EXPLANATORY MEMORANDUM TO

THE M62 AND M606 MOTORWAYS (CHAIN BAR ROUNDABOUT) (CAR SHARE LANE) REGULATIONS 2009

2009 No. 2247

1. This explanatory memorandum has been prepared by the Highways Agency, an Executive Agency of the Department for Transport, and is laid before Parliament by command of Her Majesty.

2. Purpose of the instrument

2.1 This instrument will restrict the use of the free flow link road bypassing the Chain Bar Roundabout and connecting the M606 southbound exit slip road with the M62 eastbound entry slip road (the car share lane). Motor cars, taxis and goods vehicles carrying two or more persons only (including the driver) and all motorcycles, buses and coaches are permitted to use the car share lane. Heavy commercial vehicles will be prohibited altogether from the lane.

3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1 None

4. Legislative Context

4.1 These Regulations have been made under section 17(2) and (3) of the Road Traffic Regulation Act 1984, which empowers the Secretary of State to make regulations with respect to the use of special roads generally and, as in this case, with respect to particular lengths of special road.

4.2 Section 134(2) of the Road Traffic Regulation Act 1984 requires the Secretary of State to consult with representative organisations as he sees fit prior to making regulations under that Act.

5. Territorial Extent and Application

5.1 This instrument applies to England only.

6. European Convention on Human Rights

As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

7. Policy background

- ***What is being done and why***

7.1 One of the prime policy objectives of the Department for Transport is to reduce congestion.

7.2 A Highways Agency Network Strategy study into congestion at Chain Bar Roundabout (Junction 26 of the M62) identified that the greatest traffic flows entering the roundabout destined for the M62 eastbound were from the M606. Therefore, the greatest benefit would be to provide a link between the M606 southbound exit and M62 eastbound entry slip roads. The car share lane was created by converting the hard shoulders adjacent to the M606 southbound exit slip road and the M62 eastbound entry slip road into running lanes and connecting them with a new length of highway, forming a free flow link road that bypasses the Chain Bar Roundabout. In place of the hard shoulders, new emergency refuge areas have been provided at intervals along its length. This minimises the requirement for major new carriageway construction.

7.3 The restrictions on use of the car share lane by certain vehicles was then given effect by an experimental traffic order, namely the M62/M606 Motorways (Chain Bar Roundabout – Car Share Lane) Experimental Order 2008 (S.I. 2008/988) ("the Experimental Order"), which expires on 14 September 2009. The car share lane aims to ease congestion at Chain Bar Roundabout through encouraging drivers to car share. Car sharing helps reduce congestion, tackle pollution and carbon emissions and, importantly, cuts the costs of travelling. Journey time savings for car sharers on this section on average have been 8 minutes in the morning peak compared to a saving of 5 minutes for drivers not in the car share lane travelling on this section. During the evening peak journey time savings for car sharers are 2 minutes with 1 minute saving for non car-sharers. More vehicles are travelling, on this section as a whole, with shorter journey times.

8. Consultation outcome

8.1 As required for an experimental traffic order the Highways Agency consulted with the West Yorkshire Police before the Experimental Order was made and in both its preparation and during its currency the Agency has referred to key stakeholders as to its design and implementation. These include West Yorkshire Police, Northern Way, which represents the three Regional Development Agencies in the North of England, and Bradford Council. The Experimental Order also provided by notice for any objection to made in a 6 month period and the Highways Agency reports that it received no objections from the public.

8.2 In light of the ongoing contacts with stakeholders during the operation of the Experimental Order and the interest in maintaining continuous operation of the restrictions on use of the car share lane, the Highways Agency held a brief consultation with representative organisations between 7 August and 18 August 2009 on the proposal to make the car share lane provision permanent and continue its operation when the Experimental Order comes to an end. The consultation was conducted by letter and additional telephone calls. A draft of the Regulations was issued to 21 individuals and organisations which included: local MPs and MEPs, Bradford and Kirklees Councils, Yorkshire Forward, Northern Way Transport Project, Association of British Drivers, National Express Group, IAM Motoring Trust, British Motorcyclists Federation, Freight Transport Association, Road Haulage Association, RAC, the Automobile Association and West Yorkshire Police. Following this

consultation we have had positive comments from 5 consultees who stated they were "pleased with the proposals" and the scheme is "a good example of a smarter choices initiative". There were concerns from 2 of the consultees, the Freight Transport Association (FTA) and the Association of British Drivers (ABD). The FTA expressed concern that "the safety of vehicles travelling in the car sharing lane that would be affected by an HGV, in the normal lane, needing to access the hard shoulder in an emergency". The car share lane is formed from the hard shoulder with additional emergency refuge areas (ERA). In the rare event that an HGV could not reach the ERA this would necessitate temporary suspension of the car share lane and provision of emergency traffic management which could be provided by the Traffic Officer Service in this location. In addition they commented "we are concerned about journey reliability for HGVs at the junction. I understand that the data thus far would indicate a benefit for all roads users at that junction and therefore applies to heavy goods vehicles. We would like to see some assurances that the increase in reliability for all users is due to the improvements at the junction and not as a result of a general decrease in traffic levels caused by, firstly, high fuel costs in early 2008 and, secondly, by the downturn in the economy". The car sharing lane was monitored between March 2008 and April 2009. The results show that more vehicles are travelling on this section as a whole with journey time savings for both car share lane users and non car sharers during both the morning and evening peak (Impact Assessment, supporting data, table 6). ABD commented that they were pleased to see the increased capacity and appreciate the benefits associated with the car-share lane but would have preferred to see the lane delivered as a free flow available to everyone and believe that the lane would still deliver significant benefits to all. The Highways Agency considered opening the car sharing lane to all traffic and concluded that by closing the scheme, more demand could be accommodated, however this would reduce or cancel the scale of current benefits to all users and the delays experienced by road users at the Chain Bar signals would then be shifted to the M62 eastbound entry merge area. This has not been modelled, however M62 Eastbound is already operating beyond capacity at certain times of the day at this junction and would be adversely affected by any significant increase in demand. The Highways Agency has continued to engage with stakeholders during the Experimental Order. Northern Way, who represents the three Regional Development agencies in the North of England, are keen for the car share to continue and we discussed proposals for the future of the lane and contributed to the formulation of our preferred option. We had regular contact with Bradford Council and they continued to be supportive of the initiative. Discussions have been conducted during the scheme between West Yorkshire Police and the Highways Agency specific to enforcement issues on the lane and via regular liaison meetings.

9. Guidance

9.1 A press notice will be issued when the Regulations come into force and will include the restrictions on car sharing lane outlined above. There is on-road guidance for users in the form of permanent road signs. A letter will be sent out to all consultees informing them that the Regulations have been made and it will include the website address for the Office of Public Sector Information where the Regulations can be viewed.

10. Impact

10.1 Small businesses operating in the Bradford area who may use the car share lane for deliveries or other work-related purposes – notably taxis carrying fares – will be affected by the car share lane. However, there are journey time savings both for car sharers, which would include taxis carrying passengers, and non-car-sharers alike, so the impact is considered to be positive. The scheme under operation under the Experimental Order is offering benefits both to car-sharers using the car-share lane and also to non-car-sharers using the adjacent lane. In the morning peak, car-sharers are saving 8 minutes on what was previously a 12 minute journey. Non-car-sharers are saving 5 minutes on the same journey. During the evening peak, car-sharers enjoy a 2 minute saving on this journey compared to 1 minute saving for non-car-sharers.

10.2 The impact on the public sector will not change as all relevant costs were already undertaken when the Experimental Order was initially trialled from 17 March 2008 for 18 months. There will be no further costs incurred by the public sector in making these Regulations.

10.3 An Impact Assessment has been prepared for this instrument and attached to this Explanatory Memorandum.

11. Regulating small business

11.1 The legislation applies to small business.

11.2 To minimise the impact of the requirements on small firms employing up to 20 people, the approach taken is that taxis and minibuses carrying less than two people including the driver plus HGV's still benefit from improved journey times and journey time reliability through the affected junction. The permitted vehicles have been designated following the advice of the DfT Traffic Advisory Note 3/06.

11.3 A Small Firms Impact Test has been undertaken outlined in the attached Impact Assessment.

12. Monitoring & review

12.1 The scheme operating under the Experimental Order has been monitored after opening in March 2008. Surveys were carried out on 29th and 30th April 2009. Monitoring also took place before that scheme opened to traffic, in July 2007, to allow assessment of the impact of the scheme on vehicle journey times. Vehicle journey times were monitored at three times of the day: AM Peak 0700 to 0930, Mid-day 1200 to 1400, and PM Peak 1600 to 1830. Further monitoring of the scheme is intended – most likely on a yearly basis. The monitoring has shown journey time savings for users of the car share lane and also for users of the adjacent non-car-share lane. Compared with a previous journey time of 12 minutes in the morning peak, car-sharers are now receiving an 8 minute journey time saving. Non-car-sharers are receiving a journey time saving of 5 minutes for the same journey. During the evening peak, car-sharers enjoy a 2 minute saving on this journey compared to 1 minute saving for non-car-sharers.

13. Contact

Paul Thomas at the Highways Agency, telephone: 0113 283 6446 or e-mail: paul.thomas@highways.gsi.gov.uk, can answer any queries regarding the instrument.

Summary: Intervention & Options

Department /Agency:	Title:	
Highways Agency	**Impact Assessment of implementing a permanent car-share lane on M606/M62**	
Stage: Final	**Version:** 1.1	**Date: 11 August 2009**
Related Publications: N/A		

Available to view or download at:

http://www.highways.gov.uk/roads/133.aspx

Contact for enquiries: Graham Riley **Telephone:** 0113 2836233

What is the problem under consideration? Why is government intervention necessary?

On 20 March, 2008, a car share lane trial was opened on M606/M62 in Bradford West Yorkshire. This is the first lane of its type on a motorway in England and allows motor cars, taxis and goods vehicles carrying at least one person in addition to the driver ("permitted vehicles") to bypass a signal controlled junction at Chain Bar Roundabout. The restrictions on use of the car share lane was then given effect by an experimental traffic order, namely the M62/M606 Motorways (Chain Bar Roundabout – Car Share Lane) Experimental Order 2008 (S.I. 2008/988) ("the Experimental Order"), which expires on 14 September 2009. Making permanent this prohibition on the use of the CSL will establish Car Share Lanes as an approved DfT policy option.

What are the policy objectives and the intended effects?

Car-share lanes are intended to 'lock in the benefits' of increased capacity or changes in the priority of use of any piece of highway by restricting the use of part or all of a facility to a defined user group. In particular car-share lanes have the potential to carry more people along any stretch of highway, than with a normal traffic mix and to offer improved journey time reliability.

What policy options have been considered? Please justify any preferred option.

1/ To implement a permanent car-share lane on the same basis as the current trial. (Preferred Option)

2/ To implement a permanent car-share lane but change the rules to allow HGV's to use the lane.

3/ Abandon the car-share lane

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects?

Review of the permanent car-share lane will be undertaken after 12 full months of operation.

Ministerial Sign-off For implementation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that (a) it represents a fair and reasonable view of the expected costs, benefits and impact of the policy, and (b) the benefits justify the costs.

Signed by the responsible Minister:

Sadiq Khan Date: 19th August 2009

Summary: Analysis & Evidence

Policy Option: 1	Description: **Make the M606/M62 trial a permanent scheme (under secondary legislation)**

COSTS

ANNUAL COSTS	Description and scale of **key monetised costs** by 'main affected groups' No apparent costs to stakeholders when compared to the base case.
One-off (Transition) **Yrs**	
£ N/A	
Average Annual Cost (excluding one-off)	
£ N/A	**Total Cost** (PV) **£**

Other **key non-monetised costs** by 'main affected groups' No apparent costs to stakeholders when compared to the base case.

BENEFITS

ANNUAL BENEFITS	Description and scale of **key monetised benefits** by 'main affected groups'	
One-off **Yrs**		
£	Benefit to car-sharers	£511,475
Average Annual Benefit (excluding one-off)	Benefit to non-car-sharers	£2,170,919
	of which Benefit to HGV's	£170,872
£ 2,682,394	**Total Benefit** (PV)	**£ 5,364,788**

Other **key non-monetised benefits** by 'main affected groups' Provision of the lane has effectively locked in the benefit released for a defined group of users. The use of the facility has exceeded the anticipated estimate. Further benefits could arise if the lane encourages car sharing and reaslises fuel and other savings in vehicle running costs.

Key Assumptions/Sensitivities/Risks Assumed that levels of demand will stay with modelled parameters. Any increase in fuel prices may increase demand for use of facility. Future development of adjacent Managed Motorway may impact lane operation. Assumed benefits in place for first 2 years from creating a permanent order.

Price Base Year 2009	Time Period Years 2	**Net Benefit Range** (NPV) **£**	**NET BENEFIT** (NPV Best estimate) **£ 5,365,000**

What is the geographic coverage of the policy/option?	Y & H
On what date will the policy be implemented?	14/09/09
Which organisation(s) will enforce the policy?	DfT/Police
What is the total annual cost of enforcement for these	£ N/A
Does enforcement comply with Hampton principles?	No
Will implementation go beyond minimum EU requirements?	No
What is the value of the proposed offsetting measure per year?	£ N/A
What is the value of changes in greenhouse gas emissions?	£ N/A
Will the proposal have a significant impact on competition?	No

Annual cost (£-£) per organisation (excluding one-off)	Micro **N/A**	Small **N/A**	Medium **N/A**	Large **N/A**
Are any of these organisations exempt?	No	No	N/A	N/A

Impact on Admin Burdens Baseline (2005 Prices)				(Increase - Decrease)
Increase of	£ N/A	Decrease of	£ N/A	**Net impact** **£** N/A

Key: **Annual costs and benefits: Constant Prices** **(Net) Present Value**

Background

1. The M62 between Bradford and Leeds handles substantial flows of commuter traffic, much of which joins from the M606 out of Bradford. On 20 March 2008 a new slip road that by-passes the main junction for traffic from Bradford heading east-bound on the M62 was opened. The link road was designated a trial car-share lane, the first of its type on a motorway in England. The lane is open to cars, vans and minibuses with at least one passenger, buses and coaches, and motorcycles. HGVs are not allowed in the lane regardless of how many people are in the cab.

2. The cost of the scheme was £5.33 million, funded by Northern Way, a collaboration between the three Northern Regional Development Agencies: Yorkshire Forward, Northwest Development Agency and One Northeast.

3. The car-share lane has provided a free flow movement through the junction for permitted vehicles travelling from the M606 Eastbound onto M62. This Impact Assessment considers the provision of a permanent car-share lane against a base position of the provision of a free flow lane available to all classes of vehicle permitted to use motorways. It should be noted, however, that the Highways Agency considers the provision of a free flow facility open to all classes of vehicle permitted to use a motorway likely to cancel out the benefits currently enjoyed because of the car-share lane due to promoting the release of latent demand. In this respect, all benefits quoted are in comparison to the situation before the lane was introduced. It should further be noted that the additional lane would not have been provided unless for use as a car-share facility.

Performance of the current M606/M62 car-share lane

4. A study before implementation of the scheme estimated 6-8 minutes could be saved per journey during the morning peak period. Highways Agency have recently completed a review of the first year of operation. The main results are as follows:

- The new link road has saved time for all users. Journey time savings for users of the car-share lane on average was 8 minutes in the morning peak and five minutes for non-car-share users.

- During the evening peak period the journey time savings are more modest at around 2 minutes with 1 minute saving for non-car-share lane users.

- Flows were shown to increase with a significantly greater number of vehicles travelling per hour during the early evening peak. This result implies that more vehicles are travelling, on this section as a whole, with shorter journeys.

- The compliance rate has fallen since the lane was first brought into operation.

There is no evidence on the numbers of drivers who have started to car-share and left their cars at home as a result of the scheme, as compared with those who would

have been carrying passengers anyway. This would be possible only by surveying drivers.

5. The experimental traffic order enabling the M606/M62 car-share lane trial will end on 14 September 2009. There is also the question of whether the car-share lane should be extended onto the main carriageway of the M62 – the January, 2009 roads announcement stated that this was being considered

6. Four options have been identified:

I. To implement a permanent car-share lane on the same basis as the current trial
II. To implement a permanent car-share lane but change the rules to allow HGVs to use the lane
III. Abandon the car-share lane.

(Regulations will be made under Section 17 of the Road Traffic Regulation Act 1984 in order to make this prohibition permanent)

Enforcement

7. During the design stages of the scheme, discussions with West Yorkshire Police had indicated that a Police presence would be provided on a Police Observation Platform that is now located on this section.

Consideration of options

(i) Implement a permanent car-share lane on the same basis as the current trial

8. This option allows the facility to continue to operate as at present. Certain classes of road user, particularly HGV's and taxis and minibuses with driver only have been excluded from the lane. In the case of HGV's, they were excluded from the lane during its current trial as it was judged that the slower speed of HGV's as they climb the inclined link road to join the M62 could have a negative impact on the efficient operation of the car-share lane. In addition, the radius of the bend of the car-share lane as it joins the end of the M606 and M62 may have safety implications for HGV's travelling at the speed limit. DfT Traffic Advisory Leaflet 3/06 states that the basic principle of the lane is to allow only vehicles with two or more occupants, buses and powered two wheelers to use the lane. HGV's may or may not be allowed access and, by definition, taxis and minibuses with driver only do not comply with this description. The current trial has highlighted no issues (or complaints) from taxi and minibus drivers and has demonstrated time saving benefits for all classes of vehicle whether using the car-share lane facility or not.

9. A benefit of choosing this option is that it makes the current operation of the lane permanent without introducing any new operating conditions and current benefits in terms of time and flow should be retained. There is, however, and ongoing issue of managing compliance on the lane which will need addressing once the lane has been made permanent.

Table 1: Total journey time benefits (2009 prices, 2009 values of time)

	Car-share Lane	Lane 1	Lane 2	TOTAL
AM Peak	£335,877	£921,781	£946,150	**£2,203,808**
Inter-Peak	£54,231	-£106,078	£84,101	**£32,254**
PM Peak	£121,367	£123,040	£201,925	**£446,332**
TOTAL	£511,475	£938,743	£1,232,176	**£2,682,394**

(ii) Implement a permanent car-share lane but change the rules to allow HGVs to use the lane

10. There is a case for allowing goods vehicles to use the lane. Time savings for goods vehicles can lead to direct cash savings for business, so there is a potential benefit to the economy. This option also supports the original objective for Northern Way i.e. to benefit the local economy. The maximum hourly flow recorded in the car-share lane is comfortably short of the capacity of a single lane (including non compliant vehicles) and so there is sufficient capacity to permit all goods vehicles to use the lane. This has been discussed with the Northern Way RDAs and they would be happy with this option.

11. Currently another car-share scheme on a local authority road - the East Leeds Link - permits use by all goods vehicles with two or more occupants and goods vehicles 7.5T and over with one or more occupant.

12. If this option is pursued Highways Agency can organise a detailed communications campaign to work with stakeholders and educate road users. Improving enforcement still needs addressing, though allowing HGVs in the lane reduces the size of the problem.

Table 2: Total impact of allowing HGV's to use the car-share lane

(2009 prices, 2009 values of time)

	Vehicles	Time Savings (hours)	Journey Time Benefits (£s)
AM Peak	1,436,981	124,972	**£2,077,854**
Inter-Peak	2,742,654	67	**£ 11,917**
PM Peak	1,745,610	25,779	**£400,819**
TOTAL	5,925,245	150,818	**£2,490,590**

(iii) Abandon the car-share lane.

13. By allowing the experimental order to expire and closing the scheme, allowing all vehicles access to the lane, the journey time savings from the new link road would be shared equally among all road users. However it would remove any incentive to car-share.

14. However, it is also the case that by closing the scheme, more latent demand could be accommodated, reducing or cancelling the scale of current benefits to all users and the delays experienced by road users at the Chain Bar signals would be shifted to the M62 eastbound entry merge area. This has not been modelled, however M62 Eastbound is already operating beyond capacity at certain times of the day at this junction and would be adversely affected by any significant increase in demand.

15. Closing the lane is likely to provoke criticism from the media and stakeholders, including the funding body Northern Way, who may see closing the scheme as a 'waste of money'.

Equality Impact Assessment Screening

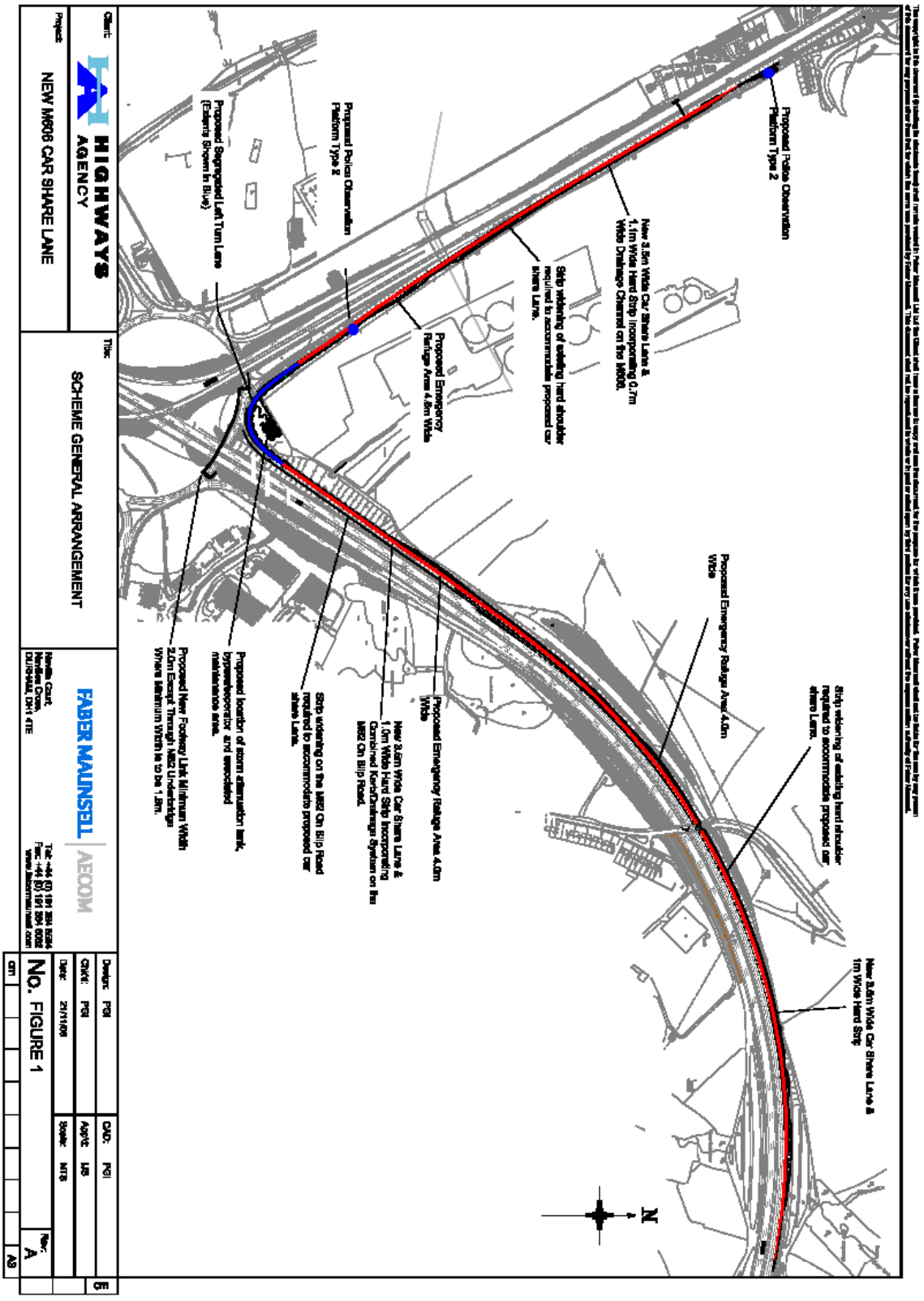
16. An Equality Impact Assessment Screening has been undertaken. This has not identified any indication of impact resulting from the operation of the car-share lane on gender, religion or belief, age, disability, ethnicity and race, sexual orientation or transgender people.

Small Firms Impact Test

17. A Small Firms Impact Test has been undertaken. This indicates that, small firms, including taxi and logistics (HGV) operators, are affected in that taxis and minibuses are excluded from the lane if they are not carrying passengers and HGV's are excluded at all times. However, both groups still benefit from improved journey times and journey time reliability through the affected junction. The permitted vehicles have been designated following the advice of the DfT Traffic Advisory Note 3/06.

Layout of Car-Share Lane

Figure 1.



Supporting Data

M606 Car-Share Lane: After Survey: 29th & 30th April 2009

The 'After' Survey

28, A series of surveys were undertaken on 29th and 30th April 2009 to determine the operational use of the car-share lane some thirteen months after the lane became operative on 20th March 2008. The surveys comprised:

- Journey time surveys on 29th and 30th April using the moving car method,
- Classified turning counts on 29th April for:
  - Vehicles using the car-share lane adjacent to the M62 Junction 26 Chain Bar traffic signals,
  - Vehicles turning left from the M606 off-slip road to the M62 eastbound on-slip road at the M62 Junction 26 Chain Bar traffic signals.
  - Occupancy of vehicles using the car-share lane on 29th April,
  - Vehicles on the M606 swooping into and out of the car-share lane in advance of the Chain Bar traffic signals,
  - Vehicles on the M62 eastbound on-slip road swooping into and out of the car-share lane.

29. The surveys were carried out on each day covering three time periods:-
    - AM Peak 0700 to 0930,
    - Mid-day 1200 to 1400, and
    - PM Peak 1600 to 1830.

30. 'Before' surveys were undertaken in July 2007. Where appropriate comparisons are made in this Note between the 'before' and 'after' surveys.

Journey Time Surveys

31. On each of the two days six cars were employed to cover each of the following:
    - Use of the car-share lane between M606 and M62 eastbound (two cars),
    - Use of the non–car-share lane route between M606 and M62 eastbound. As traffic is permitted to turn left in two lanes from the M606 and there are two lanes on the link road joining the M62 two cars travelled in the nearside lane and two travelled in the offside lane.

32. Each of the journey time measurements had a common start point as the ANPR Camera Gantry at the beginning of the car-share lane on the M606. The journey time end point was taken when the vehicle had joined the M62 mainline carriageway and passed under the A58 Whitehall Road overbridge.

33. For vehicles using the car-share lane there are effectively two points of delay; where it merges with the M62 and between the end of the car-share lane and the A58 overbridge.

34. For non-car-sharers between the M606 and the M62 eastbound there are three potential points of delay; at the Chain Bar traffic signals, merging with the M62 mainline and the delay on the mainline to the A58 overbridge.

35. An interim timing point was also taken on the M62 eastbound on-slip where the ANPR Camera gantry is located. This would enable proxies to be determined for junction delay times and motorway delays for the non-car-share lane traffic, though this Note presents only the end to end journey times,

36. The summaries of the various observed journey times are presented in Tables 1 and 2. Table 3 combines the information given in Tables 1 and 2.

Table 3 – Journey Times Wednesday 29th April 2009

	AM Peak			**Mid -day**			**PM Peak**		
	Car-share	**Non car-share**		**Car-share**	**Non car-share**		**Car-share**	**Non car-share**	
		N'side	O'side		N'side	O'side		N'side	O'side
No of Runs	29	13	13	28	13	15	28	13	12
Average Time	3:14	6:36	6:31	2:21	2:5	2:22	2:53	5:11	4:54
Highest Time	5:37	9:45	9:35	2:45	3:49	2:42	5:03	9:08	7:50
Lowest Time	2:31	4:06	2:35	2:02	2:14	2:07	1:51	2:18	3:03

Table 4 – Journey Times Thursday 30th April 2009

	AM Peak			**Mid -day**			**PM Peak**		
	Car-share	**Non car-share**		**Car-share**	**Non car-share**		**Car-share**	**Non car-share**	
		N'side	O'side		N'side	O'side		N'side	O'side
No of Runs	32	13	14	32	14	16	29	14	14
Average Time	2:18	5:10	5:19	2:18	3:04	2:21	2:25	3:19	2:35
Highest Time	3:48	6:49	7:26	2:36	3:53	2:37	2:44	4:19	3:21

Lowest Time	1:51	3:13	2:53	1:53	2:11	2:06	2:09	2:23	2:06

Table 5 – Journey Times Wednesday 29th and Thursday 30th April

	AM Peak			**Mid -day**			**PM Peak**		
	Car-share	**Non car-share**		**Car-share**	**Non car-share**		**Car-share**	**Non car-share**	
		N'side	O'side		N'side	O'side		N'side	O'side
No of Runs	61	26	27	60	27	31	57	27	26
Average Time	3:05	5:53	5:53	2:19	2:57	2:21	2:39	4:13	3:39
Highest Time	5:37	9:45	6:31	2:45	3:53	2:42	5:03	9:08	7:50
Lowest Time	1:51	3:13	2:35	1:53	2:11	2:06	1:51	2:18	2:06

37. The moving car crews observed that AM and PM peak congestion on the M62 eastbound was greater on Wednesday 29th April than on Thursday 30th April. A further observation was that for a short time towards the end of the AM Peak period on Wednesday 29th April the Police appeared to operate a rolling road block on the eastbound carriageway of the M62 between Junction 26 Chain Bar and Junction 27 Gildersome.

Comparison with the 'before' survey

38. The journey times of those using the car-share lane and the link road (non-car-sharers) have been compared with the journey times from the 'before' surveys undertaken in July 2007. The maximum, minimum and average journey times (in minutes : seconds) for the car-share lane users together with the saving in average times are presented in Table 4 and those for the non-car-sharers in Tables 5a and b, for the nearside and offside lanes respectively.

Table 6 – Comparison of car-sharers Travel Times with the 'before' situation

Period	**Before Survey**			**After Survey (car-share lane only)**			**Saving in Average Time (Mins : secs)**
	Max	Min	Average	Max	Min	Average	
AM Peak	21:49	3:51	11:07	5:37	1:51	3:05	8:02
Mid day	4:22	1:5	2:42	2.45	1:53	2:19	0:23

		7					
PM Peak	7:28	3:08	4:48	5:03	1:51	2:39	2:09

Table 7a – Comparison of non-car-share Travel Times (nearside lane) with the 'before' situation

Period	**Before Survey**			**After Survey (Non-car-share nearside lane)**			**Saving in Average Time (Mins : secs)**
	Max	Min	Average	Max	Min	Average	
AM Peak	21:49	3:51	11:07	9:45	3:13	5.53	5:14
Mid day	4:22	1:57	2:42	3:53	2:11	2:57	- 0:15
PM Peak	7:28	3:08	4:48	9:08	2:18	4:13	0:35

Table 7b - Comparison of non-car-share Travel Times (offside lane) with the 'before' situation

Period	**Before Survey**			**After Survey (Non-car-share lane offside lane)**			**Saving in Average Time (Mins : secs)**
	Max	Min	Average	Max	Min	Average	
AM Peak	21:49	3:51	11:07	6:31	2:35	5.53	5:14
Mid day	4:22	1:57	2:42	2:42	2:06	2:21	0:21
PM Peak	7:28	3:08	4:48	7:50	2:06	3:39	1:09

39. It is noted that the Chain Bar signals were converted to MOVA Control just prior to the 'before' surveys were undertaken and at the time of that survey the signal operation was still being calibrated and validated. It is likely therefore that at the time of the 'after' survey the signals were operating in a more efficient manner and hence were more receptive to changes in traffic demand. This in itself will have had a positive benefit on the journey times for non-car-sharers traffic.

40. Given that the 'before' survey indicated an average journey time of 11:07 in the AM Peak period it can be seen that the introduction of the car-share Lane has

resulted in a travel time saving for car-sharers of some 8 minutes and that there has also been benefits to non-car-sharers lane users of some 5 minutes in this period.

41. In the Mid-day period there is little difference in journey times from the 'before' and 'after' situations.

42. In the PM peak period the journey time savings for car-sharers was more modest at around 2 minutes with approximately 1 minute saving for non-car-sharers.

Use of the Car-Share Lane

43. Classified turning counts were undertaken to determine the number of vehicles using the car-share lane as well as those turning from the M606 to M62 eastbound. It is noted that from the 'before' survey information is available only for vehicles turning left from the nearside lane. Hence in peak periods this would approximate to about half the number of vehicles turning from the M606 to M62 eastbound.

44. The resultant traffic flows are be compared with those observed turning from the M606 to M62 eastbound during the 'before' surveys, as set out in Table 6.

Table 8 – Comparison of 'Before' and 'After' Turning Movements

Period	**Before Survey July 07 (Vehicles)**	**After Survey April 09 (Vehicles)**			
		Car-share Lane	Non car-share lane		Total
	Nearside Lane Only		Nearside Lane	Offside Lane	
AM Peak (2.5 hrs)	2808	601	2610	2679	5890
Mid day (2 Hrs)	1967	634	1727	978	3339
PM Peak (2.5 Hrs)	2492	931	3426	2852	7209

45. Of the non-car-sharing vehicles the majority of HGVs occupied the nearside lane and hence the proportion of light vehicles using the offside lane was substantially higher than in the nearside lane. Given the uphill gradient on the M62 on-slip road this disproportionate use of the two lanes may have influenced the relative speed, and hence journey times, of vehicles in the nearside and offside lanes.

Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	***Results in Evidence Base?***	***Results annexed?***
Competition Assessment	No	No
Small Firms Impact Test	Yes	Yes
Legal Aid	No	No
Sustainable Development	No	No
Carbon Assessment	No	No
Other Environment	No	No
Health Impact Assessment	No	No
Race Equality	Yes	Yes
Disability Equality	Yes	Yes
Gender Equality	Yes	Yes
Human Rights	No	No
Rural Proofing	No	No

Annexes

1. EqIA Screening Proforma

Name of the function, policy or strategy - M606/M62 Car-Share Lane **Current or Proposed: Current**							
Person completing the assessment: Graham Riley **Date of assessment: 11 August, 2009**							
Purpose of the function, policy or strategy: **Provide a travelling time advantage to occupants of Car-Sharers as defined by Traffic Regulation Order and on-site signage**							
Questions - Indicate Yes or No for each group	**Gender**	**Religion or Belief**	**Age**	**Disability**	**Ethnicity and Race**	**Sexual Orientation**	**Transgender**
Is there any indication or evidence that different groups have different needs, experiences, issues or priorities in relation to the particular policy?	No	No	No	No	No	No	No
Is there potential for, or evidence that, this policy may adversely affect equality of opportunity for all and may harm good relations between different groups?	No	No	No	No	No	No	No
Is there any potential for, or evidence that, any part of the proposed policy could discriminate, directly or indirectly? (Consider those who implement it on a day to day basis)?	No	No	No	No	No	No	No
Is there any stakeholder (staff, public, unions) concern in the policy area about actual, perceived or potential discrimination against a particular group(s)?	No	No	No	No	No	No	No
Is there an opportunity to better promote equality of opportunity or better community relations by altering the policy or working with other government departments or the wider community?	No	No	No	No	No	No	No
Is there any evidence or indication of higher or lower uptake by different groups?	No	No	No	No	No	No	No
Do people have the same levels of access? Are there social or physical barriers to participation (e.g. language, format, physical access/proximity)?	No	No	No	No	No	No	No

If you have answered "no" to all the questions, an EqIA is not required. If you have answered 'yes' or "not known" to any of the above questions, please complete an Initial EqIA.

2. M606/M62 Car-Share Lane Small Firms Impact Test

Please see document on following pages.

M606/M62 Car-Share Lane Small Firms Impact Test

1. Background

1.1. The M62 between Bradford and Leeds handles substantial flows of commuter traffic, much of which joins from the M606 out of Bradford. On 20 March 2008 a new link road that by-passes the main junction for traffic from Bradford heading east-bound on the M62 was opened. The slip road was designated a trial car-share lane, the first of its type on a motorway in England. The lane is open to cars, vans and minibuses with at least one passenger, buses and coaches, and motorcycles. HGVs are not allowed in the lane regardless of how many people are in the cab.

1.2. The car-share lane has provided a free flow movement through the junction for permitted vehicles travelling from the M606 Eastbound onto M62. This Impact Assessment considers the provision of a permanent car-share lane against a base position of the provision of a free flow lane available to all classes of vehicle permitted to use motorways. It should be noted, however, that the Highways Agency considers the provision of a free flow facility open to all classes of vehicle permitted to use a motorway likely to cancel out the benefits currently enjoyed because of the car-share lane due to promoting the release of latent demand. In this respect, all benefits quoted are in comparison to the situation before the lane was introduced. It should further be noted that the additional lane would not have been provided unless for use as a car-share lane facility.

1.3. It is reasonable to expect that these benefits can be retained for two years of operation, beyond which monitoring will determine whether they have been retained.

2. Businesses likely to be affected

2.1. Based on the positive outcomes of the car-share lane trial, all classes of vehicle have enjoyed journey time benefits, whether able to use the car-share lane or not. There is a differential in benefit, however, for those vehicles not able to use the lane in as much as the journey time savings available to them are not as great as for vehicles permitted to use the lane. Small firms directly affected by this are operators of HGV's and taxi firms or individual taxi operators. Other small firms with employees driving on business may also be affected, however it is not reasonably possible to quantify the proportion of traffic using the junction which may fall into this category. HGV's cannot use the lane at any time and taxis and minibuses (often operated by taxi firms or small transport operators) can only use the lane when carrying passengers. Due to the corridor nature of traffic moving between Bradford and Leeds using this route it is likely that most of the firms affected would come from either Bradford or Leeds.

2.2. In neither case are they worse off than prior to the lane being opened, however, as the alternative to the lane being made permanent is for the lane to be made available to all, it is against this scenario that the Impact Test has been considered.

2.3. There is no direct charge to businesses in the form of levy or fee to small businesses or any class of vehicle using the facility. Any costs or benefits associated with the facility are costs incurred through differences in comparative journey times.

Data for the number of taxis using the junction has not been collected, however, the number of HGV's has and represents a small proportion of overall vehicle numbers.

3. Options

3.1. The impact assessment considers a number of different options, however the preferred option, as outlined above, offers the best fit in terms of maximising the benefit delivered by this

additional capacity and locking those benefits in without adversely affecting other road users. Indeed, all other options are likely to reduce the currently enjoyed benefits of journey time savings and journey time reliability.

3.2. In addition, following the advice of DfT traffic Advisory note 3/06, only vehicles carrying two or more people, buses and powered two wheeled vehicles would normally be permitted to use the lane. HGV's may or may not be permitted to use the lane.

3.3. Other than the scenario of opening up the lane to all classes of vehicle permitted to use motorways, the only alternative option would be to allow HGV's into the lane in addition to currently permitted users, however, safety and journey time implications of this (discussed in the Impact Assessment) preclude this option. To allow any single occupancy vehicle outside of those suggested by DfT's Traffic Advisory Note is considered to be likely to reduce the effectiveness of the facility and confuse drivers of currently permitted classes carrying passengers.

4. Consultation

4.1. Prior to the introduction of the car-share lane trial the draft traffic regulation order was published allowing any interested parties to lodge their objections. No such objections were received from any organisations representing small businesses.

4.2. In the run up to the commencement of the trial a stakeholder engagement event was held targeted at businesses and their representative organisations in areas likely to be most affected by the new facility. No objections were recorded at the event and delegates were able to engage in open discussion with the Highways Agency and the Northern Way (the scheme sponsors) about how the lane would operate.

4.3. In stakeholder consultation relating to creating a permanent traffic regulation order on the lane, a range of relevant key stakeholders have been consulted, including the local office of the Freight Transport Association and the Road Haulage Association.

5. Financial Impact

5.1. The car-share lane currently offers benefit to all classes of vehicles travelling from M606 onto M62 eastbound, regardless of whether they are able to use the lane or not. Compared to the alternative of a free flowing lane it is not know whether the benefits would remain but it is likely that they would be reduced by the impact of attracting latent demand and by the potential creation of new congestion where the M62 eastbound slip road joins the mainline M62.

5.2. As data for the number of taxis using the junction is not available it is not possible to estimate the benefits to them, however, for comparison, the benefit to HGV's has been calculated. A monetised collective estimation of these benefits and any potential costs including for small firms not enjoying the full benefit of the car-share lane are outlined below and have been included in the Impact Assessment.

Table 1: Annual vehicle totals

	Car-share Lane	**Lane 1**	**Lane 2**

AM Peak	103,152	658,214	675,615
Inter-Peak	347,376	1,529,259	866,019
PM Peak	157,276	866,778	721,556
TOTAL	607,804	3,054,250	2,263,190

Table 2: Annual time savings (hours)

	Car-share Lane	**Lane 1**	**Lane 2**
AM Peak	13,811	57,411	58,929
Inter-Peak	2,219	-6,372	5,052
PM Peak	5,636	8,427	13,830
TOTAL	21,666	59,466	77,810

Table 3: Total journey time benefits (2009 prices, 2009 values of time)

	Car-share Lane	**Lane 1**	**Lane 2**	**TOTAL**
AM Peak	£335,877	£921,781	£946,150	**£2,203,808**
Inter-Peak	£54,231	-£106,078	£84,101	**£32,254**
PM Peak	£121,367	£123,040	£201,925	**£446,332**
TOTAL	£511,475	£938,743	£1,232,176	**£2,682,394**

5.3. Considering only HGVs in the non-car-share lanes 1and 2, the total number of vehicles is over 0.5 million per annum and annual journey time benefits are £171,000 (2009 prices and values).

Table 4: Total impact on HGVs

	Vehicles	**Time Savings (hours)**	**Actual Journey Time Benefits (£s)**
AM Peak	125,806	10,973	**£161,436**
Inter-Peak	343,400	-189	**-£ 2,784**
PM Peak	59,276	831	**£12,220**

TOTAL	528,482	11,614	**£170,872**

N.B. In all tables, negative benefits in the inter-peak period are minimal and occur at a time when there is little or no congestion on M606. It is likely that this represents a change in demand on the Chain Bar Junction (of which the M606 forms one leg) during the day and the effect of MOVA technology sharing access through the junction.

6. Conclusion

6.1. Whilst the level of benefit enjoyed by some small firms may be less than that of those vehicles able to use the car-share lane, they still benefit from time savings compared to the situation prior to the opening of the lane and appear to form a very small proportion of the vehicles observed. It is unknown whether the lane would have been provided at all were it not to be a car-share lane as this would undoubtedly draw more latent demand onto an already severely pressurised section of the motorway network. However, now that the new lane does exist it is reasonable to compare the different levels of benefit between current operation and if the lane were free flowing. It should be noted, however, that the Highways Agency considers the provision of a free flow facility open to all classes of vehicle permitted to use a motorway likely to cancel out the benefits currently enjoyed because of the car-share lane due to promoting the release of latent demand. In this respect, all benefits quoted are in comparison to the situation before the lane was introduced.

6.2. On balance, it is considered that the greatest benefit across all classes of vehicle travelling between M606 and M62 eastbound is with the lane continuing to operate as a car-share lane in which only vehicles with two or more persons, buses and powered two vehicles are permitted.

6.3. The operation of the lane will continue to be reviewed in order to seek to retain the current levels of benefit being demonstrated.