HOUSE OF COMMONS

Transport Committee

Oral evidence: Urban Congestion, HC 760

Monday 30 January 2017

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Watch the meeting

Members present: Mrs Louise Ellman (Chair); Clive Efford; Robert Flello; Mark Menzies; Huw Merriman; Iain Stewart; Graham Stringer; Martin Vickers.

Questions 69 -174

Witnesses

I: Andrew Byrne, Head of Public Policy, UK and Ireland, Uber, Ali Clabburn, Managing Director, Liftshare.com Ltd, Christopher Snelling, Head of National and Regional Policy, Freight Transport Association, Sam Clarke, Director, Gnewt Cargo Ltd, and Professor Tom Cherrett, Professor of Logistics and Transport Management, University of Southampton.

II: Peter Coates, Managing Director, National Express West Midlands, Kevin O'Connor, Managing Director, Arriva Bus UK, and Professor David Begg.

Written evidence from witnesses:

- Uber
- Freight Transport Association
- Professor Tom Cherrett, University of Southampton
- National Express West Midlands
- Arriva plc

Examination of witnesses

Witnesses: Andrew Byrne, Ali Clabburn, Christopher Snelling, Sam Clarke and Professor Tom Cherrett.

Q69 **Chair:** Good afternoon and welcome to the Transport Select Committee. Mr Flello has an interest to declare.

Robert Flello: I declare my usual interest on the register. The all-party freight transport group has support from the Road Haulage Association.

Chair: Thank you. Would our witnesses give their name, organisation and position?

Andrew Byrne: I am Andrew Byrne and I am from Uber.

Ali Clabburn: I am Ali Clabburn, the CEO of Liftshare.

Christopher Snelling: I am Christopher Snelling from the Freight Transport Association.

Sam Clarke: I am Sam Clarke from Gnewt Cargo, a last-mile distribution company.

Professor Cherrett: I am Tom Cherrett from the University of Southampton transportation and research group.

Q70 **Chair:** Thank you. Professor Cherrett, how do we know for sure that the trend towards smaller vehicles for urban deliveries is the major cause of congestion—or is it?

Professor Cherrett: There is some evidence pointing more towards that, but there is still quite a bit of work to do looking at the real impact of vehicles on the street. INRIX did a study in May 2016 called "London Congestion Trends," which shows that within the congestion charging zone 17% of vehicles are now LGVs. That is increasing year on year, so between 2012 and 2015 it went up by about 7% or 8%. We have more small vans coming into urban centres. The other issues are things like same-day delivery. We see more same-day delivery demands from customers. About 10% of the parcel market at the moment is for same-day delivery and that inherently leads to less efficient logistics practices.

The other interesting angle to touch on would be the loss of network capacity. We obviously have more priority for bus lanes and cycle lanes, which is very laudable, but what does it do to freight vehicles? Transport for London has calculated that there has been about a 30% loss in the proportion of network capacity for private motorised vehicles. That is an issue. On the side of that, about 20 years ago retailers had a 60:40 split between retail selling space and back-store space, and it is about 80:20 now. They are using as much space as they can to sell. That means many more delivery vehicles coming in. The picture is that there is more van activity. The interesting thing is what the real impacts are on the street.

Q71 **Chair:** It is not just about more of the smaller vehicles; it is also about road capacity and road space—is that what you are saying?

Professor Cherrett: If you take a classic parcel delivery vehicle, which we have been looking at recently in a freight traffic control project, some of those guys make 120 transactions in a day over eight and a half or nine hours. The vehicle may stop 35 times. The interesting part of that is that they are only driving about 6 km; 77% of the round can sometimes involve walking, so the vehicle has to be stationary somewhere while the driver is out delivering. How do we cater for that? We are really not thinking about that in terms of urban planning. There is less space—

Q72 **Chair:** Is it a London issue?

Professor Cherrett: It is very much a London issue, but we are seeing it in other major cities as well. It is thinking more strategically about how urban planning can cater for last-mile freight operations. That is quite an important thing. To be fair, we do not quite understand the impact of multiple carriers trying to get into scarce urban space.

Q73 **Chair:** Mr Snelling, do you agree with that?

Christopher Snelling: I agree with some of the analysis about the potential changing trends within freight, which are certainly all worth examining. The first point of caution I would make though is that we say vans and we automatically talk about freight. More vans are used for servicing activity than they are for freight. Even if we are looking at a change in the number of vans on the street, we need to do an awful lot more work to ascertain what those vehicles are doing. Far more are used for servicing than for freight, so it is not automatically a freight issue.

We would certainly reinforce the point about road space. Using London as an example, the number of vehicles on the road has remained static. The change has been the removal of road space for motor vehicles. We see that as the primary driver of the increased congestion in recent years.

Q74 **Chair:** Is there anything the Department should be doing about it?

Christopher Snelling: We could do with more research and understanding. We want there to be good public policy on the basis of proper understanding. It is too quick and easy simply to assume that one sector we have all heard about because it is in the media—something like same-day delivery—must be the cause. We are a long way from knowing if that is actually true. There is then more work that needs to be done on evaluating what the benefit is to the economy and society versus other users on the road. There is a lot more information that can be gathered, but beyond that it is also about good advice to local authorities around the country and in cities on how they plan urban transport. We need to understand very carefully the effects of everything we do on the road, including things like the cycle superhighways, for all the benefits they can bring.

Q75 **Iain Stewart:** Our predecessor Committee in the last Parliament, in the run-up to the London Olympics, did some work looking at how the extra traffic volumes were going to be handled during the games generally, and specifically on the cycling days, when road space would be seriously reduced. There were some attempts to co-ordinate deliveries and reschedule them. Has anyone done any analysis of what worked or did not work during the Olympics that could inform future planning?

Christopher Snelling: Absolutely. There has been a lot of work and a lot of research on that. To a certain degree, all things are possible on a temporary basis. That is one of the lessons from the Olympics. Finding things that can be permanently achieved is much more difficult. We have learned a lot from it about efficient use of road space, particularly in our case about the potential for moving deliveries out of peak hours and getting them moved at other times of the day. It has proved to be a very slow process to get that further integrated in the supply chain. There are regulatory restrictions from local authorities, but let's be honest, there is also simple "business as usual" practice on our side. It is a lot to overcome. Further support for looking at how we can make best use particularly of the night time for quiet deliveries will be one of the most beneficial areas where we could still build on what we learned from the Olympics.

Q76 **Iain Stewart:** Who should be driving that? Whose responsibility is it? Is it the Department or local authorities?

Christopher Snelling: To a certain degree some of it will be driven at local level, but I think there should be impetus from the Department at national level to encourage cities to look at it and set up systems for how it can be done efficiently. There is obviously a lot of concern when you start talking about night-time deliveries—noise and disturbance to neighbours. There are an awful lot of ways it can be done very quietly and unobtrusively. If the Department supports that effort, it is to the benefit of the transport network as a whole.

Q77 **Iain Stewart:** You said some work has been done to take forward the evidence that was found during the Olympics. Who actually is doing that work and who holds the evidence? Is it yourselves or another body?

Christopher Snelling: For us, it is about trying to put things into practice and make things happen. One of my colleagues is chairing Transport for London's retiming deliveries consortium, which is trying to put practical projects on the ground now. We have several supermarkets involved in that and several local London councils, trying to make it happen on a continuing basis. For us, it is more about trying to take the practices that were done then and trying to put them in place on the ground to make it work by testing it.

Q78 **Robert Flello:** What I have heard so far from the panel suggests to me that you are in agreement with what Transport for London said in written evidence to this Committee. Broadly, they say that overall traffic levels

have actually fallen since the congestion zone was introduced but congestion levels have returned to pre-congestion zone levels, which is a consequence of works to provide, among other things, more road space for walking and cycling. On that basis do you agree that, broadly, Transport for London is right and that, yes, traffic has fallen but the problem is how the roads are used?

Christopher Snelling: We have certainly seen that. We surveyed our members on the direct impacts of the cycle superhighways in London, and they have certainly reported substantial increases that can be attributed to those. Yes, we think that is generally true from our side.

Q79 **Robert Flello:** Another thing that Transport for London said to us in written evidence was that their approach looks to minimise the number of freight trips made by road and distance travelled. This delivers the largest benefit, as the safest, cleanest and least congesting trip is the one that does not happen. That seems to suggest that Transport for London is saying that the best freight delivery is one that does not happen. Is that realistic?

Christopher Snelling: Certainly not. It is a valid ambition when you are talking about motor vehicle passenger movements—it can work in that context.

Robert Flello: But this is specifically freight.

Christopher Snelling: Exactly. In the context of freight it has to move by one way or another. It is a physical product and it has to be moved. Motor vehicles carry out 90% of the freight movements in London. However much use we make of the river, the waterways and the railheads in all our cities around the country, road will always massively remain the predominant mode. The only way to reduce that is to buy less and eat less in our city centres, which is unrealistic.

Q80 **Robert Flello:** Even if the vehicles are electric or there is some form of non-polluting vehicle, there will still be vehicles and there will still be congestion.

Sam Clarke: I can take that one, because all my vehicles are electric.

Robert Flello: I hoped that you would jump in at that point.

Sam Clarke: You are absolutely right. Those vehicle movements still need to happen. One of the things we have noticed over a period of a number of years is complexity in the amount of deliveries; the type of ways we have to deliver has diversified over time. There is more time-slotted delivery and more same-day delivery, whereas in previous years it was simply a next-day service. That adds to the complexity. Part of what TfL might be referring to is the fact that some of those deliveries need to happen, but perhaps in a more joined-up, consolidated fashion rather than offering the consumer too many choices that mean we have to put considerably more vans on the road to deliver the same volume as a result of all these weird and wonderful services, which are largely being

driven by the consumer and the retailers and not by the logistics companies themselves.

Q81 **Robert Flello:** Is it not also true that the more vans that go on the road, the more congestion, which means that more vans are needed on the road to counter the congestion?

Sam Clarke: Yes. In December 2015 I wrote to the head of freight at TfL at the time about a concern I had with the number of roadworks surrounding the buildings that we occupied in central London. We were having to put more vehicles on the road to compensate for the fact that the traffic was so high. It is a vicious circle, really.

On the point about the Olympics, certain things happen in London for which we are well prepared, such as the Olympics or perhaps the Tower Bridge closure of recent months. When that happens we all prepare for it, and London and TfL do a very good job of educating us. The Olympics was a very odd one, as so many people did not come into London because they knew that the traffic was going to be horrendous. I do not know how much of a comparison there is between that and the real world on a day-to-day basis. I am not sure we can gather too much evidence from the two things.

Q82 **Huw Merriman:** We have been supplied with some research by the RAC. It finds that vans are poorly used in terms of capacity. The figures show that nearly 40% were carrying less than 25% of their capacity, and on average vans were only 38% loaded. I take your point about capacity being eaten into by cycle lanes, but is it not also the case that the industry is not very efficient in terms of organising itself? Do you have any ideas as to how it can be more efficient? Should it be based on penalties for those who do not go along with innovation?

Christopher Snelling: First, I repeat the point that the majority of vans are used for servicing activity and are nothing to do with freight; it is tradespeople moving tools and going about their jobs, and that can sometimes get calculated into this. With capacity figures, you have to look at whether they are measuring both legs of the journey. HGVs typically measure about 50% utilisation because they are full on the way there and empty on the way back, and it gets written up like that.

It is also about cube versus weight. Some vehicles will be full but they will be using only a fraction of their weight percentage. That is not to suggest that all vans are moving around full; some are moving around part loaded. Once you have a load that is required by a customer at a certain time and is too large to move by any other means, you use a van. Companies look to fill vehicles as much as possible and share a load. That is how they make their margin so they are very commercially driven to do that. Wherever they can, they do it.

Q83 **Huw Merriman:** Can you give us examples, Mr Snelling, of where innovative ideas about sharing are going on?

Christopher Snelling: It is an integrated part of the business model. Everyone looks to do it as much as possible, but it is very difficult, especially with van loads, to match different customer demands. They are looking for a specific address at a specific time and, as has been said, sometimes now on the same day. The chances of being able to match that with another load coming from the same source, going to roughly the same destination, and arranging it all in the space of an hour in order to make your movement, or for a same-day requirement, is incredibly difficult.

Q84 **Huw Merriman:** I would agree with that, which is why I am not quite as confident that it is all the other causes that you have been talking about in terms of servicing and what-have-you.

Christopher Snelling: They are contributing factors that need to be taken into account.

Q85 **Huw Merriman:** If you do not know for a fact that all these great things are going on, leading to 100% capacity, I am not sure how you would know that it is not deliveries in the LGV sector that contribute towards the problem. I suggest that we do not really know.

Christopher Snelling: That is what I am trying to say as well. There are lots of other factors that could affect those figures, which means they would not be quite as stark as they might appear. We do not fully understand the state of play. As I said, more research in the sector is required. We need to understand more about how vans are being used to understand what drives any increase in the use of vans in our cities.

Q86 **Huw Merriman:** To take congestion charging in London, for example, would you like to see a situation whereby LGV operators are incentivised to run at above threshold capacity? I take the point that you need to work out how to measure and enforce that, but are those the type of ideas that you think could add to the mix and get congestion eased?

Christopher Snelling: Are you suggesting there should be some sort of measure to check that the vans are full?

Q87 **Huw Merriman:** I am suggesting there should be an incentive in place, through either the tax system or congestion charging system, that rewards companies that are running full to capacity rather than just using half their payload.

Christopher Snelling: We are interested in innovative ideas, but the caution about that is that companies are already massively incentivised to do that. If you take a second load in your van and fill it up, you make twice as much money because you are doing two deliveries. There is a massive incentive to do that. Where it does not happen, it is because it is not possible—compared with the customer need.

Q88 **Huw Merriman:** There is no disincentive not to, let me put it that way. You do not get charged extra in that particular way. If you have decided

that you are going to make that delivery and actually you have to wait another day for another—

Christopher Snelling: That comes to the nexus of customer need. An interesting area to get into is what the customer's incentives are. It is the customer who determines when and what gets delivered, and that is what you have to meet.

With some personal ordering services, the cost of deliveries is deliberately dissociated from the product. They want you to subscribe for a year, and after that all deliveries, anywhere and at any time, are free. There is no connection there, so the individual orders as they will. There is an interesting debate to be had about how that works and incentives around that, but a logistics company responds to an order from a customer. You cannot turn back to the customer and say, "No, wait for a day because I need to have a second load." The customer will simply turn to another logistics company, because they need to sell that product today.

Q89 **Chair:** Mr Byrne, is Uber responsible for congestion?

Andrew Byrne: I don't think so. We are obviously heavy users of the road. I would agree with lots of the points that my fellow panellists have made and note that particularly in London—I am afraid I know more about London than other major cities—while total traffic on the roads broadly remains static, as we heard, car traffic has actually been declining. I echo some of the concerns that the other panellists have raised about the actual causes of congestion in terms of diminishing road space. We absolutely support extra provision for cyclists and things like that.

We have our own data about when Uber cars are driving around at any point. There are a few things that jump out at us. The first is that we are a very small part of the road users in London. Right now there are typically around 4,000 Uber cars at any one time. That is a very small number compared with the 2 million or so cars that come in and out of central London over the course of a day. Our demand profile over the course of a week leads us to believe that very few of our cars are driving at peak time. We are a service that responds mostly to people who are heading home after they have had a drink or been to a pub. The vast majority of our journeys happen on Thursday and Friday nights. Over a quarter of our entire journeys happen between the hours of 12 o'clock and 5 in the morning over the course of the week. Looking at our imprint on the congestion charging zone, around 5.9% of our journeys happen in the congestion charging zone during congestion charging hours. The profile of when people use our service is one that is slightly dissociated from typical demand patterns, rush hours and things like that.

Q90 **Chair:** What work have you done on the mode of transport people who use Uber were taking before they used it?

Andrew Byrne: We have done polling. It is quite a difficult thing to study directly. The INRIX report looking at the causes of congestion in London, which was referred to initially, was something we commissioned. We provided our data to INRIX. We have also looked at polling and what people were using before. It seems that the single largest use case were people who were previously driving a private car. The other major use case that people use it for is as a complement to public transport. We found that one in four Uber journeys in London is to or from a tube or train station. As well as using public transport services, people use it for the first and last mile of their journey, whether late at night or early in the morning.

The introduction of the night tube has been the best evidential case that we have seen recently. Since the night tube launched in September or October last year, we have seen a fairly large fall in the number of Uber journeys within zones 1 and 2 during the night tube operating hours in London, but an even larger rise in Uber journeys in zones 3, 4, 5 and 6. That again suggests to us that individuals are taking public transport as far as they can and then taking an Uber or on-demand vehicle the rest of the way.

Q91 **Chair:** Tell me more about the work that is being done in establishing what mode of transport people who use Uber used to use. You referred to it in your comments, but what is the nature of the research that was done and who did it?

Andrew Byrne: Principally it is polling. It is physically asking people what mode of transport they used before, or indeed if they took the journey before.

Q92 **Chair:** Who conducted that research?

Andrew Byrne: We have worked with a number of different polling companies. We have worked with ORB International recently and YouGov before.

Q93 **Chair:** Was that about London or anywhere else?

Andrew Byrne: Principally about London, yes.

Q94 **Chair:** How many people were using buses before they used Uber?

Andrew Byrne: I am afraid I do not have those figures directly in front of me. I think perhaps it was in our written evidence.

Q95 **Chair:** You have spoken about the objective of sharing most journeys. Is that realistic?

Andrew Byrne: It is one of the key things we think about for cities, given rising population, rising demand for mobility and the fact that public transport will never quite get from door to door. We want to use the only extra capacity in the system, which is most often the spare seat next to someone in a vehicle when they are driving. It is something we

have worked on in London for about a year, and we have had over 2 million journeys in London using our uberPOOL product—2 million people who have chosen to share their journey. If those journeys were happening in separate vehicles, that is over 1.3 million miles that have been saved in London, 98,000 litres of petrol and 231 metric tonnes of CO_2 saved.

It is pretty early days for us in London. uberPOOL is a relatively small part of how the service operates. It is relatively new. In San Francisco and LA, for example, where the product has been going for many years longer, between 40% and 50% of all our journeys are shared journeys or uberPOOLed journeys. We might never get to a place where 100% of all journeys are shared, but if we can make a really big dent in the percentages of people it will be really positive for cities.

Q96 **Chair:** What percentage do you think is realistic?

Andrew Byrne: We would love to get to 30%, 40% or 50%, as we have elsewhere. It will take time in London to develop the use case and a loyal usership. Of course, that may change in a future when we might have driverless vehicles. We do not know about that yet.

Q97 **Robert Flello:** I am curious, Mr Byrne. In terms of the data you have, or might not have, are you able to make comparisons between cities that have good public transport like London, with the night tube and those sorts of things, and cities that have mediocre, poor or even non-existent public transport? Do you have that data, and if you have, what sort of conclusions have you been able to draw from it?

Andrew Byrne: Perhaps I could write to the Committee with some specifics that we could draw out. If I could make some general comments now, the most obvious case is contrasting it with what we have seen in the States, which has very car-heavy cities without the necessary public transport infrastructure that we see in lots of different places. There we see a very different use case for Uber: lots of people use it for commuting in Los Angeles, San Francisco and places like that in a way that does not happen, and is not a significant use case for us, in the UK.

I would also observe that the single most powerful way of reducing congestion is by having an excellent public transport network. In London, typically the use case is very much skewed to after hours, when the public transport infrastructure is not quite operating at the same level. We see greater uses and different patterns in a larger geographic city. Los Angeles is a good example—a city that is fundamentally larger, and so requires cars to get across it more often than walking, for example, or taking a bike and things like that. We see very different usage patterns in those sorts of places from what we see in the UK and London.

Q98 **Robert Flello:** Do you find that the car-sharing and pooling side of things is greater where it is more car heavy and there is very little public transport? Is that the sort of pattern you see? Are people quite happy to

car-share? Effectively, they are using cars as public transport.

Andrew Byrne: That is true to a certain extent now. It is not something we know the answer to yet. POOL has been operating in more car-heavy cities, but it has also been operating there for significantly longer. We often try different price mechanisms. We have not quite figured out how it would work in London. There are different ways of incentivising individuals to take POOL, whether it is the discount that individuals are provided with or offering a flat fare over the course of a week for individuals to take as many journeys as they like and things like that. We are still trying to figure it out and innovate towards a solution that works best for London.

Q99 **Chair:** Mr Byrne, you have told us that Uber does not cause congestion, but you also say that sharing journeys in Uber will reduce congestion. Those two statements can't be correct, can they?

Andrew Byrne: We recognise that lots of individuals choose to use the road for whatever reason and however they might want, whether it is using Uber specifically over and above anything else, or using a product like uberPOOL, which means that we can get more people in. We think that will make a significant difference to congestion. That is not to say that fundamentally we want Uber to be used as a complement to public transport rather than something that is competing with public transport. We want to make sure that individuals who are getting out at a tube station late at night or finishing off their journey at a major line rail station are able to get to their final point of destination by using a service that takes them all the way to their door but also has a full car when doing it.

Q100 **Chair:** Mr Clabburn, could you tell us more about Liftshare and similar organisations? How much difference can you make?

Ali Clabburn: Liftshare is a social enterprise. We have been going for 18 years. Our main area of work is helping people share their commute. We have a free service for the public and we work with large employers across the UK, and some globally, to help their staff share cars to work. Over 750,000 people have joined the network within urban areas and in exurban and rural areas. Our main growth comes from local, large employers promoting the scheme in their area. Many of those are city centre based or town centre based.

We have had about 30 million shared trips on the network since we went live. I was with one of our corporate customers last week: they are saving 24 million miles through their Liftshare scheme, with about 5,000 people sharing cars every day to their site. If you can encourage large employers, or any employer, in an urban area to share lifts—car-sharing—you can have a major impact on reducing congestion locally around those areas.

Q101 **Chair:** You say that Liftshare is saving around 100,000 car journeys a day.

Ali Clabburn: Yes.

Q102 **Chair:** How many of those would be single occupancy journeys?

Ali Clabburn: We ask people when they join. Typically, around 75% of people were using single occupancy vehicles when they joined. Some are already sharing, and they are sharing with more people. There are people on public transport such as buses and trains—every time train prices go up, we see people join, and we have seen people join as a result of the recent train strikes. I am torn as to whether getting people off buses is a good thing, but in rural areas where buses run with one person in them I do not have a problem with that one person getting off that bus and into a car. It is much more efficient.

Q103 **Chair:** What about more urban areas? Are you threatening the viability of bus services?

Ali Clabburn: There was some academic work done in Scotland some years ago. It basically concluded that the number of people moving across to car-sharing from public transport was equalised by the number of people who shared a car to work and then used public transport during the day. More people may share a car to get to work because it is more efficient, better and cheaper for them to do so, but once they have car-shared to work they use public transport during the day because they do not have their car on site.

Q104 **Chair:** Who are your rivals? Is it other organisations like yours, or is it Uber? Is it other companies or other modes of transport?

Ali Clabburn: Our main target audience are the single occupancy drivers. There are many more of them than there are competitors. In the UK there are 38 million empty seats every morning in the rush hour. They are our competitor and they are the people we are going after. What Uber is doing with uberPOOL is very interesting, particularly in urban areas, but you need huge critical mass to make that work. We target areas where there is not necessarily the right public transport network. We actually work quite well with some of the bus operators. We work alongside them, and where there are not buses we encourage car-sharing. We also encourage bus use where it is available.

Q105 **Chair:** You work with bus operators.

Ali Clabburn: Yes.

Q106 **Chair:** How does that work?

Ali Clabburn: For example, we work with Stagecoach. We have done a lot of work in and around the Warwickshire area. Alongside Liftshare we have another product called myPTP, which is a personal travel planning service. A company can upload all their staff postcodes and we know where they work and when they work. We press a button and then email all members of staff a personalised travel plan, showing all the different ways they can travel, including car-sharing, walking, cycling, bus or train.

When we first did it with a client in Warwickshire, there was a queue outside the bus ticket sales place when they were running a workshop that day. It was the first time that had happened so they thought it was a good thing. We now work with Stagecoach running similar events at other sites to encourage a proactive supply of personal information for people. It is increasing bus use and—

Q107 **Chair:** Are these formal agreements that you have with Stagecoach and other companies, or is it something that has just developed?

Ali Clabburn: It is not a formal signed agreement but it has been very successful for both parties. We are doing a lot of work with major employers using that model.

Q108 **Robert Flello:** There are millions of drivers in this country who drive diesel vehicles, many of them incentivised to do so by previous Governments and previous scientific advice. How do you think the proposals we hear about for slapping penalties on diesel drivers parking in places like Westminster will affect the viability of Liftshare? If the drivers all have diesel vehicles and are now being told that they cannot park them unless they pay a hefty fine, what is the likely impact?

Ali Clabburn: Based on past evidence, anything that affects a segment of the population will increase the amount of car-sharing. When congestion charging first came in there was a 20% rise in occupancy rates coming into London, but it was very under-reported; all the reporting was about the increase in bus use, but car-sharing became very popular during that time. In various cities in China they now ban odd and even number plates on different days. That has an impact on the amount of car-sharing. Yes, if they target diesel drivers you may find more people sharing petrol cars. It will not be a huge amount but it will have an impact.

Q109 **Chair:** Mr Clarke, how many vans does the work you do remove from the roads?

Sam Clarke: None.

Q110 **Chair:** What is the main benefit of the work that you are doing?

Sam Clarke: The main benefit for us is that we use an entirely electric fleet of vehicles. The main savings we are able to achieve are on carbon, NOx, PM10 and so on—the ugly stuff that the diesel vans produce. We are able to dramatically reduce those emissions within city centres.

The reason why I said none to begin with is that ultimately, at the present time, as a carrier's carrier, we are delivering via an electric vehicle that is a direct comparator to the diesel vehicle that was there previously. What we are trying to achieve, as was mentioned by Mr Snelling, is an element of consolidation and integration with various carriers so that we are able to consolidate different carriers' freight in the same vehicles. That is a much more complex thing to achieve from an IT

and a physical point of view, but, if it can be achieved, you start to make efficiencies in the way that the vans are delivering, and therefore reduce the total fleet count as a result.

Q111 **Chair:** Professor Cherrett, are you doing any work on the impact of this?

Professor Cherrett: As part of the new freight traffic control project we are looking at how carriers may be able to optimise their rounds together. It is typically every man for himself, looking at how their van can operate in an urban area. There could be gains by companies actually looking at what the benefits might be, if they are all in the same patch at the same time, of allocating work into certain zones. It is quite an interesting optimisation task, which is extremely challenging because the element of walking involved has not really been looked into that much. It is something that we are looking at from the perspective of carriers working together. It cuts across what Sam has just mentioned about collaboration and consolidation.

Q112 **Robert Flello:** I have two quick questions. Consolidation centres are a fantastic idea but London pricing of properties is slightly expensive. Doesn't that mean there need to be more consolidation centres in perhaps one of the most expensive bits of real estate, certainly in the UK if not in the world?

Sam Clarke: Yes. The general land use element has been a challenge in the seven years we have been doing this business. The amount of space available for industrial use has dramatically reduced. From 1998 to 2008 in the City of London alone there was a reduction of over 80% in the amount of industrial space, which was converted, as you say, to higher value residential and commercial real estate.

We occupy alternative locations such as railway arches—we have 25,000 square feet of railway arches south of the river—and we have converted a multi-storey car park into a warehouse. We are trying to utilise land that is not necessarily particularly attractive from a real estate point of view, and utilising space that is in other diminishing markets, such as car parking. We are trying to be creative and innovative with the spaces that are left, but they are rapidly diminishing. We would very much welcome anything regulatory that promoted and safeguarded any space that was available now, or indeed would be razed to the ground with something larger being put in its stead, if there were provisions in the planning to safeguard areas for consolidation within large buildings.

Christopher Snelling: We fully support the point about safeguarding structures. It is the same point we are always making about wharves on the side of rivers and canals. We need to protect these things. For us, part of the solution to the issue you identify is that the main benefit from consolidating is when you consolidate into the largest possible vehicle. One medium-sized HGV can take 10 vans off the road. If you were utilising that model you might be able to have your consolidation centres

further out, where the real estate is less expensive. That is another part of the mix in terms of achieving maximum efficiency.

Q113 **Robert Flello:** To follow up on that point before my second question, perhaps one of the things Transport for London should be looking at if they want to reduce pollution caused by congestion is to make land available or find innovative ways of having consolidation centres. Is that correct?

Christopher Snelling: Yes.

Q114 **Robert Flello:** My second question is this. One of the issues with congestion, even with electric, non-polluting vehicles themselves, is that anything that creates congestion means that the vehicles that are not electric pollute more. Anything that slows traffic creates more pollution. Is that an issue you have concerns about or have any comments on?

Christopher Snelling: Certainly when we look at the effect of congestion on an HGV, we know from one of the manufacturers that, if you compare a vehicle stopping twice a mile and getting back up to speed with one that just cruises at 30 mph, you are looking at a tripling of emissions. It is not a marginal effect but a massive exponential increase. That is in addition to the cost of operating. Colleagues have already made the point that once you reach a certain point of delay, in order to still deliver the goods that are needed, you have to put more vehicles on the road, so it increases exponentially. Whatever is causing the congestion has a massive impact on logistics and thus the whole economy.

Q115 **Robert Flello:** To follow up on that and being slightly less controversial than I may have been on previous occasions, if TfL decided that it was going to have electric-only vehicle lanes and therefore, in TfL's own words, reduced the level of road space available to non-electric vehicles or polluting vehicles, that in turn would mean more pollution because of more congestion.

Sam Clarke: I would welcome electric-only vehicle lanes.

Q116 **Robert Flello:** I thought you might, but surely it will create more pollution because it means that traffic on the road that pollutes is going more slowly, stop-start, and therefore it is actually creating more pollution, not less pollution?

Sam Clarke: Quite possibly, but looking at it from that angle is reactive. We need to be more proactive and try to reduce the number of vehicles in the first instance by having the correct legislation and guidelines to ensure that we reduce the number of vehicles at source; otherwise the horse has somewhat bolted and we are trying to correct the problem when it has already begun.

Q117 **Iain Stewart:** The country already has a consolidated delivery system. It is called the Royal Mail and it has a universal service obligation. Is anyone doing any research into how you could, while not transferring

everything to Royal Mail, have deliveries for domestic purposes at least, if not commercial, deposited at a Royal Mail distribution centre? They could then either be kept there for people to collect or be delivered as part of the daily rounds. Is anyone innovating something like that?

Professor Cherrett: There are interesting concepts of collection and delivery points. The French have what is called the ELP system, which looks at nearby delivery areas. It has to be sponsored by somebody. They are on a small scale, so it is not like putting it into a large provider. They identify what Sam was hinting at—areas of urban space where there is a landlord who is willing to host a site that maybe six vans could use. They can offload product that can then be redistributed via electric van or barrow couriers, and so on. There are examples in Europe where that kind of thing is being done, but not so much here.

Christopher Snelling: I am certainly aware that in major new housing developments they are looking at how deliveries and servicing are managed so that they are much more integrated than they would have been in the past. There is some suggestion of locations where there will be a central point for collection and delivery within an estate rather than individual collections, other than the Royal Mail. It is something that other services are looking at. There is the question of office buildings and whether they allow the receiving of personal deliveries. A lot of those questions are now being asked by places, because it is about what is efficient use of the road space.

Q118 **Iain Stewart:** How would we encourage such a system? Do we just leave it for the market to innovate those products or services? Do we need a carrot and stick approach from Government, whether it is central or local?

Christopher Snelling: I would say again that the first thing we are lacking is full information. It is very easy for us to sit and work on the assumption that the increase in van traffic is due to next and same-day deliveries or multi-day deliveries. As I said, the majority of vans in the first place are for servicing activity. Theoretically, it could be that the entire change in van traffic is due to the fact that there are more gardening services or more plumbers moving around. It could be all those things, but we do not have a strong enough evidence base to know. We need to understand more about which aspects are changing and what is having what effect, so that we know what we need to work on to try to improve the use of road space.

Q119 **Huw Merriman:** Would you support changes in congestion charging, both for London and other local authorities where they apply it, so that it is priced on the basis of usage and time in the congestion charge zone and not just on entering?

Christopher Snelling: Our perspective is that we are interested to explore the topic of further road pricing. Obviously we would pay it so we would be losers, but if it managed congestion we could be beneficiaries as

well. We want to see road pricing focused on those who have an alternative—if there is another way you could make your journey by more efficient means, whether it is sharing or public transport. You need to look at the people who can change; that is the most important focus, otherwise it becomes purely a form of tax or charge. What you need to do is drive behaviour change on the road. In our case that would be encouraging consolidation into larger vehicles, so that there are fewer vehicles on the road. As I said, that is very difficult because you are responding to particular customer needs, but it is something that could potentially play some role.

Professor Cherrett: It is the customer with the smartphone pressing "Buy it now." If I choose the time in the delivery option that is going to cost me more because it has been factored in, the congestion charge could be used in that way if a van delivers at certain times. That may be an interesting area to explore further—whether it would change people's purchasing behaviour if the cost of getting deliveries at certain times was altered.

Sam Clarke: That is a valid point. A lot of colleagues around me sit on various panels. We talk about these elements considerably, especially in London. Often there are councils, boroughs, the Government and the freight industry, but very rarely are there any retailers in those conversations. That is a piece that is lacking, because free delivery does not exist. There is no such thing as free delivery. We are all paying for it; we just cannot see what we are paying for. That element creates a scenario in consumer purchasing that distorts the market. The "buy it now and get it within an hour" type mentality is part of the contributing factors in the increase in congestion.

Q120 **Huw Merriman:** Coming back to the point in general, are you almost advocating that you can assess a commuter's journey? Let us say they come from Tonbridge in Kent. We know there is an alternative, albeit rail. Therefore, you absolutely put in a large price differential for them if they drive, whereas we know that delivering a fridge to the centre of London probably is not going to be an easy job by rail, so a much lower differential is put in. Is that the type of thing you are looking at in terms of being intricate, or is it more of a general theme?

Christopher Snelling: That is certainly what you have to explore. The question would be identifying the groups that would change. If it is single-occupant car users instead of multiple-occupant car users, it is targeting the specific groups who are most likely to change behaviour and then looking at the mechanism that will make them change. Will the logistics industry change its delivery patterns if it pays the extra charge, or will customers say, "No, I still want it at that time and I'll just pay the extra"? It is not going to have any purpose if the latter is all it does. Identifying the bit that can change and then asking what will make it change would be an interesting piece of work.

Q121 **Clive Efford:** I want to follow up on consolidation centres. As I

understand it, they would be centres where several different last-mile delivery companies operated from. Is that right?

Professor Cherrett: Potentially, yes. A lot have been used over the years and a lot have not been successful. Essentially, you have a point in the supply chain where multiple different supply chains can come in and drop off products, which are then taken out in single vehicles. Bristol Temple Meads is one of the most long standing; it has reduced the number of freight trips into the centre of Bristol by over 70% just consolidating on to single vehicles.

Q122 **Clive Efford:** They share the vehicle over the last mile.

Professor Cherrett: Their products are collectively put on that vehicle for the last mile.

Q123 **Clive Efford:** Where is the competition between the companies in that system? I take you back to the point that was made earlier on. We already have Royal Mail that does something like that. Why would we want to reinvent the wheel?

Christopher Snelling: Royal Mail is only a tiny fraction of freight. It is personal deliveries or business office deliveries of mail. The parcel sector is only a tiny fraction. We are talking about everything from building materials to waste, to retail for shops. It is a vast quantity.

I would add a note of caution. Consolidation centres are always a good thing when we can make them work, but there is a danger that because it has a label we attach some sort of magic importance to it. It is not about what consolidation centres would do; they have been in use for decades. In a business like DHL that is exactly what they do. It is exactly what Sainsbury's and Tesco do. They consolidate in one location and then they send in full vehicles.

What we want from consolidation centres is help in making sure that the vehicles that go in, frankly, are as large as are suitable and as full as possible so that we can minimise the number of routes. That can be something very distinct like the Broadmead supply centre that was mentioned, which is 40% funded by the local council and runs electric vehicles; it is very regimented that way. It also happens in every walk of logistics at the moment. It is already there in a lot of cases.

Q124 **Clive Efford:** Just so that I am clear, the vehicles go into the consolidation centre from which the goods are distributed and you want them to be as big as possible.

Christopher Snelling: Yes, for urban deliveries in general we would want to consolidate loads into as few vehicles as possible, which means into medium-sized vehicles.

Q125 **Clive Efford:** That is the long-distance delivery to the consolidation centre.

Christopher Snelling: No, that is into the city, because that is how you get fewer vehicles.

Q126 **Clive Efford:** Bigger vehicles into the city.

Christopher Snelling: Not bigger than we currently have, but using the biggest vehicle that is suitable. A mid-sized HGV, for example, can take the same as 10 vans. There is no point sending 10 vans to the same location. That creates congestion. If you could consolidate those 10 loads into one medium-sized HGV and send that instead, that is how you reduce congestion. That is what a consolidation centre in this context is all about. Its sole purpose is to get things consolidated into a larger vehicle.

Q127 **Clive Efford:** Mr Clabburn, on car-sharing, when you answered earlier you spoke about having an arrangement with Stagecoach. Is that to the terminal? Are you picking people up at home and dropping them off at a transport terminal where a transport operator takes them on the longer journey, or are you competing along the entire distance of the journey with a transport operator? Do you get what I mean?

Ali Clabburn: Yes. We do some trips to train and bus stations, but predominantly it is working with the operator almost against a single occupancy car user.

Q128 **Clive Efford:** I am sorry if my question sounds a bit facetious but what is the point of you? Why don't we just get them on to multiple user transport like trains and buses rather than a couple more people in a car?

Ali Clabburn: Because for many trips, probably the majority, two or three people in a car is the most efficient way for them to travel. For intercity travel, yes, trains and buses are great, but for many people who work in out-of-town centres buses and trains just are not viable for those journeys. The reason the car is king is because—

Q129 **Clive Efford:** It is in that area of transport that you mainly operate—where there aren't major transport terminals or major bus or train routes.

Ali Clabburn: Predominantly, yes. There are some intercity trips where the train has become too expensive for many people. Part of our social enterprise mission is to solve transport poverty, and trains are literally out of the reach of people. Sharing a car undercuts the train price many times over.

Q130 **Clive Efford:** Mr Byrne, how many additional private hire vehicles are there on our roads as a result of Uber?

Andrew Byrne: It is a difficult question to answer specifically for just ours. We have around 30,000 in London. Some of those are shared; some of those are people who drive very few hours across the week. Typically, the average Uber driver drives around 25 hours. As I mentioned to the Committee earlier, between 4,000 and 5,000 private

hire vehicles on the roads at any one time—for example, right now—are Uber cars.

Q131 **Clive Efford:** From the figures I have heard, 30,000 is a low estimate. How many of those are drivers who have switched over from another company and how many are additional cars on the road?

Andrew Byrne: The vast majority, certainly for the first two years when we launched and recruited most of those individuals, were people who came from other private hire operators. In the last year, we have seen that change to a certain extent. Now a significant number of people are choosing to join from a different occupation or from unemployment.

Q132 **Clive Efford:** Do they own their own cars or do they lease from you?

Andrew Byrne: They do not lease from us, but they can lease from a rental car operator. They can either finance or own their own vehicle.

Q133 **Clive Efford:** Do you provide the finance? Are you involved on that side at all?

Andrew Byrne: No, we do not.

Q134 **Clive Efford:** Are they all entirely self-employed?

Andrew Byrne: Yes.

Q135 **Chair:** How realistic is it to replace urban delivery vans by drones or on-street robots? Mr Clarke, do you have any ideas on that?

Sam Clarke: It is a very unlikely outcome. Drones or autonomous units have a place in certain environments, maybe in campuses or in places where there are fixed A to B and back to A again type movements. The thought of our drivers being replaced by drones trying to deliver to a fourth-floor flat in Kensington I find quite unlikely. If they have two items, the other one will be delivered by a van anyway. Drones as a means by which to deliver anywhere near an urban area are logistically impractical and, health and safety-wise, a potential nightmare with things flying above your head.

Q136 **Chair:** Professor Cherrett, do you have any ideas on that?

Professor Cherrett: As Sam mentioned, there are some areas. Research and trial projects have been done. In Scandinavia, they are servicing small islands. Potentially you can look at other avenues; we have done some work looking at the theoretical movement of things in the hospital domain. You can look at pathology samples if it is fixed, point to point, to clinics. The number of vans used in services like that is quite considerable to move very small samples around. There are elements in things like the NHS supply chain where small point-to-point movements might theoretically work quite well with a system like that. Indeed, in relief situations and in other parts of the world, in various developing countries, they are using drones very successfully to move samples around. That is actively happening. There are examples, and other trials of pavement

drones and things. I agree with Sam; I don't think I'll see them on my drive in the foreseeable future delivering a package.

Q137 **Chair:** You do not see them replacing urban vans.

Professor Cherrett: Not in the immediate future, no.

Q138 **Chair:** You said earlier, Professor Cherrett, that urban planning had not really taken account of the changes. What sorts of changes should be made?

Professor Cherrett: Some of the interesting things related to how new builds and building design think about what freight, and particularly service visits as well as core goods deliveries, will be attracted by people. This is especially with things like same-day delivery being demanded. As a result of the Olympics, there is a delivery and service plan concept that TfL have used very successfully. It is like a green commuter plan, but obviously you are doing an audit of a business to understand what core goods and service visits it receives. If that could be an ongoing process, so that businesses are continually looking at what they are generating, you would get an improved wealth of information about what types of land use generate what types of delivery over time. That is an important thing to look into.

Obviously the Department for Transport already collect data on heavy goods vehicle use. Back in 2003, they used to have specific surveys related to van use. That was stopped because of cost, but it is something else that could be reintroduced to help us get the better information we have been talking about.

Chair: Thank you very much, gentlemen.

Examination of witnesses

Witnesses: Peter Coates, Kevin O'Connor and Professor David Begg.

Q139 **Chair:** Good afternoon and welcome to the Transport Select Committee. Could you give us your name and organisation, please?

Kevin O'Connor: I am Kevin O'Connor from Arriva.

Professor Begg: I am David Begg. I am here because I was commissioned by Greener Journeys to write a report on the impact that congestion has had on bus passengers.

Peter Coates: I am Peter Coates from National Express Bus.

Q140 **Chair:** Professor Begg, the Bus Services Bill's primary focus is the regulatory arrangements. Do you think enough attention has been given to traffic management and congestion issues, or is it a missed opportunity?

Professor Begg: No. There is a lot of really good stuff in the Bus Services Bill. I support the attempts by Government to try to create an

environment where bus patronage will grow, but there is a hurricane coming that the buses Bill is not going to deal with. That hurricane is not just around congestion; it is around disruptive technologies and the changes that are taking place in society, with the big shift towards online shopping and how that is undermining bus use. It is about the impact that car-sharing facilities—Uber share, and so on—will have on the bus market. The buses Bill certainly is not dealing with traffic management. In my report I said—I still stand by this—that congestion is a disease that, if not dealt with, will destroy the bus sector.

Q141 **Chair:** The Bill proposes new forms of partnership. Do you think there is enough power in those partnerships, or potential power, to be able to change the situation in relation to buses running more easily, lessening congestion and making them more attractive?

Professor Begg: The Bill will strengthen partnerships. It will certainly enhance partnerships. What I do not have visibility on yet is whether these partnerships will get together to deal with the impact that congestion is having on buses. In my report, I recommended that there should be targets set at the very least to try to stop bus speeds from continuing to fall. I have not seen any evidence yet that there is any willingness to set such targets.

Q142 **Chair:** Would either of our other witnesses like to comment? Do you think the Bus Services Bill is going to improve buses and make them more attractive?

Kevin O'Connor: We personally welcome anything that draws attention to that. The fact that the buses Bill has caused quite a few conversations around what can be done to increase bus patronage is something that most people can agree with. Some of the Bill is quite contentious, depending on whether you think a particular mode is the best way to run buses.

Picking up on the point about partnership and what it can achieve, we recently signed an alliance in Liverpool and had one of the first board meetings a few months ago. The people we had in the room were very different from those we had previously: we had people representing highways and we had the police, the chambers of commerce and the local enterprise partnership. Previously it could be quite difficult to get everyone in the same room and focused on the same thing. We have not quite managed to agree yet on a minimum bus speed target, but just having everyone in the same room is definitely a step forward. It is probably worth saying that we did not need the bus Bill to do that.

Peter Coates: I absolutely endorse that. In the west midlands we have been working in our bus alliance for over a year now. Again, we have the right people in the room who can actually make a difference to bus speeds. We certainly want to set targets to see a reduction in congestion and an increase in bus journey times.

Q143 **Iain Stewart:** I would like to relate the comment you have just made to some of the comments from the previous panel of witnesses. I think you were all in the room to hear them. It is about the potential for car-share services, whether Liftshare or uberPOOL, to work with bus operators; the chap from Uber was saying that Uber cars were used for the last bit of a journey from a tube station. Can you talk me through what you see as the way bus companies could work with those private innovators of car services to complement bus usage rather than replace it?

Kevin O'Connor: One of the great things about bus is that it takes people very close to their door. There is a lot of focus on that, and as a business we operate in a lot of different countries and see lots of different models. There are some people who are put off because it is not a door-to-door service, but we can do much more in terms of making sure people are informed of where the bus starts and finishes.

We did a lot of research last year, and it continued throughout the year, into non-users. Quite a lot of companies focus on their existing customer base, but we looked at non-users. The most feedback we had was that people wanted technology. People were put off about where the bus stopped and whether it would get to where they need to go. They were a bit nervous about getting on a bus and not being able to see that. We invested a lot in that technology. We also gave all our open data to Google for free, so that when people are using Google planner they can use it. Our focus needs to be on understanding why people do not use public transport, and making it as attractive as possible. To pick up on a previous point—I am sure we will come on to congestion—if we can make it even more preferential to use a bus in terms of bus speeds, that helps us more than anything we can do alone.

Professor Begg: The customer is going to insist that bus companies work with car share companies, for the simple reason that mobility counts. I am still a bit guilty of yesterday's thinking, where I think about trying to get modal shift, with more people on buses and trains. I am still of the generation that keeps thinking that way. I keep having to jolt myself and say, "It's all about mobility now." The role of Government is not to achieve outputs in terms of modal split but to achieve outcomes in terms of a stronger economy, less pollution, a more equitable society and safety.

Mobility as a service is coming. When someone like Amazon moves into the space and has hundreds of thousands of customers in the UK, they will insist that their customer can jump on to a bus or train, or use a Liftshare or a car share. I was interested in the previous session; if we could just get car occupancy rates up even from 1.2 per vehicle for commuting trips to 1.3, it would make a massive difference to congestion. People from my generation say, "Oh, people never share vehicles." That is our view, but the new millennium generation have a completely different view of what the Prime Minister calls a "sharing economy." The answer to your question is that the mobility account

providers are going to insist that there is co-operation between bus companies and the new disruptive entries to the market.

Q144 **Iain Stewart:** Is there a barrier to that happening? Mr O'Connor, you have shared your data, but lots of companies do not. They guard their data for commercial reasons. As I see it, one of the barriers to developing the type of mobility product that Professor Begg referred to is the lack of complete open data. Is there a role for Government to try either to incentivise or legislate?

Kevin O'Connor: There is a section in the bus Bill on open data and trying to encourage open data. I think that is part of it. In TfL's model, they have tried to encourage people to use their data for free and to develop apps. As David said, we did not do it for any altruistic reason. We want people to use public transport. We do not really mind what public transport they use, because, if it is in our area, hopefully they will use our services. There is going to be demand from customers, and people who do not do that or do not have technology that matches will lose out. Part of it is encouraging people through legislation in terms of open data, or insisting, but I think customers are going to demand it.

Q145 **Chair:** Is that realistic? Surely in the real world you want people to use your services and not somebody else's.

Kevin O'Connor: I do, but I am also realistic, and the first barrier is to get people comfortable with how they plan and use a journey. If we had just gone to Google and said, "You can only use the data in the areas where we operate buses," first, they would not have been very happy; but, secondly, it just makes it clumsier and difficult for people. People start and end their journeys in different areas. We are also doing quite a lot of work collaborating with train companies, including ORR and others, just to increase visibility. There is a lot more that we can do to make people's journey simpler. If people start getting used to public transport, they will ultimately use our services, but just focusing on our area is too narrow.

Q146 **Chair:** Mr Coates, what are the barriers to open information? Is it a commercial interest?

Peter Coates: Like Kevin, we are certainly sharing our data and working on improvements to get location and speed, so that the data is richer and people can use it to develop apps and get people used to using transport. We are very aligned on that. There are already incentives for all our vehicles to be tracked, with automatic vehicle location systems. That is also helping to look at where bunching of buses is occurring. Sharing data is something we are very keen on and working hard to achieve.

Q147 **Clive Efford:** I want to go back to Professor Begg's point about occupancy rates—that if you just put it up 0.1%, it would deal with congestion. If I have got it right, from everything we are told, what is finite is road space. If you create any space on the road, something will come in and fill it. Even if we got occupancy rates up, we would get more

van deliveries or something. What consolidates that gain of increasing occupancy to stop it all just being infilled?

Professor Begg: This is language that has not been used for 10 years. When we had the transport innovation fund 10 years ago and the Government were talking about road pricing being a case of when and not if, we always said that anything we could do to reduce traffic and improve traffic flow in a given corridor would have to lock in the benefits, otherwise you are right and the roads fill up and we go back down to an equilibrium level of traffic.

What has changed over that time period is this. We always thought the equilibrium level of traffic speed was higher than we found it to be. We have gone to a level of traffic speed at equilibrium level in London that is much lower than most people would have anticipated. I suspect that is because of the two categories of vehicle that are increasing exponentially, which are private hire vehicles, Uber-fed, and vans. Their commercial model will not allow them to take vehicles off the road, whereas motorists will disappear. What has happened is that the equilibrium traffic speed has dropped. Motorists have said, "I'm not going to travel; I've had enough." That is why we have fewer cars on the road. The other categories of vehicle are not dissuaded. In fact, as we heard in the previous session, there are actually more of them, to deal with the inefficiency due to traffic congestion.

Q148 **Robert Flello:** I have a couple of questions about bus lanes, but before that I want to explore a bit more about the service. If you are in my constituency and live on the Newstead estate and perhaps have a job at the Amazon warehouse, as the crow flies it is not far away at all. If you can get a bus—very rarely can you get a bus—from Newstead into Longton, then you get a Longton bus down to Stafford, and then the Stafford bus, if there is one, to where the Amazon warehouse is, and it is a very difficult journey. It is much easier to jump in a car. In some cases, it is impossible because there are no bus services. We have this problem. We want to deal with congestion, but in places like my constituency there just isn't a service for people to use instead. What do we do about that?

Kevin O'Connor: It is difficult to comment on your particular example.

Robert Flello: But it is not the only example.

Kevin O'Connor: We are in business to try to maximise occupancy and follow demand. If there is a demand, our job is to fill it and hopefully predict it before it comes. We have done a lot of work with Amazon fulfilment centres, going in and selling—much like the example of Liftshare. The bus companies can do that themselves as well, in terms of promoting their services and changing the networks. One of the great things about the model at the moment is that there is a lot of flexibility, and we can choose to be dynamic and register services to meet demand, but, first, it is beholden on the bus operators to be able to see that demand. Unfortunately, it is not always there. We do not have a system

with endless subsidy so that we can cover every area. If it is not commercially viable, unfortunately it will not be there, but if there is demand it is beholden on us to try to seek it out. We are doing much better in terms of linking with establishments that recruit a lot of people.

Q149 **Robert Flello:** But, equally, you are not going to take a punt on putting a bus between Newstead and Longton just in case there might be some people who want to go to work there.

Kevin O'Connor: It depends on how many people there are. We take punts every day. If somebody is employing a lot of people, we have conversations. We do a lot of deals in terms of giving discounts to employees. We can do schemes where they pay out of their wages on a monthly basis to help in terms of budgeting. There are a lot of examples. If we see demand like that, and we have businesspeople who focus exclusively on commercial enterprises like that, we would definitely take a punt.

Q150 **Robert Flello:** We perhaps need to have a separate conversation about that.

Kevin O'Connor: I think we do, yes. It sounds like there may be another opportunity there.

Q151 **Robert Flello:** I will return to the two questions I wish to ask. They relate to the regulation around some bus lanes, and London is a typical example. You start driving down the road and it says, "Bus lane from 7 to 7." You turn the corner and the bus lane is only in the morning. You go a little bit further and it is, "Bus lane 24/7." Do you not think there is a problem and it is creating more problems than there need to be with bus lanes?

Chair: Who has a view on bus lanes?

Professor Begg: There is no consistency, no. It is really confusing for motorists who want to obey the law when there is such confusion.

Q152 **Robert Flello:** In that case I will move quickly on to my second question, which is about the evidence on bus lanes. Is it correct that some authorities have removed bus lanes? If there is a body of evidence, why would they be doing that, or does it suggest there is no body of evidence?

Peter Coates: In Coventry, we are undertaking a trial at the moment looking at the impacts of removing some lanes, not only on bus passengers but also on road speeds. The lanes were put in a number of years ago and traffic patterns have changed. We are two weeks into a six-month trial. It will be very evidence led. It will be evidential on the basis of the impact on people, not cars and buses as just vehicles but the number of people in those vehicles. It is early days yet. We are working very closely and will be sharing all our data on the number of people in

our buses that are impacted by the changes. It is an evidentially led trial that has just started.

Professor Begg: We need to review bus lanes. They were put in 20 or 30 years ago. The timings might not be right now; they might not be in the right location. You continually have to review them. My plea is that they are reviewed on an evidence-based process. What is it doing for traffic flows? What is it doing for bus speeds? My worry, and it is something I tried to highlight in the report, is that local politicians and Members of Parliament are much more likely to get people coming to their surgery complaining about bus priority, but I wonder if you have ever had a bus passenger come along and say, "Please could we have more bus priority?" There are a number of reasons for that. Bus passengers tend to be a lot poorer and much less vociferous. You are much more likely to get a motorist or a rail passenger coming along to your surgery, or a local shopkeeper who is hacked off because someone cannot park outside their house. That is the one plea I have: that we keep remembering that bus passengers are not vociferous and they are under-represented.

The Government can with impunity knock 20% off bus service operator grant—there's hardly a squeal—but they cannot touch fuel duty for motorists. We have had seven consecutive Budgets with no increase in fuel duty, despite the fact that oil prices are at rock bottom and public finances are in a perilous state. That tells me that certain transport users are much more powerful politically; they are much more vociferous and can get to the politicians. Bus passengers are under-represented.

It is an issue for these guys too. They have to get closer to the passenger. They have to communicate to the passengers in the way that British Airways and easyJet communicate, or retail outlets. If taking out bus priority is going to be bad for bus passengers, if it increases journey time, reduces frequency and increases fares, bus passengers need to know about that. It is a communication issue.

Q153 **Chair:** Taking the point about bus passengers coming to their MPs or councillors, they come when a service is about to be curtailed; they are extremely concerned about that. Perhaps they do not look at exactly why there is a problem, but they certainly come when a service is going to be chopped. In your report, you pointed out that bus passengers are more likely to be low-income people or older people. How is the advocacy issue going to be changed? It has certainly been very noticeable to us as a Committee over the years. There have been more and more problems about buses. People do not really talk about it; they just do not have a bus any more. Certainly on other modes of transport such as trains, people are very vocal when there is a problem. How is it going to change?

Peter Coates: The West Midlands bus alliance is chaired by a lady from Transport Focus. The whole meeting is run by Transport Focus, who very much speak up for passengers. That is one thing we have definitely done

there. As we get more technology, we can communicate more easily with our customers. We can mobilise them. Certainly point five of David's five-point plan is very much to mobilise the voice of bus passengers. That is something that we are absolutely working on, such that they will not be coming because a bus service is about to be withdrawn because congestion has increased costs, and all the frequency issues that David identifies. If we can put those priorities in, journey speeds will increase and we can therefore stave off the withdrawal of a service.

Q154 **Graham Stringer:** David, you talked about an evidential base for bus lanes. Nobody is going to disagree with that; we are all in favour of evidence-based policy making. There is lots of evidence, but what should the criteria be for putting in a bus lane or taking a bus lane out?

Professor Begg: There are a number of factors you would have to weigh up. One of the first things to do would be to look at what impact it has on traffic flows. If bus lanes are effective and you are taking enough people out of their cars and on to a bus in a bus priority lane, good schemes actually improve traffic flow. That is the first thing I would look at. You cannot just look at how it impacts on one mode of transport; you have to look at how it impacts on all. It will impact on freight and logistics as well.

Graham Stringer: And rat-running potentially.

Professor Begg: Yes. That is one of the things I would look at—the impact on traffic flow. The obvious thing you look at is what impact it would have on bus patronage. A really good and effective bus priority scheme should give you double digit growth in bus patronage.

Q155 **Graham Stringer:** Bus patronage where?

Professor Begg: On that corridor.

Q156 **Graham Stringer:** But where there is a deregulated system, my experience in Greater Manchester is that you create bus lanes and First Group and Stagecoach move more buses on to those bus lanes, because in some cases they are fast—although not every lane—and take buses off other lanes, so you get a reduced network.

Professor Begg: There are possible side effects.

Q157 **Graham Stringer:** Don't you think that should be a criterion that is taken into account? It is not only the rat-running that might be caused, but in a deregulated system you damage the whole network because, as Robert said, there are places where you cannot get buses. I do not agree with what you said before. Bus passengers are incredibly vociferous in my area when First Group reduces services. They know how to find councils and MPs in those situations.

Professor Begg: It is not my experience, and I would back up what I have said in terms of policy.

Q158 **Graham Stringer:** You follow this Committee, David. Did you see the debate between Merseytravel, Transport for Greater Manchester and two or three bus companies when we were doing pre-legislative scrutiny on the buses Bill? The transport authorities gave us figures on lost mileage and lost routes over that period. Some of that will be related to bus lanes. Do you have any comment on that?

Professor Begg: I still stand by what I said. Bus passengers are much less vociferous than users of other modes. I back that up by Government policy over decades. I do not think we would have been prepared to tolerate the reduction in the rail network that we have seen in the bus network, for example. I do not think we would have been prepared to see the reduction in the amount of taxpayer subsidy going into buses and tolerated that in the same way for rail. Successive Governments have been like rabbits caught in a car headlight when it comes to motoring taxation. We just do not do anything, even though the conditions might be right for it. We just do not touch it. That is because politically it is off limits, but what is not off limits is politicians at local or national level taking action that is detrimental towards bus passengers.

Chair: It has taken a long time to get a buses Bill, and it has now been delayed. Hopefully, it will come back.

Q159 **Graham Stringer:** I want to make two general points, partly because I would like to get them on the record. Is it not the fact that the bus and coach industry—it is their job—are extremely good at lobbying the Department for Transport, as opposed to passengers being weak?

Professor Begg: I have been on both sides of the fence. I have sat on Transport in Greater Manchester and on a bus company. They have probably been more effective at lobbying the Department for Transport than they have the Treasury.

Q160 **Graham Stringer:** That is a very clever answer. The final point I want to put on the record is this. You have made the point that congestion causes difficulty in all sorts of ways, but isn't the most pernicious thing that has happened to bus transport over the last 30-odd years the deregulation of buses? There are direct comparisons with London and outside London over that period. We need to get that into perspective when we look at the buses Bill, don't we?

Professor Begg: Yes. I have always taken the line on franchise and bus regulation that when there are clear signs of market failure you need to regulate. That is a tool that local authorities should have if there is market failure. I do not think it is where the key issue is right now. There are such strong headwinds hitting the bus sector that it does not matter whether you are in a regulated environment or a deregulated environment; you are in deep trouble.

To back that up, London has been one of the most remarkable success stories in bus worldwide, but the wheels are starting to come off that success story because of congestion. Over the last two to three years,

London has shown a sharper decline in bus patronage than most other places in the UK because it cannot actually run a service with the level of congestion on the road network. Congestion is no respecter of regulatory regime, and nor is online shopping or all those disruptive technologies.

Q161 **Huw Merriman:** You may recall that I spent a couple of hours at the Brighton & Hove bus company preaching the virtues of a Committee visit. Brighton has a fantastic offer for buses, not least because the car parking charge is £5 an hour, £10 for two hours or £15 for three hours. That in itself is quite compelling. The fleet is modern; 80% of tickets are sold via an app, so it means that despatch time is relatively quick. All their new buses have USB points and audio and visual. That is in the buses Bill, but in fact that company already has it as standard. They have smart ticketing, which they give over to competitors and then reimburse them. It is all the things that we have talked about. The biggest difficulty, as I see it, is that the park and ride is in Brighton itself. On the outskirts of Brighton is the South Downs national park and their planning regime is such that you cannot get a park and ride there. If I compare that with Oxford, you cannot drive to Oxford without going past the park and ride on the outskirts, so you may as well get off and use the bus. Do you think that the Government need to do more in their planning policy to encourage park and ride?

Peter Coates: Yes, we would like to see more of it. There is very little in the west midlands. It is part of the bus alliance that we are working on to see expansion of that. Clearly from out-of-town or out-of-city park and ride sites, you have to have good priority to get into the city centre. You cannot just join a line of already queuing traffic. It has to be prioritised. I have heard a lot of good reports from Sway in Manchester, where it has recently gone in.

Kevin O'Connor: We have touched on bus lanes quite a bit, but I have a comment about busways. There are lots of innovative ways to give bus priority measures. There are a number of busways around the country, which I guess are an enhanced version of a bus lane but no car can travel on them. I am sure you are well aware of them. The travel speed can increase compared with the car. The increase in passenger numbers wherever a busway is introduced is in significant double digit growth, because it is just so much more attractive than using the car. The main aim is to make sure the speed is quicker by bus. Then it makes it even easier to pull people on to it.

Q162 **Huw Merriman:** Don’t you think we have to be a bit more radical, in the sense that we are all consumers and we have choice? We drive past the park and ride and think, “The buses are all going there and they seem to be going on a regular basis, so why don’t I just swing in and park there for free?” so then it is just part of the bus fare. If you do not pass one, you just keep on going. With so many people visiting so many towns, it means that, if that offer is not visible to people, they may not go there. Do you think local authorities should have much more of a requirement to

deliver? There is all the talk of Government delivering new garden towns. Should it only be a garden town if it has a park and ride, and more than just a nod to a park and ride but a network?

Kevin O'Connor: Park and ride is part of it, but it would be remiss of me not to lobby for things like busways as well. If you are looking at planning a new town, there are lots of ways you can make sure of that. The example you gave of Brighton is great because it is carrot and stick. People use London a lot as an example of how popular buses are. There is a carrot and stick there as well. It is very expensive to park in London. You have the congestion charge, plus excellent transport services. It is the same with Brighton. There is a real carrot and stick. If you are planning a town, we can do our part by making the bus as attractive as possible, but, if we can make the journey quicker and more pleasurable, it is an even easier sell.

Q163 **Martin Vickers:** Following up on park and ride, Mr Coates, those schemes have been tried and have failed in a number of places. Is that the fault of the bus operator or have there been other failings?

Peter Coates: As long as they have priority and they are serving customer demand, they will work.

Q164 **Martin Vickers:** Should bus companies try to take a few more risks and establish them elsewhere? Should they try to build up the market for them?

Peter Coates: We spoke earlier about taking risks every day. We look to prime the pump and work with employers, where they might have flows. We work in partnership in an innovative way. We would be keen to talk to anyone who wants to establish park and ride sites on that basis.

Q165 **Martin Vickers:** Mr O'Connor, you mentioned in reply to an earlier question that if demand was there you would try to meet it. Big cities are an exception, but in provincial towns bus operators seem to be a bit slow in meeting the demand in new housing estates or new out-of-town shopping centres and the like. Why is that?

Kevin O'Connor: It is a difficult one to answer. I can only talk for the business that I run. It is not for me to talk about other examples that I am aware of. We have tried to get much better at reacting to that demand and getting ahead of it. We have tried to get much better in terms of marketing. I spoke earlier about the campaigns we have done with non-users and the investment we have made in technology. We need to move at pace and we need to make sure that we are attracting as many people as possible. We have brought a lot of people into our business from retail. We have tried to change our marketing and commercial approach. We have also brought in a lot of people from the travel industry. Demand and the type of people who use the services, and how we attract people, are changing. I agree with David that there are a lot of headwinds within the industry. We have to get much sharper and

much better at going out there and attracting people to the same standard as retailers do.

Q166 **Martin Vickers:** Moving on to planning conditions, when local authorities grant planning permission for new housing estates, for example, is there sufficient emphasis on meeting the inevitable congestion that is caused, or are they a bit lax and more interested in building the houses?

Kevin O'Connor: It is patchy. There are some great examples where there are local growth funds and investment right at the start of the planning, where we are involved. There are some great examples in the Dartford area at Ebbsfleet, which has seen significant growth; in new developments, we have bus departure times within blocks of apartments—that has been really assisted for housing—and there is bus priority over the Dartford Bridge. There are some fantastic examples, but it is patchy and sporadic.

Professor Begg: There are some really good examples in America, where there are some new housing developments with no car parking. The market is driving it, because about a third of the costs of some new residential blocks is for providing car parking. In Washington or Los Angeles, developers are now building large apartment blocks with no car parking and they are giving the residents $100 a month towards a mobility account, which they can use on public transport or Uber. In the foyers of those new apartments there are public transport timetables and you can see when the next bus is leaving. The market is driving that, because the younger generation are not that fussed about owning a car. It is a hassle to own one and the cost of providing parking is astronomical for developers. I think that trend will start to creep into the UK as well, because we have a problem with that. Right now local authorities always have to try to produce a minimum number of car parking spaces for any development, rather than a maximum. We need to do more to encourage car-free developments.

Q167 **Huw Merriman:** At the moment you can register for your pub to be an asset of community value, which means it cannot be closed for six months. That gives the opportunity for others to see whether they can take it over and run it. There have been suggestions in the buses Bill that bus routes be made a similar asset of community value. Do you think that would be a good thing? Is there a danger that it could put entrants off taking a route in the first place if they thought that would keep it open when it is not viable?

Professor Begg: The more notice a local authority and passengers have of any changes to a bus route, the better, but you have to get the balance right. How long would you want to run a bus with one person on it? There is a balance to be struck between giving everyone enough notice about any changes and making sure that bus operators can react to changing market conditions.

Q168 **Huw Merriman:** I would be interested to hear from one of the bus

operators.

Kevin O'Connor: People need to be aware of why a service is there. Sometimes there are subsidised services that are not commercially viable but a local authority chooses to run them. Then it takes the funding away and the bus service is no longer there. There is sometimes a misconception in terms of who is controlling or who is taking away a service. There is a need to be dynamic and there is a need to be able to flex, but I would not be averse to those sorts of conversations—anything that highlights the reason why a route is going and trying to get more people to use it. There are already lots and lots of examples. We try to give as much notice as possible. Often there are Facebook accounts and collections of people trying to campaign for their bus. Unfortunately many more people sign the petitions than actually use the service, which is a bit of a shame.

Q169 **Huw Merriman:** Do you think the answer perhaps is that, whenever a bus operator is going to cease operating a route, there should be notice and provision of a significant amount of data, allowing a competitor to say, "Actually, I could probably run it for that. That would work for me even though it did not run for you"?

Peter Coates: Certainly within the West Midlands alliance our network reviews always look at the data for a route if it is in danger. It would be a last resort to pull it out. To go to the question, if you had to operate it for a year or six months, it inevitably would have an impact on someone deciding to take it on.

Q170 **Graham Stringer:** Do you think urban congestion charging is dead? You mentioned previously that, going back 10 years, it was the big debate. Greater Manchester rejected it. Do you think it is dead for the future?

Professor Begg: Yes, in the form it was in 10 years ago it is dead. I do not think it is really feasible or practical now to expect local authorities to take forward pricing. It is something that has to be done at national level. What interests me is how we can use all the new technology that is out there to come up with a road pricing scheme that is deliverable.

We have a challenge on this one, Graham. I go back to what I said about seven consecutive Budgets where fuel duty has been frozen. Any new scheme that means that even a minority of people are going pay more is not going to happen. It is trying to come up with a form of road pricing or, to use a different term, a new way of charging that will replace vehicle excise duty, which is diminishing fast, and will replace fuel duty, which is diminishing fast, and that people accept and, hopefully, opt into. That is the challenge. It is dead in the way it was, but it has never been more alive in the sense that there is such a financial imperative now to find some way of getting road users to pay for the roads. We have to come up with a solution.

Q171 **Chair:** Would that be a national initiative rather than a local one?

Professor Begg: Yes. I think it has to be national going forward.

Q172 **Graham Stringer:** One of the previous witnesses was very keen on having priority for electric vehicles. With the limited amount of road space we have for buses, bus passengers, private cars and service and delivery vehicles—all the range of vehicles we know about—how do we decide the priority between them in a taxation system? It is back to the criterion question.

Professor Begg: To use economists' language, which I am loth to do, we are trying to price in externalities. We are trying to price in external costs that a road user does not take cognisance of, the big ones being pollution and congestion. Fuel duty is a fantastic tax for pollution, but at some point we are going to have to replace it and that will be a real challenge.

In terms of charging for congestion, we have the real challenge that road users do not think they are responsible for congestion. They think that someone else is responsible and that their journey does not contribute towards congestion. Maybe the problem is that this has been driven by economists who have been coming up with something to cover the external costs, which means that the cost of motoring would have to rise by about 10 pence per kilometre. That is steep, and politically it is off limits. It might even mean reducing people's tax burden to start with. How can we come up with a new way of paying for road use, where people actually opt into it?

Q173 **Graham Stringer:** My last question is slightly different. The problem about congestion for buses is unreliability. I have not seen the most recent figures in terms of reliability and what is the bus company's fault because the bus breaks down or the driver doesn't bother turning up—whatever it is—and what is congestion. What are the latest figures on that?

Professor Begg: There has been a big swing towards road network conditions. In your neck of the wood, in Manchester, Stagecoach would argue that for some of the cross-city routes—a lot of this is because of temporary work on the Metro extension, and so on—

Q174 **Graham Stringer:** Half the roads in Manchester have roadworks at the moment, so it is not a good example.

Professor Begg: No, but I was giving it as an example to show that for some cross-city routes journey time has actually doubled in Manchester. What I picked up in my research was that congestion is something that goes back 50 years, ever since the internal combustion engine, but there has been a dramatic acceleration in the growth of congestion just in the last five years. It is not really the number of vehicles on the road; it is probably shrinking road space for a whole number of different reasons, and the behaviour of delivery vehicles. One delivery vehicle causes a lot more congestion than a car on the basis that it is just stopping and starting and stopping and starting. It is the dramatic deterioration in

reliability of the road network just in five years right across our conurbations in the UK that I find particularly alarming.

Peter Coates: On congestion, it is variability as well. A bus company will always keep to its timing points. You have to schedule to what you fear the conditions might be. If on the day, they are better than that, the bus will wait at its timing point. It will not run early. There is variability in congestion. Mathematicians would start talking about standard deviation from the norm, but that variance causes big headaches. We would like to see better bus speeds and less variance in those bus speeds.

Professor Begg: I have one statistic to show why congestion is so important in a regulated environment, as well as in a deregulated environment. In 2003, just after the congestion charge, bus speeds in London were 24% quicker than they are today. If we got back to the bus speeds of 2003, you could wipe out the subsidy that goes to London buses. That is how important it is.

Chair: That is quite a good point to end on. Thank you very much.