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Measuring the Impact of MVRIB Initiatives on Abandoned Vehicles

A report establishing the baselines and trends of abandoned vehicles, the predicted trends for the future and the likely impact the End of Life Directive and MVRIB initiatives will have on abandoned vehicles

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Executive summary

The number of vehicles abandoned in England and Wales has increased dramatically over the past 5 years:

- In 2002, 157,523 abandoned vehicles were reported to DVLA as disposed of compared to 16,827 in 1998 – an increase of nearly ten fold.
- In 2000/01 (the only year for which there is reasonably reliable national data), 238,100 vehicles were reported abandoned, making up nearly 12% of the 2 million or so vehicles scrapped in that year.

2. Three factors, working in combination, have created the conditions for this problem to grow:

- a dramatic decrease in the price of scrap metal,
- weaknesses in the vehicle licensing and registration system, and
- a growth in the pool of cheap second hand vehicles.

3. The End of Life Vehicles Directive (ELVD) is likely to push these numbers up even further, to around 800,000 by 2007, reducing thereafter when vehicle manufacturers become responsible for vehicle disposal costs.

4. In the face of such strong upward pressure, the best that could be hoped for from MVRIB and local authority initiatives would be to keep the increase in abandoned vehicles down to 400,000 by 2007. This is largely dependent on MVRIB being effective in halving the 1.5 million vehicles in the so-called 'underclass'.

5. It is likely, however, that many of the more determined keepers pulled back into the registration system will find ways around the system, for example by making fraudulent claims of theft, or setting fire to their dumped vehicles so they can't be traced back. Under this scenario, the numbers of abandoned vehicles in 2007 could be around 560,000 – twice the current number, but a good deal less than might otherwise be expected

6. Reliable data at national level on abandoned vehicles is very thin. The following data sources could provide performance indicators for the impact of MVRIB and increased local authority efforts on abandoned vehicles:

- *DEFRA Municipal Waste Management Survey*: The 2001/2 survey asked local authorities to estimate the number of abandoned vehicles dealt with in their areas and if they had any surrender schemes running. More questions about abandoned vehicles be included in future surveys and measures introduced to ensure local authorities provide more accurate information.
- *DVLA V28s*: These 'disposal of abandoned vehicle' forms can provide a measure of the numbers of abandoned vehicles. However, local authority obligations to return these forms need to be more strictly enforced.

- *DVLA web-enabled enquiries:* As more local authorities subscribe to the DVLA web-based system for checking suspected abandoned vehicles, this will provide a means of monitoring abandoned vehicle rates.
- *Monitoring of authorised treatment centres:* These centres could be asked to give figures on the numbers of cars disposed of. However, this measure would encompass all end of life vehicles and not simply abandoned vehicles, unless a system was set up whereby the centres differentiated between abandoned and other end of life vehicles.

1. Historical rates and trends in abandoned vehicles

Why are abandoned vehicles a problem?

7. Abandoned vehicles (AVs) cause problems for local communities in various ways. They are eyesores, obstruct parking spaces, frequently attract vandalism and arson and can be an environmental hazard when burnt out. In these ways, they can contribute to fear of crime and a sense of general neighbourhood decline. AVs have been identified as a 'big' or 'fairly big' problem to 18% of people surveyed by the British Crime Survey, 2001. The financial costs to local authorities of dealing with AVs are high: for example, in Kent in the year 2000/1 the removal and disposal of AVs cost the County Council £720,000.

The national picture

8. The DEFRA Waste Management Survey provides the most accurate picture of the level of the problem of AVs. In 2000/01, the number of vehicles abandoned across England and Wales was estimated at 238,100.¹ The regional breakdown for this figure is presented in Table 1.

Table 1. Number of abandoned vehicles per region 2000/01

Region	Total abandoned vehicles (thousand)	%
North East	2.5	1
North West	9.2	3.9
Yorkshire & the Humber	7.7	3.2
East Midlands	11.9	5
West Midlands	20.7	8.7
East	28.9	12.1
London	83.6	35.1
South East	44.7	18.8
South West	17.2	7.2
Wales	11.7	4.9
Total	238.1	100

9. As shown in Table 1, at 35% London has the highest concentration of AVs in England and Wales although only 9.8% of vehicles in England & Wales are registered in London. A 20% reduction in AVs in London would produce a 7% reduction nationally.

10. Anecdotal evidence suggests there might be a link between the regional variation in AV numbers and scrap dealer charges. Some scrap dealers in the North of England and the Midlands pay for end of life vehicles. These areas have some of the smallest numbers of AVs. In comparison, the South East (20% of the AV population) was one of the first areas to begin charging owners to dispose of their

¹ The 2001 DTLR consultation document on AVs provided an estimate of 350,000 AVs for the year 2000. This figure was frequently cited by organisations dealing with AVs; however, it is generally now recognised that the DEFRA figure of 238,100 is more accurate.

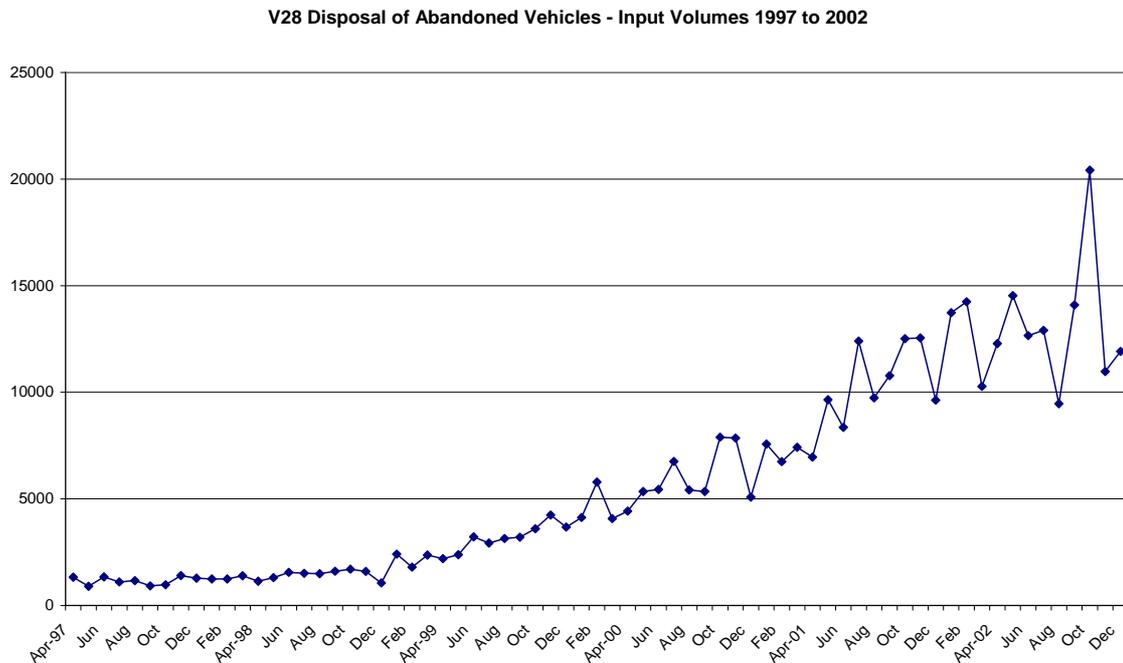
vehicles. These differences in charges have implications for the impact of the End of Vehicle Life Directive on AV numbers (to be discussed later in this paper).

Trends

11. There is a lack of historical data on the problem of AVs; however, reports from local authorities and the police indicate that the numbers have risen sharply over the past five years. Estimates range from a 750% increase in the number of AVs from 1998 to 2001² to a four to fivefold increase in numbers reported to local authorities in recent years.³

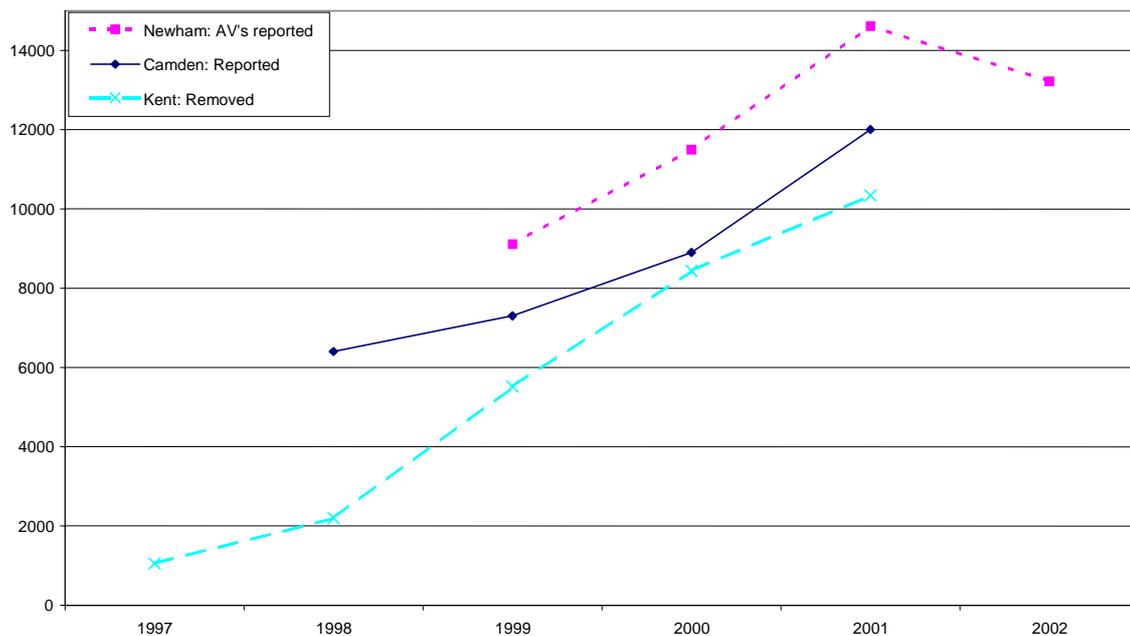
12. An indicator of recent trends is provided by returns of the DVLA V28 forms. These are the forms through which local authorities are obliged to inform the DVLA of disposal of AVs. However, since only a proportion of local authorities habitually return the forms, the V28 figures provide only an indication of trends rather than absolute numbers.

Figure 1. DVLA receipts of V28 forms 1997-2002



14. Because of the lack of reliable national historical data on AVs, the AV problem was examined in three local authority areas – Kent County Council and the London Boroughs of Camden and Newham - to gain information about local trends. These areas were selected because they have introduced proactive measures to tackle AVs and therefore have taken steps to collect better data on the scale of the problem. Details of their programmes can be found in the Appendix. Figure 2 shows the numbers of AVs reported abandoned in Newham and Camden, and the numbers of AVs removed in Kent, in recent years.⁴

Figure 2. Numbers of AVs in Newham, Camden and Kent



Source: London Boroughs of Newham and Camden and Kent County Council

15. Figure 2 confirms the picture of large increases in the numbers of AVs over the last few years.

16. It also shows that in Newham, numbers of AVs dropped in 2002. Although Kent has no figures available yet for the financial year ending 2002, early reports indicate that numbers of AVs have dropped there as well. No initial reports for 2002 are available from Camden. In the absence of national figures, it is difficult to know whether this apparent levelling out of numbers in both Newham and Kent can be attributed to local actions against AVs, or is part of a wider trend.

Causes of the problem

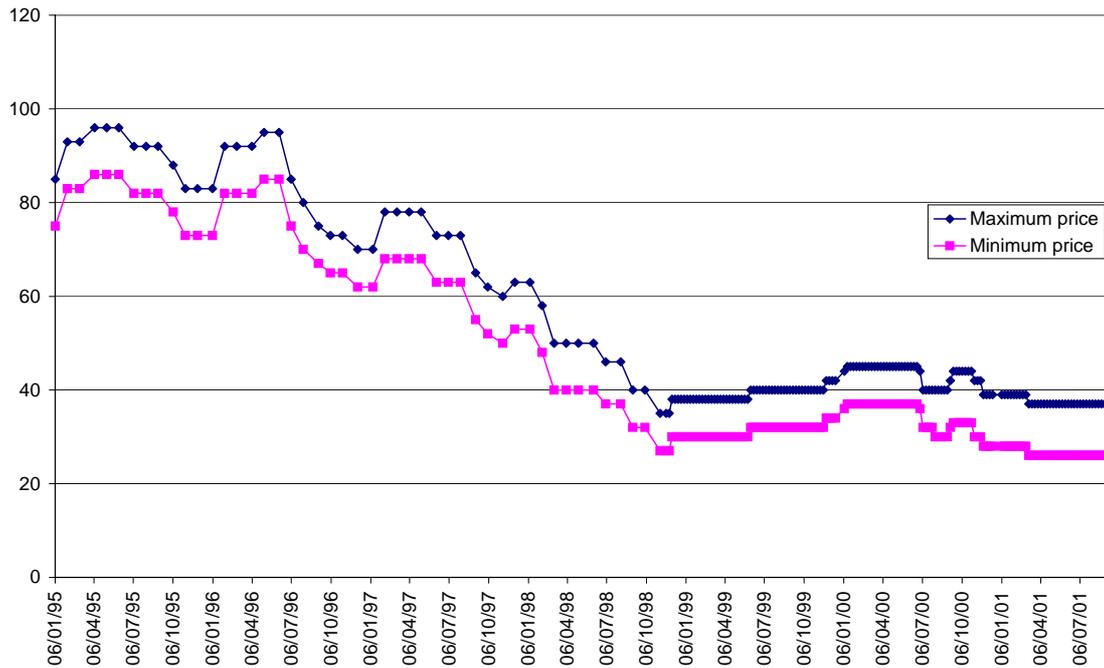
17. The increase in AVs is the consequence of a number of factors working together. These are outlined below. It is unlikely that any of these three factors on their own could have created such a steep increase in the number of AVs – it is the way they have combined that has produced such a dramatic impact.

⁴ Information on reports of AVs was not available from Kent. The data on reports from Newham and Camden do not include multiple reports of the same vehicles.

Decrease in scrap metal prices

18. There is general agreement within both central and local government agencies involved in AVs that the decline in scrap metal prices has played a large part in the problem of AVs. Figure 3 shows the maximum and minimum prices paid for scrap metal (based on car and lorry engines) between 1991-2001.

Figure 3. Maximum and minimum prices of scrap metal from car and lorry engines 1991-2001



Source: Materials Recycling Week

19. Figure 3 shows that:

- Prices of scrap metal began to decline around 1996, reaching their lowest point around 1998;
- Since 1998 the prices have remained low, but fairly stable.

20. The decline in the price of scrap metal means that it is no longer worth owners taking their end-of-life vehicles to scrap dealers. Today many vehicles are worth nothing, and indeed owners are often charged to have their old vehicles scrapped. This has led to more vehicles simply being abandoned by the roadside. Moreover, vehicles that were abandoned in the past (for example, having been stolen) would be picked up by scrap dealers rather than simply left on the streets because they were of some value as scrap. This is not the case today.

Weaknesses in the vehicle licensing and registration system

21. Weaknesses in the current vehicle licensing and registration system also have implications for AVs. Inaccuracies in the vehicle register and the ease with which a

minority of motorists evade the requirement to register their vehicles, mean that it is easy to avoid prosecution for abandoning a vehicle because the owners can not be traced. Indeed, prosecutions for abandoning vehicles are an extremely rare occurrence. It is estimated that currently 1.5million vehicles are 'outside the system' in that their keepers are not known, and around 80% (probably more) of abandoned vehicles have no registered keepers.

Growth in the pool of cheap vehicles

22. According to some experts, another contributory cause of the problem of AVs is the increasing size of the pool of cheap, second-hand vehicles. This is due in part to the growth in the overall size of the vehicle parc, and also the fact that some owners of old vehicles may now be seeking to sell them at low cost whereas previously they may have been able to sell them for scrap, an option no longer open to them. Increasingly stringent MOT tests may also push more vehicles into this market.

23. The greater availability of cheap vehicles is likely to support and encourage this market, and the buy-throw away-buy cycle of vehicle ownership associated with it, thus increasing the numbers of AVs. Unfortunately, reliable data on the price of cheap, second-hand cars is not available as many of these change ownership informally, or through a loose network of second hand car dealers.⁵

1. Future AV trends

24. Various factors are likely to impact on the numbers of abandoned vehicles in the near future - some having a negative and others a positive effect on the problem. These factors have been classified under 3 main headings below. Other factors are then briefly discussed, and this is followed by projections for the future.

End of Life Vehicles Directive

25. The End of Life Vehicles Directive (ELVD) came into force in October 2000. The UK has not yet brought this law into effect, but is expected to do so sometime this year. Implementation of the ELVD is expected to enhance the problem of abandoned vehicles as the costs to owners of disposing their vehicle legitimately are expected to rise. Estimations of the cost of disposal under the ELVD range from £60⁶ to £100.⁷

26. The purpose of the ELVD is to ensure that end of life vehicles are dealt with in an environmentally sensitive way. Under the Directive, from 2007 vehicle producers will be required to take responsibility for the increased costs of vehicle disposal (although the arrangements for this are not yet in place and negotiations are currently

⁵ If the above pattern of frequent, low-cost vehicle purchase and abandonment is indeed becoming more common, this will not be reflected in any growth in levels of VED evasion (DVLA figures show that levels of VED evasion have remained stable over recent years). Owners of untaxed vehicles may pass through several vehicles in quicker succession than in the past, but will not necessarily have more than one untaxed vehicle on the road at any one time.

⁶ Figure supplied by DTI Regulatory Impact Assessment (2002)

⁷ 'Implications of UK implementation of the End of Life Vehicles Directive', Institute for European Environmental Policy (IEEP) (2003)

underway). From 2007, it is hoped the problem of AVs should diminish significantly. Nevertheless, the problem is unlikely to fall back to previous low levels quickly, given that users of stolen vehicles and others who drive illegally will have become accustomed to a buy-throwaway-buy style of ownership.

MVRIB initiatives

27. MVRIB initiatives should have a positive impact on abandoned vehicles in two major respects:

- *Enforcement measures against untaxed vehicles*

The previous JDI paper on VED evasion concluded that the much more extensive use of ANPR could reduce vehicle licence evasion significantly. This will pull currently unregistered keepers back into the registration system, thereby increasing the risks if they abandon their vehicle because they can now be traced.

- *Continuous registration and new buyer checks*

Continuous registration and associated new buyer checks could have an impact on vehicle abandonment in a number of ways. If it is intended that the last registered keeper of a vehicle can be prosecuted for abandoning it, then this provides an important incentive for sellers to ensure that accurate new keeper details are forwarded to DVLA, thereby preventing the ‘leakage’ of vehicles into the so-called ‘underclass’ of vehicles, where abandonment is much more likely. Putting this responsibility on current keepers also removes the excuse, if they dump their vehicles, that they sold the car to a ‘man in a pub’.

28. So, MVRIB initiatives could act in a number of ways to put downward pressure on abandoned vehicles. They do this primarily by reducing the so-called ‘underclass’ of vehicles, pulling people back into the system, preventing them from falling into it and preventing keepers from being able to claim their vehicles have fallen into it. The impact of these measures would be significant only if accompanied by extensive publicity. Such publicity needs to demonstrate a much heightened risk of getting caught – publicity which cannot demonstrate this is unlikely to be effective.

Intensification of local authority efforts

29. Local authorities can take a range of actions against the problem of abandoned vehicles. The main three areas of local authority activity in this respect are the following:

1. Wheelclamping of untaxed vehicles, in conjunction with or by taking over the powers of the DVLA. Any such wheelclamping undertaken by local authorities would be additional to that undertaken under MVRIB. The likely impact of wheel clamping on abandoned vehicles is unclear. If a vehicle has been dumped, preventing its removal by the keeper is likely to go unnoticed by them. What would be more effective, at least in relation to registered keepers, is the certain knowledge that if they dump their car they will be prosecuted for it. But this

doesn't require wheel clamping, and may also encourage the more determined people to try and remove the vehicle's identity – number plates and set fire to it..

2. Rapid removal of abandoned vehicles, taking advantage of legislation introduced in 2002 to allow an abandoned vehicle of no value to have a note affixed to it and be removed after 24 hours. Rapid action against abandoned vehicles should increase fear of prosecution for abandonment among residents - particularly once the MVRIB measures have taken effect - and prevent areas being seen as 'dumping grounds'. Preventing visible 'dumping grounds' developing is important, to avoid abandoning cars being seen as acceptable behaviour.
 3. Introduction of surrender schemes to provide a low-cost means for legitimate disposal of end of life vehicles to local residents. Such schemes will become all the more crucial when the ELVD increases the costs of disposal, and provides a positive measure to complement the negative punishing measures described above.
30. The activities described above inevitably carry costs for local authorities, but can also bring major financial and non-financial benefits; including environmental improvements, and revenue generated for the Treasury through increased vehicle licensing.

Other Factors

31. Indications from the industry and the DTI are that scrap metal prices may be starting to rise; however any impact of this on AVs may be marginal given the consequences of the ELVD for costs of disposal.

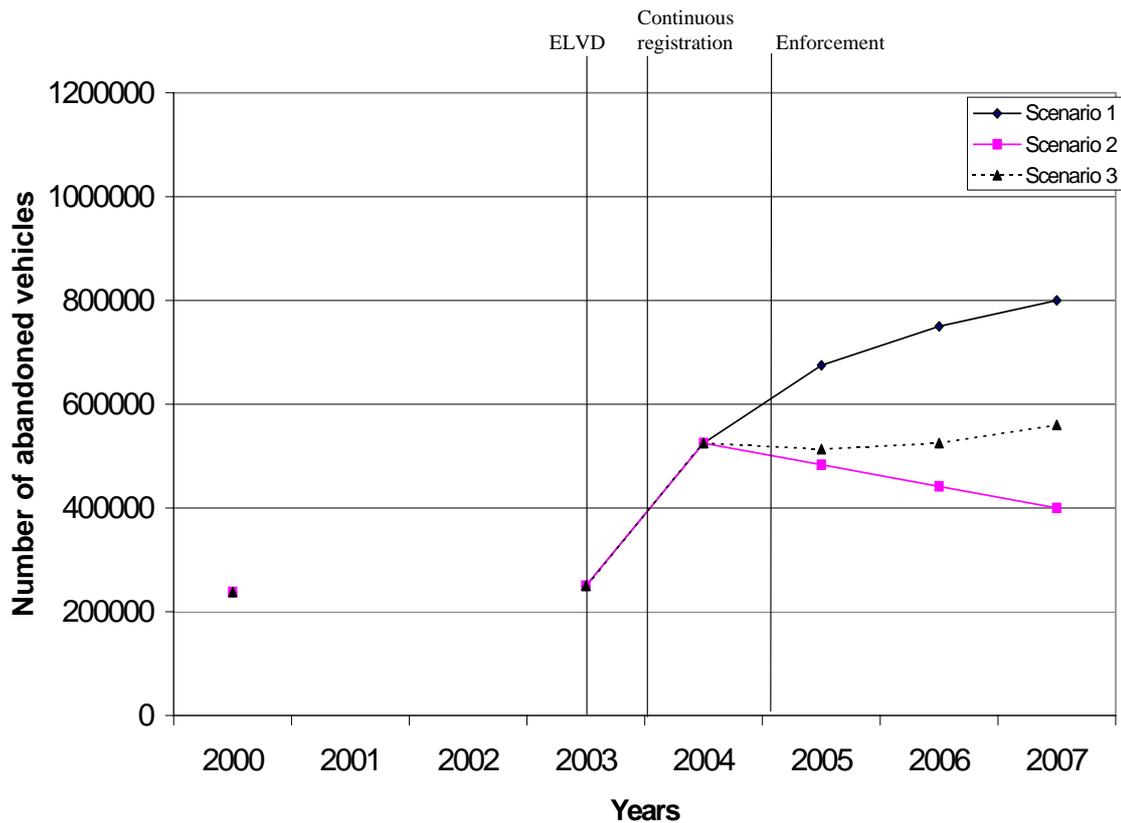
Future Scenarios

32. Given the lack of data on current and past trends in vehicle abandonment, it is difficult to make projections for the future. The following, however, makes a reasoned stab at anticipating the likely impact on abandoned vehicles of the above factors.

33. Figure 4 shows three possible scenarios. The baseline figure for AVs is taken as 250,000 in 2003, an approximation of the figure provided by the DEFRA Municipal Waste Management Survey 2000/1.⁸

⁸ In the absence of information concerning national trends from 2000/1, it is assumed that the numbers of AVs have remained stable from 2001 to 2003.

Figure 4. Future abandoned vehicle trends



Scenario 1 – no change to current activities and ELVD law implemented 2003

34. The projection for scenario 1 shows the likely impact if the ELVD is implemented in 2003 without additional actions being taken against AVs. There is much debate about what exactly the impact of the ELVD will be. According to projections by the DTI (2002) an increase of up to 100,000 AVs can be expected in the first year, after which the numbers will be held constant. However, the IEEP (2003) believe that this figure is an underestimation and increases of anywhere between 250,000-350,000 AVs per annum are likely. The scenario 1 projection is plotted as the midpoint between these two estimations, and shows a massive increase in AVs up to 2007.

Scenario 2 – ELVD implemented 2003 with MVRIB initiatives and increased local authority efforts: Best case scenario

35. Scenario 2 represents what we think is the best case scenario, in the face of such powerful upward pressures. In this case, the implementation of the ELVD is followed, in 2004, by the introduction of the MVRIB initiatives and increased local authority efforts described earlier.

36. The combination of continuous registration and increased enforcement could reduce the number of vehicles within the ‘underclass’ by approximately 50% by 2007. This is on the basis that continuous registration and new buyer checks prevent this underclass from growing as the vehicle parc grows, and that ANPR will capture 10% of such vehicles pa (i.e. 150,000 keepers pulled back into the system every year). We have therefore reduced the number of abandoned vehicles with no registered keepers

(which make up at least 80% of all abandoned vehicles) by half to produce the profile in scenario 2. We have assumed that these measures will make no difference to the proportion of abandoned vehicles that are dumped by registered keepers, i.e. registered keepers will still make up 20% of all abandoned vehicles.

Scenario 3 – ELVD and MVRIB initiatives implemented in conjunction with intensive local authority efforts: a more likely scenario?

37. Scenario 3 builds in the possibility that determined offenders will find ways around the system, for example by claiming their cars were stolen or by setting fire to them to prevent them being identified. In this scenario, we have assumed that half of those previously in the underclass but now back in the system will still try and dump their cars, since the pressures from ELVD are so great. Widespread surrender schemes may help bring this projection back down to scenario 2.

Some points about implementation

38. In the face of the powerful impact of the ELVD, the following are some observations about ways in which the response may falter.

- Continuous registration is an elegant solution to improving the vehicle keeper database since it provides sellers with some incentive for ensuring accurate details of the new keeper are forwarded to DVLA. If sellers are not provided with some responsibility and support for doing this, the impact on the database could be much reduced for two reasons – (a) responsibility for ensuring accuracy of new keeper details is not in the hands of those with most incentive for doing so, and (b) keepers can still claim they sold their vehicle to a man in a pub.
- Wheelclamping: this features heavily in both DVLA's and local authorities' activities. While this may be useful for reducing VED evasion, its impact on abandoned vehicles seems less clear.
- ANPR: Effectiveness in the roll out and use of ANPR will have important consequences for abandoned vehicles. Capturing 150,000+ unregistered keepers each year is a tall order.
- Local Authority surrender schemes: Although these schemes sound like a good idea, anecdotal evidence is that those using the schemes are registered keepers who could probably afford to have their vehicles disposed of. These schemes are only likely to work if enforcement action above is effective, so that keepers are pushed into using these schemes. Otherwise, there is little incentive to use them.
- The point about the effective use of publicity has been made before, but worth reiterating in order to make the most of any deterrent value of these initiatives.
- A final point harks back to the table which showed the concentration of abandoned vehicles in London. It may be worth focusing scarce resources here, since national figures are most likely to be affected by changes in London than other regions.

3. Measuring the change in rates of abandoned vehicles

39. Existing sources of information on AVs available are the following:

- *DEFRA Municipal Waste Management Survey*: The 2000/1 survey was the first to ask for AV numbers from each local authority. The 2001/2 survey (preliminary results due out April) also asked if each local authority ran a surrender scheme. There is potential to add more questions about AVs in future surveys. However, there are some problems with the local authorities' AV data: the accuracy varies due in part to a lack of infrastructure/funding for dealing with AVs and also to differences in defining an 'abandoned vehicle'. It is suggested that measures are introduced to ensure greater accuracy and consistency of local authority responses.
- *The DVLA V28 forms*: These disposal of abandoned vehicle forms can provide a measure of the numbers of vehicles scrapped. However, local authority obligations to return these forms need to be more strictly enforced, since currently many authorities do not consistently comply with this requirement.

40. Future sources of information include:

- *DVLA's new web-enabled enquiry system*. This system allows local authorities to carry out online checks on the status of suspected AVs. Monitoring of this system could provide numbers of AVs; however, at present there are only 200 local authorities subscribed to the system of which only 42 are online. One problem is that the lack of local authority infrastructures for dealing with AVs means that many do not perceive a need to use the DVLA system.
- *Monitoring of authorised treatment centres*: Under the ELVD, disposal of end of life vehicles will be carried out at authorised centres. These centres could be asked to give figures on the numbers of cars scrapped during yearly or monthly periods. However, this measure would encompass all end of life vehicles and not simply AVs, unless a system was set up whereby the centres differentiated between abandoned and other end of life vehicles.

Appendix: Case Study Programmes

Kent

In 2001, Kent introduced “Operation CUBIT” to tackle their abandoned vehicle problems. This involved sending out a team of one policeman, a local authority warden and clamping and removal personnel. The team worked together to pick up abandoned and untaxed vehicles, in pre targeted areas. The pilot study for this programme began in two areas- Medway and Sevenoaks. It proved to be very successful- on average 26 vehicles in Medway and 4 vehicles in Swanley per week were removed prior to the pilot. However, during the pilots, up to 80 and 46 vehicles per week were removed, respectively. It also encouraged many vehicle owners to voluntarily relicense their vehicles. Given the success of the pilots it was rolled out across Kent and is still ongoing today.

Newham

In April 2001, Newham introduced a pilot study to deal with abandoned vehicles. Newham took on the same powers as the DVLA’s contractor (Sureways), giving them the authority to clamp and remove untaxed vehicles. When the removal team inspected a vehicle that appeared abandoned, they phoned the DVLA to get authority to clamp the vehicles. The vehicle is then removed and stored at their own car pound then disposed of, if no owner was found. Like Kent, this programme also produced an increase in the number of vehicles lifted. The success of the 12 month pilot resulted in the programme still running today. In addition to having their own car pound (which reduces the costs of the programme), they also have their own database on abandoned vehicles at Newham which helps with enquiries.

Camden

The London Borough of Camden also operates a vehicle clamping scheme and has a free vehicle surrender scheme for residents. In addition, Camden was also responsible for producing the National Standard on Abandoned Vehicles, 3 years ago. The National Standard is used to train police, DVLA and council workers on how to deal with AVs.