliveries during the Games

During the Olympic period, 15 per cent of businesses and a third of freight operators made or received night time deliveries. A small proportion of businesses (three per cent) were making or receiving night time deliveries and there was no change during the Games, while a further 1 per cent increased the frequency of night time deliveries during the Games. However, 11 per cent of businesses introduced night time deliveries during the Olympics. Amongst freight operators who utilised night time deliveries, 17 per cent did not introduce any changes during the Games and just did what they always did, six per cent intensified night time deliveries and 10 per cent only introduced them as part of the Olympics period operations.

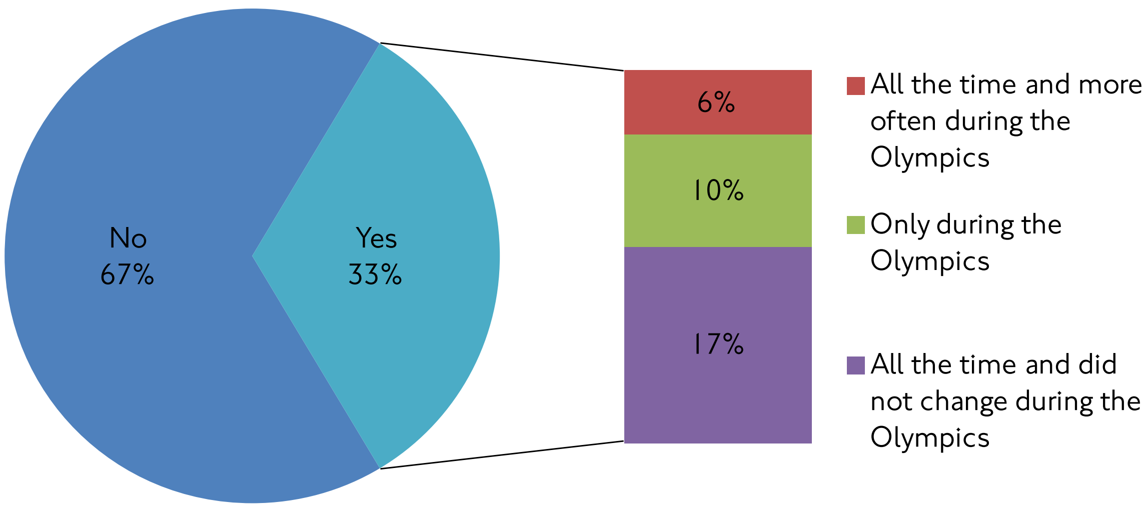
Those who make or receive night time deliveries all the time gave as their main reasons the fact that they have a 24 hour operation, there is less congestion on the network, because of customer requirements and there are cost benefits (i.e. it is cheaper). So, night time deliveries bring a clear benefit to the organisation either in the form of time or cost savings or meeting customer requirements.

Figure 6.1 Whether made or received night time deliveries during the Games – Businesses



Base: 1002 (All Businesses).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

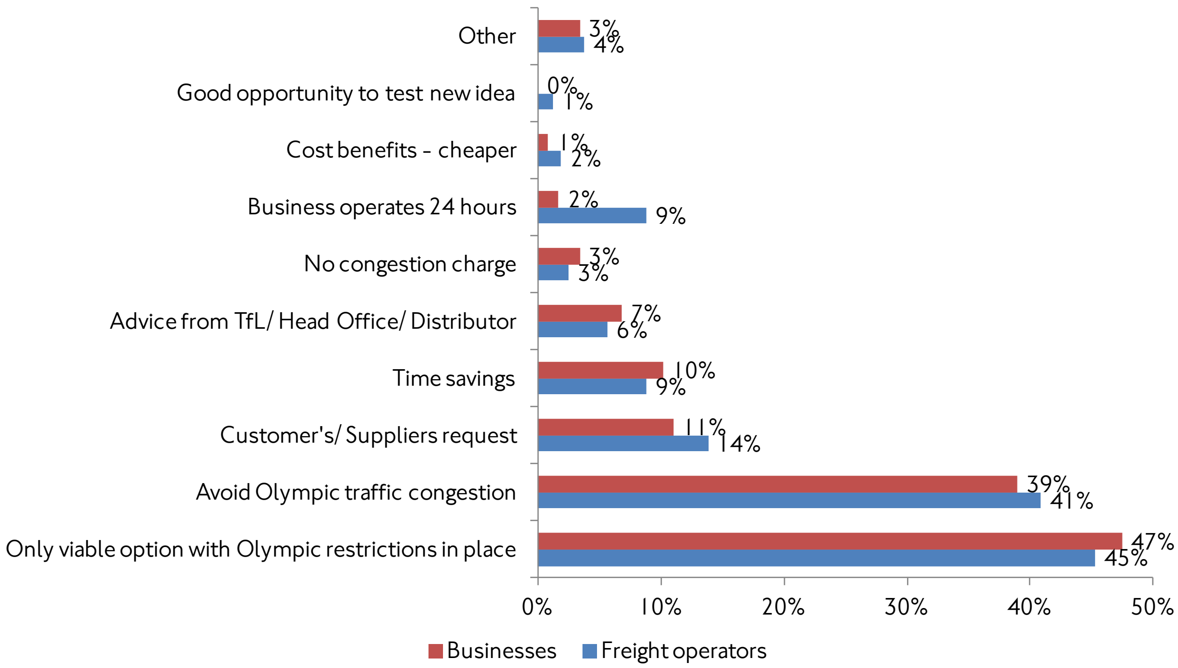
Figure 6.2 Whether made or received night time deliveries during the Games – Freight operators



Base: 1000 (All Freight operators).
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Businesses and freight operators who increased or begun making or receiving night time deliveries as a result of the Olympics said that the main reasons for doing so was because this was the only viable option with the Olympic restrictions in place (47 per cent of businesses and 45 per cent of freight operators) or that they wanted to avoid Olympic traffic congestion (39 per cent of businesses and 41 per cent of freight operators). Other reasons given include requests by customers or suppliers, time savings, following advice by TfL/Head Office/Distributor. Night time deliveries during the Games was seen by many as the only way to continue operating without impacting on their business output. Access restrictions and ORN/PRN and expected congestion levels during the day played a major role here in driving the increase in night time deliveries at many locations.

Figure 6.3 Why introduced or increased night time deliveries during the Games



Base: 118 (Businesses who started/increased night time deliveries), 159 (Freight operators who started/ increased night time deliveries).
Respondent could give more than one answer.
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

Those who introduced or increased the amount of night time deliveries were asked whether they noticed any operational benefits as a result of it. The majority of businesses (83 per cent) said that they hadn't, while 13 per cent said that they had and a further four per cent did not know or it was too soon to tell. Almost three-quarters of freight operators said that they had not noticed any operational benefit and five per cent that they did not know or they weren't sure yet. However, one in five freight operators who introduced or intensified night time deliveries during the Games saw an operational benefit. The main benefits identified by businesses and freight operators included finding it easier/quicker to get around London and having additional business preparation. Below are some comments by businesses and freight operators on their experience of night time deliveries during the Games.

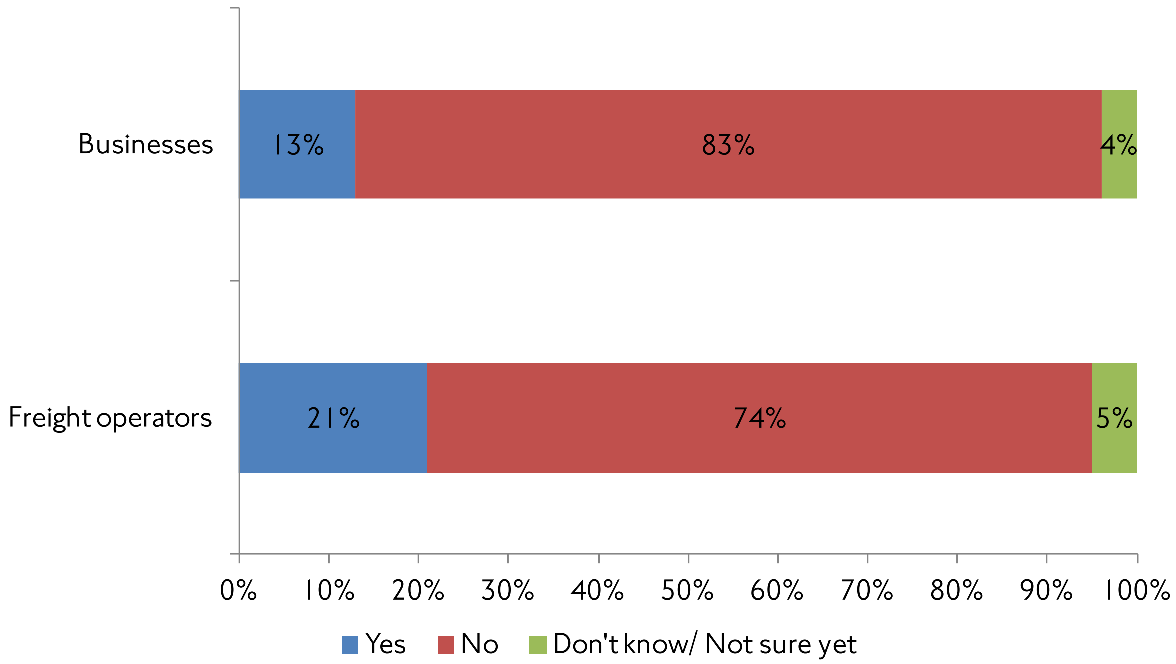
'We received all our deliveries at night during the Olympics and it was much better for us as we are not as busy at night so things were much easier.'

'Deliver more efficiently at night.'

'Many of our customers gave their orders well in advance which made life easier for us. There was a lot less traffic on the road during the night.'

'We avoided congestion and were able to do more in less time - worked out a lot more efficient.'

Figure 6.4 Whether noticed operational benefit as a result of night time deliveries during the Games



Base: 121 (Businesses who started/increased night time deliveries), 157 (Freight operators who started/ increased night time deliveries).
Respondent could give more than one answer.
Source: Olympic Business & Freight Survey, Games time Wave, TfL 2012.

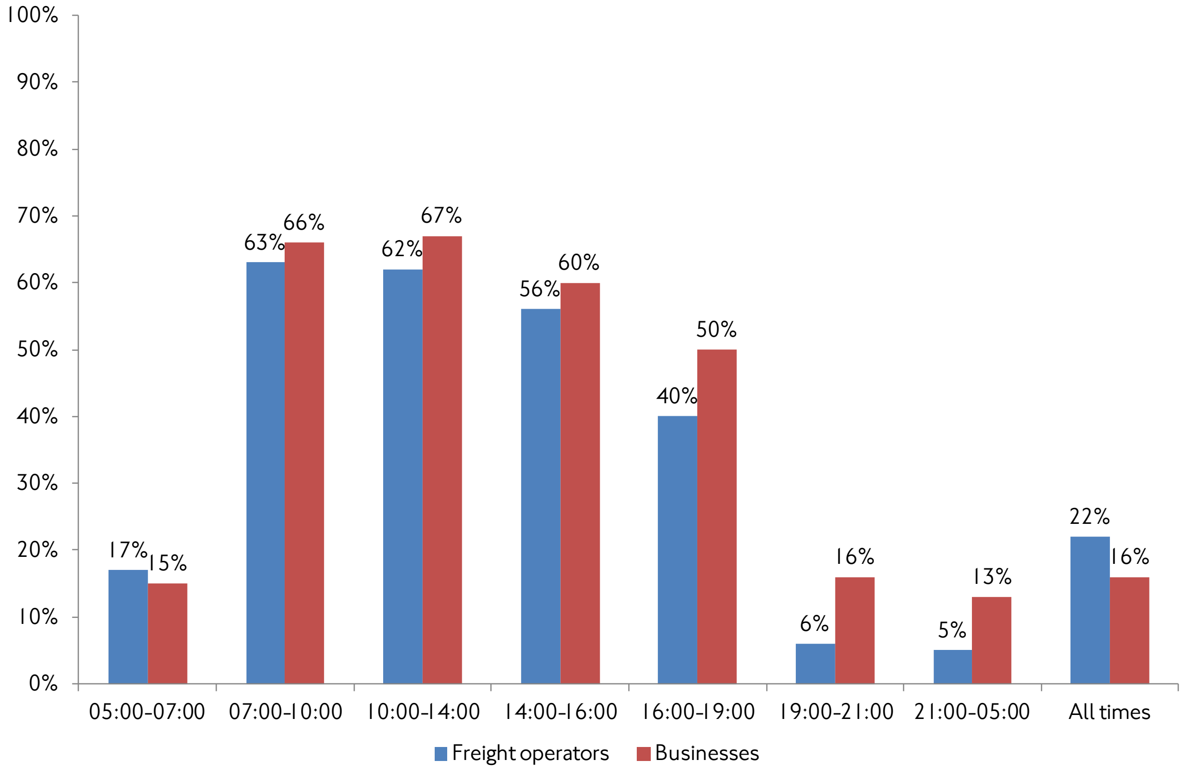
Of the businesses who began or increased receiving night time deliveries during the Games, 85 per cent received attended deliveries and around half said that their costs increased as a result. Two fifths of freight operators who started or intensified receiving night time deliveries received attended deliveries and again around half of these thought that they incurred increased costs as a result.

Evidence from the Olympic case studies also supports the finding that overnight deliveries were extensively used during the Games. The feedback from businesses was very positive on how the overnight deliveries worked. For some it was a case of the only available option due to restrictions related to their locations, while for others it was a way of ensuring deliveries would be made regardless of the impact on the road network.

Time of day for making deliveries

In the Post Games wave in November 2012, freight operators and businesses who make deliveries were asked to provide details about the times they made deliveries in London. The majority of respondents said that they make deliveries during the day time between 07:00 and 19:00. However, there is a significant proportion who make deliveries in the early morning and overnight. Respondents who said they make deliveries in more than one time period were asked to identify the most frequent time periods and the most common responses were between 07:00 and 14:00.

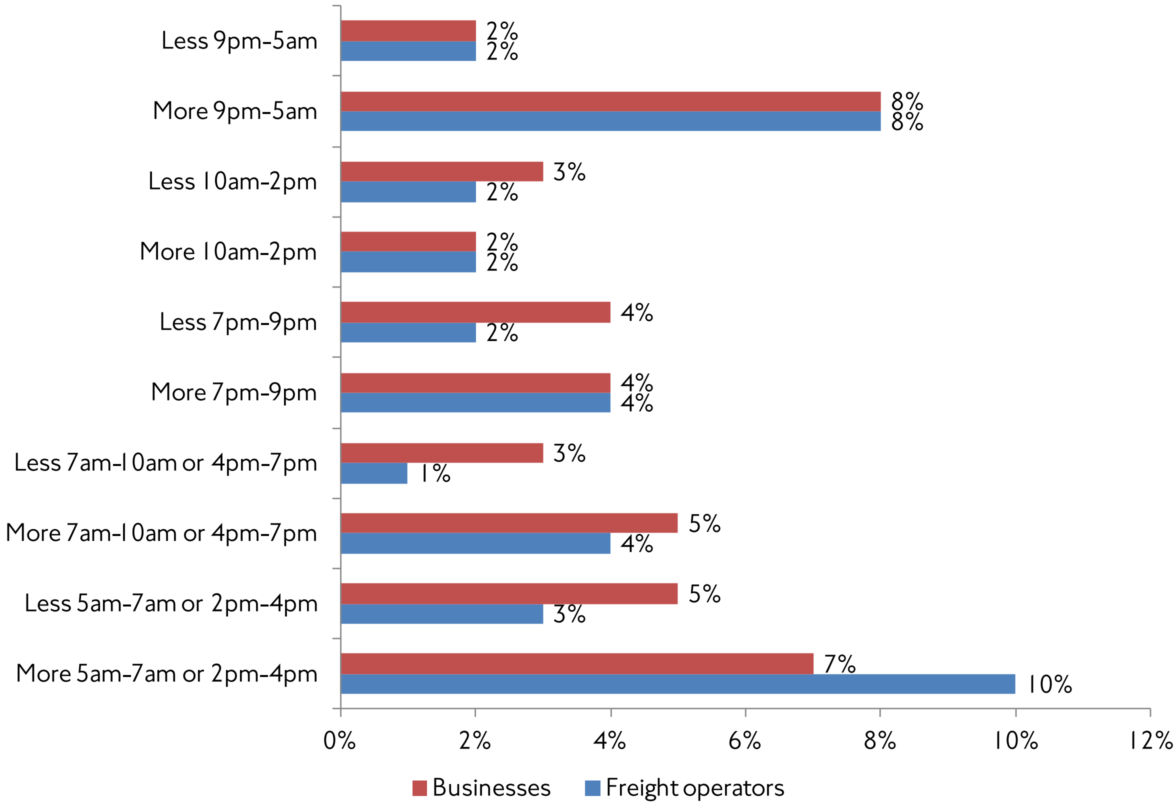
Figure 6.5 Times when businesses and freight operators make deliveries in London



Base: 990 (All Freight operators), 301 (Businesses who make deliveries).
Respondent could give more than one answer. Excludes don't know.
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Businesses and freight operators were also asked whether there was any difference between the times they make deliveries now and the times of deliveries during the Olympic period in the summer of 2012. During the Games, both businesses and freight operators increased the amount of out-of-hours activity - eight per cent of businesses and freight operators said they did more deliveries between 21:00 and 05:00, as well just outside the peak periods, with seven per cent of businesses and 10 per cent of freight operators making more deliveries between 05:00 and 07:00 and 14:00 to 16:00. The main reasons given by businesses for these changes were: to avoid restrictions; to make fewer deliveries during this period due to less business; to suit customers; and to avoid delays. The main reasons given by freight operators included: to avoid restrictions; to avoid congestion; to ensure deliveries were made on time; to satisfy customer demand; and to reduce costs. Similar to the responses given the Games time Wave (outlined in the section above), the key driver for these changes were the access restrictions and the expected level of congestion at some key locations. These resulted in activities moving at different time in order to facilitate continuity in business operations and fulfilling customer obligations.

Figure 6.6 Changes in times when businesses and freight operators made deliveries in London during the Games



Base: 995 (All Freight operators), 301 (Businesses who make deliveries).
Respondent could give more than one answer. Excludes don't know.
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Case study – Central London hospital

A major hospital in central London made a significant effort in its planning for the Olympic Games by starting two years prior to the event. The main motivation for this was concerns over staff and patient access to the hospital, as well as deliveries and waste removal. Hospitals have special requirements when it comes to transporting materials to and from the hospital such as blood, organs and radioactive materials. In was therefore important to plan effectively in order to ensure that the level of service to patients was in no way compromised during the Games. The hospital always has a certain amount of deliveries made overnight, although most are made during the day. However, during the Games almost all of its deliveries (98 per cent) were made overnight. This was implemented in order to avoid the busy times on the road network. There were some cost implications from this as extra staff time was required in order to facilitate the overnight deliveries. But overall this worked well for the hospital as it managed to maintain its service level throughout the Games.

Cost implications from re-timing deliveries

Just over half of businesses and freight operators said that they did not experience any cost implications from changing the time they made deliveries. On the other hand 38 per cent of businesses and 32 per cent of freight operators said that they had cost increases as a result. A very small proportion (three per cent) of both businesses and operators said that they experienced cost savings. A further five per cent of businesses and 15 per cent of freight operators did not know whether any cost implications had arisen from these changes.

The majority of businesses who reported cost changes said that these were no more than 20 per cent different to making deliveries at other times. The main reasons for these cost changes given by respondents included: increase due to extra staff or extra pay or out of hours staffing; increases due to transport costs; or restrictions causing longer journeys/late deliveries, additional fuel cost, loss of business/income, additional charges and cost savings due to fuel savings and lack of congestion.

Figure 6.7 Cost implications from re-timing deliveries during the Games for businesses and freight operators

Base: 302 (Freight operators who re-timed deliveries), 91 (Businesses who re-timed deliveries).
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Most businesses and freight operators who had changed the time when they made deliveries during the Games said that they expected an increase in cost similar to that experienced during the Olympics if they rolled out these changes during normal operations. Delivering at different times usually means extending the operating hours of the business and therefore requiring additional staff shifts which would inevitably lead to increased costs.

From the Olympic case studies, we know that businesses who were able to accommodate night time deliveries utilising the 24 hour security of the building did not incur any additional costs. There were businesses, however, who employed additional staff in order to facilitate deliveries at night. One such example is an investment bank in the City who employed an extra security guard to manage a new overnight loading bay, put in place for the Games.

Case study – retailer in Central London

A big retailer, based in the Royal Borough of Kensington and Chelsea, was prompted to consider the impact of the Games at an industry seminar in late 2010. The main concerns were deliveries, staff travel and customer access. A major part of the store's Games time adaptations was receiving all its deliveries overnight. This is something that is not usually possible due to the strict night time delivery restrictions. This adaptation worked well for the duration of the Games.

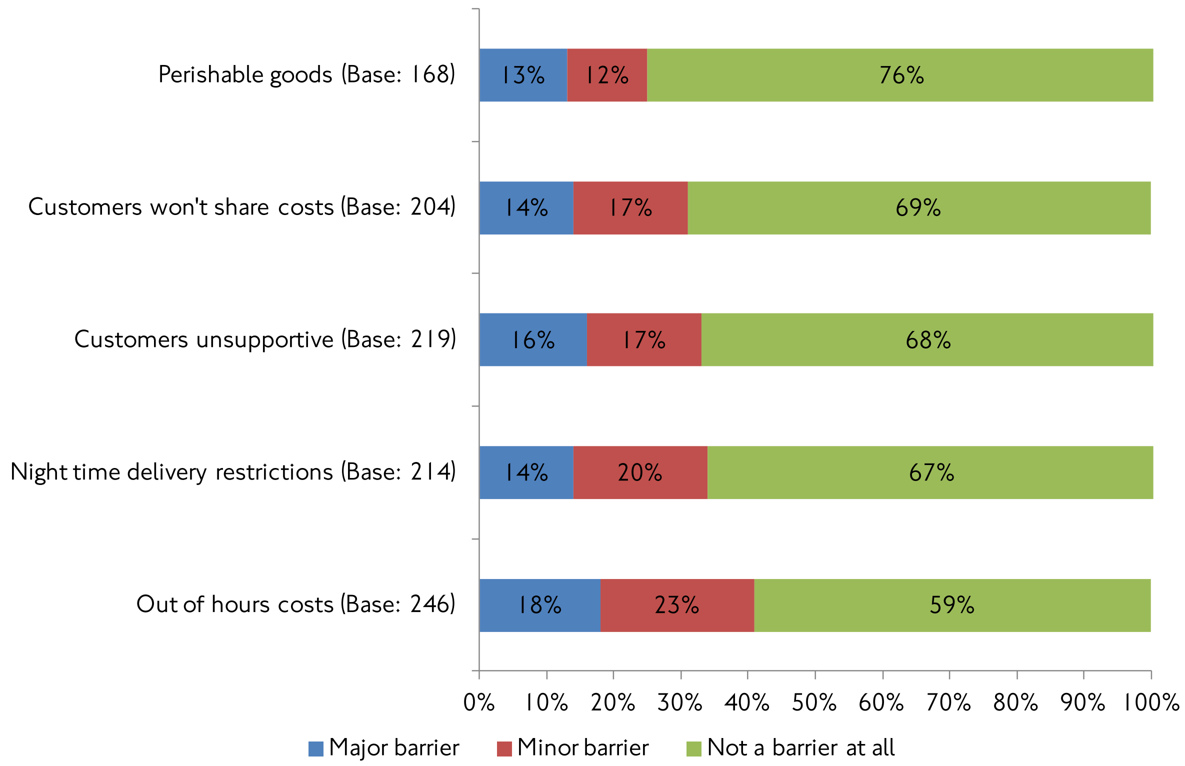
Barriers to re-timing deliveries

When asked about the barriers to re-timing deliveries, out-of-hours costs was mentioned by 41 per cent of businesses, night time delivery restrictions and unsupportive customers by a third, while 31 per cent said customers unwilling to share costs was a barrier and a quarter of respondents said the fact that they are delivering perishable goods.

Around half of freight operators identified night time delivery restrictions and out-of- hours costs as a barrier to changing the time they make deliveries in London. Unsupportive customers was mentioned by 38 per cent of freight operators, drivers not wanting to change working hours by 36 per cent, customers not sharing the costs by 35 per cent and the fact they are delivering perishable goods was mentioned by 27 per cent of operators.

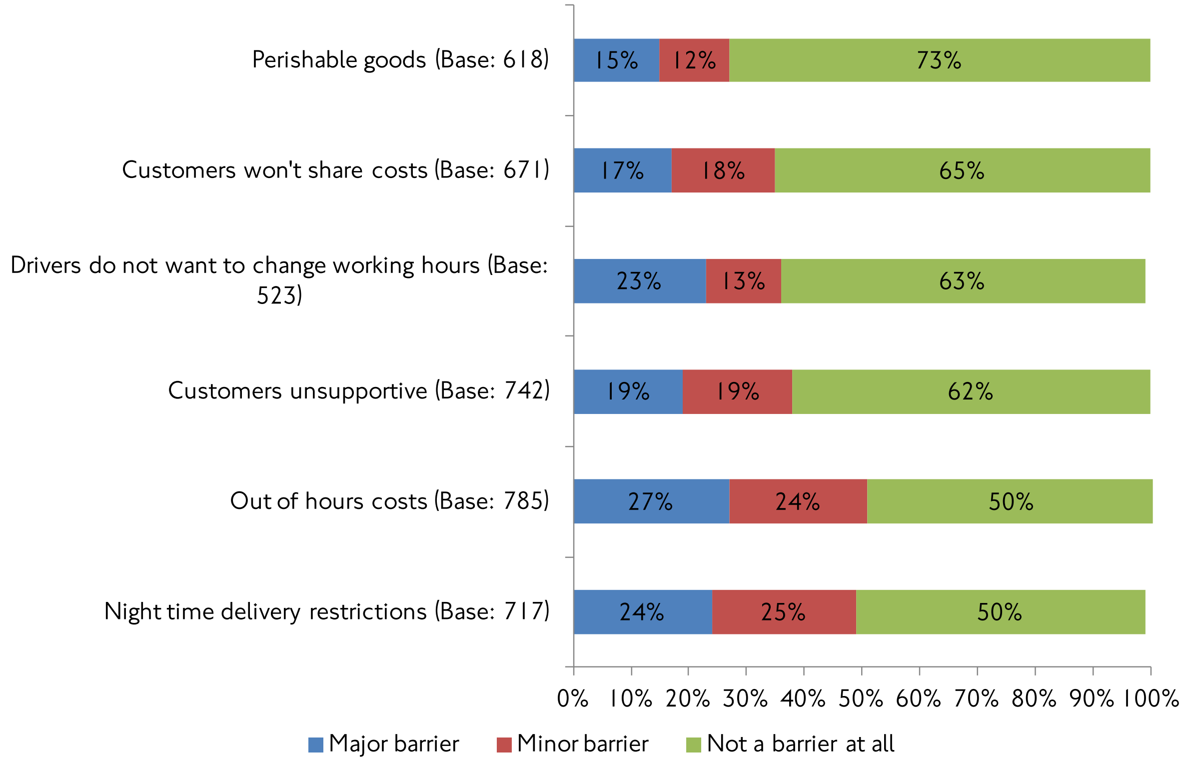
The cost seems to be one of the main barriers for both businesses and freight operators, along with the support from customers and the night time delivery restrictions. Coordination along the supply chain is required in order to successfully implement changes in delivery times in the first instance but obviously this is only applicable where restrictions are not the main constraint. Finally, if organisations are concerned about the cost impact, they are unlikely to pursue changes in the time of deliveries unless there is a direct or indirect cost benefit for them.

Figure 6.8 Barriers to re-timing deliveries - Businesses



Excludes don't know.
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Figure 6.9 Barriers to re-timing deliveries – Freight operators



Excludes don't know.
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Conclusion

Most deliveries in London are made during the day, although many organisations operate throughout the day and night. Significant changes were made to the delivery times during the Games, including significant use of night time deliveries as a result of the restrictions in place and the increased congestion. If these changes were to be introduced during normal operations, organisations expect them to result in cost increases. Apart from cost, other barriers include support along the supply chain and night time delivery restrictions. Therefore organisations are unlikely to introduce changes in delivery times unless the appropriate conditions are created or if they are pushed to do so by specific policies other than as an exception. For a small number of businesses and freight operators (five and three per cent respectively), these conditions were already there as they sustained the changes in delivery times they implemented during the Games. For the others however that hasn't been the case.

Chapter 7 – Opportunities for re-routing deliveries

Introduction

This chapter presents analysis on the cost implications from re-routing deliveries made by businesses and freight operators during the Games and the cost implications of introducing these during normal operations. It also looks at the barriers for re-routing delivery journeys and the resources used in the planning of delivery routes.

This chapter mainly draws from the data collected in the Post Games Wave of the Olympic Business and Freight Survey which was undertaken in November 2012.

Key findings

- Re-routing deliveries during the Olympics resulted in cost increases for many – 41 per cent of businesses and 36 per cent of freight operators incurred extra costs as a result of longer journeys leading to higher fuel and staff costs
- Re-routing during normal operations, however, is not expected to result in cost increases by most. Forty-three per cent of businesses and 54 per cent of freight operators said they would expect no cost implications for re-routing deliveries during normal operations, while 26 per cent of businesses and 20 per cent of freight operators would expect cost increases similar to that of the Games
- The main reasons preventing businesses and freight operators from re-routing their deliveries were lack of knowledge of alternatives, driver training and familiarisation of new routes. This is likely to be something which the use of resources to aid route planning can help with
- Several types of resources are used to aid route planning for deliveries. Over half of businesses and freight operators use information from other drivers or Sat-Nav to plan delivery routes, while other popular resources also include live traffic information, information from other operators and journey planners including the TfL freight journey planner. A significant proportion of respondents, in both businesses and freight operators, said that they would consider using some or all of these resources as efficient route planning has clear benefits for organisations resulting in reduced journey times and costs

Cost implications from re-routing deliveries

Businesses and freight operators who used different routes for making deliveries during the Games were asked whether they incurred any cost changes as a result. A very small proportion said that they experienced cost savings (four per cent of businesses and three per cent of freight operators), while 41 per cent of businesses and 36 per cent of freight operators said that they incurred cost increases. On the other hand a substantial proportion of businesses and freight operators thought that there were no cost implications from re-routing deliveries - 48 and 43 per cent respectively. Finally, seven per cent of businesses and

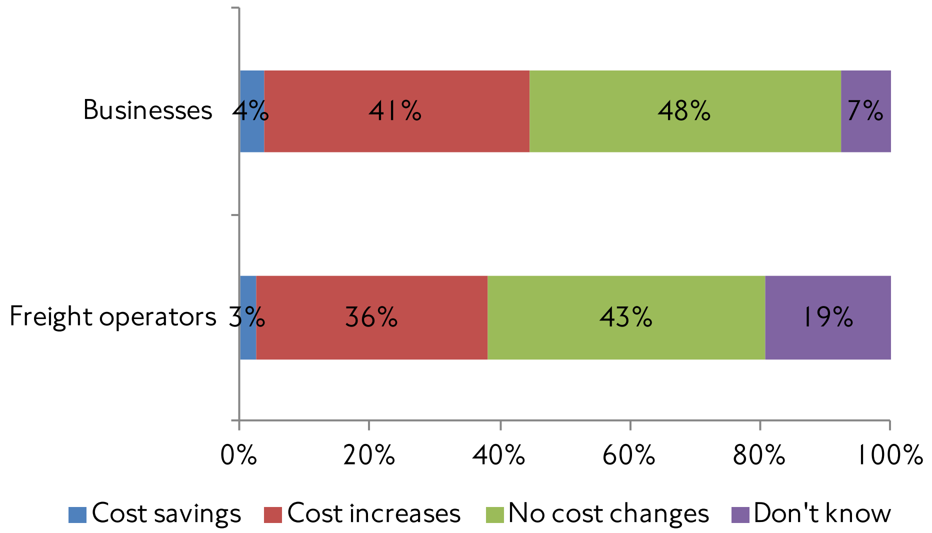
19 per cent of freight operators said that they did not know whether their costs were affected as a result of changing the route of deliveries.

The reasons for the increase in costs given by businesses were longer journeys and substantially higher fuel bills. Freight operators stated that the reasons their costs increased were: extra fuel, longer journey times and extra staff costs while the reasons for costs declining were: time savings, fewer journeys, less fuel and less staff costs.

Businesses and freight operators invariably changed their normal routes in order to avoid areas with restrictions and to avoid locations where high congestion was expected following advice provided by TfL in most cases. This resulted in longer routes and therefore a most likely increase in cost due to the higher fuel cost and staff times.

For the majority of businesses and freight operators who reported cost changes as a result of changes in their delivery routes, these were up to 20 per cent different to their normal costs.

Figure 7.1Cost implications from re-routing deliveries during the Games for businesses and freight operators

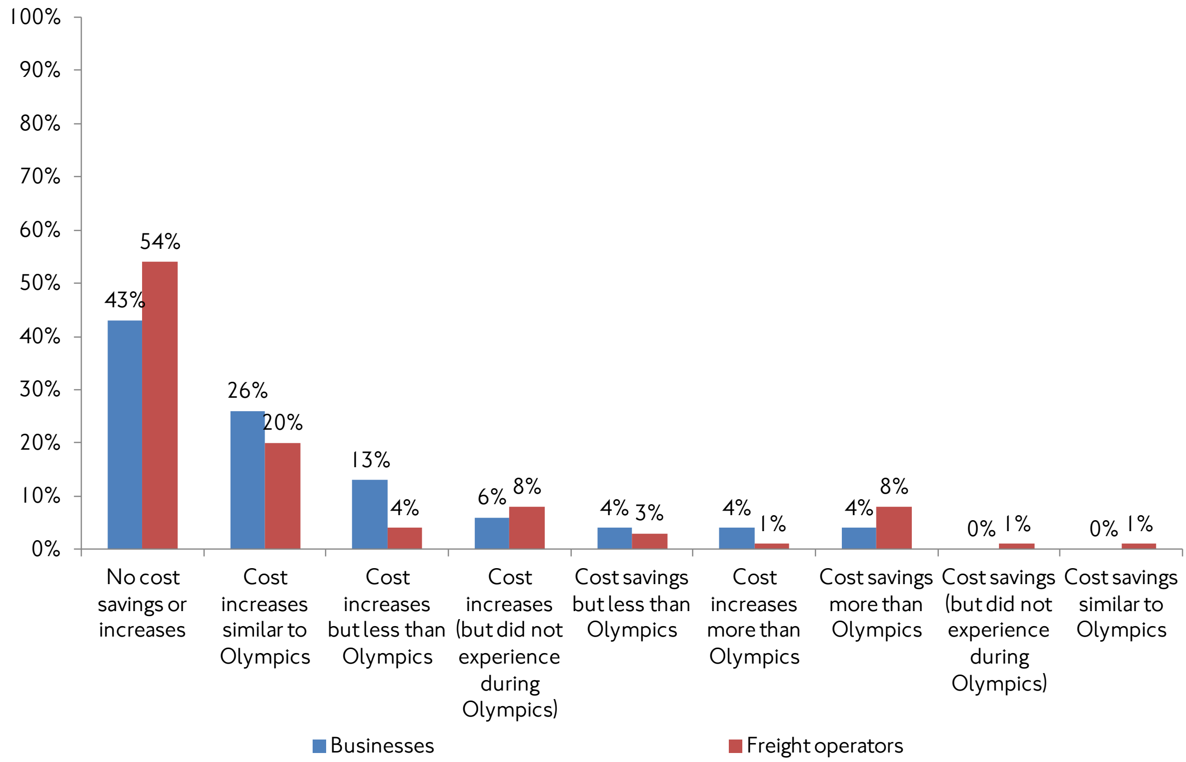


Base: 392 (Freight operators who re-routed deliveries), 54 (Businesses who re-routed deliveries).
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Businesses and freight operators who changed their delivery routes during the Games were asked whether they thought there would be cost implications from introducing these changes during normal operations. Forty-three per cent of businesses said they would expect no cost implications, while around a quarter would expect cost increases of the same order as the Olympics and 13 per cent would expect cost increases lower than the Olympics. Over half of freight operators (54 per cent) said that they would expect costs to stay the same, while one in five would expect cost increases similar to the Olympics.

The nature of the changes obviously has an impact on the likely cost implications organisations might incur. During the Olympics, those who made deliveries were mainly trying to avoid parts of the road network which was likely to increase the length of their journeys. These estimates were obviously made with these conditions in mind. If organisations are required to avoid parts of the network, this is likely to lead to an increase in their cost. If on the other hand they are supported to make use of the most efficient routes for their journeys, this is more likely to lead to cost reductions.

Figure 7.2 Cost implications from re-routing deliveries during normal operations – Businesses and Freight operators



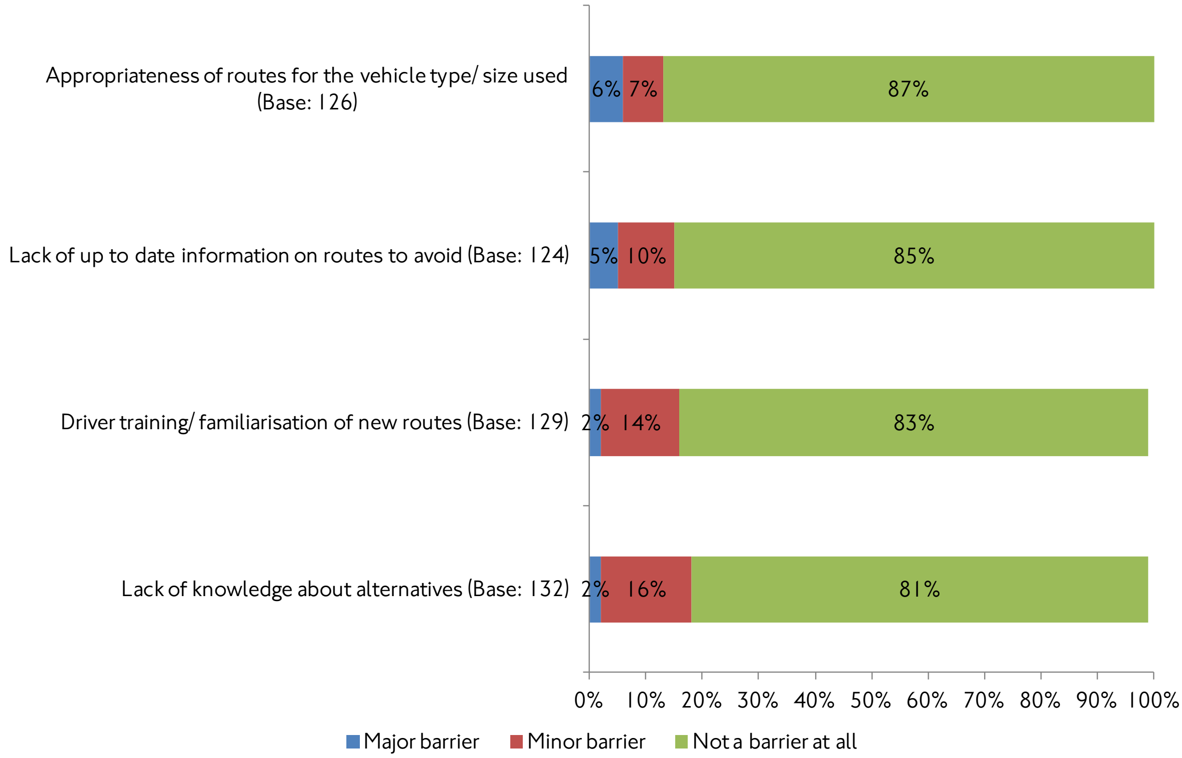
Base: 392 (Freight operators who re-routed deliveries), 54 (Businesses who re-routed deliveries).
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Barriers to re-routing deliveries

Businesses and freight operators were asked to identify barriers to changing the routes used for making deliveries. Lack of knowledge of alternatives was thought to be a barrier by 18 per cent of businesses and 29 per cent of freight operators, while driver training and familiarisation of new routes was sited as a barrier by 16 per cent of businesses and a quarter of freight operators.

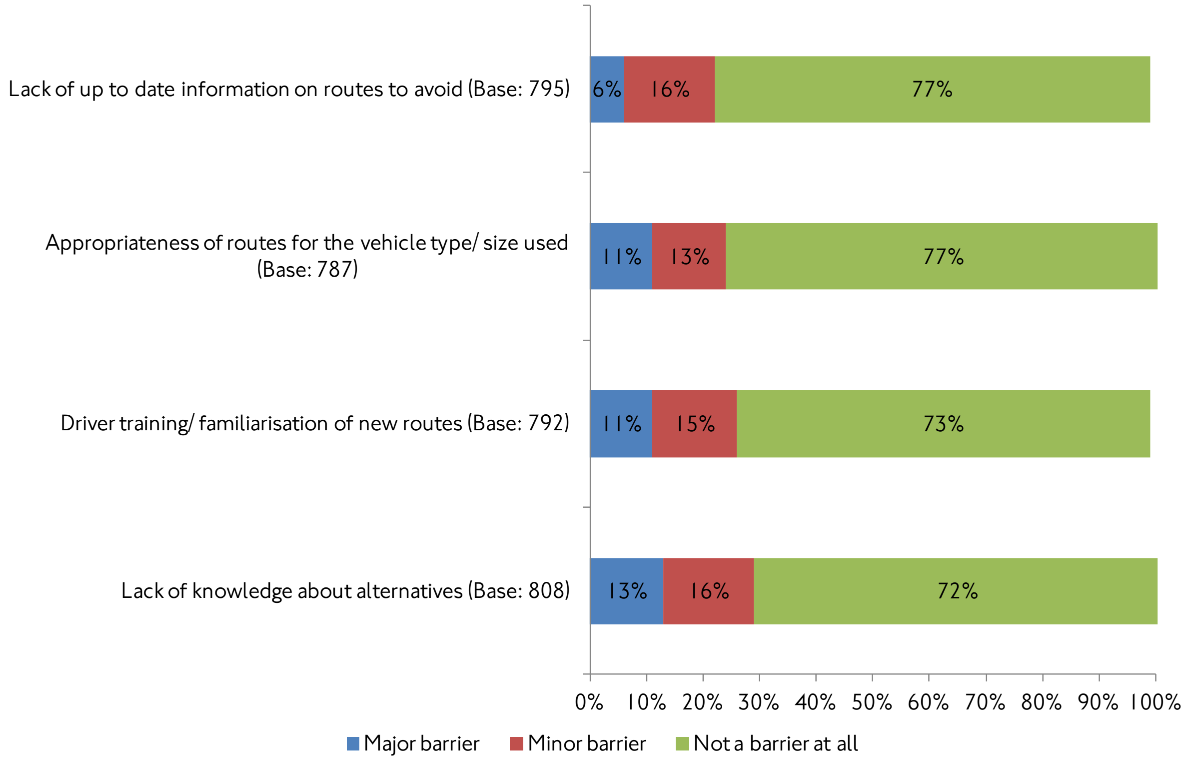
Not many significant barriers were identified here and it seems that knowledge and familiarisation are the only things which could potentially be overcome with the use of the right resources.

Figure 7.3 Barriers to re-routing deliveries - Businesses



Excludes don't know.
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Figure 7.4 Barriers to re-routing deliveries – Freight operators



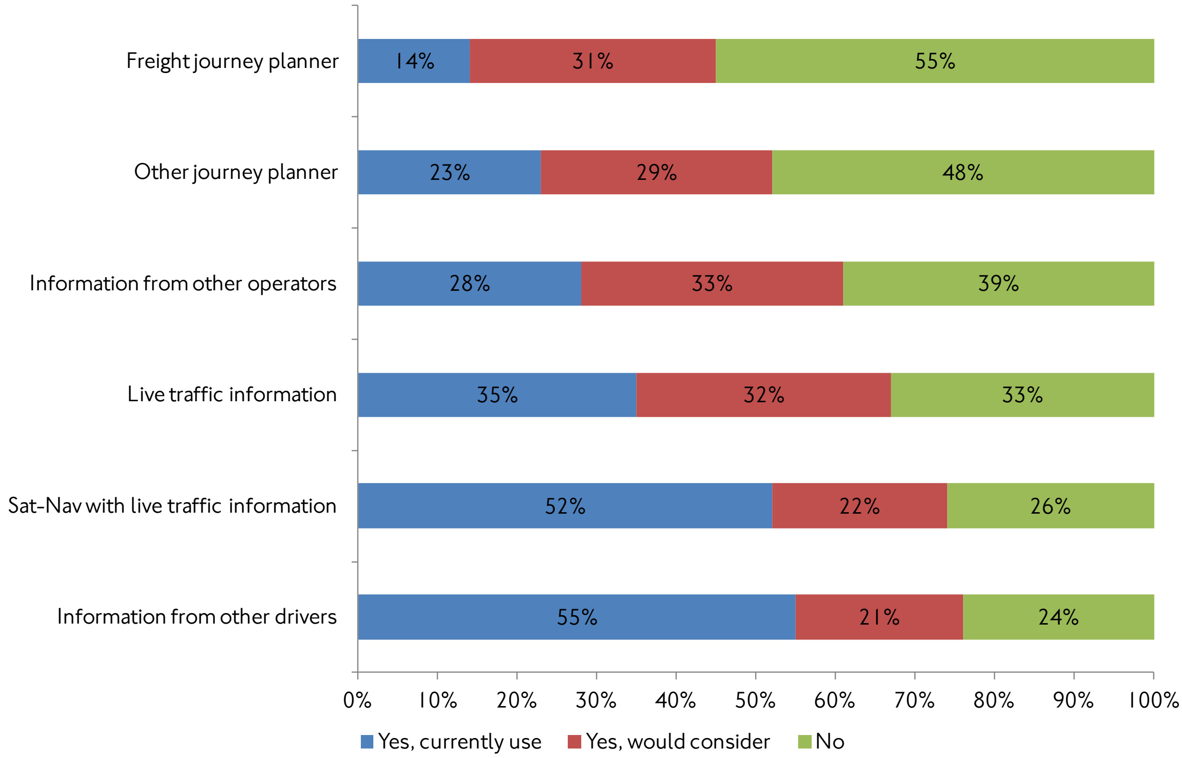
Excludes don't know.
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Use of resources to aid route planning

Businesses and freight operators were also asked whether they currently use or would consider using specific resources to help them plan their journeys. Information from other drivers or Sat-Nav is currently being used by over half of businesses and freight operators while one in five would consider using them. Live traffic information is being used by 46 per cent of freight operators and 35 per cent of businesses. A further 32 per cent of businesses and 28 per cent of freight operators would consider using them. Information from other operators is another popular resource with 28 per cent of businesses and 36 per cent of freight operators already using it, with around a third interested in potentially using it in future. A quarter of freight operators and 14 per cent of businesses make use of the freight journey planner provided by TfL and a further 3 in 10 would consider using it. Other journey planners are being used by 23 per cent of businesses and 32 per cent of freight operators, while again, one in three would consider using them.

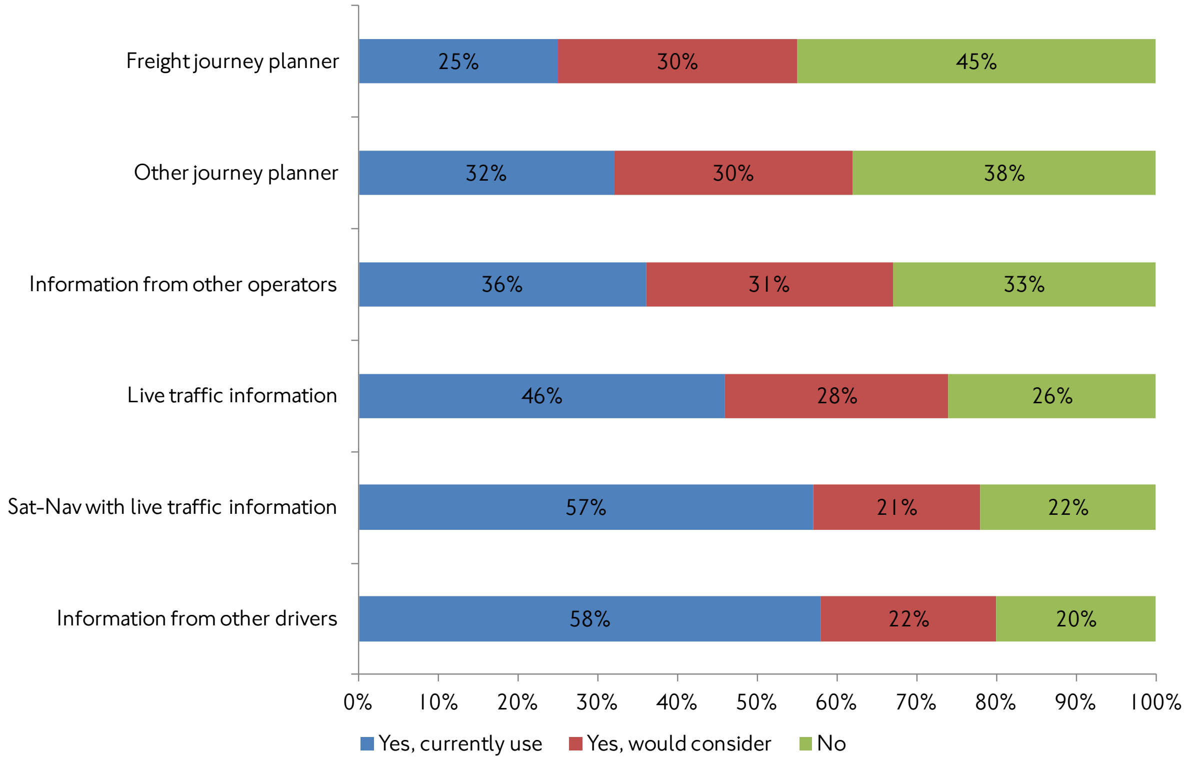
It seems that a large proportion of businesses and an even larger proportion of freight operators are either already using or would consider using a wide variety of resources to help them plan their delivery routes. Efficiency in route planning has some clear benefits for those who make deliveries and organisations are generally keen to make use of available resources to help them achieve that.

Figure 7.3 Use of resources to aid route planning - Businesses



Excludes don't know.
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Figure 7.4 Use of resources to aid route planning – Freight operators



Excludes don't know.
Source: Olympic Business & Freight Survey, Post Games Wave, TfL 2012.

Conclusion

Re-routing deliveries during the Games, which was mainly done to avoid restrictions and increased congestion, mainly resulted in longer journeys and therefore higher costs for businesses and freight operators. The use of the most efficient route for deliveries is something most organisations will aim for in their day-to-day operations. Although they are somewhat constrained by the knowledge and familiarity drivers have with routes, in general they would be keen to make sure they use the shortest routes as these will lead to cost savings. Most organisations either already use or would be interested in using resources to help them plan their delivery routes and this is clearly an area where TfL could take the lead and develop route planning tools which can influence the routes used by businesses and freight operators for deliveries in London.

General conclusions

Businesses and freight operators will always be keen to maintain business continuity and keen to ensure that their daily operations are not negatively impacted on by transport or other disruptions. This appeared to be one of the key motivations behind the industry's extensive engagement with the planning process for the Games and the introduction of many adaptations for that period. This is a key route for engaging businesses and convincing them of the need to change.

The industry is keen to receive and utilise information about the transport network which will help them plan, and, when necessary, adapt their operations. A clear role TfL can play to help businesses and freight operators adapt their operations is to provide clear and accurate information about the public transport and road networks. This could cover general operational information as well as information about planned events, such as the London Marathon, Wimbledon etc or disruption arising from infrastructure construction and improvements, such Crossrail or the Hammersmith Flyover.

Businesses and freight operators made significant changes for the duration of the Games to their delivery activity because there was a clear need for them to do so. This could have been a specific restriction in place or the risk of not being able to carry out their business. As soon as the need was removed at the end of the Games, the majority of organisations reverted to their previous arrangements. If we would like to see these changes implemented under normal operations, we need to motivate the industry in a similar way.

Changes which are likely to result in cost increases for businesses and freight operators are unlikely to be sustained. Many changes could be introduced for a short period of time for business continuity purposes but it is unlikely that changes will remain in place in the long term if they result in increased operating costs. For many, making overnight deliveries is likely to result in increased costs as it would mean extending their operating hours and introducing additional staff shifts. It is therefore difficult to see night time deliveries being used extensively by the industry without any other motivational factor in place.