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**HISTORIC CITIES PROJECT TASK 4**
**THE BUSINESS SURVEYS: QUESTIONNAIRE DESIGN,**
**IMPLEMENTATION AND INITIAL ANALYSIS**


**WORKING PAPER 538**



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**07 July 2005**

# CONTENTS

# 1.    INTRODUCTION

## 1.1    Background

The Historic Cities project examined the potential impacts of transport demand management strategies on three case study 'historic' cities in England. These cities are York, Cambridge and Norwich, all of which have the following characteristics:
-   they are cities which pre-date motorised transport, and thus tend to have city centres dominated by narrow streets;
-   they are all members of the Historic Towns Forum;
-   they have a high architectural and historic heritage, and attract many tourists each year;
-   they have severe congestion, and congestion related problems;
-   the city authorities are faced with the problems of maintaining the environmental quality of the city, while allowing the most efficient use of the transport infrastructure.

The focus of the project was how transport demand management policies, particularly parking, pricing and road-space re-allocation, can contribute to the last bullet above.

Task 4 in the Historic Cities project examined the predicted effects on the urban economy from a work place parking levy and road user charging. It is thought that a major barrier to the implementation of these instruments is the perception that they will have detrimental impacts on the local economy. This task examines whether this hypothesis is correct by examining the impacts on, and attitudes of, businesses in the case study cities.

This working paper describes the survey work that was undertaken and presents the initial analysis of the results. It has the following sections:
-   Section 1: introduces the research;
-   Section 2: describes the policies to be studied;
-   Section 3: describes the development and rationale for the questionnaire approach;
-   Section 4: describes the sampling process;
-   Section 5: presents the initial analysis of the results;
-   Section 6: gives a summary and conclusions.

This is the second Working paper that summaries the Task 4 study. The first working paper (537) outlined the business sector profile for each city. A third working paper (552) will present multi-variate analysis of the dataset.

## 1.2    Overview and Objectives

As introduced above, the aim of the Task 4 research was to examine what impacts firms perceive demand restraint policies may have on local economic growth. In more detail, the objectives were:

1.  to determine whether business decision makers perceived that two demand restraint policies (a workplace parking levy, and road user charging; see section 2), aimed at influencing car based commuting, will have an **impact** on their **firm's** performance, and the city economy generally;
2.  to determine whether the same business decision makers perceived that the policies would have a negative impact on the **overall business sectors** in the cities;
3.  to examine whether there were any relationships between the attitudes expressed, and the type, size, location or financial performance of the firms, and if so, what inferences could be drawn about the likely impacts of the **polices on the urban economies**.

The methodology used to meet these objectives was led by the data demands of objective 3, which required the use of company accounts data in multi-variate analysis (see Section 4). Initially it was thought that face-to-face interviews would be required. However, as the nature of the questions to be asked was distilled, it became clear that the data could be obtained using a structured questionnaire. This was preferable from a resource perspective, but clearly there was a danger of a low response rate. How this was overcome is discussed in Sections 3 and 4.

## 2.0 POLICIES EXAMINED

### 2.1 Policy Selection

The other tasks in the Historic Cities project examined a range of policies that aimed to reduce car borne commuter traffic. These were:
- parking control (initially increases in public parking charges in the city centre);
- physical control: i.e. roadspace reduction / re-allocation;
- permit control;
- road user charging.

The 1998 Government Consultation Paper 'Breaking the Logjam' (DETR, 1998) focused attention on two measures in particular; **road user charging (RUC)** and **workplace parking levies (WPL)**. Enabling powers for these are now part of the current Transport Bill. However, the onus will be on Local Authorities to implement and manage the schemes.

The parking and charging policies were seen to be the best performing policies in Tasks 1 (which estimated demand elasticities in response to individual measures), at influencing mode choice. Furthermore, given the prominence of the RUC and WPL policies in 'Breaking the Logjam', coupled with the fact that both have direct implications on businesses, it was decided to examine only these latter policies in Task 4.

### 2.2 Task Description

Considerable attention was given to the description of the policies. For actual schemes, the detailed design is likely to be a critical issue for successful implementation (May and Milne, 1999). However, only a concise description was felt to be sensible for the questionnaire, presenting sufficient details to give the respondent a good feel for the policy, and showing the spatial extent of the policy.

A contentious issue was the **charge level**. Possible charge levels were discussed in consultation with the local authorities at a Historic Cities seminar on 5 July 1999. This debated:
- whether the RUC should be AM and PM peak or one peak (AM) only;
- the RUC level;
- the parking levy charge, especially in respect of current long stay public car parking charges.

The charges and charging regimes were subsequently proposed by ITS and agreed with the local authorities. The preferred RUC system was a single AM charge, affecting inward traffic only, exempting public transport, non-motorised vehicles and freight vehicles. The preferred WPL had a charge much lower than that for a daily public space (c. £5-15), instead fixed at what the local authorities considered would be the upper limit of business acceptability.

A key issue was the definition of the **charging cordons**. These were based on the cordons used in previous Tasks in the Historic Cities project. Essentially the inner

cordon bounded what was considered the 'historic city centre', while the outer cordon tended to follow the outer ring road. These were derived in discussion with the local authorities. The use of the outer ring road meant, unfortunately, that while the Cambridge and York cordons largely encircled the cities, the Norwich ring road did not. It should also be highlighted that only marginal attention was given to other policies (such as the location of park and ride sites)[1].

A final point was to ensure that the respondents were aware that the revenue generated would be used for public transport improvements. This was based on the premise that hypothecation was the key to public acceptability[2].

The policy descriptions are given in Table 2.1, using Norwich as an example. The full information for each city, including the study area maps, is given in Annex I. The final wording was arrived at following piloting in Cambridge.

Table 2.1: Sample Policy Description.

| A: Road user cordon charging in Norwich | B: Parking levy charges for business private parking in Norwich |
|---|---|
| A charge of **£2** would be introduced for all cars, coaches and motorcycles **each time** they cross the OUTER RING ROAD, and a charge of **£1** would be introduced for any of the above each time they cross the INNER RING ROAD (as shown on the **map**). Driving along these roads is not charged, in effect the charging cordon is along the inside of the ring roads.<br><br>The scheme would affect traffic going **TOWARDS** the city centre and entering the cordon between 7am-10am. There would be no charges applied at other times of the day.<br><br>Public transport (buses / park and ride); cyclists, delivery vans and lorries would **not** have to pay the charge. | Companies within the outer and inner cordons would be charged for their parking provision for employees at the place of work. The charge would be **£3 per space per day** (for all days on which business is undertaken at the place of work). All spaces apart from retail consumer parking would be charged for.<br><br>Current on-street and off-street parking restrictions and charges would remain in place. **However**, bear in mind that private and public car park operators would have to pay the parking levy for their long stay and contract parking spaces, and may well increase their parking charges as a result.<br><br>There would be no change in the calculation of rateable values. |

One key decision taken in this policy description (and questionnaire) was to have a **single charge level**. The aim of the research was not to examine the impacts of different charge levels, or determine the maximum acceptable charge. Instead, the aim was to assess the impact of charges at the upper range of what local authorities considered reasonable. However, a charge sensitivity question was added to the questionnaire.

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[1] Written responses from York in particular suggest that greater attention should be given to such issues in future research.

[2] Later research by Whittles (1999) has supported this assertion.

## 3.0    THE QUESTIONNAIRE

### 3.1    Introduction: the survey method

It was originally envisaged when writing the proposal for the Historic Cities project that the business representatives would be interviewed face to face. However, as the nature of the questions to be asked was distilled, it became clear that the data could be obtained using a structured questionnaire. This would allow for a wider survey within the resource constraints of Task 4. Considerable measures were taken to maximise the response rate, primarily through telephoning into firms to identify the most relevant person to complete the questionnaire, and seek a commitment in advance. The sample was drawn from the FAME (Financial Analysis Made Easy) database (explained in section 4).

The questionnaire had four aims:
1.  to collect key information about the companies;
2.  to obtain the perception of current transport conditions in the city from a strategic decision maker within the firm, plus information on their own employee transport subsidies;
3.  to obtain views on the likely impact on the city generally, and on the firm specifically from the RUC policy;
4.  ditto for the WPL policy.

A draft questionnaire was piloted in Cambridge in June 1999. Following comments on this, the final questionnaire was derived, and implemented during July-August 1999. This is presented in Annex II. Most of the issues found during the piloting related to the wording of questions, and to the wording of the policy descriptions. The final questionnaire is now discussed in more detail.

### 3.2    General Respondent and Company Information (Parts I & II of the questionnaire)

The selection of the respondent was determined before sending the questionnaire, and is discussed below in Section 4.3. However, to confirm the suitability of the respondent, he/she was asked to give details on their position and length of time with the company, both in total and working at the site surveyed (i.e. the current location). The latter gives an indication of the familiarity with the conditions at the current location. Part II of the questionnaire asks a series of factual questions about the company:
-    whether the company at the location is a 'single site independent';
-    the number of staff employed at the location and in total;
-    the sector (Standard Industrial Classification (SIC)) of the company;
-    age of the company;
-    the annual turnover at the location and in total;
-    the total number of business locations in the UK;
-    the time the company has been at the current location.

Respondents were also asked to give the factors that the business would consider important when locating.

## 3.3    Current Transport Situation

Part III of the questionnaire asked 11 questions (IIIa (1-9), b &c) regarding the level of travel subsidy already offered to employees, with a particular focus upon parking and company cars. It was felt that these existing subsidies may influence the respondents' views of the impacts of the policies.

Two questions then asked for information on the perception of current conditions. A bipolar semantic scale was used for the respondents to estimate conditions in the city in general (Question IIId). The indicators examined were noise, air pollution, congestion, public transport provision, cycle / pedestrian provision and parking. Because these are generally area based indicators of conditions, which may not all apply at particular locations, the question was deliberately left vague (hence '*general perceptions*' throughout the city). A follow up question (IIIe) then asked for written comments on specific problems the company faces. Finally, the last question (IIIf) in this section asked whether the company was currently considering relocating, and if so, to give the reasons why. This question was not expected to yield many positive responses. However, so little is known about the actual reasons firms seek to move *before* they move (as compared to *post hoc* analysis), its inclusion was considered worthwhile.

## 3.4    Impacts of The Policies

Part IV of the questionnaire dealt with the RUC policy, and Part V with the WPL. Both asked very similar questions about the transport policies. The first question asked about the perceived impacts of the policies on the city in general, and the likely size of the impacts.  This was intentionally very broad, to capture the general attitudes of the respondent towards the policies.

The second question asked about the impact of the policies on the company at its current location. This was the most fundamental question of the survey and asked for impacts on:
-    the ability to recruit staff;
-    the ability to retain staff;
-    the ease of delivery;
-    ease of access for business customers;
-    rent levels;
-    overall profitability.

There was a danger of strategic bias in this response, although little evidence of this could be found. The use of such bi-polar scales seemed to have been successful in previous Historic City tasks, and raised no concerns during the piloting.

Question (c) in this section was an attempt to allow some sensitivity to the charge level to be examined. If the respondent appeared insensitive to the charges as described, the question asked what higher level may have an impact.

Questions (d) to (g) asked about possible responses to the policies. Firstly, any changes in travel subsidies that would be offered were assessed. Secondly, the

respondent was asked if the company's location choice would consider the impacts of the policy as a factor when next relocating. Finally, space was given for any other comments on possible responses to the policy.

## 3.5 Additional Questions

Space was left on the last sheet of the questionnaire for any additional comments the respondent may have. Three questions then completed the survey. The first asked the respondent to give an indication of their responsibility for business decisions raised in the questionnaire. The second asked about the ease of raising external finance, an issue included only due to its potential significance in the financial growth modelling. Finally, respondents were asked if they would be willing to participate in further discussions.

## 3.6 Covering Letter and Local Authority Involvement

Along with the questionnaire and policy information sheets, it was important to enclose a covering letter for the following reasons:

- to remind the respondent of the commitment expressed over the telephone;
- to give some background and introduction to the study;
- to reassure the respondent that the data would be used for research purposes only, and that all responses were strictly confidential.

The letters were drawn up in agreement with the local authorities, and differed slightly according to the preferences of each. For example, Cambridge, who wished to be a pilot for the 'Breaking the logjam' WPL trials, wanted their interest in the parking levy noted. A sample letter is included in Annex III.

## 4.0    SAMPLING AND SURVEYS

## 4.1    Background to FAME

A prerequisite for the multi-variate analysis was company account data. This was obtained from the FAME (Financial Analysis Made Easy) database. The main source for FAME is the financial records filed at Companies House in Edinburgh, Cardiff and London. There were several reasons for using FAME for the sampling of Task 4 businesses:
- the growth model and probit analysis (for objective 3) required detailed financial information about companies, information not available in other databases;
- FAME is updated annually, in contrast to the city specific databases which are less consistent in their updating;
- FAME covers all three cities consistently, and so the comparability issues which complicated analysis of the city specific databases (see WP537) is overcome;
- it contains historical data allowing time-series analysis to be undertaken.

FAME classifies companies in several categories:
- JW (Jordon[3] Watch): a company with over £700,000 turnover, or £25,000 pre-tax profit. The bulk of all companies in FAME are JW;
- JS (Jordon Survey): smaller (i.e. not meeting the JW criteria) companies added after JS commissioned surveys;
- OS (other): part of a JW company (usually holding or subsidiary) for which financial accounts are not available.

FAME also classifies companies as either a 'registered office address' or a 'trading address'.  Thus, a retail firm with several branches in Cambridge but a head office in London would have no registered office address in Cambridge, but several trading addresses. For this study we preferred to use the '**registered office** address' on the basis that:
- this is likely to contain the key decision makers;
- there is more likelihood of identifying single site firms, where the registered office is also the trading address.

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[3] Jordon is the company which produces and maintains FAME.

## 4.2    Sampling from FAME

Although extracting data from FAME was straightforward[4], the data required for each company was relatively demanding, because of the **financial analysis** to be undertaken for objective 3. This required at least three years of financial data returned to Companies House. This therefore meant that new (from 1999) firms were excluded from the cohort, and 'non-live' firms had to be removed.

Several other criteria also had to be met:
- the outer spatial boundaries of the survey area had to be defined. The boundaries were the same as those used in the analysis in WP537, and are presented again in Annex I;
- companies that had no data for the number of employees had to be removed;
- companies without any sector data (in the form of the 1980 or 1992 SIC) were removed from the cohort.

Table 4.1 below gives a summary of the cohort of data extracted from FAME, and shows the number of records remaining after removal of firms due to the above criteria.

Table 4.1: Summary of data extracted from FAME

|  | Net total remaining | | |
|---|---|---|---|
|  | **Cambridge** | **York** | **Norwich** |
| Postcode registered office addresses | 1052 | 712 | 1052 |
| Removal of all non-live companies | 947 | 692 | 994 |
| Removal of all who gave no employee record | 523 | 169 | 442 |
| Removal of those without SIC 92 | 316 | 109 | 260 |
| Removal of those outside the outer spatial boundary of the survey area | 313 | 107 | 260 |
| Removal of those without financial time series | **211** | **88** | **253** |

It is clear from this that the demands to have complete records severely constrained the cohort from which sampling was undertaken. It is also clear that the resulting sample is not sufficiently random for it to be fully representative of the population of firms in the cities. This is because:
- FAME predominantly contains firms over a certain size (JW companies);
- it is likely that those firms filing incomplete records are not randomly distributed through the population of companies.

The implication of this is that the database derived from FAME tends to overemphasise larger firms, relative to smaller ones. The filtering process also tended towards stable firms, not in circumstances, which would preclude or dissuade them from completing full financial returns. Moreover, firms are very heterogeneous, which implies that relatively large sample sizes would be required to obtain a sample in each possible stratification.

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[4] FAME was accessed via the University of Leeds subscription, and ISS.

Of particular concern is the loss of entries for York, which had a very poor dataset, with many records lacking key entries.

It is also clear from WP537 that there is considerable uncertainty about the **total** number of firms within the spatial boundaries of each city. The city specific databases discussed in WP537 give the totals in the first column of table 4.2. The end column gives the total employment resulting from the firms in column one, assuming that all of the companies' employment numbers are at the mid-point of the range[5]. The middle columns give the census employment figures for 1991, and the estimates for 1999. For all the cities (Cambridge and York in particular) the census employment figures are very different to those estimated from the firm's data and shown in the last column. This suggests that the total number of firms is either incorrect, or a poor predictor of employment.

Table 4.2: Total firms: alternative sources

|  | Total firms (from city specific databases) | 1991 Census employment (district) | 1999 Census employment estimate (district) | Employment estimate from firms size mid-point data |
|---|---|---|---|---|
| Cambridge | 1,718 | 74,496 | 79,376 | 49,296 |
| Norwich | 4,833 | 96,280 | 98,795 | 105,387 |
| York | 4,767 | 61,878 | 61,008 | 94,551 |

This crude analysis implies that the Cambridge city-specific firm database is a significant under-representation of the total number of firms, while Norwich and York are over-estimates, probably including firms no longer live. These conclusions are likely even though the spatial areas differ between the postcode areas for the city specific databases, and the district based census data. Despite this, the figures in table 4.2 are not particularly helpful in determining the actual number of firms. For example Cambridge VAT registration data suggests around 3040 firms in 1996 (less than the city specific database revealed for York in 1991), but we would certainly expect Cambridge to have more live firms than York, given its greater employment and levels of economic growth.

The target sample size for each city was a minimum of 50 firms. This is around 1.5-2% of the total number of firms, given the possible range in the total number given above.

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[5] Thus: 0-10 = 5, 11-50 = 30.5, 51-200=125.5, 200+ assumed to be 400.

## 4.3    Postal Survey Method

Using postal questionnaires for business attitude research can be difficult because of:
1   not knowing who is the key decision maker within an organisation, responsible for strategic (but not solely product) business decisions;
2   the very different decision making structures in different firms;
3   the centralisation of many decision making procedures in multi-site firms;
4   lack of time of the desired decision makers to complete survey forms;
5   lack of willingness to reveal the rationale for commercial decisions such as location choice.

The FAME database usefully gave the telephone numbers of the firms, and the names of the company directors, often with a sub-set categorisation (e.g. marketing director, managing director etc). To help overcome problems 1 and 2, it was therefore decided to call each company by telephone, and seek a conversation with the managing director. The aims of the conversation were as follows:
-   to ensure that the company was still in existence;
-   to introduce the study and to ask whether the managing director would be prepared to answer the questionnaire;
-   to ask the managing director to nominate someone else with a strategic decision making role if unable to assist.

In the event, the number of questionnaires distributed is given in table 4.3.

Table 4.3: Survey distribution and responses

|  | Norwich | Cambridge | York | York2    (see section 4.4) |
|---|---|---|---|---|
| Registered offices extracted from FAME | 1052 | 1048 | 712 + (331 TAs) | N/A |
| Records meeting sample criteria | 252 | 211 | 88 | N/A |
| Questionnaires sent out | 103 | 118 | 57(a) + (44 TAs) | 647 |
| Date of survey | 25 July 1999 | 30 July 1999 | 4 August 1999 | November 1999 |
| Number recorded as a SSI in FAME | 56 | 45 | 15 + (0 TAs) | N/A |
| Returned (SSIs) | 60 (inc. 22 SSIs) | 52 (inc. 20 SSIs) | 20 + (13 TAs) (inc. a total of 10 SSIs) | 85 (52 usable) |
| Response rate | 58% | 44% | 32% | (8% usable) |

(a) the financial filter (3 years continuous financial records) was dropped to allow for a greater sample size
TA – Trading Address.
SSI – Single Site Independent business.

Telephone calls were made to all those companies meeting the sample criteria (table 4.3 second row) using the details given in FAME. Nearly half of these did not result in a confirmation to send a questionnaire. The main reasons for this are shown in table 4.4. In summary:

- the registered address was simply a notional trading address (usually the accountant's address) for a firm that operated outside the study area, or was dormant;
- the firm did not exist, or had ceased to trade (the main cause here seemed to be data inaccuracies in FAME);
- one holding company operated with several trading names, each recorded separately in FAME, but involving a single site and people.

Note that only a small proportions (c.6%) refused to participate in the study at this stage. These companies were usually small businesses with few staff.

Table 4.4: FAME sample to whom a questionnaire was not sent

| Reason | Notional trading address only | Company is dormant or has ceased trading | Company does not exist, or is untraceable | One holding company with several trading names | Said 'no' when telephoned | Contact could not be established |
|---|---|---|---|---|---|---|
| % | 14% | 2% | 18% | 54% | 6% | 6% |

Significant resources were applied to chase firms who had promised to complete the questionnaire, but initially failed to do so. Even with this effort, the response rates vary considerably (see table 4.3). The Norwich responses are fairly pleasing, Cambridge satisfactory, but York relatively disappointing, even given the small number of questionnaires distributed.

## 4.4 Additional York Questionnaires

As discussed above, the York responses were disappointing. Partly this was a result of the small sample derived from the FAME database. It was therefore decided to undertake an additional survey of York businesses (referred to as York 2), sampling randomly from the City Specific database.

This was undertaken in November 1999. 650 questionnaires were sent out (no telephone contacts were made), the only sampling criteria being to ensure that they were within the outer spatial boundary of the survey area, as per the FAME sample (see Annex I).

A total of 85 responses were received, a response rate of 13%. Of these 52 (8% of those sent out) were usable for this basic analysis. Responses were excluded if the questionnaire was only partially completed and/or if the respondent lacked responsibility for strategic decision making. Local Authority schools and other unconventional businesses were also excluded. This overall usable response rate of 8% compares to the FAME response rates of 32% to 58% - all of which were usable (see table 4.3). It should also be noted, that only a few of the York 2 responses could

be used in the multi-variate analysis which makes use of the FAME data, as very few had a FAME record with sufficient data available.

Thus compared with the responses from the FAME derived sample, who were contacted by telephone, a higher proportion of the second York survey were only partially completed. It seems that this was due to the less targeted sample including retail firms, and other branches of national chains, where the strategic decision making is likely to be centralised.

In terms of survey approach, these findings seem to justify the higher initial costs of contacting respondents in advance, and seeking out an appropriate respondent, both in terms of the quality of response and the response rate.

These additional 52 York responses were integrated into the initial dataset, and are presented along with the FAME data in the descriptive analysis below. The responses are, in most respects, similar to the original York dataset sampled from FAME. Places where they differ are highlighted in the discussion of the results in the next section.

## 5.0    DESCRIPTIVE STATISTICS RESULTS

### 5.1    Introduction to Results

This section provides the initial basic analysis of the business survey data. It is intended as an introduction to the dataset collected, and a comprehensive analysis of the data from the questionnaire.

A more sophisticated analysis will be undertaken using the data described here, and the company data supplied by FAME. This will use econometric modelling based on multi-variate analysis to examine the relationships between business responses to the policies, and company characteristics. The third working paper in this series (552) will present this modelling work.

Each question in the questionnaire is discussed in turn below, and summary information presented. This section should be read in conjunction with the questionnaire, supplied in Annex II.

### 5.2 Respondent Information

### 5.2.1 Respondent title

Table 5.1 shows that of the 194 completed responses, most were completed by easily identifiable strategic decision makers, (i.e. CEOs, chairman, MDs etc). Aside from 'Administrators', 'Company Secretaries' and 'Other' all the groups were considered likely to have a good understanding of their companies strategic policy. 'Company Secretary' is somewhat ambiguous, as it could imply either *the* company secretary, or simply *a* secretary The 'other' category, includes job titles usually peculiar to a sector, e.g., senior consultants, conservation manager, or bursars.

Table 5.1: Job title of respondents.

|    | Category | Respondents (all cities) |
|----|----------|--------------------------|
| 1  | Chief Executive Officer | 7 |
| 2  | Finance manager / director | 9 |
| 3  | Chairman | 6 |
| 4  | Managing Director | 41 |
| 5  | Director | 34 |
| 6  | Divisional / sector director | 3 |
| 7  | Owner / partner | 16 |
| 8  | Manager (all other types) | 28 |
| 9  | Company Secretary | 14 |
| 10 | Chief / other Administrator | 2 |
| 11 | Other | 36 |

Sample size: 194: includes York2 data.

Should any records be excluded on the basis that the respondent's position is seen as unsuitable? This could be the case with some of the 'Administrator', 'Secretary' or 'Other' categories. The main area of concern was with the 'Company Secretary' title. However, as their circumstances were unknown, it was felt reasonable to retain them,

but remove them if other fields are incorrectly, or inappropriately completed. During the analysis, this was not found to be the case.

The other question relating to potential reliability of the responses was regarding the responsibility of the respondent for the decisions raised in the questionnaire. Of the 194 responses to this question, 12 (6%) ticked the box outlining that they are unlikely to be responsible for the issues raised in the questionnaire. Those 'unlikely to be responsible' were generally managers in large organisations, for example, fleet, office and sales managers. These responses (including those who did not answer the question) were examined to see if they should be removed. However, in all cases, the responses did not appear internally inconsistent (at least for the company responses from the FAME sampling frame), and so they were retained for this stage in the analysis.

**5.2.2 Time with the company and the time at this location.**

Table 5.2 shows that there is a wide degree of variation in the length of time that the respondents have been with the company, although the median is 10 years. However, the average time at the current location is lower, at 7 years. Again though, the variation is great. This reflects the large heterogeneity in firms and their employees. Note that in both time with company and time at location, the mean is greater than the median, implying that the distribution is skewed towards higher time values.

Table 5.2: Summary statistics on time of respondent with company and at current location.

| Question  (and number) | Value (in yrs) |
|---|---|
| **Time with company (Ic)** | |
| Standard deviation of Ic: | 9.4 |
| Mean Of Ic: | 12.8 |
| Median Of Ic | 10 |
| Min Of Ic: | 0 |
| Max Of Ic: | 42 |
| **Time at current location (Id)** | |
| Standard Deviation Of Id: | 7.52 |
| Mean Of Id: | 8.92 |
| Median Of Id | 7 |
| Min Of Id: | 0 |
| Max Of Id: | 37 |

Note: Query c: time with company from Data.mdl: using procedures in Access; York2 data included

Thus in summary the questionnaires were completed by a varied sample, but one which contained a high number of senior company representatives, who, on average had been with the company for 10 years, although at the current site, for around 7 years. The key point to draw from this is to judge whether on average the respondents were likely to have a good understanding of the requirements and preferences of the firm. Although the length of time of respondent at current location is less than the 'years of firm at current location' (see table 5.10) it is thought to be sufficient to give a suitable sample.

### 5.3 Background Information on The Organisation

### 5.3.1 Question IIa: Company type

Table 5.3. shows that single-site independent (SSI) firms, (as indicated by the respondent) made up 30-40% of each city sample drawn from the FAME data. A larger proportion of firms were part of larger multi-site organisations, with Cambridge having the largest proportion of Headquarters. The York2 data is presented separately, as the sample distribution is quite different, with a high proportion of SSI firms.

Table 5.3: Company classification

| Company type | Total | Norwich | Cambridge | York | York2 |
|---|---|---|---|---|---|
| Multi-site subsidiary | **33** | 8% | 20% | 36% | 12% |
| Single site independent | **89** | 36% | 40% | 30% | 73% |
| HQ of multi-site | **64** | 52% | 34% | 33% | 8% |
| Other | **8** | 3% | 6% | 0% | 8% |
| Total | **194** | **61** | **50** | **33** | **51** |

Note: 2 entries not complete; hence proportions calculated on 144 responses for FAME data. Bold figures are
absolute values, other figures are column proportions.

### 5.3.2 Question IIb: Employment at location and company employment

Table 5.4 shows that, as expected the FAME sampled firms (which are the majority of the dataset) biases the sample towards companies that employed over 10 people. The York2 data however, has a very similar distribution to the York city specific database from which it was drawn, with over 60% having 10 employees or less. Nevertheless, the total sample will still be skewed towards larger firms.

Table 5.4: Firm size by employment.

| No of employees | All company sites | Sampled site | Percentage of Sample |
|---|---|---|---|
| 0-10 | 38 | 58 | 30% |
| 11-50 | 51 | 67 | 35% |
| 51-200 | 62 | 57 | 29% |
| 200+ | 35 | 12 | 6% |
| no response | 8 | 0 | |
| total | 194 | 194 | |

Notes: Analysis of 2b and 2c; using Data Analysis in Excel: data.xls. Sample size 194
Clearly some respondents knew the staff employed at their site, but not the total employment of their company overall. Also, these omissions were not made by any of those respondents with an entry in the 'unreliability' index.

### 5.3.3 Question IIe: Company Turnover

Both employees and turnover are alternative measures of a firm's size. Generally, we would expect that the more people a company employs, the larger its' turnover will be. This should apply at the general level, as well as at a site specific level if site turnovers (question IIe) were provided.

At the company turnover and total employment level, this was tested for the FAME firms using the product moment correlation co-efficient (both variables being continuous). The results do show a weak positive relationship, at 0.54.

Of more interest is the relationship between the location turnover and employment. Initially this gave a strong positive relationship (0.94). However, examination of the plot of this data revealed this was primarily due to two very high employment / turnover outliers. Removing these gave a comparably weak positive relationship, at 0.53 – similar to the statistic obtained for whole company level analysis.

The correlation coefficients of 0.54 and 0.53 indicate that employment and turnover as measures of company size have some linear association, but are far from being close substitutes. Therefore, it will be important to examine how robust any size-related results are to changes in the definition of size.

The median turnover by city is approximately equal (see table 5.4). The average for Norwich is highly skewed due to the presence of one extremely large employer. Generally, the frequency distribution of each is positively skewed (i.e. towards turnovers below £1m).

Table 5.5 shows that in general the sample is widely distributed in terms of turnover and employment. It also illustrates that while Cambridge and Norwich have larger firms in terms of staff than York (using the median statistic), York and Norwich have slightly higher turnovers than Cambridge. The York2 data is once again displayed separately, as it differs from the FAME York data. It has lower values reflecting the larger number of smaller firms in the sample.

Table 5.5: Summary company size statistics in terms of turnover and employment.

| Turnover at location | York | York2 | Cambridge | Norwich |
|---|---|---|---|---|
| Mean | £7,310,500 | £1,320,000 | £14,437,000 | £104,164,000 |
| Median | £4,250,000 | £242,000 | £4,000,000 | £4,550,000 |
| Std deviation | £10,344,000 | £3,800,000 | £40,650,000* | £679,015,000* |
| | | | | |
| Staff at location | York | York2 | Cambridge | Norwich |
| Mean | 39.4 | 30.89 | 111.9 | 192.2 |
| Median | 29.0 | 6.00 | 44 | 50 |
| Std deviation | 38.5 | 69.3 | 324.5 | 764.9 |
| Observations | 22 | 52 | 45 | 54 |

Note: Data from Excel data.xls spreadsheet by city. Observations indicate useable responses to questions (hence lower than total sample for each city). *in each case includes one very large company (+2000 employees) with very large turnover, i.e. outliers not removed.

### 5.3.4 Question IIg: Core activities of companies

The first three data columns of tables 5.6 and 5.7 show the FAME companies by sector splits. Table 5.7 shows the comparable splits from the city specific databases discussed in Working Paper 537. The Cambridge and Norwich samples appear to over sample manufacturing firms and the agriculture/energy/utility sector, while underestimating the service sectors. The York sample however, appears to have a better balance of service and manufacturing sectors, but to underestimate the proportion in distribution / retail/ hotels. This suggests that:

1. there is a relationship between firm size and sector, and the mismatch is caused by the exclusion of small firms from FAME, and/or
2. the FAME database is biased in terms of sector proportions towards more traditional firms, rather than newer service sectors firms, and/or
3. there is a bias in the response rates towards more traditional sector firms in Cambridge and Norwich; and/or,
4. the sample size is too small to reflect the underlying population proportions.

Table 5.6: Companies by sector - absolute splits.

| Industry Sector | Cambridge | Norwich | York | York2 |
|---|---|---|---|---|
| Agriculture/energy/utility | 3 | 3 | 0 | 2 |
| Manufacturing Industry | 20 | 20 | 8 | 5 |
| Distribution/retail/hotels | 8 | 12 | 11 | 6 |
| Financial and business services | 11 | 8 | 6 | 8 |
| Other services | 6 | 15 | 7 | 24 |
| Other non services | 2 | 3 | 1 | 7 |
| **Total** | **50** | **61** | **33** | **52** |

Table 5.7: Proportion of companies by industry sector and city
**(figures in brackets are corresponding proportions from the city specific databases).**

| Industry Sector | Cambridge | Norwich | York | York2 |
|---|---|---|---|---|
| Agriculture / energy / utility | 6%(1) | 5%(1) | 0%(4) | 4% |
| Manufacturing Industry | 40%(21) | 33%(16) | 24%(16) | 10% |
| Distribution / retail / hotels | 16%(32) | 20%(44) | 33%(43) | 12% |
| Financial and business services | 22%(31) | 13%(18) | 18%(15) | 15% |
| Other services | 12%(14) | 25%(21) | 21%(22) | 46% |
| Other non-services | 4.0%(-) | 5%(-) | 3%(0) | 13% |
| **Total** | **50** | **61** | **33** | **52** |

Note: 2 observations incomplete. Also the city specific databases did not distinguish between other services and non services; these are presented in the 'other services' row
Crosstabs from Access Data: with profile values from WP537

It is likely that the under-representation of small firms in FAME accounts for most of the discrepancy between the sector percentages within the sample and the proportion of the city specific databases accounted for by each industry sector. Nevertheless, there are probably elements of all of the reasons suggested above in the data.

The last column of Tables 5.6 and 5.7 gives the York2 data. Here the data bears little relationship with either the City Specific population or the FAME distribution. The high proportion in 'other services' indicates the possibility of there being a bias towards this field in terms of respondents[6].

### 5.3.5    Question IIh: Proportion of turnover accounted for by local sales

This question was not expected to elicit a high response, in that it was not thought many respondents would know this information. In fact, the response rate was 119 of the 145 completed questionnaires from the FAME derived sample. A high proportion of the non-entries were from York respondents.

As can be seen from the frequencies in table 5.8 below, there is little pattern to the distribution. However there is a slight trend towards the ends of the distribution, indicating that firms either had no local focus, or were very focused on the local market.

Table 5.8: Frequency of firms by proportion of turnover accounted for by local sales

| % Interval | Frequency |
|---|---|
| 0-20 | 25 |
| 21-40 | 1 |
| 41-60 | 11 |
| 61-80 | 8 |
| 81-100 | 5 |
| 1 | 69 |

Source: all:data_york2

### 5.3.6    Questions IIi and IIj: Age of the company, and time at current location

There is, as would be expected, a wide variation in company age, and there is little shape to the distribution of ages. However, from table 5.9 it is striking that the medians are reasonably high, generally over 2 decades. This perhaps reflects the conclusion from Question IIg, that the FAME sample is biased towards more traditional firms, which are more likely to be older than firms in high tech or new service sectors. The York2 dataset is, on average, younger, although more widely distributed.

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[6] It is also possible that some respondents were unsure which SIC they fell into, and therefore ticked the "other services" box. Whilst this does not appear to have been an issue with respondents sampled from FAME, it does suggest that future research should give better definition of sectors (especially "other").

Table 5.9: Summary statistics on age of company.

| Age of company | York2 | York | Cambridge | Norwich |
|---|---|---|---|---|
| Mean | 32 | 50 | 35 | 84 |
| Max | 203 | 168 | 126 | 242 |
| Median | 10 | 35 | 21 | 24 |
| Observations | 52 | 31 | 49 | 60 |

Note: Data from Excel data.xls spreadsheet by city
A response from an ecclesiastical organisation, stating an age of 2000 years, was removed from the dataset.
Note that not all respondents completed this question.

From Table 5.10 the median time at the current location is reasonably similar for the cities, at 10-15 years, with firms in Norwich generally having the longest length of time since a move.

Table 5.10: Summary of statistics on years at current location.

| Years at current location | York2 | York | Cambridge | Norwich |
|---|---|---|---|---|
| Mean | 21 | 19 | 21 | 31.4 |
| Median | 10 | 10 | 11.5 | 15 |
| Observations | 53 | 31 | 50 | 61 |

Note: Data from Excel data.xls spreadsheet by city
The Norwich mean affected by a large firm outlier
Note that not all respondents completed this question.

### 5.3.7    Question IIk: Important factors in location choice

The responses to this are given in table 5.11 below (the York and York2 datasets have been combined).

Table 5.11: Factors considered important by respondents in location choice (absolute figures and percentage of total factors).

| Close to… | Cambridge | | Norwich | | York | | Total | |
|---|---|---|---|---|---|---|---|---|
| II k 15 competition | 3 | 2% | 8 | 3% | 10 | 3% | 21 | 3% |
| II k 16 market / clients | 15 | 8% | 23 | 10% | 51 | 16% | 89 | 12% |
| II k 17 goods / services | 8 | 4% | 8 | 3% | 19 | 6% | 35 | 5% |
| II k 18 labour | 25 | 13% | 30 | 12% | 28 | 9% | 83 | 11% |
| II k 19 roads | 33 | 17% | 40 | 17% | 48 | 15% | 121 | 16% |
| II k 20 rail / bus | 14 | 7% | 10 | 4% | 23 | 7% | 47 | 6% |
| II k 21 customer / visitor parking | 19 | 10% | 26 | 11% | 40 | 13% | 85 | 11% |
| II k 22 staff parking | 34 | 17% | 43 | 18% | 40 | 13% | 117 | 15% |
| II k 23 rents | 29 | 15% | 45 | 19% | 42 | 13% | 116 | 15% |
| II k 24 traffic noise | 9 | 5% | 4 | 2% | 11 | 3% | 24 | 3% |
| II k 25 air quality | 8 | 4% | 5 | 2% | 7 | 2% | 20 | 3% |
| Total | 197 | | 242 | | 319 | | 758 | |

Note: Data from Excel data.xls spreadsheet (Tables)
Firms could tick as many as appropriate

This table shows that broadly there are few significant differences in important location factors for the firms in the different cities. The most cited influences on location choice (with around 60% of the sample citing them as important) are close proximity to **roads**, the presence of staff **parking** and **rents**. Note that these should not be interpreted as reasons to move, but as influences on location choice once a decision to move has been taken.

Not only are important location factors similar across the three cities, as shown in Table 5.11, additional analysis indicates that they are also similar across different areas of each individual city.

For Norwich and York, just over 50% of respondents are located inside the inner ring road (i.e. the inner charging cordon), with 25% and 38% respectively between the inner and outer ring roads, and 21% and 8% outside the outer ring road - i.e. outside the charged area. For Cambridge the pattern is slightly different due to the dominance of Cambridge University in the city centre (this is a public sector employee, and was therefore not included in this survey of business attitudes). 8% of the respondents from Cambridge are located inside the inner ring road, 85% between the inner and outer ring roads, and a further 8% outside the outer ring road. Whilst the results of this research cannot be generalised out to the public sector, the lack of difference between important location factors suggests that results can be generalised out to other businesses in areas of the city where there were few respondents.

The factors that over 40% of firms commented were important are labour supply, customer/visitor parking, with access to clients/markets important, especially in York. The greater importance of labour supply relative to the supply of goods/services is also expected, as labour supply tends to be more dependent on the local market than other supply factors. It is interesting that environmental factors (traffic noise and air quality) are seen as minor factors, but more important among the sample from Cambridge.

These results are similar to those of Nelson, Leitham and McQuaid (1994), where 81% of a heterogeneous sample of firms sampled in Strathclyde considered road links important, 57% saw access to labour as important, 52% saw access to markets as important, and 53% saw access to suppliers as important to location choice once the decision to move had been taken. They were surprised that not more firms considered access to markets as important; but this was largely explained by the fact that many were non-SSI parts of a vertically integrated supply chain. The key characteristic of Nelson et al's sample (compared to the Historic Cities sample) was that it was comprised of firms who had recently moved.

## 5.4    Current Transport Situation

### 5.4.1   Travel Assistance from companies

Table 5.12 gives the factual information given by the respondents on the transport facilities provided by their companies. A high proportion of the companies offer company cars (on average 76%), and around 22% of the staff had company cars.

Around 42% of the companies in Cambridge and Norwich offered business use cars (i.e. pool cars), with fewer (21%) in the York sample, probably due to the presence of more retail chain branches in the York 2 sample.

As would be expected, the majority of firms (over 75%) paid for employee's business travel. It is assumed that the remainder either had arrangements where these costs were covered in other ways (e.g. through commission payments), or no business travel was undertaken (e.g. retail shop assistance work).

Table 5.12: Current Transport Facilities provided by the Companies.

|  | Cambridge | | Norwich | | York | | Total | |
|---|---|---|---|---|---|---|---|---|
|  | absolute | % | absolute | % | absolute | % | absolute | % |
| III a 1i No. of companies offering company cars | 44 | 88% | 54 | 90% | 41 | 50% | 139 | 76% |
| III a 1ii Percentage of employees at location with a company car | 24 | N/A | 17 | N/A | 24.833 | N/A | 22.023 | N/A |
| III a 2 Business use cars | 21 | 42% | 25 | 42% | 17 | 21% | 63 | 35% |
| III a 3 Employee business travel costs paid | 45 | 90% | 48 | 80% | 45 | 55% | 138 | 75% |
| III a 4 fuel / mileage TTW | 14 | 28% | 7 | 12% | 20 | 24% | 41 | 21% |
| III a 5 PT fares TTW | 1 | 2% | 1 | 2% | 5 | 6% | 7 | 3% |
| III a 6 pass discount TTW | 0 | 0% | 1 | 2% | 1 | 1% | 2 | 1% |
| III a 7 PT pass free TTW | 0 | 0% | 1 | 2% | 1 | 1% | 2 | 1% |
| III a 8 No. of companies with car parking on site | 48 | 96% | 50 | 82% | 52 | 63% | 150 | 80% |
| III a 9 No. of companies with car parking elsewhere | 3 | 6% | 18 | 30% | 11 | 13% | 32 | 16% |
| III b Percentage of staff with space provided | 76 | N/A | 65 | N/A | 63 | N/A | 68 | N/A |
| III c No. of spaces for operational use | 36 | N/A | 91 | N/A | 25.861 | N/A | 50.712 | N/A |

Note:   % columns are the proportion of the companies who responded to the question answering positively.
        Sample size 194: York2 data included.
PT – Public Transport
TTW - Travel to work

Very few companies offered subsidies for travel to work. However, some responses to Question IIIa part 4 (fuel/mileage for TTW) suggests that some companies pay for all fuel costs, or give mileage allowances.

The remaining questions shown in this table reveal the importance of **parking** to the firms. Around 80% of firms offered on-site parking (up to 96% in Cambridge), and 16% have additional parking elsewhere. Analysis of the data reveals that only 10.4% of companies offered no parking at all. Around 68% of staff have parking spaces provided for them.

### 5.4.2   Respondents perception of current conditions in the cities

The respondents were asked to give their perception on a score from 0 to –6, where 0 was no problem, and –6 was the most severe. This was an arbitrary (i.e. independently judged) scoring, as consistent scores would require every respondent to have the same perception. The scores give a clear indication of the strength of concern. The median scores given in table 5.13 generally show the problem severity to be over halfway towards the most severe end of the scale. The score for congestion indicates this is seen as the most serious problem compared to the other indicators in all the cities - 72% of all respondents view it as a severe problem.

For the other indicators of current conditions in the cities, 53% of all respondents viewed public transport provision as a severe problem. This concern is reflected by the frequent suggestion in the written responses that public transport needs to be improved/implemented to mitigate any adverse impacts the transport demand management measures may have. Some even go as far as to say the policies will not work without improved public transport. Additionally, 42% view customer parking as a severe problem, 36% employee parking, and 24% cycle/pedestrian facilities. Whilst the concern over employee parking is an accurate reflection of the importance companies place on this provision, expressed through expectations of particularly negative impacts on staff retention as a result of the WPL, the concern over customer parking provision cannot be taken at face value. Increased availability of parking spaces may not increase business acceptance of the measures, especially the RUC (see WP 552 for a full explanation). Increased availability could be seen as a result of less traffic entering the city, which is in turn seen as less potential business entering the city.

Nevertheless, the clearest message to draw from table 5.13 is that most respondents considered that conditions in the cities were poor across all the indicators, that environmental and congestion problems were present, and that poor public transport and cycle/pedestrian facilities were also part of the problem. This sets the current 'base case' for the ensuing analysis.

Table 5.13: Median results of perceptions of current conditions in the cities.

|  | Cambridge | Norwich | York |
|---|---|---|---|
| III d 1 CC: noise | -3 | -2 | -2 |
| III d 2 CC: air pollution | -3 | -2 | -3 |
| III d 3 CC: congestion | -5 | -4.5 | -4.5 |
| III d 4 CC: PT provision | -4 | -4 | -3 |
| III d 5 CC: cycle/pedestrian provision | -2 | -2 | -2 |
| III d 6 CC: parking for employees | -3 | -3 | -2 |
| III d 7 CC: parking for customers | -3 | -3 | -2 |

Notes: median values; inclusive of York2 data.

Original score from 0 to –6, where 0 was 'no problem', and –6 was the most severe.

CC - current conditions for…

To further examine these responses, they were grouped into 'severe problem' (-6 to –4), some problem (-1 to –3) and 'no problem' (0). Table 5.14 shows that congestion was rated severe by the largest proportion in each city. In Norwich and Cambridge, public transport provision was the next most significant problem. In Cambridge, parking was cited by nearly half the sample as high on the scale. Air pollution was also scored by a larger percentage as a severe problem in Cambridge than in the other cities. Interestingly, noise was scored as a problem, but generally given a low score.

Table 5.14: perceptions of current conditions in the cities

|  | Noise | Air pollution | Conges-tion | Public transport provision | Cycle/Ped-estrian facilities | Employee parking | Customer parking |
|---|---|---|---|---|---|---|---|
| *Cambridge* |  |  |  |  |  |  |  |
| severe problem | 30% | 45% | 90% | 66% | 24% | 47% | 49% |
| some problem | 47% | 49% | 8% | 23% | 47% | 35% | 26% |
| no problem | 23% | 6% | 2% | 11% | 29% | 18% | 26% |
| *Norwich* |  |  |  |  |  |  |  |
| severe problem | 21% | 24% | 65% | 54% | 33% | 37% | 44% |
| some problem | 67% | 67% | 33% | 42% | 55% | 47% | 40% |
| no problem | 12% | 9% | 2% | 3% | 12% | 15% | 17% |
| *York (1+ 2)* |  |  |  |  |  |  |  |
| severe problem | 23% | 37% | 65% | 45% | 16% | 29% | 35% |
| some problem | 54% | 51% | 35% | 49% | 49% | 42% | 32% |
| no problem | 23% | 12% | 0% | 6% | 35% | 29% | 32% |

It is interesting to examine whether there were differences in the score for current conditions based upon the location of the company in the city area. Table 5.15 presents those respondents from the FAME sample giving a score of –5 or –6 to the indicators, by the location of the company. For the majority of the indicators, the proportions are very similar to the sample distribution as a whole. Thus, it appears

that firms see congestion as a problem no matter where in the city they are located. Interestingly, the most notable distinction is for the noise indicator, where more firms inside the cordon, but outside the city core, tended to rate the noise problem as severe.

Table 5.15: Percentage of firms citing 'severe' responses for each indicator by location

| Location | Sample as a whole | Noise | Air pollution | Conges-tion | PT prov-ision | Cycle/ped-estrian provision | Park-ing |
|---|---|---|---|---|---|---|---|
| Core | **26%** | 9% | 22% | 24% | 25% | 24% | 23% |
| Ring* | **63%** | 82% | 72% | 68% | 69% | 53% | 62% |
| Outside area | **1%** | 0% | 0% | 2% | 2% | 0% | 4% |

Notes: all firms from the FAME sample only. 'Severe' indicator was a score of –5 to –6.
Data from Sur_fam2.xls
*Ring - between the inner and outer charging cordons

## 5.4.3   Specific transport problems cited

Many respondents gave some additional comments on specific transport problems that they faced (table 5.16). Most relate to road congestion making conducting business more difficult than it needed to be, and citing a lack of public transport for allowing alternatives to car use.

Table 5.16: Summary of additional comments on transport problems, by city.

| City | Overview of written comments |
|---|---|
| Cambridge | Lack of parking during office hours, narrow streets, congestion on radials, ring roads and M11. Lack of bus services to site, congestion and lack of PT access to Science Parks, lack of off-peak PT, schools create problems |
| Norwich | Particularly bad AM peak congestion, lorry ban is overly restrictive, lack of short term parking spaces, narrow roads, lack of over-night parking for goods vehicles, public transport does not run for off-peak shifts, schools cause local congestion, lack of road maintenance on trunk roads |
| York | Transport needs cannot be met by PT, lack of car parking adjacent to pedestrian zone, long delays at Clifton Moor and ring road, congestion in North of city, lack access to an airport, clients and employees have difficulty accessing city centre |

### 5.4.4 Companies considering re-locating

Approximately 17% of the 194 companies that responded to this question commented that they were currently considering relocating. However not all the firms gave reasons for why they were considering moving. For the remaining firms, the following key reasons were given (note some respondents gave more than one reason):
- a requirement for 'better' or 'more modern' premises (2);
- more floorspace required (5);
- consolidating multi-site activities into a single site (5);
- improved road access (4);
- lease up for renewal; prompting consideration of a move (3);
- high rents at current
-  (1);
- manufacturing not suited to city centre location (1).

Note that the number in brackets is the number of respondents giving that reason.

From this it is clear that non-transport factors, such as lease renewal, business consolidation and expansion drive the decision to move. However, road access was mentioned by four respondents, although only two stated it as the sole factor. This supports the general hypothesis (often made for residential location choice, e.g. Headicar and Curtis, 1995) that transport is rarely a sufficient factor to cause relocation, but once the decision to relocate has been made, it becomes an important location criterion.

## 5.5 Road User Charging (RUC)

### 5.5.1 The impacts of RUC on the city

The median scores for this question are given in table 5.17. This shows that the respondents considered, on average, that RUC would produce a modest (1 was the lowest 'positive' response on the score rating) reduction in traffic noise, congestion, air pollution, and increase the availability of parking. However, the respondents generally thought the impacts would be negative for the economic prosperity of the city (only 11% of all respondents foresaw city wide economic benefits as a result of the RUC) . Little impact was expected for the tourism industries, although Norwich, as with the economy indicator, was more negative than the other cities.

Table 5.17: RUC impacts on the city generally.

| Road user charging | Cambridge | Norwich | York |
|---|---|---|---|
| IV a 1 RUC: noise | 1 | 1 | 1 |
| IV a 2 RUC: congestion | 1 | 1 | 1 |
| IV a 3 RUC: air poll | 1 | 1 | 1 |
| IV a 4 RUC parking | 1 | 1 | 1 |
| IV a 5 RUC economic | -1 | -2 | -2 |
| IV a 6 RUC tourism | 0 | -1 | 0 |

Notes: median values. York2 included
Original score from -3 to 3, where –3 was a negative impact, 0 was 'no impact', and 3 was a positive impact.

A general finding then, is that overall, the impacts are perceived to be positive on the environment and on parking availability, given the problems of the cities outlined in the previous section. However, this is mitigated by negative impacts on economic activity and tourism.

Analysis of the distribution of responses is given in table 5.18. A majority of the sample in each city responded that RUC is likely to reduce the noise, congestion, and air pollution impacts, with Cambridge having the most respondents forecasting larger impacts. Interestingly, most also thought that it would increase the availability of parking (63% of all respondents). Most of the responses were for a slight (or medium) effect.

A majority of the respondents however thought that RUC would have a negative impact on the **economic prosperity** of the city. 31% of respondents gave this a '-3' - the **most severe negative score**. A similar, but less marked effect occurred for tourism.

Table 5.18 perceptions of impacts of RUC on the city in general

| | RUC: noise | RUC: congestion | RUC: air pollution | RUC: parking availability | RUC: city economy | RUC: tourism |
|---|---|---|---|---|---|---|
| *Cambridge* | | | | | | |
| -3 to –1 | 6% | 8% | 4% | 12% | 69% | 37% |
| no change | 24% | 21% | 16% | 20% | 16% | 29% |
| 3 to 1 | 69% | 71% | 80% | 67% | 14% | 35% |
| *Norwich* | | | | | | |
| -3 to –1 | 2% | 14% | 8% | 10% | 83% | 53% |
| no change | 34% | 14% | 22% | 34% | 8% | 18% |
| 3 to 1 | 64% | 73% | 70% | 56% | 8% | 28% |
| *York (1 & 2)* | | | | | | |
| -3 to –1 | 6% | 8% | 8% | 16% | 68% | 40% |
| no change | 34% | 20% | 21% | 22% | 21% | 23% |
| 3 to 1 | 60% | 71% | 69% | 63% | 11% | 37% |

### 5.5.2 The impacts of RUC on the company at its current location

In general, as can be seen from Table 5.19, looking only at average statistics, the impacts were thought to be neutral or slightly negative, in other words that firms do not predict much of an impact on their operations from RUC. York respondents seemed to have the most concerns, or perceptions that the impacts would be negative. However, there does seem to be the fear that staff would be very slightly more difficult to recruit and retain, and that profitability would be slightly affected.

Table 5.19: Impacts of RUC on company at current location.

| Road user charging | Cambridge | Norwich | York |
|---|---|---|---|
| IV b 1 RUC: recruiting | -1 | 0 | -1 |
| IV b 2 RUC: retaining | -1 | 0 | -1 |
| IV b 3 RUC: delivery | 0 | 0 | -1 |
| IV b 4 RUC: customer access | 0 | 0 | -2 |
| IV b 5 RUC: rents | 0 | 0 | 0 |
| IV b 6 RUC profitability | -1 | -1 | -1 |

Notes: median values. York2 included

Original score from -3 to 3, where –3 was a negative impact, 0 was 'no impact', and 3 was a positive impact.

However, examining the distribution of the data gives a different picture. Table 5.20 shows that firms expect private economic costs from RUC in all areas in which they were questioned. Most firms expect a negative impact on profitability; with over 25% of responses (in each city) giving the maximum (-3) detrimental impact. Strong negative scores were given for the impacts on the local labour market; i.e. the ease of recruiting or retaining staff. Customer access was also scored with a high (c.25%) number of maximum negative scores, indicating that the impacts would be detrimental. Interestingly, around 50% of the sample did not consider there would be an impact on floorspace rent levels (i.e. a decline in rental value); although 25% considered that they would decrease severely (-3).

Table 5.20; RUC impacts on the company at current location

| | RUC: recruiting | RUC: retaining | RUC: delivery | RUC: customer access | RUC: rents | RUC profitability |
|---|---|---|---|---|---|---|
| *Cambridge* | | | | | | |
| -3 to –1 | 67% | 89% | 78% | 78% | 84% | 100% |
| no change | 33% | 11% | 22% | 22% | 16% | 0% |
| 3 to 1 | 0% | 0% | 0% | 0% | 0% | 0% |
| *Norwich* | | | | | | |
| -3 to -1 | 81% | 81% | 68% | 69% | 72% | 81% |
| no change | 19% | 19% | 32% | 31% | 28% | 19% |
| 3 to 1 | 0% | 0% | 0% | 0% | 0% | 0% |
| *York (all)* | | | | | | |
| -3 to –1 | 56% | 54% | 52% | 60% | 27% | 65% |
| no change | 42% | 44% | 44% | 38% | 61% | 35% |
| 3 to 1 | 1% | 2% | 4% | 2% | 12% | 0% |
| *York (FAME)* | | | | | | |
| -3 to -1 | 100% | 94% | 81% | 87% | 80% | 100% |
| no change | 0% | 6% | 19% | 13% | 20% | 0% |
| 3 to 1 | 0% | 0% | 0% | 0% | 0% | 0% |

For York as a whole, the responses generally show lesser impacts than for the other cities. This is largely due to the York2 dataset, which, on average, is predicting a lower level of impact relative to the York FAME data. This is one of the few instances in the questionnaire responses where the York2 data differed from the York FAME data.

It is interesting to examine which firms are most likely to perceive negative impacts from RUC. This is shown in table 5.21. This table shows the number of firms by sector that scored the impact for each indicator either –2 or –3.

Table 5.21 Firms responding negatively to the impacts from RUC (all cities).

| SIC | Sample SIC Proportion | RUC: recruiting | RUC: retaining | RUC: delivery | RUC: customer access | RUC: rents | RUC profitability |
|---|---|---|---|---|---|---|---|
| agriculture/energy/ utility | 8 | 1 | 1 | 2 | 1 | 2 | 2 |
| manufacturing/other industry | 53 | 32 | 31 | 17 | 23 | 19 | 36 |
| retail/transport distribution/hotels | 37 | 20 | 19 | 14 | 19 | 11 | 26 |
| financial/business services | 33 | 23 | 22 | 16 | 14 | 9 | 21 |
| other services | 52 | 26 | 26 | 24 | 27 | 14 | 29 |
| other non-services | 13 | 5 | 6 | 8 | 10 | 5 | 8 |
| Firms responding | **196** | **106** | **104** | **80** | **93** | **60** | **121** |

Notes: all firms from the FAME sample only. 'Severe' indicator was a score of –2 to –3.

This table shows that agriculture, energy and utility sector firms generally have few firms expecting a negative impact for all the six indicators. This could be a reflection of their location in relation to the charging cordons, in that they are more likely to be located outside the charged area. The transport distribution, retail and /hotels sector also has lower numbers predicting negative impacts on delivery and rent indicators. However, a higher proportion are concerned of the impacts RUC may have on customer access and profitability.

The financial and business service, and manufacturing/industrial sectors appear sensitive to the impacts of RUC particularly in staff recruitment and retention, and profitability. The 'other services' and 'other non-service' sectors are more difficult to generalise upon, because they contain so many different types of firms. However, in broad terms, firms in the 'other service sector' are very sensitive to a range of impacts, whereas 'other non services' are more concerned about the impacts on delivery and customer access than staff issues.

In summary, this table shows that different sectors are expecting the impacts of RUC to affect them in different ways, dependent upon their particular reliance on transport, and their sensitivities to the supply of staffing, floorspace and customer access. Of course, with a sample of this size, confident generalisations are difficult, and further statistical analysis will examine the significance of these differences; this is discussed in WP552.

### 5.5.3 Charge levels at which negative impacts would occur.

The response rate to this question was very low (c. half a dozen responses), mostly because the responses to question IV b were largely negative (meaning that this question was not applicable). There was also some evidence that it was completed incorrectly. Therefore, this question should be ignored in further analysis.

### 5.5.4 The Impacts of RUC on travel subsidies

Table 5.22 gives the responses to Question IV d in the questionnaire. This shows clearly that few of the respondents believed their firms would implement new travel subsidies to reduce the impacts of the RUC on their employees. This is true for giving public transport subsidies, car fuel allowances, or paying employees for the charge they incur. In fact, a total of 59% would do nothing in terms of travel subsidies, i.e. leave employees to pay the RUC themselves, which is of course desirable if the RUC is to reduce car commuting. Nevertheless, 24% of respondents indicated that the firm may consider paying the employees charge, although several highlighted an ambiguity in the questionnaire regarding whether this applied to just business travel or also to commuting (it was intended to apply primarily for the commuting trip). As a result, this figure should be interpreted as a maximum likely response. Additionally, it can be calculated that 11% may introduce subsidies for public transport to work (currently paid by only 6% of respondents), 4% may introduce a car fuel allowance, and 2% may implement other measures.

Table 5.22: Impacts of RUC on provision of travel subsides.

| | PT TTW Subsidies | Car allowance | Other* | Pay employee for charge they incur |
|---|---|---|---|---|
| *Cambridge* | | | | |
| introduce the measure | 5 | 3 | 2 | 20 |
| increase existing measure | 0 | 1 | 0 | n/a |
| decrease existing measure | 0 | 0 | 0 | n/a |
| do nothing | 43 | 44 | 46 | 27 |
| *Norwich* | | | | |
| introduce the measure | 7 | 1 | 1 | 12 |
| increase existing measure | 0 | 1 | 0 | n/a |
| decrease existing measure | 0 | 1 | 0 | n/a |
| do nothing | 53 | 57 | 59 | 48 |
| *York* | | | | |
| Introduce the measure | 10 | 3 | 1 | 15 |
| increase existing measure | 5 | 4 | 2 | n/a |
| decrease existing measure | 0 | 2 | 0 | n/a |
| do nothing | 66 | 72 | 77 | 66 |

Notes: *- see section 5.5.6 below

   table shows absolute numbers of firms responding. Note that respondents could tick more than one subsidy.York2 included.

The 'other' travel subsides that were suggested by four respondents were; one suggestion of subsidising park and ride travel, and three comments regarding reviewing salaries (although they did not say how salaries could change; presumably they would rise in compensation).

### 5.5.5 Future location choice and RUC

The responses from this question show (table 5.23) that RUC is likely to play a role in firm's future location decisions. It should be noted that this question did not ask if firms were likely to move in response to the policy, only if the policy would have an influence the **next time** they moved.

Table 5.23: Impact of RUC on location choice, when next changing location.

| Would RUC influence next location choice? | Cambridge | Norwich | York | Total (% of 194) |
|---|---|---|---|---|
| yes | 22 | 34 | 46 | 53% |
| possibly | 14 | 17 | 15 | 19% |
| no | 14 | 7 | 24 | 28% |

The indications of **where** firms may move to (given in the table 5.24 below) show that 55% of firms are likely to move outside the charging area, and in some cases, away from the city area. The key issue here is the extent to which this response suffers from strategic bias, in that it is a key question for registering disapproval about the policy.

Table 5.24: Influence of RUC on location, when next changing location.

| Where firms may relocate to: | Cambridge | Norwich | York | Total (% of 194) |
|---|---|---|---|---|
| outside the outer cordon | 22 | 30 | 32 | 55% |
| inside the outer cordon | 1 | 0 | 5 | 4% |
| away from the city area | 10 | 19 | 26 | 36% |
| in between outer and inner cordons | 1 | 1 | 6 | 5% |

## 5.5.6    Other possible company responses to the RUC policy

The responses to this question have been tabulated according to nine general types of answer given to this question. However, it should be noted that over half the respondents did not respond to this question, or responded with general comments more suited to Section VI of the questionnaire (i.e. general comments on the policy).

Table 5.25: Other possible company responses to RUC.

| | Cambridge | Norwich | York |
|---|---|---|---|
| Encourage appropriate local bus services | 1 | - | - |
| Campaign against the policies | 2 | - | 2 |
| Encourage Park and Ride outside cordon | 1 | - | 1 |
| Introduce flexible working / deliveries | 4 | 8 | 3 |
| Move meetings | 1 | - | 1 |
| Pass charges onto clients | 1 | 1 | 4 |
| Charge extra for work done in the cordon | - | - | 1 |
| Introduce tele-working | - | - | 1 |
| Offer customers incentives to visit | - | - | 1 |

Aside from campaigning against the RUC policy, which 2% said they would do, the other measures divide into two, firstly those dealing with the increase in costs from the charge (e.g. passing the costs on), secondly reducing travel during the charging period. In this category, the most quoted response is to encourage flexible working to reduce travel during the charging period. 8% say they would do this to avoid the RUC. This does suggest that the policy may have the desired effect of reducing car travel during peak period congestion.

## 5.6    The Workplace Parking Levy (WPL)

## 5.6.1    Impacts of WPL on the city

These results shown by the median scores in table 5.26 are similar to those for the RUC policy, but in general are less positive than the RUC scores. Again, the majority of the environmental impacts are seen to be slightly beneficial. However, whereas the parking indicator for RUC was given, on average, as a benefit, here it is neutral, i.e. the sample seem equally divided concerning the likely impact of the WPL on other parking spaces in the city. The economic indicator is, again, the most negative, particularly in Norwich and York.

Table 5.26 WPL impacts on the city generally.

| Workplace parking | Cambridge | Norwich | York |
|---|---|---|---|
| V a 1 noise | 1 | 1 | 1 |
| V a 2 congestion | 1 | 1 | 1 |
| V a 3 air poll | 1 | 1 | 1 |
| V a 4 parking | 0 | 0 | 0 |
| V a 5 economic | -1 | -2 | -2 |
| V a 6 tourism | 0 | 0 | 0 |

Notes:  median values

Original score from -3 to 3, where –3 was the most negative impact, 0 was 'no impact', and 3 was the most positive impact.

Table 5.26 shows that in general a majority of the respondents forecast noise, air pollution and congestion benefits from the parking policy. However, fewer predicted benefits relative to the RUC impacts, and more predicted no change. As discussed for table 5.25, the respondents were divided on the impacts on the availability of parking with the WPL in place, indicating that there was no consensus. This is an important finding; that the impact on parking is uncertain, in terms of whether more or less spaces will be available as a result of the policy. Additionally, fewer respondents considered there would be overall economic benefits to the city, although fewer also thought there would be adverse impacts. This suggests that those expecting a decrease in parking availability believe car commuters will merely park in public spaces instead. The logical extension of this is fewer spaces for other visitors to the city and hence less business. This is in line with the view that more cars means business is good revealed by the multi-variate analysis (WP 552), and could explain why fewer business thought there would be overall economic benefits as a result of the WPL. The fact that fewer expected adverse impacts could be a reflection of the fact that few firms thought they would pass the WPL on to their employees (table 5.31). It is possible, of course, that the WPL was less well understood (in terms of likely operation and hence impacts) than RUC[7].

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[7] Written responses from York especially (and particularly the York2 survey), suggest this could be the case, despite the fact that the questionnaires were well completed, and the fact that output in table 5.29 demonstrates that York FAME respondents have understood the WPL policy.

Table 5.27 General responses to the WPL

| | WPL: noise | WPL: congestion | WPL: air pollution | WPL: parking | WPL: city economy | WPL: tourism |
|---|---|---|---|---|---|---|
| *Cambridge* | | | | | | |
| -3 to –1 | 6% | 4% | 6% | 30% | 66% | 24% |
| no change | 34% | 31% | 28% | 38% | 24% | 41% |
| 3 to 1 | 60% | 65% | 66% | 32% | 10% | 35% |
| *Norwich* | | | | | | |
| -3 to -1 | 5% | 10% | 10% | 38% | 79% | 34% |
| no change | 34% | 22% | 26% | 29% | 16% | 34% |
| 3 to 1 | 60% | 67% | 64% | 33% | 5% | 31% |
| *York* | | | | | | |
| -3 to –1 | 4% | 5% | 6% | 41% | 70% | 40% |
| no change | 43% | 32% | 33% | 19% | 19% | 32% |
| 3 to 1 | 53% | 63% | 61% | 40% | 11% | 28% |

## 5.6.2 Impacts of WPL on company at current location

Table 5.28 shows that the respondents stated, on average, that the impacts of the parking levy on recruiting and retaining staff, on deliveries and on floorspace rents would be neutral (or slightly negative in the case of York). Profitability is consistently negative, indicating that the majority of respondents considered that the companies would meet the charge themselves, (rather than pass it on to their employees). This sends mixed messages for the WPL policy. Firstly, this indicates that the policy would have little direct effect on the employees who drive to work, unless in the longer term firms reduce the number of parking spaces at their premises. Secondly, it shows that general political fears of strong negative impacts appear unfounded from the sample, except in the area of overall profitability.

Table 5.28: Impacts of WPL on company at current location.

| Workplace parking | Cambridge | Norwich | York |
|---|---|---|---|
| V b 1 recruiting | 0 | 0 | -1 |
| V b 2 retaining | 0 | 0 | 0 |
| V b 3 delivery | 0 | 0 | 0 |
| V b 4 customer access | 0 | 0 | 0 |
| V b 5 rents | 0 | 0 | 0 |
| V b 6 profitability | -2 | -1 | -1 |

The impacts on the firm itself from the polices was subtly different from the RUC impacts. A much larger proportion of respondents considered there would be no impacts on the variables from the policy, and fewer saying there would be negative impacts (table 5.29). This was the same across all three cities. Also, many more predicted positive impacts relative to the RUC impacts. There is less difference here between the FAME York and York2 responses, compared to the differences found in the RUC responses.

Table 5.29: WPL impacts on the company at current location

|  | WPL: recruiting | WPL: retaining | WPL: delivery | WPL: customer access | WPL: rents | WPL: profitability |
|---|---|---|---|---|---|---|
| *Cambridge* |  |  |  |  |  |  |
| -3 to –1 | 48% | 44% | 17% | 29% | 44% | 72% |
| no change | 40% | 52% | 75% | 63% | 42% | 28% |
| 3 to 1 | 12% | 4% | 8% | 8% | 15% | 0% |
| *Norwich* |  |  |  |  |  |  |
| -3 to –1 | 42% | 42% | 24% | 26% | 35% | 58% |
| no change | 46% | 47% | 58% | 63% | 49% | 37% |
| 3 to 1 | 12% | 10% | 19% | 11% | 16% | 5% |
| *York* |  |  |  |  |  |  |
| -3 to –1 | 54% | 44% | 42% | 37% | 30% | 63% |
| no change | 45% | 55% | 51% | 57% | 57% | 37% |
| 3 to 1 | 1% | 1% | 7% | 6% | 14% | 0% |

Table 5.30 shows comparable data to table 5.21, that is, firms by sector which scored negative impacts from the WPL. The sector differences on the WPL policy show a pattern indicating that the sample understands how the policy may affect their business.

In comparison with table 5.21, fewer firms indicated negative impacts than for the RUC policy. This perhaps reflects the number of firms which have parking spaces that would be affected (although it is known from Section 5.4.1 that over 80% of firms offer on-site parking). For the rents indicator, relative to the RUC, more firms responded saying there would be a negative impact. This probably reflects the direct impact this policy would have on floorspace inside the cordon.

Table 5.30 Firms responding negatively to the impacts from WPL; (all cities).

| SIC | Sample SIC Proportion | WPL: recruit-ing | WPL: retain-ing | WPL: deliv-ery | WPL: customer access | WPL: rents | WPL: profit-ability |
|---|---|---|---|---|---|---|---|
| agriculture/energy/ utility | 8 | 2 | 0 | 1 | 0 | 1 | 1 |
| manufacturing/other industry | 53 | 25 | 24 | 9 | 11 | 20 | 36 |
| transport distribution/ retail/hotels | 37 | 21 | 17 | 11 | 11 | 12 | 26 |
| financial/business services | 33 | 19 | 18 | 8 | 10 | 12 | 24 |
| other services | 52 | 24 | 22 | 24 | 23 | 14 | 28 |
| other non-services | 13 | 3 | 3 | 4 | 5 | 6 | 7 |
| Firms responding | 196 | 94 | 84 | 57 | 60 | 65 | 122 |

Notes: all firms from the FAME sample only. 'Severe' indicator was a score of –2 to –3.

As with RUC, the agriculture and energy sector has a low proportion of firms indicating negative impacts than other sectors, although the 'non services sector' also has few firms predicting negative impacts.

The manufacturing sector, financial and business services, and transport distribution, retail and hotels sectors all foresee impacts on recruiting and retaining staff. Around a third of firms also foresee impacts on rents and, most markedly, on profitability.

These findings by sector indicate that the WPL policy has a large majority of the firms, particularly in manufacturing, retail and other services who believe WPL will impact negatively on overall profitability. Other impacts seem to be determined by the type of parking used by the firms.

### 5.6.3    Charge levels at which negative impacts would occur.

As with the corresponding question in Part IV, there were very few responses to this question. Therefore, a lesson for next time is that the question should perhaps be complemented with another asking at what charge level the respondent would not be sensitive to the charge.

### 5.6.4    The impacts of WPL on travel subsidies

As with the RUC, the overwhelming choice here was not to offer any additional travel subsidies to employees (table 5.31). 67% said they would do nothing in terms of travel subsidies - this includes not decreasing any existing car use subsidies to effectively pass the WPL on to employees. Summing across the cities, only 13% of respondents who answered this question thought their firm may pass the WPL on to the employees. A smaller number (10%) thought they may implement some form of public transport to work subsidies. Additionally, 3% may introduce some form of car allowance, although this should be viewed against the fact that 92% already pay some form of car use subsidy. The 'other' category suggestions were similar (in fact in most cases identical) to the RUC responses. 3% said they would implement 'other' measures, which are outlined in table 5.34 below.

Table 5.31: Impacts of the WPL on the provision of travel subsidies.

| | PT TTW subsidies | Car allowance | Other | Pass charge to employee |
|---|---|---|---|---|
| *Cambridge* | | | | |
| introduce the measure | 5 | 1 | 3 | 8 |
| increase existing measure | 1 | 1 | 0 | n/a |
| decrease existing measure | 0 | 0 | 0 | n/a |
| do nothing | 39 | 43 | 42 | 37 |
| *Norwich* | | | | |
| introduce the measure | 6 | 2 | 0 | 3 |
| increase existing measure | 0 | 0 | 0 | n/a |
| decrease existing measure | 0 | 0 | 0 | n/a |
| do nothing | 53 | 57 | 59 | 56 |
| *York* | | | | |
| introduce the measure | 9 | 3 | 2 | 14 |
| increase existing measure | 0 | 1 | 1 | n/a |
| decrease existing measure | 0 | 3 | 0 | n/a |
| do nothing | 72 | 74 | 78 | 66 |

- table shows absolute numbers of firms responding. York2 included.


## 5.6.5 future location choice and the WPL

The responses from this question show that, as with RUC, the WPL is likely to play a role in firm's future location decisions (table 5.32). Around 20% of respondents believed the policy would have no effect on their firms choices. These firms are highly likely to be those with lower parking requirements or no current spaces, but note that this is higher number than those indicating no parking facilities in Section 5.4.1 of this paper.

Table 5.32: Impact of the WPL on location choice, when next changing location.

| Would WPL influence next location choice? | Cambridge | Norwich | York | Total (% of 194) |
|---|---|---|---|---|
| yes | 25 | 30 | 46 | 52% |
| possibly | 14 | 21 | 18 | 28% |
| no | 10 | 7 | 21 | 20% |

The indications of *where* firms may move to (given in table 5.33 below) show that firms are likely to move outside the charging area, and in some cases (particularly noticeable in York), away from the city area. This is very similar to the RUC response, and again the key issue is how much this response registers dissatisfaction with the policy, rather than a likely response.

Table 5.33: Influence of the WPL on location, when next changing location.

| Where firms may relocate to: | Cambridge | Norwich | York | Total (% of 194) |
|---|---|---|---|---|
| outside the outer cordon | 25 | 26 | 27 | 52% |
| inside the outer cordon | 0 | 2 | 7 | 6% |
| away from the city area | 12 | 22 | 29 | 42% |
| in between outer and inner cordons | 0 | 0 | 0 | |

## 5.6.6 Other possible company responses to the WPL policy

Several respondents took this question as a means to complain about the policy in general; e.g. currently *"when building new offices, the planners prescribe a minimum ratio of parking spaces to no. of staff. Unless this was changed there would be contradictory policies within business picking up the tab - this is both wrong and indefensible"*, *"charges suggested are too high for our type of service company"* and *"Already pay to use roads, and rates on parking spaces. Staff cars are demonstration cars, would they have to pay for them to enter premises? [this is a car dealership]"*.

As with the RUC 2% of respondents stated that they would campaign against the policy. Additionally, 3% may reduce employee parking to avoid the WPL, and 3% may pass the costs on to customers. Reductions in employee parking could be viewed as the stick to accompany the introduction of public transport subsidies to encourage employees not to drive to work. However, the number of respondents willing to implement measures that could push employees out of their cars is considerably lower than those willing to implement incentives such as public transport subsidies. This reflects the fear that the WPL will have negative impacts on staff retention. The responses to the question are given in the table below:

Table 5.34: Other possible company responses to the WPL policy.

| | Cambridge | Norwich | York |
|---|---|---|---|
| Reduce spaces available to employees (encourage them to park elsewhere) | 2 | 1 | 3 |
| Enforce parking for use by employees only | 1 | - | - |
| Campaign against policies | 2 | - | 1 |
| Pass costs to clients / products | 1 | 1 | 3 |
| Pass charge onto non-essential car drivers | - | 1 | - |
| More Park &Ride | - | 1 | - |
| Encourage a mode change | - | - | 1 |
| Make employees use public spaces | - | - | 1 |

## 5.7 Additional Comments and End Questions

The final section of the questionnaire gave space for comments.

Over half of the respondents offered written responses in addition to the quantitative data analysed above. A total of 440 written comments were made by 123 respondents, whose distribution by sector followed that for the sample as a whole. Responses were grouped into 87 categories and helped facilitate a more detailed, if self selected, sets

of insights. The top ten most frequently cited comments in this section are given in table 5.35.

Table 5.35 Top Ten Most Frequent Comments in the Questionnaire End Section

| Rank | Comment (Sample size: 123) | Frequency mentioned |
|---|---|---|
| 1 | RUC will have a negative impact on company profitability | 21 |
| 2 | RUC will have a negative impact on the city economy | 18 |
| 3 | Public transport should be implemented before RUC or a WPL | 17 |
| 4 | Current public transport is inadequate | 15 |
| 5 | WPL will have a negative impact on company profitability | 15 |
| 6 | Suggested public transport improvements, including tram systems | 14 |
| 7 | Requests for more park and ride | 13 |
| 8 | The business will not be affected in terms of it's location outside the outer cordon, &/or employee travel patterns | 12 |
| 9 | Other | 11 |
| 10 | Staff retention problems | 10 |

Table 5.35 shows that the concerns revealed by the quantitative analysis are also displayed in the written comments, particularly the negative impacts for the company in terms of staffing and profitability. This table also indicates that the comments reflect worries about the pricing mechanisms and calls for supporting measures, which respondents believe, may mitigate negative impacts. The most popular supporting measure is more and better public transport (including tram systems), although Park and Ride is also popular.

### 5.7.1 Responses analysed by type of company

The comments listed in table 5.35 above have been further analysed in terms of the characteristics (size, type and location) of the companies who made the comments.

There was a clear pattern of very small companies (in terms of staff and turnover) making the majority of the comments in table 5.35, and large companies making the fewest. This is not surprising, given that an increase in costs is more visible to a small company; as one respondent sums up: *"I think this would be another unfair tax on small businesses and it would make very little difference to large companies."* There is a consistent pattern of single-site-independent companies making the majority of the comments in table 5.35. This is consistent with the patterns of responses by size, given that single-site-independent companies are likely to be the smallest.

In terms of sector, businesses involved in manufacturing and industry made the majority of the comments in table 5.35, in particular relating to staffing impacts resulting from the polices. The sectors, which made the least comments, were financial and business services, and agriculture/utilities/ energy. This could reflect a lack of concern about the policies relative to other sectors (which seems unlikely given the quantitative results for the service sectors), or less concern about retaining a city centre location. In terms of location, those in the inner core of the three cities

make the majority of the comments, probably reflecting where the impacts are most likely to reside.


## 5.7.2   Other key insights

Some written responses offer interesting insights into business perceptions. However, these comments cannot to be generalised to the whole business community. In summary:

- Several written responses indicate that the WPL is seen as a tax on business to a much greater extent than the RUC.

- Comments such as the WPL was *"fundamentally wrong, if not illegal"* reflected a possible lack of awareness of policy developments among some businesses, and reinforces the need for clear publicity surrounding the policies.

- A few comments recognised some benefits, such as; *"discouraging traffic in the city centre is an inconvenience to the individual, but a benefit to the community."* However, even where benefits are recognised, winning support is still not guaranteed.

- Some comments were levelled at local authorities for not offering affordable housing within cities, hence forcing workers to live outside the cities and commute in by car, because public transport is inadequate in the surrounding areas.

- Government and local authority spending is cited by a number of respondents, mainly expressing the view that the pricing mechanisms are a *"get rich quick"* measure. Several respondents clearly did not believe that income generated would be hypothecated.

- In terms of the WPL, several firms note that they would ask employees to park on street in the industrial/retail parks, or leave their cars in outlying villages, enabling the company to reduce the number of parking spaces they provide.

- A number of companies also cited current policies in terms of transport and development as causing or exacerbating problems. Development policies attracting inward investment were seen as contradictory to transport policy that aimed to reduce congestion and pollution, especially when traffic restrictions were involved. However, in terms of traffic restrictions alone, there was no consensus amongst respondents; approximately as many thought they caused congestion, as believed they solved traffic problems. In terms of development policies alone, there were also a number of comments (primarily from Cambridge respondents) that overly restrictive policies were encouraging them to consider relocating, and would give them added impetus to consider moving away if RUC or WPLs were introduced.

The qualitative responses analysed here generally re-enforce the findings of the quantitative analysis, and show a diversity of responses from the business community.

A clear message is the pressing need for publicity and consultation before charging measures are implemented.


**5.7.3   End questions**

It is hypothesised that the ease of obtaining external finance has a significant influence on the economic performance of a firm. A question was included to obtain some data on firm's experience in this area. As can be seen from table 5.36, a majority did not have (or did not admit to) any problems, although 20% did admit to some problems.

Table 5.36: Ease of obtaining external finance.

|  | Cambridge | Norwich | York |
|---|---|---|---|
| yes: have had problems | 13 | 9 | 16 |
| no: no problems | 32 | 39 | 42 |
| don't know | 4 | 9 | 19 |

# 6.0 SUMMARY AND CONCLUSIONS

This paper has presented the methodology and results from a survey of businesses undertaken of firms in three cities; York, Norwich and Cambridge. Nearly 200 firms were surveyed, in roughly equal proportions from each city to ascertain perceptions of likely impacts from, and responses to, two transport demand management policies - road user charging and work place parking levies.

Potential respondents were contacted in advance to ensure the questionnaire was completed by an appropriate strategic decision maker. This resulted in a high quality of responses, and percentage return rate. Nevertheless, the cohort from which the York sample was obtained was small, and thus a supplementary survey was implemented with no advance contact. This resulted in a lower response rate, and more, poorly completed questionnaires. Hence, the second round of questionnaires to York seemed to justify the higher initial costs of contacting respondents in advance, and seeking out an appropriate respondent, both in terms of the quality of response and the response rate.

Analysis of respondent and background information points to the following interim conclusions:

- The majority of the questionnaires were completed by senior members of staff, over 90% of which have all or some **responsibility** for the strategic decision making discussed in the questionnaire.

- The **sample of firms** across all the cities is very **heterogeneous**, in terms of the number of employees and turnover. However, aside from the age of firms, there seems to be little difference in responses between the cities.

- In terms of the sector spread, the sample, is biased towards more '**traditional**' (manufacturing and service) and larger firms, rather than the emerging service/retail, and financial and business service sectors. This was determined by comparison of the sample with city specific databases, and the fact that the median company age was over twenty years old.

- In terms of the **factors influencing firms location choice**, in all three cities, staff parking, rents and road access were the most important variables, with local labour supply the fourth most important variable. This is in line with other research into firm's location choices.

- It is clear that **parking** was very important to the respondents. Only 10% of firms offered no parking at all. Around 68% of the staff employed by the sample had a parking space (of some sort) provided for them.

- Most respondents considered that their cities suffered from transport congestion and environmental **problems**, and that public transport and pedestrian/cycle facilities were poor. More particular problems, tended to relate to the lack of public transport accessibility and congestion on both radial and orbital routes. This was said to affect commuting, deliveries and business travel throughout the day. The possibility here of strategic bias should not be ignored.

Analysis of perceived impacts of, and possible responses to road user charging and a workplace parking levy give rise to the following interim conclusions:

- The impact of **road user charging** was generally seen to produce benefits in terms of reduced noise, congestion, air pollution and availability of parking spaces. However, it was considered to have a detrimental impact on the city economy in general. In terms of the impacts on the individual firm, the largest negative impacts were considered to occur on recruiting and retaining staff, and on overall site profitability. Around a fifth of the sample indicated that they may pay their employees' charges. Public transport incentives and encouragement to use park and ride were mentioned by only a small number of firms. The charge level selected was considered by the respondents to have an impact on their firm.

- The **workplace parking levy** gave similar impacts to the RUC, but additional negative impacts on parking availability. It is possible that the WPL is not directly associated with reduced traffic congestion, especially, relative to the RUC policy. Only around 16% of firms indicated that they would pass the charge onto their employees. This implies that a majority of firms would internalise the costs, hence nullifying the impact of the policy on the car commuter. The charge level selected was considered by the respondents to have an impact on their firm, although not for all firms, as 25% indicated that they would do nothing in response.

- For both policies, the respondents indicated that their firms would consider moving outside the charged area if the policies were implemented. For RUC and the WPL, 76% and 72% respectively indicated the policy would, or would possibly, affect their next location choice.

- This analysis suggests that senior staff are aware of the benefits that the policies may bring to counter some of the significant problems that they perceive in their cities. However, they also believe that the policies will detrimentally affect their profitability, and ability to attract staff at their current locations. It seems anecdotally from the written comments that road user charging is seen as less problematic to businesses than the parking levy. The average view is that the impacts will not be severe at the charge levels used in the survey.

- It is difficult to tell whether the respondents factored in any benefits from reduced congestion into their assessments of profitability.

- Another implication is the issue of who ends up paying the charge. Clearly to reduce congestion, the charge should be borne by the car commuter. This will not be the case if companies incur the costs, or more likely, pass them on to their customers. A clear policy message (especially for WPL) is that policy publicity should emphasise that the commuter should bear the cost.

In summary, the initial analysis indicates that the respondents believe that demand management policies can reduce congestion and improve environmental conditions in the cities.

However, it appears that some firms believe they will have more difficulty recruiting and retaining staff, that profitability may suffer, and that out of centre locations will

become more attractive. It was also found that the parking levy had higher costs, and lower benefits, than that road user charging, and that a complex pattern of responses to the policies may occur, dependant upon the characteristics of the firm.

It should be stressed however, that these are preliminary results, and do not control for the characteristics of the firm. This is the subject of the next stage of the analysis of these results - the multi-variate analysis to be presented in Working Paper 552.

**Bibliography**

Department of Environment, Transport and the Regions (1999) Breaking the Logjam; Consultation document.

Headicar P. and Curtis C. (1995) 'Residential Development and Car Based Travel; Does Location Make a Difference?' *Proc. of PTRC Summer Annual Conference, University of Warwick.*

May, A.D. and Milne, D.S. (1999): Effects of alternative road pricing systems on network performance. In press; Transportation Research (A)

Nelson J D, Leitham S and McQuaid R (1994) Transport and commercial location decisions; some recent evidence, Transportation Planning Systems Vol. 2 No 4. Pp 41-57.

Still B G (1999) Historic Cities Task 4: Business Sector Profiles. Working Paper 537 Institute for Transport Studies, University of Leeds

Whittles (1999) Urban Road Pricing: Public and Political Acceptability. PhD thesis, Institute for Transport Studies, University of Leeds

**ANNEX I: POLICY DESCRIPTIONS AND MAPS OF HYPOTHETICAL CHARGING AREAS**

## Hypothetical Policy Description For York

| A: Road user cordon charging in York | B: Parking levy charges for business private parking in York |
|---|---|
| A charge of **£2** would be introduced for all cars, coaches and motorcycles **each time** they cross the OUTER RING ROAD, and a charge of **£1** would be introduced for any of the above each time they cross the INNER RING ROAD (as shown on the **map**). Driving along these roads is not charged, in effect the charging cordon is along the inside of the ring roads.<br><br>The scheme would affect traffic going **TOWARDS** the city centre and entering the cordon between 7am- 10am. There would be no charge for other times of day.<br><br>Public transport (buses / park and ride); cyclists, delivery vans and lorries would **not** have to pay the charge. | Companies within the outer and inner cordons would be charged for their parking provision for employees at the place of work. The charge would be **£3 per space per day** (for all days on which business is undertaken at the place of work). This implies a charge of around £700 per space per year. All spaces apart from retail consumer parking would be charged for.<br><br>Current on-street and off-street parking restrictions and charges would remain in place. **However**, bear in mind that private and public car park operators would have to pay the parking levy for their long stay parking spaces, and may well increase their parking charges as a result.<br><br>There would be no change in the calculation of rateable values. |

Both policies **aim** to reduce the traffic congestion and pollution in and around York, by encouraging a switch away from car use, and also to raise finance for public transport improvements.

**IN YOUR RESPONSES, PLEASE ASSUME THAT THE CHARGES CANNOT BE EVADED, AND THE TECHNOLOGY EXISTS TO IMPLEMENT THEM.**

Note that the **charge levels** given above are exploratory only, and could be increased over time if low charges have no impact on congestion levels.

*In either case the money raised from the policies would be used for improvements to public transport services, and cycle and pedestrian facilities for the city and surrounding area.*

*Please see overleaf for a sketch of the policy cordons*

**Hypothetical Charging Cordons for York**

Notes:

- The road user charging cordons follow the ring roads. The parking levy area is inside the outer ring road. The policies shown on this map are for **research purposes only.**
- The road user charging cordons would come into effect only once the vehicle has left the inner or outer ring road, towards the city centre, and gone inside the cordon.

**Hypothetical Policy Description For Cambridge**

| A: Road user cordon charging in Cambridge | B: Parking levy charges for business private parking in Cambridge |
|---|---|
| A charge of **£2** would be introduced for all cars, coaches and motorcycles **each time** they cross the OUTER RING ROAD, and a charge of **£1** would be introduced for any of the above each time they cross the INNER RING ROAD (as shown on the **map**). Driving along these roads is not charged, in effect the charging cordon is along the inside of the ring roads.<br><br>The scheme would affect traffic going **TOWARDS** the city centre and entering the cordon between 7am- 10am. There would be no charges for any other time of day.<br><br>Public transport (buses / park and ride); cyclists, delivery vans and lorries would **not** have to pay the charge. | Companies within the outer and inner cordons would be charged for their parking provision for employees at the place of work. The charge would be **£3 per space per day** (for all days on which business is undertaken at the place of work). This implies an annual charge of around £700 per space. All spaces apart from retail consumer parking would be charged for.<br><br>Current on-street and off-street parking restrictions and charges would remain in place, and will be extended throughout the outer cordon.<br><br>There would be no change in the calculation of rateable values. |

Both policies **aim** to reduce the traffic congestion and pollution in and around Cambridge, by encouraging a switch away from car use, and also to raise finance for public transport improvements.

**IN YOUR RESPONSES, PLEASE ASSUME THAT THE CHARGES CANNOT BE EVADED, AND THE TECHNOLOGY EXISTS TO IMPLEMENT THEM.**

Note that the **charge levels** given above are exploratory only, and could be increased over time if low charges have no impact on congestion levels.

*In either case the money raised from the policies would be used for improvements to public transport services, and cycle and pedestrian facilities for the city and surrounding area.*

*Please see overleaf for a sketch of the policy cordons*

**Hypothetical Charging Cordons for Cambridge**

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Notes:

- The road user charging cordons follow the ring roads. The parking levy area is inside the outer ring road. The policies shown on this map are for **research purposes only.**
- The road user charging cordons would come into effect only once the vehicle has left the inner or outer ring road, towards the city centre, and gone inside the cordon.

## Hypothetical Policy Description for Norwich

| A: Road user cordon charging in Norwich | B: Parking levy charges for business private parking in Norwich |
|---|---|
| A charge of **£2** would be introduced for all cars, coaches and motorcycles **each time** they cross the OUTER RING ROAD, and a charge of **£1** would be introduced for any of the above each time they cross the INNER RING ROAD (as shown on the **map**). Driving along these roads is not charged[8], in effect the charging cordon is along the inside of the ring roads.<br><br>The scheme would affect traffic going **TOWARDS** the city centre and entering the cordon between 7am- 10am. There would be no charges applied at other times of the day.<br><br>Public transport (buses / park and ride); cyclists, delivery vans and lorries would **not** have to pay the charge. | Companies within the outer and inner cordons would be charged for their parking provision for employees at the place of work. The charge would be **£3 per space per day** (for all days on which business is undertaken at the place of work). All spaces apart from retail consumer parking would be charged for.<br><br>Current on-street and off-street parking restrictions and charges would remain in place. **However**, bear in mind that private and public car park operators would have to pay the parking levy for their long stay and contract parking spaces, and may well increase their parking charges as a result.<br><br>There would be no change in the calculation of rateable values. |

Both policies **aim** to reduce the traffic congestion and pollution in and around Norwich, by encouraging a switch away from car use, and also to raise finance for public transport improvements.

**IN YOUR RESPONSES, PLEASE ASSUME THAT THE CHARGES CANNOT BE EVADED, AND THE TECHNOLOGY EXISTS TO IMPLEMENT THEM.**

Note that the **charge levels** given above are exploratory only, and could be increased over time if low charges have no impact on congestion levels.

*In either case the money raised from the policies would be used for improvements to public transport services, and cycle and pedestrian facilities for the city and surrounding area.*

### *Please see overleaf for a sketch of the policy cordons*

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[8] Except where indicated on map overleaf.

**Hypothetical Charging Cordons for Norwich**

Notes:

- The road user charging cordons and parking levy area inside the outer cordon as shown on this map are for **research purposes only**.
- The road user charge is only applied once the vehicle has left either the inner or outer ring road and gone inside the respective cordon, **except** between Lakenham and Cemy, where the cordon does not follow an existing road.

**ANNEX II: SAMPLE QUESTIONNAIRE**

# INSTITUTE FOR TRANSPORT STUDIES and LEEDS UNIVERSITY BUSINESS SCHOOL
# UNVERSITY OF LEEDS

**Business attitudes to potential transport policies in York**

Company:        …………..……………………………………………………

Our ref:             ……….

Thank you for agreeing to complete this short questionnaire. Please complete and return it, even if you do not think it is relevant to your organisation.

**Section I: Information about the respondent**
        *(please fill in any missing information)*

(a) Name:                                            ……………………………………………………

(b) Position in the company:                ……………………………………………………

(c) Length of time with the company:                                ………………….(years)

(d) Length of time working with the company at the current location:        ………………….(years)

(end of section 1)

## Section II: Background Information

(a) How would you best describe the company at this location? *(please tick one box)*
    1. Subsidiary of multi-site operation ❑    2. Single site independent ❑
    3. Headquarters of multi-site operation ❑    4. Other ❑

                        *(Please describe..........................................)*

(b) How many **staff** are employed by the company at this location? …………….…

(c) How many **staff** are employed by the company in total (all locations in UK)?…..……..…

(d) How many **business locations** does the company have in total in the UK? …..………

(e) What is the **annual turnover** of the company at this location? £………..…..000

(f) What is the **annual turnover** of the company in total in UK? £……..……..000

(g) Can you describe the **core activity** of the company? *(please tick one box)*

1. Agriculture/ energy/ utility ❑    2. Manufacturing/Industry ❑
3.Transport distribution/ retail / hotels ❑    4. Financial and business services ❑
5. Other services (technical, manual etc) ❑    6. Other non-services ❑

*(Please describe........................................)*    *(Please describe..............................................)*

(h)    Please give a percentage of your turnover that is accounted for by local sales? (i.e. York and surrounding area)             …….…………..%

(i)    How many years has the company been at its current location?       …………(years)

(j)    How old is the company?       …………(years)

(k)    Which of the following are factors that your business would consider when locating? (*please tick all those relevant, and place a star (\*) next to the most important factor*)

1. Close to competitors ❑    2. Close to clientele/market ❑
3. Close to goods supply /services ❑    4. Close to labour supply ❑
5. Road links ❑    6. Rail/bus links ❑
7. Car parking for customers ❑    8. Car parking for members of staff ❑
9. Lease/rent costs ❑    10. Traffic noise levels ❑
11. Local outside air quality ❑    12. Other ❑

                     *(please state…………………………………..)*

## Section III: Current Transport Situation

(a)     Please could you tell us whether the company offers any of the following: *(tick box)*

1. Company cars for business and personal travel ❑
(*please estimate the percentage of employees at this location who have a company car:………….%*)
2. Company cars for business use only (e.g. pool cars) ❑
3. Payment for business travel costs incurred by employees (all types of transport) ❑
4. Mileage (or fuel) allowance for car journey to work and/or personal travel ❑
5. Public transport fares refunded for journey to work ❑
6. Public transport passes available at discount  for journey to work ❑
7.  Free public transport passes ❑
8.  Car parking available for staff at place of work ❑
9.  Car parking available for staff at another location (e.g. rented car park spaces) ❑

(b) Please estimate the percentage of employees at this location who have a parking space provided for them, either on-site, or nearby:                                                                   ………………%)

(c) Please estimate the **number** of parking spaces on the site for **customers and services**:
…………………)

(d) Please score the following in terms of your general perception of **current conditions** in York:
          *(please circle most appropriate score)*

|  | Serious problem |  |  |  |  |  | No problem |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. traffic noise | -6 | -5 | -4 | -3 | -2 | -1 | 0 |
| 2. traffic related air pollution | -6 | -5 | -4 | -3 | -2 | -1 | 0 |
| 3. traffic congestion | -6 | -5 | -4 | -3 | -2 | -1 | 0 |
| 4. public transport provision | -6 | -5 | -4 | -3 | -2 | -1 | 0 |
| 5. lack of cycle/ pedestrian provision | -6 | -5 | -4 | -3 | -2 | -1 | 0 |
| 6. parking for employees | -6 | -5 | -4 | -3 | -2 | -1 | 0 |
| 7. parking for customers (if relevant) | -6 | -5 | -4 | -3 | -2 | -1 | 0 |

(e) Can you give any examples of specific transport problems that the company faces?

(f) Is the company at this location currently considering **relocating**?                    (YES / NO)

*If yes, please give main reasons, and an indication of where you are considering moving to:*

## Section IV:  Road user cordon charging in York

(a) Thinking about road user charging as described on the coloured sheets, please give your views on the size of the likely impacts from the policy on the **city generally**: *(circle the number  most appropriate)*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1. traffic noise | Increase | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Reduce |
| 2. traffic congestion | Increase | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Reduce |
| 3. traffic-related air pollution | Increase | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Reduce |
| 4. availability of parking | Decrease | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Increase |
| 5. the economic prosperity of the city | Reduce | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Increase |
| 6. the attractiveness of the city to tourists | Reduce | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Increase |

*(b) Thinking about your **company at its current location**, if the road user cordon charging scheme was implemented on a permanent basis, what do you think would be the overall impact on the following:*

| | More difficult | | | No change | | | Easier | |
|---|---|---|---|---|---|---|---|---|
| 1. Ability to **recruit staff** | -3 | -2 | -1 | 0 | 1 | 2 | 3 | |
| 2. Ability to **retain staff** | -3 | -2 | -1 | 0 | 1 | 2 | 3 | |
| 3. Ease of **delivery** to and from your business location | -3 | -2 | -1 | 0 | 1 | 2 | 3 | |
| 4.   Ease   of   access   for **customers** | -3 | -2 | -1 | 0 | 1 | 2 | 3 | |
| 5. Floorspace **rent levels**    Reduce | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Increase |
| 6.    **Profitability**    of   Reduce operations  at this location | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Increase |

(c) If your answer to (b)6 was 'No change' (0) or 'Increase' (1-3) is there a charge level at which you think that negative impacts on profitability would occur?

<div align="center">NO / YES <em><strong>£………inner £ ………..outer</strong></em> (please estimate)</div>

(d) Do you think that the company would  introduce (or alter if already in place) any of the following **travel   subsidies** for affected employees if road user charging was applied? (*please tick any appropriate)*

| | Introduce | Increase | Decrease |
|---|---|---|---|
| 1.   Subsidies for journey to work on public transport | ❏ | ❏ | ❏ |
| 2.   Car fuel/ mileage allowances for journey to work | ❏ | ❏ | ❏ |
| 3.   Other       *(Please describe....................................................)* | ❏ | ❏ | ❏ |
| 5.   Pay the employee for the road user charge they incur | ❏ | | |
| 6.   None | ❏ | | |

(e) Based on your answers above, do you think that your company, when next changing location, would be influenced by the road user charging policy? (*Please circle)*      (YES / POSSIBLY / NO)

(f) If YES or POSSIBLY, would it influence you to move:
1. outside the outer cordon  ❏         2. inside the inner cordon ❏  3.  away from York area  ❏
4.  in between the outer cordon and inner cordon             ❏

(g).  What other **responses** (e.g. to business practices) may the company have to the introduction of road user charging?
………………………………………………………………………………………………

## Section V: Parking levy charges for businesses in York

(a) Thinking about the parking levy policy as described on the coloured sheets, please give your views on the size of the  impacts from the policy on the **city generally**: *(circle the number you consider most appropriate)*

| 1. traffic noise | Increase | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Reduce |
|---|---|---|---|---|---|---|---|---|---|
| 2. traffic congestion | Increase | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Reduce |
| 3. traffic-related air pollution | Increase | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Reduce |
| 4. availability of parking | Decrease | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Increase |
| 5. the economic prosperity of the city | Reduce | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Increase |
| 6. the attractiveness of the city to tourists | Reduce | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Increase |

*(b) Thinking about your **company at its current location**, if the parking levy policy was implemented on a permanent basis, what do you think would be the overall impact on the following:*

|  | More difficult | | No change | | | | | | Easier |
|---|---|---|---|---|---|---|---|---|---|
| 1. Ability to **recruit staff** | | -3 | -2 | -1 | 0 | 1 | 2 | 3 | |
| 2. Ability to **retain staff** | | -3 | -2 | -1 | 0 | 1 | 2 | 3 | |
| 3. Ease of **delivery** to and from your business location | | -3 | -2 | -1 | 0 | 1 | 2 | 3 | |
| 4. Ease of access for **customers** | | -3 | -2 | -1 | 0 | 1 | 2 | 3 | |
| 5. Floorspace **rent levels** | Reduce | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Increase |
| 6. **Profitability** of operations at this location | Reduce | -3 | -2 | -1 | 0 | 1 | 2 | 3 | Increase |

(c) If your answer to (b)6 was 'No change' (0) or 'Increase' (1-3) is there a level at which you think that negative impacts on your profitability would occur?

NO / YES *(£……………please estimate what that daily charge per space would be)*

(d) Do you think that the company would  introduce (or alter if already in place) any of the following **travel subsidies** for affected employees if the parking levy policy was applied? (*please tick any appropriate)*

|  | Introduce | Increase | Decrease |
|---|---|---|---|
| 1.  Subsidies for journey to work on public transport | ❑ | ❑ | ❑ |
| 2.  Car fuel/ mileage allowances for journey to work | ❑ | ❑ | ❑ |
| 3.  Other *(Please describe....................................................)* | ❑ | ❑ | ❑ |
| 4.  Pass the parking charge onto the employee | ❑ | | |
| 5.  None | ❑ | | |

(e) Based on your answers above, do you think that your company, when next changing location, would be influenced by the parking levy policy? (*Please circle)*        (YES / POSSIBLY / NO)

(f) If YES or POSSIBLY, would it influence you to move:
1. outside the outer cordon ❑        2. inside the outer cordon ❑  3.  away from York  ❑

(g).  What other **responses** (e.g. regarding the treatment of company owned parking spaces) may the company have to the introduction of parking policy?

……………………………………………………………………………………        (PTO)

*Please use the space provided below to give any additional comments (on any section), either regarding the company responses to the strategies, general comments on the policies or on the questionnaire itself.*

Having completed the questionnaire, could you indicate the extent to which you would be responsible for the decisions raised in this questionnaire?

Totally responsible ❑          Partially responsible  ❑     Unlikely to be responsible  ❑

It has been found in previous research that obtaining external finance (e.g. business loans) for companies can be a significant factor in constraining  business growth. Has your firm found this to be an issue?                                                    (YES / NO / DON'T KNOW)

Finally, would you be prepared to participate in a further discussion concerning these transport policies?                                                                                (YES / NO)


Thank you for your time in completing this questionnaire. The results will be important to our policy conclusions and recommendations.

Please return the questionnaire in the pre-paid envelope provided.

# ANNEX III: SAMPLE COVERING LETTER

**INSTITUTE FOR TRANSPORT STUDIES**
**and**
**LEEDS UNIVERSITY BUSINESS SCHOOL**

*University of Leeds*

**University of Leeds**
**Leeds LS2 9JT**

**Phone: 0113 233 5325**
**Fax: 0113 233 5334**
**E-mail: ajopson@its.leeds.ac.uk**
**bstill@its.leeds.ac.uk**

contact,
company name
address 1
address 2
address 3
address 4, postcode

07 July 2005

Dear <>,

**Business attitudes to possible transport policies: Cambridge Case Study**

Further to our recent telephone conversation, please find enclosed the questionnaire as promised. We are interested in obtaining the attitudes and likely responses of your organisation to some possible transport policies.

On the coloured sheet are outlined **two hypothetical** transport policies. Please consider these descriptions carefully. Then complete the questionnaire and return it in the pre-paid envelope provided. It would be very helpful to us if you could do this within a week.

We hope that you find the questions interesting and stimulating. Your views are crucial in helping us to determine the impacts of such transport policies, and they will enable us to provide policy advice. This is an important research project, and many local authorities have expressed a keen interest in the findings.

All information you supply will be treated in the strictest confidence and will be used only by the University of Leeds. The information will be stored on computer and used solely for statistical purposes under the terms of the 1984 Data Protection Act. At no point will your company be identified or quoted.

Our survey is funded by the Engineering and Physical Sciences Research Council, a government funded body which finances University research. It is for research purposes only, and does NOT imply that such a policy is proposed for Cambridge, although, as you may be aware, there is interest within the local authority to test a parking levy policy.

Thank you in advance for completing the questionnaire, and providing a valuable contribution to this research. Please contact my colleagues Ann Jopson or Ben Still on the above number if you have any questions. We look forward to your response.

Yours sincerely,


A D May
Professor of Transport Engineering

**ANNEX IV: CODING OF THE QUESTIONNAIRE SURVEY**

| *Question* | *Data* | *Field* | *Values* |
|---|---|---|---|
| | **Section 1** | | |
| Ia | 1 | Respondent | Text name |
| Ib | 2 | Position | Text name |
| Ic | 3 | Time with comp | Num yrs |
| Id | 4 | Time at location | Num yrs |
| | **Section 2** | | |
| II a | 5 | Type | 1,2,3,4 (where 2 = SSI) |
| II b | 6 | Staff at location | Num |
| II c | 7 | Total staff | Num |
| II d | 8 | Business locations | Num<br>(if Q8>1 and Q5=2 then problem) |
| II e | 9 | Annual turnover location | Num |
| II f | 10 | Annual total turnover | Num<br>(if Q5=2 and Q10 <> Q9 then problem) |
| II g | 11 | SEG | 1-6 |
| II h | 12 | % local sales | Num % |
| II I | 13 | Yrs at current location | Num yrs |
| II j | 14 | Age of company | Num yrs |
| II k | 15 | Location factors | One field for each of the 12 categories, YES/NO |
| | | | |
| | **Section 3** | **Current transport** | |
| III a 1 a | 27 | Offer comp cars | Yes / no |
| III a 1b | 28 | percentage | Num % |
| III a 2 | 29 | cars business use only | Yes / No |
| III a 3 | 30 | EB travel costs paid | Yes /No |
| III a 4 | 31 | TTW fuel /mileage | Yes / No |
| III a 5 | 32 | TTW PT fares | Yes / No |
| III a 6 | 33 | TTW pass discount | Yes / No |
| III a 7 | 34 | TTW PT pass free | Yes / No |
| III a 8 | 35 | Car parking on site | Yes / No |
| III a 9 | 36 | Car parking elsewhere | Yes / No |
| III b | 37 | Staff with space | Num % |
| III c | 38 | Number of spaces | Num<br>Q7/Q37 should be close to Q36. Amend Q36 if not? |
| III d 1 | 39 | CC: noise | -6 to 0 value |
| III d 2 | 40 | CC: air pollution | -6 to 0 value |
| III d 3 | 41 | CC: congestion | -6 to 0 value |
| III d 4 | 42 | CC: PT provision | -6 to 0 value |
| III d 5 | 43 | CC: cycle/ped | -6 to 0 value |
| III d 6 | 44 | CC: parking emp | -6 to 0 value |
| III d 7 | 45 | CC: parking cust | -6 to 0 value |
| III e | 46 | Specific T problems | Will devise a categorisation based on responses<br>*first stage is list responses* |
| III f 1 | 47 | Company relocation | Yes / no |
| III f 2 | 48 | Main relocate reasons | Will devise a categorisation based on responses |

| | | | *first stage is list responses* |
|---|---|---|---|
| | **Section 4** | **Road user charging** | |
| IV a 1 | 49 | RUC: noise | -3 to 3 value |
| IV a 2 | 50 | RUC: congestion | -3 to 3 value |
| IV a 3 | 51 | RUC: air poll | -3 to 3 value |
| IV a 4 | 52 | RUC parking | -3 to 3 value |
| IV a 5 | 53 | RUC economic | -3 to 3 value |
| IV a 6 | 54 | RUC tourism | -3 to 3 value |
| IV b 1 | 55 | RUC: recruiting | -3 to 3 value |
| IV b 2 | 56 | RUC: retaining | -3 to 3 value |
| IV b 3 | 57 | RUC: delivery | -3 to 3 value |
| IV b 4 | 58 | RUC: cust access | -3 to 3 value |
| IV b 5 | 59 | RUC: rents | -3 to 3 value |
| IV b 6 | 60 | RUC profitability | -3 to 3 value |
| IV c 1 | 61 | charge level impact | yes / no |
| IV c 2 | 62 | impact charge: inner | num |
| IV c 3 | 63 | impact charge: outer | num |
| IV d 1 | 64 | subsidies TTW PT | 1,2,3 (introduce, increase, decrease) |
| IV d 2a | 65 | car allowance | 1,2,3 (introduce, increase, decrease) |
| IV d 2b | 66 | other1 | name |
| IV d 2c | 67 | other2 | name |
| IV d 3 | 68 | value | 1,2,3 (introduce, increase, decrease) |
| IV d 5 | 69 | pay employee | yes / no |
| IV d 6 | 70 | none | yes / no |
| IV e | 71 | influence on choice | 1,2,3 (yes / possibly / no) |
| IV f | 72 | influence | num (1 to 4) |
| IV g | 73 | other responses to RUC | will devise a categorisation based on responses |
| | **Section 5** | **Workplace parking** | |
| V a 1 | 74 | RUC: noise | -3 to 3 value |
| V a 2 | 75 | RUC: congestion | -3 to 3 value |
| V a 3 | 76 | RUC: air poll | -3 to 3 value |
| V a 4 | 77 | RUC parking | -3 to 3 value |
| V a 5 | 78 | RUC economic | -3 to 3 value |
| V a 6 | 79 | RUC tourism | -3 to 3 value |
| V b 1 | 80 | RUC: recruiting | -3 to 3 value |
| V b 2 | 81 | RUC: retaining | -3 to 3 value |
| V b 3 | 82 | RUC: delivery | -3 to 3 value |
| V b 4 | 83 | RUC: cust access | -3 to 3 value |
| V b 5 | 84 | RUC: rents | -3 to 3 value |
| V b 6 | 85 | RUC profitability | -3 to 3 value |
| V c 1 | 86 | charge level impact point | yes/ no |
| V c 2 | 87 | impact charge: outer | num |
| V d 1 | 88 | subsidies TTW PT | 1,2,3 (introduce, increase, decrease) |
| V d 2a | 89 | car allowance | 1,2,3 (introduce, increase, decrease) |
| V d 2b | 90 | other1 | name |
| V d 2c | 91 | other2 | name |
| V d 3 | 92 | value | 1,2,3 (introduce, increase, decrease) |
| V d 4 | 93 | pass charge to employee | yes / no |
| V d 5 | 94 | none | yes / no |

| V e | 95 | influence on choice | 1,2,3 (yes / possibly / no) |
|-----|-----|--------------------|------------------------------|
| V f | 96 | influence | num (1 to 3) |
| V g | 97 | other responses to RUC | will devise a categorisation based on responses |
| | Other | | |
| | 98 | Responsibility | 1,2,3 (totally, partially, unlikely to be responsible) |
| | 99 | external finance | 1,2,3 (yes, no, don't know) |
| | 100 | further involvement | yes/no |