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Clare McTigue

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Identifying barriers to implementation of bus policies by local authorities in the UK

Clare McTigue, Jason Monios and Tom Rye, Transport Research Institute, Edinburgh Napier University

1   Introduction

Buses are the most frequently used and the most widely available mode of public transport. They are essential for delivering economic, transport, social and health benefits. In particular, bus services provide the links that enable people to get to and from work and access to public services such as health and education. In some instances, bus services are the only option for people without a car. Bus networks are also estimated to generate several billions in economic benefits by providing access to opportunities; reducing pollution and accidents; and improving productivity (Urban Transport Group, 2016).

The latest statistics released by Transport Scotland (2016), Welsh Government (2016) and DfT (2016) show that there is a steady decline in bus patronage and bus mileage across the UK (outside of London). In Scotland, around 414 million passenger journeys were made by bus in 2014-15. This is a decrease of 2% on 2013-14 and a 15% fall from a peak in 2007-08. Similarly, vehicle kilometres have fallen by 12% over the past five years (Transport Scotland, 2016). In Wales, around 101 million passenger journeys were made by bus in 2014-15 which in total travelled 107 million vehicle kilometres. The number of journeys travelled and vehicle kilometres have decreased over the last six years with the number of vehicle kilometres travelled by subsidised services having fallen by around a third since 2009-10 (Welsh Government, 2016).

In England outside of London, around 2.28 billion passenger journeys were made by bus in 2014-15. However, there has been a gradual decline in passenger numbers in recent years including a decrease of 1.3% on 2013-14. Over the last decade in England outside London, local authority supported mileage has decreased by 55 million miles, which is a decrease from 22% to 17% in 2014/15. Furthermore, bus mileage in England as a whole decreased by 0.6% when compared with the previous year (DfT, 2016). According to DfT (2016), this was largely due to a 10% reduction in mileage on local authority supported services in England outside London. *Figure 1* summarises the overall recent trends in local bus journeys by country, which gives a clear indication of a continuing trend of increasing bus use in London and gradual decline in England outside London, Scotland and Wales.
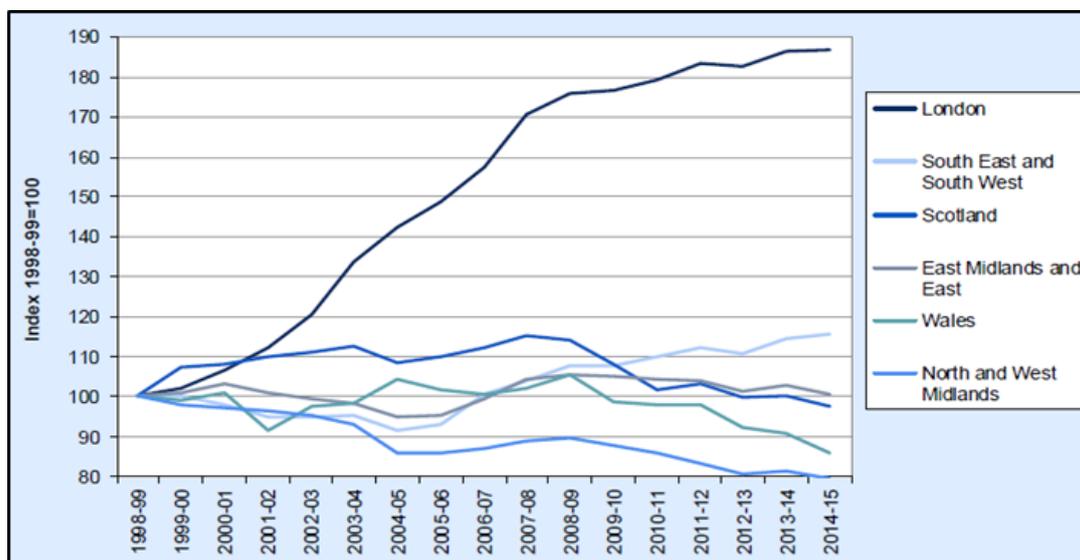

Figure 1:   Local bus journeys by country and groupings of regions 1998-99 to 2014-15

A decrease in bus patronage and bus mileage has a damaging effect on the delivery of bus services across the UK. As well as having a negative impact on economic, transport, social and health benefits, the quality of life suffers due to a lack of physical access to jobs, health, education and other amenities (Banister, 2000). To overcome these problems associated with the decline in pus patronage and bus mileage, local transport policies, and in particular, local bus policies are needed. Local bus policies are vital for the successful provision in local bus service and infrastructure to meet the needs of current bus users and attract passengers from the car.

Currently, bus policies are included in the Local Transport Plans (LTPs) and Local Transport Strategies (LTSs) for transport local authorities in England and Scotland respectively. The first round of these LTPs and LTSs were submitted by English and Scottish local authorities in 2000. The introduction of the LTS by Scottish local authorities was voluntary compared to the statutory status imparted in England by the 2000 Transport Act. The LTPs and LTSs address the options available to local authorities to improve bus services (as well as other modes of transport such as walking and cycling, and policy areas such as road safety), and achieve modal shift from the car. According to Transport Scotland (2005) characteristics of successful local bus networks in Scotland, and the UK generally, include a close working partnership between the local authority and the bus operators. This is vital in order to help identify the barriers and opportunities for better services in terms of traffic demand management; congestion reduction; bus priority measures; the provision of accessible buses; simplified fare structures; and route branding.

The 2000 Act also required English authorities to produce annual monitoring reports to show how their LTPs were progressing. At the end of the first five year LTP period, in 2006, a lengthy Delivery Report was produced to show what had and had not been implemented, and why, over the previous five years. By contrast, Scottish authorities had no statutory requirement to monitor the progress of their LTS. However, the Local Transport Act 2008 in England removed this system of close monitoring of LTPs. Furthermore, this act also removed the requirement to produce a separate bus strategy. With the abolition of annual monitoring reports and a separate bus strategy, there are currently no statutory requirements in place to monitor the performance of local bus services in the UK.

Several studies have highlighted the importance of monitoring LTPs and LTSs. Spear and Lightowler (2005) carried out a study on delivering LTSs in Scotland at the end of the first five year English LTP period. They summarised lessons to be learnt from LTPs and concluded that there were some clear parallels and lessons for the preparation and monitoring the effectiveness of future LTSs in Scotland. Another study by McTigue et al. (2016) compared the LTP 2001-2006 and the LTP Delivery Report for three English cities in order to obtain an insight into the importance of reporting in the implementation of local bus policy. A lack of policy resources was identified as a key barrier for successful implementation, while key aspects of successful policy implementation such as "inter-organisational communication and enforcement activities" and "disposition of implementers" were not being documented by local authorities. This in turn limits the ability of local authorities to monitor the reasons for the success of their policy implementation, or lack of it.

There is currently no specific research available on bus policy implementation at a local level. Evidence of this gap means that there is an opportunity to understand what factors can help or hinder successful implementation and how this can in turn improve bus services and infrastructure. The aim of this paper is therefore to identify barriers to implementation of bus policies by local authorities in the UK.

2   Literature review

2.1   Transport policy

Although there are no specific studies carried out on the implementation of bus policies at a local level, there are however, some studies that have explored the impact of bus deregulation and the impact this has on transport policy. For example, a study by Preston (2016) looked at the impact of bus deregulation

in Wales in the mid-1980s which shows there has been a decrease in bus trips and vehicle mileage, rise in fares and operating costs and decrease in subsidy. The study concludes that for urban parts of Wales, the implementation of a Bus Rapid Transit scheme to supplement the existing rail network would help improve the barriers associated with the deregulation of buses. For rural areas, the study indicates that a lack of funding has prevented the development of more flexible public transport services and therefore proposes the implementation of other reforms such as Quality Contracts, Quality Partnerships and Community Partnerships. Another study by Preston and Almutairi (2014) examines bus deregulation and the long term impact it has on transport policy (using demand, cost and fares models). They found that London (where deregulation is not in place) shows a consistent pattern of welfare gains, but consumers endured dis-benefits when there have been subsidy reductions. By contrast, outside London shows a more mixed pattern where welfare impacts are negative and suggest using a policy response in the form of re-regulation similar to that which exists in London.

Other studies have also examined transport policy by looking at other modes of transport to identify the barriers to developing and implementing sustainable transport policies. These studies include mixed data collection methods such as questionnaires, telephone interviews and face-to-face interviews with key individuals who are knowledgeable or experienced with dealing with the implementation of transport policy. For example, Lindholm and Blinge (2014) assessed the knowledge and awareness of sustainable urban freight transport among Swedish local authority policy planners. A questionnaire was sent to all Swedish municipalities and the results identified a lack of coordination, sufficient resources and effective knowledge transfer among stakeholders in urban freight transport as key barriers related to freight policy implementation. Similarly, Ballantyne et al. (2014) carried out 74 interviews with local authorities and freight stakeholders in northern Europe to examine a variety of cities in relation to urban freight transport, and their inclusion of urban freight stakeholders in local authority transport planning. The study concluded that problems faced by local authorities are not unique to one country or any specific category of urban area and so a generic decision-making framework would help overcome the barriers associated with the interaction between the various urban freight actors and stakeholders.

2.2   Theoretical approaches to policy implementation

The study of policy implementation evolved in the late 1960s and many scholars have attempted to develop policy implementation models and frameworks in order to address the gaps that often occur between policy decision intent and policy performance, or implementation outcome. These models and frameworks are used to determine what makes a policy and its subsequent implementation successful. To address the work carried out by scholars since the late 1960s, their work can be divided into three distinct theoretical approaches to the study of policy implementation.

Firstly, top-down models and frameworks suggest that centralised policymakers should be as clear as possible with their goals, minimize the number of bureaucrats a policy depends on, and limit necessary change (Matland, 1995). There are four key theorists who have embraced this approach and are central to the theory used in this paper. These include: Pressman and Wildavsky (1973); Van Meter and Van Horn (1975); Gunn (1978); and Sabatier and Mazmanian (1981).

Secondly, bottom-up models and frameworks emphasise target groups and service deliverers, arguing that policy is made at the local level (Matland, 1995). There are five key theorists who have also embraced this approach and are central to the theory used in this paper. These include: Lipsky (1971, 1980); Hjern et al. (1978); Elmore (1980); Rein (1983); and Grindle and Thomas (1990).

Finally, hybrid (synthesis) theories try to overcome the divide between both the top-down and bottom-up approaches by incorporating elements of both. This paper will therefore use the McTigue et al. (2016) hybrid theory (*table 1*) which consists of a ten-point framework based on a synthesis of the models and frameworks devised by the four top-down theorists and five bottom-up theorists mentioned above. A

hybrid theory was chosen because it avoids the conceptual weaknesses of top-down and bottom-up approaches.

Table 1:   McTigue et al. (2016) hybrid theory

1	Policy standards and objectives: Effective implementation depends on the nature of the policy to be carried out and the specific factors contributing to the realisation or non-realisation of policy objectives, which vary across policy types.
2	Policy resources: funds are needed for implementation, but the ones available are usually not adequate, which makes reaching policy objectives difficult.
3	Inter-organisational communication and enforcement activities: technical advice and assistance should be provided, and superiors should rely on positive and negative sanctions.
4	Characteristics of implementing agencies: both formal structural features of organisations and informal attributes of their personnel are important. These include, for example, the competence and size of an agency's staff, degree of hierarchical control of processes within implementing agencies.
5	Economic, social and political conditions: general economic, social and political conditions are important for the relationship between objectives and results.
6	Disposition of implementers: This concerns the motivation and attitudes of those responsible for implementing the reform.
7	Individuals at subordinate levels are likely to play an active part in implementation and may have some discretion to reshape objectives of the policy and change the way it is implemented.
8	Policy implementation is an interactive process involving policy makers, implementers from various levels of government, and other actors.
9	Policy may change during implementation.
10	When implementing policies at a local level, front line workers are faced with conflict and ambiguities.

3   Methodology

A mixed data collection method of online surveys and telephone interviews was applied to evaluate the effectiveness of bus policy implementation in the UK. According to Marshall and Rossman (1999), this methodological approach enhances the generalisation of research findings. A self-completion questionnaire survey was designed and administered online to public transport officers in the UK, outside of London. All 143 Local authorities were contacted in order to recruit survey participants. The survey consisted of 16 questions ranging from dichotomous, multiple choice, rank order scaling and rate scaling questions. In addition, semi-structured telephone interviews were conducted with ten of those public transport officers from the online survey in order to elicit a deeper understanding of the results. This second research method provided the best opportunity for in depth discussion to achieve a full understanding of the issues raised in the survey (Bryman and Bell, 2007). The telephone interviews consisted of 16 open ended questions under themes derived from the survey. Data analysis is based on the application of the ten-point framework of the hybrid theory to both sets of data.

4   Results

This section presents the online survey and telephone interview results. This includes a summary of the 16 questions from the online survey and a further 16 different questions based on the findings of the interview questions. Both sets of questions were structured under five common themes which will be used to explain the findings of this study: existing bus policy documents; policy implementation; previous bus policy targets; monitoring of bus policies; and barriers to implementation.

4.1   Online survey results

76 Local Authorities provided their council name while two local authorities remained anonymous. The highest response rate was from combined local authorities (57%) while the lowest response rate was from Welsh local authorities (41%). However, there was reasonable variation of local authority areas

with respect to geographical locations in the UK. *Table 2* provides a summary of the returned surveys based on location:

Table 2:   Returned surveys and location

Location	No. of Returned Surveys	Response Rate for Location
Welsh County Councils	9/22	41%
Scottish County Councils	18/32	56%
Unitary authorities plus the Isles of Scilly	29/55	53%
English County Councils	15/27	56%
Combined Local Authorities	4/7	57%

4.1.1   Existing bus policy documents

This series of questions asked the officers about their current bus policy documents and the key objectives and measures required to achieve these bus policy objectives. The first question in this section asked the officers how long their council had a written local bus policy in place. *Table 3* indicates that almost half of the respondents said they had a written bus policy in place for 11 or more year. In particular, 73.9% of councils had a written bus policy in place. 1.3% said they were in the process of developing one, however, 17.6% said they don't have a local bus policy written down in a single document or don't have any kind of local bus policy. The lack of a local bus policy document is most likely linked to the abolition of a separate bus strategy in the 2008 Local Transport Act.

Table 3:   Number of years written bus policy document in place

Answer	Count	% answer
Less than 1 year	1	1.3%
1 to 5 years	11	13.8%
6 to 10 years	8	10.0%
11 or more years	39	48.8%
We don't have a local bus policy written down in a single document – it is more a collection of actions and policies from different documents	13	16.3%
We don't have any kind of local bus policy	1	1.3%
We are in the process of developing one	1	1.3%
Not answered	6	7.5%

The next question in this section asked the officers to identify their bus policy objectives. 93% of the officers answered this question which indicates councils are clearly setting objectives. *Table 4* shows that between 51.3 - 88.8% of officers included the listed policy objectives which positively demonstrates councils are working towards improving the current local public transport system within the UK.

Table 4:   Bus policy objectives

Answer	Count	% answer
To promote equal access to transport	71	88.8%
To improve environmental quality and reduce the effects of transport pollution on air quality	63	78.8%
To help the transport system operate more efficiently	60	75.0%
To provide opportunities for fostering a strong, competitive economy and sustainable economic growth	57	71.3%
To maintain the transport infrastructure to standards that allow safe and efficient movement of people and goods	56	70.0%
To contribute to national and international efforts to reduce transport's contribution to overall greenhouse gas emissions	47	58.5%
To improve safety, security and health, and in particular to cut the number and severity of road casualties	41	51.3%

The last question in this section asked the officers to select from a list provided, the stage at which bus measures are at in their city, in order to be able to judge the level of success of implementation of different types of measure. Successful measures included the provision of bus information, bus shelters and improved pedestrian access to stops. RTPI is also becoming more successful where 25% have considered this and will implement it in the future. Similarly, 21.3% said they will also implement multi-operator integrated tickets and review current bus lane network and its operation to ensure it is effective, legible and enforced. However, some measures appeared to be less successful including tickets which can be bought before boarding buses, personal security (CCTV, lighting), and new bus lanes. The least successful measure (maximum fares) could arguably be a result of its applicability to the officers interviewed whereby maximum fares can only be set by English and Welsh councils if they have a statutory quality partnership in place (under the 2008 Local Transport Act). In Scotland there is no legal possibility for councils to set maximum fares.

Table 5:   Bus policy measures

Answer	We have implemented this	We considered this and we will	We considered this but we will not	We will look at this in the future
Bus Information – timetables and bus stop flags	**72 (90.0%)**	4 (5.0%)	2 (2.5%)	0 (0%)
Shelters	**67 (83.8%)**	4 (5.0%)	2 (2.5%)	3 (3.8%)
Improved pedestrian access to stops	**64 (80.0%)**	11 (13.8%)	1 (1.3%)	4 (5.0%)
Real time passenger information	52 (65.0%)	**20 (25.0%)**	4 (5.0%)	3 (3.8%)
Multi-operator integrated tickets	40 (50.0%)	**17 (21.3%)**	6 (7.5%)	11 (13.8%)
Reviewing current bus lane network and its operation to ensure it is effective, legible and enforced	29 (36.3%)	**17 (21.3%)**	10 (12.5%)	15 (18.8%)
Tickets which can be bought before boarding buses	29 (36.3%)	10 (12.5%)	8 (10.0%)	**21 (26.3%)**
Personal security (CCTV, lighting)	28 (35.0%)	13 (16.3%)	13 (16.3%)	**16 (20.0%)**
New bus lanes	26 (32.5%)	16 (20.0%)	**19 (23.8%)**	10 (12.5%)
Maximum fares	9 (11.3%)	10 (12.5%)	**21 (26.3%)**	**18 (22.5%)**

4.1.2   Policy implementation

This section of the survey investigates policy implementation related to the council area of each officer. The officers were firstly asked to indicate the number of teams within the council's transport department who have responsibility for the implementation of bus policies. Slightly alarmingly, 15 officers didn't answer this question which could suggest they did not know whether there were such teams within the council, or perhaps they simply don't have teams within the council responsible for the implementation of bus policies. The average number of teams within the council responsible for the implementation of bus policies was two.

Another question in this section asked the officers for their perception of what was planned to be implemented, and what was actually implemented for the previous LTP/S. The majority of officers said that either most of the policies that were planned to be implemented, were implemented successfully (31.3%) or more than half of the policies that were planned to be implemented, were implemented successfully (45%). 13.8% of officers who didn't answer this question could indicate that they were not aware of their success. Based on the results from the previous section, it appears that officers are more positive when asked to report on the percentage of policies implemented overall than when asked to consider specific policies and measures.

The final question in this section asked the officers if bus measures were implemented as planned and without problems in their city. The officers agreed or strongly agreed that the bus policy measures that were implemented as planned and without problem included bus information (timetables and bus stop flags) (72.5%), improved pedestrian access to stops (67.5%) and quality bus stops (66.3%). However, the officers disagreed or strongly disagreed that the bus policy measures that were implemented as planned and without problem included new bus lanes (37.6%), maximum fares (32.5%) and multi-operator integrated tickets (28.8%). Interestingly, these results are similar to those found in the previous section where the officers were asked to state the stage at which various measures are at in their city. This clearly indicates there has been little progress with the success of implementing certain bus measures since the last LTP/S and that there are measures that present particular implementation difficulties.

Table 6:   Bus policy measures implemented as planned and without problem

Matrix row	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Improved pedestrian access to stops	18 (22.5%)	36 (45.0%)	5 (6.3%)	9 (11.3%)	0 (0%)
Quality bus stops	13 (16.3%)	40 (50.0%)	10 (12.5%)	3 (3.8%)	0 (0%)
Multi-operator integrated tickets	6 (7.5%)	17 (21.3%)	19 (23.8%)	14 (17.5%)	9 (11.3%)
Marketing targeted at persuading regular car commuters to use public	5 (6.3%)	26 (32.5%)	21 (26.3%)	11 (13.8%)	1 (1.3%)
New bus lanes	3 (3.8%)	10 (12.5%)	22 (27.5%)	19 (23.8%)	11 (13.8%)
Maximum fares	1 (1.3%)	9 (11.3%)	26 (32.5%)	14 (17.5%)	12 (15.0%)

4.1.3   Previous bus policy targets

The survey included a section on previous policy targets to identify whether councils set targets and if they were met. The results show 43.8% of councils met most of the targets or more than half of the targets set in the LTP/S, while 18.8% didn't have targets related to bus policy. In terms of meeting targets, the results show councils didn't set targets for the number of vehicle kilometres per annum (73.8%), fares (70%), cost per passenger journey for services (65%), and age and quality of vehicles (51.3%). These results show inconsistency between UK councils when meeting or setting targets and therefore are not identified as an important stage of the policy process.

4.1.4 Monitoring of bus policies

The officers were asked how bus policies and measures are currently monitored by their council. The most popular form of monitoring included service reliability and punctuality (60%), number of passengers per annum (52.5%), and number of passengers satisfied with bus services (41.3%). It was interesting to see continued monitoring carried out by councils given annual monitoring reports were abolished during the Local Transport Act 2008.

4.1.5 Barriers to implementation

The last section of the survey asked the officers to identify which barriers have the greatest impact on implementation and which have the least impact on implementation. The greatest barriers included availability of resources, characteristics of local authority (e.g. competence and size of staff) and coherence and comprehensibility of the written policy. Barriers to have a lesser impact on implementation included public opposition, relationship between key people in Council and local bus operator(s), and reshaping or changes to policy measures by local implementation frontline staff. A comment box also enabled the officers to identify key barriers to implementation in their council area. Comments include: "*limited funding*", "*bus wars between operators*"; "*political will of members*"; "*physical space and layout of roads*"; "*high car ownership*" and "*public opinion influencing outcomes*".

4.2 Telephone interview results

The following results are based on the finding from the telephone interviews conducted with ten of those public transport officers from the online survey.

4.2.1 Existing bus policy documents

The first question in the telephone interviews asked the officers if they had a bus policy document in place. The majority of officers interviewed said they did not have a specific bus policy document in place. A further question asked the officers how important they thought it was to have this document in place. Interestingly, all officers agreed that it is important to have this document in place.

4.2.2 Policy implementation

This aim of this section was to unfold why certain answers were provided in the online survey in relation to policy implementation. Similar to the survey, the officers were firstly asked how many different teams within their council's transport department have responsibility for the implementation of bus policies. Eight out of ten officers interviewed said they knew the number of teams within their council's transport department. However two officers said they don't know or that they wouldn't call it a '*team*'. This led to the next question which asked the officers to explain why 15 respondents in the survey did not identify how many different teams were within their council's transport department. The officers suggested they "*don't have the teams*" or it was a combination of both answers. Three officers thought it was related to communication issues and that "*people can be naïve and don't want to take responsibility*".

It was evident in the online survey that there were areas of concerns highlighted throughout (in terms of achieving bus policy objectives, meeting targets, and barriers related to policy implementation). The interviews revealed that the majority of officers agreed that there were inconsistencies and councils want to "*give the impression how well they did*". A final question in this section asked the officers to comment on bus policy measures in their city. Less than half of the officers said they have been successful in implementing bus policy measures while three officers made reference to political constraints that prevent bus policy measures being implemented as planned. This could help explain similar results found in the online survey where councils were less successful at implementing bus policy measures.

4.2.3   Previous bus policy targets

This series of questions asked the officers about the success of targets in their city. Only one council said they met all their targets while three officers said they met the majority of their targets. Reasons for not meeting targets included a "*lack of communication within the council and the community*" and "*a lack of advertisement and marketing*". When asked what more what more could councils do to achieve targets, three officers highlighted the need for further "*financial support*" to help achieve targets. However, one officer said they succeeded in their own territory and it was the "*neighbouring authority that affected the outcome of targets*", while two officers said it was more of an issue with the actual targets. Other factors that are preventing councils from achieving targets include a "*lack of funding*" or "*financial support*", and "*political will*". The officers were then asked if their council had targets. Six of the officers said they set targets in their council. In contrast to this, three officers said there was "*little progress on setting targets since the latest LTP/S came into effect*". These results could help explain why targets are not seen as an important factor as identified in the online survey. The final question in this section asked officers if targets have an impact on how policies are implemented in their city. It was interesting to see that more than half of the officers said targets have an impact.

4.2.4   Monitoring of bus policies

This section asked the officers if they thought it was important for monitoring to be in place to achieve bus policy measures. Eight officers felt it was important, however, two officers said there should be "*less concentration on bus policies*" and that it was less important now because there is no funding attached. This section also asked the officers if more bus policy measures would be implemented as planned and without problems, if stricter monitoring was in place. Nine officers agreed bus policy measures would be implemented as planned and without problems, however, one officer said it was more about "*refining the policy instead of adding more to it*". Again, this was an interesting result given the abolition of monitoring during the Local Transport Act 2008.

4.2.5   Barriers to implementation

The last section asked the officers to rank the greatest barriers to impact implementation as identified in the online survey. Eight officers ranked availability of resources (e.g. funding) as the greatest barrier to impact implementation in their city, while eight officers did not agree that characteristics of local authority was one of the greatest barriers to impact implementation. The officers were then asked to rank the barriers which have a lesser impact on implementation as identified in the online survey. In contrast to the survey, the majority of officers did not agree public opposition and the relationship between key people in Council and local bus operator(s) had a lesser impact on implementation. However, four officers agreed reshaping or changes to policy measures by local implementation frontline staff had a lesser impact. Finally, the officers were asked to comment on other barriers highlighted in the survey. Around half officers said communication amongst staff involved in the policy implementation process, and motivation and attitudes of those responsible for developing or implementing bus policies were not barriers in their city.

4.3   Theoretical analysis of online survey and telephone interviews

Table 7 shows the hybrid theory which was used to identify the key barriers associated with bus policy implementation in the UK, outside of London. This theory also helped to rate the impact of these barriers on implementation. The highest impacts includes policy standards and objectives; policy resources; inter-organisational communication and enforcement activities, and characteristics of implementing agencies. The online surveys highlighted economic, social and political conditions; interaction between key people; and front line workers faced with conflict and ambiguities as barriers to have a lesser impact on implementation. However, the telephone interviews identified further key barriers associated with these variables and therefore were ranked as a medium impact on implementation. Finally, both sets of data found disposition of implementers; individuals at subordinate levels who play an active part in implementation; and policy change during implementation had a lesser impact on implementation.

Table 7:   Theoretical analysis of online surveys and telephone interviews

	Theory	Barriers		Impact
		Online Survey	**Telephone Interviews**	
1	**Policy standards and objectives**	17.6% of local authorities don't have a specific bus policy document in place. "Coherence and comprehensibility of the written policy" was one of the greatest barriers to impact implementation.	Majority of officers said they do not have a specific bus policy document in place. All agreed it is important to have this document in place. Majority felt it was important to have monitoring in place to achieve bus policy measures. Policy measures would be implemented as planned and without problems, if stricter monitoring was in place.	High
2	**Policy resources**	Ranked the greatest barrier to impact implementation. "*Limited funding*" identified as key barrier.	Ranked the greatest barrier to impact implementation. Lack of resources prevented councils meeting targets.	High
3	**Inter-organisational communication and enforcement activities**	Ranked fourth highest barrier to impact implementation.	Half of officers said communication was a barrier to implementation. Communication barriers highlighted between neighbouring authorities, bus operators, stakeholders, politicians and the general public).	High
4	**Characteristics of implementing agencies**	Ranked second highest barrier to impact implementation. 15 officers could not indicate the number of teams within the council's transport department who have responsibility for the implementation of bus policies.	Majority did not agree this was one of the greatest barriers. Staffing difficulties such as shortage of staff or over-worked staff, was raised on several occasions. Two officers didn't know the number of teams responsible for implementation of bus policies.	High
5	**Economic, social and political conditions**	Officers identified key barriers in their area as "*bus wars between operators*"; "*political will of members*"; "*physical space and layout of roads*" and "high car ownership".	Barriers include political constraints and support; impact of neighbouring authorities; current economic climate and public opposition.	Medium
6	**Disposition of implementers**	Ranked a lesser impact on implementation.	Four officers did not agree this had a lesser impact on implementation.	Low
7	**Individuals at subordinate levels play an active part in implementation**	Ranked a lesser impact on implementation.	Three officers did not agree this had a lesser impact on implementation.	Low
8	**Policy implementation is an interactive process**	Ranked a lesser impact on implementation.	Majority of officers highlighted the importance for the interaction between the councils and bus operators and felt it was "key" to have "a good strong partnership arrangement"	Medium
9	**Policy may change during implementation**	Ranked a lesser impact on implementation.	One officer said policy change prevented their council implementing particular policy measures. Another officer said partners and stakeholder working groups are key so policy doesn't change during implementation.	Low
10	**Front line workers are faced with conflict and ambiguities.**	Ranked a lesser impact on implementation. Some officers identified key barriers in their area as "*bus wars between operators*", "*public opinion influencing outcomes*".	Barriers include conflict and ambiguities between councils and the general public, local bus operators who were in competition with each other, and neighbouring councils who were fighting amongst each other for budgets.	Medium

5   Conclusions

This paper has identified the barriers to the implementation of bus policies by local authorities in the UK. Analysis of the online surveys and telephone interviews using the new hybrid theory revealed three barriers to have a particularly high impact on implementation. Both sets of data identified the "*coherence and comprehensibility of the written policy*" as a key barrier due the problems associated with current bus policy documents. This was noticeable where 17.6% of the officers from the online survey do not have a specific bus policy document in place, while the majority of officers interviewed also do not have this specific document in place. However, it was interesting to see all officers interviewed expressed the importance of this document. Other concerns over the coherence and comprehensibility of the written policy includes achieving the objectives set in the written policy document. Although the survey results reveal councils are clearly setting objectives, there were many areas of concern highlighted throughout the survey in terms of meeting targets and implementing bus policy measures to achieve these objectives. On the contrary, the interviews revealed that more than half of the officers believed targets have an impact on how policies are implemented in their city.

The "*availability of resources*" was also seen as another high impact barrier on bus policy implementation. In fact, both the online survey and interviews ranked this as the greatest barrier to impact implementation in their area. The interviews revealed that a lack of funding was preventing councils from achieving targets and there was a need for further financial support to help achieve targets. These results confirms the findings of McTigue et al. (2016), Preston (2016), and Lindholm and Blinge (2014) where local authorities find it difficult to allocate resources to new transport policy initiatives.

Another high impact barrier to implementation was "*inter-organisational communication and enforcement activities*". This was ranked as the fourth highest barrier in the online survey, while the telephone interviews revealed that there were concerns in some councils over the communication between neighbouring authorities, bus operators, stakeholders, politicians and the general public. Interestingly, McTigue et al. (2016) found inter-organisational communication and enforcement activities were not being documented by local authorities which therefore limited the ability of local authorities to monitor their policy implementation. It is quite evident that communication is essential for successful implementation, which also supports the opinions of Transport Scotland (2005), where characteristics of successful local bus networks in Scotland, and the UK generally, include a close working partnership between the local authority and the bus operators.

A final high impact barrier to implementation found in this study includes the "*characteristics of implementing agencies*". The surveys revealed this as the second highest barrier to impact implementation in council areas. In contrast to this, the officers interviewed said this was not one of the greatest barriers in their area, however, staffing difficulties such as shortage of staff or over-worked staff, was raised on several occasions. Furthermore, the surveys revealed 15 officers could not indicate the number of teams within the council's transport department who have responsibility for the implementation of bus policies, while two officers interviewed didn't know either. This indicates an uncertainly amongst staff in terms of nature and resources of their own organisations as implementing agencies.

Other barriers which were highlighted as a medium impediment to implementation were associated with "*economic, social and political conditions*"; "*interaction between key people*"; and "*front line workers faced with conflict and ambiguities*". These barriers were identified as a lesser impact in the online surveys, however the interviews revealed these barriers are in fact problematic. Findings from this paper show similar results to Ballantyne et al. (2014) which suggests a generic decision-making framework would help overcome the barriers associated with the interaction between the various urban freight actors and stakeholders. The results of this paper also support the findings of Ballantyne et al. (2014) who argues that problems faced by local authorities are not unique to one country or any specific category. Therefore, the ten-point framework used in this paper is not limited to bus policy and could also be used in other transport policy categories such as walking, cycling, freight, parking etc.

To conclude, the findings from this paper informs policy makers, local authority staff, regional transport partnerships, bus operating companies and other practitioners working within the field of transport of the key barriers to bus policy implementation in the UK. These barriers must be addressed for a successful bus service to be in place and to overcome recent trends which show a decline in pus patronage and bus mileage.

6   References

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