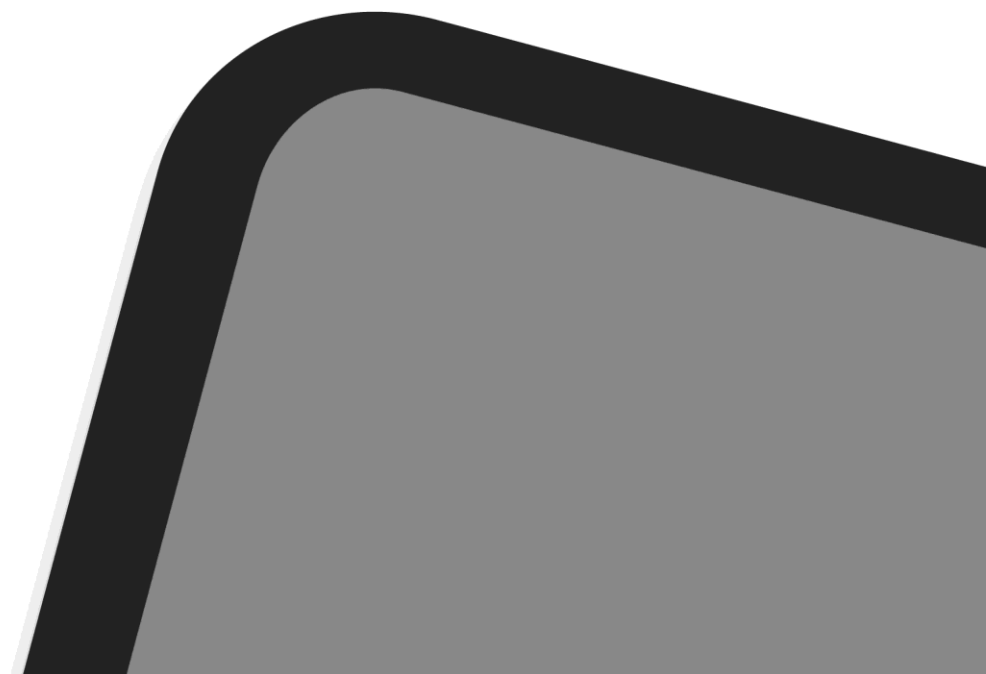


**Freight Best Practice
Programme Impact
Assessment**

Final Report



DATABUILD
Research & Solutions





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Freight Best Practice Impact Assessment

Final Report

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1 Executive summary

1.1 Introduction

The Department for Transport operates Freight Best Practice (FBP); a programme aimed at reducing the environmental impact of the freight industry in England through improved operational efficiency. Databuild has been commissioned by the Department to evaluate the impact of FBP, in particular to measure the cost effectiveness of the programme in England.

1,558 telephone interviews with hauliers were undertaken during February and March 2007. The sample was structured to take account of:

- Registered users and non users of FBP
- Registered users and non-users of SAFED (Safe and Fuel Efficient Driving Programme)¹
- Type of operation (either own account or hire and reward)
- Size of fleet (single vehicle, 2-14 vehicles or 15 plus vehicles).

1.2 Key findings

The key findings from the evaluation are summarised below.

1.2.1 Awareness and use of FBP

Overall 24% of fleets are aware of FBP, compared to 13% in 2003. Of those aware of FBP, 36% had gone on to use at least one aspect of the programme (9% of all fleets, compared to 5% in 2003). The following table summarises key factors associated with awareness and use:

		Aware	Use
Size	Single vehicle	20%	6%
	2-14 vehicles	24%	9%
	15+ vehicles	49%	24%
Job role	Transport manager	37%	13%
	Non-transport manager	22%	8%

Table 1: Segmentation of awareness and use of FBP

Looking at larger fleets with more than 24 vehicles, use of FBP has increased from 10% in 2003 to 36% in this research.

As use is highest among large organisations, this means that this represents a higher proportion of vehicles – use of FBP covers 39% of all vehicles which shows that FBP has a

¹ Databuild was also commissioned to undertake an impact assessment of SAFED. The methodology and data collection included both programmes. However the results that relate to SAFED can be found in report titled SAFED Impact Assessment 2007 written by Databuild.

high proportion of the market covered. The larger organisations also represent a higher proportion of mileage, with 29% of the mileage covered by the freight industry being done by users of FBP. The large fleets therefore together emit the highest proportion of carbon, but on average are the most active on measures to reduce their emissions.

1.2.2 Satisfaction with FBP

FBP users are on the whole:

- **Satisfied with the website**
 - 58% of users had visited FBP's website (5% of fleets in general)
 - 61% were satisfied or very satisfied with all areas of the site. 36% were neither satisfied nor dissatisfied
- **Satisfied with FBP publications**
 - 67% of users had read FBP publications (6% of fleets in general)
 - 82% were satisfied or very satisfied with all aspects of the publications
- **Willing to reuse FBP services**
 - 77% would definitely reuse FBP publications
- **Willing to recommend FBP to others**
 - 93% would recommend FBP to someone doing a similar job to them.

1.2.3 Attitude towards fuel efficiency

Using responses to a series of statements, a score was calculated to provide an indicator of respondents' overall attitude to fuel efficiency. Respondents were then assigned to one of four groups:

1. Very positive
2. Positive
3. Negative
4. Very negative.

On the whole the following groups tend to be more positive:

- Large fleets (59% very positive)
- Users of FBP (60% very positive)
- Transport professionals (45% very positive).

1.2.4 Action taken

Overall, 54% of fleets have taken action over the past two years to improve their fuel efficiency. The key variables that correlate with this are:

- **Use of FBP**
 - A higher proportion of users have taken action (80%) compared to non-users (52%)
- **Fleet size**
 - Nearly all large fleets (92%) have taken action compared to 68% of medium and 37% of small fleets
- **Attitude to fuel efficiency**
 - Higher proportions (65%) of fleets that have a very positive attitude to fuel efficiency have taken action compared to those with positive (52%), negative (36%) or very negative (0%) attitudes.

The following chart shows the different measures taken by users and non users of FBP:

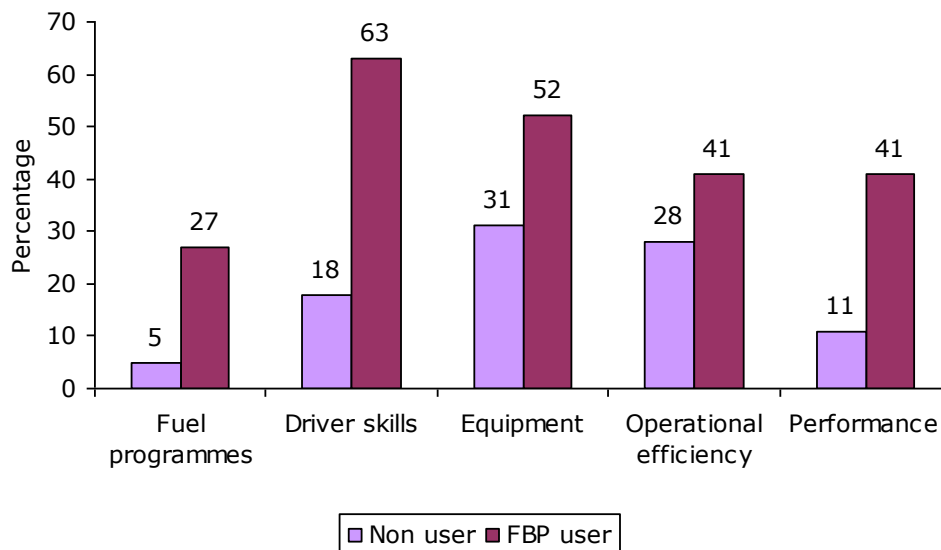


Figure 1: Action taken

1.2.5 Impact of FBP

Overall, 48% of users that had taken action had found FBP helpful in some way. The programme had most impact on providing fleets with information on how to make changes and giving them the idea for the change. However the majority of users did not intend to use the programme for specific help with individual measures.

FBP users have achieved financial savings of £190m through implementing measures to improve their fuel efficiency compared to £65m in the 2003 impact assessment. FBP users saved more than non-users. On average, organisations that use FBP saved £41,000 compared to £12,000 saved by organisations that do not use FBP. Users also enjoy greater savings per vehicle (£1,900) compared to non-users (£1,600).

The programme cost and attributed savings equate to £30 per tonne of carbon.

1.3 Conclusions

It can be concluded that FBP has a firm place in the environment of fuel and operational efficiency. In particular:

- The freight industry has been active with regard to implementing fuel efficiency measures
- Levels of awareness of FBP have increased, however there is scope to improve conversion rate of awareness to use
- FBP users are likely to be:
 - More active in implementing fuel efficiency measures
 - A specific individual dedicated to manage the transport element of the business
 - From large fleets

- Satisfaction with FBP is high, however where there is some dissatisfaction, it is with the programmes perceived relevance
- FBP is rarely used in isolation; typically it is looked to as a secondary source of advice when respondents are looking for a source of specific information on a particular area.

1.4 Recommendations

With regard to target marketing, we recommend that FBP should:

- Continue increasing awareness of FBP among large fleets
- Increase the conversion rate from awareness to use
- Target transport managers.

It should also focus on two key messages:

1. Communicating why fuel efficiency is important
2. Explaining how FBP can help.

Further recommendations include ensuring access to information is made more simplistic (particularly for small fleets) and partnering trade associations to promote the benefit of the programme.

2 Abstract

The Department for Transport's Freight Best Practice (FBP) programme aims to reduce the environmental impact of the freight industry in England through improved operational efficiency. This will result in reduced carbon emissions and contribute to reducing congestion and improving local air quality and safety. This was quantified in fuel savings and reduction in carbon emissions during telephone interviews with truck operators. FBP users have achieved financial and carbon savings through the fuel efficiency measures they have implemented. FBP users achieve larger savings per measure than non-users.

The evaluation has shown that FBP has helped reduce the environmental impact of the freight industry in England. Users of FBP tend to be from large organisations and transport professionals. Satisfaction with FBP services is high. FBP has a firm place in the environment of fuel efficiency; however, the benefits of using the programme need to be more strongly communicated.

3 Introduction

3.1 Background



The Department for Transport (DfT) operates Freight Best Practice (FBP), a programme aimed at improving the operational efficiency and reducing the environmental impact of the freight industry in England. This will result in reduced carbon emissions and contribute to reducing congestion and improving local air quality and safety.

The programme targets both own account operators and the hire/reward sector, and produces a range of guides, case studies, software and newsletters covering saving fuel, developing skills, equipment and systems, operational efficiency and performance management.

The DfT commissioned Databuild Ltd to evaluate the impact of FBP, and this report details our findings.

Databuild was also commissioned by DfT to evaluate the impact of SAFED (Safe and Fuel Efficient Driving Programme). These results do not form part of this report, but can be found in 'SAFED Impact Assessment 2007' written by Databuild.

3.2 Objectives

The principal objective of the FBP impact assessment is to measure the cost effectiveness of FBP in England by improving operational efficiency of the freight industry. This is quantified principally in fuel savings (litres of diesel saved) and reduction in carbon emissions (kgC). The methodology used identifies the added value delivered by FBP and isolates the impact of FBP from other government programmes such as SAFED.

Secondary objectives include:

- a) Identifying the freight industry's overall awareness of the FBP programme
- b) Identifying the industry's level of awareness, take up and use of FBP publications
- c) Establishing actions taken towards adopting best practice
- d) Investigating other benefits of adoption of FBP measures including improved efficiency and fewer accidents
- e) Providing feedback on barriers to further take up of FBP and identify other sources of information used.

4 Methodology

As mentioned in section 3.1, Databuild was commissioned to undertake impact assessments of two DfT programmes: FBP and SAFED. The results relating to each programme are discussed separately; however the methodology development and data collection included both programmes. The impact assessment obtained information about:

- Users of FBP (who may also have used SAFED)
- Users of SAFED (who may also have used FBP)
- Hauliers that had not used either programme.

4.1 Survey method

The study was carried out by a telephone survey of 1,558 personnel who were responsible for their company's trucks. Typically this was the owner, transport manager/director or general manager/director. A pilot study was carried out with 12 respondents which allowed us to test that the questionnaire worked and that respondents gave meaningful responses.

4.1.1 Sample

The sample was constructed to cover both users and non users of Freight Best Practice. The sample of known users of FBP was selected at random from the FBP database. The sample of non-users was selected at random from the Market Locations² database and known users were removed.

Previous impact assessments have shown that hire and reward companies behave slightly differently to own account organisations. In order to look at this difference, the sample was split by these two types of operator. Third party logistics companies have been included in the hire and reward category.

The industry is dominated by small operators who only operate one vehicle each. Also, there are only a small number of large operators (particularly own account) despite this group accounting for nearly two out of five trucks. In order to obtain accurate data about savings it is particularly important to capture responses from large fleets as these operators account for a large number of vehicles and, in past studies, have shown to be more likely to take action to reduce fuel consumption. The sample of non users therefore was split by fleet size: single vehicles, 2-14 vehicles and 15+ vehicles as well as by hire and reward and own account. This approach is similar to that taken in the 2003 impact assessment and thus provides compatibility with past research.

² Market Locations is a database provider that was selected because it provides a comprehensive list of fleets and was also used in previous impact assessments (2003 & 2005)

The following table shows the sample that was achieved, users from the FBP database may have forgotten about their use of the programme and likewise some of the respondents on the non user database may have used FBP but may not be on the user databases. The following table shows the database that respondents were drawn from:

Sample group	Number of interviews
Recorded FBP users (some may also have used SAFED)	398
Recorded SAFED users (some may also have used FBP)	246
Recorded SAFED users in the aggregates sector	122
Non recorded users own account operators	
• Small fleets - Single vehicle	41
• Medium fleets - 2-14 vehicles	220
• Large fleets - 15+ vehicles	90
Overall	351
Non recorded users hire and reward operators	
• Small fleets - Single vehicle	39
• Medium fleets - 2-14 vehicles	201
• Large fleets - 15+ vehicles	201
Overall	441
Total survey sample	1,558

Table 2: Sample size and structure

The survey was conducted on a site by site basis. However, where an area relating to fuel efficiency was controlled by head office or was subject to corporate policies, an interview was also conducted with head office to establish whether FBP had influenced central corporate activity. In total, we undertook 105 interviews with additional respondents.

Following data collection, responses were weighted in order for the results to reflect the whole freight industry. An explanation of weighting together with details on how it was undertaken has been included as an appendix.

4.2 Attribution of savings to Freight Best Practice

Attribution is concerned with the extent to which the actions and outcomes would have happened in the absence of the information received from FBP. The savings that sites have made by implementing fuel efficiency measures have been attributed to Freight Best Practice using the following approach:

1. For each measure that respondents had taken, users of FBP were asked how FBP helped with the decision to take that measure
2. Respondents' verbatim answers were captured and then coded into:
 - FBP gave the idea for change
 - FBP gave the confidence to make the change
 - FBP gave information on how to make the change
 - FBP helped to persuade colleagues
 - FBP encouraged the change to be implemented faster
 - FBP did not help with the decision to implement the measure

3. Users were also asked what they would have done if FBP had not been available. Would they have:
 - Implemented the measure anyway
 - Implemented the measure but not as quickly
 - Implemented the measure but not as effectively
 - Not implemented the measure.
4. Savings³ were then attributed to the programme where necessary.

4.3 FBP case studies

Following completion of data collection, responses were explored to identify organisations that have been particularly active with regard to fuel efficiency. We were principally interested in those companies for whom FBP was critical and without it would not have been able to implement and derive success from their fuel efficiency measures. DfT selected 10 potential case studies out of a shortlist of 16. The respondents were re-contacted and five case studies drafted on the most interesting organisations ensuring a range of size and sector. Two of these case studies are shown as an example in the appendices.

³ Information on the derivation of the savings is included in the appendices

5 Results

5.1 Segmentation

The results of the survey have been analysed to profile the freight fleet in England according to a range of variables:

- Number of vehicles
- Type of operator (hire and reward and own account)
- Attitude towards fuel efficiency
- Job of respondent (transport professional or non transport professional).

This section looks briefly at each of these variables.

5.1.1 Number of vehicles

- 50% of fleets have 1 vehicle accounting for 13% of vehicles
- 43% of fleets have 2-14 vehicles accounting for 48% of vehicles
- 7% of fleets have 15 or more vehicles accounting for 39% of vehicles

5.1.2 Type of organisation

- 73% of fleets are own account operators
- 27% of fleets are hire and reward operators

5.1.3 Attitude towards fuel efficiency

- 26% of fleets are very positive towards fuel efficiency
- 59% are positive towards fuel efficiency
- 14% are negative towards fuel efficiency
- 1% are very negative towards fuel efficiency

5.1.4 Job of respondents

- 17% are transport professionals (ie their role is specific to transport):
 - 16% transport managers
 - 1% transport directors
- 83% are non transport professionals (ie their role does not only cover transport):
 - 26% are managers
 - 26% are directors
 - 18% are owners
 - 13% have other job titles

5.2 Awareness and use of FBP

Respondents were asked what external sources of advice about fuel efficiency they had used in the past two years.

3% of fleets mentioned Freight Best Practice or Transport Energy Best Practice (TEBP) unprompted; a further 5% mentioned that they had used DFT – it is likely that some of these had come across Freight Best Practice but were unaware of the name of the programme.

Respondents that did not mention FBP or TEBP at these times were asked if they were aware of either of these programmes. When prompted, 18% were aware of Freight Best Practice and 6% were aware of Transport Energy Best Practice (1% were aware of both).

Overall, 24% of fleets are aware of FBP (either prompted or unprompted) compared to 13% in the 2003 impact assessment.

35% of fleets recorded as using Freight Best Practice were not aware of it. Reasons for this were explored and included:

- The original contact either being unavailable or had since left the company (42%)
- The respondent speculating that a colleague may have registered on their behalf (particularly prevalent in small fleets e.g., *"My son is a director and co-owner, he may have registered us"*) (21%)
- Other respondents had no idea how they were on the database (e.g. *"Don't know. There's only four of us here so no idea why we'd be on the database!"*) Some of these respondents may have forgotten that they had requested a publication or registered on the website (37%).

The fleets that were not aware of FBP despite being on the database were then categorised as non users and are included within the non user category throughout the rest of this report.

Respondents were asked where they had first heard of Freight Best Practice. The most common mechanisms were through the trade press (31%, for example Commercial Motor) and through trade associations (10%, in particular, the Road Haulage Association and Freight Transport Association). 28% could not remember where they heard about it.

42% of fleets have used external sources of advice. Most commonly they are using trade associations as well as the trade press. 6% of fleets are aware of external sources of information for fuel efficiency but have not used any, whilst the remaining 52% are not aware of any sources of advice.

The majority of large fleets (with 15 or more vehicles) use external sources of advice (76%) compared to medium fleets (2-14 vehicles) - 50% and small (single) vehicle fleets (29%). Transport professionals are more likely to use external sources of advice (50%) compared to 40% of other respondents.

5.2.1 Use of FBP

Respondents that were aware of Freight Best Practice were asked whether they had:

- Ordered or downloaded Freight Best Practice Publications
- Visited the Freight Best Practice website
- Used other Freight Best Practice services such as events or the helpline.

The following chart shows the results of this:

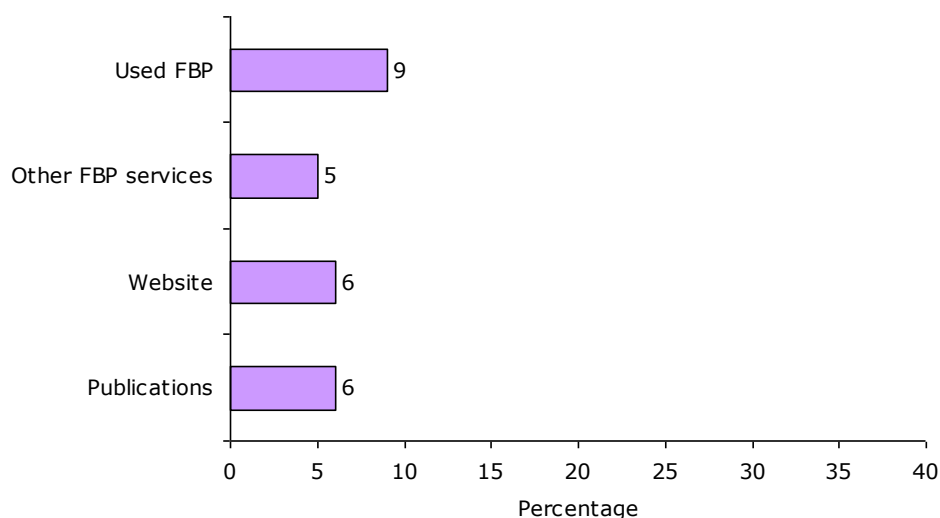


Figure 2: Use of Freight Best Practice (n=1,558)

Overall 9% of fleets have used Freight Best Practice (36% of those that are aware); this has increased from 5% in 2003. Use of each of the services offered by FBP: publications, the website and other services such as events and the helpline are at a similar level. 43% of users have only used one service, 39% have used two services whilst 18% have used three services.

1% of fleets have used both FBP and SAFED, whilst a further 8% have just used FBP.

A higher proportion of large fleets have used Freight Best Practice (24%) compared to medium size fleets (9%) and single vehicle fleets (6%). Looking at larger fleets with more than 24 vehicles use of FBP has increased from 10% in 2003 to 36% in this research.

A higher proportion of fleets that have a positive attitude towards fuel efficiency have used Freight Best Practice (26%) compared to those that do not have a positive attitude (3%). Attitude is explored further in section 5.4.

13% of transport professionals have used FBP compared to only 8% of non transport professionals.

64% of fleets that are aware of Freight Best Practice have not gone on to use its services. The following chart shows their reasons for not using Freight Best Practice:

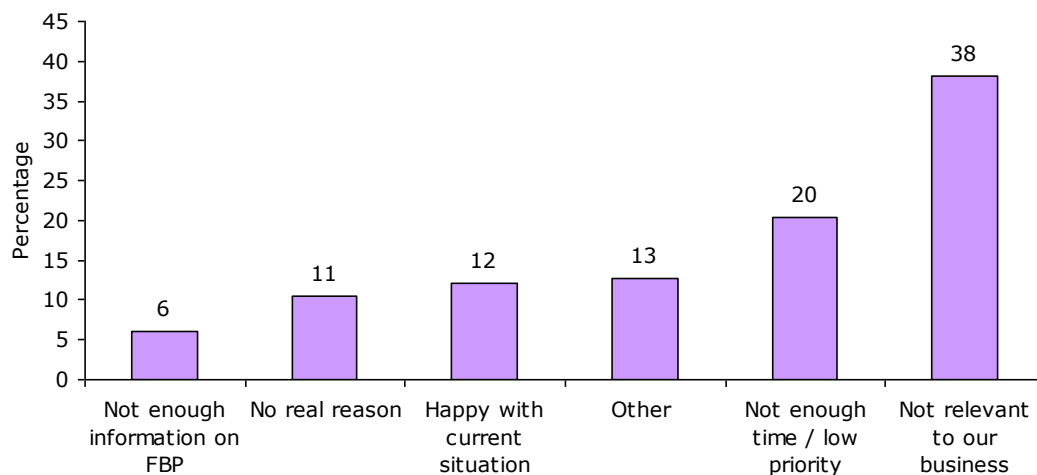


Figure 3: Reasons for not using Freight Best Practice (n=291)

A high proportion of fleets that are aware of Freight Best Practice do not think that it is relevant to them and therefore have not used it, the majority of these fleets are single vehicle own account fleets. There are a number of reasons why they do not feel that it is relevant to them:

- Firstly, some organisations feel that the way that they operate determines how fuel efficient they can be: *"We mainly do short haulage," "We can't really do return journeys and I believe that's what it's about"*
- Other organisations feel that they are too small for it to be of a benefit to them: *"I don't really see it as benefit to my operations. We only have 2 trucks."*
- Some of the small own account fleets do not see themselves as being in the freight industry: *"It's not really applicable to us. We're not involved in haulage, it's just a toolbox on legs."*

Of those that are happy with their current situation, respondents tend to access either internal or other external sources of advice, or do not feel that they need any fuel efficiency advice:

1. **Resources available internally** – *"Basically, we are policing our own fleet and benchmarking, so we're fulfilling the role of FBP"*
2. **Other professional advice used** – in particular, trade associations such as RHA and FTA as well as vehicle manufacturers and VOSA. *"Rather take advice from manufactures than from the government who aren't in the industry"*
3. **Do not need any advice** *"Confident we are doing a good job, and have 35 years experience" "No real reason, think we are as efficient as can be."*

20% of respondents have not used FBP due to lack of time: *"Not enough time for us to do it. We sometimes work 24 hour days", "Not enough time to research and implement the measures"*. For others, they had not used FBP because it was early days: *"Only recently heard of FBP, so not had time to actually use any services. However, definitely looking to*

explore possibilities”, “I’m hoping to do it this year, I only took over the business earlier this year and have spent a lot of time growing the business”.

Others have not used FBP because they do not feel that they have sufficient information on the programme. This appears to have three aspects:

- 1) Potential FBP users have tried and failed to use FBP: *“I had difficulty in getting hold of publications; I never saw any information on how to obtain them.”*
- 2) Respondents expect FBP to make the first move: *“They haven’t contacted me about it.”*
- 3) Respondents are vaguely aware of the programme’s name but do not really know what it offers: *“Not sure what it entails. Heard of it, but not sure what it is.”*

5.3 Satisfaction with FBP

5.3.1 Satisfaction with Freight Best Practice Publications

Respondents that had used Freight Best Practice publications were asked whether they found them:

1. Easy to understand
2. In the right level of detail
3. Impartial
4. Relevant
5. Sufficiently full of information on how to implement measures
6. Telling them something new about fuel efficiency.

The following chart shows their responses to each of these areas:

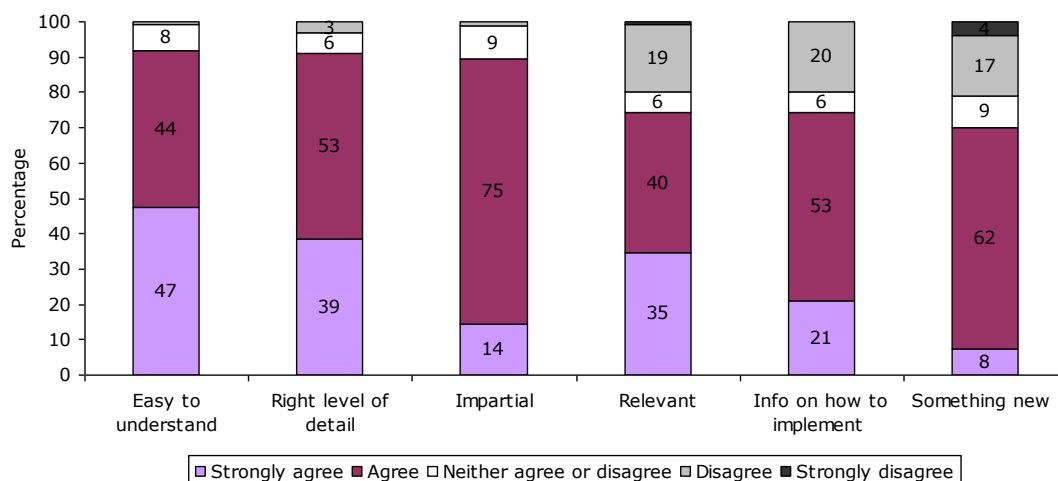


Figure 4: Satisfaction with the publications (n=291)

Overall, there is a high level of agreement with each statement. Users particularly find publications easy to understand and impartial, and feel that they go into the right level of detail. There is however less satisfaction with the publications' relevance and the provision of sufficient information to implement the measures and new information.

Respondents typically felt that FBP publications provide an accessible route to specific information that is easy to use. Comments include:

- "They were informative, and easy to understand"
- "Free user friendly guides"
- "They were well presented, concise and easy to read"
- "They were handy, easy to pass on"
- "They were clear, concise and cost effective"
- "Relevance of fuel efficiency was spot on, well written"
- "Good format, step by step, unbiased"

Few respondents said that there was anything they disliked about the publications (5%, 27 respondents). Of those that did, their comments can be summarised in 3 main areas:

1. **That the publications were not relevant to them and their business** (they felt that the publications were geared towards organisations either larger or smaller than themselves):
 - *"Wasn't relevant to our organisation. It was rather intimidating: it was described as being for small fleets but we only have two vehicles, and there were 15 boxes to input data from your vehicles, so it seemed like their understanding of "small" is different to ours"*
 - *"The publications are geared more for the larger operations who can devote time and personnel from separate departments. Too much emphasis on companies with 150+ vehicles"*
 - *"Some of the examples, formulae and spreadsheets weren't big enough for the company's fleet"*

2. **That the level of detail was not right:**
 - *"Was way too simplistic, felt like I was being treated like an idiot. Nothing new to it. No bite to it. No meat to it. Too much 'pad' and not enough information"*
 - *"At my level didn't give any more clues as what to do really"*
 - *"Are too general to the freight industry should be more specific i.e. to the aggregate industry as they aren't trucking up motorways. And to rigid vehicles as a lot of things appropriate to artics aren't relevant to rigids"*

3. **That the content did not meet their expectations:**
 - *"They are not always kept up-to-date. For example the telematics publication is a few years old and has not kept up with changes in technology"*
 - *"There was nothing that jumped out and demanded that we improve our fuel efficiency"*
 - *"Nothing new I have not used, been in business for 15 years and FBP could not supply me with any more details"*
 - *"It didn't jump out at me and make me immediately want to do that"*

Overall though, satisfaction with the publications is very high, 77% would definitely use them again and 21% would possibly use them again. 93% would recommend them to someone doing a similar job to their own.

5.3.2 Satisfaction with the website

Respondents that had used the Freight Best Practice website⁴ were asked to rate how satisfied they were with several aspects of the site:

- Ease of navigation
- Overview of Freight Best Practice
- Access to freight specific fuel efficiency information
- Relevance of the information to the organisation
- Access to freight publications.

The following chart shows satisfaction with each of these areas:

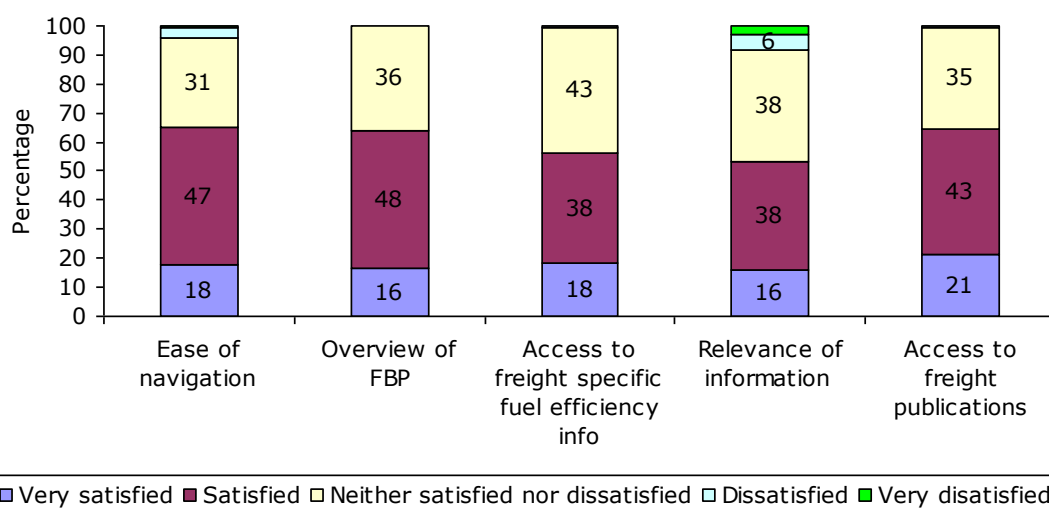


Figure 5: Satisfaction with the website (n=226)

There is little dissatisfaction with the website, although a significant proportion of users are neither satisfied nor dissatisfied. The main reason for this is that many users have only used the site a couple of times and so could not remember much about it. There is some dissatisfaction with the ease of navigation and the relevance of the information.

Respondents were asked if they had any other comments regarding the website. On the whole responses were positive, for example *"It was very clear and easy to understand"*, *"For a government website it was unusually easy to use and quick"*, and *"I think it's very good and refreshing to have something new in transport for reference and also that's free!"*

Several respondents commented that they felt the information on the site was out of date: *"Needs updating and some more relevant information and the information is fairly old"*, *"Very good site, two things are needed it needs to be updated and to be publicised more"*. Others felt that the site was not relevant for their business, or that they struggled to find the relevant information: *"Tended to concentrate more on long haulage and aerodynamics that are not relevant to our organisation"*, *"There was so much information it was quite hard to find the relevant stuff"*.

⁴ The questions on the website referred to the new FBP website which went live in September 2005.

Where fleets have used external sources of advice, the following chart shows the number of external sources cited as being used:

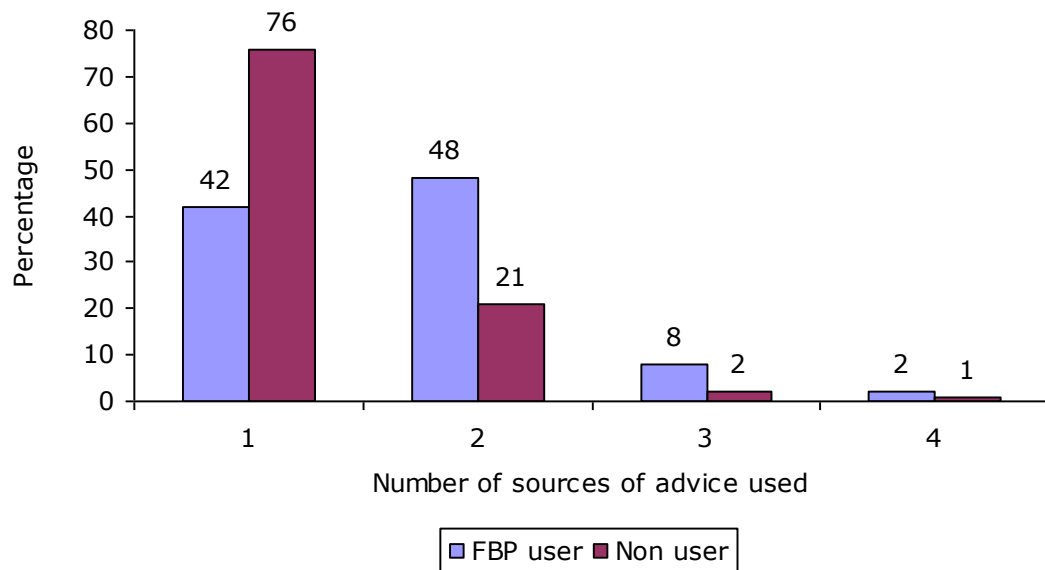


Figure 6: Number of sources of advice used (n=1,079)

Nearly three quarters of fleets that have not used Freight Best Practice only use one source of advice, usually trade associations. More than half of Freight Best Practice users use the programme together with another source of advice. Those that are aware of Freight Best Practice but have not used it are similar to those that are not aware of Freight Best Practice, in that the majority of them use only one source of external advice.

5.4 Attitudes towards fuel efficiency

Respondents were asked whether they agreed or disagreed with a series of statements about fuel efficiency and, if so, how strongly:

- Making the most efficient use of fuel is critical to the success of their business
- Improving the environmental performance of the fleet is very important to their organisation
- They are confident they have sufficient information about how to improve the fuel efficiency of their fleet
- There is a potential to reduce their business costs significantly by making more efficient use of fuel.

The following chart shows their responses:

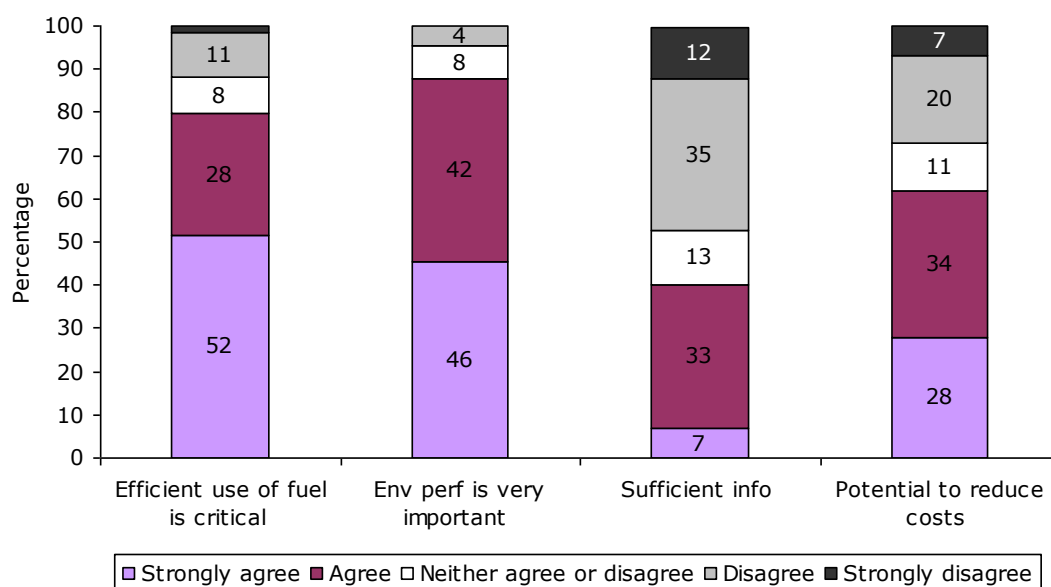


Figure 7: Agreement with attitude statements (n=1,558)

A very high proportion of fleets feel that:

- Efficient use of fuel is critical to their business
- Improving their environmental performance is very important to their business.

Fewer fleets feel that:

- They have sufficient information to improve the fuel efficiency of their fleet
- There is potential for their business to reduce costs by making more efficient use of fuel.

A score out of 20 was calculated to provide an indicator of respondents' overall attitude to fuel efficiency. Four groups were created:

- Very positive – score of 17 or more out of 20
- Positive – score of 13 to 16
- Negative – score of 9 to 12
- Very negative – score of 4 to 8.

Overall, 85% of fleets are very positive towards fuel efficiency compared to 15% who are negative.

The following chart shows this by size of fleet:

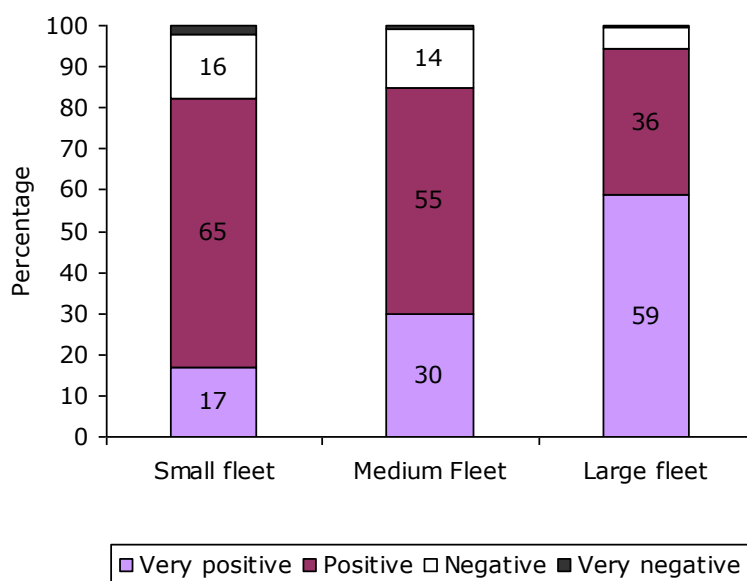


Figure 8: Attitudes towards fuel efficiency by size of fleet (n=1,558)

Larger fleets have a more positive attitude towards fuel efficiency when compared to those with smaller fleets, with over half of large fleets having a very positive attitude.

Users of Freight Best Practice are more positive (60% are very positive) than those that do not use it (21% of non users are very positive). 88% of those that are aware of Freight Best Practice unprompted are very positive towards fuel efficiency.

A variety of different respondents were spoken to. Transport managers tended to be very positive (45%) towards fuel efficiency. Other directors and 'others', however, are less positive (17% and 18% respectively are very positive). The majority of owners spoken to were from single vehicle sites and so it is likely that their attitude is due to their size.

A higher proportion of hire and reward operators are very positive about fuel efficiency (34%) than own account operators (23%).

Of FBP users, 84% felt that they had sufficient information on fuel efficiency compared to 36% of non-users of FBP. The 16% of users that felt they did not have sufficient

information were still satisfied with Freight Best Practice but felt that they lacked information specific to their organisation.

5.5 Action taken

All respondents were asked whether they had taken any action for the following in the last two years (calendar years 2005 and 2006):

- **Fuel programmes** – including converting vehicles to alternative fuel and fuel management programmes
- **Developing the skills of drivers** – including driver training
- **Improving equipment and systems** – including aerodynamic kits, swapping trailer types, IT (including telematics and CVRS), vehicle selection policies and using semi synthetic or synthetic oil
- **Improving operational efficiency** – including maximising vehicle fill, reducing empty running and undertaking preventative maintenance
- **Improved performance management** – including benchmarking and key performance indicators.

The following chart shows whether respondents reported taking any of these actions:

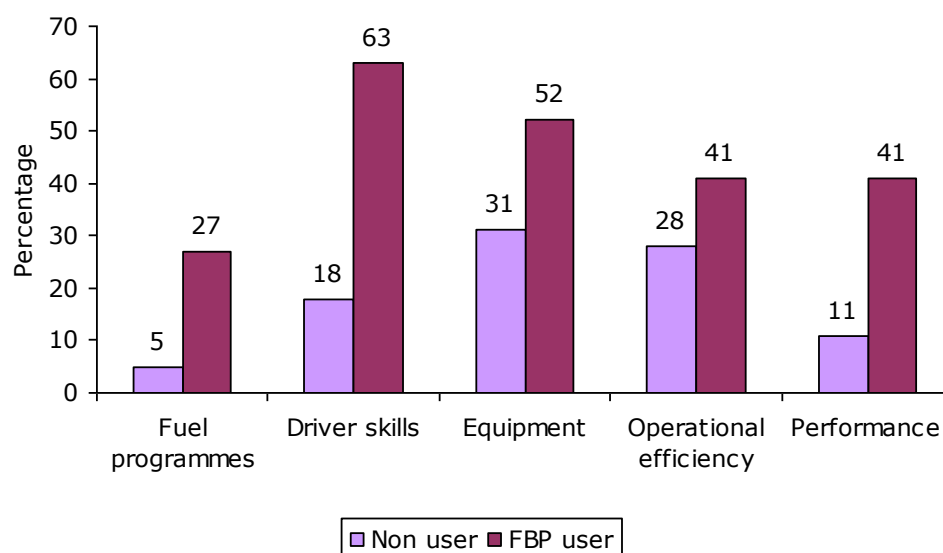


Figure 9: Measures taken by users and non users (n=1,558)

Overall, 54% of fleets have taken action to improve their fuel efficiency over the past 2 years. The most common actions are improving equipment and systems and improving operational efficiency.

A higher proportion of users have taken action to reduce their fuel consumption compared to non users. There is less difference between users and non users in taking action to improve their operational efficiency and to improve their equipment; however the differences are still statistically significant.

Where fleets have taken action to improve their fuel efficiency, 50% of fleets have taken just one of these measures, 26% have taken two measures, 13% have taken three measures and 11% have taken more than three measures.

The following chart shows the percentage of fleets within each size band that has taken at least one action to improve fuel efficiency:

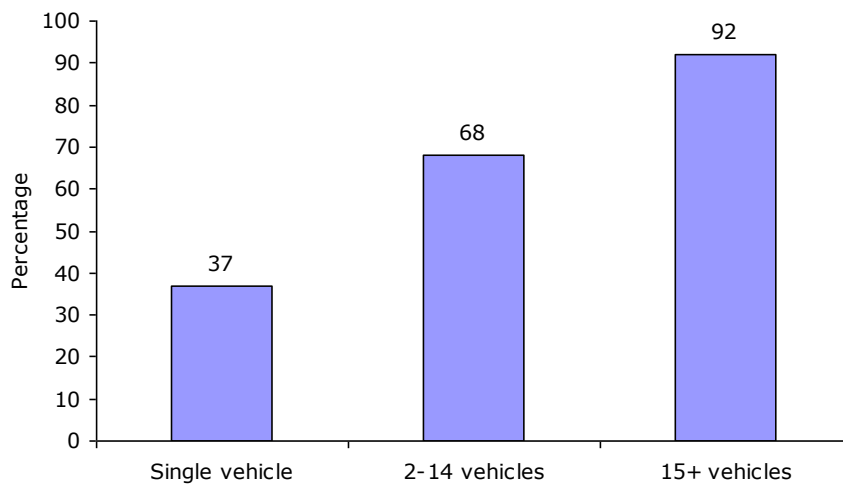


Figure 10: Action taken by size of fleet (n=1,558)

It can be seen that over the past 2 years, nearly all large fleets have taken action to improve their fuel efficiency compared to just over a third of fleets with just one vehicle.

A higher proportion of fleets that have a positive attitude towards fuel efficiency have taken action, as demonstrated in figure 13:

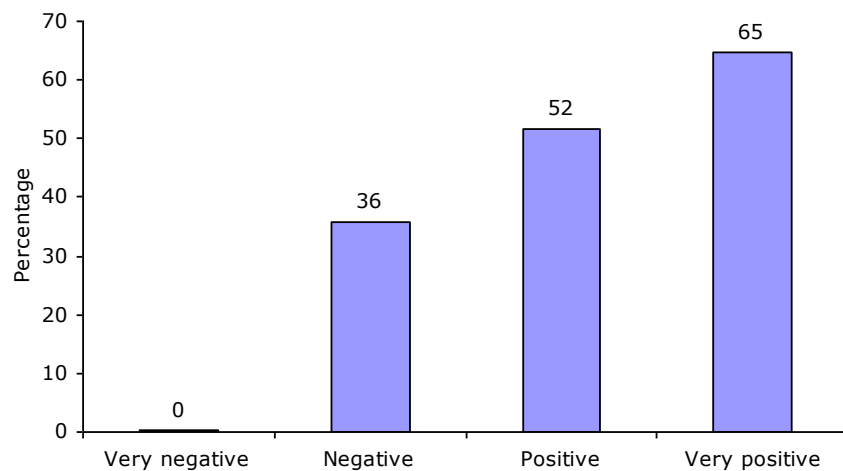


Figure 11: Action taken by attitude towards fuel efficiency (n=1,558)

5.5.1 Savings

Where fleets have taken action to improve their fuel efficiency, the financial, fuel and associated carbon savings have been calculated. Appendix 2 details the methodology and assumptions used to calculate these savings.

The following table shows the total savings achieved by all users and non users in the calendar years 2005 and 2006:

	All	FBP user	Non user
Financial savings (£000s)	603,000	189,500	413,500
Carbon savings (tonnes)	475,000	149,000	326,000
CO₂ savings (tonnes)	1,742,000	547,300	1,194,700
Litres savings (000 tonnes)	670,000	210,500	459,500

Table 3: Total savings (n=1,558)

FBP users have achieved financial savings of £190m through implementing measures to improve their fuel efficiency. £42m of these savings have been achieved by users of FBP that have also used SAFED.

This compares to users achieving £65 million in the 2003 impact assessment.

The following table shows the average savings achieved by all users and non users:

		FBP user	Non user
Total savings (£000s)		£189,500	£413,500
Average savings per fleet		£32,500	£6,000
Average savings per fleet	Small	£200	£570
	Medium	£13,000	£7,300
	Large	£248,000	£133,000
Average savings per vehicle		£1,500	£850
Average savings per vehicle	Small	£200	£570
	Medium	£2,300	£1,200
	Large	£3,000	£2,700

Table 4: Savings achieved by users and non users (n=1,558)

The following table shows the average savings for those fleets that have taken action to improve their fuel efficiency:

		FBP user	Non user
Total savings		£189,500,000	£413,500,000
Average savings per fleet		£41,000	£12,000
Average savings per fleet	Small	£300	£1,300
	Medium	£16,000	£11,000
	Large	£259,000	£146,000
Average savings per vehicle		£1,900	£1,600
Average savings per vehicle	Small	£300	£1,300
	Medium	£2,700	£1,800
	Large	£3,100	£2,900

Table 5: Savings for users and non users of FBP (n=1,267)

5.6 Impact of FBP

5.6.1 Attribution

Respondents that had used Freight Best Practice and had taken action to improve their fuel efficiency were asked how Freight Best Practice had helped. Their responses were coded into the following categories:

- Gave them the idea for the change
- Gave them the confidence to make the change
- Gave them information on how to make the change
- Helped persuade colleagues
- Encouraged them to make the change quicker than they otherwise would have done
- Helped in another way
- Did not help – in most cases where respondents said that the Freight Best Practice did not help it was because they had already thought about the measure and did not use the programme to help with the measure.

The following chart shows how Freight Best Practice has helped fleets with the different measures:

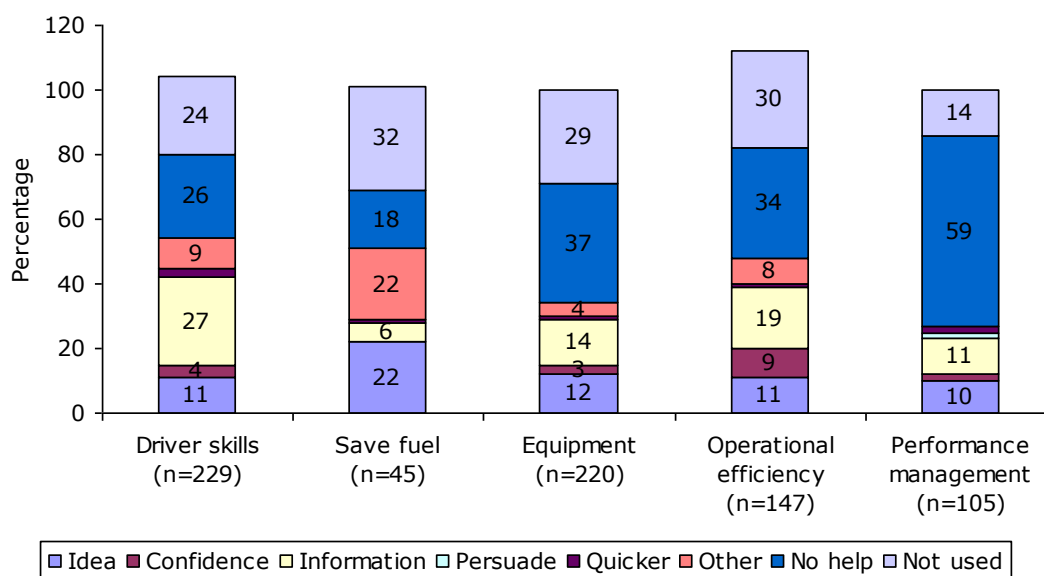


Figure 12: Attribution to Freight Best Practice⁵

The main areas where FBP helped with individual measures was giving respondents:

- The idea on what they should do
- Help and information on the measure.

⁵ The totals do not add up to 100% as some respondents gave more than one answer

Their comments include:

Driver skills

- *"FBP helped us to get thinking about fuel efficiency in general and examine the possibilities that exist for us"*
- *"FBP told us about SAFED so [without them] we wouldn't have done any training"*

Fuel programmes

- *"Again it highlighted the areas we wanted to improve and it helped to convince colleagues"*
- *"Ideas to simulate, and put forward to management teams. Puts the ideas forward, what's relevant to us and target areas"*
- *"It [FBP] was our first point of call"*

Improving equipment and systems

- *"Helped overall, with providing the information and getting me prepared to implement the change"*
- *"FBP helped us to realise that we had to renew the system that we had in place previously to monitor and manage fuel, and provided us with information about how we could go about making changes"*

Improving operational efficiency

- *"Better load planning from FBP enabled us to reduce our fleet by about one third (we had 22 rigids and now only 15 at Birmingham site now), used a publication for the pallet sector and our management programme monitors routes"*
- *"It gives us ideas, what we should be monitoring how we might improve general maintenance"*
- *"Commercial aspects drove the project, with support by FBP publications"*

Monitoring performance

- *"They gave us the tool which otherwise I'd have probably paid for"*
- *"FBP gave us background information on how to do it, we had already had the idea to do it, they just helped us"*
- *"It brought more information to light. We knew certain things ourselves but there is always more information available"*
- *"Read about it and use FBP for cross referencing, so was part of process. Useful as reference point, and gave confidence"*
- *"We gained all of our information on KPIs and targets from the FBP spreadsheets and database"*

The majority of users of Freight Best Practice did not use the programme for help with individual measures. The main reason for this is that the information does not necessarily tell them anything new and it is only used as one of a number of sources of advice. Users often go to the programme for general information and already have ideas in mind; they therefore do not use the programme for help with individual measures.

Overall, 48% of those that have used Freight Best Practice and have taken action to improve their fuel efficiency have found the programme helpful in some way for the measures they have implemented.

5.6.2 Attributed savings

Overall, users have attributed 44% of their savings to FBP which equates to £83m and 65,560 tonnes of carbon. The following table shows the financial savings split by measure type:

Measure type	User savings (£s)	Attributed savings (£s)	% attributed savings
Saving fuel	29.6m	6.2m	21%
Driver skills	54.9m	28m	51%
Equipment	87m	39.7m	46%
Operational efficiency	9.8m	5m	51%
Performance management	7.5m	4.4m	59%

Table 6: Attributed savings (£s)

The following table shows the CO₂ savings split by measure type:

Measure type	User savings (tonnes CO ₂)	Attributed savings (tonnes CO ₂)	% attributed savings
Saving fuel	86,000	18,000	21%
Driver skills	160,000	81,000	51%
Equipment	251,000	115,000	46%
Operational efficiency	28,000	14,000	51%
Performance management	22,000	13,000	59%

Table 7: Attributed savings (CO₂)

£2m has been spent on FBP over the last two years. This has resulted in attributed savings of 65,560 tonnes of carbon and 240,000 tonnes of CO₂. This therefore equates to £30 per tonne of carbon and £8 per tonne of CO₂.

5.6.3 Reduction in accidents

Respondents were asked if they had seen a reduction in accidents as a result of implementing any fuel efficiency measures. The following chart shows the results of this:

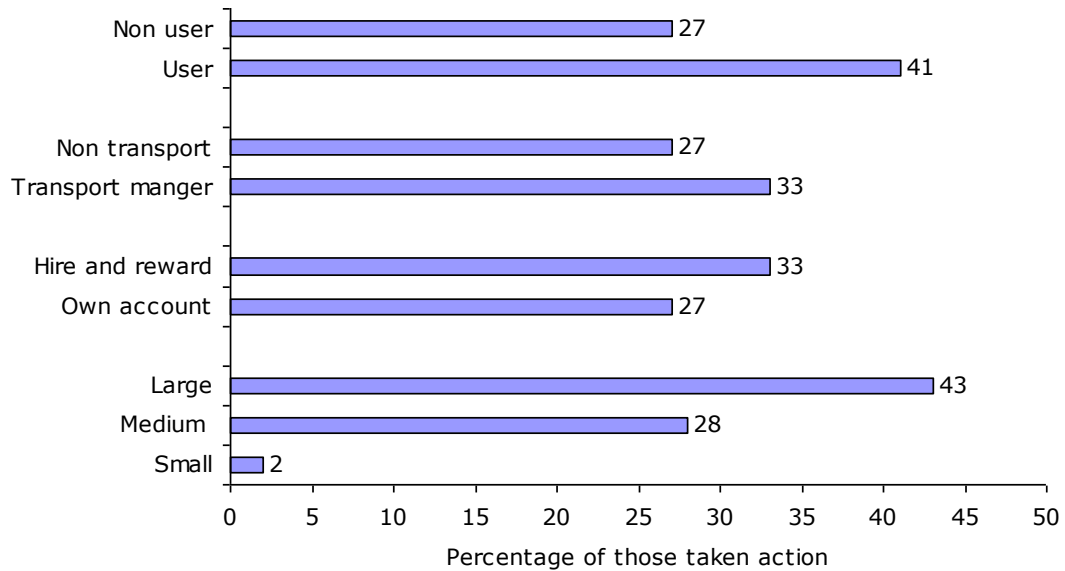


Figure 13: Reduction in accidents (n=1,267)

36% of users felt that FBP helped them to reduce the number of accidents.

6 Discussion and conclusions

6.1 Use of Freight Best Practice

6.1.1 Who is using the programme?

The following chart explores the use and awareness of FBP by different types of fleet:

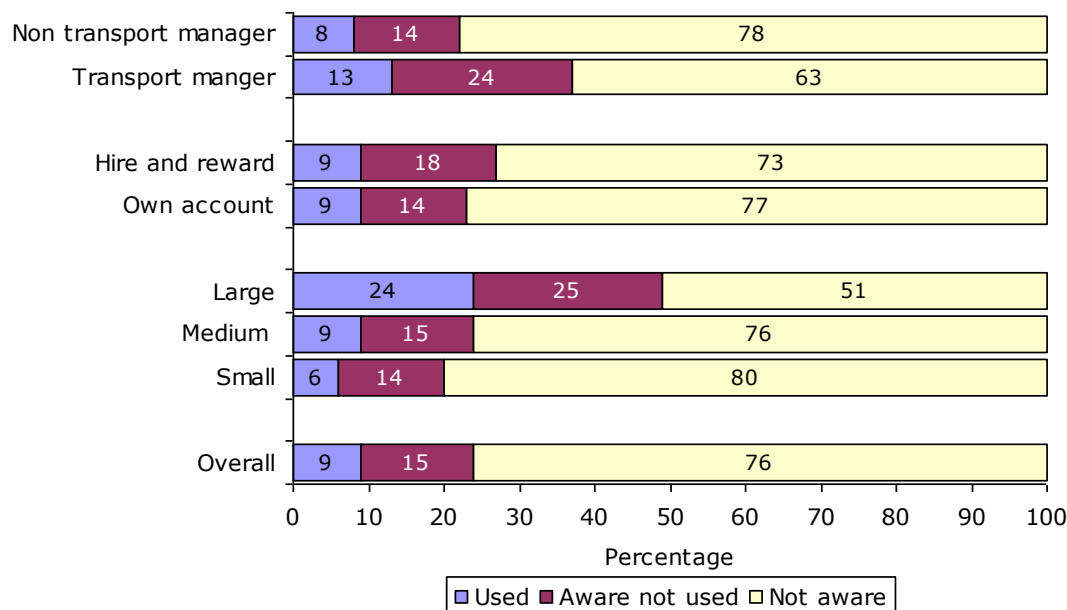


Figure 14: Use and awareness of FBP (n=1,558)

Users of the programme are typically from larger organisations (15 or more vehicles) and are usually a transport manager who has responsibility for the efficiency of the fleet. In smaller organisations, the person responsible for the fleet is likely to have a number of other responsibilities and so has less time to look into ways of reducing the fuel efficiency and therefore less likely to use external advice such as FBP.

The conversion rate from awareness of FBP to use of the programme is also highest among large organisations. This shows that out of all the different types of organisations, large organisations see the programme as most relevant to them. Section 5.1.2 showed that 38% of fleets that are aware of FBP but have not used it because they feel it is not relevant to them – nearly all of these were single vehicle fleets.

As use is highest among large organisations, this means that this represents a higher proportion of vehicles – use of FBP covers 39% of all vehicles which shows that FBP has a high proportion of the market covered. The larger organisations also represent a higher proportion of mileage, with 29% of the mileage covered by the freight industry being done by users of FBP. The large fleets therefore together emit the highest proportion of carbon, but on average are the most active on measures to reduce their emissions.

6.1.2 What are users' characteristics?

Users of FBP generally have a more positive attitude towards fuel efficiency. This relates to the types of users as discussed in 6.1.1 – users are generally from larger organisations and have a role specifically to look after the fleet. There are a number of reasons why these fleets have a more positive attitude towards fuel efficiency:

- Their job role is dedicated to the upkeep, logistics and efficiency of the company's fleet. Investigating best practice with regard to this would form part of their remit and so they are more likely to know and understand the benefits that can be obtained from fuel efficiency
- It would be expected that personnel appointed as transport managers would have a background in transport, and could consequently be more positive about how fuel efficiency can be improved. Those respondents whose primary job function is not transport related, for example owner or business development manager, may not have this underlying interest/knowledge
- An organisation that has dedicated an individual specifically to look after the fleet is more likely to foster a 'can do' culture with regard to fuel efficiency.

Users of FBP are also using a number of other external sources of advice. The process of looking for external advice appears to be as follows:

1. Trade press (e.g. Commercial Motor) and trade associations (e.g. Road Haulage Association and the Road Transport Association) are used regularly and provide a general overview of the freight transport industry and any breaking news
2. Freight Best Practice is then looked to second when respondents are looking for a source of specific information on a particular area. This probably explains why respondents rated the publications lowest for 'told them something new about fuel efficiency' – because it is used as a secondary source.

For example: *"Read about it [the measure] and use FBP for cross referencing, so it was a part of the process. It was useful as a reference point, and gave confidence to make the change".* FBP is also perceived by many as more credible than other sources, *"[FBP] did help. The fact that it's nationally recognised, assumption it's government backed so it's 'trustworthy'".*

It appears that, although Freight Best Practice is not used in isolation, it does have a firm place in the environment of fuel efficiency.

6.1.3 Why are fleets not using FBP?

The main reason cited for not using FBP is that respondents do not think it is relevant to them for reasons that include:

- The perception that operational necessities limit how fuel efficient they can be
- The feeling they are too small to benefit from using Freight Best Practice
- Some of the fleets, especially own account and small fleets, do not see themselves as being in the "freight" industry and so perceive *Freight* Best Practice to be irrelevant to their business.

Interestingly, the majority of respondents with 'transport' in their job title (ie transport managers or directors) cited lack of time or low priority as the greatest barrier to using

FBP. Senior personnel whose main job function is not fleet responsibility (e.g. owner or 'other' director) tended to cite FBP's relevance (or lack of it) as a barrier to use. This raises a couple of challenges for FBP regarding the types of messages that need to be communicated and to whom.

6.2 Satisfaction with FBP

On the whole, satisfaction with FBP's website and publications was very high. This suggests that FBP as a product is well received once used. However there is still the obstacle of converting the 15% of the industry that are aware but have not used FBP.

Section 5.2.1 showed that users of publications have found them easy to use, clear and concise. This is an area where the FBP publications have fallen down in the past and FBP have worked on the new publications to make them easier to understand. Respondents' comments show that the new publications have been successful in providing the information in a more succinct way.

Where there is some disagreement with the statements about publications, it concerns the following three areas:

1. Relevance of the information to their organisation
2. Information on how to implement the measures
3. Information that is new to the reader.

Relevance is an issue that was frequently cited as a barrier to using FBP in the first place and it is clear that a minority of users have also felt that the publications they have read have not been at the right level. The other two areas of disagreement are a reflection of how FBP is used. FBP is often used as one of a number of sources of advice, and so consequently would not necessarily provide new information to the reader. Section 5.6.1 shows that FBP is used to support the decision making process, and hence, it is not necessarily used as an implementation manual.

Similar to publications, few respondents were dissatisfied with the website. However, between 31% and 43% of respondents neither agreed nor disagreed with each of the five areas discussed. This suggests that either:

- Website users are fairly indifferent towards the website and it doesn't tend to elicit a strong sense of satisfaction or dissatisfaction
- Users did not really remember their use of the site. This could be because they used it a while ago, fleetingly, or because they did not find it very memorable.

6.3 Improving fuel efficiency

The following chart summarises the profile of fleets that have taken action to improve their fuel efficiency:

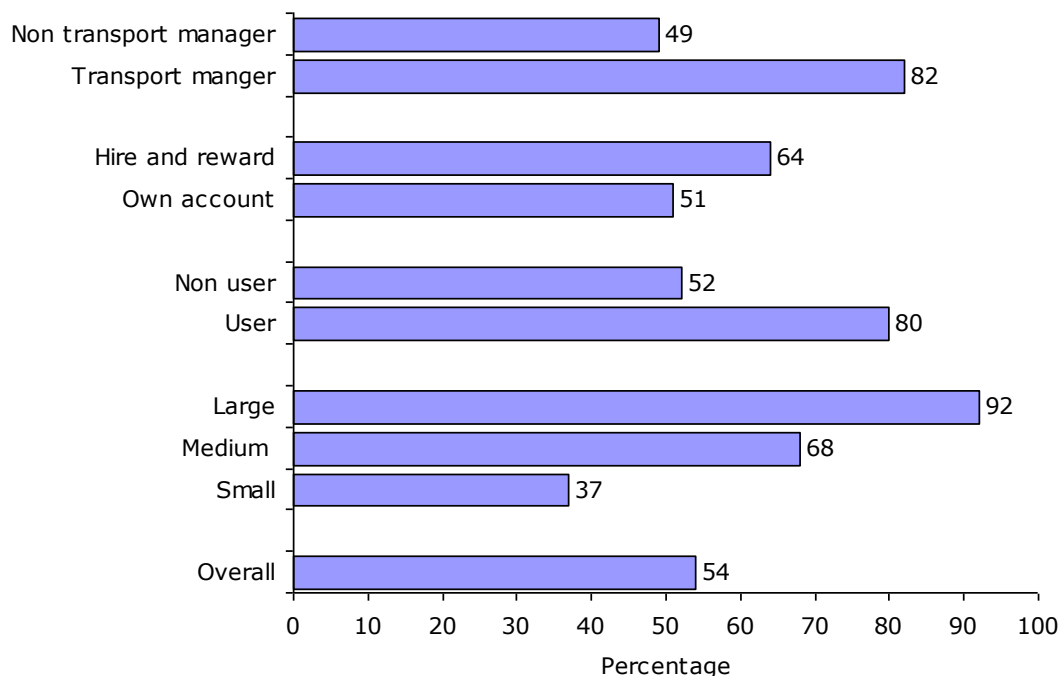


Figure 15: Action taken (n=1,558)

Once again, the fleets that are taking action to improve fuel efficiency are predominantly:

- Large fleets
- Transport managers
- Hire and reward fleets
- Users of FBP

The measures that currently have the highest take up are implementing fuel management programmes and managing performance.

A higher proportion of hire and reward operators have taken action to improve the fuel efficiency of their fleet. This is probably due to the fact that trucks are integral to a hire and reward operator's line of work and account for a high proportion of all business costs, whereas for own account operators, a vehicle is more likely to be seen as a means to transporting an end product to a customer.

The savings associated with the action taken show that users of FBP generally achieve higher savings than non users. This appears to be especially the case in medium size fleets where the fleet is positive about fuel efficiency but they may not feel they have the resources to dedicate to looking into fuel efficiency. These fleets have therefore found FBP very useful in understanding what they can do to improve the efficiency of their fleet.

Nearly half of the savings achieved by users can be attributed to the programme. This shows that whilst a proportion would have taken the action and resulted in the same

outcome regardless of their use of the programme there is a large group that the programme is helping to achieve more carbon reductions than would otherwise have been achieved.

7 Recommendations

7.1 Who should FBP target?

9% of fleets are using FBP, with a further 15% aware of it but not using it. Although this figure has increased since previous evaluations there is potential to do more. The research has shown that half of large fleets are aware of FBP and half of these are using it. A much lower proportion of medium and small size fleets are aware of FBP let alone using it. The programme needs to think about the type of organisation it wants to target. There are a number of ways of increasing use of the programme:

- Continue increasing awareness of FBP among large fleets
- Increase the conversion rate from awareness to use
- Increase awareness and use among smaller fleets
- Target transport managers
- Increase use and awareness amongst own account operators.

FBP needs to focus on the opportunities where they can make the most difference. From this research it would appear the priorities for FBP should be:

- **Continue increasing awareness of FBP amongst large fleets** – the conversion rate from awareness to use is much higher among large fleets than other size fleets. Therefore, the more fleets that are aware of the programme, the more users there will be. The larger fleets have the ability to save a greater amount of fuel per fleet than smaller fleets. The programme therefore could target a small number of fleets that can achieve a higher proportion of savings.
- **Increase the conversion rate from awareness to use** – there is currently a fairly high proportion of fleets that are aware of FBP but are not using it. The challenge with these is to show them the benefits they would get from using FBP; this would include making sure that fleets see the relevance of the programme to their business and that they can see examples of how other fleets have benefited from the programme. This again is particularly important among the 25% of large fleets that are aware of, but are not using, FBP.
- **Target transport managers** – transport managers within fleets are much more likely to use FBP and to take action than non specialists. It would therefore be a priority for FBP to target these before other managers.

7.2 Messages

The research has shown that a high proportion of fleets are positive about fuel efficiency. However a lower proportion has actually taken action to improve their fuel efficiency. The gap between attitude to fuel efficiency and action taken gets smaller as the size of fleet increases. The proportion of large fleets that are very positive about fuel efficiency is much higher than medium and small fleets. This suggests that the majority of fleets want to be seen as being positive but large fleets actually mean it and are doing something about it. Therefore FBP has two challenges. To:

1. Communicate why fuel efficiency is important
2. Explain how FBP can help.

The majority of large fleets already understand the benefits of fuel efficiency improvements and so FBP needs to inform them about the benefits of using FBP. The medium and small fleets will need to be told why fuel efficiency is important as well as why they should use FBP.

7.2.1 Communicating the importance of fuel efficiency

Slightly different messages need to be used depending on who FBP are targeting:

- Messages need to be communicated to transport managers and directors that fuel efficiency measures do not have to be time consuming, and that they are worth prioritising because of the benefits derived
- Senior personnel whose job role is not primarily concerned with the organisations fleet need messages to convince them that fuel efficiency is viable for their organisation.

7.2.2 Communicating value of FBP

The savings achieved through implementing fuel efficiency measures have shown that FBP helps users to implement measures more effectively than non users and thereby achieve greater savings. Messages such as this should be communicated to non users so that they can understand the benefit of using the programme.

The majority of fleets feel that they are different to other fleet operators and therefore feel that FBP is not for them. FBP's marketing needs to show that it is relevant to different types of organisation and that it is not just relevant to fleets that do large mileages. Some users have used publications that are not relevant to them – this may be because they chose the wrong publication to look at. The use of one publication that was not relevant may lead to the user not looking at other FBP publications or services. It is therefore important that material should be clearly identifiable as to what it is about so that users can see whether it is relevant to them. This could be in the form of a simple diagnostic on the website which asks a series of questions about the organisation and what they want to do.

7.3 Communication channels

The research has shown that users of FBP use the programme as one of a number of sources of advice on fuel efficiency. The most commonly used sources of advice are trade associations and trade press. FBP would benefit from working more closely together with trade associations and trade press for a number of reasons:

1. The majority of the large organisations in the freight industry will belong to at least one of the main trade associations – RHA or FTA. This is therefore a good way of communicating with fleets as it will reach a high proportion of the market.
2. Working with trade associations and trade press will help organisations see the relevance of FBP to them. Fleets reportedly find the information from trade associations and trade press useful, so would be more likely to think that as these organisations are promoting FBP it will be of benefit to them.

Smaller fleets are more difficult to target as they appear to have a less positive attitude towards fuel efficiency. They are also less likely to have someone with a job that solely covers their fleet. In these cases it is worthwhile targeting the owners of the business and presenting them with a solid business case about the savings they can achieve through improving fuel efficiency. In order to reach these people, FBP could work with other organisations such as the Federation of Small Businesses.

A gap has been identified between the positive attitudes of smaller fleets and actions taken to improve fuel efficiency. A simple checklist could be produced for these fleets, identifying what they can do and which guides they should look at. Once fleets have looked at the publications they find them easy to understand so it is a matter of fleets identifying the most appropriate publication for them.

The publications that have proved most popular with users are the pocket guides providing tips for drivers. These small but useful booklets have provided fleets with lots of information that can easily be passed on to others within the organisation. Future publications should follow similar, easy to use formats.

The measures that are less likely to be implemented are fuel management programmes and performance measurement. These are areas that FBP could start to promote more intensively. Areas such as operational efficiency are already being implemented by users and non users alike so whilst FBP should not stop promoting these measures, less work is required.

We understand that FBP are currently piloting the provision of site specific advice. If this were not the case, we would have recommended that FBP consider offering site specific advice to the larger organisations. This would involve sending a consultant into the organisation to give recommendations on improving fuel efficiency. This could have a number of benefits. Firstly, the larger fleets are already more positive about fuel efficiency and if they start taking more action this will result in high savings. Secondly, if the visit requires some form of preparation and sign off from senior management this may give fuel efficiency a higher profile within the organisation and will lead to further savings.

8 Appendix 1 – weighting

Respondents to the survey were selected to provide robust representative samples of users of FBP and SAFED and so the results can be extrapolated with confidence to draw conclusions about the population of users under examination.

This process of extrapolation is known as “weighting” or “grossing up”. This process weights each response to reflect the population that it was drawn from. Because respondents were selected to reflect different groups they need to be grossed up to that group separately. This has been done by assigning each response a weight depending on the group it was drawn from.

The results for the sample recorded as users of Freight Best Practice were grossed up to the user database after duplicates and contacts that are not relevant have been removed. The proportion of these were identified during the survey.

The industry sample was grossed up to the total number of vehicles in the UK minus the number on the Freight Best Practice database.

For example, each FBP user was assigned a weight which was calculated as:

Number of users on the database

Number of users in the sample

The data for the total number of vehicles was taken from a number of sources and the process was as follows:

- The total number of freight vehicles in the UK was taken from table A2 in the Road Freight Statistics 2005 publication.
- The split between hire and reward and own account was also taken from this table.
- 86% of vehicles are from England – taken from table 1.34, Road Freight Statistics 2005.
- The size split (ie how many vehicles there are within fleets with 1 vehicle etc) was taken from the 1997 Road Transport Market Survey.
- The average number of vehicles in each size category was then used to calculate the total number of fleets.

The data for the total number of fleets is as follows:

	Own account	Hire and reward
Small (1 vehicle)	22,786	5,080
Medium (2-14 vehicles)	16,004	8,071
Large (15+ vehicles)	2,279	1,913
Total	41,069	15,064

9 Appendix 2 - Assumptions

9.1 Fuel consumption

The consumption figures below have been based on the statistics in the Transport Statistics Bulletin: Road Freight Statistics 2005.

The following average mpg assumptions have been used:

Rigid vehicles	8.3 mpg
Articulated vehicles	8.1 mpg

A "standard fuel consumption" has been calculated for each respondent. This is the mileage/mpg for each class of vehicle.

Where respondents could not provide mileage an average mileage for the segment would be used taken from Road Freight Statistics 2005.

We have taken an average price for diesel fuel as £0.9 per litre and assumed that each litre of fuel produces 2.6kg of CO₂. Carbon dioxide equivalents have then been converted to carbon equivalents by multiplying the carbon dioxide equivalents by 12/44 (the ratio of the molecular weight of carbon to carbon dioxide).

9.2 Savings factors

This table shows the savings factors that have been used:

Measure	Comments and proposed savings calculation	Proposed Saving
Selection policy	<p>Selecting the right vehicle for the job can make a significant difference to Fuel consumption.</p> <p>We would look for the preparation of specifications for manufacturers to enable them to recommend the best combination of torque, gearbox and drive axle ratios.</p> <p>Savings would be calculated as the standard fuel consumption of vehicles purchased since the introduction of the policy multiplied by saving.</p>	10% where they tailor vehicle to demand, 5% where they choose most fuel efficient vehicle in the class
Aerodynamic styling kits	<p>Cab deflector blade 5%</p> <p>Solid cab fairing 10%</p> <p>Full streamlining 15%</p> <p>Or average 10%</p> <p>Savings:</p> <ul style="list-style-type: none"> • TNT (artic) 16% • Excel (rigid) 20% • Somerfield – 7% <p>The “standard fuel consumption” of vehicles fitted with kits would be multiplied by the saving.</p>	Use 10% as an average so that we can reduce the amount of specific questions asked to respondents
Driver training	<p>Good driving technique can reduce fuel consumption by:</p> <ul style="list-style-type: none"> • Exel – 5% • Clugston Distribution -7.3% <p>As well as driver training, for savings to persist we would also look for reinforcing measures such as:</p> <ul style="list-style-type: none"> • Refresher courses • Driver feedback and monitoring • Incentives <p>The proportion of drivers trained (or their mileage) would be used to calculate the “standard fuel consumption” this would be multiplied by the saving.</p>	5%
Fuel management	Fuel management for trucks can save over 5% of fuel consumption. In the Thorntons case study the vehicles without on board loggers seem to have	5%

	<p>saved around 4% while those with loggers have saved about 8%.</p> <p>We will be looking for</p> <ul style="list-style-type: none"> • A systematic procedure, either managed in house or by a fuel supplier. • Targets for improvement <p>The "standard fuel consumption" will be multiplied by the saving factor.</p>	
On board fuel consumption monitoring	<p>Loggers in the Thorntons case study seem to have saved an additional 4% over and above straight fuel management.</p> <p>The "standard fuel consumption for vehicles fitted with the kits would be multiplied by the saving factor.</p>	5%
Route planning	<p>We will be looking for the use of route planning software or systems like Trafficmaster.</p> <p>The respondent will be asked to estimate mileage saved. Otherwise, say 4%.</p> <p>Where there is no respondent estimate the "standard fuel consumption" will be multiplied by the proportion of vehicles using the system and the saving factor.</p>	Respondent estimate or 4%
Strategic measures	<p>We would look for:</p> <ul style="list-style-type: none"> • Load consolidation • Fleet sharing • Supplier collections • Depot location review • Empty running • Vehicle fill <p>The savings would be established by finding out the reduction in the mileage or getting the transport manager to estimate the reduction in empty running.</p> <p>The saving would then be calculated by the savings factor.</p>	<p>By calculation</p> <p>If no info provided then 5%</p>
Trailer types		<p>By calculation</p> <p>– no savings factor to be used where respondent</p>

		doesn't know
Synthetic oils	3-5% saving from FBP publication - "Fuel Saving Devices"	3%
Preventative maintenance		By calculation – no savings factor to be used where respondent doesn't know
KPIs/Benchmarking		By calculation – no savings factor to be used where respondent doesn't know

Where multiple measures have been implemented savings factors would be applied cumulatively to allow for the reduction in the savings from additional measures.

Sources:

- Fuel savings through improved driver training
- Fuel management for transport operators
- Fuel savings from integrated logistics management
- Freight distribution and logistics
- Fuel management guide
- Fuel efficiency in road transport
- Fuel consumption in freight haulage fleets
- Wayfinding research using satellite navigation to improve efficiency in the road freight industry.
- Fuel saving devices

10 Appendix 3 – Example case studies

10.1 Case study 1

When Bolton Transport MD Chris Healey signed up for information from the Department for Transport's Freight Best Practice programme, he hoped it would keep him up-to-date with fuel efficiency measures he could implement. By joining the local pallet distribution network, and tightening fuel record keeping, Chris cut costs, increased turnover, and kept the company in profit.

Bolton Transport is a small local freight company. As owner-manager, Chris Healey is acutely aware of the cost savings to be made through fuel efficiency. He was one of the first UK operators to fit aerodynamic body kits to his trucks in the 1970s. But the pressures of managing his company meant that fuel efficiency was pushed lower down the agenda.

Chris explains: "It's harder to be innovative when you're working with older vehicles. I'd love to be operating brand-new trucks, and kitting them out with the latest and greatest. Unfortunately we are not in the position to do this, but the Freight Best Practice Programme (FBP) is still able to help us stay on top of fuel costs."

Freight Best Practice is the Department for Transport's programme to promote operational efficiency within freight operations in England. It offers free essential information for the freight industry covering topics such as saving fuel, developing skills, equipment and systems, operational efficiency and performance management.

FBP suggested some simple record keeping tools that helps Chris keep track of the fuel use of particular trucks and drivers. He was then able to compare this against the amount of freight delivered or other key performance indicators.

And the figures speak for themselves. In the 12 months to January 2007, Chris' fuel bill fell by more than £3,000, even as turnover increased by nearly £30,000.

One of the most significant changes Chris has made is to get involved in the local pallet distribution network. The Pallet Network sees companies combining resources to deliver goods right across the UK. FBP shows that this system can lead to significant increases in fuel efficiency, without sacrificing customer service or delivery times. FBP's independent support of the networks has encouraged more companies to get involved, increasing their viability and value to members.

Rather than sending a half-empty truck miles across the country, Chris now runs one or two full trailers to the central hub which then come back fully loaded with other member's deliveries. Since joining the network four years ago, Chris has been able to cut the

number of trucks in the fleet without sacrificing delivery numbers. This has resulted in a 7.5% increase in fuel efficiency, measured by deliveries made to fuel consumed.

“This is an idea that had been bandied about for years,” he says. “The problem was that no-one could really see how it would work. Now, with the independent support of FBP the networks are having a huge impact on the viability of small freight companies.”

“I can certainly say that over the last few years, FBP has helped our little company keep itself in business.”

10.2 Case study 2

Wincanton's site in Swindon, Wiltshire was one of the first companies to use Freight Best Practice (FBP) to help reduce fuel bills. Five years on, the programme has helped save thousands of pounds every year and has become a central part of every major change at the site, from purchasing vehicles to adopting new technologies.

Wincanton Plc is a leading European supply chain services provider. It employs 30,000 people, runs a fleet of 6,500 vehicles and generates £1.9 billion in annual revenue. Based in Chippenham, it boasts approximately 250 locations around the UK and a further 150 across Europe.

Wincanton's Swindon site was one of the first organisations to investigate the Department for Transport's Freight Best Practice programme. It came across FBP whilst searching for a way to reduce its £1 million annual fuel bill. At Swindon, Wincanton required 150 litres of fuel for each vehicle per day. However, they had a limited understanding of how this fuel was being used by the site's 100 drivers or the factors affecting fuel usage that the company could control.

Freight Best Practice is the Department for Transport's programme to promote operational efficiency within freight operations in England. It offers free essential information for the freight industry, covering topics such as saving fuel, developing skills, equipment and systems, operational efficiency and performance management.

Wincanton's driver training manager Russ Bithell evaluated how FBP might offer the Swindon site ways to reduce fuel costs. He quickly realised that FBP's advice could be used to save money across a much wider range of Wincanton's practices. Since 2001 Russ has become a pioneer of applying FBP's advice to deliver real financial benefits. The programme's guidance has helped him justify the purchase of new, more efficient vehicles as well as the implementation of new technologies. It has also helped him quantify the cost of small changes to conventional methods of fleet management and driver behaviour.

The changes initiated by Wincanton's application of FBP have reduced the Swindon site's fuel costs by 5% and saved a further £46,000 in additional costs by increasing the efficiency of company practices.

FBP helped Wincanton reduce fuel bills by allowing Russ to demonstrate the benefits of accurately monitoring how the fleet was using fuel. The company's existing system was out-of-date, offering only basic information and relying on drivers to monitor how much fuel they were using. Russ used guidance from FBP to back up claims that a more advanced fuel tracking system would save money by tracking fuel usage by vehicle or driver and linking this to factors including payload and journey duration. It provided such detailed information that Wincanton was quickly able to isolate ways to drastically improve vehicle efficiency.

One approach Russ suggested was to change the type of vehicle the company used. "Five years ago we were running a fleet of six year old, low-tech vehicles with high revving engines and manual transmissions," he said. "FBP showed us how this could cost us money in the long-run. We now only use ultra-modern vehicles with air suspension, auto gearboxes, cruise control, GPS tracking systems and every fuel saving aid available. It's made a real difference to fleet efficiency."

One of the most important benefits Wincanton drew from the FBP programme was the ability to evaluate the financial impact of small changes to the site's existing practices. Through a series of time and motion studies Wincanton found that FBP modifications to drivers' routine checks could save 10 minutes every shift. This included introducing visual markers on wheel nuts to enable drivers to see any movement rather than having to physically check whether each one needs tightening with specialist tools. It also involved standardising the checking process. Previously drivers controlled their own pre and post-shift checks. Some took ten minutes whilst others could take up to an hour. Using FBP's guidelines, Wincanton implemented a standard, approved routine which ensured all safety and regulatory checks were carried out in ten minutes. The programme's KPI tool was able to convert this time into a true cost saving which could be extrapolated to demonstrate the financial impact over a week, month or year. Being able to quantify such small adjustments allowed Wincanton at the Swindon site to make informed decisions about every aspect of the site and the way drivers use Wincanton vehicles. For example, the company now provides every driver with a pressure gauge because it knows that one under-inflated tyre can increase fuel consumption by as much as 2% per journey.

"The benefit of FBP is that we now know considerably more about running an efficient fleet of vehicles than we did five years ago," says Russ. "This includes management, drivers, support staff and trainers. We have seen a dramatic change since we started using FBP and it has become an integral part of the majority of decisions both for the site and the company as a whole. Without it we would be making less money and that would be reflected in our share price. It's been instrumental in improving the success of this site, this company and its people."

