AN ANALYSIS OF LOCAL AUTHORITY VIEWS AND TREATMENT OF URBAN FREIGHT IN THE UK

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Abstract

Freight transport is critical in sustaining and growing the urban economy. For the efficient and effective distribution of goods a balanced set of policies that meets the needs of all stakeholders and all users of the urban road network, including residents, businesses and suppliers is crucial. The European Commission (2009) predicts that the proportion of the European population residing in urban areas will continue to grow for the foreseeable future, and hence the demand for goods and services in those areas continues to rise. Despite these predictions, there remains a strong impression that the requirements of freight distribution and logistics operations are often neglected in urban transport policies and strategies drawn up by local authorities.

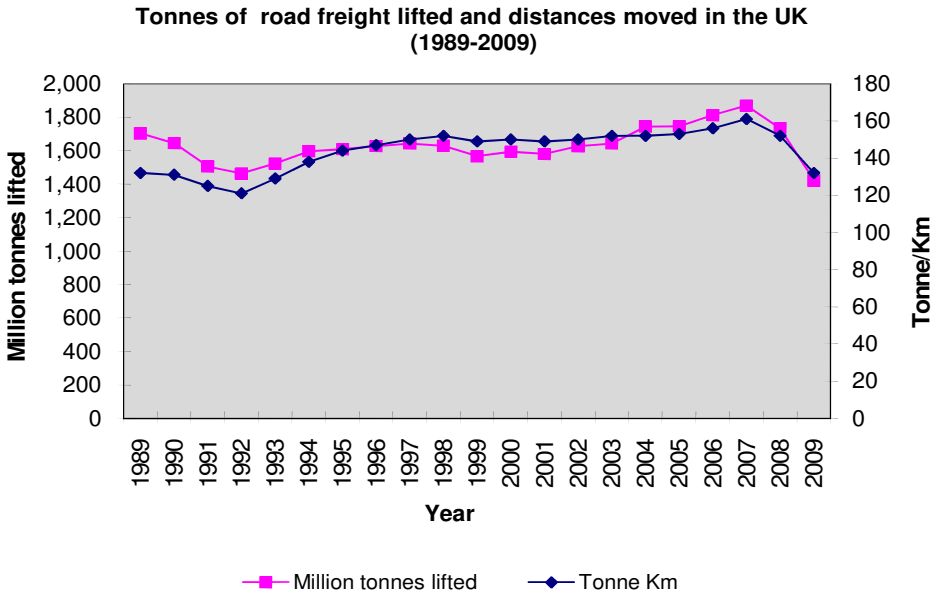
This paper presents an analysis of some of the findings from eleven in-depth qualitative interviews with representatives from local transport authorities across the UK. The research finds that whilst local authorities acknowledge the importance of urban freight to the local economy they know surprisingly little about it. Only half of the authorities interviewed held detailed information on freight and, on further analysis this tends to be about major freight generators and heavily used routes rather than being an understanding of freight movements across the area. Coupled with a relatively limited level of engagement with freight operators through formal partnerships and consultation processes, the mechanisms for including freight issues in the planning process remain unclear. Further work will consider the problem from the perspective of the freight operators.

1 INTRODUCTION

Hicks defined urban freight transport as encompassing “All journeys into, out of, and within a designated urban area by road vehicles specifically engaged in pick-up or delivery of goods (whether the vehicle be empty or not), with the exception of shopping trips” (Hicks, 1977, p101)

In the UK, supply chains have developed around road transport, which is responsible for around 84% of goods moved (tonnes lifted) in the UK (DFT, 2010a). 68% of all road freight movements occur within the same region (*Ibid.*) where options for modal shift to rail and water are not necessarily viable options. This means that road freight will continue to play a vital role in the transport of goods, especially as the final leg of most freight journeys often

takes products into urban areas door to door where road freight is the most appropriate mode in terms of cost, efficiency and time reliability. The graph below shows the historic growth of freight transport in the UK over the past twenty years (DFT, 2010b). However, it is also noted from the graph that over the period 2007 to 2009 there has been a 24% decrease in the amount of freight lifted and distance it is moved over, which is most likely to be the result of the economic recession. It is expected that when the UK economy improves, the amount of freight travelling on the roads will increase.



The principal urban freight policies advocated over the last decade have been through the Local Transport Plan (LTP) process which was introduced in 2000 for all areas in England, with the exception of London (DETR, 1998) to replace the previous system 'Transport Policies and Programmes', which had been operating since 1973 (Shepherd et al. 2006). The new system of LTP was designed to get local authorities to plan five-year transport strategies to accompany their bids for capital resource funds from the national government. Currently, second LTP policies are still valid until the third LTP begins in April 2011. As for each LTP period, the DFT produced a guidance document to assist local authorities with the preparation of LTP 3. The latest guidelines outline the duty of local transport authorities to consult different stakeholders and user groups during the formulation of policies and plans (DFT, 2009). However, the list of stakeholders to consult does not include any freight related ones, aside from freight train operating companies. As LTP3 does not require authorities to formally consult the freight industry, the only means of formal engagement is thorough Freight Quality Partnership's (FQP's), which bring together industry, local government and representatives from local and environmental interest groups. The FQP's were launched in 1996 by the Freight Transport Association (FTA) and have been promoted by the government since 1999 (Browne et al. 2010).

This paper contends that the situation Ogden described in 1984 has changed comparatively little in that local authorities know little about the nature of the freight problem and therefore struggle to plan effectively to tackle the key issues. Section 2 of the paper reviews a selection of discussions on previous studies carried out to address urban freight in the UK and America. Section 3 sets out the methods that have been adopted for this study; and Section 4 describes three main findings from the research along with some proposed solutions. Finally, Section 5 concludes with a discussion of key findings and the intended next steps for this research project.

2 LITERATURE REVIEW

One of the earliest discussions addressing urban freight was a study by Hicks in 1977, which described the various facets of the urban freight problem. These facets included under-utilisation of goods vehicles, traffic congestion and lack of adequate loading/unloading facilities. Hicks also highlighted the different costs that freight transport incurs; ranging from transport operation costs; community costs; external costs; and urban structure costs.

Hicks (1977) also believed that manufacturing is the biggest generator of freight transport, with service industries attracting the greatest volume of freight. This belief still rings true today according to a scoping study conducted by AECOM (2010) for the freight strategy element of the development of the third West Yorkshire Local Transport Plan, which highlighted approximately ten percent more freight is destined for West Yorkshire than originates there, indicating the region consumes more than it produces. The most recent Continuous Survey of Road Goods Transport (CSRGT) backs this up further by showing that amongst the main categories of freight destined for West Yorkshire, a high proportion of the tonnes lifted contain beverages, foodstuffs and miscellaneous items (general haulage), much of which are will be distributed within West Yorkshire.

In 1984, Ogden highlighted that urban transport planning tends to concentrate on "the urban movement of people" rather than goods, which doesn't accurately reflect the significance of freight in towns and cities. In an effort to address this gap in "policy deliberations", Ogden (1984) discusses a number of planning and policy interventions to help improve urban freight distribution. Some of the initiatives discussed include: infrastructure design that considers goods vehicle dimensions and maximum vehicle loads; identification of urban locations which have the potential for "freight generating land uses"; and considerations in the area of traffic flow which is highly sensitive to public policy intervention.

Further work by Ogden (1992) identified three main objectives that urban transport policies should aim to satisfy, they are 1) economic development, which reflects the importance of freight and logistics in the urban economy and its contribution to GDP; 2) transport efficiency, relates to public sector responsibilities such as the provision and maintenance of appropriate infrastructure that facilitates urban freight movements; and 3) minimisation of adverse impacts, which refers to the implementation of measures to reduce the adverse impacts of goods transport in urban areas, for example the introduction of access restrictions in an effort to reduce levels of traffic congestion and pollution.

An American study of urban freight mobility in 1998 recognised that the government organisations which are responsible for planning and developing transport systems need to have greater understanding of the changing requirements of the transport industry. The qualitative study by Morris et al. (1998) was conducted in New York City and obtained data from interviews and focus groups with logistics, transport and distribution managers. It aimed to identify the barriers to moving goods into and through city centres and to extract the different strategies adopted by industry to overcome these issues. Some of the major barriers to freight mobility and the possible solutions that Morris et al. (1998) identified included: congestion during the peak hours and associated parking issues, solved by some hauliers with a switch to Saturday deliveries; and physical difficulties that hinder unloading of large shipments could be broken down into smaller consignments and onto multiple deliveries, although this can add to the congestion problem as more vehicles are added.

In 2007 as part of the Green Logistics Project, Browne et al. completed a detailed predominately UK literature review of logistics activities in urban areas relating to the economic, social and environmental impacts of freight operations. They highlighted the importance of road freight movements in urban goods distribution and presented a variety of solutions to the problems of distributing urban freight identified by freight operators. One of these solutions was the introduction of urban consolidation centres (UCC's), which as defined by Browne et al. (2005) is "a logistics facility that is situated in relatively close proximity to the geographic area that it serves be that a city centre, an entire town or a specific site (e.g. shopping centre), from which consolidated deliveries are carried out within that area". UCC's are often suggested as a solution to tackle the urban freight problem,

despite their low success rate on the continent (possibly due to the ownership and management structure). There have been a couple of successful UCC's set up in the UK, in particular Meadowhall, Sheffield and Broadmead, Bristol, both primarily aimed at consolidating clothing for high street retail.

3 METHODS

3.1 The study area and recruitment

The main study area is the geographic region of Yorkshire and Humberside, which comprises of a variety of different urban areas, and hence encompasses a variety of freight issues. For example, there are historical cities such as York and Ripon; the port city of Kingston-upon-Hull; old industrial towns such as Rotherham and Barnsley; and modern cosmopolitan cities like Leeds; in addition to large urban conurbations, which are particularly evident in South and West Yorkshire. Although, some areas outside this area were also looked at during the study to help ensure that the trends discovered in Yorkshire and the Humber are not unique to the region but occur elsewhere in the UK as well.

Semi-structured in-depth interviews were used to gain insight into the varying perspectives of local authorities on the position of urban freight in transport policies. This method was selected because qualitative interviews of this style allow the greatest flexibility in terms of the order in which issues and questions are raised, taking the form of a detailed conversation, which allowed the small sample of interviewees to provide open-ended answers. All the interviews were conducted in-person to encourage a higher response rate (Groves, 1979) as well as for ease of arrangement and control, and with the exception of one, all were conducted on a one-to-one basis.

A list of potential local authorities to target was drawn up and potential participants were identified for each council where a contact was already known to the research team. Prospective participants were contacted via email, which outlined the research project and inviting them to participate in a research interview. Further emails were sent to generic email addresses for the other councils on the list, either via customer services or to specific transport teams following a series of 'cold calling' to establish a suitable contact. Some participants were recruited through a 'snowballing' process, whereby some early interviewees kindly recommended and provided the contact details for their counterparts in neighbouring authorities.

A total of eleven interviews have been conducted with representatives from local authorities within both the selected region and from a few select authorities from other locations around the UK. Table 1 provides a list of all the participating authorities who provided an interview. It was felt that this sample of local authorities would be able to capture a broad range of contexts common to many urban areas in the UK.

LOCAL TRANSPORT AUTHORITIES INTERVIEWED	REGION OF UK
York City Council	Yorkshire
Barnsley Metropolitan Borough Council	South Yorkshire
North Yorkshire County Council	North Yorkshire
Rotherham Metropolitan Borough Council	South Yorkshire
Hull City Council	Humberside
METRO (West Yorkshire Integrated Transport Authority)	West Yorkshire
Transport for London (TFL)	London
Hampshire County Council	Hampshire (south coast of England)
Leeds City Council	West Yorkshire
Birmingham City Council	West Midlands
East Riding of Yorkshire Council	East Yorkshire

Table 1: List of all participating authorities

3.2 The Pre-Interview Questionnaire

A pre-interview questionnaire was distributed via email to each of the interviewees for completion prior to the interview. The purpose of this was two-fold, firstly it provided a simple generic way to collect brief background information from each of the respondents about the transport demand management measures currently in use in their respective authority; and secondly the questionnaires were able to act as preparation for the respondents prior to participating in an interview.

The questionnaire is divided into four short sections; Section A collected a few details about the respondent including their position/role in the local authority and how many years experience they have had in the role (Warren, 2001). Section B comprises questions about the general views on existing policies as well as what types of Transport Demand Management (TDM) measures and policies are currently in operation. Respondents were asked for their views on polices that affect freight in Section C, including: the barriers to effective freight policies being implemented; and then each respondent was asked to rate their TDM measures and policies on three scales, (1) how effective each policy is or could be at improving freight distribution operations; (2) how favourable their authority is towards the introduction of each policy; and (3) how easy it would be for their authority to implement such a policy. Section C concluded with a few questions on Urban Consolidation Centres (UCC's), which have been considered as one way of improving the capacity of under-utilised delivery vehicles. The final section of the questionnaire (Section D) was open for respondents to propose any other urban freight issues, which they wished to be discussed during their interview.

3.3 The Semi-structured Interview approach

All the interviews were conducted on a one to one basis and followed a detailed interview guide, which was divided into two sections. The questions in the first section were specifically written for local authority respondents and themed slightly towards the creation of the next Local Transport Plan (LTP 3) due to be introduced in April 2011 which authorities are currently engaged in consultations. The second section contained more general questions about urban freight which will be suitable for all stakeholders to answer, as it is proposed that these will be carried forward into the next round of interviews with representatives from the logistics and transport industry.

The opening question for each local authority representative interviewed was focused on the key transport targets or main policy objectives for the towns and cities in their authority. This was followed with a series of questions based around the creation of local transport policies and covered the following themes: local authority choice of policy; policy time frames; and policy selection. The final set of questions asked specifically about the role and consideration of freight in their future plans.

Questions in the second section covered a variety of topics including: perceptions of urban freight and its role in the urban economy; the level of political influence in freight and transport policy; impediments to urban logistics; and concluded with future urban logistics trends.

4 FINDINGS

4.1 Freight drives the urban economy

When interviewed, all of the authorities recognised the important role of freight in the urban economy, although they suggested that this view is not yet widely appreciated by the general public. In areas which had been more severely struck by the economic recession, authorities believe that urban freight is "key to the successful regeneration of the region" (Respondent 4) and port cities appeared to place a very high level of importance on freight as a driver of the economy, providing employment opportunities for many. "Various people have come up

with figures for the amount of jobs associated with the port, something like 20,000 indirect jobs" (Respondent 5).

Aside from the recognition that freight has a significant part to play in boosting the economy, many of the authorities portrayed a rather negative impression of urban freight. Some areas reported exhaust emissions from freight transport being perceived as a major contributor to poor air quality, in some places resulting in belief amongst locals that "lorries are killing them, causing pollution and cancers" (Respondent 2). These authorities feel a lot needs to be done in order to change the public's perception of freight, and the value it has in the economy. In some places, authorities have already started making attempts at radiating a more positive message to the voting public with the introduction of schemes such as 'Eco-Stars' and FORS (Freight Operator Recognition Scheme), of which both are aimed at recognising the freight industry players who operate in an environmentally friendly manner.

Freight Operator Recognition Scheme (FORS)

This is a free, voluntary membership scheme run by Transport for London that aims to improve the delivery of freight in London. It forms part of the wider London Freight Plan, providing the freight industry with a quality and performance benchmark. Its members are offered a wide range of benefits to help them improve performance and cut costs. (TFL, 2010)

Eco Stars Fleet Recognition Scheme

A South Yorkshire wide scheme, for which membership is free and voluntary. It provides each member with tailor-made support for their fleet, to help it operate more efficiently and economically. The scheme aims to help improve fuel efficiency, minimise operating costs, and reduce emissions. (Care4air, 2010)

Rising congestion on the main trunk roads, which provide access into urban areas was also recognised as being a threat to the local economy. The port cities felt most strongly about this, recognising the need to look towards reversing the effects that rapid traffic growth is having on creating journey time unreliability if they are to keep businesses from moving out of the area.

4.2 Authorities appear to lack an in-depth knowledge of local freight flows

The level of knowledge that authorities have of urban freight flows varies from one area to another. In some places authorities have very little knowledge of freight movements in their area aside from knowing of its existence, whilst other authorities, more than half of those interviewed appear to be rather well informed of local freight movements. Those better informed authorities appear to have a good understanding of the freight industry in their geographical area; however this is mainly derived from their own local knowledge rather than from quantifiable data sources.

Despite what at first appears to be a detailed in-depth knowledge of freight activities in their area, the authorities understanding seems to be limited to knowledge of industrial estate locations and land dedicated to logistics and warehousing activities, and some basic port traffic flows due to good relations with port operators. In some cases, popular routes travelled by HGV's are also known, but that is usually due to either issues and complaints raised by local residents or the authority having become involved in mapping and signing HGV routes in and around the area. Data held by the authorities on local urban freight movements is also minimal, and in some places there is no data that directly relates to freight. Generally the authorities have no real idea of the volumes of freight or the different types of commodities that are being moved through their area, with the exception of the few authorities interviewed whose area is home to quarrying, mining and timber industries; and the major ports.

Less than half of the authorities interviewed claimed to have some data on freight. In at least two cases their data was sourced from consultants who authorities had contracted to work on drafting a freight strategy. The main focus of this data was HGV statistics highlighting freight modal share by road in the area and percentages of HGV trips taking place in the area. Other data sources included the FORS and Eco-Stars schemes, which provide the authorities behind them with performance data on HGV trip origins and destinations, profiles of company fleets, fuel usage, CO_2 and collisions. Some authorities have conducted small scale HGV traffic surveys; however this data was collected for and used in conjunction with specific problems raised, such as the public's perception that there is too much HGV through traffic coming through some of the smaller market towns. Other surveys of HGV's relate to scoping the viability of major infrastructure improvements to the network, and relate to proposals for new lorry park provisions, although there is a somewhat heavy reliance on consultants to carry out these surveys and provide the data.

4.3 Freight stakeholders have little influence in policy selection

During the policy planning phase of the Local Transport Plan (LTP) authorities are required to consult with a wide variety of stakeholders, from public transport operators to vulnerable user groups, however aside from freight train operating companies there is no requirement for other freight stakeholders to be consulted when formulating policies and plans (DFT, 2009). Although individual companies are rarely consulted, most authorities make the effort to invite trade associations, namely the Freight Transport Association (FTA) and the Road Haulage Association (RHA) to consult on behalf of their members during the LTP process. Some of the authorities interviewed also attend local Chamber of Commerce meetings to engage with private sector stakeholders, whilst others attend local FQP's for the chance to hear the industry's viewpoint.

Outside of the LTP process, there is little engagement between the freight industry and local authorities; it tends to occur on "an ad hoc basis when there is something that needs to be addressed" (Respondent 3). When asked specifically about engaging with individual freight transport companies one authority responded "We have had dialogue with specific companies but only to really answer specific concerns that they have. We have not really been proactive in engaging with specific companies" (Respondent 4). In some instances authorities even admit that they could be more proactive in engaging with the private sector, even if it is just through the available forums such as FQP's where they are still active; as unfortunately this is no longer an option in some places as the FQP has "sort of fizzled out over the last couple of years" (Respondent 5), Chamber of Commerce and the Local Strategic Partnership meetings could also be attended more regularly by local authority officers.

Of the eleven authorities interviewed, only six reported a good working relationship with the major trade associations (FTA and RHA); whereas local authority attendance at local Chamber of Commerce meetings does appear to be on the rise, with nearly all the authorities interviewed were represented at their respective Chamber of Commerce meetings. Many of the authorities interviewed mentioned that they would like more interaction with the trade associations and that they would like them to get on board and support the authorities' policies. It would appear that some authorities hold the recent demise of the regions by the new coalition government as responsible for the lack of interaction with the trade associations, as previously regional meetings were well attended by representatives from the FTA and the RHA. Whilst other authorities link their lost communication with the trade associations to their local and or regional FQP no longer meeting regularly, if at all in some instances. With the majority of freight trips crossing regional boundaries, it may be more sensible for local authorities to plan for freight on a regional basis. However, due to the change in national government and the recent decision to abolish regional development agencies this could be difficult for authorities to organise in a formal setting.

Some authorities may still lack direct engagement with the freight transport industry on policy selection, however to compensate for the gap in communication, four of the authorities

interviewed mentioned they had recruited individuals with either a background in one of the trade associations (FTA or RHA) or from the road haulage industry. It is hoped that these individuals will be able to engage strongly with the FTA and RHA on behalf of the authority, as well as bring the authority a wide range of new contacts for the authority to liaise with. One of the local authorities interviewed cited the departure of their designated 'Freight Officer' as the reason for their lack of communication and engagement with commerce and industry in their area, and also a contributing factor to the decline of their FQP.

Another authority reported a negative past experience of engaging with individual freight transport companies, which has meant they no longer wish to approach the private sector for their input on policies. The authority distributed questionnaires to companies in the vicinity in the hope of establishing feedback on the possible impacts and effects that a proposed introduction of a road pricing scheme may have on their business and operations. Unfortunately, the authority felt that the responses they received did not contain enough detail to a level that was originally sought, "the broad private sector could not identify if there was road pricing, how they would benefit and not benefit from it..." (Respondent 10). This experience is perhaps an example of why some authorities prefer to engage with the private sector through forums and committees such as the Chamber of Commerce and the FQP's.

4.4 Solutions

Most of the authorities have identified possible strategies for improving urban freight operations, which may also help towards changing the public's perception of freight. Some are already in operation, whilst others are purely ideas for the future or exist in the pipeline. They range from the simple "quick wins to make things more comfortable" on the network (Respondent 10), which include freight specific signage and improved road markings, to bigger investments such as building new lorry parks to reduce the number of HGV's parked up on the roadside, and major improvements geared to modal switch from road to rail so rail lines can accommodate rail freight direct from the port terminal. Other authorities placed high priority on improving air quality and as mentioned above have designed schemes such as the Eco-Stars Fleet Recognition Scheme in South Yorkshire, which is a voluntary scheme that recognises levels of operational and environmental performance on a five star scale (Care4air, 2010). The FORS scheme, also voluntary operates in London and aims to benchmark the freight industry, helping it to become "safer, greener and more efficient" by educating and encouraging best practice to be followed, it rewards operators with either a bronze, silver or gold mark of excellence (TFL, 2010).

A number of authorities expressed a desire to improve route mapping for freight vehicles by producing freight specific maps for their area that can be downloaded onto satellite navigation systems. Although only one of the interviewed authorities has begun working with a company to develop a 'Freight Journey Planner', which will map all the road widths and height restrictions in the county so that HGV drivers can use the tool to help avoid driving down unsuitable roads and getting into difficulty. Some other authorities with the help of local Freight Quality Partnerships (FQP's) have published a more traditional printed advisory freight map of their area, although due to lack of feedback they are unsure of how popular or useful it has been amongst the freight industry. Some authorities provide a route advisory service for wide and abnormal loads, but this service is only available if operators notify the authority of the load beforehand.

The possibility of creating an urban consolidation centre (UCC) had also been considered by the majority of the authorities interviewed but the general attitudes towards establishing one were less than positive. Reasons against a UCC varied, and included: a lack of suitable sites; lack of demand for such a facility amongst local retailers; belief that many of the large retailers in their town centres already distribute consolidated loads and therefore a UCC would be redundant; funding and ownership issues, whereby authorities believe the private sector should take responsibility for developing and managing it. Interestingly, one of the authorities interviewed is really enthusiastic about establishing a UCC to service their town centre. They have identified potential sites and begun discussions with an experienced 3rd

party logistics services provider who also operates the consolidation centre for Meadowhall Shopping Centre near Sheffield.

5 DISCUSSION

It would appear that despite authorities recognising the importance of freight in maintaining the urban economy, and the identification of various solutions and strategies to improve freight movements into and around urban areas, there still remains a significant barrier which prevents local authorities from making these a reality. With urban freight issues seeming to appear rather low on the agenda of the voting population, authorities are left with little or no backing for investing in projects whose potential secondary benefits for the wider population are not recognised. As one respondent pointed out "people don't really understand what freight does in the urban environment and how it contributes to the urban economy" (Respondent 7).

From the interviews conducted with local authorities, there does seem to be a shortage of engagement between industry players and the policy makers. There are a variety of reasons for what appears to be a communication breakdown, from FQP's no longer meeting regularly to difficulties arranging mutually convenient meetings between trade associations and the authorities, resulting in either no meeting or some of the relevant parties being absent. It is perhaps due to the obvious lack of communication between authorities and the private sector that this significant gap in relevant and necessary data collection has occurred. Without the relevant data and adequate interaction with the private sector, authorities could be forming their policies based more on assumptions and ideology than on evidence, as perhaps they should.

With current LTP guidelines not stipulating the importance of authorities consulting with a wide range of freight industry representatives, it is likely that the current state of practice with regards to communicating with industry will continue into the foreseeable future, which will leave industry with very little influence on the creation and selection of the policies put in place for them to abide by.

Even in 1977, Hicks had recognised the important role that policy makers have in decreasing the social cost of urban freight transport. The governing local authorities hold the keys to implementing solutions to the problems of urban freight transport, as they have what appears to be a huge influence on urban freight operations. Stathopoulos et al. (2010) also highlights that "there are few contributions considering policies of city logistics aimed at commercial activities explicitly", and the most commonly studied policies relate to time-window regulations, such as the research by Quak and de Koster (2007) that considers sensitivity amongst retailers to the pressures of delivery time-windows.

The next stages of this research project will begin with a second round of semi-structured interviews, similar to those already carried out with representatives from local authorities, except that they will be targeted at other urban stakeholders. Prospective interviewees for the second round will include retailers; shopping centre management; the Freight Transport Association (FTA); the Road Haulage Association (RHA); and a selection of freight transport operators who regularly make deliveries in urban areas. It is important that these stakeholders views are heard as currently "little is known regarding the attitude of receivers towards policy measures and how they are...to react to policy scenario changes" (Stathopoulos et al. 2010).

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