



# Foreign registered vehicles on UK roads

A quantitative assessment of the extent of foreign vehicle activity in the UK Commissioned by the SPARKS Programme.



### Executive summary

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The number of foreign registered vehicles on UK roads is increasing. Enforcement bodies find it difficult to trace those responsible for traffic violations by foreign vehicles, and impractical to impose penalties. This is recognized as inequitable, raises concerns that it encourages higher levels of violation among drivers of foreign vehicles, and leaves the system open to the charge that it imposes disproportionate compliance costs on UK owners.

However, at present there is no robust data on the volume and mix of foreign vehicle activity, or how this is distributed across the UK. This means that public concerns can neither be addressed, nor dispelled; it makes it difficult to justify updating enforcement systems to deal with a more open economy; and means that efforts to improve enforcement may not be directed in the most effective areas.

To promote informed debate, the SPARKS Programme has commissioned a desktop research exercise with the aim of using available data to quantify the extent of foreign vehicle activity in the UK. While these estimates are no substitute for direct measurement, they appear consistent with observed levels of activity, and it is hoped that they will stimulate discussion of the issues, provide pointers to the areas where further investigation will prove most valuable, and give some guidance to enforcement bodies in advance of further research becoming available.

The main outcomes of this exercise are estimates of the level of foreign vehicle activity:

- Over three million foreign registered vehicles enter the UK each year;
- At any point in time, there are 140,000 foreign registered vehicles in the UK, and around 107,000 in Great Britain;
- Across the whole of the UK, foreign registered vehicles travel a total of almost 5 billion kilometres each year, and make up 1% of all traffic
- In London foreign registered vehicles represent 3% of all traffic. In the south-east and major cities the proportion is 1-2%;
- The main sources of foreign registered vehicles in the UK are those brought in by migrant workers, representing 28% of foreign registered vehicles, and tourists, who account for a further 24%;
- Cars make up 87% of the foreign registered vehicle stock, and 47% of foreign registered traffic;
- Heavy goods vehicles make up 9% of the foreign registered vehicle stock, and 43% of foreign registered traffic;

- The remaining foreign vehicle activity consists of coaches (3%), and light goods vehicles (7%).

The key conclusions arising from our analysis are

- Despite the growing volume of activity by foreign registered vehicles, and the high levels of concentration of activity in certain areas, the number and behaviour of foreign registered vehicles on UK roads is poorly understood;
- More attention needs to be paid to cars - the activity of foreign registered heavy goods vehicles has a high public profile, but the number of foreign cars in the UK is almost ten times larger;
- The highest levels of concentration of foreign registered vehicles are in London, followed by the South-East of England. Other hot spots include major tourist destinations, and road routes between the South-East of England, Wales, and the North-West of England
- Around 11% of the foreign registered vehicles in the UK have remained beyond the deadline for registration with the DVLA;
- There is some evidence to support fears that foreign registered vehicles represent a higher risk group, but more precision is needed to determine whether the differences are significant;
- Owners of foreign registered vehicles appear to be more likely to contravene traffic regulations, and to evade congestion charging than owners of UK registered vehicles, and a core group of repeat offenders is more likely to contravene parking regulations.
- Suggestions that enforcement activity should involve controls at the point of entry will require systems at the border capable of dealing with over 3 million vehicles per annum, and does not appear to be a viable option.

We recommend:

- Increased efforts are made by government to enforce re-registration of foreign vehicles that stay beyond an initial six month period. These should focus on specific target groups, and could reduce the overall number of foreign registered vehicles by up to 11%.
- Action is taken to pursue drivers of foreign registered vehicles who are persistently taking advantage of limitations in the current enforcement systems.
- That government addresses the issues around enforcement of penalties on foreign registered vehicles at the point of introducing new legislation to deal with traffic management.

## Foreign registered vehicles on UK roads

- More detailed investigation is undertaken of the spread of foreign registered vehicles in the UK, including both stocks and activity levels, with a particular emphasis on cars.

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### Introduction

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#### Background

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With the expansion of the EU borders, with increasing international trade, and with increasing freedom of movement across borders there is no doubt that the UK is welcoming increasing numbers of foreign visitors, that there has been an increase in the number of foreign nationals residing in the UK (temporarily or permanently), and that the number of vehicles crossing UK borders is increasing.

- The number of foreign goods vehicles visiting the UK has trebled over the last ten years;
- The number of European nationals employed in the UK has trebled over the last five years;
- The number of European visitors to the UK has increased by almost 50% over the last five years.

As a result there has been an increase in the number of foreign vehicles using UK roads. There is, though, no robust measure of how many foreign vehicles there are in the UK.

This is causing concern in a number of areas. The enforcement of UK traffic regulations is largely based on tracing vehicle owners and drivers through UK registration systems. Where vehicles registered elsewhere are involved in traffic violations it is difficult for enforcement bodies to trace those responsible, and for them to subsequently impose penalties. There is a fear that when penalties cannot be imposed it encourages higher levels of violation.

The implication is that foreign registered vehicles may be contributing disproportionately to safety risks, to public inconvenience, to the costs, and environmental impact that traffic regulations are designed to control. Commercial operators fear that companies based in the UK suffer a more heavy regulatory burden, and hence operate at a competitive disadvantage in comparison to foreign operators. The public has concerns over safety; and enforcement bodies have concerns over inequities in the treatment of offences involving vehicles and owners from different countries.

These issues involve hundreds of different public bodies, including police forces, local authorities, and a number of different national and regional agencies. The decriminalization of parking enforcement and increasing powers of local authorities in traffic management have exacerbated the issue, and increased the number of different stakeholders.

To make progress involves a considerable amount of inter-agency, and international cooperation. Inevitably, this is a complex, time-consuming, and lengthy process. Without reliable quantitative evidence, public fears can neither be addressed, nor dispelled; enforcement bodies face difficulties in developing the case for change; and efforts may not be directed at the most effective areas.

### Terms of reference

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Although there are no direct measures of the level of foreign vehicle activity in the UK, there are a number of robust indicators that can be used indirectly to estimate the scale of activity. The aim of this exercise is to develop the best possible estimate of foreign vehicle activity in the UK, based on the indirect data that is currently available. While this is no substitute for detailed primary research, it is possible to arrive at an approximation, and to explain some of the apparent anomalies in the current data.

These calculations also provide a number of pointers to where primary research would be most valuable. It becomes possible to advance a number of hypotheses which other parties may be able to throw further light on, we hope that our analysis will be of assistance to decision makers in advance of more direct measures becoming available.

Different stakeholders have particular interest in different types of foreign vehicle, different types of owner, different countries of origin, and different parts of the UK. In order to develop as complete a picture as possible, and to take full advantage of the different sources of information, our scope covers all types of vehicle, owner, origin and UK region. This includes commercial and private vehicles, heavy goods vehicles and passenger cars, used by visitors, and by UK residents.

Because it has the only land border, patterns of foreign vehicle use in Northern Ireland are significantly different from the rest of the UK. Our primary concern has been with Great Britain, but for comparative purposes we have also included estimates of the level of activity in Northern Ireland.

### Responsible bodies

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For more than ten years, parking violations have been decriminalized and enforcement has been partially transferred from the police and traffic wardens to local councils. London councils began to enforce most parking offences in 1994, and now over 170 authorities in England, Scotland and Wales have civil enforcement powers, including most of the largest (Birmingham, Leeds, Glasgow, Sheffield, Liverpool, Manchester, Edinburgh but not yet Bradford).

London Boroughs and Transport for London have been using CCTV cameras to enforce traffic regulations in general, and bus lanes in particular since 1999. More recently statutory changes have allowed for more than 70 approved local authorities outside London to do the same.

In general, the police remain responsible for enforcement against vehicles causing an obstruction or likely to cause a danger to other road users. They also enforce minor traffic offences, such as not wearing a seatbelt, driving with a broken headlight, and driving while talking on a mobile phone; and endorsable offences like speeding and driving without insurance. They may issue vehicle defect rectification notices where a fault on the vehicle needs to be fixed. Serious road offences such as causing death by dangerous driving, may result in imprisonment.

The Vehicle and Operator Services Agency is responsible for the roadworthiness of vehicles. They carry out spot checks on commercial and other vehicles for compliance with regulations relating to safety and environmental standards, overloading, driver's hours, operator licensing, vehicle and drivers' licences.

Vehicles that are registered and taxed in their home countries and brought into the UK temporarily are usually exempt from UK registration and licensing, and may be used in the UK for up to six months in any twelve month period. The Driver and Vehicle Licensing Agency is responsible for enforcement of UK registration and licensing laws, and takes action against foreign registered vehicles that don't comply with UK laws.

Action to improve enforceability involves an even wider range of bodies, including the Home Office, because of their responsibility for border control; the Department for Transport because of their responsibility for road safety, traffic management, licensing, vehicle registration, etc; the Department for Constitutional Affairs; the Foreign and Commonwealth Office for collaboration with European partners; and the Department of Communities and Local Government because the enforcement of decriminalised traffic offences is a local authority responsibility. Transport for London has wide ranging responsibilities, and a special interest in this area because of the concentration of foreign registered vehicles in the London area.

### Methodology

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There are four different types of data relevant to this study:

- There is a limited amount of data dealing directly with foreign vehicles including surveys of the movement and behavior of foreign commercial vehicles, vehicle registrations, and traffic into, and out of the UK. Much of the data dealing directly with foreign vehicles is concerned with heavy goods vehicles. Coverage of foreign passenger vehicles is more limited;
- Where data on foreign vehicles is not directly available, we can estimate the level of vehicle activity from the data that is available on vehicle users. Examples include statistics on the number of UK visitors, and patterns of migration;
- Data on enforcement activity provides evidence of the degree to which foreign registered vehicles are contravening traffic and other regulations. Comparing the level of enforcement activity with estimates of vehicle numbers provides some validation of the estimates and allows us to estimate the extent to which behavior differs between owners of UK and foreign registered vehicles; and
- Finally, we can draw on other sources of information such as international data to determine whether UK patterns of behavior differ substantially from those in other countries.

To take advantage of the data that is available to us, we have considered the vehicle population as falling into four different groups:

- Heavy goods vehicles (estimated from number of visits and length of stay)
- Passenger cars (subdivided as described below)

- Light goods vehicles (estimated as subset of passenger vehicles)
- Coaches (estimated from number of visits and length of stay)

We believe that the volume of other types of vehicle, such as motorcycles, is too small to have a significant impact on the overall picture, and we have not attempted to estimate activity by vehicles outside the above four groups.

Because the volume of passenger cars is relatively large, we have developed estimates based on different types of vehicle owner. We have subdivided these into three groups:

- Tourists visiting the UK (estimated from number of visits and length of stay)
- Short-term residents (estimated from car ownership among short-term migrants)
- Long-term residents (estimated from discrepancies in the registration of used foreign vehicles)

The first step in our analysis is to develop a baseline number of vehicles present in the UK. We build on this to estimate the level of activity of foreign and UK registered vehicles, and the geographic distribution. Differences in the level of usage are the basis for deriving the proportion traffic accounted for by foreign registered vehicles. The geographic distribution accounts for higher presence around ports, around tourist destinations, on routes between ports and final destination, and in areas where there are high levels of inward migration from Europe.

Data on enforcement activity is incomplete across the UK, and what is available is specific to a particular geographic area. By modeling the distribution of foreign registered vehicle activity across the UK, we are able to compare our figures with local data. This tests the validity of our estimates, and allows us to examine differences between the behavior of owners of foreign registered vehicles and owners of UK registered vehicles.

Compared to the direct measurement of foreign registered vehicle activity, this approach clearly has limitations. We are relying on historical data and a number of assumptions about the ownership and usage of vehicles. While our assumptions appear reasonable and consistent with known data, they have not yet been tested. Our figures can, we believe, be regarded as plausible and an improvement on what has previously been available, but they cannot reflect all the different variations in behavior that must exist.

### Foreign registered vehicle stock

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#### Introduction

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In this section we develop the initial estimate of the total number of foreign registered vehicles present in the UK. We show how these estimates have been developed, and the assumptions on which they are based. We find that the best estimate of the total number of foreign registered vehicles in the UK is 142,000 and the best estimate for Great Britain is 109,000.

Some 3million foreign registered vehicles enter the UK each year.

#### Heavy goods vehicles

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Department for Transport figures show that 1.5 million foreign goods vehicles left the UK in 2006 for mainland Europe – three time more than the figures from ten years ago. This represents 73% of the goods traffic with mainland Europe. The figure grew by almost 10% in 2004, following the expansion of the EU borders, but subsequently it has been rising by an average of 2.3% per annum.

This figure only covers traffic with mainland Europe. It does not include goods vehicles travelling between the UK and other countries. We can assume that the only significant amount of such traffic is between the UK and Republic of Ireland. To derive a figure for ferry traffic between Ireland and Great Britain we have used data on roll-on, roll-off ferry activity for Irish Sea ports. These account for around 9% of all roll-on, roll-off traffic in the UK, or around 200,000 vehicles. No breakdown of ownership is available, but on the assumption that the mix of vehicle ownership is the same as for traffic with mainland Europe, we have increased our estimate of the total number of foreign registered vehicles by the same proportion, adding some 140,000 vehicles. If we compare this figure with the number of vehicles registered in Ireland that subsequently cross to mainland Europe the figures suggest that around a third of the vehicles travelling between the Republic of Ireland and Great Britain are on route to mainland Europe.

Adding the recent trend of 2.3% p.a. growth for 2007, we obtain a forecast of 1,686,400 foreign registered goods vehicles leaving the UK during 2007.

In 2003 the Department for Transport carried out a survey of the activity of foreign registered Heavy Goods Vehicles (HGV) within Great Britain. That survey found that the average length of stay of a foreign registered goods vehicle in the UK was between two and three days (average of 1.7 overnight stays). On that basis, on a typical day, the number of foreign registered goods vehicles in Great Britain is just under 12,000.

We have made no allowance in this calculation for the changing mix in countries of origin. More than half of the vehicles visiting for a single day come from France and the Netherlands. In 2003 these countries accounted for 38% of trips, but now they account for only 26%. Trips from the new EU member states typically last for more than three days, and these countries now account for 8% of all trips, whereas in 2003 they accounted for less than 3%. It is therefore possible that the average length of a trip has increased by

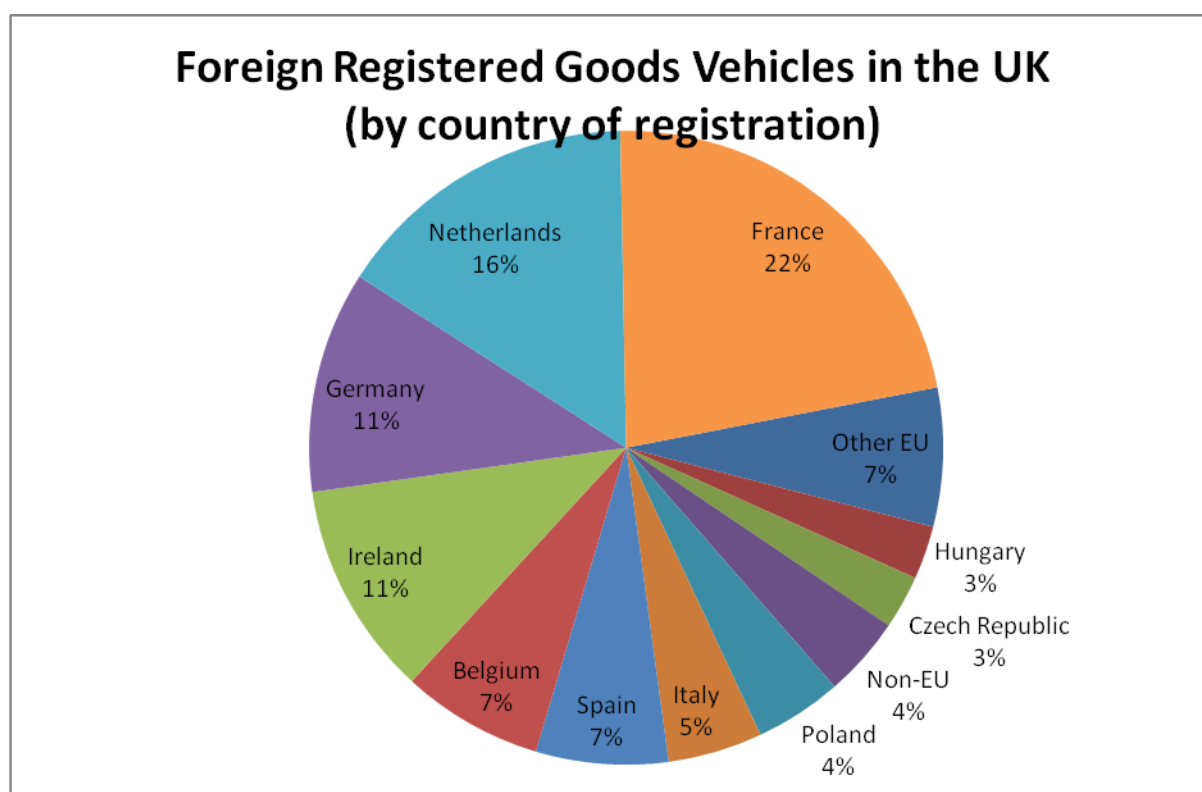
around 10-15%, but in the absence of more recent data in this area we have retained the figures from the 2003 survey.

There are only small seasonal variations in the number of foreign goods vehicles leaving the UK with quarterly numbers ranging between 95% and 105% of the average.

The pattern in Northern Ireland is different, and we have based our estimate of the degree of foreign registered vehicle activity in Northern Ireland on the mix of trade in between Northern Ireland and the Republic of Ireland. Almost 5% of the freight moved by road in Northern Ireland originates in the republic, and we have assumed that the proportion of goods vehicles from the republic that are in Northern Ireland follows a similar ratio. With around 24,000 registered good vehicles in Northern Ireland, this equates to 1,120 vehicles.

Thus our estimate of the average number of foreign registered goods vehicles in the UK on a typical day in 2007 totals 13,100. There are some 450,000 registered heavy good vehicles in the UK, so the number of foreign registered good vehicles equates to some 3% of the total, across the whole of the UK.

With different assumptions on the length of stay and mix of countries of origin, this figure could vary downwards by around 30% and upwards by around 10%, giving a range of plausible values falling between 9,000 and 15,000 foreign registered goods vehicles in the UK on a typical day.



Based on the calculations described above, we believe that the largest number of goods vehicles in the UK are registered in France, at 22% of all foreign registered vehicles.

The Netherlands represents the next largest group with 16% followed by Germany and Ireland at 11%. The largest contribution from the new member states of the EU is Poland, with 4%. The EU represents 96% of the total, with only 4% of foreign registered goods vehicle coming from outside the EU.

### Visitor passenger vehicles and coaches

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The Department for Transport does not collect data on the number of foreign registered cars in the UK. We therefore need to estimate this from the number of potential owners of foreign registered passenger cars. We have chosen to do this across the following groups:

- Visitors to the UK, travelling as tourists;
- Temporary residents, including migrants bring a car from their home country for relatively short periods of time;
- Permanent residents, including UK nationals who use a foreign registered car in the UK over relatively long periods of time.

In the case of tourists, we know from travel and tourism data published by the Office of National Statistics, and based on the International Passenger Survey that some 7.9m people visited the UK in 2005, using sea and tunnel routes. Of these, just over 2 million travelled by private car, and 1.8million by coach. In the same year, 12.8 million UK residents travelled by sea or tunnel for an overseas visit. Also in 2005, 4.8 million accompanied passenger cars passed through UK ports, and 2.1 million through the channel tunnel, making 6.9million passenger car journeys in total. On the basis that foreign visitors to the UK represent 38% of the travelers by private car, this equates to 2.6million journeys in both directions, or 1.3million visits by a foreign car.

The average length of stay, again based on the passenger survey, is around 10 nights. At any particular point in time, this puts the total number of foreign registered passenger vehicles in the UK driven by visitors at around 37,500.

Detailed statistics are not available which separate passenger cars from light goods vehicles. However, we believe that light goods vehicles represent a relatively small proportion of the total. In order to approximate the total level of activity we have allocated 11% of the passenger traffic estimated here to light commercial vehicles rather than passenger cars. This is based on the mix of vehicles registered in the UK, and puts the number of light commercial vehicles at 4,100 and the number of passenger cars at 33,400.

On a similar basis, using data on ferry traffic, modes of travel, and average length of stay, we can estimate the total number of foreign coaches visiting the UK over a year at 44,000, with 1,300 in the country at any point in time.

For verification, the 2million foreign visitors travelling in 1.3million cars would mean that the average number of passengers per car is 1.5; and the 1.8million travelling by coach means that the average number of passengers per coach is 40. Both of these appear, on face value, to be plausible figures, although the average number of passengers per car that we have used is somewhat lower than the figure of 2.1 people per car which is estimated by the National Travel Survey for UK holidaymakers.

There are around 20 million private cars registered in the UK, and around 20,000 coaches, which means that the proportion of all private cars driven by foreign tourists is around one in 500 and the proportion of all coaches which are foreign registered is around 6.5%.

The most recent data available for the total number of cars and coaches using ports and the tunnel shows a slight downwards trend, but more recently there has been a slight increase in the number of tourists arriving by sea and tunnel, and a higher increase, of around 4% per annum, among those arriving from EU countries. As there is also a degree of fluctuation in the numbers from year to year, we have not attempted to estimate growth rates in this area, and assumed that the volume of foreign tourist cars and coaches is currently flat from year to year.

With goods vehicles we can estimate the amount of cross-border activity in Ireland based on trade statistics. However, other than anecdotal evidence, we have been unable to identify any sources of data, on the level of activity of passenger vehicles in Northern Ireland that are registered in the republic. We have therefore chosen to use the same ratio for passenger vehicles as we used for good vehicles. There are over 750,000 passenger vehicles registered in Northern Ireland. Assuming that the mix is similar to that for good vehicles, the number of foreign registered vehicles in Northern Ireland should be in the region of 35,000, or about 5% of the total.

### Passenger cars owned by short-term residents

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Visitors can use a vehicle displaying foreign plates in the UK for six months in any twelve month period, provided that all taxes and duties have been paid in their country of origin. Beyond this six month period then the vehicle should be permanently imported, registered and taxed. It is, however, widely believed that this rule is normally misinterpreted as meaning that cars need not be registered if they leave the UK at least once every six months. In practice, only the owner holds evidence of travel into and out of the UK, and regular ferry tickets could be used in support of claims that the car had not been used in the UK for a longer period.

Our first objective in estimating the number of foreign registered vehicles used by residents is therefore to calculate the number of residents keeping vehicles within a six month period, and hence complying with UK registration requirements. Our second objective is to calculate the proportion which keep the vehicle beyond the six month period, and hence do not comply. By considering short-term and long-term use separately we hope to minimize the potential error in these calculations, and also to make it easier for others to test our assumptions and hence refine the figures.

Our starting point is the size of the foreign workforce in the UK. The most recent labour force survey estimates that there are 1.175m UK residents of working age who were born in the EU, of which 310,000 were born in new member states and 870,000 in other EU countries. Over 3 million were born outside the EU, but we consider it unlikely that these will have imported a foreign car.

These figures provide an upper limit on the total number of cars that may be used by inward migrants. However, over the long-term we can assume that the economic

advantages of using a foreign registered vehicle in the UK are outweighed by the practical difficulties of insuring and maintaining such a vehicle, not to mention operating a left-hand drive vehicle on UK roads. To size the use of foreign vehicles over shorter periods it is more useful to concentrate on the recent flow of migrants, rather than the stock of foreign workers. In 2005/6 the Department of Work and Pensions allocated 662,400 national insurance numbers to overseas nationals entering the UK. Of these 389,900 came from European countries. The numbers have been rising fast over recent years, mainly among arrivals from the new EU member states.

We have therefore chosen to base our estimates on the number of new national insurance numbers allocated. Each year these figures include a significant proportion of applicants who have already resided in the UK for at least a year. There is thus a lag between arrivals and registrations. Because there was a surge in 2004 following accession of new EU members, we have projected a further 50% increase for 2006/7 to take account of continuing growth in registration. This gives an estimate of almost 600,000 migrant workers arriving per annum from European countries.

Different schemes give further insights into the demographics of migrant workers. Work Permits represent around 20% of the inflow of foreign labour, but as these apply outside the European Economic area we can assume that the number of cars brought to the UK by Work Permit holders is too small to impact our overall figure. Around half of the known inflow of foreign labour into the UK is covered by the Workers Registration Scheme, which applies to workers from the new members of the European Union. The scheme approved 224,195 applicants in 2006, of which more than 70% were from Poland. Self-employed workers are not required to register, so these figures exclude the self-employed, and hence under-estimate the total. Figures around 33% higher have been suggested to include those arriving from the new member states who do not register with the scheme. Most applicants on the Workers Registration Scheme state that their intended length of stay is less than three months, although in practice it is known that circumstances change, and hence the actual length of stay may well be longer.

The Seasonal Agricultural Workers Scheme applies to citizens of Eastern Europe and the former USSR that are not part of the EU, and accounted for more than 15,000 entries in 2005. Ukraine accounts for around a third of the total. However, participants are mainly students aged between 18 and 25, and we have assumed that car ownership in this group is relatively low. Other migration schemes such as the Highly Skilled Migrant Programme and Working Holiday Makers Scheme deal primarily with countries outside Europe, and hence are unlikely to impact the number of vehicles brought to the UK.

Overall we conclude that an estimate of 600,000 annual arrivals from Europe based on National Insurance registrations, is broadly consistent with a mix of 70% entrants on the Workers Registration Scheme (uplifted to account for the self-employed); 25% entrants from other EU states, and 5% from other European countries. The number of such registrations has trebled over the last five years.

A small proportion of registered workers have dependants living with them, and hence the estimate of migrant inflow from Europe, as distinct from the migrant workforce, is likely to be around 10% higher than the figure of 600,000 workers that we have used. A better estimate of the total population involved is therefore 660,000.

| UK car ownership   | Per adult | Per household |
|--------------------|-----------|---------------|
| <b>Rural areas</b> | 81%       | 89%           |
| <b>Urban areas</b> | 52-66%    | 68-80%        |
| <b>London</b>      | 44%       | 61%           |
| <b>All areas</b>   | 61%       | 75%           |

Car ownership in the UK averages 61% of the adult population. Across Europe, the ratio is somewhat lower, and in new member states around 2/3 of the UK level. The age profile of the migrant population is not typical of the general population: 43% of those on the Workers Registration Scheme are aged between 18 and 24, and 39% aged between 25 and 34. Anecdotal evidence suggests that car ownership on arrival in the UK among younger migrants is relatively low. Some 73% of migrants say that they expect to stay for less than 3 months, and it seems likely that these will be the most likely to retain their existing car from their home country.

Balancing these factors we expect that a third of European migrants bring a car with them to the UK. With 600,000 adult arrivals from European countries per annum this would put the number of cars brought to the UK annually by European migrants at around 200,000.

When migrants are asked about their intended length of stay, 73% say that it is less than 3 months, 24% more than 6 months, and only 2% select a period between 3 and 6 months. Taking these figures at face value means that 150,000 of the foreign registered cars brought by migrants remain in the UK for less than six months, representing an average stock of around 40,000 over the year. This equates to around one in 700 of the total fleet of passenger vehicles in the UK.

With different assumptions about inward migration and vehicle ownership this figure could vary down by around 50% and up by around 30%. This gives a range of plausible values of between 20,000 and 53,000.

A further 50,000 foreign vehicles owned by migrants could remain in the UK with the owner for longer than six months, and hence ought to be re-registered. In the next section we estimate the number that are not re-registered and hence remain as foreign registered vehicles beyond the legitimate period.

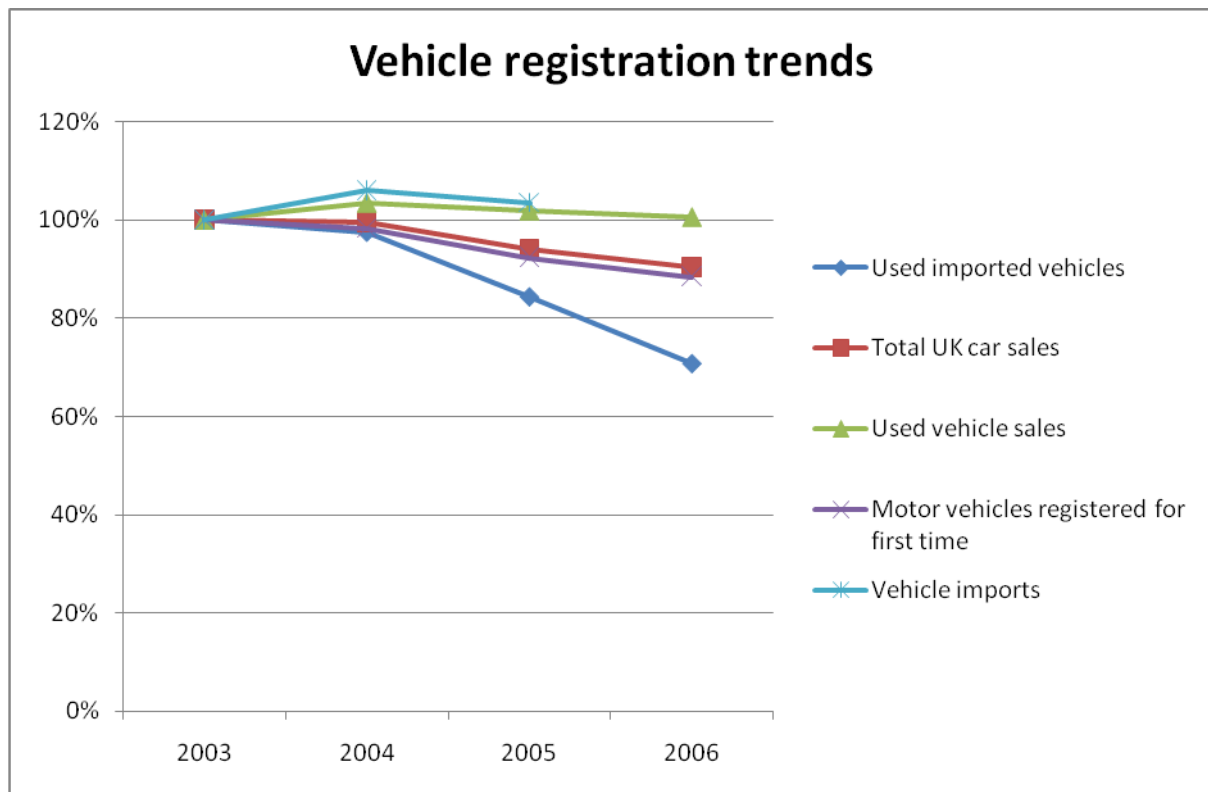
Across this category of foreign vehicle user we estimate that 30% of vehicle owners are from Western Europe, and 70% from new member states, with around half of this total using vehicles that were originally registered in Poland.

### Passenger cars owned by long-term residents

## Foreign registered vehicles on UK roads

Foreign registered vehicles owned over periods of time longer than six months should have been registered in the UK, but may not have been. Because it involves a failure to engage with any of the systems for measurement, this is a particularly difficult figure to estimate. We can, however, draw on other data to derive an approximation, which takes account of all sources of imported vehicles.

In 2006, some 94,730 used imported vehicles were registered with the Driver and Vehicle Licensing Agency, a number which has been declining over the last three years, most recently by around 15% p.a. In 2003, prior to the increase in migration from new EU members, the number was 134,000.



Based on data from the Society of Motor Manufacturers and Traders, the volume of used vehicle sales in the UK has remained flat over the last four years. The volume of vehicle imports tracked by the Department for Transport has been following a similar trajectory. Meanwhile the volume of new vehicle sales has declined by around 10%. Over the same period the volume of all first-time vehicle registrations has also declined by around 10%. We can reasonably assume that the true volume of used imported vehicles has followed a similar trajectory over recent years. This implies that a significant number of used imported vehicles are not registered with the Driver and Vehicle Licensing Agency.

Assuming that the true volume of used imported vehicles has declined by some 7% per annum since 2003, one would expect the volume of registrations in 2006 to have been 125,000 compared to the actual figure of 94,730. In addition there was a step change in the level of European immigration in 2004, which we estimate will have brought an additional 5,000 cars into the UK. This means that there is a shortfall of 35,000 between

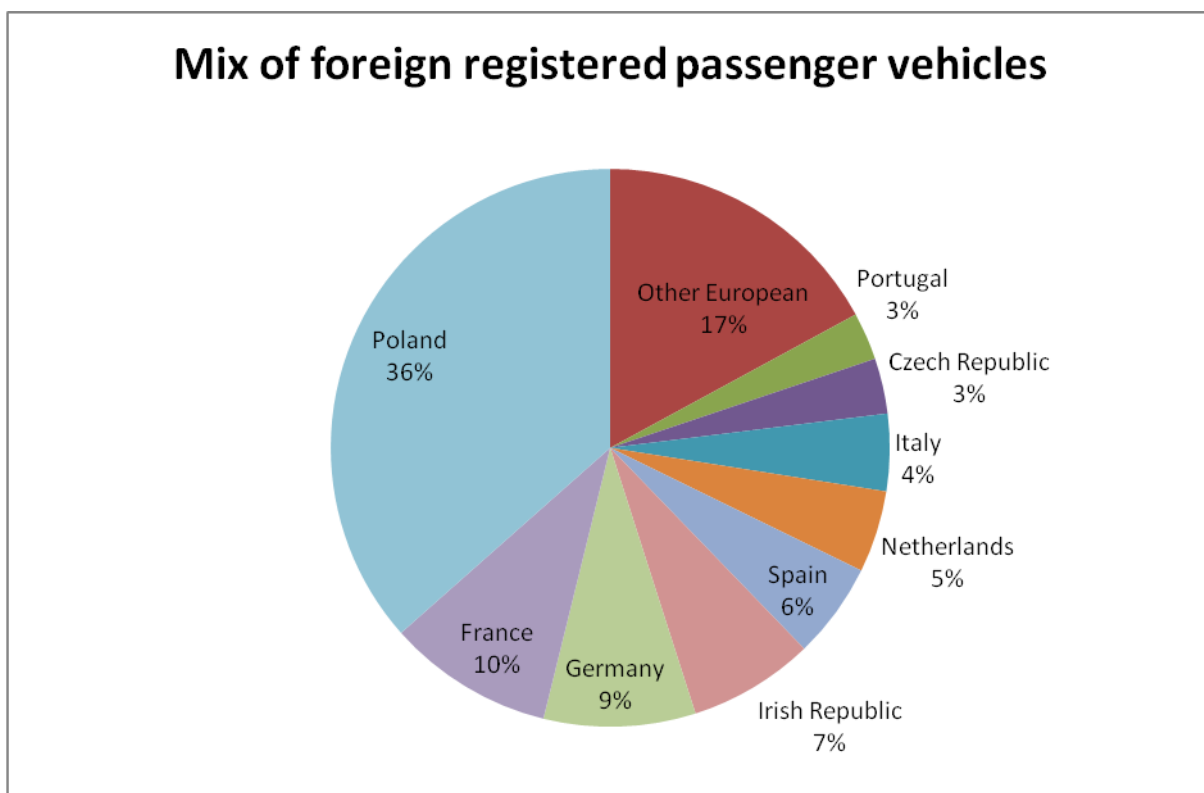
the number of cars one would expect to have been registered, and the number that actually were. This represents 27% of the total figure.

There were thus 35,000 cars that we would expect to have been registered in 2006 that were not. This figure represents an annual increase in the number of illegal foreign registered vehicles in the UK. In order to estimate the total stock we need to consider how long these, as well as similar numbers from earlier years, remain unregistered in the UK. It is possible that they remain here for extended periods of time. However on balance we feel that it is unlikely that they remain indefinitely, because of the risks and practical difficulties of driving a vehicle illegally in the UK. It seems more likely that the owners keep the vehicle for a period of time, and subsequently return to their home country, or return the car, register it, or dispose of it. We have assumed unregistered vehicles remain for a six months period from the date when they should have been registered, or one year in total from the point when they entered the country. This assumption implies that there are some 15,000 foreign registered vehicles that remain in the UK beyond the period when they should have been registered, representing around 13% of the number of used imported vehicles, and around 20% of the vehicles brought into the UK by migrants who stay longer than six months, and around one in 2,000 of the total number of passenger vehicles on UK roads.

While we have used a figure of 15,000 in our subsequent calculations, this rests on the assumption that they are only retained for a limited period of time. Different assumptions about retention of unregistered vehicles would give a range of possible values, and the maximum number that could have accumulated over the last three years amounts to around 60,000.

For comparison, the Department for Transport estimates that evasion of vehicle excise duty across the whole of the private and light vehicle fleet is currently running at 4.3% of the stock. Our estimate of 15,000 would indicate that evasion among foreign registered vehicles is around three times the overall level.

If the pattern of evasion is more in line with evasion of vehicle excise duty, then the number of unregistered vehicles will be in the region of 4,000.



The mix of tourist and migrant activity that builds into the estimate of foreign registered passenger activity leads us to expect that over a third of foreign passenger vehicles in Great Britain are registered in Poland, with France and Germany representing around 10% and 9% respectively. We would expect this mix to vary from region to region, with the South East in particular showing higher proportions of vehicles from western Europe, and we know from the congestion charge data in central London that the mix there includes a lower proportion of Polish vehicles, and a significant proportion of vehicles from outside Europe.

#### Vehicles entering and leaving

Based on the above calculations we estimate that over 3million foreign registered vehicles enter the UK each year. Because some are re-registered in the UK, the number leaving is slightly lower. Land border traffic between the Republic of Ireland and Northern Ireland is not included in these figures.

The implication is that any system introduced to track foreign registered vehicles at the point of entry will need to deal with over 3 million vehicles per annum.

| Type of vehicle      | Number entering the UK p.a. | Number leaving the UK p.a. |
|----------------------|-----------------------------|----------------------------|
| Heavy goods vehicles | 1,686,000                   | 1,686,000                  |

|                           |           |           |
|---------------------------|-----------|-----------|
| <b>Light goods</b>        | 120,000   | 120,000   |
| <b>Coaches</b>            | 44,000    | 44,000    |
| <b>Passenger vehicles</b> | 1,200,000 | 1,100,000 |
| <b>Total</b>              | 3,050,000 | 2,950,000 |

### Summary of vehicle stock

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The calculations outlined above lead us to estimate the total number of foreign registered vehicles present in the UK at around 142,000, which represents around one in 250, or 0.4% of all vehicles in the UK. Excluding Northern Ireland the estimate for Great Britain is just under 107,000.

Although to date there has been considerable discussion on the impact of foreign heavy goods vehicles, these make up only 8% of our total, and around 3% of all HGVs in the UK. Passenger cars make up almost 90% of all foreign registered vehicles, with the largest proportion used legally within the first six months by short-term migrants.

Although they make up only 1% of the total, foreign registered coaches represent one in fifteen of all coaches in the UK, and hence have the greatest impact in terms of the proportion that they represent of their particular vehicle type.

We estimate that around 11% of all foreign registered vehicles are operating in the UK beyond the date when they should have been registered with the Driver and Vehicle Licensing Agency.

## Foreign registered vehicles on UK roads

| Type of vehicle                          | Number of foreign registered | As % of all foreign registered | As % of vehicle stock |
|--|------------------------------|--------------------------------|-----------------------|
| <b>Heavy goods</b>                       | 13,100                       | 9%                             | 3% (1/34)             |
| <b>Light goods</b>                       | 4,100                        | 3%                             | 0.1% (1/800)          |
| <b>Coaches</b>                           | 1,300                        | 1%                             | 6.5% (1/15)           |
| <b>Passenger cars</b>                    |                              |                                |                       |
| <b>Used by visitors</b>                  | 33,400                       | 24%                            | 0.1% (1/865)          |
| <b>In N. Ireland</b>                     | 35,000                       | 25%                            | 0.1% (1/826)          |
| <b>Used legally by residents</b>         | 40,000                       | 28%                            | 0.2% (1/725)          |
| <b>Used beyond registration deadline</b> | 15,000                       | 11%                            | 0.05% (1/2,000)       |
| <b>Total passenger cars</b>              | 123,400                      | 87%                            | 0.4% (1/234)          |
| <b>All foreign registered vehicles</b>   | <b>141,900</b>               | <b>100%</b>                    | <b>0.4% (1/245)</b>   |

It must be remembered that these are estimates of the number of vehicles present in the UK, and that the ratios shown represent the number of vehicles as a percentage of the total UK stock. The proportion of foreign registered vehicles on the roads is a function both of the total stock, and the relative level of usage. We believe that foreign vehicles receive higher levels of usage than UK registered vehicles, and we examine the implications of this in the next section.

### Foreign registered vehicle traffic

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#### Introduction

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In the previous section we estimated that foreign registered vehicles make up around one in every 250 vehicles in the UK. Because, on average, foreign registered vehicles are used more heavily than UK registered vehicles they make up a higher proportion of traffic on the roads. Normally, for enforcement bodies, the level of activity of foreign registered vehicles is a more valuable indicator than simply presence in the UK. In this section we calculate the level of activity of foreign registered vehicles, and hence the percentage of traffic that is made up of foreign registered vehicles.

We conclude that foreign registered vehicles make up 1% of all traffic on UK roads.

#### Analysis of vehicle activity

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In 2003, the Department for Transport estimated that foreign registered goods vehicles moved 10,165 million tonne kilometers of goods, compared to a UK total of 151,700 million tonne kilometers by all carriers. This represents 6.7% of the total goods moved in 2003. Since then, the total volume of goods moved has increased by around 3% p.a. to around 153 billion tonne kilometers, but the volume of foreign goods vehicles has increased by around 7.5% per annum. Extrapolating forwards from the 2003 figures we can estimate the volume of goods moved in 2006 by foreign registered vehicles at 11.6 billion tonne kilometers, or 7.6% of the total.

Although we have calculated the proportion of heavy goods vehicles in the UK at 3% of the total, the higher usage levels mean that we should expect the number of foreign registered heavy goods vehicles on UK roads to be in the region of 7-8% of all heavy goods vehicles. The implication is that a foreign registered heavy goods vehicle is used on the roads 2-3 times more than a UK registered vehicle.

We have made a similar adjustment to take account of increased usage levels by light goods vehicles, raising this estimate from 0.1% of the total vehicle stock to 0.25% of the stock on the roads.

These do not appear to be unreasonable proportions. The 2003 Department for Transport survey showed that more than two out of three foreign registered goods vehicles were on the road at the peak time of day (mid-morning), and that there were rarely less than one in four on the road at any time of day. A significant proportion are bringing goods into the UK and returning empty, which implies that most loading time is spent outside the UK. In addition, we presume that most maintenance and idle time is spent outside the UK.

Data from the Worker Registration Scheme on the age profile of migrants from new EU member indicates that they are predominantly in the age ranges 18-24 (43%) and 25-34 (39%). This implies that there are proportionally twice as many in their thirties, and around three times as many in their twenties as there are in the population as whole. Data from the National Travel Survey suggests that these age groups travel further distances,

and are more likely to use a car for transport than other age groups. We also know that a relatively high proportion of European migrants are in professional and managerial occupational groups. It is therefore not unreasonable to imagine that car usage is higher among migrants than among the population as a whole, because of the demographic profile. However, the evidence to quantify this is limited and we have not been able to make any associated adjustment.

We have estimated that 20% of the foreign registered passenger vehicles in the UK are driven by visitors to the UK. It seems reasonable to suggest that vehicles are used more intensively on holiday than at other times of the year, but quantifying this relies on a number of assumptions about the behavior of foreign holidaymakers in the UK, for which there is little supporting evidence. The National Travel Survey indicates that holiday travel in the UK accounts for some 7% of the total miles travelled annually. Assuming that this travel is concentrated in a two week period implies that distances travelled while on holiday are around 80% higher than during the rest of the year. If this behavior also holds true of foreign holidaymakers using their car in the UK, then the level of activity represented by foreign tourists rises from around 0.1% of all activity on UK roads to around 0.2%.

In order to take these factors into account we have therefore lifted the volume of activity of foreign registered passenger cars from around 0.5% of the vehicle stock to around 0.6% of traffic on the road.

## Summary of vehicle activity

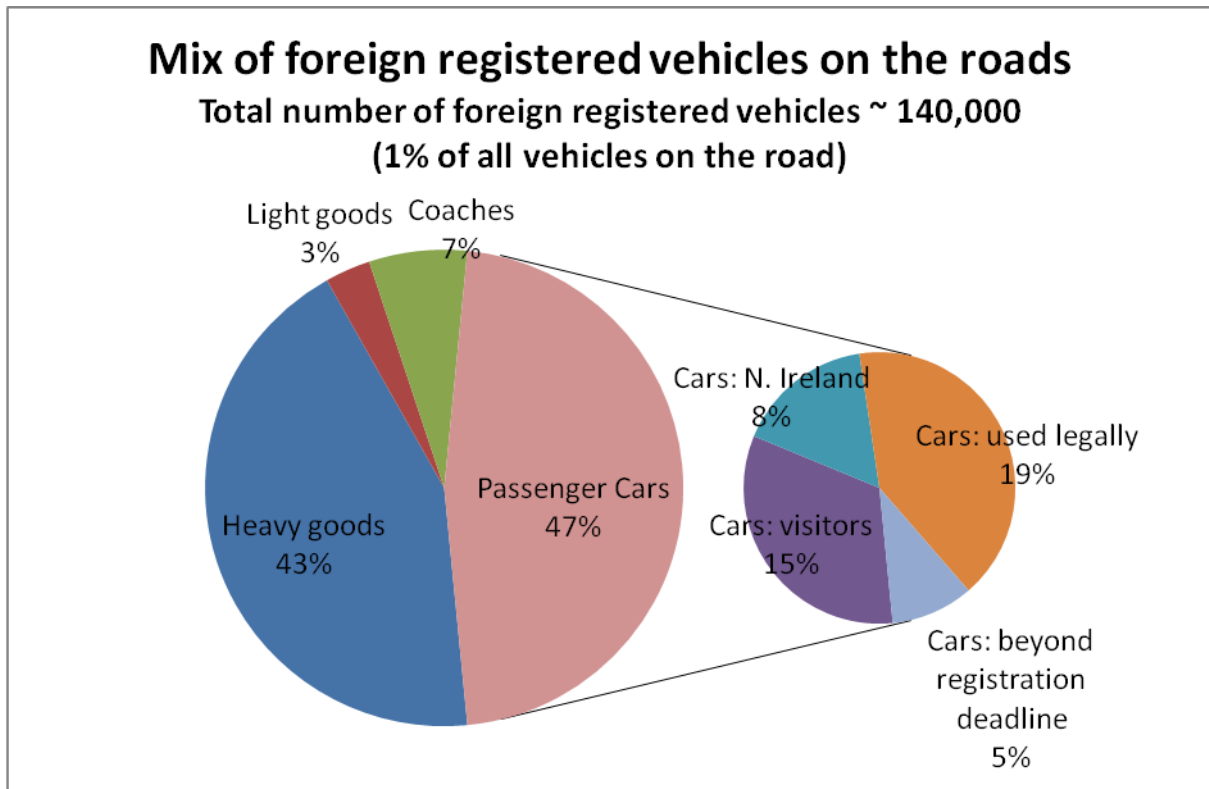
| Type of vehicle                  | As % of traffic | Foreign registered as % of stock | Foreign registered as % of traffic | As % of foreign registered traffic |
|----------------------------------|-----------------|----------------------------------|------------------------------------|------------------------------------|
| <b>Heavy goods</b>               | 6%              | 3%                               | 7.6%                               | 43%                                |
| <b>Light goods</b>               | 13%             | 0.1%                             | 0.25%                              | 3%                                 |
| <b>Coaches</b>                   | 1%              | 6.5%                             | 6.5%                               | 7%                                 |
| <b>Passenger cars</b>            |                 |                                  |                                    |                                    |
| <b>Used by visitors</b>          |                 | 0.1%                             | 0.25%                              |                                    |
| <b>In N. Ireland</b>             |                 | 0.1%                             | 0.1%                               |                                    |
| <b>Used legally by residents</b> |                 | 0.2%                             | 0.2%                               |                                    |
| <b>Used beyond deadline</b>      |                 | 0.05%                            | 0.05%                              |                                    |
| <b>Total passenger cars</b>      | 80%             | 0.5%                             | 0.6%                               | 47%                                |
| <b>All vehicles</b>              | <b>100%</b>     | <b>0.5%</b>                      | <b>1%</b>                          | <b>100%</b>                        |

Based on Department for Transport figures, which use total mileage to estimate road traffic by vehicle type, these adjustments bring the proportion of foreign vehicles on UK roads to 1% of all vehicles on the road. We estimate that 47% of these are passenger cars, 43% heavy goods vehicles, 7% coaches and 3% light goods vehicles. Of the passenger cars, the largest proportion are believed to be used legally within the first six months by residents, and the next largest group by short-term visitors to the UK.

The following table shows these ratios expressed as distance travelled, in billions of kilometers per annum:

| Type of vehicle          | Billion vehicle kilometres |               |              | Foreign registered as % |
|--------------------------|----------------------------|---------------|--------------|-------------------------|
|                          | Foreign registered         | UK registered | Total        |                         |
| <b>Heavy goods</b>       | 2.2                        | 27.1          | 29.4         | 7.6%                    |
| <b>Light goods</b>       | 0.2                        | 64.5          | 64.6         | 0.3%                    |
| <b>Coaches</b>           |                            |               |              | 6.5%                    |
| <b>Passenger cars</b>    | 2.4                        | 397.5         | 399.9        | 0.6%                    |
| <b>All vehicle types</b> | <b>4.8</b>                 | <b>489.1</b>  | <b>493.9</b> | <b>1.0%</b>             |

Although passenger cars make up the bulk of the stock of foreign registered vehicles in the UK, the impact of foreign registered heavy goods vehicles on traffic volumes is almost as great.



### Geographic distribution

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#### Introduction

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Because of the land border with the Republic of Ireland, we know that the pattern of foreign vehicle activity in Northern Ireland is different to the rest of the UK. However, we also expect regional variations across different parts of Great Britain. Levels of migration differ in different parts of the country. The channel ports and tunnel carry most of the traffic entering and leaving the country, and this will inevitably cause a higher proportion of foreign vehicles in the South East. Apart from their presence as they enter and leave the country, the final destinations of tourists, and commercial vehicles are not evenly distributed across the country; and hence the routes between port and destination will concentrate activity in certain areas.

There is no national data today on the presence of foreign registered vehicles. The data that is collected comes from enforcement bodies such as Transport for London, police forces and local authorities, all of which are working at a local level. In order to compare our estimates against this local data we need to estimate the degree to which foreign registered vehicle activity varies in different places.

London has the highest proportion of foreign registered vehicle activity at 3% of all traffic. Outside the south-east where the proportion is over 1.5%, foreign registered vehicles make up around 0.5% of all traffic.

Our primary calculations are based on the regional distribution of different types of user, but using data from enforcement bodies we are also able to consider the impact at sub-regional level, by assessing the degree to which foreign registered vehicle activity varies between rural and urban areas.

#### Regional variations

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Our assessment of the regional distribution of foreign vehicle activity is based on the regional distribution of different types of foreign registered vehicle:

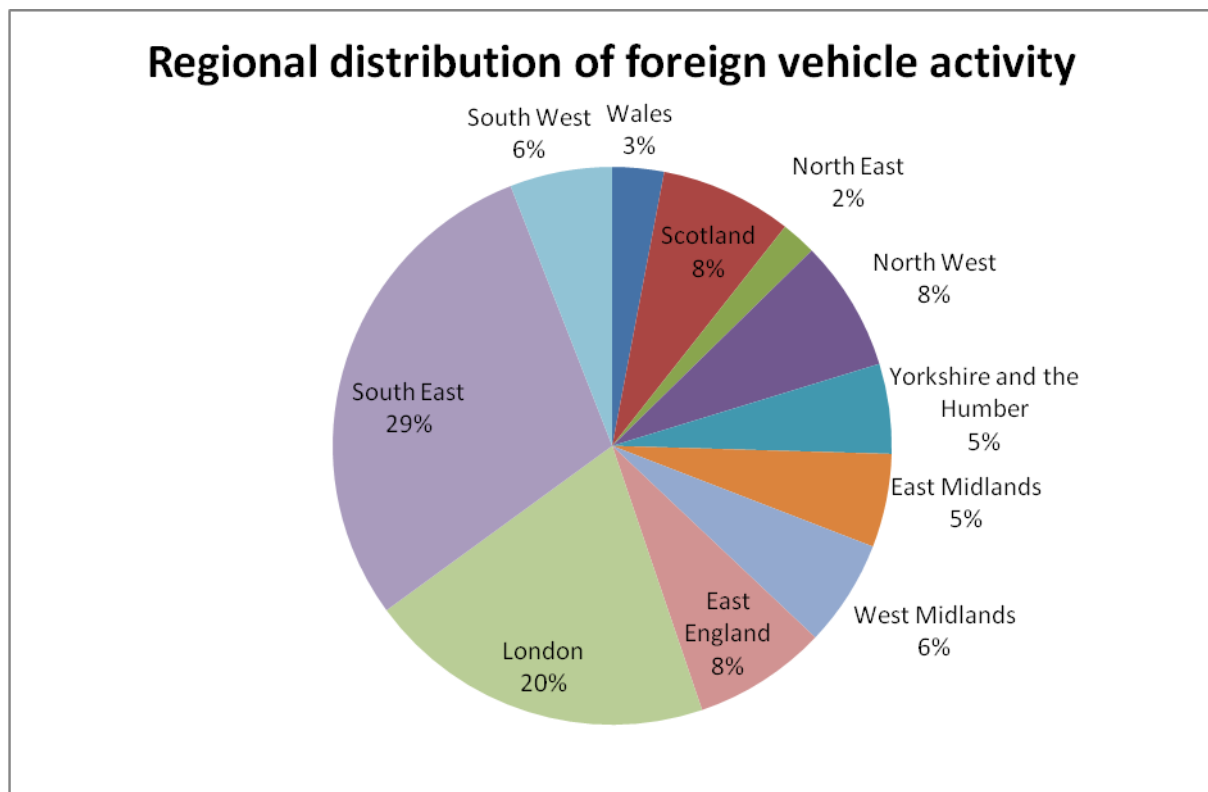
- The destination of freight movements in Great Britain is concentrated in the South-East, North-West and East of England
- Tourist activity is concentrated in London, the South-East, and North-West of England
- Inward migration is concentrated in London, and the South-East.

We must therefore expect higher levels of foreign vehicle activity in these regions.

In quantifying this mix, we have made adjustments to allow for low car usage among tourists visiting London. In addition, because the majority of visitors arrive through channel ports, we have adjusted for the assumption that most short-term visits begin and end in the South-East. We have therefore moved an appropriate proportion of the burden for short-term visitors from their region of destination to the South-East of England.

Combining the adjusted data on regional distribution for different types of foreign vehicles leads to the view that London and the South East account for the bulk of foreign vehicle activity, and together represent almost half of all foreign vehicle activity in the UK. Elsewhere the level of activity appears to be fairly evenly distributed, with lower levels in the North-East and Wales.

These figures include an adjustment for traffic in transit via the south-east, but take no account of travel between their arrival and their destination. We would expect more detailed research to find, for example, higher levels of activity on major routes in Wales resulting from the freight traffic from the republic of Ireland, and higher levels of activity on major routes in the West Midlands resulting from journeys between the south of England and the North-West.



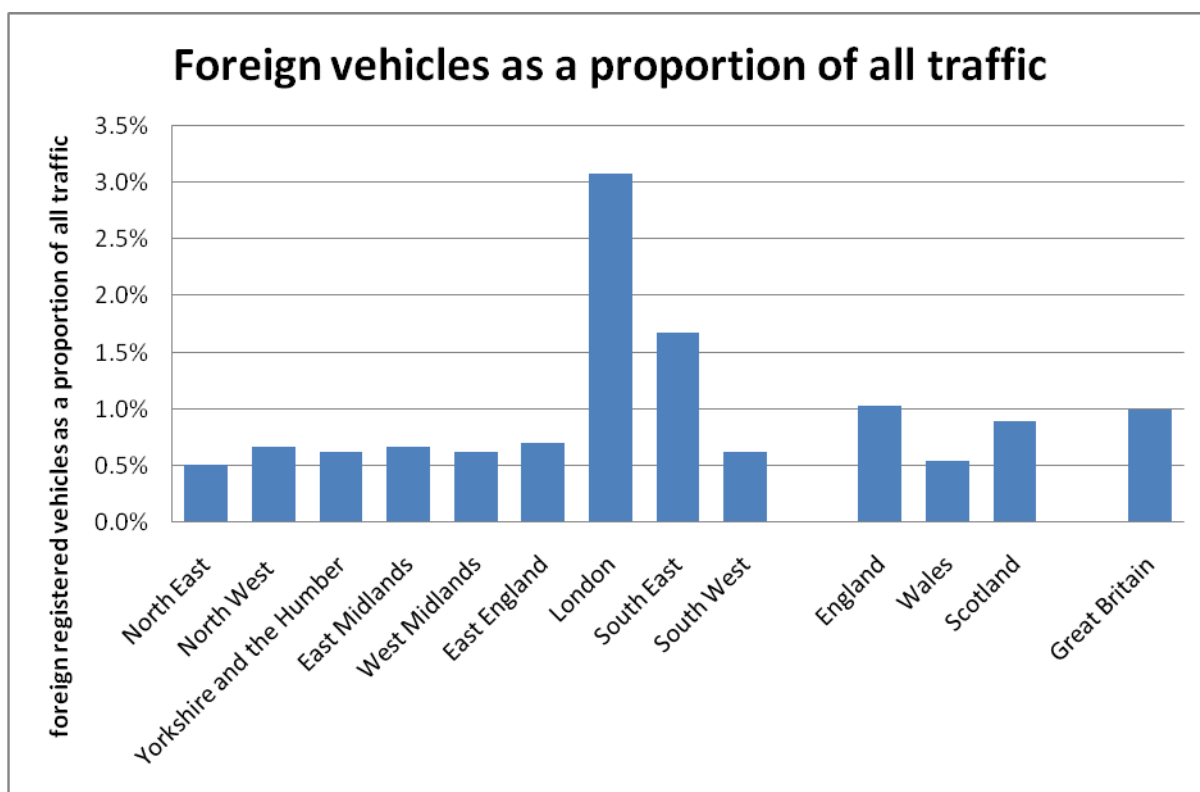
We would expect the mix of foreign vehicle types to vary somewhat from region to region, with London having a particularly high proportion of foreign passenger cars, and we believe that there is a relatively high proportion of goods traffic in the South-East and north-East of England, and in Wales.

This estimated distribution of foreign vehicle activity follows the profile of regional traffic distribution estimated by the Department for Transport in some areas, but is significantly different in others. For example, the Department for Transport estimates that the South east region accounts for 17% of all UK road traffic, while we estimate that it accounts for 29% of foreign vehicle activity. We should therefore expect the proportion of foreign registered vehicles in the South East to be around 50% higher than the national

average. London, accounts for 7% of all traffic activity, but 20% of our estimated foreign vehicle activity. We should expect the proportion of foreign vehicle activity in London to be around three times the national average.

Based on our estimate that foreign vehicles account for 1% of all vehicles on UK roads, and the differences between overall traffic activity, and foreign vehicle location, we can thus develop an estimate of the ratios between foreign and domestic traffic for each region.

London stands out as having an exceptionally high level of foreign vehicle activity. Other regions are closer to the national average, with relatively high levels in the South East, and relatively low levels in the regions that are furthest from the South East.



### Sub-regional variations

The reason that we anticipate a disproportionate level of foreign vehicle activity in London is that domestic car ownership in the capital is relatively low, and London attracts a higher proportion of visitors, and migrants than other regions. At sub-regional level we would expect similar factors to be in play. We hypothesise, for example, that urban centres, and major tourist destinations can expect higher levels of foreign vehicle activity than the region as a whole. For example, this would apply to the cities most visited by foreign tourists, which are:

1. Edinburgh

2. Manchester
3. Birmingham
4. Glasgow
5. Liverpool
6. Oxford
7. Cambridge

We would also expect major inter-regional routes to experience higher levels of foreign vehicle travel in transit from origin to destination.

### Summary of geographic distribution

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On average, foreign registered vehicles represent around 1% of all traffic on UK roads, but this figure varies from a high of around 3% in London, to around 0.5% in most regions outside the south-east of England. At sub-regional level we expect cities to experience a proportion of foreign registered vehicle traffic towards the higher end of the range.

### Implications

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#### Introduction

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There is no robust data available on foreign vehicle activity in the UK, and the aim of this analysis is to provide an alternative until primary research can be carried out. However, we can test our estimates against point data from enforcement bodies, and other sources. Since most of the point data relates to violations of traffic regulations, we have also examined whether the evidence confirms the perception that drivers of foreign registered vehicles are more likely to contravene than drivers of UK registered vehicles.

#### Goods vehicles

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The base data from which our estimates have been developed is most complete for foreign registered goods vehicles. Existing data on ferry and tunnel movements is relatively complete, although reporting of this data tends to concentrate on the major flows across the English Channel, and does not always recognize movement across the Irish Sea.

The data on the use of foreign registered heavy goods vehicles within the UK is less complete, and it was collected almost five years ago, prior to recent EU expansions. Our estimates of foreign goods vehicle activity rely on assumptions regarding the length of stay of foreign registered vehicles in the UK, and to the level of activity while operating within the UK, both of which are based on research from 2003. Although the main countries of origin continue to be in western Europe, changes in market behaviour since 2003, such the growing market share won by new member states, and the possibility that cabotage by foreign registered vehicles has increased in an open market, could both be significantly changing this model.

We know that foreign registered vehicles accounted for 10% of personal injury road accidents reported to the police in 2005. The equivalent figure in our estimates is that foreign registered vehicles account for 7.6% of heavy goods traffic. This suggests that foreign registered vehicles are around 30% more likely to be involved in an accident than a UK registered vehicle.

Data from VOSA indicates that 47% of foreign registered vehicles fail roadside tests. This compares to an equivalent figure of 39% in the case of UK registered vehicles, which suggests that foreign registered vehicles are some 20% more likely to fail.

There is thus some support here for public and industry concerns over the safety and compliance of foreign registered vehicles. However, the level of risk does not appear to be as high as some fear. More detailed data would help focus enforcement activity. It may also help to reassure, rather than inflame public concerns.

#### London

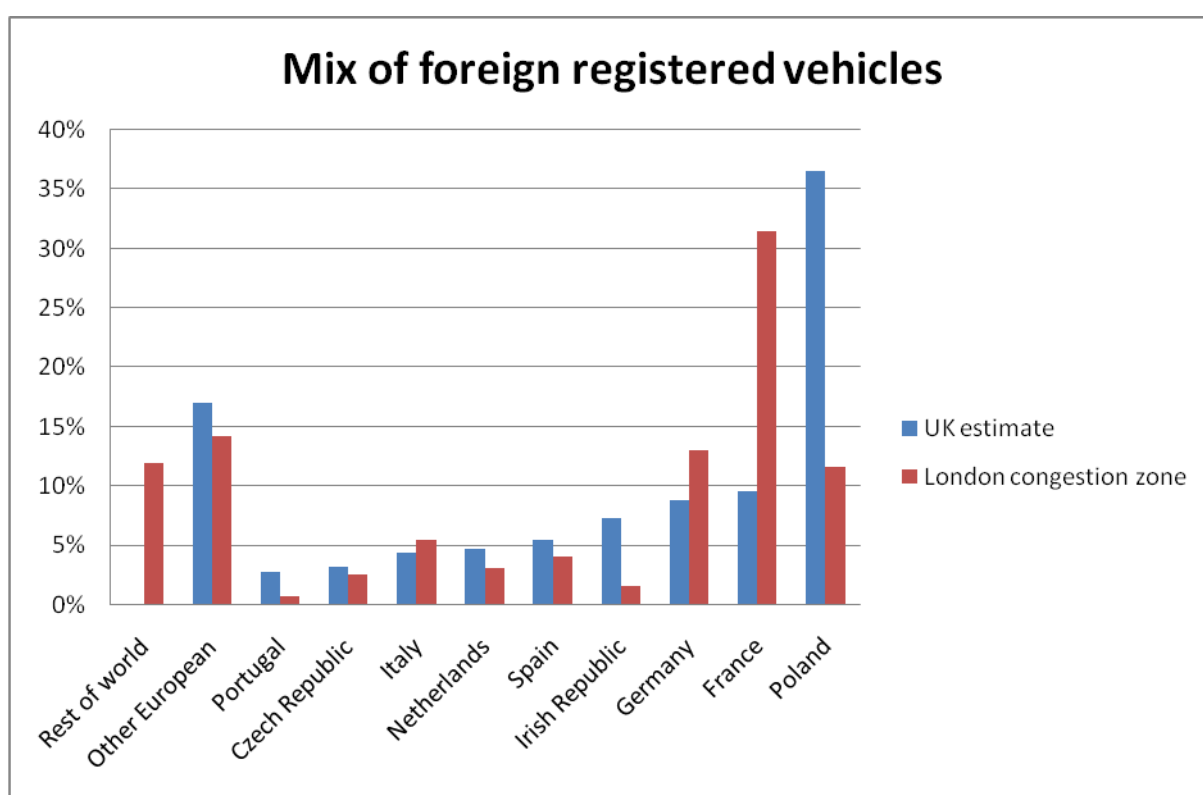
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Although it only applies to central London, the most detailed, and most direct data on foreign registered vehicles as a proportion of all traffic is collected by Transport for

London in support of the congestion charging scheme. Data provided by Transport for London indicates that 2.1% of all vehicles detected by the congestion charging system are foreign registered. This compares to our estimate of 3% of vehicle activity in the London region being accounted for by foreign registered vehicles, which suggest that the volume of foreign registered vehicle activity in central London may be some 30% lower than we have estimated.

The mix of countries of registration in London shows a significantly higher proportion of vehicles registered in France than our model predicts for the UK from the mix of tourists and migrants, and a significantly lower proportion of vehicles from Poland. Data on speeding offences in London does not show the same high levels of activity by French vehicles as the congestion charging data, but otherwise shows a mix of countries that is broadly consistent with the mix of vehicles entering the central London congestion charging zone. This indicates that our estimates may overstate the proportion of Polish vehicles, at least in the London area, but that there are unique characteristics for foreign registered vehicle behaviour in the capital that need to be taken into account by more detailed studies.

We have assumed that the number of foreign registered vehicles in the UK that originate from outside Europe is insignificant, but in central London these represent around 12% of the total, with the highest numbers from the USA and United Arab Emirates. We presume that this characteristic is unique to central London, and that we will not discover significant numbers of such vehicles elsewhere in the UK.



Almost 13% of foreign vehicles entering the London Congestion Zone avoid paying the charge. Thus, while 2.1% of vehicles entering the congestion charging zone are foreign

registered, the proportion of penalty charge notices raised against foreign registered vehicles is 4.2%, which indicates that drivers of foreign registered vehicles are around twice as likely to avoid the congestion charge as drivers of UK registered vehicles.

The proportion of penalty charge notices issued to drivers of foreign registered vehicles in London for violating bus lane regulations is running at 3.7%, which suggests that drivers of foreign registered vehicles are also more likely to contravene bus lane regulations than drivers of UK registered vehicles. Data from the City of London Police suggests that speeding offences by foreign registered vehicles represent around 4% of the total – again somewhat higher than either the congestion charging figures, or our estimates would have predicted, suggesting that foreign registered vehicles are more likely to be caught speeding than UK registered vehicles.

On the other hand, the proportion of moving contraventions by foreign registered vehicles, is running at 2.1% which is close to the overall ratio of foreign vehicles. This indicates that drivers of foreign registered vehicles are no more likely to contravene in this area than UK registered vehicles.

The indications are that in central London, drivers of foreign registered vehicles are less likely than drivers of UK registered vehicles to contravene parking regulations. Enforcement by CCTV identifies 1.2% of violations by foreign registered vehicles, and enforcement by street wardens indicates 1.6% of violations involving foreign registered vehicles: indicating a level of contravention around 25-40% lower than should be expected.

Outside central London, the pattern is different. Some 3% of penalty charge notices issued by Enfield involve foreign registered vehicles. This is closer to the proportion that our analysis would predict across the London region, but it is impossible at this stage to know whether the difference between inner and outer London is due to higher levels of contravention, or larger numbers of foreign registered vehicles.

There are indications, however, that a small number of repeat offenders account for a significant proportion of penalty notices in outer London. Both the travel patterns of repeat offenders, and their response to different levels of enforcement activity could explain why more residential areas would experience a high level of contravention.

### Passenger vehicles

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Although the most complete data that is available on foreign registered vehicles relates to the congestion charging zone in central London, we have also had access to quantitative information about penalty charge notices issued elsewhere. In Newcastle, for example foreign registered vehicles represent around 1% of penalty charge notices issues, which is around twice the proportion of foreign registered vehicles that we have estimated for the North-East region. As described above, we would expect a city like Newcastle to experience a higher proportion of foreign registered vehicles than the region as a whole, because of patterns of tourist visits and inward migration. We might also expect the proportion of penalty notices to be somewhat higher for foreign registered vehicles in some areas. The figures for Newcastle in comparison to our estimates are broadly consistent with such variations, although we are unable to say to what extent

higher levels of contravention or higher proportions of foreign registered vehicles are impacting the figures.

Data from different parts of Kent indicates a high degree of local variation. In Dover, for example, which is the main port of entry from the continent, the proportion of parking tickets issued to foreign registered vehicles is 8%, while in Thanet it is very close to our estimate of foreign vehicle activity for the region, at 2%.

Our estimates suggest that in Great Britain, the number of foreign registered passenger vehicles is distributed more-or-less evenly between tourists, and short-term residents, with an additional 10% or so which are retained by longer-term migrants beyond the date when they should have been registered in the UK.

In these calculations we have had to rely heavily on assumptions about the behavior of vehicle owners, and this inevitably results in the potential for inaccuracy in the estimates. Tracing the owner of any foreign registered vehicle is a problem. The greatest uncertainty in estimating relates to vehicles owned by migrants who are staying in the UK for longer than six months.

Clearly a full-scale survey of foreign passenger vehicles would be the ideal way to obtain more precise figures, but given that these groups of owners are widely dispersed, and behavior in different areas is likely to vary substantially, it seems that a more appropriate approach would be to target more detailed measurement specifically at the groups which are of most concern.

Specifically, it seems likely that the majority of foreign owned vehicles which have fallen outside the registration period are owed by those who have resided in the UK for between six months and a year. Our key assumptions in this area relate to the level of car ownership among EU citizens arriving to work in the UK for the first time, and the length of time for which they retain a car from their home country. Small scale sampling which aimed to test the validity of our assumptions would be a relatively low-cost exercise, and could significantly improve the quality of estimates and hence the ability of enforcement agencies to direct their efforts.

### Enforcement activity

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In some areas there are indications that drivers of foreign registered vehicles are more likely to contravene regulations than drivers of UK registered vehicles, in other areas they are no more likely, and may even be more compliant.

Overall figures for parking contraventions appear comparable to those for UK registered vehicles, but with some heavy repeat offenders among the owners of foreign registered vehicles. Figures for congestion charge, bus lane contraventions; and roadworthiness tests are higher among drivers of foreign than among drivers of UK registered vehicles; and there are indications that the accident rate could be higher.

Special initiatives to improve the safety of foreign registered vehicles therefore do seem to be justified by higher levels of contravention. More detailed analysis in this important area would help to direct efforts to improve enforcement. Some press

reporting in this area suggests a danger that the level of risk becomes inflated and robust data should help to avoid overstatement.

It is recognised that enforcement of parking penalties is difficult among foreign registered vehicles, and the indications are that a small proportion of owners take advantage of this. Initiatives to improve parking enforcement should therefore concentrate on identifying and imposing penalties on repeat offenders and may also best be directed at more residential areas.

Efforts to ensure that vehicles are registered in the UK can effectively be targeted at specific groups of owner. Our analysis suggests that short-term migrants are most likely to be the keepers of vehicle that are not registered in the necessary period, although further research would be required to build a firm business case to support investment in programme activity.

### Vehicle and driver safety

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In contravening parking regulations, as one example, it can be argued that vehicle offences primarily cause economic impact, through inconvenience and disruption to traffic, rather than risk to the public. In other areas, such as speeding, overloading, and vehicle safety, contraventions cause increased risk to the public.

Department for transport figures show significantly higher levels of contravention among foreign registered vehicles for offences associated with driver hours, but in other areas that could be associated with risk - such as speeding, overloading, road accident statistics, and goods vehicles failing VOSA roadside tests, the figures suggest that foreign registered vehicles are around 25% more likely than UK registered vehicles to represent a risk to safety.

Enforcement agencies need to understand whether the risks associated with foreign registered vehicles are sufficiently high to warrant specific action, in comparison, for example, to targeting resources at other relatively high-risk groups. We recognise that exaggerating the scale of these issues can unnecessarily inflame public concerns, and that informed debate in this area requires a firm evidence base. We do not believe that the differences we are seeing are sufficient in themselves to justify specific enforcement action, but they are sufficient to flag this as an area where further investigation is required.

### Summary

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We have estimated the total number of foreign registered vehicles in the UK at 141,900.

Our primary concern is with Great Britain, and here we estimate the number of foreign registered vehicles at 105,800. To illustrate the degree of uncertainty we have also derived a range of plausible values.

We believe that for Great Britain the most convincing figure for the number of foreign registered vehicles is 105,800. However, on different assumptions a plausible case can be

## Foreign registered vehicles on UK roads

made for a number as low as 62,750, or as high as 166,800. We view it as unlikely that the true number of foreign registered vehicles in Great Britain falls outside this range.

For some purposes this range will be sufficient to guide decision makers, and at least offers a step forward in comparison to the dearth of primary data. Where the level of uncertainty is too great for effective decision making we can only urge more detailed research.

| Average number of foreign registered vehicles | UK Estimate | Great Britain only | Low    | High    |
|---|-------------|--------------------|--------|---------|
| <b>Heavy goods</b>                            | 13,100      | 12,000             | 9,000  | 15,000  |
| <b>Light goods</b>                            | 4,100       | 4,100              | 4,100  | 4,100   |
| <b>Coaches</b>                                | 1,300       | 1,300              | 650    | 1,300   |
| <b>Passenger cars</b>                         |             |                    |        |         |
| <b>Used by visitors</b>                       | 33,400      | 33,400             | 25,000 | 33,400  |
| <b>In N. Ireland</b>                          | 35,000      |                    |        |         |
| <b>Used legally by residents</b>              | 40,000      | 40,000             | 20,000 | 53,000  |
| <b>Used beyond deadline</b>                   | 15,000      | 15,000             | 4,000  | 60,000  |
| <b>Total passenger cars</b>                   | 123,400     | 88,400             | 49,000 | 146,400 |
| <b>All vehicles</b>                           | 141,900     | 105,800            | 62,750 | 166,800 |

On average, foreign registered vehicles represent around 1% of all traffic on UK roads, but this figure varies from a high of around 3% in London, to around 0.5% in most regions outside the south-east of England. At sub-regional level we expect cities to experience a proportion of foreign registered vehicle traffic towards the higher end of the range. This range of figures is broadly confirmed by data from enforcement bodies, although there is considerable variation at a local level.

The behaviour of foreign registered vehicles varies, with relatively high levels of congestion charge evasion, and contravention of bus lane regulations. Moving contraventions are no higher among foreign registered vehicles, and the level of parking contraventions varies in different areas, with repeat offenders being the main cause where the level is high. Further investigation should be carried out on the risks imposed by foreign registered vehicles in order to ensure that enforcement activity is directed effectively, and to avoid the danger of unnecessary public concern.

## Conclusion and recommendations

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The presence and behaviour of foreign registered vehicles on UK roads is poorly understood, and while we hope that this analysis has contributed to understanding, we believe there is a strong case for detailed research in this area to better understand the mix and behaviour of foreign registered vehicles.

Research should be sufficiently detailed to direct resources at areas where they can have the greatest impact. Although historically a higher profile has been given to foreign registered heavy goods vehicles, these represent a small proportion of the total foreign vehicle population and passenger vehicles should be included in future research. Although we believe that they are concentrated the south east and London, and in urban rather than rural areas, foreign registered vehicles are present across the UK and further research needs to take this into account.

There appear to be significant numbers of foreign vehicles that have remained beyond the initial six month period and should now be registered in the UK. Because of the associated insurance and safety risks, this does seem to be an area where increased enforcement activity would be justified, and this would be directed at around 11% of the foreign vehicle stock. On face values it seems that such efforts could be focus on specific target groups which represent a high risk of contravention.

There are some indications that foreign registered vehicles represent a higher risk than UK registered vehicles, and that levels of contravention in some areas are higher. The differences do not appear to be great enough to target specific inspection and enforcement activities at foreign registered vehicles in general. However, a proportion of drivers of foreign registered vehicles take advantage of limitations in the current enforcement systems, and action should be taken to pursue this group specifically.

Addressing enforcement activity at the point of entry will require systems at the border capable of dealing with over 3 million vehicles per annum. Given the importance of this cross-border traffic to the UK economy, it is difficult to see how this can be achieved without considerable disruption, and this does not appear to be a viable option.

Enforcement of penalties against foreign registered vehicles continues to represent a challenge for those involved. While efforts continue to ease the process, new legislation and enforcement systems are being introduced in the context of new congestion charging schemes and decriminalisation of parking. These need to take account of the enforcement issue, and should track and report the extent to which foreign registered vehicles are involved.

### Appendices

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#### References

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Much of the base data on which this exercise was based is published by the Department for Transport. Key reports include:

- Expenditure on roads (November 2006)
- Road Traffic Statistics for Great Britain: 2005 (July 2006)
- Vehicle licensing statistics: 2005 (May 2006) and Statistical release on Vehicle licensing statistics (March 2006)
- Vehicle excise duty evasion: 2006 (January 2007)
- Road Freight Statistics 2005 (June 2006)
- Road goods vehicles travelling to mainland Europe: 2006 (February 2007)
- Survey of foreign Vehicle Activity In GB (November 2003)
- National travel survey: 2005
- Focus on Ports - 2006 edition
- Lorry Annual Test Failure Rates (VOSA)

Migration data is based on a variety of reports:

- Foreign labour in the United Kingdom (John Salt and Jane Millar, Migration Research Unit, University College London)
- Accession Monitoring Report (May 2004 – December 2006) – a joint online report by the Home Office, Department for Work and Pensions, HM Revenue & Customs and Communities and Local Government
- National Insurance Number Allocations to Overseas Nationals entering the UK (DWP)
- Labour Force Survey from the Office of National Statistics

Other sources of data include:

- Burns Freight Taxes Inquiry into fuel costs, foreign competition and freight taxes commissioned by the Road Haulage Association and Freight Transport Association
- Congestion Charging, Red Route and Parking Enforcement data from Transport for London and the London Borough of Enfield
- Enforcement data from a number of different Local Authorities and the Metropolitan Police and City of London Police

#### About Sparks

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The SPARKS Programme (Shared Parking and Registered Keeper information Service) is an initiative that enables traffic authorities in the UK and other EU Member States to collaborate and co-operate as they resolve the issue of cross-border enforcement of traffic violations. The initiative is the creation of London's Enforcement Task Force, a pan-London grouping of organisations that co-ordinates traffic enforcement activities across

the capital. The London Enforcement Task Force comprises Transport for London, London Councils (formerly the Association of London Government), Metropolitan Police Service and City of London Police, as well as representatives from the Driver and Vehicle Licensing Agency (DVLA) and the Vehicle and Operator Services Agency (VOSA).

The aim of the SPARKS Programme is to significantly increase the number of overseas drivers who obey UK traffic laws relating to parking, bus lanes, moving traffic, the congestion charge, and other civil traffic laws that may be introduced in future across the UK.

Further information on the SPARKS Programme can be found on the SPARKS web site at [www.sparksproject.org](http://www.sparksproject.org).

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