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Working Paper 296

June 1990

**TAXI LICENSING
FOLLOW-UP STUDY:
SUMMARY OF MAIN
RESULTS**

S R Pells

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ABSTRACT

This paper presents the findings of a survey of taxi licensing policy in England and Wales in mid 1989. The survey acts partly as a follow-up study to earlier work reported earlier in this series (Toner 1989 WP 273) and partly as a vehicle for the assessment of a number of additional issues. These issues form the key to an understanding of the consequences to both consumers of taxi services and road users more generally of the decision to either retain or remove restrictions on entry to the hackney carriage trade.

The results presented are purely corss-sectional in nature and do not include a treatment of the important issues of price and service effects. These topics will form the basis of further papers (see, for example Pells, (1990) WP 290 for initial findings on values of waiting time and price elasticities in the hackney market).

TAXI LICENSING FOLLOW-UP STUDY: SUMMARY OF MAIN RESULTS

1. INTRODUCTION

This working paper forms part 2 of a series of two documents reporting the results of surveys of hackney carriage licensing officers in local authorities throughout England and Wales. The first paper (Toner 1989) assesses the state of the taxi market (both hackneys and private hire cars (PHCs)) before the implementation of the 1985 Transport Act by drawing on work carried out by TRRL (Coe and Jackson (1981), Coe (1986)). Toner then compares the state of the industry in 1985 with that in early 1989.

The survey reported here serves both as a follow up to Toner's work, and as a vehicle for the examination of a number of additional key features of local taxi market regulation and operation. The paper is in 11 sections. Section 2 discusses sample issues, sections 3 to 6 discuss licensing and fares policy, section 6 examines the degree of quality enforcement undertaken by local authorities. Sections 7 to 10 discuss peak demand generators, rank provision, trade structure and "Section 16" cases respectively. Finally, the results are summarised in section 11. Throughout the paper results are broken down according to hackney licensing policy and district type (metropolitan or non-metropolitan). The results are summarised and discussed in relation to the effects of the 1985 Transport Act in Pells and Toner (1990).

1.1 Background to the 1985 Act

Sections 10-17 of the 1985 Transport Act concern taxis and PHCs and has 3 main areas of impact, the extension of licensing throughout England and Wales, the partial removal of entry barriers to the hackney trade, and the stimulation of innovatory practices such as shared hackneys and taxi (hackney) - buses. It is with the second area of impact in particular, and the regulator's role in providing the general legislative and physical environment to the operation of the taxi markets that this paper is primarily concerned.

1.1.1 Entry restriction to the hackney trade and Section 16 of the 1985 Transport Act

It is the section of the Act which deals with entry control which has proved the most important and the most controversial. Whereas under the provisions of the Town Police Clauses Act 1847 a district council was able to set the number of licensed vehicles

at whatever level it considered desirable, (in practice this meant the imposition of a restriction on the supply of taxis in many cases), under the new legislation this right would be weakened. The original intention of the Government was to remove the ability of councils to restrict the quantity of taxis completely, but a late amendment prevented this from occurring. Thus, since January 6th 1986 Local authorities have retained the right to restrict entry to the market if, but only if, they can demonstrate on the basis of firm independent evidence that there exists no "significant" demand for taxi services in the area of jurisdiction which is "unmet" (Section 16). Further, an individual who is refused a licence is given the right to appeal against the decision. In practice therefore, in a number of cases it has been possible for applicants for licences, either acting individually or in groups, and using the powers of the court, to successfully overturn a council's decision not to grant a licence (or licences). In contrast a council wishing to remove controls is not required to provide any evidence on demand.

The practical difficulties in defining the terms significant and unmet in this context have come to light in many of the 31 studies that ITS has carried out for district councils to facilitate compliance with section 16. Let us first consider the word "unmet"; it has become clear that this has wider application than simply representing those potential passengers who seek a taxi and are unsuccessful. The now accepted measure for identifying unmet demand is the waiting times of those passengers actually served. Thus unmet demand has come to be interpreted as failure to dispatch a taxi immediately (or at the pre-arranged time where appropriate) if the taxi is requested by phone, or the absence of a waiting taxi at a rank when a passenger arrives.

This rather stringent (although relatively clear) requirement of prompt supply is blurred however when we attempt to determine at which level unmet demand becomes "significant". This is especially the case when we consider the general pattern of demand for taxi services both throughout the day and at different times of the week. In many provincial settings taxis provide the only means of travelling between certain origins and destinations or the only means of travel available at certain times of day. A prime example of this is demand for taxis late at night. In the UK most entertainment facilities close at about the same time in the evening (about 2300), and similarly night clubs most often close between 0100 and 0200. Demand for taxis at these times, at weekends especially, is very much higher than that during all other periods. As a consequence waiting during such periods can often be high, especially at ranks.

1.1.2 A discussion of the possible consequences of removing entry controls.

To supply sufficient taxis to meet peak demand more fully where this exists, or to increase supply through the lifting of entry restrictions altogether could have a number of side effects; these effects and their causes are now discussed. First such policies might produce a reduction in drivers' earnings. Assuming

an elasticity with respect to cab numbers of below unity, an increase in cab supply will produce a less than proportionate increase in demand. This will increase the amount of time each cab is vacant and therefore reduce earnings. If the former level of earnings is to be re-established two alternatives exist, either fares must increase or expenditure on vehicle maintenance or renewal must fall. In 90% of districts fares are determined by local authorities (Toner 1989) and since fares reviews are typically only carried out on an annual or biannual basis, it is likely to be the latter cause of action which is taken in the short run. This may lead to a poor standard of up-keep of vehicles and threaten comfort and safety standards. Further, after a time lag these quality and safety reductions, if they occur, may then be followed by fares increases. This is especially likely if, as is often the case, the evidence used by councils to decide the magnitude of fares increases comes either directly or indirectly from the trade. In the absence of any change in quality enforcement policy on the part of the regulator, there is no mechanism to guarantee that quality and safety levels will be re-established at their former higher levels.

Even in those districts where fares are not regulated there may be a tendency for fares to rise if entry to the market occurs. It has been suggested that where a cruising market exists (with cabs being hired as the result of being flagged down in the street), passengers will be inclined to take the first cab to arrive. This is because there is no guarantee that the next cab to pass will be cheaper, or if it is cheaper, sufficiently so to compensate for the increased waiting time involved in obtaining it. Hence there is no advantage to operators in price competition (Douglas 1972, Schreiber 1975).

Cruising is not the dominant form of operation however, except perhaps in London, and it has been argued that with large scale firms, for example operating on a radio circuit Associations, it would be possible to advertise low fares in a manner which would attract custom and make the operation of competitive fares possible (Coffman 1977). Further, Williams (1980) has argued that where there is a trade substantially made up of rank work the same could apply as long as cabs displayed fare levels and the passenger was free to choose freely between them. This latter condition does not apply at present since a first-in-first-out system operates at ranks throughout the country. The layout of many existing ranks is such that it is only possible for cabs to file in and out according to a strict queueing discipline.

Empirical evidence on this matter is rather sparse at present, but a study carried out in the USA (Teal and Bergland 1987) and another in Chile (Fernande and de Cea 1985) although by no means conclusive do not provide support to the idea that market fares determination in a free entry situation leads to any downward pressure on prices. If anything, these studies show that prices tend to rise. This remains a contentious issue; whereas in theory it is not difficult to envisage circumstances where price competition might occur, many practical difficulties in realising

that competition are apparent.

The reduction in earnings caused by increased supply may in some circumstances be a desirable result. In many instances where local authorities have controlled both fares and quantity, the effect has been to create quasi-rents, or premium values, attached to the possession of a licence. Clearly where such a premium exists there also exists the potential of transferring the benefits to passengers through lower fares and/or increased supply.

A further side effect of the relaxation of quantity control relates to traffic problems. For obvious reasons taxi ranks are often situated in central areas where road space is in short supply. This makes it difficult to extend ranks for either physical or policy reasons. In such cases, an increase in vehicle numbers can create or exacerbate problems of rank over-spill causing obstruction to other traffic. In some areas, by simply increasing the number of vehicles in circulation in the town centre, a quantifiable effect on the level of congestion can result, especially in historic towns where the topography may impose severe constraints on traffic.

2. The survey sample

Of the 367 questionnaires distributed in March 1989, 276 replies were obtained between mid March and early July, a response rate of 73.4%. However, the earlier survey received a higher response of 86% and some councils who responded to the follow-up survey did not respond to the first. For these reasons it is necessary at the outset to devote some attention to the make-up of the present survey sample in order that comparisons between the two samples be put in context.

Of the 47 councils who did not respond to the first survey, 29 (62%) responded this time. The contents of this questionnaire comprised questions from both surveys. Thus we now have information from 349 councils or 93%. Conversely, of those who responded to the first survey some 73 failed to respond to the second. Information from 247 (just under two thirds of all councils) is therefore directly comparable. In the text which follows the different data sets will be classified as follows:-

Table 1. The survey samples.

Data	Description	Sample size
A	All respondents to 1988 survey	320
B	All respondents to 1989 survey	276
C	In B but not in A	29
D	In A and B	247
E	A + C	349

The data set used in each part of the analysis will be identified.

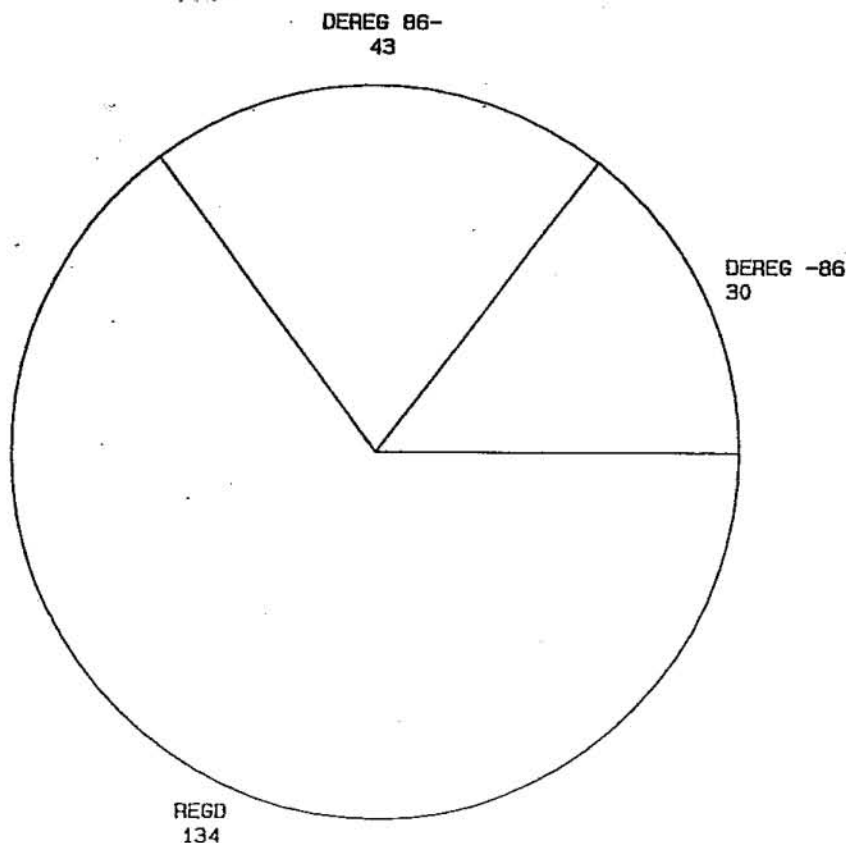
3. HACKNEY LICENSING POLICY

In this section we present an update of hackney licensing policy. The situation throughout England and Wales regarding entry regulation in summer 1989 is summarised in figure 1 (data set D). Of the 231 councils responding to the question, nearly two thirds were regulating entry. We now consider any changes in entry policy over the period between the two surveys.

When we examine those districts for whom we have two sets of data we find that the situation is very much as it was in early 1988 with 2 deregulating, 2 proposing to deregulate, and 1 reimposing restrictions. We are also aware of one non responding district which has reimposed quantity restrictions during 1989. In addition, 5 districts had (or were proposing to) attach conditions concerning the ability to take wheelchairs as a condition of being granted a licence. Thus, as was found in the 1988 survey, for every one authority which has deregulated as a result of the 1985 Act about three are continuing to control entry.

FIGURE 1. HACKNEY LICENSING POLICY

FREQUENCY OF POLICY



Officers were asked if they had issued any new hackney plates in the period since the previous survey; responses were as follows:-

Table 2. The issue of hackney licences.

Outcome of policy	Dereg -86		Dereg -86		Regulated		Total	
	F	%	F	%	F	%	F	%
Issued	38	88.4	28	96.5	61	45.9	164	66.7
Not issued	5	11.6	1	3.5	72	54.1	82	33.3
Total	43	100.0	29	100.0	133	100.0	246	100.0

Data set D

Of the 246 councils responding to both surveys, two thirds had issued some plates. Further, of the 133 regulated districts, nearly half had issued plates in the twelve month period of interest and over 10% of those who had deregulated since the Act had issued none.

Officers in Authorities which had issued licences were asked to indicate the number issued over that period. The responses are given in table 3.

Table 3 Hackney licences issued.

Plates issued	Frequency	Per cent	Cumulative Per cent
1-10	84	54.2	54.2
11-20	29	18.7	72.9
21-30	14	9.0	81.9
31-40	6	3.9	85.8
41-50	8	5.2	91.0
50-100	9	5.8	96.8
101-200	3	1.9	98.7
200+	2	1.3	100.0
Total	155	100.0	100.0

Data set B.

The average number of plates issued by licensing policy is given in table 4. Taking all districts with entry restrictions we see that on average 6 licences have been issued in the period of interest. Taking all authorities who have deregulated since 1986 together, the increase in cab numbers over the period in question has been over three times greater than in those who deregulated prior to the implementation of Section 16.

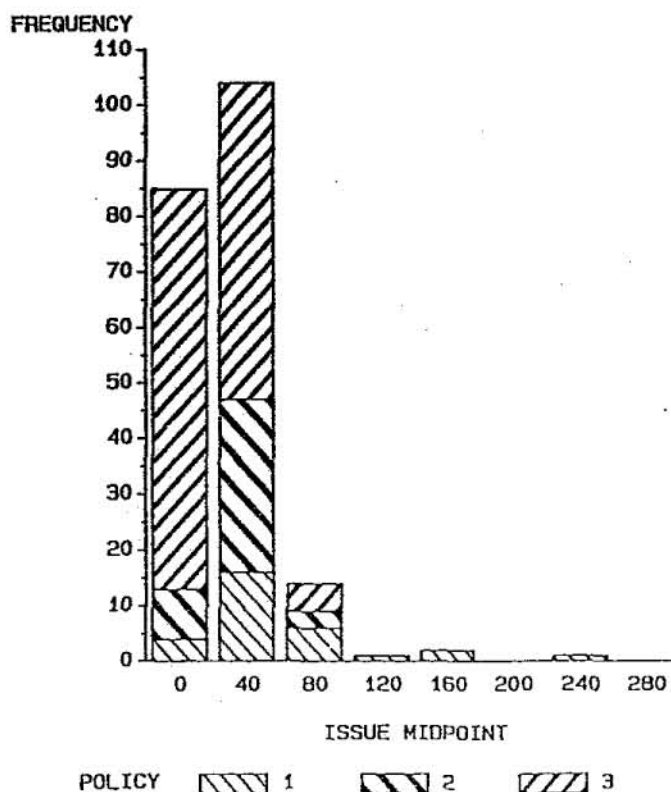
Table 4. Mean issuance of hackney licences.

HACKNEY ENTRY POLICY	MEAN ISSUANCE		SAMPLE SIZE	
	All	Issuers only	All	Issuers only
Deregulated	23.5	26.1	73	66
Since 86	39.2(20.7)	42.0(29.0)	30	28
Before 86	12.6	14.3	43	38
Regulated	6.2	13.0	135	61
Total	13.2	19.9	247	164*

*Total exceeds sum of rows due to missing values.
Data set D. Numbers in parentheses are adjusted for outliers.

The distribution of licence issuance by policy type is illustrated in figure 2. As can be seen post-section 16 deregulated Authorities are subject to outliers thus affecting the mean issuance figure given in table 5. Removing the 4 authorities who have issued in excess of 90 plates, (Arun 255, Great Yarmouth 145, Newcastle Upon Tyne 140 and Newport 97), reduces the average issuance to 20.7 plates and the value for issuers only to 29.0.

FIGURE 2. HACKNEY LICENCE ISSUE BY LICENSING POLICY TYPE



KEY TO POLICY: 1=DEREGULATED 1986
2=DEREGULATED PRE 1986, 3=REGULATED

The number of applications for hackney plates refused was as follows:-

Table 5. Hackney licence applications refused.

Applications refused	Freq	Per cent
0	50	61.7
1-5	15	18.5
6-10	5	6.2
11-20	3	3.7
21-100	5	6.1
101-200	1	1.2
201-400	2	2.4
Total	81	100.0

Data set B

Only 31 districts claimed to have refused licence applications.

Officers were asked if there existed a waiting list for hackney plates: of the 247 districts, 84 (34.0%) had a waiting list. The length of the waiting list for hackney plates is summarised in the following table.

Table 6 Waiting lists for hackney plates.

Waiting list	Frequency	Per cent
1-20	21	25.0
21-40	20	23.8
41-60	12	14.3
61-80	11	13.1
81-100	5	6.0
101-140	5	6.0
141-180	6	7.1
181-220	2	2.3
221-280	1	1.2
281+	1	1.2
Total	84	100.0

Data set B

Taking the information on requests for licences refused and the incidence of a waiting list for plates together provides a more comprehensive idea of the effective restriction on licence issuance (table 7).

Table 7 Incidence of refusal to issue plate to applicant(s)
(number of Authorities).

Effective restriction	Dereg -86		Dereg 86-		Regulated		Total	
	F	%	F	%	F	%	F	%
Refused	2	4.2	0	0.0	41	45.9	43	15.6
not refused	46	95.8	34	100.0	108	54.1	233	84.4
Total	48	100.0	34	100.0	149	100.0	276	100.0

Data set B

Of the 276 responding Authorities 43 or 16% had refused at least one application for a hackney plate.

Having established the extent of entry restriction we now go on to consider the consequences of such a policy: first we look at the premium value attached to a hackney plate. Officers in districts with entry control were asked to estimate the premium attached to a hackney licence plate; the distribution of premium values was as follows;

Table 8 Licence premia.

Premium (£'s)	Frequency	Per cent	Cumulative per cent
0*	11	10.7	10.7
101-1000	6	5.8	16.5
1001-5000	26	25.2	41.7
5001-10000	31	30.1	71.8
10001-15000	16	15.5	87.3
15001-20000	8	7.8	95.1
20001-25000	3	2.9	98.0
25001-30000	2	1.9	99.9
Total	103	100.0	100.0

* The 11 districts included as zeros maintained that the trading of licences either didn't apply in their case or that trading was not permitted. Data set B

The mean plate value is estimated to be £8,800. Taking the 69 districts responding to the both surveys with a non-zero premium we find an average plate value of £9,930. This compares with an average value of £8,060 (or £8,700 at March 1989 prices), reported by the same councils in 1988. Premium values have therefore risen in real terms by 14%. Users of hackney services in areas where quantity restrictions have remained, taken collectively, do not therefore appear to have benefitted since the implementation of the Act. This is an interesting result

which tends to imply that any losses of market power caused by controlled increases in cab numbers are being more than compensated for by increases in real fares and/or cuts in expenditure on vehicles.

Table 9 illustrates the sharp contrast in estimated premiums between metropolitan and non metropolitan districts, the former being only two thirds of the latter.

Table 9. Licence premia by district status (f's)

	All	Mets	Non Mets
Premium value	8,400	11,900	8,000

Data set D: 1989 prices.

4. HACKNEY FARES POLICY

Using information from both surveys it was possible to determine the incidence of fares increases over the period between the surveys for 250 districts; the findings by policy type are given in table 10.

Table 10 Incidence of fares increases by licensing policy type.

increase over period?	Dereg -86		Dereg 86-		Regulated		Total	
	F	%	F	%	F	%	F	%
Yes	12	31.6	8	28.6	44	32.6	70	31.1
No	26	68.4	20	71.6	91	67.4	155	68.9
Total	38	100.0	28	100.0	135	100.0	225	100.0

Data set D

In the 1988 survey officers were asked what evidence they took into consideration when assessing the need for a fares increase; they were also asked if they revised fares on a regular basis, and is so at what intervals (see Toner 1989 p9). Of particular interest with regard to the issue of regulatory capture is the proportion of districts responding to demands from the trade for fares increases and whether this can be related to licensing policy across the country. Using this information along with that on licensing policy in the present survey provides 177 observations summarised in table 11.

Table 11 Proportion of Districts using Trade information in fares determination policy by licensing policy type.

Incorporate Trade opinion?	Dereg -86		Dereg 86-		Regulated		Total	
	F	%	F	%	F	%	F	%
Yes	6	37.5	7	58.3	22	23.2	64	26.2
No	10	62.5	5	41.7	73	76.8	180	73.8
Total	16	100.0	12	100.0	95	100.0	244	100.0

Data sets A and D

The trade opinion appears to be relied upon to the greatest extent by those authorities where entry controls have been relaxed as a result of the Act. Only about one in four currently regulated authorities rely to any extent on the trade for advice on pricing policy.

One further indicator of interest is the incidence of regular fares revisions and the time between these (table 12).

Although the sample sizes here are small, there does appear to be some evidence that fares revisions occur much less often in those districts which have been traditionally deregulated. However, the similarity between the proportions for the other two categories suggests that this is possibly due to the nature of these districts and that those which have deregulated since 1985 have made no change to their fares setting procedures.

Table 12 Time interval between fares revisions by licensing policy type.

Reviewed at least biannually?	Dereg -86		Dereg 86-		Reg,d		Total	
	F	%	F	%	F	%	F	%
Yes	4	13.3	8	44.4	42	44.2	43	25.1
No	26	86.7	10	55.6	53	55.8	128	74.9
Total	30	100.0	18	100.0	95	100.0	171	100.0

Data sets A and D

5. THE LICENSING OF PRIVATE HIRE CARS.

PHCs carry out many of the same functions as hackney carriages; a factor which has led to much confusion among the public, though they are not permitted to ply for hire in the street. The main piece of legislation governing PHC licensing is the 1976 Local Government Miscellaneous Provisions Act. The Act lays down the basis of powers to regulate vehicle type, driver, and safety

standards but does not permit the control of entry. The Act is permissive in nature but does not require that licensing of PHCs be carried out. Officers in districts where licensing does take place were asked if they had issued any PHC licences in the period of interest; the responses were as follows:-

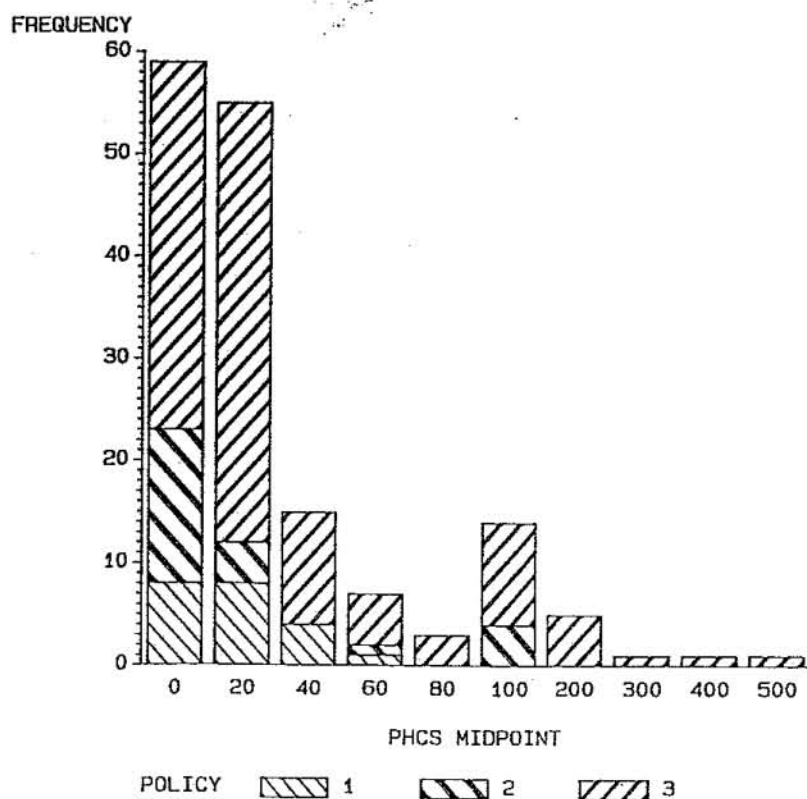
Table 13 Incidence of PHC licence issuance.

Issued licences?	Frequency	Per cent
Yes	197	82.1
No	14	5.8
No licencing	29	12.1
Total	240	100.0

Data set B

Those districts which do licence PHCs were asked to provide details of the number of licences which had been issued; the distribution of responses is illustrated in figure 3 (data set B).

FIGURE 3. PHC LICENCE ISSUE BY HACKNEY LICENSING POLICY TYPE



KEY TO POLICY: 1=DEREGULATED POST 1986
2=DEREGULATED PRE 1986, 3=REGULATED

The number of PHC licences issued by hackney licencing policy is as follows:-

Table 14 Mean issuance of PHC licences.

Policy Viz Hackneys	Mean issuance
Dereg before 86	23.35
Dereg since 86	18.86
Regulated	49.70
Total	38.45

Data set B

The previous study (Toner (1989), Waterman and Toner (1989)), identified an apparent trend whereby the effect of removing entry controls was to change the balance between hackney and PHC numbers without having any substantial effect on total market size. Fairhead et al. (1989) found that over a longer period the hire car market had expanded such that the overall market for taxis and PHCs had increased. The findings from the 1989 survey would tend to support this finding suggesting that the effect identified by Toner was merely an initial effect of the freeing of local markets. Nevertheless, as can be seen from table 5, growth in PHC numbers has been far from uniform with mean growth in post section 16 deregulated districts being only 80% of that in pre section 16 deregulated districts, and 40% of that in regulated districts. In fact, if we take the ratio of the increase in hackneys to the increase in PHCs across districts for the period 1988 to 1989 (including zero entries) we obtain a value of 1.8 for pre section 16 deregulated districts and 3.1 for post section 16 deregulated districts. This suggests much faster growth in taxi numbers relative to PHC numbers in the latter category of districts compared with the former.

Table 15 Mean issuance of PHC licences.

Policy on Hackneys	Mean issuance of PHC licences	Ratio of hackney inc. to PHC inc.
Dereg before 86	23.4	1.8
Dereg since 86	18.9	3.1
Regulated	49.7	0.4
Total	38.5	1.1

Data sets B and D

Those districts who do not licence PHCs were asked to estimate the number of hire cars operating in the area; the responses were as follows:-

Table 16. PHCs operating in unlicensed districts.

PHCs	Frequency	Per cent
1-10	1	6.7
11-50	7	46.7
51-100	4	26.7
101-200	2	13.3
201-400	1	6.7
Total	15	100.0

Data set B

Officers were asked if their authority had adopted the provisions of the 1976 Miscellaneous Provisions Act in the last year or so. Eight authorities had done so in 1988, 6 in 1989, and 1 planned to in 1990.

6. QUALITY ENFORCEMENT POLICY.

Under the provisions of the 1976 Local Government Miscellaneous Provisions Act local authorities have wide powers to attach conditions to the ownership of a hackney carriage or PHC licence. Officers were asked whether they imposed a range of conditions on vehicles licensed as hackneys and PHCs in their area. The responses were as follows:-

Table 17. Vehicle standards enforced.

Variable enforced	Hackneys	PHCs
	Per cent	Per cent
Vehicle type	45.6	39.5
Engine size	37.3	41.3
Space inside	57.0	61.0
Vehicle age	41.9	40.4
Livery	29.9	18.6
Sample size	271	243

Data set B

The most enforced aspect of vehicle for both PHCs and hackneys is the amount of space provided for passengers in the vehicle. Second for hackneys is vehicle type but for PHCs second place goes to engine size. Livery is the least enforced variable for both type of service. Maximum vehicle ages may be specified but cannot be rigidly enforced. For example, if a driver presents a car which is older than the limit but which is judged to be of adequate condition, the authority is obliged to pass it. Maximum desirable vehicle age is specified by about 40% of authorities and seems to be applied equally to PHCs and hackneys.

The level of quality enforcement by hackney licensing policy was as follows: the table gives the per cent of councils in each category who enforce each respective variable.

Table 18. Enforcement by licensing policy.

Variable	Dereg -86	Dereg 86-	Regd
Vehicle Type	51.1	40.0	50.3
Engine size	42.2	37.1	34.5
Space inside	51.1	54.3	63.9
Vehicle age	37.8	45.7	46.9
Livery	33.3	25.7	34.0

Data set D

A potentially important pattern is identified here with vehicle age, perhaps the most useful measure of vehicle quality, being enforced by only just over a third of newly deregulated authorities. This proportion is markedly lower than for the other two categories of authority. Further, internal dimensions of vehicles are regulated to a greater extent in the regulated districts. Otherwise, there do not appear to be any strong differences between the categories.

Analysis of hackney enforcement policy by district status highlights some interesting differences. Metropolitan districts appear to enforce vehicle type and livery to a much greater extent than non-metropolitan districts who seem to concentrate more heavily on features such as engine size and vehicle age when setting standards.

Table 19. Enforcement by district status.

Variable enforced	Non-met	Met
	Per cent	Per cent
Vehicle type	43.0	69.5
Engine size	39.2	19.2
Space inside	57.0	57.7
Vehicle age	43.0	30.1
Livery	28.3	42.3
Sample size	244	26

Data set B

We were also interested to find out how much time was devoted to quality enforcement issues. Officers were asked to provide details of the type and frequency of vehicle checks. The responses for hackneys and PHCs are given in figures 4 and 5 respectively.

It can be seen that in well over half the cases both random and regular checks are employed by councils to monitor the road worthiness of vehicles providing each kind of service. Table 20 disaggregates the results by policy type and district status. Vehicle checks are carried out much more frequently in the regulated/metropolitan districts.

FIGURE 4. ROAD-WORTHINESS CHECKS FOR HACKNEYS
FREQUENCY OF CABCHECK

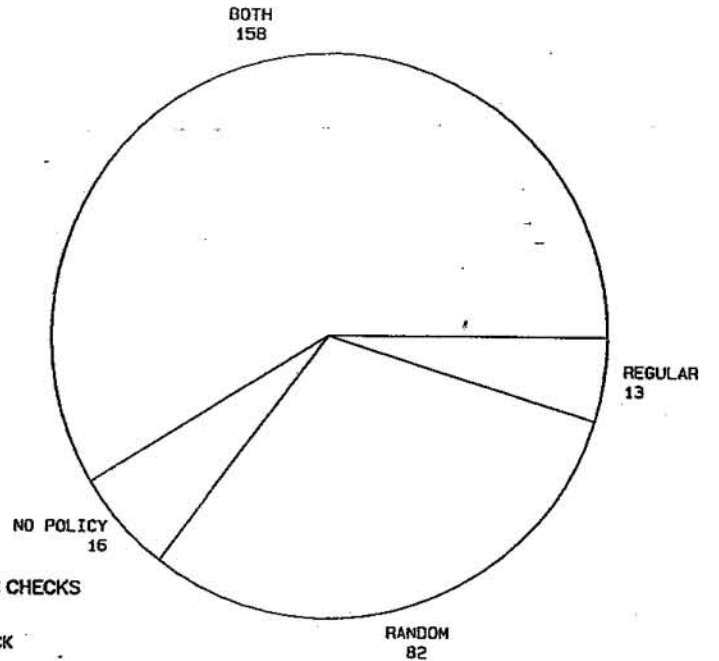
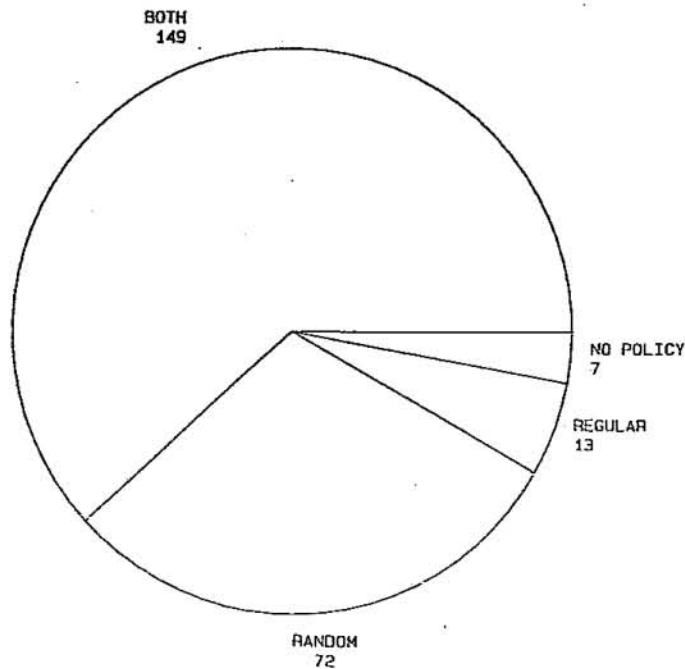


FIGURE 5. ROAD-WORTHINESS CHECKS FOR PHCS
FREQUENCY OF PHC CHECK



Data set B.

Table 20. Road worthiness checks for hackneys by licensing policy and district status.

	Dereg 86-	Dereg -86	Regd	Met	Non met	Total
Monitor	%	%	%	%	%	%
Regular	6.3	6.3	4.1	0	5.4	4.9
Random	40.6	39.6	21.8	19.2	32.0	30.7
Both	46.9	45.8	73.5	76.9	57.3	59.2
No policy	6.3	8.3	0.7	3.8	5.4	5.2
Sample	32	48	147	26	241	267

Regulating authorities are found to employ tighter policy with regard to vehicle checks with only 0.7% of such councils having no monitoring policy. This compares to 6.35 and 8.3% for those where entry controls were removed (or where never in place) before and after 1986 respectively.

The number of officers employed by districts whose brief includes vehicle standards enforcement is as follows:-

Table 21 The number of part time enforcement officers by district type.

OFFICERS	ALL		METROPOLITAN		NON METROPOLITAN	
	Freq	%	Freq	%	Freq	%
0	20	7.6	1	4.2	19	8.0
1	169	64.5	7	29.2	162	68.1
2	46	17.6	8	33.3	38	16.0
3	15	5.7	4	16.7	11	4.6
4	6	2.3	1	4.2	5	2.1
5	3	1.1	0	-	3	1.3
6	0	-	0	-	0	-
7	2	0.8	2	8.3	0	-
9	1	0.4	1	4.2	0	-
Total	262	100.0	24	100.0	238	100.0

Data set D

On average, 1.4 officers are employed. Metropolitan councils employ 2.6 officers whose duties include taxi quality enforcement on at least a part time basis, this compares with an average of 1.3 for non-metropolitan councils.

Table 22 The number of part time enforcement officers by entry policy

OFFICERS	Dereg -86		Dereg 86-		Regulated	
	Freq	%	Freq	%	Freq	%
0	3	7.0	3	9.7	7	4.8
1	30	69.8	18	58.1	93	63.7
2	6	14.0	8	25.8	27	18.5
3	3	7.0	1	3.2	11	7.5
4	1	2.3	0	-	3	2.1
5	0	-	0	-	3	2.1
6	0	-	0	-	0	-
7	0	-	1	3.2	1	0.7
9	0	-	0	-	1	0.7
Total	43	100.0	31	100.0	146	100.0

Data set D

Regulated districts employ 1.53 officers, on average, compared to 1.28 for those who were derestricted before 1986 and 1.42 for those who derestricted after 1986.

The distribution of the number of full time enforcement officers is as follows:-

Table 23 The number of full time enforcement officers by district type.

OFFICERS	ALL		METROPOLITAN		NON METROPOLITAN	
	Freq	%	Freq	%	Freq	%
0	171	67.3	7	29.2	164	71.3
1	64	25.2	11	45.8	53	23.0
2	16	6.3	4	16.7	12	5.2
3	2	0.8	1	4.2	1	0.4
4	1	0.4	1	4.2	0	-
Total	254	100.0	24	100.0	230	100.0

Data set D

Here the difference between metropolitan and non metropolitan councils is more stark with, on average 1.1 full time officers being employed by the former and 0.3 officers employed by the latter.

Table 24. The number of full time enforcement officers by entry policy.

OFFICERS	Dereg -86		Dereg 86-		Regulated	
	Freq	%	Freq	%	Freq	%
0	30	73.2	18	60.0	91	64.1
1	7	17.1	10	33.3	39	27.5
2	3	7.3	2	6.7	10	7.0
3	1	2.4	0	-	1	0.7
4	0	-	0	-	1	0.7
Total	41	100.0	24	100.0	142	100.0

Data set D

For those councils deregulated before 1986 there are 0.39 full time enforcement officers; for those who are currently regulated there are 0.45, and for those where restrictions have been removed since the 1985 Act, there are 0.47 full time enforcement officers. A dichotomy therefore exists between the situation in those districts where entry controls existed until 1986 and the rest with those having traditionally restricted entry more full time manpower to enforcement.

7. PEAK DEMAND CHARACTERISTICS

Experience gained from undertaking taxi service quality studies for a number of authorities has allowed us to identify certain key aspects of taxi markets with the existence of delays at certain times of the day and week, especially when we look at the rank trade. Variables which tend to be important include the number and capacity of night clubs in a district and the availability of other public transport modes at peak times, especially those associated with the late night pub and club trade.

Information about the number of night clubs and night club capacities is summarised in the following table.

Table 25. Night clubs and night club capacity.

	All	Dereg -86	Dereg 86-	Regd	Sample
Clubs	5.8	4.4	8.0	6.9	223
Capacity	2032.0	1028.0	2528.0	2453.0	136
Clubs/pop*	0.005%	0.004%	0.007%	0.005%	148
Cap/pop+	1.7%	1.5%	1.8%	1.71%	133

Data set D * Clubs per head of population expressed as a per cent. + Club capacity as per cent of population.

Night club capacity is seen to be very much lower in those districts where entry regulation has not traditionally been imposed. Interestingly, in those districts where entry barriers have been removed as a result of the 1985 Act there exist the largest number of night clubs and the greatest nightclub capacity both absolutely and in proportion to district population.

Officers were asked about the extent to which late night bus services were available in their districts. The responses were as follows:-

Table 26. The provision of late night bus services.

Level of bus services	Frequency	Percent
No buses after 2200	122	49.4
W'end services after 2200	16	6.5
Services after 2200 all week	109	44.1
Total	247	100.0
Special club services	31	12.6
Metropolitan districts	8	32.0*
Non metropolitan districts	23	10.5+

*Per cent of metropolitan districts

+Per cent of non metropolitan districts. Data set B

Bus services aimed specifically at the late night weekend club trade were available in about 1 in 8 districts, however, in nearly half, no late night bus services are available. The following table shows the availability of late night bus services by entry policy.

Table 27. The provision of late night bus services by entry policy.

Level of service	Dereg -86		Dereg 86-		Regulated	
	Freq	%	Freq	%	Freq	%
None after 2200	22	50.0	17	58.6	53	40.2
After 2200 w'end	5	11.4	3	10.4	5	3.8
After 2200 all wk	17	38.6	9	31.0	74	56.1
Total	44	100.0	29	100.0	132	100.0
Club services	6	13.6	4	13.8	19	14.4

Data set B

The table above shows that those districts who have deregulated since 1986 have the lowest provision of late night bus services. Further, in those districts where entry regulation is still in

place we see the highest provision of late night bus services.

8. RANK DESIGNATION POLICY

In this section we examine the provision and utilisation of rank space, the constraints on the extension of rank space and attitudes of authorities to the problem of rank overspill where this exists.

The number and capacity of ranks are given in table 28.

Table 28. The number of 24 hour ranks.

24 hour ranks	Frequency	Per cent	Cum %
0	8	3.3	3.3
1-2	60	24.6	27.9
3-4	57	23.4	51.2
5-6	42	17.2	68.4
7-8	25	10.2	78.7
9-10	10	4.1	82.8
11-20	29	11.9	94.7
21-30	6	2.5	97.1
31-40	5	2.0	99.2
41-50	1	0.4	99.6
71-80	1	0.4	100.0
Total	244	100.0	100.0

Data set B

The distribution of the number of part time ranks is as follows:-

Table 29. The number of part time ranks.

Part time ranks	Frequency	Per cent	Cum %
0	143	61.4	61.4
1-2	43	18.5	79.9
3-4	20	8.6	88.4
5-6	8	3.4	91.2
7-8	7	3.0	94.8
9-10	6	2.6	97.4
11-20	5	2.1	99.6
21-30	1	0.4	100.0
Total	233	100.0	100.0

Data set B

Officers were asked to disclose the number of designated ranks in their district which were not currently utilised by the trade for the purpose of plying for hire. The following table

summarises the results. It can be seen that in the almost two thirds of districts had at least one designated rank that was not used.

Table 30. The number of under utilised ranks.

Unused ranks	Frequency	Per cent	Cum %
0	78	38.2	38.2
1-2	69	33.8	72.0
3-4	33	16.2	88.2
5-6	9	4.4	92.6
7-8	3	1.5	94.1
9-10	7	3.4	97.5
11-20	4	2.0	99.5
21-30	1	0.5	100.0
Total	204	100.0	100.0

Data set B

The following table presents average values for rank sizes. On average, ranks designated for 24 hour use are larger in those districts who have deregulated since the 1986, these also exhibit the smallest allocation of part time rank spaces. regarding the number of ranks, we see that provision in regulated and recently deregulated districts in of the order of double that in the districts who either never had entry restrictions or removed them before 1986.

Table 31. Mean ranks and rank capacities.

Statistic	All	Dereg -86	Dereg 86-	Regd
Mean space/FT rank	5.2	4.2	6.0	5.6
Mean space/PT rank	4.2	5.7	3.0	4.2
Mean combined ranks	8.1	4.3	8.4	9.8

Data set B

We now turn to a consideration of the amount of rank space per licensed hackney. The following table gives average values. Thus, overall there are 0.42 24 hour rank spaces allocated per hackney and 0.52 total spaces. Provision is highest in regulated and metropolitan districts and lowest in those districts where entry controls have been removed since 1986. This points to the problem of increasing rank capacity in line with increased fleet size, an issue examined in more detail in the next section.

Table 32. Rank space per hackney by licensing policy and district status.

	Dereg -86	Dereg 86-	Regd	Met	Non met	Total
24 hr ranks	0.33	0.24	0.53	0.53	0.41	0.43
All ranks	0.40	0.28	0.61	0.71	0.50	0.52

Data set B

8.1 Adequacy of ranks and constraints on rank designation

officers were asked about the incidence of rank overspill and the action (if any) used against offending drivers. The responses were as follows:-

It can be seen that the problem of insufficient rank space during peak demand periods is widespread with over three quarters of officers having experienced it at some stage and nearly one in four stating that it occurred on a regular basis. We also observe the higher incidence of rank overspill in those districts who have deregulated since 1986 and the regular nature of these occurrences.

In the vast majority of cases, no action was taken against offenders by the authority itself, the enforcement of discipline considered to be the responsibility of traffic wardens and/or the police. In only about 9% of cases (mostly metropolitan in nature) were steps taken to prosecute persistent offenders, with a much smaller number resorting to revoking licences or simply moving drivers on.

Table 33. The occurrence of rank overspill.

	All		Dereg -86		Dereg 86-		Regd	
	Freq	%	Freq	%	Freq	%	Freq	%
Overspill occurs?								
Yes	170	76.2	28	70.0	23	88.5	104	78.8
No	53	23.8	12	30.0	3	11.5	28	21.2
Frequency of occurrence								
Regularly	86	50.9	17	60.7	16	69.6	43	42.2
Occasionally	64	37.9	8	28.6	6	26.1	47	46.1
Rarely	19	11.2	3	10.7	1	4.3	12	11.8
Total	169	100.0	28	100.0	23	100.0	102	100.0

Data set D

The main constraints on the provision of more rank space was distributed as follows:-

Table 34. Constraints on increasing rank capacity.

Constraint	Frequency	Per cent
Congestion	123	57.7
Pedestrianisation	21	9.9
Parking policy	27	12.7
Trade opposed	5	2.3
Public opposed	3	1.4
Other	34	16.0
Total	213	100.0

Data set D

As might be expected the most commonly cited constraints personify the premium attached to centrally located roadspace. Of the "other" responses, 10 authorities stated that there was no demand for additional rank space. "No suitable sites" and "County Council agreement" were each cited as constraints by 6 respondents, "Redevelopment work" by 3, "private ownership of land" by 2 and "lack of resources" by one.

9. STRUCTURE OF THE HACKNEY TRADE.

Officers were asked to estimate the a split of work in each principal town of work between rank, phone, flagdown and contract work. The split, averaged across all districts, is estimated as follows. The estimates are for up to four principal towns in a district in descending order of importance. Thus, for the main town we find that, on average, rank business is estimated to account for just over 40% of total business with phone trips second. Flagdowns are estimated to account for only 1 in 14 trips. As we move from main town to secondary towns we see that rank and flagdown trips fall and phone and contract work increases.

Table 35. Composition of hackney trade.

	Town 1	Town 2	Town 3	Town 4
Rank	43.4	25.7	22.8	17.2
Phone	37.2	57.0	57.6	63.2
Flagdown	7.3	5.5	4.6	4.6
Contract	12.3	11.8	15.0	15.0
Sample	168	96	56	32

Data set D

The per cent of trade estimated for town 1 by licensing policy and district status is as follows:-

Table 36. Composition of hackney trade by licensing policy and district status.

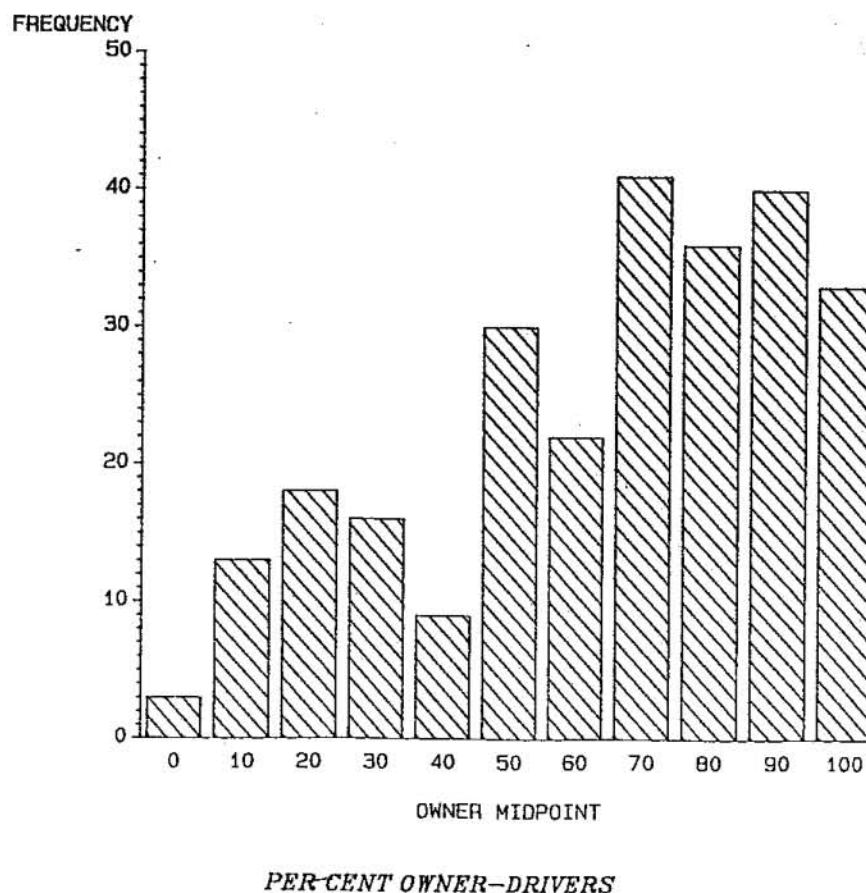
	Dereg -86	Dereg 86-	Regd	Met	Non Met
Rank	44.8	44.0	47.8	49.4	42.4
Phone	38.6	40.2	30.5	22.7	38.1
Flagdown	6.3	3.6	7.8	12.7	6.5
Contract	8.5	12.2	12.2	22.1	11.2
Sample	18	29	101	15	153

Data set D

Regulated districts are considered to be slightly more rank based than the others.

Officers were asked to estimate the proportion of the hackney trade accounted for by owner drivers and whether a trend towards or away from owner drivers could be identified. The responses are illustrated in figure 6.

FIGURE 6. PROPORTION OF DRIVERS WHO OWN THEIR VEHICLE



The mean estimate of ownership of vehicles by drivers was 65.3%. Mean owner drivership by licensing policy is as follows:-

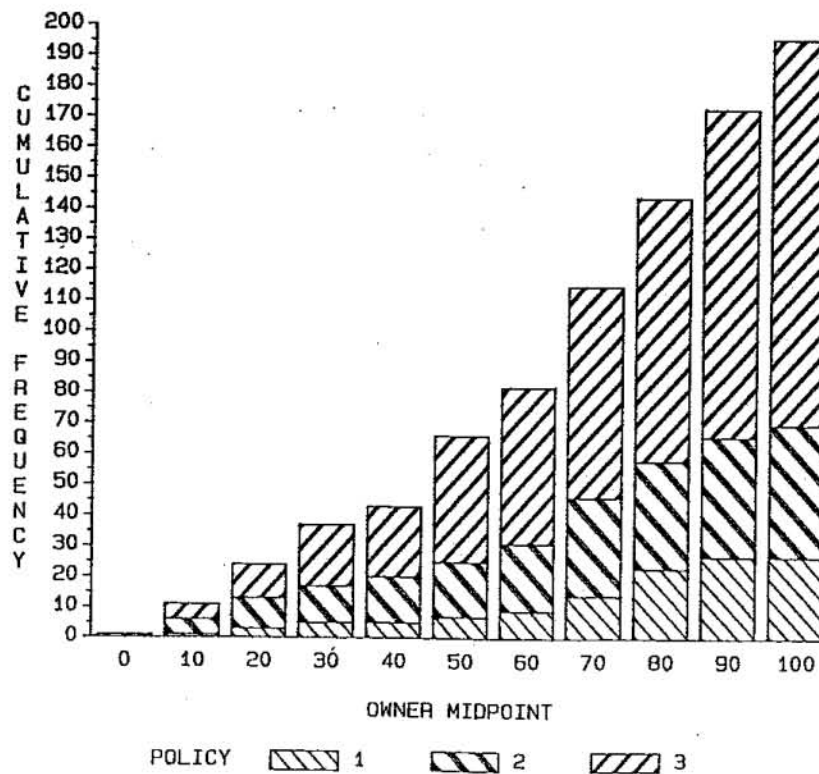
Table 37. Mean proportion of owner drivers by licensing policy and district status.

Mean ownership	Dereg -86	Dereg 86-	Regd	Met	Non met
	68.3	58.7	66.9	73.2	64.4
Sample size	31	48	140	25	236

Data set B

Driver-ownership is highest in the metropolitan districts and lowest in those where entry restrictions have been removed since 1986. The distribution of ownership by hackney licensing policy is illustrated in figure 7.

FIGURE 7. PROPORTION OF DRIVERS WHO OWN THEIR VEHICLE BY POLICY TYPE



PER CENT OWNER-DRIVERS
 1=DEREGULATED POST 1986
 2=DEREGULATED PRE 1986, 3=REGULATED

Officers were asked if they considered a trend either towards or away from owner drivers to exist in their district: the responses are as follows:-

Table 38. Trends in the proportion of owner drivers.

Trend towards owner drivers?	ALL		MET		NON MET	
	Freq	%	Freq	%	Freq	%
Yes	126	48.6	13	52.0	113	48.3
No	30	11.6	3	12.0	27	11.5
No trend	103	39.8	9	36.0	94	40.2
Total	259	100.0	25	100.0	234	100.0

Data set B

Just over half the officers responding considered that a trend towards owner-drivers was evident in their district and only about 12% thought that a trend in the opposite direction existed. District type appears to have no effect on officers' assessment.

The following table gives the same results split by entry policy. We see some evidence to suggest a higher degree of concentration of driver-ownership in those districts where free entry has existed prior to 1986 than in those where free entry is absent or a recent innovation.

Table 39. Trend in driver-ownership by licensing policy.

Trend towards owner drivers?	Regulated		Dereg -86		Dereg 86-	
	Freq	%	Freq	%	Freq	%
Yes	67	47.5	26	61.9	13	43.3
No	14	9.9	7	16.7	4	13.3
No trend	60	42.6	12	28.6	15	50.0
Total	141	100.0	42	100.0	30	100.0

Data set B

10. SECTION 16 COURT CASES

The provisions of the 1985 Transport Act, and in particular, the implications of section 16 of that Act are doubtless familiar to reader and will not be repeated here. Of those councils responding to the survey, 25 had had their licensing policy challenged under Section 16 (or were currently in the course of proceedings). Of the 27 cases cited the council's policy was

upheld in 13, rejected in 11, and was either not defined or pending in 3. In an additional 3 cases the Trade had taken out an injunction to prevent the issue of extra licences but in each case the council had successfully appealed and the injunction had been removed.

11. SUMMARY

This paper has presented the results of a follow up study to that carried out in 1988 by ITS (Toner 1989). The purpose of the present study is to up date some key findings of that study, and to examine a number of additional questions as part of the ongoing programme of research into the workings of local taxi markets being undertaken at the Institute.

11.1 Hackney licensing policy.

Very little change, on aggregate, has occurred re the stance of councils on entry control. However, of the 133 responding councils which retain quantity control the majority, (54%), had issued at least one plate in the period between the springs of 1988 and 1989. Thus, although quantity control remains widespread, absolute restriction of hackney numbers is apparent in less than 30% of responding councils. The extent of licence issuance in districts where quantity controls are retained is relatively low however, with average issuance for those who have issued being half that of all deregulated districts and less than a third of that of those who have deregulated since the implementation of the 1985 Transport Act (though when figures are adjusted for outliers the proportion is much increased).

Where quantity controls remain premium values are estimated to have risen, on average, in real terms by about £1,200 providing a clear indication that for the taxi market as a whole, many drivers who have traditionally enjoyed a privileged market position are continuing to do so despite the Act.

11.2 Fares policy.

The evidence on fares is mixed. On the one hand it appears that there exists the potential for the trade push up fares in recently deregulated markets. For instance, these authorities review fares more often than those where entry has not traditionally been restricted, and are more likely to include the trade in the fares review process. On the other hand, there is some evidence to suggest that, over a period of a year, users in districts where entry controls were in place were more likely to have experienced a fares increase than those in deregulated districts.

11.3 Private hire cars.

Overall, the hire car market has been expanding in the twelve month period of interest. However, growth has not been uniform. In particular, where quantity control for hackneys exists the increase in the number of hire cars over the period in question

has far outstripped that in the deregulated districts.

11.3 Quality enforcement policy.

The level of enforcement of vehicle standards for hackneys and hire cars was found to be similar. For both hackneys and hire cars the most regulated aspect of quality was the internal dimensions of the vehicle. This was followed by vehicle age and type. Enforcement policy does not appear to be strongly related to hackney licensing policy; however, larger differences were observed between metropolitan and non-metropolitan districts with vehicle type and livery being more tightly controlled in the former and vehicle age being more tightly controlled in the latter.

Road-worthiness checks on vehicles of some form were carried out by the vast majority of districts, both random and regular checks were made by about 6 out of 10. There is some evidence to suggest that vehicle road worthiness standards are enforced most tightly in districts where entry is restricted.

On average, districts employ 1.4 officers whose duties include enforcement duties either on at least a part time basis and 0.42 full time officers. Using the amount of manpower as a guide, there appears to be a greater emphasis on enforcement in the metropolitan districts compared to the others and in those where entry controls either currently exist or existed until 1986.

11.4 Peak demand characteristics.

The two variables analysed under this heading were the number and capacity of night clubs and the availability of bus services late at night. Those councils who had deregulated as a result of the introduction of the 1985 Transport Act were found to exhibit slightly higher club and club capacity to population ratios than those where entry controls are still in position, and rather higher ratios than those who were deregulated before 1986. Further, those deregulating since 1986 have the lowest level of late night bus provision.

11.5 Rank designation policy.

Rank space provided per licenced hackney was found to be 0.43 on average. However, for those districts where entry restriction have been removed since 1986 provision is only 0.28 spaces per licensed hackney reflecting the difficulties experienced by the regulating authorities in increasing centrally located rank space in line with increases in supply. It is not therefore suprising to find that the occurrence of rank overspill is highest in these same districts with 89% of officers citing that it occurred and 70% indicating that it occurred regularly. The major constraint on the provision of extra rank space is the conflict with the attempt to combat congestion.

11.6 Structure of the hackney trade.

For principal towns the largest slice of trade is estimated to be rank based trips, accounting for 43%. The telephone trade is estimated to account for 37% with contract work on 12% and flagdowns on 7%. For the minor towns in districts the distribution of work is very much changed however, with telephone work being estimated to account for nearly two thirds of trade and rank trips only representing 1 in 6. Taking the principal town alone we find that rank trips are estimated to be slightly more important in the regulated/metropolitan districts. Contract work is also apparently dependent upon district type being estimated to account for 22% of total trade in the metropolitan districts, very nearly as important as the telephone trade.

11.7 Section 16 cases.

Case information was supplied by 25 councils with the outcomes of actions overall being fairly evenly balanced.

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