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A PROPOSED APPROACH FOR DETERMINING THE SUCCESS OF PUBLIC TRANSPORT PROJECTS IN IRELAND.

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Abstract

In Ireland, the planning and development of public transport projects must be taken through a detailed process involving stakeholders including relevant government departments, government agencies and other public and private stakeholders. Various tasks must be undertaken such as technical feasibility studies, route selection, public consultation, economic appraisal, environmental assessment, detailed design and statutory approval procedures and public procurement. This paper will propose a new scientific methodology for determining the potential impact and success of public transport projects prior to the planning process as well as their implementation, management and operation in Ireland. This paper will also consider similar research undertaken internationally and a similar approach developed previously.

Introduction

There is a conception in Ireland that the planning and implementation (including construction) of public transport projects can be a lengthy process and that that key projects of strategic importance in Ireland's national transportation infrastructure remain seriously behind schedule (Forfás, 2000). Whilst considering the context to which public transport is planned in Ireland and abroad, the motivation and overall scope of this PhD research has been concerned with studying the roles of key stakeholders for the planning, implementation, management and operation of public transport projects in Ireland in order to gauge the efficiency and suitability of the Irish planning process in relation to our international counterparts.

The aim of this paper is to present a new methodology by which the potential impact and success of public transport projects in Ireland can be measured prior to the commencement of the planning and implementation processes. This proposed scientific and reproducible methodology will describe the approach that is being considered as the research progresses. The methodology will describe a means of measuring the success or otherwise of projects or their likelihood of success using specific criteria prior to the commencement of a project.

To date, the research has involved in-depth consultations with stakeholders with a vested interest in public transport in Ireland and abroad in order to better understand the conception which exists. Stakeholders were consulted by means of structured interviews and as a result three major issues were identified that commonly cause difficulties in the planning, operation and management of public transport systems in Ireland. These issues are anecdotal and therefore, it has become necessary to develop the proposed methodology so as to guide the process of analysing case studies and identifying whether or not these issues play a role in determining the success or otherwise of projects to the extent that the stakeholders (and survey respondents) believe.

Current transport policy and its impact and challenges faced by public transport planners and policy makers will be presented. The context to which public transport is planned, operated and managed in Ireland will also be briefly described along with current impact of this approach. Whilst considering the Irish context, the methodology adopted for the consultations with key stakeholders will be explained and results of the structured surveys will be presented and discussed. The proposed methodology that will be used for benchmarking projects and assessing their likelihood of success, prior to their commencement, depending on criteria to be developed will then be presented.

Finally, complementary research undertaken by will be considered and discussed.

Impact of current policy and challenges faced by transport planners and policy makers

The European Commission (2011) is of the view that the quality, accessibility and reliability of transport services will gain increasing importance in the coming years, inter alia due to the ageing of the population and the need to promote public transport. Attractive frequencies, comfort, easy access, reliability of services, and intermodal integration are the main characteristics of service quality. The availability of information over travelling time and routing alternatives is equally relevant to ensure seamless door-to-door mobility for passengers (European Commission, 2011). This indicates the paradigm shift expected in terms of European citizens using public transport verses the private car.

Whilst considering these efforts by the European Union, the Central Statistics Office (2011) in Ireland, reported from the 2011 Census that amongst public transport users, bus users fell from 114,956 to 91,676, a fall of 23,280 while train users were also down marginally from 54,942 to 52,749. This may be related to the fact that the number of people commuting to work fell by 5 per cent from 1.79 million in 2006 to 1.70 million in 2011. "The number of people driving to work fell by 12,995 while the percentage of commuters driving to work increased from 61.5 per cent in 2006 to 65.5 per cent in 2011. Car passengers showed the sharpest decline from 104,861 in 2006 to 69,164 in 2011, a drop of 34 per cent. When car commuters are combined with those workers who drove a van or lorry, 75 per cent of all workers were private vehicle users in 2011" (Central Statistics Office, 2011).

This indicates that there may be challenges for policy makers involved in the planning, implementation, operation and management of public transport to address this decline in use, prior to the beginning of the planning process. Consideration of the issues raised by stakeholders involved in the planning of public transport and development of a scientific and reproducible methodology to measure the success or otherwise of projects, before they begin, may assist in addressing this decline. It may also assist in developing measures to enhance the use of public transport, as encouraged by the European Commission and ensure the success of public transport systems.

The role of public transport planners and policy makers

Marsden and May (2006) argue that the task, means and challenges of delivering sustainable public transport systems has been widely addressed internationally and these commentators have concluded that it is generally correlated to the democratic and institutional arrangements within a country or region and the legislative and regulatory boundaries of public transport planning as well as factors including the availability of resources and motivations of all relevant stakeholders. They have argued that “the extent to which such arrangements currently appear to work is a function of the range of powers and the funding levels afforded to the coordinating organisation” (Marsden and May, 2006). The European Commission (1996) has stated that “in recent years, it has become quite obvious that transport can be affected, in both a positive and negative manner, by many disparate issues. When attempting to produce a positive effect on public transport operations, legislative and organisational measures can be brought into play”. The Commission also argues that for such measures to be implemented there is a need to establish a framework for policy development and decision making. “Through a coherent framework, local and national governments, and also public transport operators, are able to consider, implement and evaluate legislative and organisational measures effectively” (European Commission, 1996).

Considering that there is a need to establish a common framework for policy development, Veeneman (2002) proclaims that “the roles that various stakeholders, both public and private, have vary throughout Europe, suggesting the absence of a shared optimal way to organize public transport or substantial differences in situations in cities” (Veeneman, 2002). In Ireland, the planning and development of public transport projects must be taken through a detailed process involving government departments, government agencies, local authorities and other public and private stakeholders. The institutional arrangements in place in Ireland are mostly dependent upon factors including the type of service to be integrated into the system or network, the source of funding, the location of the proposed service and/or infrastructure, the tasks involved in the process, which are generally underpinned by regulation or other legislative boundaries, and the required levels of expertise so as to ensure appropriate delivery of the infrastructure and/or service.

Tasks that may be essential when planning a public transport system or service include technical feasibility studies, route selection, public consultation, economic appraisal, development of a business case, environmental assessment, detailed design, statutory approval procedures and public procurement. As this paper has stated, there are conceptions regarding the planning, implementation, operation and management of public transport systems in Ireland. These conceptions have also been heightened by issues which have been raised by stakeholders involved in the process, as a result of structured interviews. These issues relate to the roles of stakeholders and the tasks that need to be undertaken in the process. These issues will be described as the proposed methodology by which the success of public transport projects in Ireland can be measured, prior to the commencement of planning.

Irish context: Public transport planning and perceived issues causing difficulties

Public transport in Ireland has changed significantly over the past seventy years. Since 1987, Coras Iompair Éireann (CIÉ) has comprised three major operating subsidiaries: Iarnróid Éireann (Irish Rail), Bus Éireann (Irish Bus) and Bus Átha Cliath (Dublin Bus) (Veeneman, 2002; Conroy, 1928). Urban rail services within the Dublin area are provided principally through the DART (Dublin Area Rapid Transit) operations of Iarnróid Éireann, and the LUAS light rail initiated by the Railway Procurement Agency (RPA).

Local government also plays a role in terms of public transport planning and decision making. This differs from other public sector agencies (such as the National Transport Authority). It is democratically elected and has therefore both a representative and an operational role, with responsibility for a range of services, including public transport services in the local area and drafting *Local Area Development Plans* (which considers public transport provisions in the area) (Department of the Environment, Community and Local Government, 2013). There has also been other actors through the years in Ireland who have been involved in the planning of public transport and the decision making process. "An Bord Pleanála was established in 1977 under the Local Government (Planning and Development) Act, 1976 and is responsible for the determination of appeals and certain other matters and determination of applications for strategic infrastructure development including major road and rail cases. It is also responsible for dealing with proposals for the compulsory acquisition of land (for the provision of public transport infrastructure or otherwise) by local authorities and others under various enactments" (An Bord Pleanála, 2013). Therefore, there are a number of actors currently involved in the planning and organising of public transport in Ireland.

In order to verify conceptions reported in the media and gain an in depth understanding of the process and roles of stakeholders, survey questionnaires were developed and used at an earlier stage of the research as a qualitative means to conducting structured interviews with key stakeholders. Stakeholders (Irish and international) were identified on the basis of their intended and perceived legislative functions and relevant expertise, knowledge and experiences in the areas of planning, implementing, operating and managing public transport projects and associated infrastructure. Stakeholders were divided into two distinct categories:

- Category A: Government (or related) stakeholders;
- Category B: Scholars and other experts.

A survey questionnaire tailored for each category of stakeholder was developed and stakeholders from each category were asked to engage in the structured interviews. The sample size of survey respondents was 29 which included 12 respondents from Category A and 17 respondents from Category B.

The aims of the structured interviews were to:

- i. Gain a full understanding of the process (from each stakeholder's perspective – personal and/or organizational); and,
- ii. Gain a full understanding of the roles of the specific stakeholder and their understanding of the role(s) of other stakeholders.

Questions ranged from topics such as their role in the process to their view of the way in which public consultation is conducted in Ireland. Other questions related to their views regarding the reasons for delays in the Irish process in a historical sense and their perceptions regarding the flow of information between stakeholders and levels of cooperation. Respondents were also asked to discuss their views of international best practice and cities or countries that they deemed to be efficient and admirable in terms of planning, implementing, operating and managing public transport projects.

Following the completion of the structured interviews, a list of issues raised as a consequence of comments made by survey respondents was compiled. The comments raised broadly fitted into three categories of issues which relate to:

- A. Possible complexity of the process;
 - B. Political agendas;
-

C. Governance.

As a result of these findings, key research questions have been developed in relation to each category of issue:

A. Complexity of the process:

Is the process of planning and implementing public transport projects in Ireland overly complex and if so, what are the key factors causing this complexity?

B. Political agendas:

Are approvals for the initiation of public transport projects in Ireland influenced by political agendas and have there been unrealistic approaches taken by decision makers in the political sphere relating to government spending, forecasted demands for transport services; route selection, etc?

C. Governance:

Is there a lack of appropriate governance structures in Ireland and has this resulted in the misunderstanding of roles and responsibilities and the duplication of some roles and has this introduced a degree of opaqueness regarding decision making in Ireland for public transport infrastructure?

Although these consultations have supported conceptions expressed publically and identified issues hindering the planning of public transport in Ireland, thus far the evidence of such conceptions and issues is anecdotal and not based on fact but speculation. Therefore, the scientific methodology being proposed in this paper will be a reproducible means of measuring the role of these issues in the success or otherwise of projects. It is also anticipated that a series of recommendations will be proposed for the appropriate governance and complexity that will lead to the successful planning, implementation, management and operation of public transport projects in Ireland, prior to the commencement of planning and projects.

Proposed methodology for determining the success or otherwise of public transport projects in Ireland.

As stated earlier, a scientific reproducible methodology is required to assess or benchmark public transport projects in terms of their likely success or otherwise before these projects are initiated. Three major issues have been identified by key stakeholders that appear to hinder the projects and/or their planning. However, these issues are not based on fact, but on anecdotal evidence.

The first step in the proposed methodology will involve defining what is meant by the issues raised. In other words, it was suggested in the structured interviews with stakeholders that the public transport planning process in Ireland is complex. This complexity will be defined and the key factors causing this complexity will also be identified. It was also stated that there is an issue regarding the role of political agendas in decision making. It was suggested that projects in Ireland are influenced by political agendas and that there has been unrealistic approaches taken by decision makers in the political sphere relating to government spending, forecasted demands for transport services; route selection and other relevant decisions. This will be investigated further in order to fully understand what was meant by this issue. The final common issue relates to the appropriateness of governance structures in Ireland for the planning, implementation, operation and public transport projects. It was indicated that there is a lack of appropriate governance structures in Ireland which has resulted in the misunderstanding of roles and responsibilities and the duplication of some roles. It has also been implied that and has this introduced a degree of opaqueness

regarding decision making in Ireland for public transport infrastructure. This issue will be examined in greater detail in order to provide a full understanding of this issue.

The second step in the proposed methodology will be to define a successful project and the criteria that defines success. Research has been undertaken in this area in the international arena namely by Babalik-Sutcliffe. This research focussed on the development of factors to determine the success of urban rail systems and used this approach to analyse the success or failure of eight urban rail systems in the United Kingdom, United States and Canada. The performance analysis of the case studies as well as a detailed analysis of the factors that influenced the performance of each system was carried out (Babalik-Sutcliffe, 2002). The novelty of the new proposed approach lies in the consideration of the issues raised by key stakeholders in Ireland in the development of a framework. This research will also build on the work already contributed to the research community in this area.

Babalik-Sutcliffe alluded to governance issues and focussed more on urban rail transport but this research will provide an in-depth analysis of the issue of governance and other issues raised by stakeholders in Ireland as well as considering public transport in the broader context.

The final step in the proposed methodology will be to develop a new scientific and reproducible methodology, considering the issues raised by the stakeholders in Ireland and their definitions. The new methodology will also take into account the meaning of a successful project and the criteria that defines success. A set of steps will be developed that can be used to benchmark a project and assess its likelihood of success, depending on specific criteria, prior to the project being initiated.

Conclusion

There is a conception in Ireland that the planning and implementation (including construction) of public transport projects can be a lengthy process and that that key projects of strategic importance in Ireland's national transportation infrastructure remain seriously behind schedule (Forfás, 2000). It has also been suggested by stakeholders involved in the planning, implementation, operation and management of public transport that projects in Ireland may be overly complex and the approvals for the initiation of projects may be influenced by political agendas. It has been implied that there may be a lack of appropriate governance structures which may result in the misunderstanding of roles and responsibilities and the duplication of some roles. It is thought that this may also introduce a degree of opaqueness regarding decision making for public transport infrastructure. Thus far this evidence is anecdotal and based on opinions and speculation. Therefore, this paper has presented a proposed methodology which will consider these conceptions, common issues and anecdotal evidence and define what is meant by the issues. The methodology will also involve a definition of what is meant by a successful project and the criteria that defines success. It will build on international research carried out to date in order to develop a novel scientific and reproducible methodology for projects in Ireland that will measure the role of these issues in the success or otherwise of projects. A set of steps or methodology will also be produced that could be used to benchmark projects or assess their likelihood of success depending on certain criteria prior to the initiation of projects.

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