'Integration of Transport Systems in the UK : Fact, Fiction or Fantasy ?'

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Contents:

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Integration of Transport Systems in the UK : Utopia or Fantasy ?

A study to determine whether transport systems in the U K can be integrated to provide a service which is efficient and sustainable.

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1   Overview

The study of integrated transport systems is not new; indeed in the UK there is a Commission for Integrated Transport (CfIT:2006) which was set up in 1998 by the Government to assist in developing its transport policy including pursuing a sustainable transport agenda. It is an independent body which takes a broad view of integrated transport policy and its interface with wider Government objectives for economic prosperity, environmental protection, health and social inclusion. Physical integration - the principle of ensuring transport modes operate in conjunction with one another, is just one vital element of the bigger transport picture. The Commission provides expert advice supported by independent research (CfIT: 2006). There are similar organisations in other countries with major developed transport networks notably in Europe, the USA, Australia and Asia, and these will be researched in the Literature Review.

The UK has been struggling with its policy of a sustainable transport agenda. Government's *intent* to promote sustainable transport was welcome, desirable policy *outcomes* have to date been minimal. As such, the time has come to ask whether the heralded 'New Deal for Transport' is a chimera. (Docherty and Shaw: 2003). It is acknowledged that bringing about major change in the sector is a long tem business. A contributory problem is the gap between political rhetoric and the realities of the policy progress notwithstanding the large government majority in Parliament (Docherty and Shaw:2003).

The purpose of this study is to address the issues inherent in achieving integrated transport systems in the UK. This will involve taking an independent objective look uninfluenced by bias, be it political, economic or social. The study will provide insights for the following:-

- management of transport companies including rail/ bus and coach/ airlines and airports/ ferry and shipping lines
- policy makers within the Department for Transport
- general public that regularly use transport
- researchers in transport worldwide

This document outlines the basis of study and provides an initial introduction to the principal issues.

Initially the reason for examining the subject is outlined and the objective of the general research and specific research questions are identified. This section also outlines a brief structure of the area covered. Secondly, the findings of the preliminary literature review are set out. This is followed by an explanation of the rationale behind the proposed methodology and a mapping of the methodology. The proposals for Documents 3, 4 and 5 are set out. Necessarily these are not definitive as it is expected some changes may be needed prior to submission of the actual documents. Lastly the possible political/ethical issues are discussed in the final section of the document.

2   Topic and Aims

The choice of the subject matter was influenced by two main factors. Firstly, the continuing debate on transport problems in the UK; and secondly by the author's frequent travels in Europe, notably Switzerland ,which has a different approach to transport integration. Regular visits to Switzerland, and recent interviews with local heads of transport companies in Lugano, have been indicative as to why the country tends to be held up as a benchmark for other countries to use as a model. The relatively small size of Switzerland is a help but this is offset by the difficult terrain, dominated by the Alps, which   its transport systems have to negotiate..

The opening years of the twenty-first century look like being a pivotal period in UK transport policy for two principal reasons. The first relates to the framework of economic regulation within which decisions have to be made by the users and providers of transport services; the second involves the adjustments which transport policy must make given the growing understanding and concern about the impact of transport on the environment (Glaister *et al*.1998). The past ten years or more have seen changes come about as a result of deliberate government policy affecting economic regulation. At the same time there has been increasing public awareness of environmental issues particularly in the way they affect transport policies. (Glaister, *et al*.1998). The recent increased demand for oil, and the consequent rise in prices, has borne this out. It has also been heightened by the hurricanes of increasing intensity and frequency which have hit the Gulf States in the southern USA. Both events have been evidenced by press and television reports, eg Financial Times, BBC, CNN which have commented on trends over recent years.

In pure economic terms integration of transport policy should be achieved by market forces. However from the perspective of a sociologist there should be provision of effective transport services - those that the consumer wants and society is willing to pay for. The present Government believes an 'integrated transport policy' is required because   integration will not be achieved by market forces. Its policies have an interventionist bias. (Hibbs: 2000).

Hibbs advocates some government intervention in transport can be justified - for example, supervision of safety standards and investigation of suspected cartels. But, in general, he considers that policy should aim to encourage competitive markets in

transport. He further contends that transport should not be regarded as 'something different' but as an industry best left alone to serve the public.

However, Bannister (2002) contends that the expansion of the last 20 years or so has shown that some form of planning is needed. Inter alia, he considers there is a need for intervention in the market with new forms of regulators. He considers even the private sector favours a strategic framework within which to operate as stability in political objectives reduces uncertainty and risk, and these two factors in turn allow greater scope for private sector action. Further, such a strategic view does not conflict with the free market as it would still permit businesses to pursue their own profit-related objectives. The publicly-planned strategic framework would provide the longer term horizon (Bannister:2002).A fresh mind-set is needed to approach this change.

It could be argued that there is a case for management of change through management of paradox; it is not a case of 'either/or' but 'and/both' choices. (Ralph Stacey: 1995). In creating a transport policy there must be empathy with customers/consumers and the coordination of systems and processes accordingly.

2.1 Aim

The **main** aim of this study is to determine how transport systems in the UK can be better integrated in a sustainable and efficient manner. Is seeking to achieve integration of transport systems in the UK, utopia or fantasy ?

2.2 Research   Questions

Specific **research questions** include:

- Who are the stakeholders involved in the UK and are they the same in other countries such as Switzerland?
- How important are integrated service timetables to a sustainable, effective and efficient transport system ?
- What do customers/prospective customers want from their local transport systems; and what do they regard as a fair price to pay for their services?
- What are the social consequences of having/not having access to an integrated transport system ?
- What is done in other countries - is there more or less government involvement compared to the UK: and how good are their systems ?
- What are the legal implications, such as competition requirements in relation to

transport systems   in the UK?

2.3 *Transport   Systems in the UK*

Transport Systems in the UK   have their origins dating back to the pre-Victorian era of the early 19th century when roads started to evolve from horse tracks and turnpikes, and canals became a means of moving across country. The earliest railway, the Liverpool and Manchester opened in 1830 and from then onwards transport systems started to evolve at an ever increasing pace culminating in the   present multi-modal systems. Today transport systems in the UK comprise railways, roads and car-parks, cycle and walkways, tramways, canals and waterways, shipping ports and ferry services, aeroplanes and airports making up networks. Modes of transport include aircraft, ships and ferries, trains, metro & underground, light rail, buses and coaches, cars, taxis and minibuses, motorcyclists, cyclists, and pedestrians.

For the purposes of this study the UK includes the mainland (including Scottish Islands, Isle of Wight, Anglesey) and Northern Ireland, the Channel Islands, and the Isle of Man.

3 Preliminary Literature Review and development of a Conceptual Framework

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Fisher (2004) advocates that well-defined concepts and creating a conceptual framework are a means of simplifying the research task and clarifies the processes ahead providing a 'map' of the field of study. Defining the concepts and creating a conceptual framework can be done early on in the research process (structured approach) or left to a stage towards the end (grounded approach). A structured approach increases the sense of security that a project or study can be completed on time and some useful findings obtained. A grounded approach needs more time and from a practical viewpoint for this study a structured approach is considered more apposite. In addition, in researching integrated transport systems, issues arising out of climate change and environmental matters generally are likely to be continually developing, although other policy issues also change rapidly

After agreeing on the usage of certain concepts the next stage is to define them.

3.1 Definition of Integration

When discussing integration in relation to transport there is not a clearly   consistent definition. For the purpose of this study, the definition being used is 'fitting together of all transport modes in an effective and sustainable way to form a whole'   in relation to integrated transport systems provided by both the public and private sectors in the UK.

Hibbs (Nov.:2000) argues there is 'no theoretically perfect end-state' toward which the transport industry can be directed, and thus   is not a suitable case for planning. The future is all unknown. However, few real systems are perfect yet this is not a reason to abandon any prospect of introducing some order through planning, a point alluded to above by Bannister (2002). Hibbs does not specifically define integration as such. He postulates that in the White Paper - A New Deal for Transport (DETR 1998), Mr Prescott's (Deputy Prime Minister and also responsible for the DETR at the time) concept of   integration was merely a call for more intervention which   led to the weakening of effectiveness and efficiency. Hibbs argues that all transport must be a market-based, customer-driven activity which is not what Mr Prescott means by integration, the latter having advocated a more policy planned approach.

In discussing the evolution of transport policy Glaister *et al* (1998) point out that in

1997 a Government was once again elected with a commitment to establish 'an effective and integrated transport policy at national, regional and local level that will provide genuine choice to meet people's transport needs' , in accordance with the Labour Party manifesto.

Glaister *et al* (1998) also acknowledge, that for the Government to implement its commitment to an 'integrated transport policy', may require the creation or re-creation of strategies designed to facilitate greater co-ordination. The 1997 Labour manifesto stated unequivocally that ' a sustainable environment requires above all an effective and efficient integrated transport policy at national, regional and local level'. (Glaister *et al* 1998:165). It is also pointed out that the Conservative governments of 1978-1997 would not have agreed with that judgment, believing that markets should decide where investment takes place.

It is acknowledged by Glaister *et al* (1998) that a long term strategy is needed but the (Labour) government must have the courage to stick to it. The alternative is that policies continue to drift while one review succeeds another and individual decisions are dictated by political expediency and the short time-horizons inherent in the political process. At present the alternative seems to be happening with short-term decisions or deferral of decisions, as evidenced by the Department for Transport rejecting light rapid transport (trams) systems in Leeds and Merseyside for example. In addition whilst Glaister *et al* make specific reference to sustainable development, by contrast Hibbs makes scant reference in his paper.

In a recent paper presented by Neil Brown (2005), a transport consultant at an Sustainable Development Research Centre conference he stated that " 'Integrated transport' was a false and unachievable nirvana: sustainability in transport needs a 'consolidated transport system' ". He also postulated that for sustainability to be achieved, people need to be persuaded to use their cars less. He considered that the overall journey experience by public transport is too far behind the private car for local travel and will only be chosen when car use is unduly problematic.

However he makes no comparison with other countries; Switzerland in particular is reputed to have the highest use of public transport in Europe. From the author's personal experience, the Swiss are proud of their transport systems and even British visitors consider they can be regarded as a benchmark which the UK should strive for in terms of running to time, comfort, safety and ease of change of mode.

Both Hibbs and Brown share a view that for people living in rural areas, public transport can never be an effective alternative to the car because of poor levels of service eg often only two hourly. In principle, however, urban and rural travellers have similar needs. For non-car owners public transport offers independence however.

Brown(2005) considers that outside of cities, a car equivalent form of public transport, described in his paper as a 'consolidated transport system', is needed. He contends that the car has taken over people's lives from a societal viewpoint. Car ownership provides widespread, but not universal, personal mobility, giving inevitable consequences for local public transport which is perceived as slow and cumbersome. Those without access to a car, by choice or otherwise, could find themselves marginalized and he considers only these people will use public transport. (This is the case in many parts of the USA). At the same time, bus companies are only operating routes if they are cost effective I.e. profitable or granted a subsidy by local government. He contends that public transport takes real effort to use: timetables being difficult to interpret and understand, and signing often being poor. However, latterly this problem is being alleviated by websites and information telephone lines. Nonetheless information barriers need to be lowered to encourage transfer.

Brown argued that a 'consolidated transport system' would need the criterion of improved vehicle-use efficiency offering a journey experience at least equivalent to the private car. The system, he advocates, essentially involves the use of 7-8 seat vehicles (in essence high quality mini-buses/people carriers) running wholly in response to demand but with larger vehicles also operating on demand along major corridors, where appropriate. All user interactions are with a Central Control Company which manages administrative and financial functions including bookings and payments, allocates and schedules vehicles, then tracks journeys to completion. If delays occur the system automatically responds to ensure each journey is satisfactorily completed (for example by re-routing, if necessary) - which is more akin to the logistics industry. Public transport operators, however, tend to gear their services to set schedules.

Notwithstanding, the system described is not dissimilar to systems used in certain parts of the USA (for example in New York - hotels to airports services) and similarly in Europe. There are also services to out of town shopping centres. Examples are Houston, Texas; and Bournemouth, England where Tesco runs buses from local

pick-up points to its Supermarket.

Brown goes on to say that the system can be applied to island communities by offering door to door land based travel opportunities reducing the need to increase (water) ferry vehicle capacity. He also suggests internal air services using 8 seat passenger planes would in principle operate as a consolidated transport system although acknowledges some form of financial support would be needed. But he does not consider the environmental consequences which would be a major concern.

The system he envisages concentrates primarily on trying to reduce the number of local car journeys. It can be said that the system attempts to address a key problem of reducing traffic thereby improving the environment and improving social contact. But cars are not the only polluters - he ignores lorries, coaches and buses. And virtually no mention is made about other forms of land-based transport e.g. heavy and light rail systems. The system he advocates may be a possible building block to an overall integrated transport system. From the customer's perspective the requirement is for a seamless system whereby a journey can be made using different modes of transport eg car to train to underground or metro using just one ticket This requires coordination of timetables for the different modes. In summary there is a big debate about integration which is   more fully explored in Document 2 (Literature Review).

3.2 Modes of transport and reputation

It has been observed that a modern and efficient system of urban transport can only operate when there is inter-modality and integration between the different modes of transport (Pierre Laconte: 1995:8). Switzerland and Canada are examples of two countries, encompassing the extremes of small and large, which have embraced this philosophy. Prime means of transport in these countries (including freight) include cycling; car; bus and coach; lorries; heavy rail; light rapid transit and metros; aircraft; ferries, lake steamers and other water-borne craft.

The perception in the UK, mainly influenced by the national press, is that all forms of public transport are inefficient and therefore many people resort to their cars for travel - be it commuting, work travel journeys between two or more locations, leisure trips or shopping trips. Much of the population has become addicted to the motor car. This has resulted in ever increasing numbers of cars on UK roads leading to ever greater congestion, with gridlock being reached in some locations, on occasions, as reflected

in radio and television bulletins. Often driving to work has just become a habit rather than a necessity, but also is a reflection of the emotion of personal autonomy.

A transport research project carried out under the Performance   Analysis of Road Infrastructure (PARIS) project and reported in the EC Journal (1999) claimed that road transport   provided over 80 percent of all transportation journeys in Europe in 1999. Given this high percentage, attempts are now being made   by Governments to persuade users to use other modes particularly rail.

However a major event occurring, such as the Hatfield rail crash involving a broken rail, or the more recent (July 2005) London bombings can have devastating effects on transport use not least because of   perceived fear that a particular mode is not safe. The public, that is the customer, can often be misled by the daily press whose objective is a good story to sell their newspapers notwithstanding that the railways, in particular, are one of the safest forms of transport. Accidents occur daily on our roads yet they hardly get a mention unless there is a major hold-up on a motorway as a result. There is still a need   for more focused marketing by the railways to project the benefits of rail travel through better presentation and much improved public relations especially when operating problems occur.

The situation is further confused by UK competition rules and other legal complications over what is deemed commercial confidentiality. Some of these rules go against the need for integration. For example light rail schemes (trams) should be complemented by buses to provide a smooth interlocking journey for customers who wish to go from A to B. In Switzerland and Germany, for example, routings are coordinated to provide easy changes from bus to tram and vice versa to make travel easier for the customer.   In the UK   such thinking is sometimes lacking because of present organisational and cost structures often imposed by Central Government.

Button (2005) comments that the challenges are compounded when political economy is enmeshed in neo-classical positivism (modern value-free objective knowledge reflecting external reality). He considers that in reality, in many cases it matters as much who pays for the full costs of transport as how the efficiency is achieved. This is an observation which needs further investigation during the study.

3.3 Inter-modality of Ticketing and Use of Information and Computer Technology through Smart Cards

In many cities worldwide, tickets are now available which facilitate travel on various modes of transport without having to purchase multiple tickets for each separate part of the journey.

A good example of an inter-modal ticketing system is the Oyster smartcard (Ford,2005) issued by Transport for London which can be used on the London Underground, buses and on heavy rail services within the boundary areas. There is also the more traditional zonal Travelcard which uses a magnetic stripe rather than a computer chip as with the Oyster card. However problems are being encountered as Oyster card readers are not installed at some railway stations .Under the present arrangements it is up to the train operating company (TOC) to be able to read your Oyster card on their readers. 'What counts is the message not the medium'; as more readers are needed. The problem is caused by the franchising agreement which TOCs live or die by and something like Oyster introduces the prospect of new costs, additional risks, radical changes to fare structures, revenues which were not in the business plan and so on. Ironically, when British Rail and London Transport were in existence in the early 1990s, the original Travelcard was agreed at a single meeting including getting their respective boards and the government on side. Interestingly use of the Oyster card is being extended to small purchases , such as newspapers and light refreshments (Ford:2005).

One of the most developed smartcards is that in use in Hong Kong and issued by the Hong Kong Mass Transit Railway (MTR) called the Octopus card (James Abbott:2005). Not only is it used for purchasing tickets, newspapers and food, it also acts as an entry card for schools (doing away with a rollcall), or can facilitate entry into apartment blocks .

Another interesting variation (but is not a smartcard) is used in Basel, Switzerland which the author often visits. A small 'tax' is charged to all hotel rooms in the city; but all visitors are provided with a Mobility Card by their hotel, which the author has used, which permits the visitor 'free' travel throughout the Basel transport system including trams, buses and local rail stations. If good use is made of the travel system it is a boon and is an excellent example of how inter-modal ticketing can be made simple and beneficial for the customer/visitor.

3.4 The Perspective of the Customer

In general there are several needs from the customers' viewpoint, whatever the mode of travel, which include the following:

• Reliability, convenience and punctuality

• Safety and security

• Affordability

• Accessibility for all

• Quality information (including timetables, signage, explanations etc)

Customers are also increasingly concerned about local air quality and noise.

The 22nd report published by the cross-party UK Public Accounts Committee on 2 February 2006 accused the railway industry of paying scant attention to customers' needs. The report commented that passengers are most dissatisfied with upkeep, repair and personal safety. The railway industry has defended its position by claiming that large sums are spent on maintaining, cleaning and improving stations. From the author's observations, the actual situation is somewhere in the middle of the two opposing views. Nonetheless similar comments could be made about some bus stations and even airports, ferry terminals or ports.

The problem of safety is in fact wider when one considers the social implications on our society. We are encouraged to take exercise rather than take the car or even the bus. The broader benefits of walking and cycling should not be underestimated but 'What use is it to have reduced our risk of death from heart disease and extended our longevity through exercise only to be too scared to walk out of our front doors?' (Cavill N :2003. 'The potential for non-motorised transport for promoting health').

However the views of customers can sometimes be very fickle and opinions can be swayed impetuously. This tends to be very evident in the retail trade where customer service and care can be a prime competitive tool .(Leahy: 2006).

Sir Terry Leahy, Chief Executive Officer of Tesco, has commented that 'most businesses will tell you that they listen to customers, but listening is not enough, you have to act on what they say'. (2006). He believes this is something that retailers do particularly well - 'they have to or else the effects of an unhappy customer are felt pretty quickly'. He further contends that developing a deep understanding of local markets has been key to Tesco's successful international expansion, which is not done purely for the sake of it. Markets are carefully researched to understand local

consumers , cultures and economies. Many areas of the transport industry have not grasped this analogy; often they are too distant from the customer and frequently hampered by government intervention as to what service they can or cannot provide. But also they can be inflexible and do not use lateral thinking.

Peter Thomson (2006), Director of Future Work at Henley Management College, argues that it would make more sense for transport, industry, environment and education officials to work together to create a framework that is good for the economy, good for the environment and reflects our increasingly integrated lifestyles. He goes on to comment that the Department for Transport is thinking of introducing road charges during the rush-hour, to try to get people moving around at different times of the day but Thomson believes this is dealing with the symptoms and not the cause. He contends that the cause of the congestion is that people are moving around too much in the first place. This is because of old fashioned work patterns which say that in order to get work done, everyone has to be there at the same time. In the UK the economy is moving from manufacturing to service based, which often requires changes in work patterns.

Thomson (2006) cites a recent CBI report which indicated that 48% of companies said transport problems were having a substantial affect on profitability, 40% stated their business growth was significantly affected, and 33% said the problems were having a notable impact on investment in their company. Business had tried hard to tackle these problems by introducing more flexible working and altered delivery schedules or logistics. However for the vast majority of employees and workers these alone cannot overcome the problems, and extra investment in the transport infrastructure in the UK is vital, according to a Growth from Knowledge National Opinion Poll survey for the CBI (Professional Manager :2006).

3.5 Role of Government

The British Transport Commission (BTC) established under the Transport Act 1947 was the high-water mark of Government control and coordination of the transport industries. The role of the BTC was to provide 'an efficient, adequate, economical and properly integrated system of public inland transport'. Between 1951 and 1979 the evolution of transport policy was more pragmatic than ideological, with many important developments carried over from one government to the next even when the political direction had changed. However between 1979 and 1997 policy was characterised by a much more radical commitment to privatisation and deregulation. The Conservative governments of the 1980s and 1990s were more concerned to bring market pressures to bear on the provision of transport services through policies designed to give maximum scope to private enterprise which, when freed from the shackles of bureaucratic control, was expected to deliver better services at keener prices. The need for safety regulation was acknowledged and the orderly management of a competitive market-place was accepted, but there was little room for planning since it was assumed that less interference would lead to better services (Glaister *et al* 1998).

At present we are faced with a Government which is merely tinkering with the planning procedures but at the same time relying on the market to provide transport services as its transport policy notwithstanding various White Papers on Integrated Transport Policies and the need for sustainability (DETR:1998). What is needed is a long term strategy covering a twenty to thirty year period which can be carried over from one government to the next, irrespective of its political persuasion. This has happened in Switzerland and other European countries. In many West European countries (viz Spain and Portugal, Italy, France, Benelux and Germany) plans are well in train to develop high speed rail networks providing fast, safe and reliable journeys. In some cases airlines have withdrawn from equivalent routes as they cannot compete with city centre to city centre timings and convenience of these rail services. The reduction in aircraft flights has also helped reduce carbon emissions and thus improve the environment.

Meanwhile in the UK there is still debate over a new high speed line to the north (London to Glasgow or Edinburgh). The only other high speed line is the Channel Tunnel Rail Link and even this will not be fully complete until 2007.However, Sir Rod Eddington (former CEO of British Airways) is leading a study jointly commissioned by the Treasury and the Department for Transport which is looking at long term issues

relating to transport and economic growth (Paul Salveson:2005). The key questions he is asking are 'What are the biggest challenges that might inhibit transport's contribution to the economy over the next thirty years, and how might they be overcome?'

One issue which Government is debating is the question of *congestion charging* for car drivers. This has been introduced in Central London by the Mayor (Ken Livingstone) and has had some success in reducing traffic levels according to local media reports; at the same time the main shopping areas such as Oxford Street allege that their takings are down, but this may be due to other factors such as customers having less money.

Now   UK Airport operator BAA is contemplating introducing a new congestion charge tax for cars entering London's Heathrow and Stansted airports in an attempt to reduce the number of bottlenecks on roads within and around the perimeter, and to reduce pollution. The £5- charge is among options being discussed to encourage travellers to use public transport. (Airliner World:2006) The UK is not alone in its Government's debate. It was reported in February 2006 edition of Today's Railways Europe that 'Public transport in Stockholm was expected to benefit greatly from a seven month congestion charge trial from 3 January to 31 July 2006'.

Hibbs (2000) makes the point that 'If integration has any meaning today it is the urgent need for rational pricing of the transport infrastructure. Neither is this new: railway and road transport have argued for half a century that each is unfairly treated. If ever the term "a level playing field" were justified, it is appropriate here.' He considers that without it the market cannot function properly. His view is that bringing the provision and pricing of road and rail track under the same regime would bring about the level playing field. Road pricing is a means of financing road infrastructure so as to introduce a more rational use of the scarce resources involved; income would be derived by motorists   using electronic smartcards.   The danger for government   is that the public are sold the idea as no more than a means of dealing with congestion. Hibbs contends that the heart of the argument for it must always be the gain in allocative efficiency of scarce resources. He makes no mention of social equity. This topic will be further explored in the Literature Review.

3.6 Environment and Sustainability

Motor propelled vehicles are contributing ever increasing levels of pollution in the atmosphere which is affecting our environment; aircraft are deemed to be even worse offenders. However major manufacturers of vehicles are starting to recognise the damage caused by pollutants and are looking at ways to reduce environmental damage as exemplified below.

Corporations and consumers are becoming increasingly aware of the need for sustainable environmental protection to our world. Schaltegger *et al* (2003:216) point out that the advantages of an electric car highlight two possibilities for business to reduce the impact on the environment caused by emissions:

- First, business can offer technical solutions that reduce pollution without consumers having consciously to change their behaviour (e.g. consumers can use an electric car for short journeys just as they would with a conventional car).
- Second, business, through advertising and advice, provide overt or covert messages to consumers to change their everyday habits (e.g. consumers of the electric car can be encouraged to further reduce their environmental impact by walking or cycling where possible).

Toyota Motor Corporation, for example, has developed hybrid vehicles for both road and rail transport, and emphasises the fact that the majority of materials it uses can be recycled, thereby helping towards a cleaner environment.

Most people also acknowledge that electric railways are much more environmentally friendly than diesel powered trains. However an electrified railway requires extra infrastructures costs for overhead line and line side power equipment. A similar argument can be applied to tram systems; but most customers find the ambience of a tram much more conducive than a bus even though the latter is becoming more sophisticated, with air-conditioning, for example, now becoming a common feature.

Aircraft producers, particularly engine manufacturers, have realised the damage that their engines can contribute to air pollution and have special projects in hand to address this issue. The concept of corporate social responsibility is starting to make its impact on companies and corporations in the transport industry and in its way help a move towards an integrated transport system.

The Go-Ahead Group Plc is an example of a leading transport management services company in the UK which publishes a Environmental & Social Report available with its Annual Report and Accounts. The group provides bus and rail services, parking services at airports, railway stations, shopping centres and hospitals, and aviation ground handling services at UK and Irish airports. It is a good example of a transport conglomerate that attempts to take account of business and customers in its strategy. It has recognised that there is a growing awareness of the adverse environmental, safety and social effects of increasing levels of travel: equally it accepts that public transport is part of a sustainable solution. (What is not clear however is whether such matters as integrated timetabling have been properly taken on board by the group).

For the UK, a coherent network strategy is needed embracing complementary intermodal transport schemes that will help sustainable development across the country but in particular the wider southeast area.

The impact of the environment and sustainability will be probed in the literature review and in document 5.

4   Methodology

4.1 Reasoning behind Methodology

The main dilemma is whether to adopt a positivist or interpretive (phenomenological) approach for the main part of the study. At this stage of the study it is difficult to decide but the answer may lie somewhere in between. From initial studies, a critical realist approach may be the way forward. Fisher (2004) articulates that critical realism shares the ambitions of realism but it takes a more gnostic than orthodox direction since it adds the notion of layers or stratification into our understanding of knowledge.

Critical realism is a stance developed by Bhaskar (Johnson and Duberley 2000: 150-156) It proposes three levels of reality (Collier 1994: 42-45) :

• *Experiences -* What we see and experience of the world.
• *Events -* Things that happen in the world that we perceive through our experiences of them.
• *Mechanisms -* Events do not occur out of nothing but have a cause. Mechanisms are the causes of events and are the third, and deepest, level of reality.

The difficulties of choosing a methodological stance has been highlighted   by Fisher (2004). He points out that management and business research is different to research in many other subjects because it has both an academic and a practical purpose. Academically   such research should contribute to knowledge and understanding about management. Practically it should help managers do their job. Management research is about both knowledge and action but the relationship between the two is not straightforward. Five ways in which people envisage the relationship are identified by Fisher. These are Ivory Tower research; realist research; interpretative ethnographic research or fieldwork; action research; and critical social research. Each has its own characteristics but for planning this study realist research which identifies and evaluates options for action may be appropriate.

4.2 Determining the Scope

Given the subject of the study, the author believes a practical approach is required since integrated transport systems   is clearly a very wide topic. The study   will be based on a comparison of Bournemouth, England with Lugano, Switzerland facilitating a comparison of their similarities and differences. The two towns chosen both, inter alia, have local airports, are situated on major rail trunk routes, have three bus companies each, and are holiday destinations. They will provide a basis of comparison, but with the caveat that they are not entirely representative of the broader picture. Fisher (2004) points out that it is sensible to have a comparative approach since it makes its findings easier to write about and allows the creation of contrasts that make it easier to see things clearly.

4.3 Approach

Qualitative and quantitative approaches will adopt a mix of some or all of the following:

1. interviewing,
2. focus groups,
3. questionnaires,
4. observation, including participant observation,
5. documents
6. databases
7. case studies.

However Yin (2003) points out that using case studies for research studies remains one of the most challenging of all social science endeavours. He highlights   that the case study has been a common research strategy in psychology, sociology, political science, social work (Gilgun,1994), business (Ghauri and Gronhaug, 2002), and community planning, as well as in economics.

According to Yin, the technical definition of a case study begins firstly with its scope.
'A case study is an empirical enquiry that
• Investigates a contemporary phenomenon within its real-life context especially when
• The boundaries between phenomenon and context are not clearly evident.
Secondly , a case study enquiry
• Copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result
• Relies on multiple sources of evidence, with data needing to converge in a

triangular fashion, and as another result

- Benefits from the prior development of theoretical propositions to guide data collection and analysis.'

Thus, the case study as a research strategy comprises an all encompassing method - covering logic of design, data collection techniques, and specific approaches to data analysis.

5 Outline for Documents 3, 4 and 5

5.1 Research Plan/Strategy

The significance of having a research plan/strategy has been highlighted by several writers including Fisher (2004), Remenyi *et al* (1998), Gill and Johnson (1997),Hart (1998: Appendix 1).It needs to be stated that research is not a linear and sequential process; rather processes are 'complex and dynamic'. (Dawson 1993:3). Plans, however good, must be flexible and amenable to change. It is expected some change may be necessary along the way.

Several models have been identified including the Fisher (2004) model that is an eight step process as is the Remenyi *et al* Model (1998). Irrespective of the choice of model, all writers stress the importance of project selection, literature review, conceptual framework formulation, carrying out the study, analysis and synthesis, writing up findings, and arriving at conclusions.

5.2 Document 2

A critical *literature review* is one of the most essential and early steps within the research process (Fisher 2004). Both Fisher (2004) and Hart (1998) explain and define the importance of the literature review.

General information on the key areas of transport will be included in the literature review but the main focus throughout will be on identifying either where integration is taking place or the obstacles to it taking place. The main elements of transport systems will be established such as funding, planning, social implications and government involvement. A conceptual framework will also be decided upon. The literature review will be presented using sub-headings for example:
• Structures of transport companies
• Government policy - funding
• City, urban, rural needs - comparison
• Planning

5.3 Document 3

It is intended to conduct a series of interviews during the course of the study especially at the outset and indeed preliminary interviews have already taken place in both Bournemouth and Lugano with key   top officials of various transport companies and in the case of Bournemouth with the local authority transport office. The interviewing process should help to identify who are the stakeholders, which may vary with transport mode and also by country. Interviews were conducted at this early stage to establish a relationship/rapport which is particularly relevant in Switzerland where relationships are considered important.

Further interviews will be conducted with the respective companies once the literature review has been completed. It is also proposed to seek opinions from the public, with cooperation from the transport companies where needed. A standard questionnaire will be developed to give a consistent approach to determine what influences the use of a particular form of transport. In the case of Lugano, Switzerland this is likely to necessitate translation into three languages other tha English viz, Italian, German and French. An alternative approach may be to use focus groups if this is possible. A fallback approach will be to analyse the results of transport surveys already conducted by interested government and non-government organisations, if they are relatively recent.

5.4 Document 4

A questionnaire will be developed and given to various transport companies to define what they consider to be the key areas of integration. Documents and databases will also be researched to determine the degree of integration evident in UK transport compared to Switzerland. It is acknowledged that any questionnaire will need careful editing and piloting before use; several iterations may be needed.

Documents 3 and 4 may be carried out in tandem. This is relevant   particularly when dealing with passengers whose opinions can sometimes change very quickly; it is necessary to identify the issues they consider important..

5.5 Document 5

The approach for document 5 will be to build on the work completed for documents 2,3 and 4. It is intended to refine the questionnaires following initial processing and analysis, and further surveys made together with additional interviews and development of case studies as appropriate. This will be the key document for the case study of comparison between Bournemouth and Lugano which should identify matters such as social consequences and the effects of timetabling.

The most suitable method of analysis of the data will be determined before collation of the results. Once this stage has been achieved a small number of further interviews   may be necessary to clarify any outstanding issues.

6   Issues Arising

6.1 Political / Ethical / Confidentiality

Having had an interest in transport systems, especially rail and air, and seen the changes and developments over the years, the author is very aware of the political issues, particularly in the UK. Cognisance will be taken to exclude political dogma unless it provides a constructive basis for academic argument   (possibly in the literature review).

Initial interviews with heads of transport companies have already opened the door to cooperation in this study. Cognisance may need to be given to commercial confidentiality, right to privacy and informed consent. In addition some of the data collected will need to be kept confidential and anonymous which will involve consideration of physical security of documents etc. It is considered that impartiality is fundamental; free from influence or pressure, for example by those who give or have given permission or access to the research.

6.2 Outcomes / Consequences

The proposed research will have benefits for four principal beneficiaries, namely the author, transport companies, government - both central and local, travelling public.

The author will benefit through:
- Gaining a thorough understanding of a subject that has been of personal interest for a long period
- Acquiring research skills on positivist/interpretive/critical realist approaches as relevant
- Being able to use the research experience gained perhaps in a consultancy role
- Contribute a significant piece of research to the transport debate
- Obtain a worthy post-graduate qualification for efforts applied
- Augment intellectual and academic abilities.

The learning and benefits acquired should progressively materialise during the study and be drawn out in **document 6** . To this end a 'personal log' will provide a core foundation.

Transport companies will benefit by:

- Acquiring a wider understanding of a subject that is much talked about but not well understood

- Seeing a comparison with another country which does have a developed integrated transport system and allow consideration of adopting best practices

- Being able to adopt a less insular and more cooperative/complementary approach to transport needs within the legislative framework.

Government will benefit by:

- Having a research study which might help to influence taking a wider vision based on longer term strategies irrespective of political party in power at both central and regional/local levels.

The travelling public will benefit by:

- having a research study which will help consumer groups in putting across their viewpoint in improving transport needs over time.

It is hoped to promulgate the findings via publication of articles in transport journals and possibly newspaper articles.

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DOCTOR OF BUSINESS ADMINISTRATION

CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY

Integration of Transport Systems in the UK: Fact, Fiction or Fantasy ?

CRITICAL LITERATURE REVIEW AND
INITIAL CONCEPTUAL FRAMEWORK
(Document 2)

Document Two is submitted in part fulfilment of the requirements of The Nottingham Trent University for the degree of Doctorate of Business Administration.

Geoffrey F Silverman

December 2008
(Amended Final).

Table of Contents

Competition, Planning and the Environment:
synthesising their objectives.

1. Introduction

Over recent months the debate about transport systems in the UK and their integration (or lack of) has taken on a more significant profile, for example, discussion of the need for more High Speed Rail Lines; the rising price of oil with implications for the use of alternative sources of energy. A number of diverse factors have brought this about , including alleged financial constraints being imposed by Government (Treasury) and competition for funds, renewal of franchises for railways, calls for regulatory reform of the bus industry, an acknowledgement of the influence of behavioural elements in people's mode of travel, and the increasing awareness of the effects of climate change and the need for sustainability. In addition, the approach by the various constituents of the transport industry in how to market and brand their products is generating increasing discussion. For the purposes of this study, focus of integration will be on passenger transport: freight will be excluded except where there is considered to be an overlap.

In 'Transport Policy in Britain' (Glaister *et al:* 1998) comment is made that the transport sector has moved on a long way since the establishment of the British Transport Commission (BTC) which was set up under the Transport Act 1947 to provide ' an efficient, adequate, economic and properly integrated system of public transport'. It is doubtful whether anyone knew then (or now) what was meant by a properly integrated system of transport, but it would certainly have meant co-ordination under some degree of government control rather than competition. (Glaister *et al*: 1998). Subsequently in 1998 CfIT was established by the Government to take a broad view of integrated transport policy. (Doc 1:3). The principle of ensuring transport modes operate in conjunction with one another, is just one part of the bigger transport picture.

Notwithstanding, it is reiterated that the definition of integration being used in this study is 'fitting together of all transport modes in an effective and

sustainable way to form a whole' in relation to integrated transport systems provided by both the public and private sectors in the UK.

Whilst there seems to be an acknowledgement by 'interested parties', in other words stakeholders, that integration is needed, the basic questions of' 'why, what, when and how?' are not being addressed in any logical focus. There is much debate but hitherto, no clear direction surfacing particularly from the transport industry itself and from government. The perception by commentators is that each is waiting for the other to make the first move.

Clearly there are several stakeholders which need identifying and who can provide input into helping develop a coherent transport policy which can facilitate appropriate integrated transport systems.

Terry (2004) argues for greater clarity of thought about the place of market forces in transport and more coherence in government strategy. He contends that significant progress is being made by transport professionals in working towards objectives set out in the 1998 White Paper, but the results so far are fragmented geographically and poorly related to other aspects of public policy. He considers there are encouraging signs in the infrastructure of training, investment and planning for transport, but too many resources are wasted through inefficiencies which remain pseudo-competitive or quasi-monopolistic.

Although several train operating companies and bus companies, as well as some tram operators sometimes are owned by the same group company , for example Stagecoach Holdings owns South West Trains, Stagecoach buses and Stagecoach trams, the latter in Sheffield, there is often no dialogue between respective transport divisions. However Stagecoach Group are a good example of 'joined up' thinking. They have made attempts to co-ordinate train, bus and tram systems to provide greater ease of travel for the customer/passenger.

But set against this practical, common sense approach, which benefits the customer, is also, the desire to give the customer choice through competition.

A few months ago the traffic in the centre of Manchester became grid-locked by large numbers of empty buses due to the launch of new services by operator UK North along a route into the city centre already served by Stagecoach. (Local Transport Today: 2006). This resulted in Metrolink trams being stuck for up to an hour. Some travellers left buses to walk to their destination. Allegedly discussions between Stagecoach, UK North, Manchester City Council and the Greater Manchester Passenger Transport Executive (GMPTE) had been stymied by *competition laws* that prevent firms discussing routes, timetables and fares. As a result there has been lobbying to bring back regulation of the bus industry. (Only London has a regulated bus system). This issue is explored more fully later in this document, but a system of franchising has been advocated as happens with the railways. The Manchester example highlights what happens when the teutonic plates within the industry start to grate against each other.

However, it is doubtful if the Manchester fiasco would occur in other European countries. Switzerland ,in particular, has well developed and better co-ordinated transport systems. For example, the main railways SBB and BLS, are asked to set their timetables, and other smaller private railways, trams and bus companies then dovetail their   timings to fit in with the main railways. As a result, the customer/passenger, has the benefit of good connections and a more seamless journey.

Applying the Swiss example to Manchester, the buses would feed the tram at appropriate locations, which in turn would feed the railway and vice versa. The impact of legislative and institutional controls on their effect in the market place is explored later in this Document.

There is an oft quoted remark by the late (Lord) Harold Macmillan when he was Prime Minister. He was asked by a reporter what he regarded as his biggest problem. The response was 'Events, dear boy ,events…', and when applied to the transport industry today it s an apt comment. In the literature review which follows, the themes or threads touched upon in Document 1, and the difficulties highlighted above,   will be explored and key issues identified

which will provide the input for Documents 3, 4 & 5. The first issue to be discussed is Stakeholders and who they comprise.

2. Stakeholders

Although an in-depth review of stakeholder theory is not being attempted, it is necessary to examine the concept in order to assess how it applies to the transport industry.

2.1 Overview and analysis

Sternberg (2000) explains that the term 'stakeholder' was defined by Freeman (1994) and originally used to designate those groups without whose support a business could not survive, those in which the business had a stake: not just its owners, who provided the initial capital, but its employees and its customers, suppliers and lenders, the community and even the legal system. She contends that increasingly, however, the meaning of 'stakeholder' has been reversed, and the term is being used ever more widely, to include everything and everyone who might have a stake in the business or might be affected by it. So in this extended sense it has been taken to include the media, competitors and capricious managers (termed 'terrorists' by Sternberg). The UK Co-operative Bank includes both 'past and future generations' in its list of stakeholders.

This wider version of stakeholder has tended to become more common place and in the context of the transport industry includes government, be it central, regional or local. Interestingly, Schaltegger *et al* (2003) define stakeholders to include every individual, or group, that has a claim on a company, quoting the definition by Freeman (1984:25). They point out that usually, the claim arises through an exchange relationship whereby the stakeholder provides resources, and goods, or services, are received in return. Whilst this generally involves an economic settlement between the parties, there is also a social exchange and exchange with the physical environment in which a company operates. They add, that in all cases, stakeholders rely on the company in order to attain their own economic, social or environmental goals. Moreover, in order to achieve its goals and increase its economic wealth a business relies

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on resources provided by its stakeholders. Interaction between a business and its stakeholders are guided by rules, routines, established procedures, common standards, negotiations, debates and use of power. Each company uses some or all of these mechanisms to achieve its purposes with different mixes distinguishing one company from another.

It is further highlighted by Schaltegger *et al* that the variety of stakeholder perspectives provides a framework for the analysis of social relations between stakeholders and business. In addition the stakeholders perspective describes enterprises as constellations of co-operative and conflicting interests. (Cyert and March:1963, 1992, Donaldson and Preston:1995). It emphasises the fact that enterprises must not only satisfy their customers and employees but also represent the interest of other groups that reach beyond market relationships and into political and social concerns. There is thus some convergence of view between Sternberg and Schaltegger *et al*. The latter also points out that if important stakeholders are neglected in environmental management, or if their interests and power are not taken into account, there is a danger the process of value creation will be impaired. (Jones:1995; Nassi 1995).

However, Sternberg also states that the stakeholder theory of business typically holds that business is accountable to all its stakeholders, and that the role of management is to balance their competing interests. This characterisation is nonetheless deemed by Sternberg to be wrong because of four fundamental errors.

Firstly, it is contended that stakeholder theory confuses business with government. Because of the nature of government, citizens are regarded as equal under the law, and entitled to representation and a vote in the way things are run. Participants in business are not; stakeholder theory asserts that they are postulating that stakeholders in a business are citizens of the   business. The weakness is that not all stakeholders in a business are of equal importance.

Secondly, a business cannot be accountable to every type of group eg

competitors even if affected by them. Equally it applies to suppliers, lenders, employees and customers. A business is clearly affected by them but it is not accountable to them. It is answerable to them only to the extent of its specific contractual obligations or applicable laws. Any accountability stems from the nature of specific contracts entered into, not from the stakeholder relationship as such. The owners are the only stakeholders to which business is automatically accountable. A business can be held to account by government, but this is coercive power, not its notional role as a stakeholder. (However the transport industry in the UK -notably the railways, could be deemed as an exception to this assertion. It is the Department for Transport which awards franchises on the basis of tenders).

Thirdly, stakeholder theory cannot be a proper account of business since it is argued, it effectively destroys business accountability - a business that is accountable to all, is actually accountable to none. Accountability that is diffuse is effectively non-existent e.g. the practicalities of 'matrix management' - who is in charge and has effective responsibility? Sternberg argues that multiple accountability can only function if everyone involved accepts a common purpose that can be used for ordinary priorities.

However this uncovers the fourth problem with the stakeholder account of business; it provides no such criterion. By rejecting the maximisation of long-term owner value as the purpose of the business, and substituting it with trying to balance the interests of all stakeholders, stakeholder theory does away with the objective basis for evaluating business action - there is no standard against which the business can be judged.

Notwithstanding, the concept of 'stakeholder' still has a useful role since it encompasses those groups whose support is needed for a business's continued existence and also those with whom a business continually interacts. Provided the components are clearly identified, it does not matter which groups are considered as stakeholders since they have neither any rights relating to the business nor constitute its purpose. One can ask the question that if the purpose of business cannot be to serve the interests of

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stakeholders collectively could it be to benefit specific stakeholder groups?

Some will claim that serving the interests of customers is also the purpose of a business. Without customers there is no selling which is why the business was founded in the first place. Treating customers well - giving good service and care, is essential for achieving business success. The transport industry   in the UK is only slowly starting to grasp this point: it has not been a customer focused industry willing to delight the customer (Bowker: 2006).

The real aim of a business is to make a profit, albeit for a particular group of stakeholders i.e. the owners. Sternberg argues that serving customers' interests cannot constitute the definitive purpose of business. It is an input into helping to generate a profit and facilitating increased sales by encouraging the customer to return because their needs have been satisfied. The logic seems sensible.

2.2 Description/definition

The term stakeholder is a useful shorthand label to describe all those groups whose actions and attitudes need to be considered in assessing whether a course of action is likely to maximise long-term owner value. A business cannot be complacent and ignore any stakeholder concern that could affect long-term owner value. The operations of a business are not merely affected by actions of owners, but also those of employees and customers, suppliers and lenders and regulators. Their tastes and preferences including their moral preferences will influence their relationship with a business. It is as essential to be transparent with suppliers as with shareholders, and to be fair to employees as to customers. In simple terms businesses should abide by good ethics, which in turn, will be good for business.

To gain a further view into stakeholder theory an analytical review by Donaldson & Preston (1995) is   worthy of consideration. They point out that there are three aspects of the theory which although interrelated, are quite distinct:: they involve different types of evidence and argument and have different implications. The three aspects are descriptive accuracy, instrumental

power, and normative validity. They conclude that the three aspects of stakeholder theory are mutually supportive and that the normative base of the theory - which includes the modern theory of property rights - is fundamental.

Their central theses can be summarised as follows:-

Thesis 1: The stakeholder theory is unarguably (in their view) *descriptive.* It presents a model describing what the corporation is. It describes the corporation as a constellation of co-operative and competitive interests possessing intrinsic value (as commented by Schaltegger *et al* above).

Thesis 2: The stakeholder theory is *instrumental.* It establishes a framework for examining the connections, if any, between the practice of stakeholder management and the achievement of various corporate performance goals, (alluded to by Sternberg above).

Thesis 3: Notwithstanding Theses 1 & 2, stakeholder theory's fundamental basis is *normative* and involves acceptance that a) Stakeholders are persons or groups with legitimate interests in procedural and substantive aspects of corporate activity. Stakeholders are identified by <u>their</u> interests in the corporation, whether or not the corporation has any corresponding functional interest in <u>them</u>. b) The interests of all stakeholders are of <u>intrinsic value</u>, each group meriting consideration for its own sake and not merely to further the interests of some other group, such as shareowners.

Thesis 4: The stakeholder theory is *managerial* in the broad sense of that term. It is not just describing existing situations or predicting cause - effect relationships; it also recommends attitudes, structures, and practices, which when combined constitute stakeholder management. A key requirement is simultaneous attention to the legitimate interests of all appropriate stakeholders, both in the establishment of organisational structures and general policies and in case - by- case decision making. This requirement holds for anyone managing or effecting corporate policies, including not only professional managers, but shareowners, the government and others. Donaldson & Preston acknowledge that the theory does not imply that all

stakeholders (however identified) should be equally involved in all processes and decisions. Sternberg, as explained above, does not share this view but acknowledges that the concept of a 'stakeholder' does still have a useful role.

Donaldson & Preston (1995) comment that considerable agreement now existed as to the theoretical definition of property as a 'bundle' of many rights, some of which may be limited, as set out by Coase (1960). They add that the notion that property rights are embedded in human rights and that restrictions against harmful uses are intrinsic to the property rights concept, brings the interests of others (i.e. of non-owner stakeholders) into the picture. They argue that if one accepts a pluralistic theory of property rights, then the connections between the theory of property and the stakeholder theory becomes explicit (Becker: 1978,1992). They state it is only necessary to show that characteristics which are the same as those giving rise to fundamental concepts of property rights, gives various groups a moral interest commonly referred to as a 'stake' in the affairs of a corporation. Consequently the normative principles that underlie contemporary pluralistic theory of property rights also provides the foundation for the stakeholder theory as well.

In the modern day world the term 'stakeholder' is increasingly developing a wider meaning as noted by Sternberg. The notion that the media should be routinely recognised as stakeholders was originally introduced by Freeman (1984) although Donaldson & Preston (1995) comment it seems to have been eliminated from his later writings. They believe it is essential to draw a clear distinction between influencers and stakeholders: some actors in the enterprise (e.g., large investors) may be both, but some recognisable stakeholders (e.g., job applicants) have no influence, and some influencers (e.g., the media) have no stakes. Thus the view of Donaldson & Preston is at variance with those of Sternberg. Given the passage of time, and the higher profile of corporate social responsibility in everyday life it is suggested that the view of Sternberg could be seen as more apposite. It could be argued, for example, that the media is both an influencer and a stakeholder, having a dual role since it frequently responds to the views of its readers or viewers. Modern transport newspapers and magazines are a good illustration of this feature

when they highlight particular issues by way of special features, news items or editorials. Perhaps a more pertinent point is whether their views affect or influence transport planning in the context of stakeholders.

2.3 Impact of Transport Planning

Bannister (2002) points out that transport planning has been completely transformed from a technical activity based on a simple demand led assumption (sometimes called predict and provide) to a more complex approach that attempts to place limits on mobility through pricing, regulation and other strategies. The planning process has become more holistic with transport elements being linked to housing allocations and the need to maintain regional competitiveness.. He also considers the process is more broad based, involving a wider range of stakeholders and affected parties. In his view it has been democratised and become more normative, principally through the introduction of complex objectives such as those relating to sustainable development.

Whilst planning issues will be touched on later it is worth highlighting that sustainability issues are, for example, at the core of all airport planning policy making (Graham: 2003). A strategy increasingly employed by airport planners is the idea of partnerships between stakeholders in air transport and local communities, whose representatives meet in Air Transport Forums. The air transport industry has been used here purely for illustrative purposes, but the principle applies to all transport modes. It can be seen that Graham has differentiated local communities from stakeholders, but in the wider definition used by Sternberg, local communities could be deemed   stakeholders.

2.4 Stakeholders in the Transport Industry

Surprisingly, there appears to be no authoritative literature which helps with a definition here. Many writers refer to 'stakeholders', alluding to who they may encompass, but there is no definitive guide. It is therefore necessary to construct a list of who they may embrace: they will not necessarily be the same for each transport mode. The example provides a broad listing but it can be adopted on a 'pick and mix' basis.

The above listing is clearly not finite and will depend on circumstances. Whilst the list is merely a guide it is still quite extensive and there is plenty of scope to argue whether some should be regarded as 'influencers' rather than 'stakeholders' in Donaldson & Preston terms. For this reason the media in its various forms has been deliberately omitted but could be validly inserted in relevant circumstances. For example, the role of the Manchester Evening News in demanding urgent action to resolve the buses debacle described in the introductory section above (p4). The newspaper would be deemed to be a representative of passengers/customers in demanding a proper reliable service.

Another example, in diagrammatic form, is illustrated in the Privatisation process and structure of the UK rail industry as of February 2001 (Tyrall: 2006). The inclusion of 'Bereaved Families' results from the tragic train accidents at Southall, Ladbroke Grove and Hatfield. This illustration, nonetheless, is mainly covered in the listing above but portrays the general linkages as related to the railways. Interestingly, Tyrall has included the Media. Railtrack has now been succeeded by Network Rail, and the SRA (Strategic Rail Authority) replaced by the Department for Transport.

Example 1.
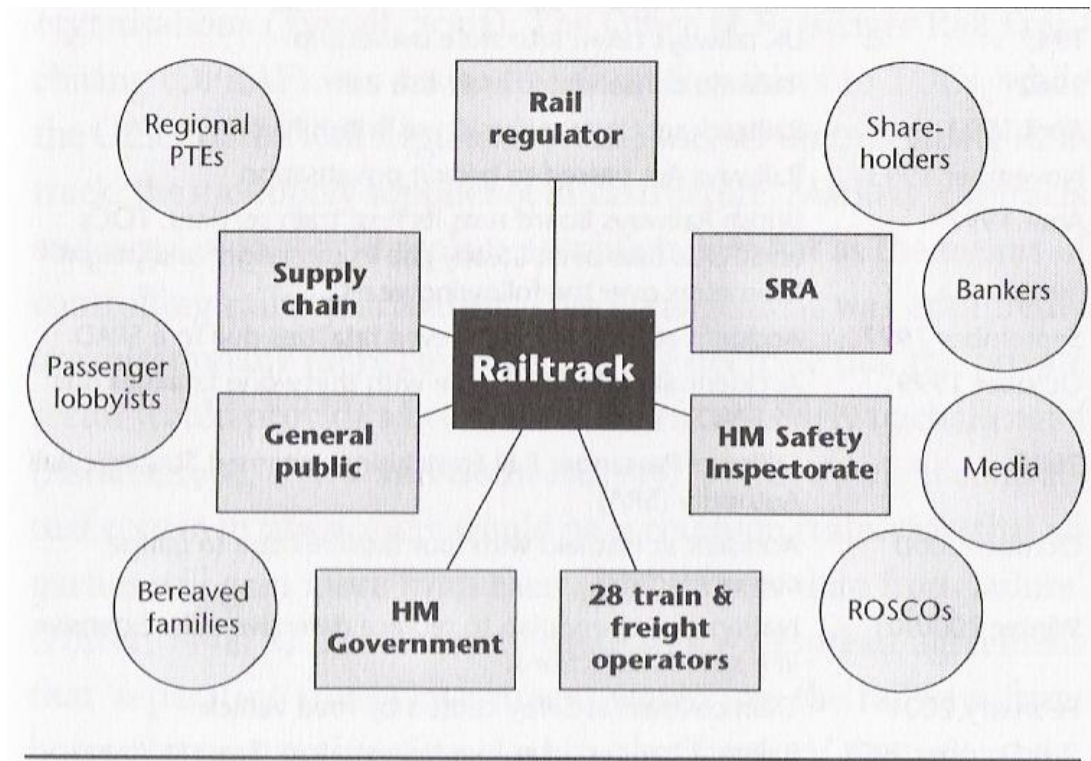
(Tyrall: 2006)   Rail industry stakeholders in February 2001.

The stakeholders listed for the UK should be similar for other European countries , but are they ? A comparison with a European country seems apposite : Switzerland in particular, since it will form a focal part of this study.

2.5 UK vs. Switzerland

Firstly, it is appropriate to look at the Government structure in Switzerland which consists of three tiers: federal government, canton level government and municipal level of government. The federal government is made up of two houses; the *Nationalrat,* which is voted in by a system of proportional representation, and the *Standerat,* which is directly elected, with two seats from each canton. There are 26 cantons, of which 6 are 'half-cantons'. Each canton has a directly elected parliament and an executive. The municipalities, or communes, have substantial autonomy, as specified by cantonal law, and are directly elected. Direct democracy is strong, which is evidenced by the fact that the national transport plan was rejected through a referendum. In addition, citizens can start their own referendum. (Transferability of best practice in transport policy delivery: Final Report. (2003)).

Government responsibilities can be summarised as follows:-

Road and Rail Networks: The national government is principally responsible for traffic management, and for the road and rail networks, but funding for the road network comes form both national and cantonal administrations. Both canton and municipalities develop plans for urban development and traffic infrastructure including parking policies and traffic management.

Rail Services: The national railway operator is Schweizeriche Bundesbahn (SBB). Changes to the financing and structure of rail services were formulated in the mid-nineties which resulted in regional transport being regulated by the federal and cantonal governments. Responsibility for the structure of services of the regional transport system now rests with the cantons, the federal government having a coordinating role. The changes also specified that local transport is the joint responsibility of the communities and cantons. They also specified that all forms of public transport would get a subsidy of 66% of all uncovered costs from the federal government, with the final 34% covered by the cantons, (though this has sometimes been problematic to implement because of inter-cantonal disagreements). The level of subsidies is agreed in advance by the federal and cantonal governments and the transport companies, and cannot be increased. The changes also introduced

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competitive tendering for new or replacement services.

Other Public Transport Services: In some regions, the cantonal government assists with the funding of urban public transport, as well as the regional public transport network (eg. Bern) The funding of different modes is set out in legislation, with much of it coming from fuel tax. Financing of public and private transport is separate, with emphasis on supporting public transport. Also a new tax on lorries indicates a move towards internalising the external environmental costs. The municipalities also have considerable autonomy in developing and implementing their own transport policies.

The Report (*ibid*) comments that the changes introduced in the mid-nineties introduced competition into the bus market, via competitive tendering which has led to more cost-effective bus services without loss of quality, but where improvements have been made through capital investment in new rolling stock, some social problems have become evident. It also states that there has also been a lack of competition in the urban public transport network.

The government has significant control over public transport, as the   level of service is specified by a government controlled authority. With the exception of SBB, entry to the public transport market is controlled by government authorities, which also determine the development of new services by requiring operators to be granted a concession to run a service. These concessions restrict all other operators from running services on the same route, and last for several years. This could provide some explanation for the statement about lack of competition in urban public transport above.

Financing of regional and urban public transport varies between cantons; the federal authorities determine cantonal contributions towards regional (road and rail) public transport. The relative contributions from cantons and municipalities are established on the bases of regional or local income tax, with the municipal contribution also determined by an index of service levels in each municipality. Such contributions are taken from the property taxes of the cantons and municipalities.

Environmental Policy: In general, environmental policies and laws are drawn up at national level but are implemented by the cantons. The municipalities also have considerable autonomy in relation to environmental policy.

Land Use: The national government sets out the framework for the land use system, which is then taken on by the cantons. Cantonal legislation and policies regarding land use are coordinated by national government. The municipalities also have considerable autonomy in the implementation of land use policies, and as the decision-makers, are left to decide the best forms of land use for their area.

Environmental Policy and Land Use will be discussed later; notwithstanding one form of transport which is conspicuous by its absence is air transport and airports; this may be included in 'Other Public Transport Services' but it does seem a patent omission from the Report. However, from the point of view of highlighting who are the stakeholders, a listing would be very similar to that of the UK, with a bias towards governmental involvement on the one hand, and more direct and democratic involvement of citizens on the other. In the UK , 'citizens' are represented by Passenger Focus, passenger lobbyists, customer focus groups, and the media. The general overview provided of the Swiss structure highlights the fact that their transport systems are far more based on integration and the total journey for a passenger. The principle of integration now needs to be explored in more detail.

3. Integration

It is worth repeating the definition of integration being used in this study which is 'fitting together of all transport modes in an effective and sustainable way to form a whole'. Put simply, whatever modes or types of transport are involved they all operate as a seamless entity - for the benefit of the fare paying customer. It is the desire to provide a seamless journey that is as ' door to door' as is practically   possible.

3.1 Discussion

However integrated transport as a concept can have different links for different purposes. For example, at government level, the Commission for Integrated Transport (CfIT) is an independent body advising the Government on integrated transport policy. CfIT takes a broad view of integrated transport policy and its interface with wider Government objectives for economic prosperity, environmental protection, health and social inclusion. Physical integration - the principle of ensuring transport modes operate in conjunction with one another, is just one vital element of the bigger transport picture. The Commission provides expert advice supported by independent research.

CfIT was established by the 1998 Integrated Transport White Paper "to provide independent advice to Government on the implementation of integrated transport policy, to monitor developments across transport, health and other sectors and to review progress towards meeting our objectives".

Following an independent review of CfIT in 2003, the Commission's remit changed to a) Providing policy advice via evidenced based reports on:

- Future policy options, so-called "blue-sky thinking" on future strategic issues
- Policy issues spanning departmental boundaries (ie environments, social etc)
- Best practice amongst local authorities/delivery agencies to encourage improved performance and to highlight barriers to best practice
- Comparisons with European/International policy initiatives and dissemination of best practice

- The impact of new technology on policy options
- Specific issues as requested by the Department for Transport

And b) <u>Refreshing the transport debate</u> based on published reports and with a view to raising the overall level of the 'Transport Debate' and where possible to build consensus among stakeholders. (CfIT: 2007).

Smyth (2003) comments that contrary to the common tendency of governments to centralise power so that they can exert maximum influence on policy formulation and delivery, the Labour government has fulfilled long-standing commitments to introduce devolution to the UK. (The UK government in London retains responsibility for 'reserved' powers (including macroeconomic management, foreign affairs and some domestic matters such as transportation safety) and English domestic administration).Long regarded as one of the most centralised states in the developed world, the UK's political structure was substantively decentralised by devolution in 1999, with power over many domestic policy areas transferred from Westminster to the elected Scottish Parliament, National Assembly for Wales and Northern Ireland Assembly. Smyth considers that it is very likely, this transformation of the political landscape will prove irrevocable, and may herald the beginnings of a longer process of enhanced regional autonomy across the UK.

The attraction of devolution to its supporters is that it offers the potential to create local solutions to suit local circumstances. Against this must be balanced the risk to the state that its devolved regions or countries might pursue policies that contradict central priorities: but this is what 'regional;' or 'national' autonomy is all about.

Notwithstanding possible policy inconsistency and incoherence - the physical and socio-economic differences between England and Scotland, Wales and Northern Ireland are many and varied - it so happens that the UK has, hitherto maintained a single transport strategy of sorts. The elements of this broad strategy, have been in the main, common not just to the approaches of Westminster and the various devolved institutions, but also to those of the Greater London Assembly and English local authorities. At the rhetorical level, Smyth argues that they include a renewed emphasis on public transport with

increased investment in buses and trains, initiatives to support walking and cycling, a transfer of freight from road to rail, and a determination to relieve congestion, reduce pollution and cutback on the emission of greenhouse gases. But it is not just the broad aims that are consistent, since the range of actions being considered or undertaken by the different bodies is also similar. Although the devolved administrations' interpretation of Labour's sustainable transport agenda varies according to local circumstances, there has, until relatively recently, been evidence of significant retreat from the aspiration to improve sustainability in each of the jurisdictions. The issue of sustainability will be reviewed in the next section. Meanwhile the wider aspects of integration need consideration..

According to Vigar and Stead (2003) there is a long history of (physical) integration in the transport field that seeks to improve interchange between modes (intermodality) and the interoperability of transport systems (EC:2001). They identify two types of integration. One is vertical policy integration, which refers to integration between different levels of government (national, regional and local). A second is horizontal policy integration, which refers for example to integration between different policy communities at a given spatial scale. This can imply relations between departments in the same local authority and other stakeholders or between departments in the same organization. In addition it is noted that a subset of horizontal integration refers to intradepartmental integration, where coordination occurs between individual departments that are split, perhaps in terms of organizational boundaries (for example, separate sections or units) and /or functional boundaries (for example, according to transport mode).

They further contend that vertical policy integration in terms of the relations between central and local government is dominated by central government's control of local authority transport policy, principally through approval of financing. This potentially maintains a large degree of integration over policy objectives as central government can exercise a gatekeeper role over such funds.

It is also pointed out that the second form of integration, horizontal integration,

has often focused on uniting the two policy communities of land-use planning and transport planning, although increasingly links are being made between transport policy communities and those concerned with others such as health.

The word 'integration' has had a long importance in (Labour) transport policy, albeit with major shifts in interpretation, from the manner of governance of a nationalised transport sector in the 1940s, to concern about coordinating bus and rail timetables and ticketing in the 1970s, to recognition of the interaction between modes, and with land-use planning, now. However this is not a problem of any particular party but of government. It in fact mirrors similar problems discussed in many other countries, led by whatever party (Goodwin:2003).

A shift in rhetoric towards the notion of 'integrated' rather than 'sustainable' transport is noteworthy, as the idea of what exactly 'integration' meant has never been made clear (Docherty:2003). Was it improved physical integration between buses, trams and trains to make public transport more attractive? Was it integration between the car and public transport through policies such as park and ride? Or was it a more general integration between policies to improve the transport system in other ways (as illustrated above)?

Notwithstanding the views and comments set out hitherto, a paper by Potter, Skinner (2000) has attempted to analyse how Integrated Transport could be defined. Their paper endeavours to explore the meaning of 'Integrated Transport' considering what strategies will contribute to sustainability. Examples are used from photography and computer system design, outlining a typology developed to classify various definitions of Integrated Transport. 'Integrated Transport' is viewed as scalar in nature, with higher levels incorporating lower, or narrower, understandings of the term. Indicators on the scale include:

- *Functional or Modal Integration*, which is part of …
- *Transport and Planning Integration,* which is part of…
- *Social Integration,* which is part of…
- *Environmental, Economic and Transport Policy Integration*.

Thus Transport Integration could be taken as a series of steps, with an incremental approach leading to higher levels of both Integration and Sustainability. It is contended that only by commitment, and allocation of resources, to the highest levels, will issues of sustainability be properly addressed. (Potter, Skinner :2000).

Potter, Skinner adopt the 'Bruntland Report' (1987) definition of Sustainable Development as meaning "meeting the needs of the present without compromising the ability of future generations to meet their own needs" or in their own terms 'promoting stewardship of our planet so that our activities do not degrade our children's future'. They contend such definitions are difficult to implement via specific actions. Integration is considered much harder to define as it can, in their view, encompass so many different things, many different actions can be thought of as representing an integrated approach.

Using analogies with photography and the computer world, it is suggested that transport can be viewed in system terms: to describe it in terms of how it operates, and its boundary systems. It is contended that the use of 'integration' in transport, in practice, is at an earlier stage of development, compared to say, computer systems understanding. Having considered that some linking of computer systems might suffice, it was eventually realised that a radical approach to integration was required to obtain the ambitious financial and performance targets. It is considered this is the key problem facing the meaning and consequences of integration for transport policy. It is contended that much is trying to be achieved with just a minor linking of disjointed and/or disparate systems.

It is pointed out by Potter, Skinner that with the election of a Labour Government in 1997 the phrase 'Integrated Transport Policy' became more factual: transport integration, following the example of several mainland European countries, was intended to be the mechanism to move towards a more sustainable future. Its purpose was :

"To provide access to goods, resources and services, while reducing the need to travel, so that economic, environmental and social needs can be met

efficiently and in an integrated manner'.

The OECD uses a definition of more precise criteria. This is transport that "does not endanger public health and ecosystems and meets needs for access to people, goods and services consistent with a) use of renewable resources at below their rate of regeneration, and b) use of non-renewable resources at below the rate of development of renewable substitutes". They go on to say that achieving a sustainable transport system will require reductions of up to 50% of CO_2 emissions. The rhetoric and goals of local transport strategies now tend to reflect such definitions.

Potter, Skinner argue, that Integrated Transport is better viewed as scalar in nature, with higher levels incorporating lower, or narrower, understandings of the term Integrated Transport. Points on the scale from lower to higher were described above (p21/22), but are now reviewed in more detail.

Functional and modal integration:

The objective is to make travel easier by a better combination of different modes during one journey; this could be using public or private transport or a mixture of both. This first level is the narrowest definition but will have one or both of the following characteristics.

Functional Integration: which involves ticketing arrangements to enable multi-modal journeys; examples are Transport for London's Oystercard, the similar 'Carte 'Orange' in Paris. In the Netherlands the 'Nationale Strippen Kaart' acts as a single ticketing system for all local transport systems throughout the whole country. Such functional integration is leading to innovative ticketing systems, including the use of stored value and smart card systems.

Modal Integration: allows easy transfer between different modes because of their close physical location and integrated timetable planning. Examples include bus-rail interchange points and rail-link services to meet trains. Potter, Skinner examples of the latter include Amtrak's 'Thruway' buses and Dutch railway's shared 'Train Taxi'. The UK features an innovation in the demand

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responsive 'Wigglybus' rural bus service. Since it serves sparsely populated areas where people may need to cycle to catch the bus, there is a space on the buses themselves. Other examples are Park and Ride , or Bike and Ride (the latter often seen in Scotland).

Transport and Planning integration

It is propounded that a higher stage of transport integration involves consideration of land use and planning as a single entity. Such a policy seeks to employ land use planning as a tool to reduce demand for travel but is likely only to work effectively as a long term strategy, particularly in trying to reduce car travel. It is considered that in the longer term better integration of transport decisions and land use planning has the potential for major benefits by promoting more appropriate land use patterns for public transport, walking and cycling. These would be in stark contrast to, say, development of city fringe shopping, leisure and business parks at motorway junctions.

Social integration

This level would integrate transport policy into key social policy areas to include those who use and provide transport systems, and others with a stake in transport who are not usually involved, such as those who suffer transport generated noise and vibration. In addition, those who operate trip-generating sites, would be asked to consider the travel impact of their operations. Examples such as employers, schools and shopping centres would be expected to implement Green Transport Plans (Transportation Demand Management in the USA or Mobility Management by the EU Commission).

A social integration strategy in Potter, Skinner terms, "would also cover travel substitution and reinventing the mechanisms and processes involved in obtaining motorised mobility. Examples include web-based shopping home delivery services, or car clubs, which are well established in Switzerland, the Netherlands and Germany". Such systems are now gaining popularity in the UK. Potter, Skinner comment that when all external costs of motoring are taken into account, motorists do not pay their way (a view shared by Hibbs:2000), and thus changing the way car use is obtained and paid for

results in its more rational use as with car clubs or similar shared use. This is identified as being behind the EU Commission's desired aim for 'fair and efficient' pricing of transport.

This higher level of meaning of the term integrated is considered to have radical implications if taken to its logical conclusion.

Environmental, economic and transport (or Holistic) integration

This is the holistic level and is contended to bring together all of the above in a coherent way and provide harmony to reduce the need for travel, and reduce the impact of journeys made. Potter, Skinner's logic is that the whole system has a greater value than the sum of the parts; in business terms - synergy. This is a systems led or holistic approach (Saleh, Bell:1997). Using the computer analogy it is pointed out that, just as in transport, disconnected computer systems operate with no relationship to each other, or to the overall operation of the organisation. Only when integration is pursued with adequate resources over a period of time can the systems start to deliver the full benefits expected.

It is suggested that the meanings of integrated transport in use are not at the highest level; only the 'lower level' meanings and actions are prevalent. Whilst the UK Transport Policy White Paper (1998) addressed transport integration mostly in terms of modal integration, there now seems to be some movement towards the higher levels. The Potter, Skinner paper provides an interesting approach to 'Integrated Transport' and how it might be defined. There are some intriguing overlaps with Docherty (2003) in the way questions are posed as to what 'integration' means.

Docherty goes on to comment that in pursuing the mantras of 'integration' and 'choice', the White Paper (DETR:1998) had much more to say about political 'carrots' designed to entice motorists out of their cars, rather than more powerful 'sticks' fashioned to force them out. But, particularly recently, the debate has gathered a greater intensity because of the increasingly acknowledged impact of climate change, notably in the Stern Report, followed by the Eddington Report on transport planning and sustainable choices. Given

this premise, it is now appropriate to explore the interaction of integration and sustainability and the dichotomy created.

3.2 Integration and Sustainability

External unpredictable events, either of a natural cause (for example, earthquakes, hurricanes, tornados) or of anthropogenic origins (for example, war) can result in discontinuities. These types of events are normally excluded from predictions about the future as change is often assumed to be gradual and smooth. But if a paradigm shift or a major change in policy is to take place, then this might well result in such a discontinuity. This argument could be particularly relevant in the debate over sustainable transport where the emerging view is that all policy actions are not sufficiently strong to change direction in a fundamental way. A discontinuity of substantial proportions (for example, a health epidemic that is transport induced) may be the only way to achieve major change, but even here there are doubts over whether real change will actually take place (Bannister:2002). In the longer term, the same well established patterns will be re-established (Bannister:1997). This can be exemplified by the 'SARS' outbreak a few years ago.

It is now acknowledged that emission levels and consumption of oil is continuing to rise, with any benefits from increased efficiency being outweighed by the continuous growth in traffic. If the UK was to achieve the target set by the Climate Change Convention (Department of the Environment:1992), to return the emissions of each greenhouse gas to 1990 levels by 2000, action was required by all sectors. Yet in transport, the dilemma was clear as there seemed to be no obvious, politically acceptable means to reduce emissions and energy consumption.

The vacuum on environmental policy was filled by the Royal Commission on Environmental Pollution (RCEP:1994) in their significant report. After a comprehensive review of the environmental problems caused by transport, six options were presented:

- Letting congestion find its own level;

- Predict and provide;

- Greening the way we live;

- Collective action;

- Selling road space;

- Relying on technology.

Very little guidance was given in the report as to how a strategy for sustainable transport should or could be put together, as it would require a combination of at least four of the options. The focus was clearly on the city, when much of the growth in traffic was taking place outside the city, on the motorways and the inter-urban road network, as well as in international travel, and indeed, in the main, this situation still prevails. More fundamentally, little was said on the importance of persuasion and communication, as it is impossible to impose a radical situation solution, at least in a democratic society (Bannister:2002).

Bannister goes on to comment that it is clear public attitudes to the car must change if a sustainable transport policy is to become a reality. Technology would allow people to do what they are currently doing without using so many resources and creating less emissions. New fuels and low emission vehicles would help reduce the environmental costs of transport, and this option would always be acceptable as it requires little change in travel. But even here the environmental arguments are not clear as to which fuel is the most appropriate long -term option.

Pricing might make people more aware of the real costs of using the car, but current evidence suggests that many drivers are price resistant. Major increases in motoring costs are necessary if the intention is to get individuals to reassess the necessity of making a trip, of switching to the green modes (walk, cycle or public transport), or of travelling to a more local destination. The coffers of the Exchequer would be considerably boosted and Bannister contends this might have a deflationary effect on the economy. In the current economic environment this seems less likely since voters seem to fear that the

monies collected would be put to other uses to plug gaps in the economy. If there were compensating actions to make the impact revenue neutral, then the impact would be reduced substantially.

Market economists such as Hibbs argue that so long as congestion remains a political issue, road pricing will be seen as 'just another tax' or more pointedly 'a poll tax on wheels' (Hibbs:2000). He argues that road pricing should never be seen as a means to penalise the motorist: it is a radical solution (in his view) to so many of he problems that the government's transport policy fails to address. He also states that some commentators regard road-use pricing as a form of *tolling*, for entry to towns or sectors of cities; others see it as *point-pricing*, applying a charge on any section of road where there is congestion. The difference between the two is considered important; point-pricing can be relied upon to constrain the use of cars, whereas tolling could lead to an authority to encourage car use, in order to increase revenue. Hibbs believes that no one can defend the existing system for providing roads. It is inequitable, ineffective, and inefficient in the allocation of scarce resources involved. He considers that ever suspicious of radical reform, the British could all too easily be sold the idea of (electronic) road pricing as no more than a means of dealing with congestion; even worse, the politically correct may see it as another means of harassing the motorist. The heart of the argument must always be the gain in allocative efficiency. It could be argued that Hibbs worst fears have come true; but will the problems of climate change be the 'tipping point' ? Interestingly both Bannister and Hibbs advocate road pricing, but government seems to lack the courage at present to take this forward, fearing voters' back-lash. However the increasingly acknowledged effects of climate change could provide the lever needed.

The addiction to the motor car is perhaps understandable in the context of the travel freedom it provides. The facility for door - to - door movement over short or long distances and particularly where public transport is unavailable or inaccessible, notably but not exclusively in rural areas. But the commute to work by car when other means of transport are available is also a conundrum. Often it is done out of habit; sometimes because it is allegedly quicker than by

public transport. The car is frequently seen as being cheaper than travel by train or bus, and also the car allows one to be in one's own personal space or environment. It is seen as a place of freedom from the pressures of work or home - the commute becomes a lucid interval. We are thus drawn into the world of behavioural science.

A contention put forward by Steg and Tertoolen (1999) is that the problems arising from car use result from the cumulative effect of many individual choices and behaviours of car users. They argue that transport and traffic issues have conventionally been regarded as a challenge for economists and urban planners. These disciplines regularly make implicit assumptions about human behaviour and its determinants. Several of these assumptions prove, on closer inspection, to have limited viability and to be true only under certain conditions. For example, economists frequently assume that humans behave rationally and will always choose the option with the highest utility. But people do sometimes make sub-optimal decisions, owing to lack of information or through the influence of habit. Indeed, technologists also assume that their innovations will be used in the way that was intended by the designer. This assumption is, unfortunately, disproved by experience. For example in the Netherlands, people who have installed energy-saving lamps are less inclined to switch them off when not in use; or they extend the use of energy-saving lamps to places that were not previously illuminated after dark, such as driveways and in gardens. Similarly, a driver whose car has been fitted with a catalytic converter may be inclined to use it more often because 'it is a clean car'.

Steg and Tertoolen (1999) point out that the very widespread use of cars can be interpreted as a large-scale social dilemma, reflecting the conflict between individual and collective interests. From the individual's perspective, the advantages of car use outweigh the negative consequences, such as possible damage to the environment, safety risks and other problems. The negative contribution made by each individual to the sum total of environmental costs and risks seems negligible. Correspondingly, the individual may doubt whether his or her contribution to reducing damage and risks really makes any

significant difference. The result is that individuals tend not to feel responsible for such collective problems and it remains attractive to act purely in one's own interest. A second point is that many people are pessimistic about other people's willingness to change. Steg and Tertoolen could therefore interpret the current problems of car use as a summative consequence of the behaviour of many individual car users, each of whom is shifting what are considered to be negligible costs onto society as a whole.

Car use is seen as having many advantages over alternative means of transport. On the one hand, these advantages are rationally perceived: they include speed, comfort, flexibility, radius of action and carrying capacity. On the other hand, subjective or emotional factors also play a role, such as expressing feelings of power or superiority, or deriving enjoyment from driving (Steg *et al.,*2001). Car users can also express their personality through their choice of car and the way they use it. It has the potential to impress, while catering for feelings of self-worth. Advertisers are able to take advantage of intrinsic motives for car use.

The advantages of car use encourage it to become a habit. People develop activity patterns and a lifestyle that are tuned towards use of the car. Once car dependency is established (Goodwin,1995; Steg,1996), it is very difficult to alter habits and lifestyles. It appears that people will mostly reconsider habitual behaviour only when radical changes are introduced into the situation, causing them to re-evaluate the choices they have made hitherto automatically. Mann & Abraham (2006) have produced an interesting interpretative phenomenological analysis about car use and the role of affect in UK commuters' travel choices. The psychology of human behaviour in this regard has been highlighted by transport planners and is worthy of consideration.

3.3 The Impact of Behaviour

Mann and Abraham (2006) postulate that previous research has suggested that the choice between public transport and private car use is not solely based on utility considerations such as time and cost. However, they suggest that affective considerations tend not to be targeted in policy interventions to reduce car use. This may be due, in part, to a lack of clarity about which affective responses to car use are important and how they may affect willingness to switch to public transport. Their study sought to clarify the affective responses in transport mode choice. An interpretative phenomenological analysis (IPA) of car users' accounts was conducted to (i) explore associated decisions to drive or to use public transport to get to work and (ii) describe the role of affect on such transport decisions, and its relationship to utility considerations. In their semi-structured interviews with 18 car users employed at a medium sized UK University, four affect themes were identified; these were journey-based affect (JBA), personal space, autonomy and identity. Typical utility factors such as time, cost and reliability had important affective effects, and these were considered alongside utility components (eg getting to work on time). However they concluded, these effects were not always addictive, and the role of affect depended on participants' own assessment of their circumstances. Implications for interventions were discussed in the paper.

It is acknowledged by Mann and Abraham that excessive car use contributed to a substantial proportion of UK greenhouse gases (DETR, 1998a) and poor air quality resulting from traffic congestion increases hospital admissions and deaths (Dept of Health 1998). Commuting is a key intervention target because 70% of UK commuters drive to work (DETR1998b).

The Government has tried to persuade people to use public transport; its approach has been based on the assumption that people are willing to use public transport, if it is available, safe and affordable. Yet, resistance to transport interventions suggest that drivers' unwillingness to switch to public transport may go beyond such utilitarian considerations. This has prompted planners to call for a greater understanding of the psychology of human

behaviour in making travel decisions (Transport Planning Society News Column, 1999).

The paper points out that other studies have highlighted affective aspects of travel mode choice. For example, Jensen (1999) found that drivers could be categorised according to their experience of affective and psychological effects of car use. *Passionate* drivers drove for the power and status conferred by their cars, as well as comfort and enjoyment. *Everyday drivers* emphasised the 'rational' aspects of time efficiency, convenience and cost, but also acknowledged affective benefits of independence and control. *Leisure time drivers* by contrast, drove because they did not have access to public transport rather than being motivated by affect or convenience. In a qualitative study Hiscock, MacIntyre, Kearns, and Ellaway (2002) found that driving may also relate to more basic needs. Their data indicated that car ownership resulted in a greater level of ontological security (Giddens 1984), which is theorized as a basic protection need maintained through autonomy, prestige and status. Interviews with car owners and non-car owners showed that car use bestowed a feeling of control over journeys as well as providing protection from unwanted social interaction, weather and discomfort.

It would seem that the challenge for public transport is to provide a consistent positive experience for commuters that contrasts with the hassle of driving. A comfortable and stress-free journey was seen as a basic requirement of a good mode of transport.

Often feelings of control and freedom reflected affective consequences of reliability and accessibility. The car was seen as a source of freedom because it avoided the accessibility problems of an insufficient public transport infrastructure and also enhanced control when faced with unreliability and delays. However, no mention is made of 'turn-up and go' facilities provided by many inner city/urban public services such as London Underground or other cities' 'metro' services, which can be very efficient when run properly and effectively.

Other views from interviewees suggest that it would be possible to highlight the

feeling of freedom from responsibility that public transport can provide while at the same time, also emphasising the limited control over journey time offered by driving because of congestion and limited access to parking space. Combined with service improvements that would allow for greater control over personal space, this could make public transport relatively more attractive. However it is clear this would depend on establishing trust on the dependability and quality of the service among commuters.

It was highlighted that for some, car ownership was simply a 'given', because for them cars are essential for everyday functioning and part of their identity. This is distinct from choosing to drive a specific journey because no alternative is considered. Also, the acceptance of a cultural norm of car ownership engenders the view that ownership is a sign of adulthood or financial status. Some consider that in retirement a car may be less of a 'necessity', but many retirees still have to rely on a car if they live in rural or remote areas.

In the Mann and Abraham sample, emphasising the down to earth , even dysfunctional, aspects of an owned car seemed to protect certain respondents from accusations of driving for image or pleasure. There were some strong feelings about the environmental impacts of driving, and comment about guilt in using a car every day. Their resolution of this was a need-based car ownership, which eschewed identification with the status and other image-relevant social connotations of driving.

The Mann and Abraham results support previous findings implying that driving confers affective benefits not achieved through public transport use (Ellaway *et al* 2003;Hiscock *et al* 2002; Jensen 1999; Stradling, Meadows and Bentley,1998). But their data did not demonstrate a clear distinction between affect and utility factors, which appears to underpin their treatment in earlier research (eg Steg *et al* 2001; Wardman *et al* 2001). As an Example, Wardman *et al* found that 'psychological factors' (such as safe, dry, simple, clean, comfortable, unharassed and easy) were statistically independent from 'instrumental benefits' of time and cost. In the Mann and Abraham study, however, utility beliefs such as time efficiency and reliability were commonly presented as influencing decisions through their affective impact. Thus, when

the meaning of 'time' is not explored in quantitative studies (eg Bamberg & Schmidt 1999,2001) its effects may be due to the affective experience of coping with delays and the effect of a longer journey rather than lateness per se. The findings suggest that, although affective aspects of decision making are semantically distinct from utility considerations they are not separate aspects of the decision-making process. The intrinsic impediments to making public transport services as time efficient as car use (Bamberg & Schmidt,1999), tackling the affective impact of a potentially more time consuming journey may be important to campaigns designed to reduce the numbers of commuters who drive to work. Time efficiency is crucial to public transport use, but providing a more pleasant travel environment may reduce the need for public transport to be <u>more</u> time efficient than driving. In addition. being able to demonstrate to the potential customer that the transport service is trustworthy is likely to become a powerful motivator to change mode. Developing quality public transport services and successfully marketing these to commuters will depend on having a sophisticated understanding of the perceptions and concerns that underpin commuters driving decisions.

A look at research which was conducted in a group of European cities can provide an insight into how people are being persuaded to use public transport .systems.

3.4. Verkehrsverbund (Verbund)

Pucher and Kurth (1995) produced a paper highlighting the Verkehrsverbund system of public transport organisation which offers a practical solution to the problem of providing integrated regional public transport services for the increasingly suburbanised metropolitan areas of Europe and North America. They initiated their exposition by pointing out that throughout the world, public transport is experiencing problems due to increasing car ownership and the suburbanization of both residences and firms. They also acknowledge that car ownership creates greater competition for public transport. Indeed a recently published report by the RAC Foundation (Transit,10 Aug 2007) concluded that (in the UK) "where transport is concerned, we tend to stick with what we know"; that is that modal shift has been difficult to achieve. This supports the Mann

and Abraham study discussed previously.

Pucher and Kurth comment that historically, most public transport has been focused in central areas of cities, where high population and employment densities enable frequent services, many routes and high occupancy rates. As metropolitan development spreads out into the suburbs, public transport faces a crucial challenge to extend its services to outlying areas and to integrate suburban services with city centre services to produce a truly co-ordinated, regional public transport system. They argue that the Verkehrsverbund system of public transport organisation appears to be an ideal solution to the problem of providing an integrated regional public transport service for the increasingly suburbanised metropolitan areas of Europe and North America. By carefully coordinating fares and services for all routes, all types of public transport, and all parts of the metropolitan region, Verkehrsverbund systems in Germany, Austria and Switzerland have greatly improved the quality of public transport alternative to the car. Five Verbund systems were chosen for detailed analysis: Hamburg, Munich, the Rhein-Ruhr region, Vienna and Zurich.

The analysis documents the success of each Verbund in attracting more public transport riders and, in most cases, increasing or at least stabilising public transport's share of modal split. They also analysed the reasons for the success of the Verkehrsverbund, including service expansion, improvement in service quality, more attractive fares, and extensive marketing campaigns. They considered the five case study systems offer lessons for other public transport systems facing similar challenges of dealing with increasing car ownership and suburbanization. Ultimately they conclude with the most challenging problem of all: public transport finances. The five case studies spotlight the service improvements and fare structures needed for truly effective regional public transport but which requires substantial government subsidy. Fiscal austerity at every government level is leading to subsidy cutbacks in most countries of Europe and North America. An attempt is made by the authors to provide lessons on how to deal most effectively with limited subsidy funds in order to minimise service deterioration, fare increases and ridership losses.

The movement towards regional coordination of public transport services began in Hamburg in the mid-1960s. Hitherto it was totally lacking; for example, getting from one end of Hamburg to the other could take up to seven different tickets (Doerel *et al*,1993). When one added in increased car ownership, suburbanization, and unfavourable demographic trends, the low quality of public transport service was partly responsible for a 16% decline in total ridership in Hamburg from 1956-1965.

Recognising the predicament of public transport the government officials from the three states (Lander), 140 cities and towns and seven public transport firms in the Hamburg region came together in 1967 to form the Hamburger Verkehrsverbund (HVV), a special public authority that fully coordinates public transport in the region while preserving the identities of the component firms, which remain responsible for actually supplying the services. This co-operative arrangement was the first of its kind in the world. (Doerel *et al*,1993). The Verkehrsverbund ensures that the customer needs only one ticket and one integrated timetable for the entire trip from origin to destination. HVV is responsible for planning and marketing public transport services throughout the Hamburg region. It collects and analyses operational and financial data, designs the route network, determines the frequency of service and exact timetable for each line; sets the fare structure; distributes passenger revenues and subsidies among the member firms, and performs all advertising and public relations functions. The member firms have an incentive to operate efficiently as the subsidies they receive from the Verkehrsverbund are based on route-km and vehicle-km of service provided, not on the operating deficit. In the nearly three decades since HVV was set-up, its improved services and fare structure had generated a 14% increase in passenger usage (Doerel *et al*, 1993). Pucher and Kurth point out this had been achieved notwithstanding a decline in the central city population.

Success in Hamburg led to Verkehrsverbund being set-up in various cities/regions of Germany. The common feature provided by the Verbund was that it greatly simplified public transport use for the customer (rider), offering one integrated route network , one consolidated timetable, and one unified fare

structure and ticketing system for the entire metropolitan region (German Ministry of Transport,1988; Pucher and Wiechers,1985).

The positive results with the Verkehrsverbund led to its spread to Austria and Switzerland. Indeed most Austrian cities are now served by some sort of Verkehrsverbund system, frequently the entire state (Bundesland). The largest Austrian cities such as Vienna, Graz, Linz, Salzburg and Innsbruck, have Verkevrsverbund focused on their own metropolitan regions, whilst smaller cities and rural areas are generally served by state-wide (ie provincial) Verbund systems (Austrian Ministry of Transport, 1995). Switzerland has now also introduced the Verkehrsverbund, with the largest and most successful Swiss Verbund in Zurich, Basel and Geneva, and other cities/regions have followed. (Pucher and Kurth,1995)

The Austrian and Swiss Verbund are not the same as in Germany, having different procedures for revenue and cost accounting, and thus different methods of distributing subsidy funds among members. In addition, the relative importance of different levels of government - federal, state and local - varies from country to country, especially in subsidy finance. Nevertheless the basic structure of the Verbund system is the same in all three countries. The prime factor is that the result is the same for the customer: completely coordinated and integrated services and fare structures. (This fact is likely to act as key focus for documents 3, 4 and 5).

The Zurich, Munich and Vienna Verbund regions include extensive forests, farms, nature preserves and many small towns and villages, which are essentially rural in character. The Rhein-Ruhr Verbund also covers a large area, but is mainly of high density cities and towns clustered around the industrial core of Germany.

Pucher and Kurth rightly point out that each Verkehrsverbund is based upon a rail network as its backbone. In virtually every Verbund, the S-Bahn (suburban rail) and U-Bahn (metro) work together to provide the bulk of the long-distance public transport services in each region, and an increasing proportion of intermediate-distance travel in high-volume corridors. The S-Bahn systems are

the crucial links between the outlying portions of Verbund regions and their central areas (and for the Rhein-Ruhr, between different city centres as well). The U-Bahn systems are primarily designed to provide high- speed travel within the urban core of each region. The various types of bus services are designed as feeder and distribution routes to bring passengers to and from the rail network.

Tramways play an intermediate role: their function varies according to whether they have exclusive right of way. In Dusseldorf, Dortmund, Essen and Bocheim (Rhein-Ruhr), tramways have been upgraded to modern light rail standards, largely underground, and on separate rights of way even on surface routes. In Vienna and Munich the emphasis has been on replacing tramways systems with fully grade-separated U-Bahn and S-Bahn systems. The tramways in Zurich still carry more than half of all passenger trips, and proposals to replace these with a U-Bahn system were rejected by voters in a referendum. In Zurich trams serve mainly short- and intermediate-distance trips. Suburban rail (S-Bahn) has now grown in importance and established itself as the key unifying link between the various parts of the Zurich region. It is also of note that as Zurich is a lakeside city, the lake steamers are included in the Verbund system. Interestingly, Zurich had almost twice as many public transport trips per capita as Paris and London, although it is only a tenth of their size (Pucher and Kurth,1995).

Pucher and Kurth comment that virtually all analysts agree that the indirect social and environmental benefits of public transport (congestion relief, pollution reduction, traffic safety) are all closely related with the level of public transport use. They contend that both in terms of direct and indirect benefits, the five Verbund systems they reviewed were a major success. The reasons are discussed below but before doing so a recent interview in Rail Magazine (Issue 573) with the Managing Director of Northern Rail, one of the UK rail franchises, is worthy of comment. The parent company of Northern Rail is Serco Ned railways (which also runs the much smaller Merseyrail franchise).

Ned Railways is a wholly owned subsidiary of the Dutch National Rail Operator NS and has tried to import European-style integrated transport

networks but according to the Managing Director (MD) Northern Rail, has had difficulties trying to achieve success. The MD points out that Europe generally, and the Netherlands in particular, have moved much further forward than has the UK. Integration is proving a struggle: the public structures in the UK do not make it easy. Bus de-regulation has an impact. The rail company has a good relationship with the Passenger Transport Executive (nearest equivalent to a preliminary Verkehrsverbund in the UK) who are trying to bring together the rail planning agenda and the bus planning agenda. But they have different powers for both and that does not facilitate integration particularly well. In the Netherlands, the MD points out, it is built into the structure that if the rail timetable changes, the bus timetable is mandated to change. That is not the way public transport is constructed in the UK and is frustrating, but efforts are made to make integration work where they can. Whilst Pucher and Kurth did not include the Netherlands in their study these findings are still apposite. In Switzerland a similar system of setting timetables as in the Netherlands is in force with the bus and tram timetables mandated to dovetail into the rail timetable.

All five Verbund systems in the study expanded the public transport services provided. In the cases of Munich and Vienna new U-Bahn systems were created which were fast, dependable and comfortable. S-Bahn networks were expanded in all cities, but largest growth was in Munich, Vienna and Zurich. Service frequency was also increased on most existing rail and bus services and, in addition, they provided more regular interval services (Taktverkehr) to make the schedule easier for customers to remember and to facilitate transfers between lines and different public transfer modes. As an example, in Vienna and Zurich bus and tram services are generally every five or ten minutes. S-Bahn services in Munich are every 20 minutes and U-Bahn services every five minutes, with higher frequencies at peak times.

In addition, all five Verbund systems have made considerable investment in improved information for passengers. Use of computerised information has been widely developed and some systems are now being copied in the UK. The five Verbund have also improved passenger information by distributing

free route-by-route timetables, expanding and improving their phone information service, and providing extensive route, schedule and fare information at every rail station and bus stop.

Pucher and Kurth also noted that express bus services were established to those outlying areas where densities were considered too low to justify the large expenditure to extend the suburban rail network. Each Verbund seems to have adopted the approach of feeder services to fill in the market gaps in low density areas. In terms of integration this is a logical approach.

The study also highlights how ridership growth through better quality service has been achieved. Inter alia, the following were evident :-

- Speed and dependability affect modal choice; for example in many German, Austrian and Swiss cities, computerised traffic control systems have been installed to give buses and trams priority access to inter sections shared with cars and lorries;

- Convenient S-Bahn services between airports and the city centres are evident in all five case study regions;

- Park and ride and bike and ride are two further aspects of inter-modal co-ordination;

- Bus stops and stations have been expanded with modern inter-changes with appropriate sheltered waiting areas providing protection from the weather;

- Improved quality of vehicles be they buses, trolley buses, tram, railcars for U-Bahn and S-Bahn;

- Better co-ordination of timetables. Increasingly, the unit of analysis for schedule planning is the entire trip from origin to destination, taking transfers explicitly into account, with the goal of minimising total travel time and problematic transfers. Synchronisation of route schedules had become especially important.

Ridership growth had also been achieved through more attractive fare structures. A key element brought about by the Verbund system has been integrated fare structures. Zurich and Rhein-Ruhr had been able to offer major fare reductions in 1990 through the introduction of new environmental tickets (Regensbogenkarte in Zurich, Ticket 2000 in Rhein-Ruhr). Zurich had the lowest average fare of the five Verbund systems in the study. It was also noted that too complex a zonal fare structure could discourage ridership. The UK fare systems are often criticised on this point; particularly on the railways.

The five Verbund systems had been innovative in their marketing strategies. Good use had been made of advertising as a free public service, large stores in Zurich, for example, put public transport adverts on their shopping bags. Advertisements in the Verbund regions emphasise the environmental and social benefits of public transport, but also depict public transport as a safe, convenient, money-saving alternative to the car. (Hitherto, in the UK, such advertising has been treated with cynicism by the travelling public. However with modern technology such as CCTV now installed in buses, trams and trains, this attitude is starting to change).

As indicated above the fare structure itself is employed as a key to marketing. Various innovative strategies are used; for example, some hotels include public transport tickets in their room prices. These are generally quite effective at increasing ridership since there is no additional charge to the user for the public transport ticket itself. The observation by Pucher & Kurth on hotels contrasts with that found in the UK. Dr Paul Salveson (Rail 574) comments that, in general, UK hotels are hopeless at supplying train information. This compares most unfavourably with Germany where hotel reception will have a current timetable to hand as well as being skilled in the use of the DB (German Rail) website. Many hotels will sell you a day ticket to use on the local public transport network (if not included as described above). In the UK the attitude towards bus transport is often little better. Clearly there is a culture problem - expecting everyone to use a car.

To return to the five case studies, Pucher & Kurth consider that all marketing techniques used were aimed at advertising more attractive services and fares

of the Verbund, convincing car drivers to try out public transport, and deepening the loyalty of current customers. In every respect, the Verkehrsverbund form of public transport organisation represented a genuine advance in the provision of public transport service to the metropolitan regions.

However Pucher and Kurth acknowledge that notwithstanding the benefits of the Verkehrsverbund, it has proved costly to provide extensive, high-quality regional public transport. The study indicated that operating deficits had grown steadily, and the percentage of operating costs covered by passenger fare revenues had fallen. It was considered that there were three possible explanations for the deteriorating financial situation of most Verbund systems. Firstly they comment that in their view, a crucial point is, it is virtually inevitable that the increased expenses from expanding services and the reduced revenue of discounted fares will not be matched by commensurate increases in public transport ridership. They go on to state that virtually every available study of travel demand elasticity shows that the demand for public transport is quite inelastic, especially in response to fare reductions. (Goodwin, 1992; Oum *et al*, 1992; Cervero, 1990). Lower fares would increase ridership but the percentage growth in passenger trips is far less than the percentage reduction in fares, thus leading to overall revenue losses. Service improvements tended to be more effective than fare reductions in increasing ridership, but still with a demand elasticity less than 1.0. They contend that increasing the supply of public transport services produces more ridership but the percentage increase in passenger trips is less than the percentage increase in service supply. They believe that in general public transport demand is quite inelastic, requiring large subsidy increases to generate ridership growth (Cervero, 1992). All five Verbund systems examined tended to confirm that financial dilemma.

Earlier reviews by German and Swiss transport ministry reviews (in 1994 & 1989 respectively) confirmed the demand inelasticity estimated by other studies, and the large subsidy increases needed for ridership growth.

Whilst time has moved on since the five Verbunds were originally examined, at least one has become more financially aware. It was recently reported (TR Europe: 2007) that DB (Deutsche Bahn/ German Rail) is taking

Verkehrsverbund Rhein-Ruhr to court over VRR's unilateral cut in subsidies by 20%. VRR claims that DB was offering overpriced services when the operating contract was agreed several years ago, citing lower fares by DB for other contracts at present. The case is likely to reach the highest appropriate court of the German legislature given its significance.

Returning to the review, two other factors have compounded the financial problems of the Verbund systems. Some Verbund arrangements have distributed subsidies among member firms based on vehicle kilometres of service supplied, not on passenger trips. Thus, the focus of individual public transport firms within any given Verbund has been on service expansion not on maximum usage of existing services or redistributing service supply away from under-utilised services towards markets with greater potential demand. Consequently there has been insufficient incentive to maximise the efficiency of service provision and utilisation.

Finally Pucher and Kurth consider that the extension of public transport from the cities to the suburbs has indeed succeeded in creating truly regional public transport systems but only at enormous subsidy costs. Nonetheless they go on to say that after years of expansion, public transport is now having to deal with subsidy reductions or at least a stabilization of subsidy levels. In Zurich, for example, strict cost control was introduced and routes and loadings looked at to make the best use of resources. Such action had resulted in cost increases less than inflation in 1993 & 1994. Continuing monitoring of costs together with innovation through use of new technology has perpetuated an optimum efficiency approach. Expansion of the systems only take place if costs/benefits indicate a positive outcome. Funding for new projects has often come about through private firms 'adopting' particular public transport lines or stations.

It is concluded, that overall, the more extensive, higher-quality and better integrated services offered have significantly increased above pre-Verbund levels, and the modal-split share of public transport has either grown or stabilised at most of the Verbund regions, in sharp contrast to the plummeting modal splits of public transport in some other countries.

Adequate government support of public transport was crucial to its continued success. It was not realistic to expect that voluntary private contributions will suffice: the most logical source of funding for public transport was increased taxes, fees and user charges for automobile ownership and use. Because car users are not required to pay the full costs of car use, the modal choice between the car and public transport was severely biased in favour of the car. This is a view endorsed by John Hibbs (2000). Economists propose increased taxation of car use as the optimal solution to the car's under-pricing. Such taxes could produce considerable new revenues that would be the ideal source of funding for public transport. Pucher and Kurth advocate that not only would higher taxes on cars' use help internalise the many severe social and environmental externalities of car use, thus eliminating the bias in modal choice; they would also help to provide a high-quality, extensive, affordable public transport alternative to car use. The five Verbund systems clearly illustrate the benefits which can be made, but adequate government funding was essential. However the Political implications, in most countries, vis-à-vis the electorate and the addiction to the car by many people is overlooked.

4.0 Multi-Modal Traveller Information

Clearly car addiction is a major problem to be tackled. Glenn Lyons and Reg Harman produced a useful paper entitled 'The UK public transport industry and the provision of multi-modal traveller information' (Lyons and Harman 2002). They point out that public transport is considered key to the policy objectives of achieving an integrated and sustainable transport system. But improvements to public transport operations alone will not necessarily persuade people to forego the use of their cars and make use of public transport modes. Intending travellers need to be informed of what is available. The paper (Lyons & Harman 2002) attempts to address the issue of integrated traveller information provision and subsequently explores the issues facing decision makers and service providers in the light of public needs and consumer understanding.

4.1 Stakeholder Issues

Considerable progress is being made in developing both bespoke systems and the national multi-modal systems. UK transport professionals appear keen to exploit the potential of traveller information to influence behaviour. Yet this requires an understanding of more than just the technological opportunities and policy frameworks to succeed. For information systems to be effective (as opposed to only technologically advanced <Adler and Blue,1998>) several factors need consideration including awareness of information availability and the inclination and opportunity to access information alongside the provision of information items that are relevant to travellers' requirements (Lyons, 2000). There is a need to consider the role of information in the context of an integrated transport system within which factors concerning the underlying quality of service also have a significant bearing on travel behaviour and mode choice.

Lyons and Harman (2002) observe that people undertaking journeys rarely look for information. A lot of journeys are undertaken regularly and people often use the same mode for a particular trip purposes without reflecting on it. Only if they face disruption (eg their car not being available) do they consider an alternative. Even then they are more likely to decide on a main mode (eg train) without seeking in-depth information on alternatives or on other aspects of the journey.

Public transport can be perceived as difficult by car users, in particular, because information has to be sought from unfamiliar or uncertain sources especially when a journey using more than one mode or link is involved. Lyons and Harman contend people tend to know they have a local bus route but have difficulty in finding out and using bus routes at the other end of their journey. This can often dissuade them from using public transport throughout.

Furthermore, information concerning travel interchanges is critical since <u>fear</u> over interchange forms a key barrier to travel by public transport. Partly as a result of bus Regulation (outside London) easy links between bus and train are often lacking at stations; in some cases buses do not even serve stations.

However recasting local bus networks to overcome this would usually be expensive and disruptive. Interchanges themselves need to provide excellent facilities, including   information, but often fail to do so. There is often a lack of trust in much of the information available. Not enough thought (ie empathy) has been given to the passenger and what they need. The National Rail Enquiry System (NRES) has attempted to alleviate this problem by offering impartial and comprehensive advice on route planning and is rebuilding the feeling of trust hitherto. Similarly in London, Transport for London (TfL) appears to have a strong image as a provider of information, possibly because it is a traditional publicly owned body managing an apparently single network.

Having local timetables and maps available as supplied by TfL is helpful, if not essential. But the user has to be encouraged to pick up and use the information. In part this can be done by addressing the needs of particular groups in society eg students, elderly, mobility handicapped. Targeting people when they make major lifestyle changes (eg jobs, residence or key family change) is also valuable because it is then that they change regular journeys. In addition employers can be targeted to ensure employees know what is on offer. Often people do not know what they want: so public transport providers need to do effective market research on the needs for services and facilities before promoting them. Unfortunately too often this does not happen, so that intending travellers do not use the services or find out about them.

Lyons and Harman rightly point out that most public transport and essential services are provided by commercial bodies for whom the bottom line return on investments is the key objective for all actions: usually this means increased travel on rail or bus services. Public transport providers consider it important to market their services, but give priority to promotional activities which are known to generate business. However they can have difficulty in assessing their impact with sometimes no discernable financial impact. Passenger Transport Authorities and Local Transport Authorities are charged broadly with changing travel plans patterns to generate a better environment and more efficiency in their area. Their view postulates modal shift to public transport is

good if accompanied by less car traffic but not if it merely leads to increased total travel. Government has the wider objective of changing national travel behaviour to achieve more sustainable quality of life for everyone, including reduced pollution and more efficient use of resources, including all public transport systems. Government policy covers all modes including walking, cycling and air travel.

Lyons and Harman conclude, inter alia, that integration of public transport within a clearly established national framework remains the norm in countries such as Germany and the Netherlands. They could also have mentioned Switzerland which many regard as the benchmark. In the UK by contrast, the public transport industry is complex, particularly so following the privatisation of operating companies and change in public authority roles over the last two decades. This has resulted in fragmentation of responsibilities among transport operating groups and many other organisations with different roles, including operators' trade groups, public authorities and customer groups.

There needs to be effective partnership through all providers as Government itself has stressed. Good examples exist for partnership in transport provision such as the Santa Monica Freeway Corridor Demonstration Project in California (Nuttall,1996). But public authorities are not always likely to co-operate willingly unless circumstances require them to, even in well-integrated countries such as the Netherlands (Witbreuk,2000). Government guidance on this, supported by adequate core funding may prove essential to establish an effective national system. However there is also recognition that multi-modal information might sometimes serve to disadvantage public transport rather than benefit it; for example, real-time information on station car parking availability might reinforce knowledge that car parks are usually full to capacity and thereby set rail travel in a bad light. But such possible dis-benefits can be overcome with lateral thinking.

4.2 Smartcard Transportation Systems

There is an increasing acceptance that the UK could benefit from an integrated approach to smartcard systems. Pierre-Antoine Benatar (Logistics and Transport Focus,2007) has exemplified how such systems have been rolled out in, as an example, the Netherlands and why the UK needs them. As faced in the privately operated UK market, the Netherlands had to implement a central clearing and settlement solution in order to make pricing transparent for users travelling across the entire transport system.

Benatar expresses the view that transport operators worldwide recognise that contactless smartcard represents the next generation in public transport ticketing. It is considered a viable technology that offers great benefits, and in a growing number of cities such systems have already been successfully implemented. He believes that the UK need only look at other countries around the world for evidence that integrated public transport systems would benefit the UK passenger and operators alike. Traditionally Asian countries have been at the forefront of cutting-edge technologies, with the Japanese Railway East cited as the first transit company in the world to offer contact less fare collection on mobile phones. Another example is the Octopus card in Hong Kong, a rechargeable contactless smartcard used for electronic payment in online or offline systems in the region. Originally launched as a fare collection solution for the city's mass transit system, the Octopus card reveals to the rest of the world's operators a strong business case for how smart cards can be multi-application solutions for low value payments in convenience stores, fast food restaurants, parking meters and many other point of sale applications. It is also now used for other non-monetary value added applications such as school attendance and identification for access to civil services making it the most widely deployed truly multi-function city card. This extension of interoperability is key to the success of smartcard systems and signals the future for such technology.

As pointed out above by Benatar (2007), a countrywide scheme has been rolled out in the Netherlands, and similarly in Denmark where a national system is also being prepared. A central clearing and settlement system sits

on top of individual operators' fare collection systems. It is not just about financial clearing between operators however, but also about reconciling each operator's revenue with the actual use of its transport network. It uses complex ticketing and fare collection rules. The UK nationwide transport network is made up of a multitude of transport systems operated by an equal multitude of companies. To overhaul the entire network and integrate ticketing, transport operators must agree between themselves the ticketing rules that allow for the distribution of revenue depending on the travel journey on each of the individual networks. However the UK can also learn from the North American transport sector which is slowly becoming aware of the benefits of modern technology; Toronto, Canada is a prime example.

The Greater Toronto Area (GTA) Fare System was introduced on a limited basis during 2007 to be fully implemented by 2010 in eight transit agencies and five subway stations. The introduction of a smartcard should provide an incentive for people to leave their cars at home since the hassle of buying a single ticket for different modes of transport will reduce. Passengers will be able to load their fare card with values at terminals and selected retail outlets through pre-authorisation payments by telephone or on the internet. The system when fully operational should be able to accommodate between one and two million passengers across the GTA transit system. In the UK Transport for London has its Oyster card which has a similar function but has yet to introduce 'M' ticketing (mobile) although trials are starting to take place. Other parts of the UK have yet to catch up but Scotland is consulting on options for smartcard integrated public transport ticketing.

Benatar concludes that the overall result of a unified smartcard based fare collection system combined with an integrated command and control centre is greater customer satisfaction and ultimately an increase in revenue.

It is interesting to relate this to the Potter, Skinner paper commented on earlier above. It was ambivalent in its conclusions, given that one cannot foretell the future but did emphasise much is dependent on what is integrated with what. They commented that it is argued by many that technology will resolve the issue of transport unsustainability, however whilst acknowledging it will have a

role, they contend that a major contribution to sustainability in the first decades of the twenty first century will come from demand management strategies. They consider exploring and understanding changes in the process of achieving access and mobility needs more emphasis in future studies. Benatar seems to have taken on this challenge in his article on smartcard systems; technology is helping to resolve sustainability problems. This in turn may push government to get a better grasp of   the need for integration in transport.

5. Conclusions

The way forward is likely to be driven by the advances in, and influence of technology. Three areas seem to stand out as indicating scope for further study and analysis in documents 3 and 4 and, depending on the outcomes, providing an indication of the parameters for the scope of document 5.

Document 3 is likely to follow a 'story telling mode' as exemplified by Tony J Watson(2001); following one or more journeys to Switzerland from the UK or vice versa. The style will be based on that of Watson since it can provide an easily assimilated basis for qualitative analysis and explanation. Document 4, however is likely to adopt more of a case study approach in the style of Robert K Yin (2003). Again hopefully, providing a relatively easily understood and pragmatic approach to analysis of statistical data related to the transport industry. Questions which need to be researched are -'How are integrated ticketing systems being developed and similarly how are integrated timetables being developed?' In addition, 'Who is driving progress?'; 'What input do customers have, and are they being listened to?' Document 3, Qualitative study and Document 4, Quantitative study should provide the bases to address these issues. They are likely to provide prominence for both ticketing and timetabling issues probably on an equal footing between documents 3 and 4. At the same time the influence of stakeholders is also likely to feature although this area will developed in document 5.

A key issue to be considered is whether Government has the political will to implement an integrated transport strategy. A better understanding of

what 'integrated transport' means needs to be assimilated by government. The opportunity needs to be taken to learn from other countries, especially in Europe, North America and the Far East (Hong Kong, Singapore) and also Australasia. Funding issues should be part of a long term strategy covering a 20/30 year time horizon which can be rolled out on a consistent basis; and without undue influence of political dogma. Pragmatism is required based on ontological assessment. Switzerland is a good example of a country that consults and listens to its electorate and thus its customers. There is a feeling of pride in their transport system and a desire to ensure that it is sustainable. This is partly exemplified by the fact that the extensive hydro-electric power supply facilities for its all electric railway systems are railway-owned (Porter:2008).

The UK has the opportunity to develop a modern integrated transport system which could be a showcase for the world. This should not be frittered away by political dogma. Legislation needs to be adapted to fulfil this aim; competition laws which work counter to integration need to be reviewed. Good models can be looked at in Europe and elsewhere.

6. Conceptual Framework - A Synthesis

The likely way forward has been highlighted in the previous section on 'Conclusions'. A conceptual framework can be developed which links the viewpoint of the various stakeholders towards the main areas of development including matters such as smartcards and better information provision. This can be achieved by adopting Kurt Lewin's Force Field Analysis, highlighting the driving and restraining forces relating to the proposed developments. A synthesis follows which indicates the complexity surrounding integration of transport systems.

6.1 Stakeholder Interface

A key factor is the sometimes conflicting perceptions of stakeholders brought about by the current structure of the transport industry in the UK. There does not seem to be a 'holistic' approach even by Government and this creates unnecessary friction or resistance.

One major driving force is ,of course, the passenger/customer who wants a seamless journey with care and service in a safe environment; points which were reflected in the Mann and Abraham paper referred to above (Section 3.3). Ideally the passenger wants just a single ticket which provides inter-modality eg., train to tram to bus as provided, for example, by Transport for London in the Greater London area. In some ways this can be likened to a supermarket approach - 'one stop shopping', (as against a 'boutique' approach).

On the other hand, in many areas, notably outside of London, the transport providers (usually commercial transport companies) object to joint ticketing allegedly on the grounds of competition and commercial viability. This 'silo' approach is due in part to the legislative structure of the transport industry. Pursuit of free market economics (in Hibbs terms) does not sit well with providing and satisfying social need. In the bus industry this is now further complicated by the concessionary fares scheme which has been imposed by Government allowing the over 60s to travel free on buses outside of peak hours.

6.2 Effects of Competition Legislation

Recently Neil Scales, Chairman of PTEG (Passenger Transport Executive Group) stated that he hopes the current Local Transport Bill ….”will do a lot to make partnerships between bus operators and PTEs (Passenger Transport Executives) work better for passengers”. (Transit , 2008). He was alluding to the ..”crazy situation where the threat of action from the competition authorities stops operators from co-operating on fares and timetables”…and is therefore a restraint to satisfying customer needs. Another example of Competition Commission worries is described below.

In the UK, a large proportion of transport providers are in the hands of a few (five) large transport groups, (two of which happen to be based in   Scotland). These groups operate trains, buses and in some cases trams as well. As a result they are slowly starting to realise that from a consumer's ie.,   customer perspective having just one ticket to travel contributes to a more satisfying journey and therefore encourages use of public transport. To this end, train and bus companies have co-operated to provide PLUSBUS, a rail ticket which incorporates local bus travel at the end or beginning of a journey giving one zone which covers the whole urban area. The PLUSBUS leaflet states: 'Ask for PLUSBUS when buying your ticket at the station (or by 'phone) and say which town you want to travel around. Buy PLUSBUS with most train tickets : single, day return, period return, and season ticket…'. The leaflet then goes on to extol the virtues of the ticket including its green environmental credentials. It also states that Railcard discounts are available with the ticket. But, it then comments …..'you can hop-on <u>any participating</u> bus operator's services to and from the station and make other bus journeys too'. Note the words 'any participating'; this has competition implications. Some bus companies may be reluctant to participate or co-operate because of fear of being accused of behaving in a cartel like manner. Interestingly the PLUSBUS pamphlet states “PLUSBUS is brought to you by Journey Solutions, a partnership of Britain's bus and train operators”. Further confusion is caused by the fact that the cost of PLUSBUS can vary by destination, with some only available as a day ticket add-on. In addition, the marketing of PLUSBUS is inconsistent; in many areas

customers are unaware of the existence of PLUSBUS, although the transport companies would argue awareness is increasing.

6.3 Integrated Information and smart ticketing

A recent article in Transit (2008) in a 'Viewpoint' column by Jeremy Acklam entitled "Now is the time to make Britain a lot smarter" provides an interesting perspective. The argument was made that now is the time to complete the overhaul of transport information and ticketing. It provides an appropriate follow on to the discussion on PLUSBUS.

Essentially, to achieve a meaningful modal shift, an integrated approach is necessary. It is commented that it is not surprising that an integrated approach in London, for example, has been substantially successful over the past decade. One of the reasons for London's growing usage was considered to be customer convenience through integrated transport ticketing, as customers can use all the transport modes with the Oyster card (smartcard), together with better information. It is pointed out that Oyster pricing gives a discount against cash, capped city fares and is very convenient as well. Congestion charging and economic growth have also had their influences in modal shift. What is needed, therefore, is political vision. 'Funding with vision rather than funding for point solutions'. There needs to be a customer vision with clear objectives and success criteria. It was emphasised an integrated transport political vision is not that difficult in principle - it can be straightforwardly expressed - all UK customers having access to integrated transport information and ticketing.

Surprisingly, for a nation vision, the building blocks for the future are already in place; Transxchange for information and ITSO for smart ticketing. The missing element is the political will to see the completion of the implementation work already started. Many transport operators have independently invested in better information and ticketing, with benefits being seen in increased ridership. However this has only resulted in a patchwork of good point solutions without integrated vision.

This latter point is exemplified by the fact that some attempts are being made to provide better integrated information. Transport Direct states on its website

that it is the only one which offers information for door-to-door travel for both public transport and car journeys around Britain. It adds, its aim is to provide comprehensive, easy-to-use travel information to help the traveller plan their journeys effectively and efficiently. However, it does not refer to integration per se but by implication.

Transport Direct works together with public and private travel operators and local/national government. Its is operated by a consortium led by Atos Origin an international information technology company appointed by the Department for Transport (DfT). The non-profit service is funded by the UK DfT, the Welsh Assembly Government and the Scottish Government. So here we have government involvement.

Unfortunately Transport Direct appears to give the impression everyone will use its website. This is not so in real life as many people do not like using a website or do not have access to a computer and prefer face-to-face or telephone contact. The Highways Agency, Traffic Wales, Transport Scotland and the rail, coach and bus operators provide information to Transport Direct either directly or through their partners 'Traveline' which operates a public transport telephone service. The latter, started operating in 2000. It is a partnership of transport operators and local authorities formed to provide impartial and comprehensive information about public transport. It states it operates in England, Scotland and Wales using representatives from a comprehensive Advisory Group. Yet the latter, includes Translink Which covers Northern Ireland, which is conspicuous by its absence from the operational areas quoted above. Examples of integrated ticketing outside London include Nottingham (which issues a 'Kangaroo' ticket covering local trains, trams and buses; but also many other types of ticket - which is confusing to the traveller, and includes PLUSBUS), Derbyshire, Tocyn Taith (North Wales), Wiltshire and various Sunday Rover Tickets. These will be further explored as appropriate in Document 3 and 4/5.

6.4 Vision and economics

There are good examples abroad where a vision for integrated transport has

been successful (see 3.4 Verkehrsverbund above as one example). Ackram (Transit, 2008) rightly points out the UK has a challenging political structure, but also has a private sector where transport companies and operators are willing too invest because they consider that is what customers want. Co-ordination and vision are keys to achieving integration. It is postulated that a policy which delivers private sector investment in transport information and smart ticketing would be a political and environmental 'win' in an economic era where political wins in transport are to difficult to come by. Now was the time for the private sector to help the public sector to complete the integrated information and ticketing   task for the UK.

By chance, in the same issue of Transit (2008) John Hibbs writes in the letters section responding to an earlier letter regarding integration per se. In essence he predicates that integration can only come from free choices in a free market; not surprising given he is a free market economist. He goes on to state that if imposed from above, it is what officials think people (ie consumers) want, but officials who are remote from the market do not have the incentive to get it right like a businessman looking for a return on capital. (This is true, assuming that no one has thought to ask the consumer which government often fails to do). Hibbs goes on to state that the businessman has to have freedom to decide what to offer and what prices to charge. He continues by pointing out that in commercial business firms have to take risks, and take the consequences if they make mistakes. Public authorities are not permitted to risk money, but when they do make mistakes they do not suffer, the public does. He adds finally, that if there is not a 'public service ethos' in a transport firm it will not survive long.

So we have free market economists advocating one view, and socialist economists a contra or different view. But Ackrams's suggestion above may be a way of bringing the two to work in tandem.

6.5 Decentralisation & sustainability

One issue which has only briefly been alluded to thus far is that of devolution. This has had implications for the transport industry and it is interesting to see

its effect. Transport responsibilities for each of the constituent countries are now in the hands of their respective Parliaments ie., Northern Ireland, Wales, Scotland, but for England at Westminster (Department for Transport).

In general devolved government has proved a boon, particularly Scotland's rail and bus systems. There has been heavy investment in new infrastructure including electrification and new trains, but also development of a new tram system in Edinburgh, as well as a new Glasgow Airport Rail Link. The means used to do this was the establishment of Transport Scotland in January 2006 to oversee five areas: rail delivery, strategy and investment, major transport infrastructure projects, trunk road network management, and finance and corporate services. (Rail, Feature Franchise:2008). It provides funding for the Scottish railway as well as roads and ferries. It is behind several rail opening projects and is accountable to the Scottish Executive and public through Scottish ministers. It works in partnership with private sector operators, local authorities and the government as well as seven regional transport partnerships that take a view on the strategic needs for the area.

In Wales, the Welsh Assembly is also funding restored railway routes and trying to encourage bus operators to expand and develop new routes. Similarly, in Northern Ireland the Northern Ireland Assembly is carrying out or encouraging reopening of rail routes and more use of buses and coaches. All the devolved governments are working with the private sector operators to encourage more use of public transport and less use of the car in an effort to develop efficient and sustainable transport systems. However, England by comparison seems to be struggling because of central control from Westminster. Although London's transport systems are delegated to the London Mayor and Transport for London, and there are some large Passenger Transport Authorities for some large areas of England they still have to rely on the Department of Transport for developing new transport schemes or innovations since this is their main source of funding.

What seems to be evident is that where transport matters are decentralised to regional areas there is much more attention to local needs and understanding local solutions. This tends to lead to better cooperation between public and

private sectors locally rather than having decisions made by remote civil servants who lack the more detailed knowledge of local problems and are prone to adopt a more rigid philosophy which ignores customer needs. In essence this manifests in an apparent lack of vision by central government.

6.6 Externalisation and system integrity

At a recent Institution of Highways & Transport conference Alan Wenban-Smith (Local Transport Today,2008) commented that "Urban transport and development in the UK are at an historical crisis point brought about by the dominance of the car since WW2. Transport policy in the UK is too highly centralised and too much isolated from its wider context compared with best continental European practice to deal effectively with this crisis. And divergent concepts and cultures of transport and environmental planning have inhibited better integration to the great detriment of both". He also pointed out that the effects of transport measures are felt far beyond the transport system itself. In his view the 'externalities' may be somewhat more important than the 'internalities' that have typically preoccupied transport planning practitioners. A continuing problem has been the different approaches and cultures of transport and land-use planning. Although there has been a desire to integrate transport, economic and land-use planning, achievement has been very patchy. There is a need to move towards some of the more sustainable behaviour patterns in European countries and not follow the North American patterns of travel behaviour. (McDonald and Beecroft; Local Transport Today,2008).

However it can also be argued that there needs to be a balance. Whilst it is easy to criticise central government there is still a need for overarching coordination and control to provide a cohesive national system of transport. A paper by O'Sullivan and Patel (2004) highlights the fragmentation in transport operations and consequent lack of systems integrity. They point out that many European states have followed, or are following, the British example in privatising airlines, shipping lines and certain forms of road transport operation but that they are fighting shy of wholesale rail privatisation. They suggest there may be good economic reasons for this and that reluctance is not just purely a

political matter. It is the issue of system integrity which they consider to be an inevitable effect of privatisation. As a result it is predicated that the market system will sometimes fail to produce optimal allocation of resources because of externalities and this can only be done by state intervention to promote system integrity. An externality is an effect arising from the production or consumption of any one agent in the economy on the production (profits) or consumption (well being) of other agents in the economy but in connection with which no market transaction or payment of any kind is being made (Pigou,1932).

In simple terms what is really needed is an integrated transport system with a centralised vision by government linked to a proper long term strategy which can be rolled out and pursued irrespective of which political party is in power. Many of today's problems, particularly in the world of financial services, but other industries as well, including transport, stem from an attitude of short-termism and a failure to take a long term view. Yet if one reflects back to the last century, between 1951 and 1979 the evolution of transport policy was more pragmatic than ideological, with many important developments carried over from one government to the next even when the political direction had changed. The transport industry, particularly the railways and roads, requires heavy investment, the costs of which may take time to recover but nonetheless benefits for the end user can be immediate. Government needs to eschew political dogma and look to the future, consulting widely with all stakeholders (including passengers/customers). This has happened in Switzerland and other countries such as Japan who have thriving, efficient, integrated and sustainable transport systems. The UK should   follow suit.

Funding will always be a problem as highlighted in the discussion of the Verkeshrsverbund (3.4).But one is reminded of the scientist Rutherford who once remarked "Gentlemen, we have no money, we shall have to use our brains". Food for thought.

As a final note, it is acknowledged that several references are not recent (more than two or three years ago) but more contemporary literature did not pertain to the areas covered or give appropriate analysis.

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DOCTOR OF BUSINESS ADMINISTRATION

CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY

Integration of Transport Systems in the UK: Fact, Fiction or Fantasy ?

AN INTERPRETATIVE REPORT ON A
PIECE OF ETHNOGRAPHIC RESEARCH
(Document 3)

Document three is submitted in part fulfilment of the requirements of
The Nottingham Trent University for the degree of Doctorate of Business
Administration.

Geoffrey F Silverman

August 2009 (Amended Final Version).

Table of Contents

<u>1.Introduction</u>

As a prelude to setting out the approach to this interpretative report on ethnographic research relating to integrated transport in the UK, it is apposite to re-iterate the definition of integration being used in this study which is – 'fitting together of all transport modes in an effective and sustainable way to form a whole in relation to integrated systems provided by both public and private sectors in the UK'.

Transport integration is a very wide subject but a focus on three key areas was highlighted in the literature review (Document 2) namely – stakeholders, ticketing and timetables. Whilst there are other issues these three areas epitomise the principal core elements which help to shape an integrated transport system. In this document (3) the main thrust will be on ticketing, timetables and the travel experience.

From a traveller's (customer) perspective, whatever the mode of travel, there are several needs which include the following that have to be satisfied:
• Reliability, convenience and punctuality

• Safety and security

• Affordability

• Accessibility for all

• Quality information (including timetables, signage, explanations, etc.,).
Customers are also increasingly concerned about local air quality and noise.

The approach to be used in this document is based on one of participant observation and differs from that originally envisaged. A fuller explanation follows under '3' in methods and methodology. In the meantime the research objectives and questions need to be addressed.

2.Research Objectives and Questions

The research objectives of this study are to provide a focus on the travel experience highlighting in particular the relevance of integrated ticketing and timetables for the traveller, making appropriate comparisons between experience in the UK and Switzerland (and other countries where relevant). Essentially, using travel ethnography involving participant involvement, it is intended to explore the practical issues and affective interpretation of journey making and the degree of integration.

As a result of this approach the research questions which evolve are :-

(I) What are the problems, issues and experience that affect travellers through transport networks ?

(ii) What are the benefits of having an integrated system in relation to the travel experience ?

Whilst each of the questions in themselves can stand alone, they also dovetail with each other such that they point the ways to broader issues such as culture, demography and socio-economic factors. Endeavours will be made to highlight such issues and their effect on integrated transport strategy.

3. Methods and Methodology

It was originally postulated that qualitative and quantitative approaches to this study would adopt a mix of some or all of the following :-

    1. Interviewing

    2. Focus groups

    3. Questionnaires

    4. Observation, including participant observation

    5. Documents

    6. Databases

    7. Case studies.

Early thoughts on a research plan/strategy for Document 3 focused on carrying out interviews with top officials of transport bodies, followed up by seeking opinions from the public using standard questionnaires developed to determine what influences the use of a particular form of transport. A fallback approach was possibly to use and analyse the results of surveys conducted by interested government and non-government organisations if they are relatively recent. However having completed the literature review (Document 2) it has become apparent that a more appropriate strategy would be to use participant observation, given the writer's propensity for travel, especially to Switzerland and its border countries. This would be supported by case study as appropriate.

In essence the writer is firming up on taking a critical realist approach as originally put forward in Document 1. Critical realism shares the ambition of realism but takes a more gnostic than orthodox direction since it adds the notion of layers of stratification into our understanding of knowledge (Fisher,2004).

Critical realism is a stance developed by Bhaskar (Johnson and Dubberley, 2000). It proposes three levels of reality (Collier,1994):

- *Experiences* – What we see and experience in the world

- *Events* – Things that happen in the world that we perceive through our experience of them

- *Mechanisms* – Events do not occur out of nothing but have a cause. Mechanisms are the causes of events and are the third, and deepest, level of reality.

An ethnographic participant observational technique aligns itself usefully with critical realism. An ontological view is likely to flow from this approach ie., what reality is. Whilst ethnography is related to the experiences level of critical realism, one could also maintain that by 'interrogating' or examining some of my travel experiences which follow it is possible to identify some of the mechanisms. For example, I believe good planning is important, particularly for instance when travelling to Switzerland. A failure in planning could cause completely different outcomes and experiences, perhaps resulting in frustration and disappointment.

It is now appropriate to consider ethnography per se.

3.1 Ethnography

Ethnographers try to explain cultures, including organisational cultures, by writing accounts of their subjective experiences of living and working in the culture being studied over a considerable period of time (Fisher,2004). Ethnography focuses on the manner in which people interact and collaborate in observable and regular ways (Gill and Johnson,1997:57). Fisher (2004)

points out another way of expressing this is to say that ethnography is the study of cultures. But the approach is also defined by the manner of the study. It is pointed out that ethnography sometimes requires extended periods of immersion in the culture being studied, during which the researcher remains as open as they can to the experiences that surround them. Academic researchers into management and organisations become ethnographers by leaving their academia and working for a time in the businesses and organisations they are studying. In Fisher's explanation they become participant observers.

Ethnographers can only give accounts of their own interactions with the culture they study. They cannot claim that their accounts are replicable or generalisable. Their research is written up as case studies. Those taking an exploratory approach eg., students, ought to adopt open or at most semi-structured research tools. That is the research should be conducted in ways that do not presume to know what they will discover. In simple terms one needs to ask open and not closed questions.

The problems latent within traditional ethnography, described by Fisher (2004), highlight some of the problems that may be associated with open and semi-structured methods. The colonial origins of ethnography identify two of its dangers. The first is that it can be seen as patronising by those who are being studied: an example being quoted from a modern ethnographic study of a telecommunications company undertaken by Watson (2001).

> *Seriously though. You've told us that you are writing a book about managers, about us lot. So who is it for? I mean, you know, will thick people like us understand it?*

The second danger is that in response to the felt condescension of the

ethnographer, the subjects may seek to mislead the researchers by relating misleading or improper tales that they know the researcher wants to hear. Freeman (1983) quotes the example of Margaret Mead, who gave a lyrical account of adolescent sexuality in Samoa, and fell foul of this danger. Subsequently many Samoans argued that:

> *the girls who they claimed plied Mead with their colourful tales were only amusing themselves, and had no inkling that their tales would ever find their way into a book.*

This does not mean or imply ethnographic methods should not be used but that care must be taken with research and analysis.

Watson (2001) similarly postulates that ethnography is often seen simply as a way of collecting 'data' through a process of participant observation in which the researcher becomes an active member of the group being studied, but considers that it is also seen as more than this. He points out that Van Maanen (1988) agrees that an ethnography is a 'written representation of a culture (or selected aspects of a culture)'. This is in line with Fisher's thinking above. Van Maanen (1988) goes on to point out that ethnography 'carries quite serious intellectual and moral responsibilities, for the images of others inscribed in writing are most assuredly not neutral'. He goes on to state that ethnographic writings inform human conduct and judgement in innumerable ways by indicating the choices and restrictions that exist at the heart of social life. In the Preface of his book 'Tales of the Field', Van Maanen (1988) comments that 'How social reality is conveyed through writing involves, among other things, authorial voice. The author's perspective exhibited through voice marks particular ethnographic styles and genres'. He also makes a caveat, since voice does vary within and between ethnographic narratives and in cold print can become complicated. (This is something I will try and avoid as far as possible

in my journey stories which follow later).

Basically Van Maanen postulates that method discussions of ethnography must explicitly consider firstly, the assumed relationship between culture and behaviour (the observed); secondly, the experiences of the fieldworker (the observer); thirdly, the representational style selected to join the observer and the observed (the tale); and fourthly, the role of the reader engaged in the active reconstruction of the tale (the audience). I believe that this is a helpful and practical analysis and synthesis.

However, one of the influences on the conduct of business research is 'Values' (Bryman and Bell, 2003).It is contended that values reflect either personal beliefs or the feelings of a researcher. In addition, nowadays, it is accepted that there are numerous points at which bias and the intrusion of values can occur. Bryman and Bell point out that it is not uncommon for researchers when working within a qualitative research strategy, especially when they use participant observation or very intensive interviewing, to develop a close affinity with the people that they study to the extent that they find it difficult to disentangle their stance as social scientists from their subjects' perspective; thus perhaps unwittingly, a degree of bias is introduced.

Bryman and Bell go on to state that in relation to values and bias, one has to recognise and acknowledge that 'research cannot be value free, but to ensure that there is no untrammelled incursion of values into the research process, and to be self-reflective and so exhibit reflexivity about the part played by such factors. This view is borne of the assumption that the prior knowledge, experience, and attitudes of the researcher will influence not only how the

researcher sees things but also <u>what</u> he or she sees'. Thus, they consider, there is now a tendency to 'confess' about any personal bias. This seems to be pragmatic and honest. When looked at objectively I consider that this fits in with Van Maanen's philosophy. The question of 'reflexivity' is further discussed below under my bibliography.

In relation to transport and travel, ethnography provides a useful basis to explore and monitor transport systems making comparisons between what happens in this country to, say, what happens in Europe, particularly Switzerland , which I intend to use for comparative purposes. From research hitherto, there seems to be very little on this approach and therefore this study is an innovative analysis. Basically I will be exploring passengers' subjective experiences of the problems, issues and benefits which an integrated transport system creates.

Another pragmatic hypothesis of ethnographic research is made by Watson (2001) in that he considers that it involves 'feeling one's way in confusing circumstances, struggling to make sense of ambiguous messages, reading signals, looking around, listening all the time, coping with conflicts and struggling to achieve tasks through establishing and maintaining a network of relationships'. Quite correctly he states that this is what we do all the time as human beings and how we cope with our lives. Indeed it is what managers do in their more formalised 'managing' roles. However the role of participant observation requires a little more explanation, and needs to be set in context for this research report.

3.2 Participative Observations

Vinten (1994) produced an interesting paper on this topic: it in turn starts with a reference to a paper by Nisbet (1977). Inter alia, the latter comments that the student working alone is at no disadvantage compared to a research team when working personally on observation and analysis of individual instances. Nisbet considers observation is not a 'natural' gift but a highly skilled activity for which an extensive background knowledge and understanding is required, and also a capacity for original thinking and the ability to spot significant events. It is thus not an easy option. (I can identify with this hypothesis from my own experience as explained later under biographical details).

Participant observation, states Vinten, is a means of collecting evidence, and as Nisbet suggests, it requires skill, knowledge and understanding. In its dominant social sciences meaning a researcher seeks to become a member of a group, organisation or event under study. By being immersed in the events in progress, the researcher hopes to glean much more information and a greater depth of knowledge than would be possible from the outside looking in. Therefore to monitor how integrated transport does/does not operate one needs to be a passenger/customer and experience the trials and tribulations of real journeys. In this respect participative observation seems to be a useful way of gleaning this information.

Vinten concludes that employees, psychologists, and other staff officers are natural participant observers in their organisations. As such they need to consider the strengths and weaknesses this role places them in. The notion of informed consent needs consideration. When and to what degree should informed consent be sought? Where employee co-operation is to be

maximised, or a co-operative partnership developed , informed consent provides a suitable foundation. Using covert participant observation, except in its strictly limited benign form, is generally counterproductive, unless there are legal infractions that need investigating. He does concede, however, that there are some short term applications where the method does have advantages to the organisation, with minimum or no harm to other employees: the 'mystery shopper' approach would appear to fit this approach. And indeed this is not dissimilar to a travel writer on a journey.

Again this seems to reflect the ethnological approach of Van Maanen and story-telling. Essentially, he describes three main types of ethnographic writing. Firstly, he talks of the 'Realist' tale, which he considers to be by far the most prominent, familiar, prevalent, popular, and recognised form of ethnographic writing. Secondly, he refers to the 'Confessional' tale – the fieldwork confessional. Confessional tales contrast distinctively from the 'realist' tale by having highly personalised styles and their self-absorbed mandates. Thirdly, 'Impressionist' tales, which are likened to impressionist paintings. Van Maanen describes the form of an impressionist tale as dramatic recall: it is a sequential recall of events as they occurred and various odds and ends which are associated with those events. It attempts to draw an audience into an unfamiliar story world and to allow it, as far as possible, to see, hear, and feel as the fieldworker saw, heard, and felt. The tale of a traveller's journey can quite neatly fit into this genre. Van Maanen also comments that 'impressionist' tales are typically enclosed within 'realist', or perhaps more frequently 'confessional' tales.

To carry out Participative Observation there needs to be the minimum amount of bias, as well as clear observation and the ability to empathise. An almost

clinical and detached approach is needed – like starting with a clean sheet of paper, and documenting a real life situation. It is perhaps apposite at this point to provide a brief biography of myself, since I will be the participant observer.

Although now semi-retired, my working career was spent in a major Clearing bank for some 37 plus years, of which approaching half was in audit and investigation roles. These latter duties helped equip me to understand the behaviour of people (mainly staff) in particular circumstances, and what caused them to act in the way they did e.g., when a fraud had been perpetrated; or how major errors were made. As part of my training I was police trained in investigative interviewing techniques. I am multi-qualified professionally in banking, law, accounting, and management and hold a Masters degree in 'Managing Change', the latter being a learning experience in itself. I have served on the governing bodies of professional institutes: but now remain on just one , an Accounting body. I have also been director (chairman) of two private property companies but have now retired from these roles and merely act as adviser when needed. I have a reputation for setting high standards and have often been 'mocked' for some of my catchphrases such as "lack of attention to detail" or "do not criticise, help". Some have labelled me a 'perfectionist', but I have the philosophy of a job worth doing, is worth doing well.

In my latter years in the bank my inspection (audit and investigation) role involved worldwide responsibilities and therefore one needed to be aware of local cultures. (I was regarded as a trouble-shooter). Some of my audits/investigations have involved working with outside organisations such as external auditors, police, Inland Revenue and even other banks. One learned that although the basic principles remain the same in carrying out an

audit or investigation, when dealing with people one needed to adapt ones approach depending on the character and position or role of the person concerned. A soft diplomatic approach might be warranted in one circumstance, but a more positive or even forceful approach in another. One learns that people are all different. An understanding of body language is helpful, as well as listening to intonation in speech. It is in this context that I believe I can fulfil the role of participant observer in an objective manner with little bias, in documenting travel journeys. Any personal caveats will be highlighted and explained.   In essence one needs to look, see, listen and hear – these words are carefully chosen (to encompass observation).

Under 3.1 on page 7 above, the subject of 'reflexivity' was alluded to and it is now apposite to briefly expand on this theme in the context of my bibliography. Interestingly, George Soros (the billionaire investor), says his life is driven by 'reflexivity', which highlights the loop created between people's beliefs and actions. He applies the theory to markets too, to the disbelief of many economists. (Management Today, 2009).

Lee (2009) considers the term 'reflexivity' as a rather slippery one because there are many different usages of the term and various typologies have been proposed (Lynch 2000; May 2000; Macbeth 2001). She considers that at the heart of reflexivity lies a concern with the issue of the status of research knowledge. It is postulated that in the quantitative paradigm objectivity is prized, personal bias and prejudice must be kept from the research process. By contrast, she poses the question 'Should qualitative findings be presented as objective facts or should their production in particular historical and cultural circumstances by specific individuals be recognised?' She considers that in recent times qualitative enquiry has tended to the latter view and this

has led to an emphasis on 'reflexive self-disclosure' (Pels 2000) within research writing. Audible rather than silent authorship is recommended. It is contended that voice has become a central concern leading to 'reflexive turn' with authors seeking to develop a more 'autobiographical and personalistic style' in Pels' terminology (2000). This fits in with the interpretations by other writers such as Coffey (2002) and Van Maanen (1988).

Bryman and Bell also consider that reflexivity has several meanings in the social sciences. They consider the term is employed by ethno methodologists to refer to the way in which speech and action are constitutive of the social world in which they are located. But the other meaning of the term, in their view, carries the connotation that business researchers should be reflective about the implications of their methods, values, biases, and decisions for the knowledge of the social world they generate. They consider it assumes that all researchers enter the field carrying cultural 'baggage', personal idiosyncrasies and implicit assumptions about the nature of reality. In addition they state that reflexivity involves a willingness to probe beyond the level of straightforward interpretation (Woolgar 1988) and to explore how these biases and characteristics affect the research process. (In my case for example, in the context of transport, I rarely travel on buses even though I am entitled to a Concessionary Travel-card).This is described by Bryman & Bell as resembling having an ongoing conversation with oneself about an experience whilst simultaneously living in the moment.

So essentially I consider my role will be as a travel explorer and writer, which hopefully reveals the travel experience and the emotions and feelings that are engendered. In his paper Vinten (1994) comments that the method of participant observation can paint a much fuller and more accurate insight into

situations than would otherwise be possible. Participant observation may often be the only way to achieve an awareness of how people (in my case customers/passengers) behave in actual situations. It is now appropriate to investigate and analyse some journeys which I have made. Whilst it may not be possible to generalise, various issues and points do emerge.

One final point - I think it is appropriate to highlight the fact that the stories are a study of my own perceptions as a traveller, and thus also reflective of my own persona.

3.3 Classification of Journey Types

There are several ways for travellers to make a journey, often in mixed modes. It is proposed to start the classification by reviewing a journey by car since this tends to be the 'addictive' mode; and from a sustainability perspective   one of the most damaging as far as greenhouse gases/emissions are concerned.

(i) A journey by car - Bournemouth to Kenilworth   and return.

It is mid-December and arrangements have been made for a few ex-colleagues to meet up in Kenilworth for a Xmas lunch. Why Kenilworth ? Simply because my former secretary lives not too far away and it has become a convenient meeting place. There will be a group of five of us (a sixth could not attend). One of my former Inspectors was driving from Romford, Essex, alone, and I was to pick up two other ex-colleagues (also former Inspectors) who live in Warsash and Chandlers Ford (in Hampshire) respectively. Public transport could not be used because there is currently no station at Kenilworth but there are projected plans to re-instate it.

The journey starts from my home in Bournemouth and I had agreed to pick up my first passenger in Warsash at around 09.30hrs. I eventually left home around 08.40hrs having previously ensured I had a full tank of petrol for the journey of about 340 miles. As I left Bournemouth there was still a lot of commuter traffic about even though I was travelling against much of the flow. Everyone seemed to be in a hurry and I wondered why they were using their cars if they were going to work. Was it habit or had the thought of using any form of public transport not occurred to them? Maybe they just liked driving to work and being in their own personal space. My mind wandered back to my working career as an Inspector when I had a company car and did a very high mileage. But back then I needed speed and flexibility to get to a location and it could be quite stressful even though I perhaps did not realise it at the time.

I was approaching Ringwood and now joined the A31 towards Southampton. (There used to be a railway to Ringwood but it is long gone). I had joined the tail-end of commuter traffic heading east and had settled into the flow. As I have a powerful car I was able to progress swiftly: one had to be very alert and I thought again why would anyone put themselves through this form of purgatory every working day ? You can be worn out before even starting work: it must just become a habit which is accepted. The scenery was pleasant driving across the New Forest but I had driven the route many times, and sometimes also as a coach passenger (when going to Heathrow Airport), little seemed to have changed.

The M27 beckons and I would particularly need to concentrate since I regard this motorway as one of the most accident prone in the country, particularly after the M3 turn-off. The bulk of traffic was still cars although lorries were becoming more evident. However the section from the Southampton turn-off

to the M3 (north) turn-off was being widened and a 50mph speed limit is in situ with 'average speed' cameras and they seem to have the desired effect: but 'White Van Man' seems not to care……. Once past this stretch   I am on the notorious section for accidents and it is quite busy; traffic from the M3 is joining us. One does not have time to take in the change in scenery - concentration is needed. Most of the car drivers seem to be in such a rush. Suddenly brake lights come on for no apparent reason and some drivers are just too close to each other. Ahead I see the sign for Junction 9 and know I need to turn off shortly and head south. As I do so there are warnings of road-works; this part of the journey involves several roundabouts and care is needed to access the correct turn-off. After missing my friend's road I eventually get back en route and arrive at his house just after 09.30hrs and was pleased to get out of the car for a stretch.

My friend Chris makes himself comfortable in the front passenger seat and we set off on the next stage of the journey to Chandlers Ford. He knows some back roads and guides me towards the M27 (Jct8) and we head westwards (back on my tracks) and then to the M3 spur and head north towards Winchester. As we approach Eastleigh I turn off to go to Chandlers Ford. Traffic on the M27 reduced but that on the M3 quite busy, particularly with lorries. The road to Chandlers Ford is narrow, a bus route, but also has road humps to slow the traffic. Fortunately I am able to negotiate the road to the shopping centre and the turn off towards my other friend's (Hugh) house. We discover he has gone out but luckily he soon turns up and we do not lose too much time. Everyone makes themselves comfortable (Hugh in the back behind me) and we set off for Kenilworth. We all know the route as our office base used to be near Kenilworth on the outskirts of Coventry. We get back on to the M3 heading north and the number of lorries is now very noticeable; quite a few

will have come from Southampton container port. Chris and Hugh are chatting about golf but I concentrate on the road ahead. I turn off onto the A34 dual-carriageway, a road we stay on until the M40 is reached north of Oxford. I am conscious of time, it has gone 10.30hrs and want to keep a good pace. The A34 is a major trunk road evident by the number of distribution lorries which we pass. I ask myself why aren't these goods being transported by rail? And indeed would it not be preferable if we were on a train. Having said that we were travelling in leather seated, air-conditioned comfort of a luxury saloon car. My friends were noticing various animals in the fields and isolated manor houses in the distance but I remained concentrated on the driving. We continue to head north through the infamous Newbury by-pass and under the new M4 junction towards Didcot. Traffic is now heavier – lorries, vans, cars and the occasional coach. We continue northwards past Didcot power station, around Oxford up to the M40 encountering speed limits and road-works on the way. Chatting on different topics goes on between us. Once on the M40 a good pace is kept – it has now passed 11.30hrs. Good progress is made to junction 15 where we turn off for the A46 northwards towards Kenilworth. At approximately 12.00noon we reach the turn-off for Kenilworth and within five minutes or so reach our destination restaurant/meeting place. I am lucky to get a parking space in their car park. (Parking sensors do have their uses). It is 12.05hrs and our table is booked for 12.15hrs, so all in all not a bad journey – but it was nice to stretch our legs! Within the next 10 minutes or so everyone had gathered so lunch could proceed.

At about 14.30hrs I glanced at my watch and said I wished to leave before 15.00hrs because of hitting the rush-hour traffic down south. Most of us had refrained from drinking alcohol – those who were driving, and at 14.50hrs we said our goodbyes. I was not looking forward to the long drive home,

especially as I had to make two detours to drop-off Hugh and Chris. But we set off , Chris suggesting an alternative route to the A46, to which I agreed. (He used to live not far away). Once on the A46 it was a straight run to the M40 south and it was already quite busy. My RDS radio was continually providing traffic reports which was helpful and I suggested we might like to listen to an 'Abba' CD which was welcomed (I could still get traffic reports). We were making good progress but Hugh and Chris were taking time to doze. The sun was now going down and I was conscious I may need to put my lights on. Traffic was building up and I wondered where everyone was going. We approached the A34 turn-off to head south and were briefly stopped by traffic lights. I had to remember the speed cameras and the approaching road-works at the turnoff for the A40. Traffic by now was heavy as the time headed for 16.00hrs. A mix of traffic was evident as we retraced our route down the A34. At around 16.15hrs we joined the M3 and traffic was now very heavy with commuters. How I was wishing I was on a train – it was getting quite dark and there was a sea of headlights and red rear lights – I was getting tired. We shortly reached the turnoff for dropping off Hugh but as we turned the corner could see a major traffic jam. It was caused by a drain cleaner vehicle – and fortunately for us it was in the other direction! We all wondered why they had chosen to clear the drains just as the rush-hour was underway. The queue on the other side stretched for a good mile but luckily we were able to turn right to get to Hugh's home. It was now 16.40hrs; I said goodbye to Hugh. Chris reckoned we should get to Warsash in about 20minutes or so – all being well…….

We started off and traced our way back to the M3 junction at Eastleigh but Chris suggested we take a more local route cutting out a lot out of the motorway traffic. I agreed; but of course someone conspired against us and

whilst reasonable progress was made towards the A27 we then hit a bottleneck! Time taken so far 35 minutes or so….. Once on the A27 it was just one long crawl; the cause was road-works which had not been reported on the radio. To say I was frustrated (and tired) was an understatement but I tried to hide my feelings and emotions from Chris who I knew was upset as he had chosen this route. Both of us experienced pleasure that we were no longer working and delighted we did not have to commute everyday - by car. Here was a clear case for looking at alternatives. But also I questioned how bus operators had any chance of keeping within their schedules.

Eventually we get through the log jam and then leave the A27 to join the M27 - more problems, the cause just volume of traffic. Ultimately we get on to the M27 and I notice that drivers are rushing to get home or whatever. I decide to stay in the inside lane since this appeared to be the safest and least congested lane. Chris tells me to turn off at junction 8 which will take us on a 'back' route to his home which he assures me will be quicker! At last we arrive at his house and I can stretch my legs. It has taken not 20 minutes but one hour and 10 minutes to get from Chandlers Ford to Warsash, and I still have to get back to Bournemouth. We say our farewells and I set off for home. I take the route I know onto junction 9 of the M27 and make reasonable progress. Once on the M27 I settle into the traffic flow keeping to the 70mph limit. It is dark but the motorway is lit as I approach the M3 turn-off. Continuing westwards I expect heavy traffic as the M3 south spur joins the M27. There are also road-works again for lane widening (with average speed cameras). My mind is now focusing on getting home; I am still listening to my 'Abba' CD! The M27 becomes the A31 and I progress along the dual carriageway across the New Forest. I concentrate on the road ahead quite indifferent to the scenery since it is dark. Ringwood approaches and as I cross the flyover ensure I get into the

left lane to filter to Bournemouth (A338). Once on the Spur road (as it is called) I know I shall hopefully soon be home. After 10 minutes or so I reach the turnoff by the station – just one mile and I will be home. At 18.45hrs I pull into my garage and so glad to be at the end of my journey. I feel tired, frustrated and emotionally drained – I have driven 342 miles, thinking to myself 'I must be mad?'. On the plus side I have had a good re-union lunch but it has been along day. Should not have too much problem getting to sleep…..

Compliance with travellers' needs:

When I reflect upon my feelings and emotions they seem to mirror the findings of the study by Mann and Abraham (2006). In respect of commuters they comment, inter alia, that .." the challenge for public transport is to provide a consistently positive experience for commuters that contrasts with the inevitable hassles of driving". But the 'door to door' convenience of the motor car, as in this instance, cannot be matched by public transport if it is not readily and easily available.

The car journey generally met the several needs (five headings as identified on page 2) for a traveller: but a car of course tends to contribute to more damaging greenhouse gases. One could also question how safe it is to travel by car given the number of accidents which occur daily. However from the point of view of a seamless journey, one has to acknowledge that the 'door to door' convenience of the car for its driver and passengers is undeniable. The journey was 'integrated' from origin to destination: but from my personal perspective I would have preferred to use public transport (the train) had it been available. I believe it would have been less stressful; provided some exercise in walking to/from the station and more environmentally friendly. Cost comparisons are difficult to determine; for the majority of travellers this

could be a significant factor. However a rough and ready calculation would have put public transport as somewhat more expensive, as well as the journey time being considerably longer and inconvenient (lack of railway station at Kenilworth and reluctance to use buses if available, or high cost of taxi).

The car is generally more flexible for this journey since the integrated nature of the motorway and road system facilitates a change of route should a traffic problem develop. But the lack of information about traffic hold-ups on the changed route can (and did) diminish the effectiveness of the revised routing. Notwithstanding there would have been far less flexibility using public transport. However, if the journey had been taken to say London, the transport system is more integrated, and the railways often permit more than one routeing. Once again if cost is a major factor and cheaper tickets are purchased they may have restrictions eg., as to specific train. Miss the train and one could have to purchase a fresh and more expensive ticket. The writer considers flexibility is essential in travel and is always conscious of this detail.

(ii) A Journey to Switzerland from Bournemouth, England

This journey is very much multi-modal, using public transport but not using a motor car (including taxis). It was undertaken some two years ago and was the initial phase of a visit to Switzerland; one of many I have made over the years. I will start at step one which was the booking of my flights. These would be from London to Zurich, and returning from Lugano via Zurich to London. I tend to travel with Swiss International Airlines (Swiss) and always travel business class rather than economy class; it gives me greater flexibility and in fact overall is not much more expensive, especially when 'air-miles' are taken into account, which allows you to take future flights at much lower cost. They are not 'free' as the airlines would have one believe since there are always taxes

and a share of landing fees, etc to be paid.

I telephoned Swiss reservations centre (for the price of a local call; some airlines are free) and was put through to their centre in Brisbane, Australia as it was 21.00hrs or thereabouts which equated to 09.00hrs in Brisbane. A bit earlier and I would have been put through to Cape Town, South Africa. (I know the drill!). Flight details were quite quickly agreed, and I had flexible tickets so that if necessary I could change my flight without penalty. I had decided to travel from London City Airport to Zurich going out: my return would be from Lugano to Zurich, change plane and fly back to London Heathrow. The latter flight landed with enough time to catch a direct coach back to Bournemouth. I also reserved my seats on all flights – I normally have a window seat in one of the front rows. This is not normally a problem as I am a regular flier.

I then later arranged a train ticket (single), with travel card for London City Airport. For my return, I organised a single coach ticket on National Express from Heathrow to Bournemouth. I have to admit that I do not like travelling by coach, but it gets me back to Bournemouth without changing. For both my rail and coach tickets I was able to obtain a discount (as a 'Senior') which is useful. However in the UK I normally have to travel standard class, especially on South West Trains as the first class fare is ridiculously expensive. The coach is of course one class.

On the day of travel outbound it was wet weather and unfortunately I was caught in a 'flash' hail downpour just after I left home to walk to the station. I managed to shelter in a petrol station and eventually able to walk to the rail station to catch my train but somewhat damp! I caught my train with a couple of minutes to spare and able to park my luggage, but there was a delay. No

reason was given until the train departed Southampton Airport Parkway station. Allegedly there had been a problem at Dorchester. As the train got underway again I noticed it was becoming quite crowded with commuters and indeed once at Winchester there were some people standing: but the guard did announce there were some seats available towards the rear of the train. As I had travelled this route (and on this particular train) many times I had got used to the scenery and decided to have a doze.

The train finally arrived at London Waterloo some 12 minutes late. The guard apologised for the late arrival and also announced that the Underground was not reporting any delays. Being slightly late was not a problem for me as I had allowed a 'buffer' in planning my journey for possible delays. However some commuters were getting a little fraught but my experience in catching this particular train is that it is normally on time. I then caught the Jubilee line underground train to Canning Town, where I changed to the Docklands Light Railway (DLR), for the final part of my journey to London City Airport station. This was relatively problem free (with my ticket being accepted by the automatic ticket gates), and in two minutes off the train I was able to check in for my flight to Zurich. (I should add that the frequency of Underground and DLR trains is a big advantage to travellers.) As I was travelling business class I was provided with a voucher for a snack by Swiss as the airport has no business lounge. I was in plenty of time so could relax.

I went to the restaurant and had my snack before then proceeding through security checks. However, unusually I set-off the alarm as I had forgotten to take my key 'wallet' out of my pocket! The plane was on time and my seat reservation was in order. I noticed that the flight was quite well loaded including business class, given this tends to be a 'business' airport. It was a good flight; the stewardess (cabin director) referred to me by name, checking

to see that I was quite content – the customer service by Swiss is generally very good. A meal was provided which was very tasty and good quality. Prior to landing at Zurich, connecting gate numbers were provided, on screen, for those passengers with onward connections. As I looked out of the window I could see other aircraft above and below as we flew over France. My thoughts suddenly turned to the amount of CO_2 emissions they were all making. Should I have gone by train? The answer was 'no' since it would have added several (six) hours to my journey on current timings. But in the future, if rail timings could come down with more direct French TGVs, then it could be a possibility.

Arrival in Zurich was on time with usual Swiss efficiency. The immigration/police were very courteous. Once processed, I passed into the baggage hall and was immediately confronted by (LED) screens indicating which baggage carousel would contain my flight luggage and how long a wait there would be. For the traveller I thought this was useful and impressive – the system had been designed with empathy. At the carousel another screen indicates train departures/destinations for the next trains on a rolling basis. Again helpful information, typically 'Swiss' – thinking ahead for customer needs. I retrieved my luggage from the carousel (less time elapsed than indicated), walked through Customs and then proceeded down to the railway station.

I did not go to the booking office but opted to use one of the ticket machines which are touch screen based and very user friendly. One goes through logical steps:–

1. Which language? – choose from German, French, Italian or English. Used English.

2. Indicate destination – names provided. If 'Other places' start to 'type' in

name and after three characters a new list appears. Not needed as I was going to St Gallen which is a major station in north east Switzerland.

3. Indicate single or return (arrows shown); required single.

4. Indicate second class or first class. I always travel first as I have a half fare card which can be usually be used with all modes, (including lake steamers).

5. Indicate if full fare or half fare card. I have a half fare card valid three years, and I am normally able to recover the cost after two or three journeys. I indicate half fare card.

6. Indicate when travelling ie., today or a later date: I chose the former.

7. Indicate routing to be taken (only if appropriate) - not necessary for St Gallen.

8. Indicated price is shown.

9. Either insert cash or card. I paid cash and was given change and ticket.

I then proceeded to the platform shown on the indicator board. The train is precisely on time, I board and find a window seat having 'stacked' my luggage between the seatbacks. The train departs on time; a mini-bar is available but I decline. As the local time is 16.40hrs the daily evening commute has started and the train is well filled. The train calls at its three scheduled stops and finally at its destination (St Gallen) precisely on time. As always when I visit I am impressed how clean and neat is the scenery, which engenders a sense of pride - except of course for signs of graffiti which is endemic in Europe. I then gathered my luggage, left the train and walked across the road, fifty metres or so into my hotel.

Compliance with travellers' needs:
The journey had been organised and relatively seamless in its entirety which

had started from my home at 07.30hrs (GMT) ie.,08.30hrs (CET) and arriving in my hotel at 17.30hrs (CET); a total journey time of 9 hours (door -to- door) covering a distance of some 900 miles. Attempting the whole journey by train would have added approximately 6 hours to my journey time. Language had not been a problem in Switzerland since train and other announcements are frequently made in several languages (including English) on Inter-City type trains and of course on the airplane. Whilst I am an experienced traveller, I wondered how a novice would have got on. In general I believe they would have found booking arrangements relatively straight-forward; signage at interchanges in both England and especially in Switzerland were very good and helpful staff were available for those who were experiencing any difficulty.

All in all, as a traveller there was full compliance and all needs satisfied. The only real issue is whether the train could substitute for the plane. Once the high speed line (LGV) from Paris to Basel and onwards is fully operational this may be a worthwhile option. Journey time is the significant factor; also when changing trains in Paris, at present, it is not straight forward. One final point is that, personally, I would not even contemplate driving to Switzerland. Indeed when outside of the UK I always use public transport or walk. (The only exception is when I visit my cousins in Alabama, USA where without a car one cannot be mobile to go any distance unless it is very local and walkable. I am therefore frequently a passenger in a car.)

Whilst it is acknowledged that delay and slow journey time can be important issues for the traveller, effective planning can usually mitigate or alleviate problems, an example being missing a connection, which can be very frustrating and for business travellers could result in missed meetings.

<u>(iii) A Journey from a downtown, Boston (USA) hotel to Boston Logan Airport</u>

This journey is of interest from a cultural and communication perspective, and took place in October 2007. I had arrived at my hotel from the airport by Airport Shuttle Bus as I was unfamiliar with the transport system. It was a relatively easy option providing door-to-door service; more expensive than by bus/subway but much cheaper than a taxi. I had decided that on my return journey to the airport however I would use the subway/bus interchange facility.

My hotel was just some 300 metres from the subway station for the line to the airport so walked to catch the train. On arrival I discovered that the subway line to the airport interchange station was closed. A member of staff saw me looking puzzled and explained that there was a substitute bus and I was told to "Go to the bus ", pointing to a waiting bus. I asked about payment (I had two $1 dollar bills ready) but was merely told again to "Go to the bus". So that is what I did - climbed on with my luggage, told the driver I was going to the airport and offered payment. He replied that I should just sit down. I again offered payment but the driver just told me to stay in my seat. (As he was a large chap, about 16 stone I did as I was told!). At this point I found the situation somewhat bizarre. The bus was just about full (with what appeared to be mainly local people ie Bostonians) and the despatcher told the driver to depart, and off we went.

The bus called at all the appropriate station stops and I was interested to see the various urban areas that we were travelling through - quite a revelation….Passengers were getting on and off the bus. After around twenty minutes we arrived at the Airport Interchange Station where one changes onto

the Airport Coach. I watched some people get off the bus and noticed no one seemed bothered about tickets. I soon surmised and got confirmation that travel today, on this particular subway line, was free since as a passenger I had been inconvenienced by the subway engineering works. The operator, the Metropolitan Transit Authority, was providing an inferior service from normal and felt duty bound to compensate the passenger.

I went to the adjacent Airport Coach where a very helpful driver explained the situation and asked which terminal I wished to go to - which was the International terminal (for British Airways). He insisted on stacking my luggage and I sat down. We then quickly proceeded to the various terminals, in my case the International terminal: The driver retrieved my luggage, I thanked him and went to the appropriate check-in desk for my flight.

Compliance with travellers' needs:

Whilst this was a relatively short journey, the points of note were that firstly, I cannot recall seeing any notice advising that travel on my route today was free. Secondly, the staff at no time tried to communicate this fact to me. It was not until I had arrived at the Interchange station that the Airport Coach driver confirmed the situation to me. The operational staff just seemed to assume that I should have known my journey would be free today.

Fortunately I am much travelled around the USA, but for the novice traveller from abroad, especially if they did not understand (American) English well, would have been totally confused, if not possibly somewhat distressed. In such situations communication is everything. I could not envisage such an experience happening in, say, Switzerland. The trains would probably have

kept running notwithstanding the engineering works and/or there would have been clear signage/explanation with helpful staff. So Boston Mass Transit System did quite well in looking after the local passenger/customer but lacked total empathy with the Airport traveller. In terms of the needs of the traveller as set out in the introduction on page 2 the Boston journey failed on 'Quality information', there was lack of signage and explanations for the visitor. Otherwise not too bad an experience, even if a little strange to the uninitiated! Clearly a culture difference came through; but 95% of US citizens have never travelled abroad and so the lack of circumspect is not surprising.

Finally taking a taxi to the airport is normally anathema to me – far too expensive compared to alternatives. I could have taken the Airport Shuttle Bus but I always prefer to use the metro/train where available since it is much better value, an interesting experience, frequent and usually much quicker. Many USA citizens would probably take a taxi, with little thought about alternatives.

(iv) A (day) Return Journey to Newcastle

This was a fairly recent journey involving train and plane. Ideally one would have preferred to have done the whole trip by train, but given the time constraints and cost effectiveness the train/plane modes provided the optimum practical solution. The purpose of the journey was to attend a Board meeting and time was of the essence.

My plane tickets were arranged/purchased for me: I would catch the 09.20hrs Eastern Airlines flight from Southampton Airport to Newcastle and return on the 17.30hrs flight from Newcastle to Southampton. I have done this particular

journey several times before and will do so again in April. This current journey would take place on a Friday – not the best day of the week. I was up early hoping to catch the 07.28hrs train from Bournemouth to Southampton Airport Parkway station which is 100metres from the airport terminal. As I was leaving home I stopped to talk to the Porter and as a result arrived at the station to see my train departing. I purchased my return ticket to Southampton Airport (my Railcard was not valid for this journey apparently) and noticed a Crosscountry train was about to depart from the opposite platform. The ticket collector said it was about to pull out and I should not attempt to get it. In fact he was wrong, I believe I could have just caught it. Notwithstanding I had no choice but to wait for next train at 07.59hrs. As a result I arrived at Southampton Airport a half hour later than I intended. Fortunately this was not a catastrophe and I checked in for my flight and was allocated a window seat fairly near the front of the aircraft. I then proceeded through security and got caught for one of their checks! Once through I sat and waited for my plane.

It arrived a few minutes late but boarding was soon underway. I noticed the number of passengers was relatively few – even though this flight continued to Aberdeen after Newcastle. Clearly the recession was having an effect on peoples travel plans. We took off and I settled down to read a magazine and also enjoy a drink and a snack courtesy of the airline: it was not a 'Low-cost' airline (which I refuse to travel on). The journey was scheduled to take 55 minutes but because of headwinds and a slightly late start we would land a few minutes late, which we did. However we soon disembarked and knowing my way was quickly out of the terminal and into a taxi to take me to my final destination. I arrived about 10 minutes before my meeting was due to start.

The journey back to the airport, after the meeting had finished, was again by

taxi but shared with a colleague who was flying to Stansted airport. We arrived in good time for our respective flights, mine at 17.30hrs and his at 17.40hrs. We split up to check-in (he was flying with Easyjet) and later caught up after having gone through security - no problems this time. We then went to a lounge and had a hot drink until the flights were called and mine was first. We said goodbye and I proceeded to my gate for departure. Today I would be put on a bus to reach the plane. I noticed a couple of people who had been on my morning flight and clearly had done a day trip as I had. Once again I had a window seat near the front of the aircraft which had come from Aberdeen. We took off and had a good flight back to Southampton airport where we landed a few minutes early. The service was as good as in the morning. After leaving the terminal I headed across the road to the station to get the next train to Bournemouth.

It was at this point that frustration set in. I would have to wait over 20 minutes for the train, and although it was formed of 10 coaches it would be stopping at all stations after Brockenhurst. At Bournemouth the train would be split with the front 5 coaches going on to Weymouth. Why the train was not split at Southampton and then run fast to Bournemouth I could not understand. Whilst this was a 'peak' train from London Waterloo (depart 18.05hrs) all the others seemed to be split at Southampton according to the timetable. The splitting of my train seemed to be done for operating convenience rather than thinking about the customers' needs.

My train eventually arrived on time and then I boarded for my slow journey to Bournemouth where I arrived at 20.00hrs. I was not amused: this journey should have normally taken 35 minutes, instead it had taken nearly 55 minutes. The walk home from the station helped to calm me down and of

course gave me some well needed exercise.

Compliance with travellers' needs:

In terms of customer needs I consider firstly there was a failure on customer convenience. It seemed ridiculous that there was not a fast portion on my train home. Whilst the timetable did specify that the train would split at Bournemouth rather than Southampton Central, this was not helpful to travellers arriving via the airport. South West Trains need to pay attention to customer needs. (Indeed I have taken up the matter with them, but so far have not received any written reply which they said they would send to me). The fact that my Rail Card was not valid for the journey was also a negative point for the journey. And incidentally I did not even consider travelling first class! But at least I was able to find a seat in the 'Quiet coach' and avoid the mobile phone users, etc. It could be said that there needs to be better cooperation between the train operators and the airlines to provide better integration of timetables; but how practical is it? Yet they seem to better manage it in Switzerland, particularly at Zurich and Geneva. Swiss International Airlines actually provide times of train connections as part of their timetable.

(v) A Journey to Nottingham and Return

For this trip I visited the Travel Bureau at Bournemouth Station the day before travel and purchased a ticket via London, with PlusBus for the use on the tram in Nottingham (valid all day). My rail ticket was valid on the Underground but not on the buses. I had decided not to take the alternative and slightly cheaper route via Birmingham using Cross-Country trains since it was no quicker, had fewer good train connections and the fact that I regard Birmingham New Street as possibly the worst inter-change station in the country. A 'plus' point was that I was able to use my Railcard for the whole journey and thus obtain a

discounted fare (providing that I caught the 07.59hrs train and not an earlier one which was acceptable).

I caught the 07.59hrs South West Trains long distance commuter train and decided to sit in one of the 'Quiet' coaches; there are two on a ten coach train. (This train was the same one I caught in the previously described   journey). I sat in a window 'Airline' style seat, forward facing and with good leg-room. I decided to doze since it was misty in parts outside. The announcements on the train were helpful as we started off – repeated on LCD screens in the coach. My ticket was checked en route; but I also noticed that there were seats available at Winchester, perhaps a sign of the times; usually people are standing. However I was in a 'Quiet' coach so this inhibited the use of mobile phones, to my delight. There was a trolley refreshments service passing through the train but I did not use it on this occasion.

The train arrived on time at Waterloo; and I used a shortcut route to the Underground Northern Line but found the signage confusing in the renovations which were going on. Incidentally one now has to pass through ticket gates to exit/enter the respective parts of the station. I caught the next train to Euston on the Northern line, which after being the worst is now the best of the Underground lines, and changed to the Victoria line at Euston. I soon arrived at Kings Cross/St.Pancras station where I would catch my East Midlands train to direct Nottingham. I was able to catch the 10.30hrs train with 5 minutes to spare. Apparently there would be no buffet service passing through the train on this service which was a HST. I found a forward facing 'airline' window seat and made myself comfortable. However my seat was apparently 'reserved' (there was no indication to this effect) but the passenger said he was happy to sit in the aisle seat. I subsequently discovered from the

train guard that the original train for this journey (a Meridian Unit) had been defective and the HST was a substitute, hence the lack of 'reservation' indicators. The train left on time and was due into Nottingham at 12.24hrs: unfortunately it was a 'stopper'.

There were clear announcements and explanations by the Guard (whose name was Oliver). There was a buffet open but in the First class coach and customers would have to make their way there if they wished to make a purchase. I decided to stay put. The train itself was clean but starting to look a little 'tired' and in my view in need of refurbishment. The ride quality was good on the HST's Mark 3 coaches, for which they have a good reputation. Outside it was a dull day which did not brighten up ones spirits. However the train appeared to be well occupied: there seemed to be people from all age groups.

The first stop was Luton Airport Parkway – providing airport link. The second was Bedford where electrification ends, notwithstanding that I was travelling in a diesel train (which I hate). The quicker they electrify the rest of this line the better; and it would be more climate friendly. However I did notice that the electric First Capital Connect trains looked filthy; this would not have enhanced the travel experience for passengers. The third stop was Wellingborough where the chap sitting next to me got off. I wondered why he had bothered to reserve a seat since there seemed to have been some spare seats available even though the train appeared well patronised. The next (fourth) stop was Kettering. I had noticed that between Wellingborough and Kettering, Network Rail was reinstating tracks that had been removed in the past. We then stopped at Market Harborough followed by Leicester. A mobile phone had kept going off for much of the journey but fortunately a man got off (Rail Worker?) who I suspect had poor hearing because of his job. Hopefully the

rest of the journey would be a little more peaceful. The train proceeded to stops at Loughborough, Beeston and finally Nottingham where it arrived on time. I left the train and headed to the tram which departed at 12.30hrs and arrived at my final destination at 12.40hrs. Having left home at 07.30hrs I had been travelling for 5 hours, so I was glad to arrive. Nonetheless it had been a relatively smooth and integrated journey with few difficulties, but I did know my way around the system, including at St.Pancras International where the signage was fairly good for the unfamiliar traveller.

The return journey home was initially a little quicker but ultimately a little frustrating for me. I caught the first tram back to the rail station and just managed to catch the 15.28hrs train back to St.Pancras with two minutes to spare. I had had no problems with my PlusBus ticket on the tram. The train set off on time but there were no announcements as to destination, buffet service etc; the train was again an HST and I had a similar seat to the outward journey. This train was a 'fast' which stopped at East Midlands Parkway (for East Midlands airport), Leicester, Market Harborough and finally St.Pancras. Tickets were checked by the Guard who seemed less confident than that on the outward journey. The train was not crowded with plenty of seats to spare in my coach. It arrived on time at St Pancras although we were kept waiting until a platform became available. The interior of the train was in a similar state to that of the outgoing train. My only other comment is that on an HST I felt as if I was travelling in a time warp, the trains are of course some 30 years old even if the diesel engines have been replaced with cleaner and more efficient ones.

I had arrived at St.Pancras at 17.20hrs in the middle of the rush hour commute, so people were dashing around everywhere to get their trains or leave the station. I made my way to the Underground and caught a Victoria line train to

Euston and then the Northern line to Waterloo for connection to my train back to Bournemouth. Unfortunately I arrived at Waterloo to find that the next train back to Bournemouth was at 18.05hrs – the dreaded 'slow' train referred to in the previous journey from Southampton Airport. I decided to wait for the 18.35hrs train which arrived 18 minutes after the 18.05hrs. It was most frustrating since I must have just missed the 17.35hrs train by a couple of minutes! But that's life as they say.. I had a wander around Waterloo station observing the commuters and other passengers and then made my way to the 18.35hrs train and made sure I was in the front five coaches since they would run non-stop from Southampton Central to Bournemouth. Once again I found a suitable window seat in the 'Quiet' coach and made myself comfortable. I found the ambiance of this long-distance electric train far preferable to the HSTs I travelled on on East Midlands Trains. (Both South West Trains and East Midlands Trains are owned by Stagecoach Holdings).

The train departed on time and I settled down for the journey home to Bournemouth. Tickets were checked and announcements were made as the journey progressed, but I wish the Guard had stuck to using the 24hr clock face time announcement as she was supposed to do. Airlines seem to, so why not SWT? ! We had a good run to Bournemouth and arrived a minute or so early. I was glad to leave the train as I needed some exercise which the walk home would provide. Apart from the frustration of the timetabling of 18.05hrs train the journey home was not problematic. Maybe other travellers particularly leisure travellers may not have been troubled by catching the (slow)18.05hrs train but for me it was an unnecessary inconvenience. Perhaps my problem was that I remember when back in 1970 a fast train would leave Waterloo, then first stop Southampton Central followed by Bournemouth – a journey time of just 90 minutes. But since then there has been considerable passenger growth

and extra stops put in so that the fastest train now takes about 100 minutes if you are lucky.

One observation I should perhaps make is that I never purchase tickets on the Internet notwithstanding that they might be a bit cheaper since I do not consider the payment system safe and subject to possible 'hacking'. The younger generation would probably have no such foibles. I come back to this point later under 'Themes and Issues', and also under the subsequent section on Demographics (3.3.2).

The other point I would make is that if there had not been a tram service from Nottingham station I would have walked to my final destination (or maybe have caught a taxi if it was raining hard): I would not have taken a bus, which in any case did not appear to be readily accessible. Buses just do not have the same ambience as a tram. I concur with Melia (2009); who comments that car owners do not think twice about jumping aboard a tram, but buses generate different feelings. This behavioural issue and its relationship with integration will be further developed in Document 5.

Compliance with travellers' needs:
So as far as traveller/customer needs are concerned the journey was in the main satisfactory but failed on poor signage directions for the Underground (even regular commuters were having problems), and on convenience (the 'slow' 18.05hrs train); also the use of diesels on East Midland Trains was a negative from a sustainability viewpoint. Electric trains are far superior and cleaner with less noise. The Swiss railways are all electric (with the exception of some freight shunters and infrastructure trains for maintenance) and from most peoples perspective are an enjoyable mode of travel and generally faster.

Overall, the journey was integrated and was relatively seamless although negotiating the London Underground might have been a problem for the unfamiliar and particularly the elderly. Having observed the latter with their baggage, signs of stress were noticeable. (But I suspect this is likely to be the case with any such system in a large city anywhere in the world). Although there is a bus service which, inter alia, runs between Waterloo and St. Pancras it is not ideal for luggage. I suspect those who could afford a taxi might take this mode rather than the Underground.

It is now appropriate to highlight the comparisons and contrasts of these journeys which were deliberately chosen to form an eclectic mix.

3.3.1 Journey Comparisons and Contrasts

Firstly, in all the journeys undertaken, some sort of planning was involved viz.,:

Journey	Planning
(I) Car to Kenilworth	–date of lunch, rendezvous points.
(ii) Mixed mode to St.Gallen, Switzerland	–dates for departure/return, –purchase of tickets; –timing (integration) of modes; –'buffer' for possible missed connections; late running of trains or plane.
(iii) Boston (to Airport)	–date of departure/'walk on' ticket; –sufficient time to get to check-in.

(iv)   Newcastle   -date of meeting; time for

                                                      departure/return;

                                        -'buffer' for connection, particularly

                                                      for train;

(v)   Nottingham   -date of trip;

                                        -pre buy 'integrated'/combined

                                                ticket;

                                        -flexibility with connections/buffer.

Secondly, some themes have become apparent, and they can be considered under various groupings as follows:-

(1) Communication:

There was a general need for improving communication with the traveller in some instances, particularly in case study (iii) - Boston. This includes recognising the fact that not everyone speaks fluent English; having empathy with the traveller; and the need for the transport operator to recognise that it has a responsibility to provide first class customer service. Passengers are attracted by good performance and good customer service.

Hibbs (2000) comments that 'there are still too many companies.......whose managers have yet to learn the lesson of the market: that their business is carrying people, not running buses'. Whilst he was talking about the bus industry it applies equally to the rail industry - perhaps more so. It is also apposite to add that he comes from the bus industry and is a keen advocate of the 'free market economy'. And, unlike me, he believes trams are an unnecessary extravagance. His view is that transport integration is a myth, as

argued in his paper (2000). But it was written before the issue of sustainability really took hold. (However, I do share his view that public transport can never be an effective substitute for the private car where population density is low. He also adds that people who choose to live away from the urban environment do in general accept that they cannot expect the same level of public transport).

(2) Familiarity:

I am an experienced traveller and as such this provides me with the confidence to be able to cope with problems which might occur. The novice traveller needs reassurance and it is part of the role of transport operators to satisfy this need. Sometimes there is too much concentration on the smooth working of the operator's systems to the detriment of the customers' requirements. Case study (v) illustrates this with the poor signage and difficulties for travellers with luggage.

(3) Satisfaction and Enjoyment:

All of the journeys provided degrees of enjoyment and satisfaction. I have an aversion to slow or 'stopping' services, and can only reiterate that for me as an experienced traveller this results in frustration. There are occasions when I might deliberately take a 'slow' train, but normally this is done with a purpose. One example is in Switzerland when travelling between Lugano and Chiasso, when I have taken a regional train to try out the new rolling stock; trains which are 'high-tech' and known as 'Flirt' manufactured by the Swiss firm Stadler. It also gives one an opportunity to observe the indigenous population and thus the culture of the area.

Leisure travellers are more likely to be less bothered by whether a train

is 'slow' or 'fast', since for them the journey experience alone may excite with the opportunity to see new and different places. Another observation is that in Switzerland the ticketing system normally permits break-of-journey, so that travellers can visit places of special interest to them and then continue on a later train to their ultimate destination, whereas in the UK the ticketing system frequently does not permit such breaks. In the UK the rail franchising system and the need for competition complicates matters particularly as regards ticketing, and also timetabling in a way which does not happen in Switzerland or other European countries.

3.3.2 Demographics

Each generation seems to have its own perspective on the world: this can sometimes manifest itself with conflict between, for example, parents and their off-spring. But we are all, to some degree, shaped by our environment. In a recent feature on 'Customer Service Excellence and The Travel Experience' (Transit, 2009) Natalie Calvert, a Management Consultant, provided an intriguing insight into the role of generational influences in communicating with customers.

It was postulated that each new generation changes the way we do business with one another. However it was not only generation change which happens but also technological and social influences. People (consumers) are becoming much more demanding and the UK was at the forefront in this respect. The benchmark of customer service is continually being raised: organisations such as First Direct, John Lewis or Tesco were leading the way.

Calvert was of the view that generational influences were at the heart of these changes and identified three types of consumer by generation: 'Baby Boomers'

born from 1945 to 1960, 'Generation' X born between 1961 and 1982 and then the latest generation of consumer -'Generation Y'. She commented that 'Baby Boomers' had television in the home for the first time, they assumed they had a career for life and money for life. They had moved from corner shop-style customer service to the mass market that exists today. Then you had 'Generation X', who are techno-immigrants. They had not grown up with technology, but immigrated to new technology. 'Generation X' could live with technology, but it was not the key issue in their lives. She also considered that they are   very social people but very different to the generation before. They do not want mass market customer service, but a more bespoke approach: and they want a customer experience, rather than a customer service. Finally she concluded that the latest generation, 'Generation Y', were changing the world and changing it fast. This generation had grown up with a 'bottle in one hand and a laptop in the other'. They are not techno-immigrants, technology is just part of how they operate. As a result there was a need to have the right technology in place to communicate with them. Also they had a very different issues and priorities. The challenge was to be able to change quick enough to keep up with them and this meant moving fast. 'Generation Y' tends to readily accept use of mobile phones and wifi access to information, which other generations may have more reluctance to use - or perhaps will not use because of security issues. This reflects back to my comments in case (v) - p32 above.

The point Calvert was demonstrating was that organisations (such as transport operators) need to change the way they communicate with customers in order to meet their expectations. Some operators seem to be having difficulty recognising the need for rapid change. This provides a neat progression to how integration is perceived.

4. Analysis

It is now appropriate to attempt to understand what the fundamental requisites of integrated ticketing and timetabling are for the traveller, and the benefits derived.

4.1 What creates integration?

In this context one is effectively talking about functional (ticketing) and modal (transfer) integration as outlined by Potter, Skinner (2000) and discussed in document 2 (3.1). It encompasses the narrowest definition of integration where the objective is to make travel easier.

In terms of ticketing, having a simple 'through' ticket from origin to destination (and return where appropriate) which is easy to use and understand on all modes by all age groups would satisfy this requirement. As far as timetables are concerned, provision of buses/trams/trains/ferries on a regular and convenient basis, and where changes are needed, the ability to change within and between modes conveniently, and with easy access, so as to provide as seamless a journey as possible. As a matter of course the implementation of a regular interval timetable, as in Switzerland, is the ideal. In the UK, South West Trains have managed to accomplish this requirement. But also in Switzerland, timetables are first set by the railways, and then the trams and buses are timed to coincide with arrivals/departures of the trains. So, in substance we come back to the traveller's needs as highlighted on page 2, with perhaps the need for 'value for money' coming under emphasis and also ease of accessibility.

Considering the latter point first, interchange facilities should be sheltered and provide protection from the weather. Ideally design of station/interchange

buildings should adhere to the basics of travellers' needs; most of the larger stations do but some of the smaller ones leave a lot to be desired. In this day and age adherence to Disability Discrimination Act requirements is also relevant. And of course there should be clear signage. In this context cleanliness is another priority; dirty premises, carriages and vehicles will discourage travellers to use a particular mode.

In essence much is about perception, which conveniently brings us back to 'value for money'. If fares are set at the wrong level then travellers will be dissuaded from using any kind of public transport and opt for using their cars, which essentially will be their benchmark. This element is further complicated by the fact that in many outer urban and rural areas, the only way for travellers, particularly commuters, to get to a station is by car. They therefore require adjacent car-parking and, where as in most cases, a daily or weekly charge is payable, prefer such charges to be incorporated into the price of the ticket. Evidence of the use of car-parks is clear to see when looking out of the train window in some of the journeys described above.

<u>Advent of the smartcard.</u>

Notwithstanding, slowly the transport industry is grasping the fact that multi-modal smartcard ticketing is the way forward. In London, Transport for London's Oystercard is setting the pace; and Nexus (Tyne and Wear) Transport Authority is working with transport operators to develop a smartcard ticket for the conurbation and potentially the region. The objective of the North East smart ticketing scheme is to deliver an ITSO-standard smart ticket for use on buses, Tyne & Wear Metro, heavy rail services and the Shields ferry. (LTT 2009). Similarly, in Europe, notably in the Netherlands, the metro systems in both Amsterdam and Rotterdam will only be accessible with the OV-chipkaart, the

smart card which is to be introduced nationally for public transport. (Today's Railways Europe 158).

The advent of smartcard ticketing which is relatively simple to use and can easily be 'topped-up' monetarily, makes travelling on public transport smoother and less hassle, particularly for the commuter. In London, Amsterdam, and especially Hong Kong, where the smartcard has its origins, daily travel in the metropolis has been transformed. Indeed a further recent example is in Ireland (Eire) where the Irish Department for Transport has announced integrated bus/rail ticketing for the Greater Dublin Area to be introduced over the next 12 months. The new multi-modal tickets will replace the individual magnetic stripe tickets used by bus and rail passengers. The Dublin smartcard was already available on Luas (tram) services and all vehicles in the Dublin bus fleet are now fitted with validators to enable its use. Once commuters become familiarised with the latest single smartcard it will also be introduced on Irish Rail (IR) DART (Dublin Area Rapid Transit) and commuter rail services. (Today's Railways UK 89).

The UK transport system.

However because of the current fragmented structure of the UK transport system, achieving integration in terms of ticketing and timetables is beset with pitfalls. For example the bus system in London is regulated by Transport for London, whereas elsewhere in the UK it is deregulated to encourage competition. But the latter often results in poorer services because transport operators tend to only run services on routes which are profitable to them (unless they receive other funding such as Local Authority subsidy).

In the context of multi-modal ticketing, there are a plethora of tickets

available which can confuse even an expert. The magazine 'Today's Railways UK' has just published in its latest issue a Rover Ticket Guide 2009 which extends to some 11 pages. Some 13 areas of different sizes are covered; and within each there several different types of 'rover' tickets available. Just about all have some sort of restriction attached. Using Light Rail and Tram Systems as an example:–

London Tramlink (covers trams and all buses in London): One Day Tram/Bus Pass: Adult: £3.80.

Stagecoach Supertram (Sheffield): Dayrider tram ticket: Adult £3 (available from conductor). Also valid on Stagecoach buses within Sheffield. But apparently not other bus companies; 'competition' rules creeping in here?

As comprehensive as the article is, I cannot find any reference to the 'PlusBus' ticket which I used on my journey to Nottingham. However, understandably there is a caveat that there might be some omissions! But just taking the example above at random one can see there is a problem for the traveller. This can be made worse for those who use the Internet to gain information; frequently the information available is out of date. As such it is likely to discourage potential new users to public transport. It is now appropriate to consider how integration might be achieved.

4.2 Ways of achieving integration

To achieve integration at its lowest or narrowest level as described above, ideally requires a degree of coordination. Some would argue the terms are interchangeable but this is too simplistic a view. Earlier I referred to a paper by

Potter, Skinner (2000) where they attempted to explore the meaning of 'Integrated Transport' considering what strategies will contribute to sustainability. It is worth re-iterating their analysis that 'Integrated Transport' is scalar in nature with higher levels incorporating lower, or narrower, understanding of the term. Indicators on the scale include:

- *Functional or Modal Integration,* which is part of …….

- *Transport and Planning Integration,* which is part of …….

- *Social Integration,* which is part of …….

- *Environmental, Economic & Transport Policy Integration.*

Potter, Skinner consider that only by commitment, and allocation of resources, to the highest levels, will issues of sustainability be properly addressed. But the problem is that often, government does not appreciate the inter-relationship of the various indicators, because there is a lack of 'joined up' thinking.

Thus a key issue seems to be political. There needs to be consensus from all parties of whatever political persuasion, that integration is a priority for the traveller to enhance their journey experience and receive first class service. Without political consensus, the current industry fragmentation will continue to result in the dominance of car use by travellers. Ideology must be eschewed with all parties working together for the common good and taking a long-term view. This is what has happened in Switzerland and resulted in its having the highest level of public transport service in Europe.

Some progress is evident with political consensus building behind High Speed Rail. Lord Andrew Adonis, transport minister, has commented that "the basis of infrastructure planning in the post war decades was the failure to develop a national consensus behind essential long-term improvements" (Transit

2009,a). On another front too, consensus is starting to prevail. The new Local Transport Act (LTA), has provided powers for co-operation between bus operators in certain circumstances providing some derogation from the normal competition requirements. Oxford's two biggest bus operators are to coordinate their timetables in a bid to head-off the removal of buses from many city centre streets (Transit 2009,b). They propose to use new powers in the LTA to reduce departures on services on which they compete and introduce inter-availability of tickets. It is interesting to compare this approach with the second example of Rover tickets in Sheffield described above. Whilst there are different circumstances it does illustrate the incompatibility which is often evident between satisfying competition requirements and providing an effective customer service. We seem to have a discord in the needs and objectives of the various stakeholders.

But interestingly Stagecoach has just launched Megabusplus.com a new integrated coach and rail service linking towns in the north of England with London. The idea (or innovation) according to Brian Souter, Chief Executive, is that it is priced as a bus experience, and one gets a quick reliable journey into London using East Midlands Parkway as the interchange station. Stagecoach have looked at value fares and differentiated their product (Transit 2009,c). Whether this type of integration is endearing to the traveller only time will tell, but it may well appeal to generation 'Y' on price grounds and internet access.

In summary integration requires consensus, common sense set of rules or guidelines (as in Switzerland), innovation and the ability to listen to and deliver what the customer wants.

5. Conclusion

From the small sample of journeys undertaken it is difficult to draw any particular behavioural trends, apart perhaps that many people use the mode of transport which they are used to, never thinking if alternatives should be used. If public transport is to be successful especial thought needs to be given to ticketing and timetables by operators to provide what the customer wants and when. Innovation and good marketing by transport operators are essential in the development of integrated transport. At present, particularly with the railways, the Department of Transport seems to be trying to micro-manage matters such as timetables notwithstanding that transport operators are often trying to accede to customer/passenger wishes. Civil servants seem to be in denial as to what the customer wants because they just ignore them, when they should be consulting with them. However, the wider remit being given to Passenger Focus which has as its main function, putting forward the customers' viewpoint, may help to resolve this dichotomy.

Other chinks of light are also appearing. Devolution has resulted in London, Scotland, Wales and Northern Ireland being able to look after their own areas and listen to local concerns resulting in much better allocation of resources and better coordination. New Integrated Transport Authorities are being established as result of the latest Local Transport Act. In addition the Minister of State for Transport, (Andrew Adonis) has just embarked on a 2200 mile trip across the UK to see for himself how the transport system is or is not functioning. His travels will take him to towns and cities as diverse as Penzance and Inverness. (BBC News 2009).

The use of an ethnographic approach, especially participant observation, provides a useful insight into understanding how public transport functions

and the benefits of incorporating integration. It is interesting that Lord Adonis has decided to do his own form of participant observation. How different will his perceptions be from mine ?

The research methods used in this paper were based in general on Van Maanen's ethnological approach of story telling through the various studies as described above (Section 3.2). In essence the case studies provided the form of 'impressionist' tales based on my participative observations. It could be postulated that different types of traveller expect different levels of expectation. The levels of expectation may be determined by a single priority such as cost, or a mixture of factors which could include not only cost but purpose, time, enjoyment, demographics, ease of use of technology and other behavioural factors.

As an example of the latter, I have pointed out previously that I rarely, if ever, travel on a bus even though I am entitled to a concessionary travel card (and would not even consider having one). However, many retired people would not be able to get out and about if it were not for their concessionary travel card. It fulfils a social need or benefit and provides a means of interaction with other people which would not otherwise be available. This is evident from my watching the buses in Bournemouth going to/from Poole and Christchurch. Such (participant) observation helps give support to the writings of Van Maanen, as well as   Watson, and Brymon & Bell as outlined in 3.1. above.

When reflecting on the case studies and then considering the concessionary travel card concept it begs the question as to whether integrated transport is appropriate or relevant ? The answer in my view is definitely in the affirmative since the travel card provides a means of using any bus service ie it provides

integrated ticketing with simplicity for the particular type of traveller.

Continuing the issue of type of traveller, had I been on business travelling to Switzerland (case study ii) would I have been as relaxed about the train from Bournemouth arriving late ? Given the journey was planned and the ticketing to the airport fully integrated, probably 'yes'. I believe it much depends on a person's temperament and experience. So, do all customers want the same thing? Certainly they want a good travel experience. I share the view of Lyons (2009) that for journeys that are familiar and predictable to us we have less inclination to consult on information service than for journeys that are unfamiliar and potentially unpredictable. Individuals have different approaches to decisions (and given individuals may have different approaches at different times).

Lyons points out that some individuals' approach is that deciding how to get somewhere is no big deal so long as the outcome is good enough. Others want to be in as full possession of the facts as possible in order to make an optimal decision faced with the options on offer. He calls the first the 'Homer Simpson' approach and the latter the 'Mr Spock' approach. I find this a good analogy. For some journeys making a decision is an unconscious process, automatic or habitual. Other journeys with the greatest potential information demands will be those whose full option assessment and planning is required. Formal information services are not the only source. People can have their decisions informed by past experience or instinct (my case study (i) car journey); they can also be influenced by significant others: friends, family, colleagues, etc.

One other observation on the different cultural approaches and behaviour when comparing   the UK and the Swiss which is perhaps exemplified in case

study (ii). The Swiss have an expectation of efficiency, service, and good experience as the norm. In the UK there tends to be a rather cynical view, partly driven by the media (who, unfortunately, only like to report bad news on transport), to not expect anything to work properly, possibly engendered by a lack of pride and confidence in abilities, and the consequent setting of poor standards.

Further research is needed, initially with Document 4 – carrying out a quantitative review, inter alia, of National Passenger Surveys. The opportunity will also be taken to consider the implications of behavioural economics in integrated transport in the UK, principally in Document 5 the main thesis.

The main journey has only just begun…….

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DOCTOR OF BUSINESS ADMINISTRATION

CORPORATE SOCIAL RESPONSIBILITY AND SUSTAINABILITY

Integration of Transport Systems in the UK: Fact, Fiction or Fantasy ?

A Report on a Piece of Structured Survey Based Research

(Document 4)

Document four is submitted in part fulfilment of the requirements of The Nottingham Trent University for the degree of Doctorate of Business Administration.

Geoffrey F Silverman

October   2010   (Amended Final).

Table of Contents

1. Introduction

Whereas the previous document (3) was essentially a piece of qualitative research, this document (4) is a quantitative and survey based analytical report. However it is again appropriate to restate the definition of integrated transport being used for this study which is - 'the fitting together of all transport modes in an effective and sustainable way to form a whole in relation to integrated systems provided by both public and private sectors in the UK'.

The definition embodies a wide interpretation but the literature review identified, inter alia, three important elements - stakeholders, ticketing and timetables. In this document the principal issues will be on ticketing, timetables and the types of traveller e.g., commuter, leisure, business person, using demographic analysis and comparisons as appropriate. Factors such as value for money, convenience and punctuality will also be reviewed from the various perspectives of the types of traveller brought out by the data in the surveys.

Travellers' needs have been set out in previous documents but are worth re-iterating here. Customers/passengers expect the following needs to be satisfied:
- reliability, convenience and punctuality
- safety and security
- affordability
- access for all
- quality information (including timetables, signage, explanations etc)
And increasingly there is concern about local air quality and noise.

2. Research Objectives and Questions

The Research Objectives are very much in line with those considered for document 3 - qualitative study, but in this study based on statistical survey based information gleaned from the National Passenger Surveys which are undertaken every six months by Passenger Focus, the body whose remit is basically to pursue the rights and needs of the traveller (customer) as highlighted in the introduction. The intention is to attempt to use this information to explore integration from the rail travellers' viewpoint. This is being done by using the publicly accessible NPS dataset which is available on line and described/discussed below under 'findings and analysis'.

Hitherto, the half-yearly surveys, have been solely based on rail transportation, but from 2010, Passenger Focus also has responsibility for bus transportation as well. There are both similarities and differences between these two modes of transport. But for the purposes of this study data will be based on the rail surveys. Concentration will, where possible, be based on data which reflects the relevance and importance of integrated ticketing and timetables to the traveller, and the views of stakeholders such as train operators and Passenger Transport Executives (PTEs)/ Integrated Transport Authorities (ITAs).

Research questions are similar to those identified in Document 3 viz:-

What are the problems, issues and experiences that affect travellers through transport networks, in particular those highlighted through the responses to the NPS and other transport surveys ?

What are the benefits of having an integrated system in relation to the travel experience, testing the value of the NPS for evaluating integration issues ?

The type of traveller and demographic issues, including those highlighted by the NPS and other surveys, will again be pertinent matters and also their effect on integrated transport strategy.

2 (1). Rationale and use of data

Quantitative research generally involves the use of statistics. One is reminded of the quotation attributed to Prime Minister Disraeli, who in a moment of irritation referred to 'lies, damn lies and statistics!'. This can be seen as a cynic's viewpoint but if data is not explained (ie statistics) it can easily take on the connotation.

Hart (1998) considers that the point to remember is that statistics are an outcome of categorization and decision making; they are created (eg through surveys), and are not natural or universally true. He adds that the same point applies to the use of interpretation. All data requires an interpretation; no data - especially statistics - speak for themselves. So why use NPS?

It needs to be reiterated/explained that Passenger Focus is the title adopted by the Rail Passengers' Council. Its goal is essentially getting operators, funders and regulators of UK transport systems to "put passengers first". Its twice yearly NPS has evolved as the benchmark by which performance of train operators is judged. (Recently its remit has been extended to include buses, coaches and trams). There are collective scores, including judgment about value for money, as well as specific ratings of customer service delivery in terms of timetables, train provision and station facilities.

As such, the half-yearly surveys, which are a public domain dataset, appeared to be a tried and tested means of gathering data: to carry out an independent survey therefore seemed akin to 're-inventing the wheel'. The size and scope of data gathered by NPS indicated that it would, inter alia,   provide a good source of information on passenger views on issues of transport integration, as well as good research material. (However, as will become apparent, the analysis in fact developed into a critique of NPS).

Hence, in this study I chose to use survey data produced by the half-yearly National Passenger Surveys (of Train Operating Companies) carried out by Passenger Focus. Passenger Focus (and before it OPRAF [Office of Passenger Rail Franchising} and the Strategic Rail Authority)   set up the National Passenger Survey (NPS) in 1999. The aim of the NPS was to provide customer views on rail company performance on a consistent basis to enable comparison of various companies over time. Consequently data from the NPS has been built into the franchising agreements with train companies with the results providing an important commercial dimension of running a Train Operating Company (TOC). Thus the   sample design, fieldwork standards and accuracy of assigning journeys to specific TOCs take on   important   significance. Also, large enough sample sizes are needed for each TOC to ensure performance changes can be seen in the marketplace.

The first NPS was run in Autumn 1999 and it has been run twice a year since then.

Before exploring the findings and analysis of the NPS surveys it is relevant to undertake a short critique of quantitative research.

3. Critique of Quantitative Research

Bryman and Bell (2003) comment that over the years quantitative research along with its epistemological and ontological foundations has been the focus of a great deal of criticism, particularly from those supportive of qualitative research. They highlight four criticisms as examples which are briefly analysed below:

- Quantitative researchers fail to distinguish people and social institutions from the 'world of nature'. The latter phrase is from Schutz.(1962). It is stated that Schutz and other phenomenologists charge social scientists who employ a natural science model with treating the social world as if it were no different from the natural order. It is contended that by doing so, they draw attention to one of positivism's central tenets, in that the principles of the scientific method can and should be applied to all phenomena that are the focus of investigation. As Schutz argues, this tactic is essentially to imply that this means turning a blind eye to the differences between the social and natural world. But it also means ignoring and riding roughshod over the fact that people interpret the world around them, whereas this capacity for self-reflection cannot be found among the objects of the social sciences e.g., molecules, atoms and electrons - in Schutz explanation. (Schutz work was much influenced, inter alia, by Weber's concept of *Vesterhen* . Weber (1947) described Sociology as a 'science which attempts the interpretative understanding of social action in order to arrive at a causal explanation of its course and effects').

- The measurement process possesses an artificial and spurious sense of precision and accuracy. It is postulated that there are number of aspects to this criticism. One is that it has been argued that the connection between the measures developed by social scientists and the concepts they are supposed to be revealing is assumed rather than real; thus   Cicourel's (1964) notion of 'measurement by fiat' (not the car manufacturer!).Testing for validity as described above fails to address this problem since the very tests themselves involve measurement by fiat. Writers like Cicourel also regard the measurement process as flawed because of the presumption that when, for example, members of a sample respond to a question on a questionnaire (which in itself is taken to be an indicator of a concept), they interpret the key terms in the question similarly. Many writers consider that respondents simply do not interpret such terms similarly. Bryman & Bell contend that an often used reaction to this problem is to use questions with fixed-choice answers, but this approach merely provides 'a solution to the problem of meaning by simply ignoring it' (Cicourel,1964).

- The reliance on instruments and procedures hinders the connection between research and everyday life. This issue relates to the question of ecological validity - the question of whether social scientific findings are applicable to people's everyday, natural social settings. Cicourel,(1982) puts it : 'Do our instruments capture the daily life conditions, opinions, values, attitudes, and knowledge base of those we study as expressed in their natural habitat?' Bryman & Bell point out that many methods of quantitative research rely heavily on administering research instruments to subjects (such as structured interviews and self-completion questionnaires) or on controlling situations to determine their efforts (such as in experiments).But as Cicourel,(1982) points out, how do we know if survey respondents have the requisite knowledge to answer a question or whether they are similar in their sense of the topic being important to them in their everyday life? Thus, if respondents answer a set of questions designed to measure motivation to work, can one be sure that they are equally aware of what it is and its manifestations and can one be sure that it is of equal concern to them in the ways in which it connects with their everyday working life? One can go even further and

ask how well their answers relate to their everyday lives. People may answer a question designed to measure their motivation to work, but respondents actual behaviour may be at variance with their answers (LaPiere, 1934).

- The analysis of relationships between variables creates a static view of social life that is independent of people's lives. Bryman & Bell comment that Blumer, (1956) argued that studies that aim to bring out the relationships between variables omit the process of interpretation or definition that goes on in human groups. They consider this means that we do not know how what appears to be a relationship between two or more variables has been produced by the people to whom it applies. Consequently this criticism incorporates the first and third criticisms above, ie., that the meaning of events to individuals is ignored and that we do not know how such findings connect to everyday contexts - but adds a further element- that it creates a sense of a static social world that is separate from the individuals who make it up. Therefore quantitative research is seen as carrying an objective ontology that verifies the social world.

Bryman & Bell consider that one can see in these criticisms the application of a set of concerns associated with a qualitative research strategy that reveals the combination of an interpretivist epistemological orientation (an emphasis on meaning from the individual's point of view) and a constructionist ontology (an emphasis on viewing the social world as the product of individuals rather than that as something beyond them). However, quantitative supporters would counter these arguments with their own critique of qualitative research: briefly, some of the more common ones include - qualitative research is too subjective; it is difficult to replicate; problems of generalisation; apparent lack of transparency.

It is not proposed to pursue this line of thought other than to be aware of the differing viewpoints. Nonetheless, Lee (2009), comments that positivist influenced quantitative studies have tended to emphasise the neutrality and objectivity of the scientific process, thus excluding the influence of personal and social factors on research.

It is now apposite to look at the National Passenger Survey data commissioned by Passenger Focus using the Autumn 2009 and earlier waves making comparisons as appropriate with comments thereon.

4. Findings and Analysis

Passenger Focus, which commissions the NPS, describes itself as the independent national consumer watchdog for Britain's rail passengers and England's bus and coach passengers. It considers its mission to get the best deal for Britain's passengers.

It sees itself as pursuing a strong emphasis on evidence-based campaigning and research to ensure that it knows what is happening on the ground. It believes it uses its knowledge to influence decisions on behalf of passengers and works within the industry, passenger groups and government to secure journey improvements.

The vision of Passenger Focus (PF) is to ensure that operators, funders and regulators of transport systems *put passengers first.* This is to be achieved by its mission of *getting the best deal for passengers.* (NPS, 2010).

PF states that, over the next three years, its work will be based on the following seven objectives, which underpin the vision and mission.

1. Make a difference for all passengers
2. Tackle examples of poor passenger service
3. Improve access to services for passengers with particular needs
4. Promote good practice in complaint handling and provide advice and advocacy to complainants
5. Increase awareness of Passenger Focus
6. Build and deliver effective passenger representation for bus and coach passengers
7. Boost Passenger Focus's capacity and capability to get the best deal for passengers.

Unfortunately it makes no specific mention of integration in any shape or form.

It then poses the question 'what is Passenger Focus doing for me?' In response it states that it is there to put the interests of rail, bus and coach passengers first; doing this by:

Campaigning for improvements
- By gathering research and information, like NPS, where over 54,000 rail passengers give them their views about their journeys, so that PF understands the issues that matter to passengers.
- By working with government and the industry to ensure that the passenger voice is heard when making decisions about the future.
- By focusing on a number or key issues:- fares and tickets; quality and level of services; & investment.

Resolving complaints with rail companies
- If a passenger makes a complaint and is unhappy with the response PF will take up the issue with the rail company concerned.

At this point a quote from 'Macbeth' seems apposite - "the attempt and not the deed confounds us". In the analysis and commentary which follows under the various headings, it will be seen that the experience of using NPS dataset leads me to conclude that the NPS was per se, not an ideal vehicle for exploring the issues relating to integration. Nonetheless, there is still some useful information to be gleaned from the NPS. Consequently this document has tended to evolve into a critique of the NPS from the point of view of evaluating integration. Of particular note is that the SPSS data package is difficult to use with NPS and a keen eye is needed to ensure that it produces data relating to a particular wave and not all waves when requested. It appeared to have a tendency to 'flip back' into all waves mode for no apparent reason. (Perhaps it is more suited to a mainframe computer rather than a laptop….).This could be frustrating!

4. (1) Data - Statistics and Trends

The NPS survey is conducted across the entire franchised railway (and also on two non-franchised TOCs). Its findings are now available on line. In both Spring and Autumn of each year self-completion questionnaires are distributed at approximately 700 stations across Great Britain, selected to be representative of the entire network. Questionnaires are distributed at different times of the day across all days of the week. Data is weighted to help ensure the sample accurately represents passengers using each operator's services, in terms of the proportion of commuting, business and leisure journeys.

PF states that overall at least 26,000 correctly completed questionnaires are returned

each wave. For the majority of train operators the results are based on responses of 1,000 passengers per survey. Smaller operators' results are based on the views of 500 passengers whilst 2750 passengers are surveyed for the largest operator. Sample sizes for each question are provided on each page in sections two and three, along with sample size for each operator. Not all passengers will answer all of the questions, for example only those passengers who are delayed would rate 'how well train company dealt with delays'. The number of passengers responding to each question is indicated in the sample size column.

The NPS also points out in its 'Methodology' that, in order to provide a benchmark, three different types of train operator have been identified; these are long distance, London and the South East and regional operators. These are not necessarily ideal for the purposes of assessing integration factors but nonetheless provide a starting base. The situation is further complicated over time by the changes to the organisation of franchises but should not deflect from the basic information and trends provided by the data. In the publication, individual train operator results are presented alongside an appropriate sector type thus enabling comparison of a TOCs results with operators that provide broadly similar services.

A 'building block' approach is used by the NPS. This is where the area covered by a TOC is divided into routes or divisions, so that when the boundaries of a franchise are revised, NPS data can be quite easily reprocessed to the boundaries or routes of the new franchises, For example using the building blocks for the old Midland Mainline and part of the Central Trains franchises, NPS results up to Autumn 2007 have been reprocessed to the boundaries of the new East Midlands Trains franchise to ensure compatibility between different waves of the survey.

However with changes to the specification of the boundaries of train operating companies, 'sector' definitions are becoming less straightforward and meaningful as train operating company boundaries increasingly do not relate to the traditional sectors. PF is thus reviewing the 'sector' reporting and following consultation with stakeholders may make some changes to these in the near future.

Given the above, an attempt has been made to identify the variables from the survey which seemed relevant to integration. These include, inter alia, age, purpose of journey, type of traveller, availability of information, connection with other services - rail and other modes, value for money, and so on.

Some Key results as highlighted by PF (NPS Feb 2010)

PF comment that for Autumn 2009 wave (21), nationally the percentage of passengers satisfied with their journey overall was not significantly different compared with the same figure for Autumn 2008 wave (19) (83% of passengers were satisfied which was the same figure for Autumn 2008 -wave 19). 83% is the highest recorded since the survey started in Autumn 1999. PF state that 81% 0f passengers were satisfied with their journey in Autumn 2007. So some progress but then an apparent levelling out. (See Appendix: national and sector level results).

At a national level PF reports that the proportion of passengers satisfied with punctuality/reliability was 83%. This is up compared to Autumn 2008 when the comparative figure was 81%. Again it is commented that it is the highest recorded since the survey started.

The proportion of passengers satisfied with value for money for the price of their ticket nationally was 45%. This was down compared to Autumn 2008 when 46% of passengers were satisfied. Satisfaction with sufficient room for all the passengers to sit/stand improved (up 3%) to 67% satisfied (64% in Autumn 2008.

A digression and reflection on analysis

At this point it is perhaps appropriate to digress for a moment to reflect on the data analysis which is being commented on, since in business research terms it can be best defined as secondary analysis of Official statistics. Bryman & Bell provide a definition of what is secondary analysis. They comment that to some extent, it is difficult to know where primary and secondary analysis start and finish. If a researcher is involved in the collection of survey interview data and analyses some of the data, resulting in some publications, but then some time later decides to rework the data, it is not entirely clear, in their view, how far the latter is primary or secondary analysis. Typically, secondary analysis entails the analysis of data that others have collected (eg as with NPS),but as this simple scenario suggests, this need not necessarily be the case.

It is pointed out that secondary analysis provides several benefits which are now briefly summarised.

Cost and time. Access to good quality data is available which saves much time and effort in having to carry out independent data collection.

High-quality data. Many of the data sets that are employed most frequently for secondary analysis are of very good quality. Sampling procedures will have been rigorous, in most cases resulting in samples that are as close to being representative as one is likely to achieve. In addition the samples are often national samples covering most, if not all of the regions of Great Britain or the UK (as with NPS); and also many data sets have been generated by research organizations that have developed structures and control procedures to check on the quality of the emerging data.

Opportunity for longitudinal analysis. Partly linked to the previous heading is that secondary analysis can offer the opportunity for longitudinal research (analysis of variables over time; Pettigrew (1990)) but which can often be time consuming and costly.

Subgroup or subset analysis. When large samples are the source of data, there is the opportunity to study what can often be quite sizeable subgroups of individuals or subsets of questions.

Opportunity for cross-cultural analysis. Cross-cultural research has considerable appeal at a time when social scientists are more attuned to the processes associated with globalization and to cultural differences. The secondary analysis of comparative data from two or more countries provides one possible model for conducting cross-cultural research.

More time for data analysis. While secondary analysis generally involves a lot of data management, it remains crucial. The fact that one is freed from having to collect fresh data means that ones approach to the analysis of data can be more considered than perhaps it might have been.

Reanalysis may offer new interpretations. A secondary analysis enables the consideration of the impact of a certain variable on the relationships between variables of interest; or new theoretical ideas may suggest analyses not foreseen by the original

researchers. Also an alternative method of quantitative data analysis may be employed which offers a different interpretation of the data. New methods of quantitative data analysis are continuously emerging. An example is meta-analysis; this provides a means whereby the results of large numbers of quantitative studies of a particular topic can be summarised and compared. Again the NPS lends itself to this type of analysis.

The wider obligations of the business researcher. In essence making data available for secondary analysis enhances the possibility that fuller use will be made of data.

But what are the limitations of secondary analysis? These might include some of the following points.

Lack of familiarity with data. Familiarisation can take time particularly if it is complex.

Complexity of the data. Sometimes, the sheer volume of data can present problems with the management of the information at hand and, again, a period of acclimatization may be required. This is particularly relevant when reviewing NPS data.

No control over data quality. This applies mainly, but not exclusively, to specially commissioned commercial research or one-off projects. Basically common sense is needed.

Absence of key variables. In secondary analysis one or more key variables may not be present; for example, examining whether a relationship between two variables holds even when one or more *other* variables are taken into account. This type of analysis is termed 'multivariate analysis'. However, this can be a drawback in meta-analysis, sometimes making it difficult to generate unambiguous conclusions as a result of the analysis. Once again there are implications relating to the NPS data which are mentioned later and relate to integration. All in all I consider the Bryman & Bell analysis and explanation to be useful and   in general agree with its logic.

Having taken a diversion it is time to return to the NPS analysis. The intention was to look at the integration variables, embodying matters such as level of satisfaction; changes over time (comparing Waves); and seeing whether satisfaction differed with demographic variables. An example of the latter would be whether integration was more of a problem for leisure travellers than commuters; another would be any differences seen in accessing information for different age groups; and yet another would be ease of familiarity by age group. However the outcome proved less than ideal and therefore left a lot to be desired.

The 'Technical   appendix' in the **Appendix** section attached describes in detail the basic   methodology used for the latest survey available - Wave 21 Autumn 2009. (It is also explained above on pages 7/8). The overall sample size for this survey was 26,849 for all the train companies combined.

Earlier   (page 8/9) comment was made on punctuality/reliability. It is reported that PF consider the NPS results under this heading show that when a train company is able to run its services on time, passengers are more likely to report that they are satisfied with services overall. What continues to annoy passengers is the way delays are managed by the industry. (Johnstone, 2010).   From a behavioural aspect this comment seems logical.

Interestingly those Train Operating Companies (TOCs), franchised or open access, that are self-contained or tend to be smaller companies appear to provide, in the main,

much better satisfaction levels. Chiltern Railways, c2c, Merseyrail, (franchise TOCS) and Heathrow Express, Grand Central, and Wrexham, Shropshire and Marylebone Railway (WSMR) stand out. In the latest survey, the large majority of passengers travelling on open access operators WSMR (98%) and Grand Central(95%) said they received a good service from their company. Both of these operators were taking part for the first time.

Additionally, Heathrow Express (95%, no change), Mersey rail (91%, up 2%),Scotrail (90%, no change), Heathrow Connect (90%, up 2%), and c2c (90%, no change) all continued to be strong performers. However, there does not appear to be direct comment on factors relating to integration; the 'door-to-door' journey experience. The perception is of 'silo' analysis, but this may be too harsh a view without further drilling down into the data.

(Please note -   in the following analysis please refer to the **Appendix** for details and cross tabulation).

An attempt has been made to compare 'waves' over time to try and establish whether any trends are evident. Some examples follow.

a) If one looks at the 'Opinion of how connections were handled' analysed by age (nationally) in wave 12, the variations are not large. Given that the 26 - 54 range of age groups are slightly lower than 16 - 25 and 55 - 59, 60 - 64, 65+ age groups, this probably reflects the fact that the 26 - 54 range are more likely to be regular travellers such as commuters and business people for whom connections can be critical. The younger and older travellers are more likely to be leisure travellers (but not exclusively) who perhaps travel less frequently. When one compares Waves 14 and 18 as well there is not a lot of difference: crosstabulations indicate no association between the variables. This analysis relates to connections with other train services (Train facilities section of survey). The Autumn 2008 NPS (Wave 19) indicates a 2% overall improvement since Spring 2008 - Wave 18, and 1% overall improvement since Autumn Wave 17. The implication is that train operators are trying to do better. Alternatively it may be due to different travellers answering the survey questionnaire, or both.

b) When one compares 'rating of station where train was boarded - connections with other forms of transport eg bus, tube, tram vis-à-vis (A) not enough information at station where connection made and (B) aspects which were not handled adequately, strange results comparing waves over time are apparent. Wave 10 indicates likelihood of no association between variables - 6.5% no association; Wave 14 indicates 2% likelihood there <u>is</u> association between variables; and Wave 18 indicates 78% likelihood of no association between variables. (All on national rating). So we seem to have indication of an abnormal or erratic result. Perhaps trying to analyse two variables at the same time complicates the results given the valid cases in the sample size. However, the general indication seems to be 'could do better'.

c) Looking at 'ease of ticket purchase' and comparing (1) 'information provided' and (2) 'range of tickets available' over time, crosstabulation indicates only a partial analysis as category (1) [table c27 vis-à-vis table c1701] is empty according to SPSS for waves 10 & 14 but is available for wave 18. However over time (looking at waves 10, 14 & 18) there does not seem to be an association between ease of purchase and range of tickets variables. Wave 18 cross tabulation also shows no association between the variables when 'information provided' is included. Once again this is based on national rating. The NPS analysis comparators comparing Autumn (Wave 19) with Spring 2008 (Wave 18) and with Autumn 2007 (Wave 17) shows 'no significant

change'. But interestingly Wave 19/18 comparison for London & South East does indicate a slight reduction in satisfaction.

Comparing National Wave 19 to Wave 18 (see Appendix) shows a decline in satisfaction. London & South East and Regional tables show a similar decline; but no significant change; Long Distance shows no change. (According to the latest NPS Technical Appendix approximately 35% of questionnaires are returned each survey). In reality many travellers are unhappy with ticket buying facilities and the multitude of tickets offered (and restrictions). Simplification is needed, which is advocated by many transport commentators, and indeed is set out as one of the Key Issues for Passenger Focus. The format of parts of the survey seem to obfuscate what travellers actually want. This point is returned to later in the document.

d) A comparison of 'main purpose of trip' with 'overall satisfaction with trip' ostensibly shows a slightly improving trend over waves but does not seem to show a correlation between the variables. Interestingly however, 'main purpose of trip' shows an analysis more akin to type of traveller ie., commuter, business, leisure. In looking at waves 12, 14, and 18 it is apparent that the analysis has expanded over time; thus inferring the analysis is being developed with experience.

e) NPS Graph comparisons:

- The percentage of passengers satisfied 2005 - 2009 graph reveals conflicting trends over the period when considering overall opinion of the journey. Nationally the trend shows slight improvement moving from 77% to 83% over the five year period but falls well short of 90% levels one ought to see, and indeed apparently now being seen in the self contained or smaller TOCs as noted earlier (page 9).
- Provision of information about trains/platforms shows a less than flattering situation; improvement by 5% is indicated but only to an 80% satisfaction level. Long distance TOCs seem to have fared better ending at 85% satisfaction level but latterly showing a downward trend. This seems to reflect poor management and lack of empathy with the traveller. In Switzerland, for example, there is clear signage and indicators, and if you have purchased a ticket for a journey involving a change of train and you are unfamiliar with the routing you are given additional information (bespoke) detailing where to change and relevant platform numbers. Much thought is given to the needs of the traveller: the UK has much to learn. Whilst Regional TOCs show signs of improvement, London & South East (heavy commuting areas) has the worst showing.
- Connections with public transport, National and Sector levels shows a disappointing trend, moving from 70% to 73% is unsatisfactory. Noticeably the Regional TOCs show the lowest/worst rating. This is perhaps not surprising given they tend to cover more of the rural areas. At the same time it is an indictment of the lack of public transport and by implication any form of integration.
- The most disappointing graph relates to 'Value for money'. Travellers clearly feel they pay high fares for poor levels of service. Once again London & South East gives the worst showing at 35-40%, with commuters venting their ire. The Regional and Long distance TOCs are less worse with the former having improved and then dropped back again. Long distance has started an upward trend in 2009 and this may reflect the perception of the business traveller or that the computer literate travellers have been able to purchase their tickets on the internet at advantageous prices. Walk-on fares, however, are regularly criticised for being extortionate - Virgin trains being a prime example.

There are other graphs in the survey but I have tried to highlight those that have implications for integration.

4. (2) NPS   and Integration - A Critique

The problems and criticism relating to the NPS centre on the fact that it is more concerned with behaviour or attitude rather than opinions. In addition it concentrates more on the detailed experience   than with the overall experience of integration. This is compounded by the size of the database which made it very difficult to examine. Indeed the size of the database affects some of the statistical tests; when using the chi-square significance figure it sometimes shows the null hypothesis as being untrue even though on examination of the figures shows little apparent difference between actual and expected numbers. (A small difference with a very large sample can cause distortion). This is exemplified by some of the examples on page 12.

The NPS was first rolled out in 1999 and is now in its eleventh year. Clearly it has developed with experience and become sharper and better reflects passengers/travellers concerns as time moves on. It has however focused solely on the railways hitherto but Passenger Focus now also (from 2010) has responsibility for bus surveys, and more recently coaches and trams as well.
Because in the past the NPS related solely to railways it has tended to take on a 'silo' approach - not necessarily intentionally. A survey is very useful in getting feedback on satisfaction levels but this may not reflect what passengers actually want. In my literature review (Document 2) I referred to a paper by Pucher and Kurth (1995) which related the development of the Verkehrsverbund systems in Germany, Austria and Switzerland for integrated public transport. The Verkehrsverbund ensures that the customer needs only one ticket and one integrated timetable for the entire trip from origin to destination.

In a talk to the Railway Study Association, Stephen Joseph pointed out that we have to consider the door-to-door journey if one wishes to make rail more attractive. This could be done by providing more car parking spaces (a lazy way) or implementing effective station travel plans. He pointed out that often the things to done are quite simple: at Leighton Buzzard as an example, all the buses conspired to arrive just after the trains have left. This just needed some effective cross-modal planning. More could also be done to accommodate cycles. He also advocated better use of smart ticketing; for example, spreading use of the Oyster card used in London.

The NPS survey highlights a particular gripe of passengers as being a lack of or insufficient parking facilities. This is clearly relevant to an integrated journey yet there does not seem to be a 'connect' with the satisfaction of the total   journey experience.

(As an aside Stephen Joseph also picks up that historically, in the UK we have been poor at coordinating transport and land use planning. A point on which I very much concur and which will be followed up in Document 5).

Transit (2007) contains an article by Pete Thomson, Passenger Focus passenger research manager in which he comments on the considered shortfalls of the National Passenger Survey. He stated that the level of detail was limited - it may highlight that a service area is poorly rated or has gone down but does not really tell us why. This is in line with my own findings above. An example quoted by Thomson is that "poor cleanliness could be interpreted as inadequate litter picks on the one hand, or old and tired fixtures and fittings". Interestingly he adds that the survey is also not ideal for demographic or census analysis, and is "unapologetically not for non-users".

Thomson also commented that the NPS is often supplemented by mystery shopping or

audits to bridge the gap in detail and understanding. Whilst the survey adds value it has its limitations in his view, which is again in line with my own thoughts. It is not clear what improvements have been made, if any since 2007.

Following on from some of the above comments, an intriguing presentation was given by Colin Stewart, Director, Global Rail Leader, Arup to the Railway Study Association (Modern Railways; 2010). Towards the end of his presentation he highlighted the need to consider the customer. He contended that easy to use and up to date information is paramount in getting people to use public transport, which seemed to be happening faster on roads than on railways. He highlighted the information available to the motorist from radio and sat nav systems, with these being enhanced recently by new real-time overhead motorway signs. ''The driver knows exactly where he is , how long it will take him to get to his destination, and there is an overall feeling that he is in control''.

Real time information is rarely available on trains, and he commended a Danish example which shows your arrival time at every station. (From memory the new Swiss 'FLIRT' trains provide similar information - and more).

He further commented that on rail, it is possible to use personal technology systems and smart phones might be the answer. But the transmitters are all placed alongside motorways, so there is a desperate need for greater coverage on the rail network. Apparently Mr Stewart brandished his iPhone, praised its ability to find routes across London Underground and how it showed delays so that you could reroute - but it could only be used at surface locations!

In relation to the NPS, clearly the survey could be enhanced by adding questions relating to modern technology and how it could be used to influence people to use public transport and in particular the benefits of integrated transport systems   when looking at door -to-door journeys. An example for a car driver might be to know whether a car park was full at the station before starting ones journey. Maybe it would be quicker to cycle or take the bus if available. Further comment about use of technology and its usefulness to travellers is considered later.

The cover sheet of the NPS Autumn 2009 (included in Appendix) describes the role of Passenger Focus. It then states that over the next three years, work will be based on seven objectives but none mention 'integration'. Passenger Focus also states it focuses on a number of key issues: fares and tickets, quality and level of services, and investment; but again integration is missing. Hence my earlier comment on the danger of falling into a 'silo' approach.

The other point of note is that they state over 54,000 rail passengers are surveyed - yet only 26,000 questionnaires were correctly completed and returned according to the section on 'methodology'. But just under 50% correct returns is perhaps reasonable. This provides an apposite entry to consideration of different forms of data collection, and the phenomenon of 'cognitive dissonance'.

4. (3) Data Collection and Cognitive Dissonance

Tony Blair, when Prime Minister, faced an awkward personal situation. He had a liking of family holidays in far away places - and consequently an unwillingness to tell the public not to fly off on their own vacations - even though he had made statements about the threat of global warming, prompting accusations of hypocrisy.

This illustrated the dilemmas that millions of citizens are having to wrestle with when they try to reconcile concerns for the environment with high energy consuming lifestyles. The uncomfortable tension that comes from holding two conflicting thoughts at the same time is a phenomenon known as 'cognitive dissonance', and is well known to those involved in attitudinal studies (see below). It is the reason that the National Travel Survey only gathers behavioural, not attitudinal, information. The fear is that respondents will change their answers when faced with the obvious dichotomy between their social conscience and their travel habits. (LTT, 2007).

The National Travel Survey is carried out annually by the National Centre for Social Research (Nat. Cen.) for the Department for Transport (DfT). The NTS is an annual household survey in which respondents are interviewed face - to -face and are then asked to complete a seven day travel record. (LTT,2007).

The DfT commissioned a study by Nat Cen in 2006 which highlighted how different survey techniques can give rise to different responses from participants. One source of bias is the extent to which respondents give 'socially desirable' answers.

In response to the question 'how much do you agree/disagree that speed cameras save lives' Nat Cen found that at least 53% of respondents agreed with this statement when responding to a telephone or face-to-face survey ie. where an interviewer is present. But, in response to the same question contained in a BSA module where respondents fill in the questionnaire themselves, the proportion that agreed dropped to 42%.

Nat Cen suggests that respondents might be more likely to give answers that they believe an interviewer wants, or would like, to hear and that respondents in surveys where an interviewer is not present may be more open and honest.

Another problem highlighted by Nat Cen was that 'people do not consider walks to be "travelling" and so forget about them'. Nat Cen's researchers also found that respondents fell into two broad categories: 'readers' - those that read through most of the instructions provided; and 'skimmers' - those who only read as much as they think is required to complete the task. Skimmers have a tendency to skip parts of the form that are not intuitive or are difficult to complete without fully reading the instructions. Apparently skimmers also occasionally take shortcuts by deliberately omitting journeys if they feel it is too much effort to enter them. The researchers found that the majority of their sample group were skimmers and suggested that 'this pattern exists throughout the general population'. As a result of these and other findings the DfT has attempted to make the survey easier to understand and easier to complete.

The DfT commissioned further research by Nat Cen who considered three types of data collection: face-to-face survey (similar to the NTS); a telephone survey using show cards (posted to respondents along with a covering letter before the interview takes place); and a telephone survey that used modified questions so that show cards were not required.

Nat Cen concluded that face-to-face surveys tend to be more costly than telephone surveys but they produced a higher response rate (81%) when compared to the response rate achieved by telephone surveys (70%). A face-to-face survey also provides data that is most comparable with the main NTS, which is itself partly face-to-face.

As a result Nat Cen recommended that the DfT use face-to-face methods when the priorities are high quality data, high response rates and flexibility in terms of the nature of the questions to be asked. Where the emphasis is on speed of implementation or where the budget is more limited, a follow-up survey over the telephone should provide good quality data. (LTT 2007).

Having made a 'technical' digression into data collection, further evaluation of the NPS and the role of Passenger Focus (PF) is warranted including the fast advancing impact of technology on travellers.

4. (4) Impact of technology and the NPS

PF' vision is stated as being to ensure that operators, funders and regulators of transport systems put passengers first, through its mission of getting the best deal for passengers by making sure their voice is heard. Nothing wrong in that; except the NPS gives the impression that it is suffering from what can best be described as 'strategic drift'. The NPS was designed/set-up some eleven years ago and its design appears to no longer fully reflect the fast changing needs of modern day travellers. Stewart's (Modern Railways;2010) comments above seem to encapsulate the situation. Thus the NPS questionnaire needs updating to better reflect the technological needs of passengers/travellers and a more positive and helpful approach to integration.

In this regard a comparison with France, as an example, might help. Carr (New Transit; 2010) comments that British passengers in France often admire near seamless integration. Ticketing (often using smartcard) is highly flexible with little cash payment on vehicle (mainly referring to trams or buses). Travellers generally pay for the full journey with no separate payment on transfer between services and modes. He considers it is convenient for the user - one transaction: good for society - faster journeys, minimum dwell times at stops, less traffic delay. He contrasts with the UK, including London, where full journey tickets are, in his view, very much the exception. I would disagree, however. For example, travelling to Nottingham from Bournemouth, including tram (or bus) in Nottingham, is done in one transaction (although the Plusbus ticket for the tram is a separate ticket) - so we are getting there albeit slowly. Indeed the Oyster smartcard in London, is starting to migrate into the Home Counties and is highly regarded in its use as a smartcard. The NPS needs to reflect this advance in smartcard use and passenger views.

Manchester is becoming another example of where smartcards are being developed. System One was created to meet demand from public transport customers in Greater Manchester region for a multi-operator, multi-modal ticketing option, aiming to make travelling across the region using trains, trams and buses more affordable and more convenient. GMTL is co-owned by Greater Manchester's private bus, rail and tram operators and Greater Manchester Passenger Transport Executive (GMPTE).(Innovations,2010).

Greater Manchester Travelcards Limited (GMTL) launched its multi-bus operator/multi-mode ticketing range in 1994. In September 2006 GMTL rebranded its

travelcard range as System One Travelcards. Outside London , its product range is the largest integrated ticketing scheme in the UK.

Currently, System One is accepted by more than 30 bus companies across Greater Manchester, plus all rail operators who operate into the Greater Manchester rail network and the Metrolink tram. However System One is not yet as sophisticated as London's Oyster Card. GMTL seems to take the view that 'it must meet the demands of existing and potential users of public transport and that to achieve this it must consider a variety of other purchasing and ticketing technologies, such as cashless payment system, EMV, mobile and web'. Thus GMTL would like to see implementation of flexible ticketing options on a phased basis.

An example quoted is the proposal to introduce e-sales which will allow customers to purchase their tickets online and be delivered to their home, rather than having to go to a Pay Point store or GMPTE Travelshop, has been given the go-ahead by the GMTL board. The best-case scenario is for launch at the end of 2010.

A further option being explored is mobile ticketing, allowing customers to purchase tickets via their mobile phone and then to simply show their purchased ticket on their mobile phone screen to the driver. This opens up opportunities for convenient ticket options and also has Sustainability ('green'), as well as anti-fraud benefits.

Mobile phone ticketing is also currently being tested on Chiltern Trains and may be a contributing factor to its high satisfaction rating in the NPS. This appears to be another example of the where the NPS questionnaire could be updated/improved to determine what the traveller/customer wants or prefers. Indeed the possibility of including some form of demographic analysis takes on a greater importance in my view . Its absence of analysis seems to be an important omission from the questionnaire and somewhat disappointing. (See comment by Thomson, 2007 on page 15 above).

The advent of Near Field Communications (NFC), which is similar to 'Bluetooth' technology used in mobile phones raises further issues. NFC effectively allows the traveller to pass through ticket barriers without having to display any form of 'ticket'; the reader in the barrier will automatically 'read' the ticket details located in a mobile phone in your pocket or bag, for example. Will travellers appreciate this function?   It will be particularly useful for commuters, and probably the younger passengers. The NPS could be used to gather information in the future to help develop such an integrated ticketing system.

Ticket barriers have been referred to which are a recognised part of stations but can be a touchy subject with travellers in this country in particular. Advances in technology can sometimes create friction with the ultimate users, even though it is meant to provide greater efficiency, with stations being a prime example. Indirectly there can be impingement on passenger satisfaction with punctuality/reliability, and also functionality of stations. These two separate issues will now be briefly considered starting with the former.

4. (5) Passenger Focus and timekeeping

Thomson (2007) above referred to supplements to the NPS by extra audits. But this now seems to have been extended into extra 'special' surveys, one of which relates to punctuality performance measures (Jack; New Transit 2010). Basically, research by PF shows trains are 'on time' but their passengers are late. Passenger satisfaction with punctuality/reliability percentages for the NPS - Autumn 2009 show a range of

figures between 98% (for Wrexham & Shropshire Railway) and 68% (for London Overground), with 'bunching' in between. PF wants the rail industry to adopt tighter punctuality performance measures focusing on right time arrival at all stops. This has come about as a result of a special survey undertaken by PF with the help of one TOC, National Express East Anglia (NXEA).

Currently, the rail industry's Passenger Performance Measure (PPM) logs trains as 'on time' if they arrive at the final station within 5 or 10 minutes (depending on journey length). However passengers' overall satisfaction with NXEA journeys measured by the NPS has been below the London & South East sector average for some time and well below the highest performing franchise in the sector. This is despite train punctuality, measured by the PPM, now being over 90% of trains arriving at destination within 5 or 10 minutes of scheduled time. (Common sense tells me this should be no surprise!).

Key research findings were:
- 60% of passengers are commuters; whether their train is on time is a strong determinant of whether they are satisfied. Apparently, for every minute that a train is late passenger satisfaction will drop two percentage points. Commuters, quite rightly, notice lateness from the first minute, not just after 5 or 10 minutes allowed by PPM.
- Commuters seem to take into account their experiences over the past three months in determining satisfaction with their journey 'today'. (My ethnography in Document 3 reflects this attitude of the commuter - they want to get to work on time, and likewise get home on time!).
- Average passenger lateness in the evening peak on NXEA is worse than average train lateness. This is as a result of the effect of cancellations and because many trains that are on time at their destination are late at intermediate stations.
- 62% of NXEA passengers arrived in London on time, whilst only 48% travelling from London arrived on time.

  PF's principal conclusion is that Britain's railway must focus on 'right time' arrival at all stops. This could have franchise renewal implications for the new Greater Anglia franchise due to start on April 1, 2011.

PF's objective is for the industry to move to a system which reports to passengers whether trains are arriving on time, not within 5 or 10 minutes of scheduled arrival time. A comparison with the situation in Switzerland is worth a mention. In Switzerland there is an integrated regular interval timetable involving more than two dozen operators but Swiss Federal Railways (SBB) is trying to do better. In 2007, SBB had a target of 95% of trains arriving within five minutes of schedule (a value recommended by the International Union of Railways) and achieved 95.8% (Today's Railways Europe,2009). It seems in 2008, a target of 90.3% of trains within <u>three</u> minutes of time was apparently missed by a hair's breadth. In 2009, SBB changed its measurement system and was trying to measure punctuality to better reflect the point of view of customers. As a result, the new system produced results for 2008 which are not so good - 85.8%. The objective was to achieve 87% in 2009. The Swiss continue to set and strive for high standards

The new system will take into account the breaking of connections, which is creditable. The Swiss transport network is such that connections at every junction are so well organised that one just has to saunter from side of the station to the other to find a warm train waiting to depart a couple of minutes later. And there are co-ordinated buses on the forecourt, too, in most towns; and trams as well at some locations. This needs to be compared with the UK and France where connections are deliberately being broken - to make punctuality statistics look better. However the French have

started to see the value of multi-modal service provision in its station renovation programme. And indeed, the message may be starting to permeate in the UK.

This provides a convenient point to look at the role of stations and integration.

4. (6) Data Survey and stations

The NPS does not seem to reflect the importance of modal integration directly. 'Connections with other forms of public transport' are assessed as part of 'Station facilities' group; 'Connections with other train services' are assessed as part of 'Train facilities'. There is no apparent link between the two. The cross-tabulation on pages 9/10 are not particularly helpful, indicating that the questionnaire design is perhaps now out-of-date. This has been demonstrated by the separate review of stations recently undertaken by Chris Green and Professor Peter Hall, who were appointed in May 2009 by the Government in an independent review on ways to improve stations in England and Wales. They were given the title of 'Station Champions'. Their remit was to focus on getting the basic facilities right, as well as considering the broader role of stations in the future. (Modern Railways:2010).

Essentially,   the Station Champions' report focuses on achieving:
* An enhanced and consistent level of facilities at each type of station, so passengers can find what they need to know and what they can expect;
* A greater emphasis on end-to-end journeys, with more attention given to help passengers get to and from the station by bus, bicycle or car;
* More effective integration of public transport into the planning of local communities.

Pertinent questions asked were, firstly, -'What do we want from our stations, and who pays? Secondly, 'What do passengers think of them?   It was stated that Passenger Focus supplied data which indicated more than 80% of passengers were satisfied with their overall journeys, which was considered a good result, but not in the top league. But satisfaction dropped to only 65% for the stations themselves, while station facilities were rated at just 50%. (These figures seem to have been derived from the Autumn 2009 NPS data).

The Champions state that 'if stations are to be improved, the solution should lie in finding affordable ways of bringing their facilities and environment up to a consistent and modern standard'. Since 1994, stations have been categorised into six main groups (A-F), viz.;- A) National Hub; B) National Interchange; C) Important Feeder; D) Medium Staffed; E) Small Staffed; & F) Small Unstaffed. These classifications are similar to those used in other countries. However they considered it might be appropriate to split categories C) & F) into two sections. Also B) National Interchange is a renaming from Regional Hub.

There is an interesting comment about Car Parking by Chris Green. Apparently, there are about 150,000 parking spaces at all stations in Britain in total, with a need for (perhaps) 350,000 to cater for suppressed demand. If 10,000 new spaces a year were created, double deck versions as at Bicester North might be self funding, but multi-storey car parks would be very expensive. Inner city station car parks were deemed not financially feasible. Outside city centres, assured parking with a booked space could be provided. (Modern Railways, 2010).

In general there was a need for a long term approach to station upgrading/development with the following possibilities and recommendations:

- There is a need to plan for integrated networks on urban streets around stations, prioritising pedestrians, cyclists and public transport;
- Large rail stations should become Hubs and Super Hubs for transport activities in their areas, and the natural places to locate interchanges to bus, tram, cycle and park-and-ride;
- Medium and small stations should evolve into Community Hubs providing local services such as small supermarkets, collection points for undelivered mail, sub-post offices and community services;
- The Super Hub stations should become the focus for large scale mixed-use developments.

To summarise, the report acts as a catalyst and to quote 'it should at least serve to lubricate the interface between the DfT, TOCs and Network Rail'.

But how do we compare with countries in Europe? The aim of SNCF (French Railways), according to Jean-Pierre Farandou (New Transit,2010), has been to begin positioning itself as a provider of integrated transport rather than simply rail services between stations. Farandou comments that 'We are no longer transport professionals but mobility professionals'. SNCF's move towards multi-modal service provision is most obvious in its station renovation programme which aims to turn its stations into bus, rail & tram interchanges, making them easier to navigate for passengers, and expand the range of services with more convenience stores and retail facilities available. In other words to become part of the city or town. Dijon is a good example of a staion which has been renovated and rebuilt as a model of integrated transport. The whole redesign has been made with passenger convenience in mind. For example, there is now a single sales point for the three transport operators - SNCF, the Diva local bus network and the Transco coach company.

The approach has been similar to what has happened in Switzerland and the Netherlands. The undercroft of Zurich, and to a lesser extent Lucerne, is like visiting a shopping mall; buses, trams and taxis are located immediately outside the station main entrance with direct access. St. Pancras International station in London has attempted to achieve a similar approach. However in the UK we still have a long way to go in changing our mindset about the function of a station and its benefits as an interchange. The Champions report referred to above has at least' pointed the way'.

Interestingly Farandou   (New Transit,2010), comments that there is a project initiative by SNCF to guarantee connections between trains and the last bus service from rail stations. If the train is late, the bus is held for a short time or a new bus is laid on. To date the project is running at 60 stations in the Ile de France region and has involved partnerships with 10   different operators. They are actually thinking about the customer for a change.

To close this section on stations it is appropriate to have the views of an architect. Paul Beaty-Pownall (New Transit, 2010), considers that we should no longer think of stations as somewhere to merely travel through or purchase a ticket. By challenging the role of stations and understanding the needs of passengers, train operating companies have the chance to create stations which increase revenues whilst enhancing the customers' experience. Beaty-Pownall believes we should take into consideration the full journey of passengers, how they will arrive at the station, where they will travel on to when they alight the train, what they would like to do or buy during their journey and the type of communication and services they would like to receive at the station. His (sensible and common sense) view is that good connections throughout a journey are key to creating a seamless transition for passengers to ensure they get to their destination as easily as possible. Which is why well planned

transport interchanges at stations is an area that can hold the key to how we travel. There is a need to ensure that staff as part of their role can act as customer service advisors ie., a more interactive role, thus creating a more passenger friendly environment which would enhance the experience of the customer. Management need to ensure good communication with staff so that they feel involved and thus be better equipped to help passengers. This in turn can enable franchise commitments of train operators to be exceeded and increase revenue.

Finally, the NPS whilst providing broad analysis of passenger approval ratings does not get to the nub of what the passenger really would like. The NPS covers a wide range of train travel issues but by its design cannot be 'all things to all men'. It is probably fair , therefore, to undertake separate surveys for particular issues such as the role of stations. But qualitative as well as quantitative responses are likely to be needed: hence the stations survey.

4. (7)   Other New Surveys

The NPS, as already noted, tends to provide trend as well as comparative data. This is shown at National level, London & South East sector, Long distance sector, and Regional sector. The allocation of franchises (TOCs), to sectors is done on a consistent   basis as is possible to facilitate comparison, and is reflected in the key results page (see Appendix). So far so good, but the definition of 'long distance' can appear to be rather vague requiring further investigation, particularly when looking at all modes of travel.

A new report has recently been published   by the Independent Transport Commission (ITC), a research charity, which is the first of its kind. According to Jack (2010), it sheds light on a sector of the transport market   that is misunderstood and neglected, but accounts for around one third of all mechanised mileage in Britain. The focus of this multi-modal study was on journeys of 50 miles or more by car, train, coach and plane. Jack goes on to state that the report draws on data from the government's National Travel Survey; it looks at how we make journeys and why we make them. It also examines the key drivers of demand for each mode. He adds that at the heart of the study is a statistical model which explains, and can forecast, long distance travel demand in relation to a large number of causal factors, such as differing levels of economic growth.

Dr David Quarmby, a member of the ITC, comments that 'Long distance travel is a neglected area of policy', and that not a lot is known about it. Hence why the ITC commissioned the research. There are some surprising findings which bring new insights (in his view). Although travel over 50 miles account for only 3% of all mechanised trips it represents about one third of all travel. 80% is by car, 12% by rail and the balance by air and coach. It is, apparently, dominated by leisure travel - 70% of journeys by all modes are leisure, holidays and visiting friends and relatives, 20% is business travel, and 10% is long distance commuting.

Some of the findings by the ITC study do not surprise me. The ITC study found that the drivers of long distance travel are   different to day-to-day urban travel. The amount of travel people make is much more sensitive to income, price and travel time. And it varies between modes - rail and air travel are particularly driven by rising incomes and clever pricing. Cost to travellers has a significant effect on car and coach travel too. The most important factors influencing long distance car and coach travel are travel times. (Surely this is what one would expect?).

The study also found that cross elasticities between different transport modes are

small - much less than for urban day-to-day travel. Quarmby states that this suggests that people couple their choice of mode with choice of destination - for a city break one would go by train, and for a country weekend one would go by car. Thus the ability to influence people's choice of travel mode on its own is quite limited. It is evident (and indeed acknowledged by other transport commentators) that small shifts out of cars can manifest as a large proportional increase in rail travel - because of the differences in scale. Car travel is six to seven times the amount of rail travel.

The study also reinforced the attractions of city centre to city centre rail journeys with some 43% of respondents saying that they would be happy to travel by train for up to six hours - double the three-hour threshold of conventional wisdom. Another fact is that Britain's emerging domestic network of air routes has grown up not so much to compete with rail, but to cover routes for which there is no satisfactory rail option. For example, to get to Inverness from Bournemouth by air (from Southampton) takes about one hour and 20 minutes; by train it is over 10 hours!

Dominance of the car for journeys over 50 miles reflects the geographic dispersal of many households. It reflects too, the limited extent and accessibility of the rail network. Cars have the additional advantages of being able to reach remote rural and coastal destinations, carry children's and sporting equipment , and provide mobility at many destinations. One other point made by Quarmby was that while the study did not analyse specifically, the flat lining of car travel growth in recent years may be due to gradually increasing congestion and journey unreliability.

Most of the above findings will be explored in more depth in Document 5.

To move on from the ITC survey, there is another new survey entitled 'Bus Passenger Priorities for Improvement' produced by transport consultancy Steer Davies Gleeve. It is one of the first pieces of bus passenger research to have been published by Passenger Focus since it took on its new role of the statutory passengers' champion for bus users in England outside London earlier this year. (Garnett,2010). 3,800 bus users across the country were canvassed in the survey. They were asked to rate how well their expectations are currently being met for a number of different attributes relating to the bus stops and services that they use and where improvements could be made.

Apparently, whilst expectations are currently being met for the majority of bus journey attributes, two key criteria, punctuality and value for money were considered unsatisfactory. The research revealed that different passengers have different views about improvements to their journey. Fare-paying passengers generally gave less positive responses for bus stop and bus journey attributes than concessionary pass holders. They also considered that their expectations of service frequency and value for money are not being met by bus operators at present. In some ways this may represent a partial demographic analysis which appears not otherwise to be measured in the survey. (Garnett,2010). Concessionary fare passengers, as senior citizens, wanted better attitudes from bus drivers and also easier access when alighting and boarding vehicles.

It seems urban and metropolitan region passengers ranked bus stop attributes higher than those in rural areas, but were more critical of most of the other areas surveyed. They also expressed a preference for the introduction of cross-operator ticketing initiatives and improved personal security both at the bus stop and on-board vehicles. Rural passengers by comparison, felt their expectations at the bus stop were not being met, but on all other criteria, except service frequency, considered their expectations were being met. They wanted a greater range of destinations and also greater provision of bus shelters.

The Chief Executive of PF has put a positive 'spin' on the findings and has undertaken to do more to understand the 'value for money' of passengers' expectations. In my view, the integration aspects need to be looked at and comparisons made with the findings of the NPS for railways. Interestingly, in Nottingham, Trent Barton's Hucknall Connect bus service has been hailed as a model of commercial integration (by one local MP), by acting as a feeder service for the tram. (Trent Barton is a partner in the Tramlink consortium which is bidding to run the extended Nottingham Express transit tram system). And of course the tram acts as a feeder to the rail network. This is the way transport systems tend to operate in Europe, particularly Switzerland,
where integration is taken seriously.

So what conclusions can be drawn from this study?

5. Conclusion and areas for further investigation.

It is as well to summarise the overall picture which has emerged. The initial intention was to use the NPS to explore rail users attitudes and opinions about integration from the rail travellers' point of view, and using the publically available NPS dataset. Unfortunately from the experience of attempting to do this I reached the conclusion that the NPS was not a good vehicle for exploring these issues. Consequently although there is some useful information provided by the NPS, this document became more of critique of the NPS from the point of view of evaluating integration.

The survey data used for this study has been centred on the NPS data which is produced half-yearly. It is very much 'broad brush' - the level of detail is limited; and is not ideal for demographic or census analysis, as commented by Pete Thomson, PF passenger research manager (highlighted on page 12). NPS has to be supplemented by other forms of audit or discrete surveys. It is unfortunate that there seems to be sparse information about type of traveller and demographic issues.

The NPS seems to focus on identifying how well the train operators are performing in the services they provide. This is not the same as trying to glean what the passenger/customer actually wants: there is a need for empathy by the train operators. Management needs to get out and about and seeing the problems passengers experience in a journey; they need to look at the total door-to-door journey experience.

It appears that the more recent surveys as identified in 4(7) above do attempt to provide a little more detail on types of passenger surveyed, but some of the findings do seem rather obvious in my view and yet the initiators seem surprised at the results. This gives the impression of a lack of understanding of the market-place which appears strange to say the least. Travellers are more concerned about the whole journey experience - from door-to-door, not just particular segments. That is why integrated ticketing and timetables are so important. Travelling on public transport needs to be a seamless experience. Frustration with a lack of integration is bound to attract people into their cars purely on a convenience basis notwithstanding health, ecological and social factors.

Wolmar (2010) points out that the perception is that it is impossible to provide better public transport in low density suburbs without requiring massive subsidy and therefore it is inevitable that people will jump in their cars. But he
believes he has found a rebuttal to this argument in a new book by Paul Mees

(2010). Wolmar states 'to paraphrase, Tony Blair, it's policy, policy, policy and not density'. The book, Transport for Suburbia: Beyond the Automobile Age, he considers should be the essential primer for all transport planners. One good example of standard and integrated services is to be found in Zurich, Switzerland. It is pointed that Zurich is not particularly densely populated, but in 1990, having held a referendum, the whole travel-to-work area was brought under one public transport administration with the powers to standardise and integrate services. In other words a Verkehrsverbund as (highlighted on page 14) with the customer needing just one ticket and one integrated timetable for an entire trip from origin to destination.

Mees (2010) suggests that Britain is on its own by sticking to the notion that public transport can be provided through competition and deregulation - the free-marketers utopia. He believes that for effective public transport, there needs to be integration, public control - not necessarily delivery - and a clear policy framework. Wolmar believes that Mees considers it is all about policy and not density or other structural factors. I have some sympathy with this view.

Stonham (New Transit, 2010), points out that since deregulation and privatisation the UK industry has maintained a suspicious, and relatively detached, attitude to what is going on in France, Germany, The Netherlands, Scandinavia and beyond. There seems to be a 'them' and 'us' attitude and 'we' are right. But a deregulated system does not seem to be catching on in the rest of Europe and it is more likely therefore that the British system will have to catch up with the rest of Europe.

European transport groups seem to be increasingly becoming major players in the UK transport market (eg., DB, German Rail; Abelio, Dutch Rail and others). They firmly see themselves   as much more than transport operators and instead being in the mobility business (Stonham New Transit, 2010). In essence we are entering a new paradigm.

Clearly there is a vast area for investigation and research for Document 5. This will involve not just integration, per se, but the role of stakeholders and behavioural aspects of travelling. It is likely that this will centre around qualitative rather quantitative data, but not exclusively.

To end this document a quote from Paul Mees' book (start of chapter 10) is apposite. It is a quote from Professor Heinrich Brandli.

> *Our customer wishes to set off from a place of his own choosing, travel quickly, comfortably, cheaply and in safety to his destination, and arrive there at a time set by himself; nothing else will do.*

> Brandli, Institute of Transport, ETH Zurich.

There is much to do but light is starting to permeate the end of the tunnel…….

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Appendix

What is Passenger Focus?

Passenger Focus is the independent national consumer watchdog for Britain's rail passengers and England's bus and coach passengers. Our mission is to get the best deal for Britain's passengers.

With a strong emphasis on evidence-based campaigning and research, we ensure that we know what is happening on the ground. We use our knowledge to influence decisions on behalf of passengers and we work with the industry, passenger groups and government to secure journey improvements.

Our vision is to ensure that operators, funders and regulators of transport systems put passengers first

This will be achieved by our mission of **getting the best deal for passengers**

What is Passenger Focus doing for me?

We're here to put the interests of rail, bus and coach passengers first. We do this by:

Campaigning for improvements
- We gather research and information, like the National Passenger Survey, where over 54,000 rail passengers give us their views about their journeys, so we understand the issues that matter to you.
- We work with government and the industry to ensure that the passenger voice is heard when making decisions about the future.

Over the next three years, our work will be based on the following seven objectives, which underpin the vision and mission.

1 make a difference for all passengers
2 tackle examples of poor passenger service
3 improve access to services for passengers with particular needs
4 promote good practice in complaint handling and provide advice and advocacy to complainants
5 increase awareness of Passenger Focus and our influence with stakeholders
6 build and deliver effective passenger representation for bus and coach passengers
7 boost Passenger Focus's capacity and capability to get the best deal for passengers.

- We focus on a number of key issues:
  - fares and tickets
  - quality and level of services
  - investment.

Resolving complaints with rail companies
- If you make a complaint you are unhappy with the response we can take up your issue with the rail company involved.

Passengerfocus
putting passengers first

Methodology

The survey is conducted across the entire franchised railway (and also on two non-franchised TOCs). In both Spring and Autumn of each year self-completion questionnaires are distributed at approximately 700 stations across Great Britain, selected to be representative of the entire network. Questionnaires are distributed at different times of day and across all days of the week. Data is weighted to help ensure the sample accurately represents passengers using each operator's services, in terms of the proportion of commuting, business and leisure journeys.

Overall, at least 26,000 correctly completed questionnaires are returned each wave. For the majority of train operators the results are based on responses from 1,000 passengers per survey. Smaller operators' results are based on the views of 500 passengers whilst 2,750 passengers are surveyed for the largest operator. Sample sizes for each question are provided on each page in sections two and three, along with the sample size overall for each operator. Not all passengers will answer all of the questions, for example only those passengers who are delayed would rate 'how well train company dealt with delays'. The number of passengers responding to each question is clearly indicated in the 'sample size' column.

To provide a benchmark, three different types of train operator have been identified; these are long distance, London and the South East, and regional operators.

In this publication, individual train operator results are presented alongside an appropriate sector type thus enabling comparison of a TOCs results with operators that provide broadly similar services.

On the 22 June 2008 the Gatwick Express franchise was absorbed into the Southern franchise. To enable comparison with earlier surveys, NPS data for Southern up to Spring 2008 now includes the results for Gatwick Express.

In November 2007 there were some major changes to the organisation of franchises. Central Trains, Midland Mainline, Silverlink and Virgin Cross Country all ceased to exist after the 10 November, and from 11 November four new franchises commenced; CrossCountry, East Midlands Trains, London Midland, and London Overground. All these franchises cover different areas/routes to the previous individual franchises (see paragraph below). To enable comparisons to be made with earlier data NPS data up to Autumn 2007 has been reprocessed to the new franchises boundaries.

The areas covered by the franchises formed on 11 November 2007 are as follows. The East Midlands Trains franchise covers routes previously operated by Midland Mainline and some routes operated by Central Trains. The London Midland franchise covers some routes previously operated by Central Trains, and Silverlink (the 'County' part). London Overground covers routes previously operated by Silverlink (the 'Metro' part). The CrossCountry franchise covers routes previously operated by Virgin CrossCountry and Central Trains.

The NPS uses a 'building block' approach. This is where the area covered by a TOC is divided into routes or divisions, so that when the boundaries of a franchise are revised, NPS data can be quite easily reprocessed to the boundaries or routes of the new franchises. For example using the building blocks for the old

Midland Mainline and part of the Central Trains franchises, NPS results up to Autumn 2007 have been reprocessed to the boundaries of the new East Midlands Trains franchise to ensure compatibility between different waves of the survey.

Based largely on the number of passengers travelling on each franchise; CrossCountry and East Midlands Trains have been placed in the Long Distance sector, and London Overground and London Midland have been placed in the London and South East sector. Also the route operated by the former Gatwick Express franchise (now part of Southern) is from Autumn 2008 in the London and South East sector. All these changes mean that the sector results (for Autumn 2007 (and earlier surveys) and Spring 2008 in particular) differ slightly in the areas that they cover (but this change generally only makes a difference of one or two percentage points).

On the 9 December 2007 the National Express East Coast franchise started, replacing the routes previously operated by GNER.

Previous changes to franchise boundaries in 2006 and a minor change in early February 2007 are detailed in the NPS Summary Report for Autumn 2007.

With changes to the specification of the boundaries of train operating companies, 'sector' definitions are becoming less straightforward and meaningful as train operating company boundaries increasingly do not relate to the traditional sectors. Passenger Focus is currently reviewing the 'sector' reporting and following consultation with stakeholders may make some changes to these in the near future.

Key results

Autumn 2009 wave

- Nationally the percentage of passengers satisfied with their journey overall was not significantly different compared to Autumn 2008 (83% of passengers were satisfied). 83% of passengers were also satisfied overall with their journey in Autumn 2008. 83% is the highest recorded since the survey started in Autumn 1999.

- At a national level, the proportion of passengers satisfied with punctuality/reliability was 83%. This is significantly up compared to Autumn 2008 when 81% were satisfied. This is the highest recorded since the survey started.

- The percentage of passengers satisfied with most service areas at a national level was generally up or unchanged compared to Autumn 2008. Satisfaction with twelve service areas improved (the rest were unchanged, except for one decline).

- The proportion of passengers satisfied with value for money for the price of their ticket nationally was 45%. This was significantly down compared to Autumn 2008 when 46% of passengers were satisfied. Satisfaction with sufficient room for all the passengers to sit/stand improved (up 3%) to 67% satisfied (64% in Autumn 2008).

- For London and the South East operators 82% of passengers were very or fairly satisfied overall, not significantly different compared to Autumn 2008 (when it

was also 82%). The percentage of passengers satisfied with most train and station factors was generally not significantly different compared to Autumn 2008. But satisfaction improved for six factors (with no declines).

- For the long distance operators the proportion of passengers who were very or fairly satisfied overall was 87% (3% up compared to Autumn 2008 when it was 84%). Passenger satisfaction for the various train and station factors was mostly unchanged compared to Spring 2008, but satisfaction improved for ten factors. Satisfaction did not decline for any factors.

- For regional operators 87% of passengers were very or fairly satisfied with their journey overall, not significantly different compared to Autumn 2008. 86% were satisfied in Autumn 2008. 87% is the highest percentage ever recorded. For most service areas passenger satisfaction was unchanged compared to Spring 2008, but satisfaction improved for five factors and declined for one.

- Comparing the percentage of passengers satisfied for individual train operating companies with Spring 2008, three significantly improved (First TransPennine Express, London Midland and Virgin Trains), and none have significantly declined. Eighteen TOCs have had no statistically significant changes in their overall satisfaction results compared with Autumn 2008. Two other TOCs joined the survey for the first time in Autumn 2009.

- The lowest ratings for overall satisfaction were given to First Capital Connect (75%), National Express East Anglia (79%) and Southeastern (80%). Four TOCs had overall satisfaction of 82%.

- The highest ratings for overall satisfaction were achieved by Wrexham & Shropshire (98%), Grand Central (95%), Heathrow Express (93%), Chiltern Railways (91%) and Merseyrail (91%). Three other TOCs recorded overall satisfaction of 90%.

Improved ⬆
Unchanged ⬌
Declined ⬇

National total

Overall sample size 24663	Autumn 2009				Improvement/decline in % satisfied or good since Spring 2009		Improvement/decline in % satisfied or good since Autumn 2008	
	sample size	% satisfied or good	% neither/ nor	% dissatisfied or poor	% change	significant change	% change	significant change
Overall satisfaction	24156	83	11	8	2		1	
STATION FACILITIES								
Ticket buying facilities	13022	71	15	14	-1		0	
Provision of information about train times/platforms	22887	80	11	9	2		1	
The upkeep/repair of the station buildings/platforms	22797	66	21	14	2		1	
Cleanliness	23059	71	19	10	2		1	
The facilities and services	20263	51	21	28	1		1	
The attitudes and helpfulness of the staff	18052	70	21	9	1		0	
Connections with other forms of public transport	17363	74	15	11	1		1	
Facilities for car parking	9139	45	18	37	2		2	
Overall environment	23623	66	22	11	2		2	
Your personal security whilst using	21083	64	29	7	1		2	
The availability of staff	20478	59	24	17	1		0	
How request to station staff was handled	4260	83	6	10	1		-1	
TRAIN FACILITIES								
The frequency of the trains on that route	23802	77	9	14	2		1	
Punctuality/reliability (i.e. the train arriving/departing on time)	23905	83	7	10	3		2	
The length of time the journey was scheduled to take (speed)	23680	84	9	6	1		1	
Connections with other train services	13204	74	18	8	1		1	
The value for money for the price of your ticket	22730	45	22	33	5		-1	
Upkeep and repair of the train	23707	72	16	11	0		-1	
The provision of information during the journey	21703	68	21	11	2		1	
The helpfulness and attitude of staff on train	13925	62	28	10	2		2	
The space for luggage	18807	51	24	25	1		1	
The toilet facilities	10374	38	23	39	2		1	
Sufficient room for all passengers to sit/stand	23455	67	14	19	1		3	
The comfort of the seating area	23499	70	18	12	1		1	
The ease of being able to get on and off	23839	79	14	7	2		2	
Your personal security whilst on board	22199	73	22	5	2		1	
The cleanliness of the inside	24087	72	16	11	1		0	
The cleanliness of the outside	21152	71	22	7	3		1	
The availability of staff	18006	43	29	28	2		3	
How well train company deals with delays	3571	36	38	26	1		-1	

Improved ⬆
Unchanged ●
Declined ⬇

London and South East

	Autumn 2009				Improvement/decline in % satisfied or good since Spring 2009		Improvement/decline in % satisfied or good since Autumn 2008	
Overall sample size 15989	sample size	% satisfied or good	% neither/ nor	% dissatisfied or poor	% change	significant change	% change	significant change
Overall satisfaction	15646	82	12	6	2	⬆	0	●
STATION FACILITIES								
Ticket buying facilities	8995	68	16	16	-1	●	1	●
Provision of information about train times/platforms	14829	78	12	10	2	⬆	1	●
The upkeep/repair of the station buildings/platforms	14734	63	22	15	2	⬆	0	●
Cleanliness	14931	69	20	11	2	⬆	1	●
The facilities and services	13003	49	22	29	1	●	0	●
The attitudes and helpfulness of the staff	11822	68	22	10	1	●	0	●
Connections with other forms of public transport	11654	75	15	11	1	●	1	●
Facilities for car parking	5845	43	18	39	2	●	3	⬆
Overall environment	15287	64	24	12	3	⬆	1	●
Your personal security whilst using	13747	62	31	7	2	⬆	1	●
The availability of staff	13394	56	25	18	0	●	0	●
How request to station staff was handled	2632	82	6	11	1	●	-1	●
TRAIN FACILITIES								
The frequency of the trains on that route	15543	75	9	16	1	⬆	1	⬆
Punctuality/reliability (i.e. the train arriving/departing on time)	15480	82	7	11	3	⬆	1	⬆
The length of time the journey was scheduled to take (speed)	15362	83	10	7	1	●	0	●
Connections with other train services	8752	73	19	8	1	●	1	●
The value for money for the price of your ticket	14847	40	23	37	5	⬆	-1	⬆
Upkeep and repair of the train	15352	71	17	12	0	●	-1	●
The provision of information during the journey	13941	66	22	12	2	⬆	0	●
The helpfulness and attitude of staff on train	7601	54	33	13	2	⬆	2	⬆
The space for luggage	11922	49	25	26	1	●	1	●
The toilet facilities	6267	34	24	42	2	●	1	●
Sufficient room for all passengers to sit/stand	15181	65	15	20	2	⬆	3	⬆
The comfort of the seating area	15202	68	19	13	1	●	1	●
The ease of being able to get on and off	15444	78	15	7	2	⬆	2	⬆
Your personal security whilst on board	14341	71	24	5	2	⬆	1	⬆
The cleanliness of the inside	15808	71	17	12	1	●	0	●
The cleanliness of the outside	13827	71	22	7	2	⬆	1	⬆
The availability of staff	10769	34	31	35	3	⬆	3	⬆
How well train company deals with delays	2322	33	40	27	1	●	-2	●

Improved ↑
Unchanged =
Declined ↓

Long distance

	sample size	Autumn 2009 % satisfied or good	% neither/ nor	% dissatisfied or poor	Improvement/decline in % satisfied or good since Spring 2009 % change	significant change	Improvement/decline in % satisfied or good since Autumn 2008 % change	significant change
Overall sample size 5248								
Overall satisfaction	5147	87	7	6	2	↑	3	↑
STATION FACILITIES								
Ticket buying facilities	2103	80	11	8	1	=	-2	=
Provision of information about train times/platforms	4924	85	9	6	-1	=	1	=
The upkeep/repair of the station buildings/platforms	4880	73	17	9	2	↑	3	=
Cleanliness	4942	78	16	7	2	↑	1	↑
The facilities and services	4463	65	18	17	1	=	3	=
The attitudes and helpfulness of the staff	3691	76	18	6	-1	=	0	=
Connections with other forms of public transport	3421	74	14	12	1	=	0	=
Facilities for car parking	1748	53	18	29	1	=	1	=
Overall environment	5055	74	17	9	1	=	2	↑
Your personal security whilst using	4416	72	24	3	1	=	2	↑
The availability of staff	4196	66	22	12	1	=	1	=
How request to station staff was handled	1109	88	4	8	1	=	2	=
TRAIN FACILITIES								
The frequency of the trains on that route	4957	82	8	9	1	=	2	↑
Punctuality/reliability (i.e. the train arriving/departing on time)	5097	87	5	8	3	↑	6	↑
The length of time the journey was scheduled to take (speed)	5032	88	7	5	0	=	5	↑
Connections with other train services	2716	77	14	9	2	=	3	=
The value for money for the price of your ticket	4952	57	17	26	5	↑	3	↑
Upkeep and repair of the train	5062	82	11	6	0	=	1	=
The provision of information during the journey	4770	75	17	7	0	=	1	=
The helpfulness and attitude of staff on train	3835	77	19	4	2	=	2	=
The space for luggage	4331	51	19	30	-1	=	1	=
The toilet facilities	2775	52	22	25	1	=	3	↑
Sufficient room for all passengers to sit/stand	4990	71	13	16	-1	=	5	↑
The comfort of the seating area	5018	78	14	8	0	=	2	=
The ease of being able to get on and off	5077	82	13	6	1	=	2	=
Your personal security whilst on board	4719	83	15	2	-1	=	2	=
The cleanliness of the inside	5128	81	11	7	0	=	0	=
The cleanliness of the outside	4410	79	17	5	2	=	2	=
The availability of staff	4327	64	25	10	1	↑	3	↑
How well train company deals with delays	835	46	33	22	-4	=	-3	=

Improved ↑
Unchanged ■
Declined ↓

Regional

Overall sample size 3426

	Autumn 2009				Improvement/decline in % satisfied or good since Spring 2009		Improvement/decline in % satisfied or good since Autumn 2008	
	sample size	% satisfied or good	% neither/ nor	% dissatisfied or poor	% change	significant change	% change	significant change
Overall satisfaction	3363	87	8	5	1	Unchanged	0	Unchanged
STATION FACILITIES								
Ticket buying facilities	1924	79	12	9	-1	Unchanged	-1	Unchanged
Provision of information about train times/platforms	3134	84	9	7	3	Improved	4	Improved
The upkeep/repair of the station buildings/platforms	3183	73	17	9	2	Unchanged	3	Improved
Cleanliness	3186	76	16	8	2	Unchanged	4	Improved
The facilities and services	2797	51	19	30	1	Unchanged	0	Unchanged
The attitudes and helpfulness of the staff	2539	75	16	9	1	Unchanged	1	Unchanged
Connections with other forms of public transport	2288	70	17	13	2	Unchanged	2	Unchanged
Facilities for car parking	1546	51	15	34	1	Unchanged	1	Unchanged
Overall environment	3281	72	19	9	2	Unchanged	3	Improved
Your personal security whilst using	2920	69	25	8	0	Unchanged	3	Unchanged
The availability of staff	2888	66	19	16	2	Unchanged	2	Unchanged
How request to station staff was handled	519	84	5	10	-2	Unchanged	-2	Unchanged
TRAIN FACILITIES								
The frequency of the trains on that route	3302	81	8	10	2	Unchanged	2	Unchanged
Punctuality/reliability (i.e. the train arriving/departing on time)	3328	86	5	9	2	Unchanged	2	Unchanged
The length of time the journey was scheduled to take (speed)	3286	90	6	4	2	Unchanged	2	Unchanged
Connections with other train services	1736	77	17	6	2	Unchanged	3	Unchanged
The value for money for the price of your ticket	3131	59	18	23	4	Improved	-4	Declined
Upkeep and repair of the train	3293	71	17	12	2	Unchanged	0	Unchanged
The provision of information during the journey	2992	71	18	11	2	Unchanged	3	Unchanged
The helpfulness and attitude of staff on train	2489	75	19	6	3	Unchanged	3	Unchanged
The space for luggage	2554	58	21	21	-1	Unchanged	0	Unchanged
The toilet facilities	1332	40	23	36	3	Unchanged	2	Unchanged
Sufficient room for all passengers to sit/stand	3284	73	12	15	0	Unchanged	1	Unchanged
The comfort of the seating area	3279	74	16	10	2	Unchanged	2	Unchanged
The ease of being able to get on and off	3318	84	11	5	1	Unchanged	1	Unchanged
Your personal security whilst on board	3139	78	18	4	-1	Unchanged	0	Unchanged
The cleanliness of the inside	3351	73	16	11	3	Unchanged	2	Unchanged
The cleanliness of the outside	2915	69	21	9	6	Improved	3	Improved
The availability of staff	2910	60	26	14	1	Unchanged	2	Unchanged
How well train company deals with delays	414	41	33	26	5	Unchanged	5	Unchanged

Percentage of passengers satisfied 2005-2009

Chart 5.1a National and sector levels
Percentage of passengers satisfied 2005 to 2009

- London and South East
- Long distance
- Regional
- National total

Chart 5.1b Long distance operators
Percentage of passengers satisfied 2005 to 2009

- CrossCountry
- East Midlands Trains
- First TransPennine Express
- National Express East Coast
- Virgin Trains
- Long distance sector

5.1 Overall opinion of journey
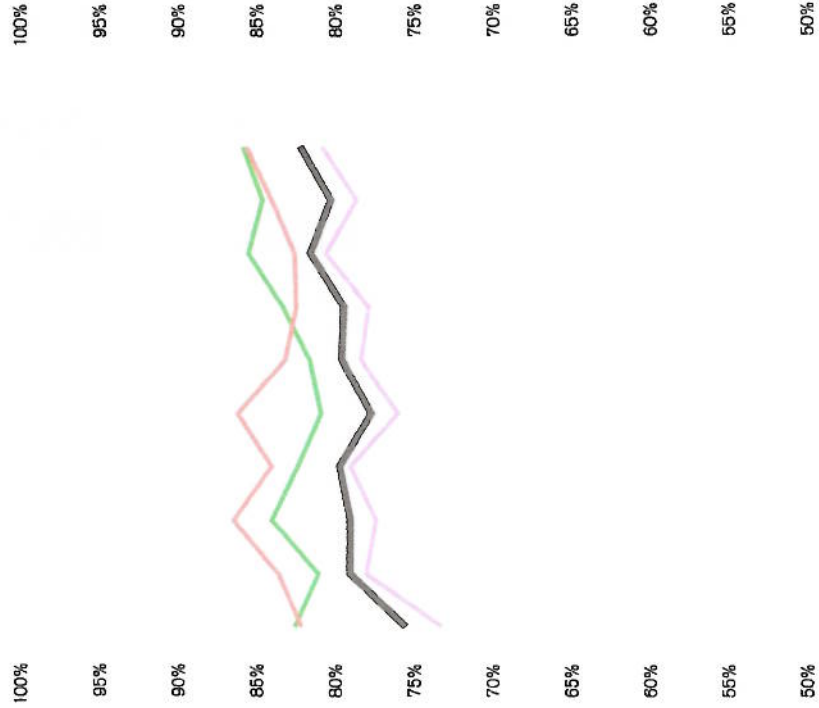
Chart 5.1c Regional operators
Percentage of passengers satisfied 2005 to 2009

Arriva Trains Wales   ScotRail
Merseyrail   Regional sector
Northern Rail

100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%

2005 Spring Autumn | 2006 Spring Autumn | 2007 Spring Autumn | 2008 Spring Autumn | 2009 Spring Autumn

Chart 5.1d London and South East operators (part one)
Percentage of passengers satisfied 2005 to 2009

c2c   First Great Western
Chiltern Railways   London Midland
First Capital Connect   London and South East sector

100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%

2005 Spring Autumn | 2006 Spring Autumn | 2007 Spring Autumn | 2008 Spring Autumn | 2009 Spring Autumn
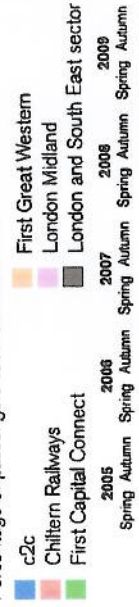
Chart 5.1e London and South East operators (part two)
Percentage of passengers satisfied 2005 to 2009

London Overground   Southeastern
National Express East Anglia   Southern
South West Trains   London and South East sector

100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%

2005 Spring Autumn | 2006 Spring Autumn | 2007 Spring Autumn | 2008 Spring Autumn | 2009 Spring Autumn

5.1 Overall opinion of journey
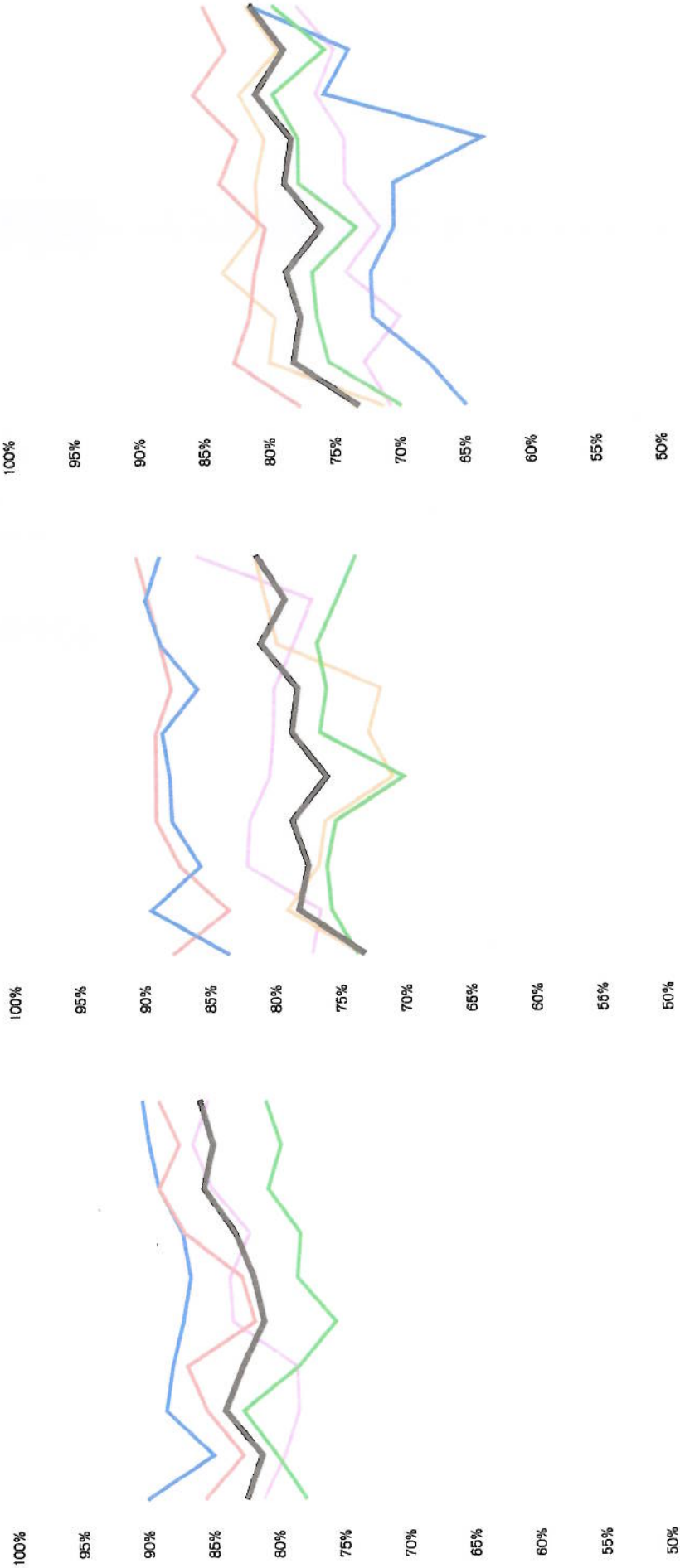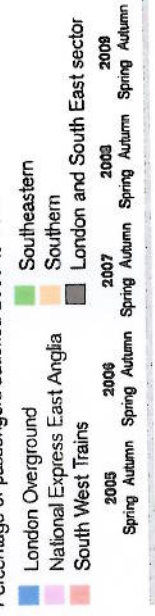
Chart 5.2a National and sector level

Percentage of passengers satisfied 2005 to 2009

Legend:
- London and South East
- Long distance
- Regional
- National total

Y-axis: 100%, 95%, 90%, 85%, 80%, 75%, 70%, 65%, 60%, 55%, 50%, 45%, 40%

X-axis: 2005 Spring Autumn, 2006 Spring Autumn, 2007 Spring Autumn, 2008 Spring Autumn, 2009 Spring Autumn
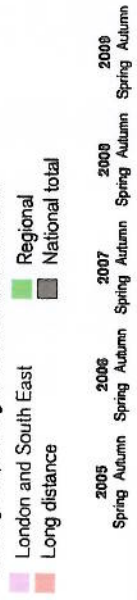
Chart 5.2b Long distance operators

Percentage of passengers satisfied 2005 to 2009

Legend:
- CrossCountry
- East Midlands Trains
- First TransPennine Express
- National Express East Coast
- Virgin Trains
- Long distance sector

Y-axis: 100%, 95%, 90%, 85%, 80%, 75%, 70%, 65%, 60%, 55%, 50%, 45%, 40%

X-axis: 2005 Spring Autumn, 2006 Spring Autumn, 2007 Spring Autumn, 2008 Spring Autumn, 2009 Spring Autumn

5.2 Punctuality and reliability
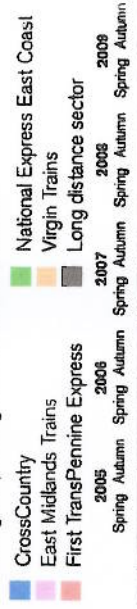
Chart 5.2c Regional operators
Percentage of passengers satisfied 2005 to 2009

Arriva Trains Wales
Merseyrail
Northern Rail
ScotRail
Regional sector

	2005		2006		2007		2008		2009	
	Spring	Autumn	Spring	Autumn	Spring	Autumn	Spring	Autumn	Spring	Autumn

100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
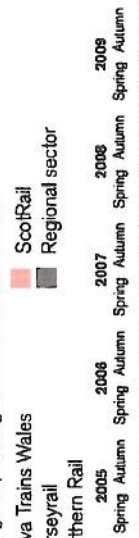
Chart 5.2d London and South East operators (part one)
Percentage of passengers satisfied 2005 to 2009

c2c
Chiltern Railways
First Capital Connect
First Great Western
London Midland
London and South East sector

	2005		2006		2007		2008		2009	
	Spring	Autumn	Spring	Autumn	Spring	Autumn	Spring	Autumn	Spring	Autumn

100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%
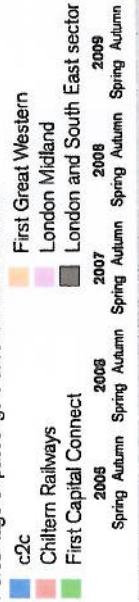
Chart 5.2e London and South East operators (part two)
Percentage of passengers satisfied 2005 to 2009

London Overground
National Express East Anglia
South West Trains
Southeastern
Southern
London and South East sector

	2005		2006		2007		2008		2009	
	Spring	Autumn	Spring	Autumn	Spring	Autumn	Spring	Autumn	Spring	Autumn

100%
95%
90%
85%
80%
75%
70%
65%
60%
55%
50%
45%
40%

5.2 Punctuality and reliability
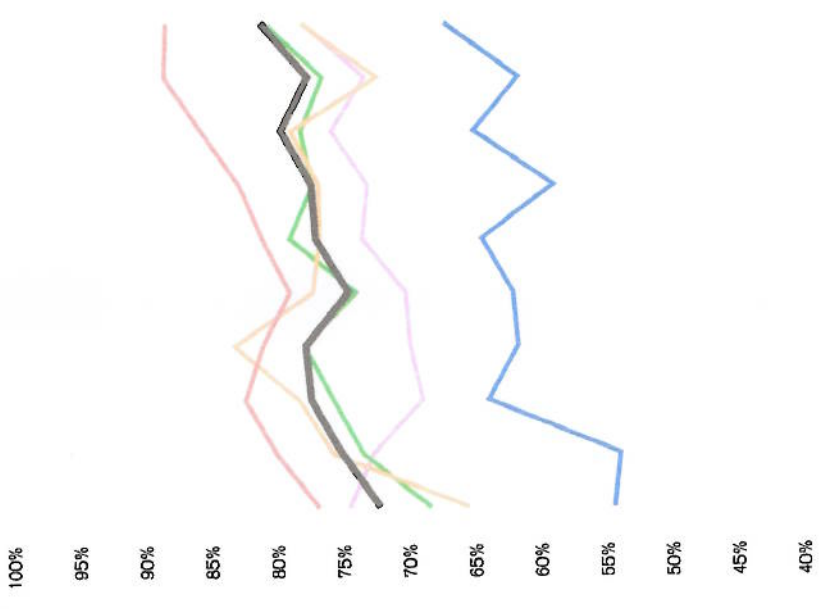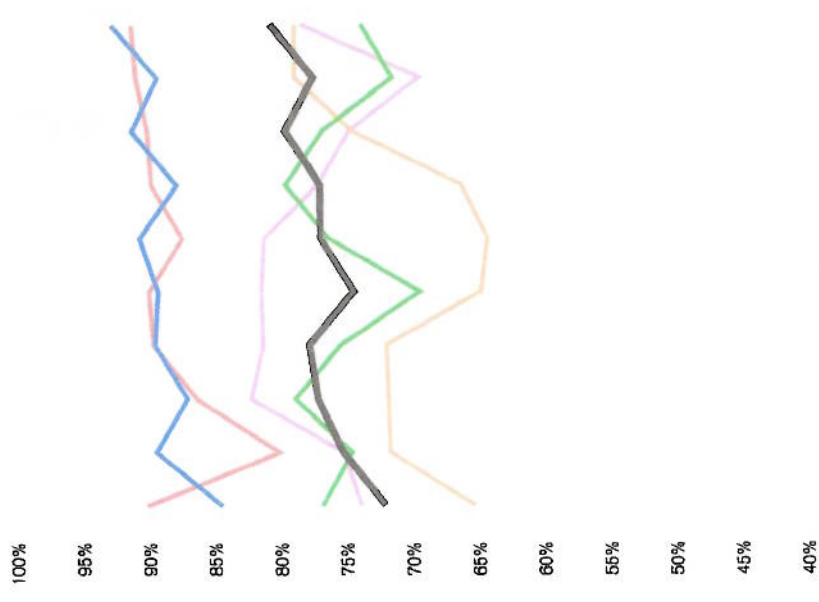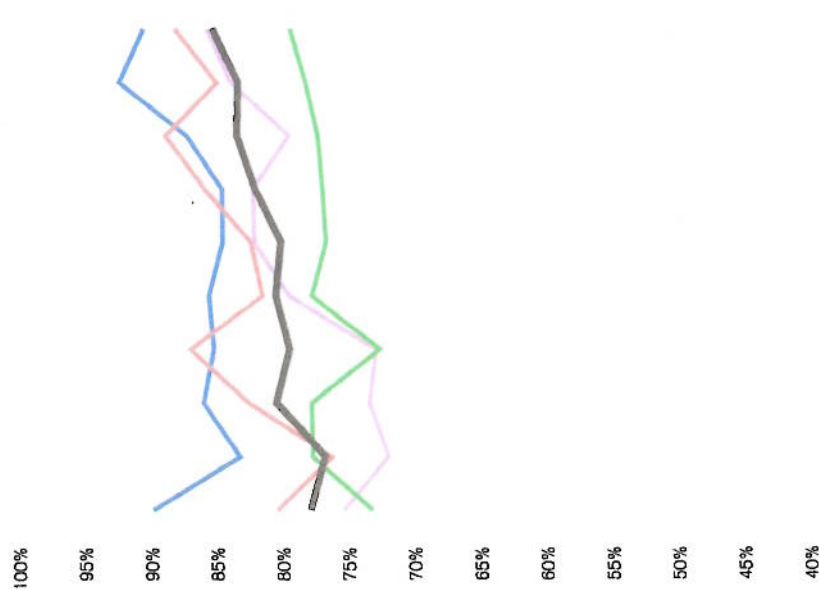
Chart 5.3a National and sector level
Percentage of passengers satisfied 2005 to 2009

Legend:
- London and South East
- Long distance
- Regional
- National total

Y-axis: 70%, 65%, 60%, 55%, 50%, 45%, 40%, 35%, 30%, 25%, 20%, 15%, 10%

X-axis: 2005 Spring Autumn, 2006 Spring Autumn, 2007 Spring Autumn, 2008 Spring Autumn, 2009 Spring Autumn
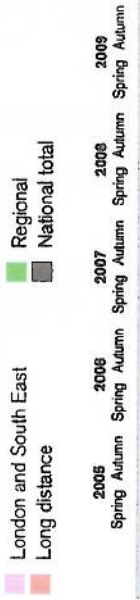
Chart 5.3b Long distance operators
Percentage of passengers satisfied 2005 to 2009

Legend:
- CrossCountry
- East Midlands Trains
- First TransPennine Express
- National Express East Coast
- Virgin Trains
- Long distance sector

Y-axis: 70%, 65%, 60%, 55%, 50%, 45%, 40%, 35%, 30%, 25%, 20%, 15%, 10%

X-axis: 2005 Spring Autumn, 2006 Spring Autumn, 2007 Spring Autumn, 2008 Spring Autumn, 2009 Spring Autumn

5.3 Dealing with delays

Chart 5.3c Regional operators
Percentage of passengers satisfied 2005 to 2009

Arriva Trains Wales   ScotRail
Merseyrail   Regional sector
Northern Rail

| 2005 | 2006 | 2007 | 2008 | 2009 |
| Spring Autumn | Spring Autumn | Spring Autumn | Spring Autumn | Spring Autumn |

70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
15%
10%
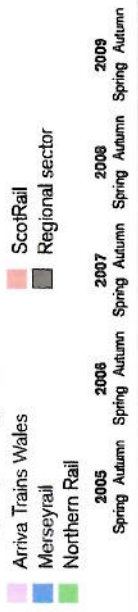
Chart 5.3d London and South East operators (part one)
Percentage of passengers satisfied 2005 to 2009

c2c   First Great Western
Chiltern Railways   London Midland
First Capital Connect   London and South East sector

| 2005 | 2006 | 2007 | 2008 | 2009 |
| Spring Autumn | Spring Autumn | Spring Autumn | Spring Autumn | Spring Autumn |

70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
15%
10%
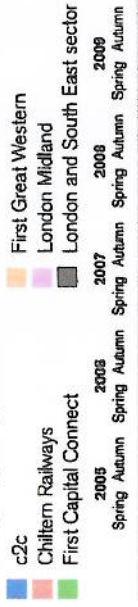
Chart 5.3e London and South East operators (part two)
Percentage of passengers satisfied 2005 to 2009

London Overground   Southeastern
National Express East Anglia   Southern
South West Trains   London and South East sector

| 2005 | 2006 | 2007 | 2008 | 2009 |
| Spring Autumn | Spring Autumn | Spring Autumn | Spring Autumn | Spring Autumn |

70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
15%
10%

5.3 Dealing with delays

Chart 5.4a National and sector level
Percentage of passengers satisfied 2005 to 2009

Legend:
- London and South East
- Long distance
- Regional
- National total

Y-axis: 100%, 95%, 90%, 85%, 80%, 75%, 70%, 65%, 60%, 55%, 50%

X-axis:
2005 Spring Autumn | 2006 Spring Autumn | 2007 Spring Autumn | 2008 Spring Autumn | 2009 Spring Autumn
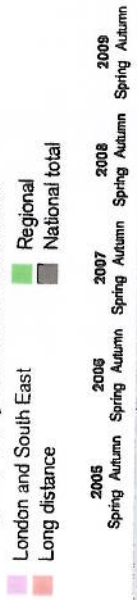
Chart 5.4b Long distance operators
Percentage of passengers satisfied 2005 to 2009

Legend:
- CrossCountry
- East Midlands Trains
- First TransPennine Express
- National Express East Coast
- Virgin Trains
- Long distance sector

Y-axis: 100%, 95%, 90%, 85%, 80%, 75%, 70%, 65%, 60%, 55%, 50%

X-axis:
2005 Spring Autumn | 2006 Spring Autumn | 2007 Spring Autumn | 2008 Spring Autumn | 2009 Spring Autumn

5.4 Provision of information about trains/platforms

Chart 5.4c Regional operators
Percentage of passengers satisfied 2005 to 2009

Arriva Trains Wales
Merseyrail
Northern Rail
ScotRail
Regional sector
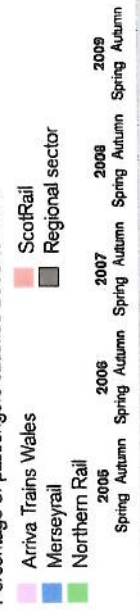
Chart 5.4d London and South East operators (part one)
Percentage of passengers satisfied 2005 to 2009

c2c
Chiltern Railways
First Capital Connect
First Great Western
London Midland
London and South East sector

Chart 5.4e London and South East operators (part two)
Percentage of passengers satisfied 2005 to 2009

London Overground
National Express East Anglia
South West Trains
Southeastern
Southern
London and South East sector

5.4 Provision of information about trains/platforms
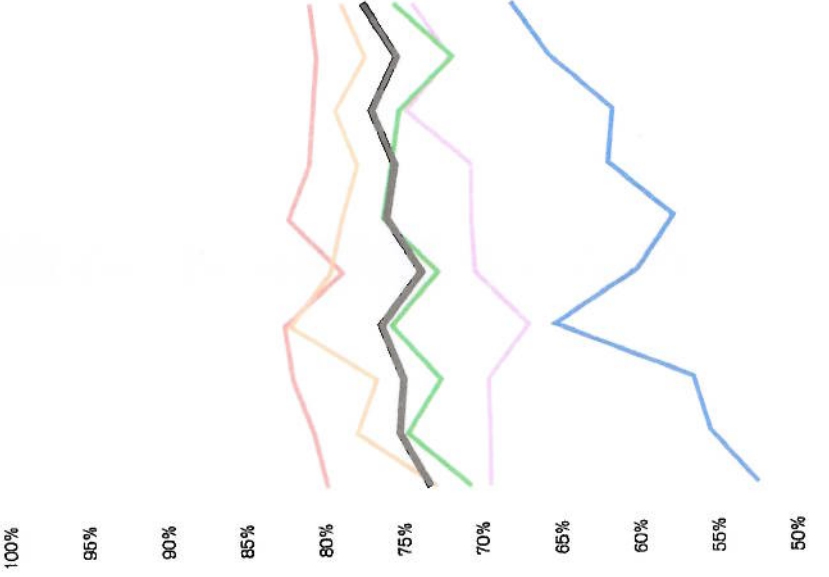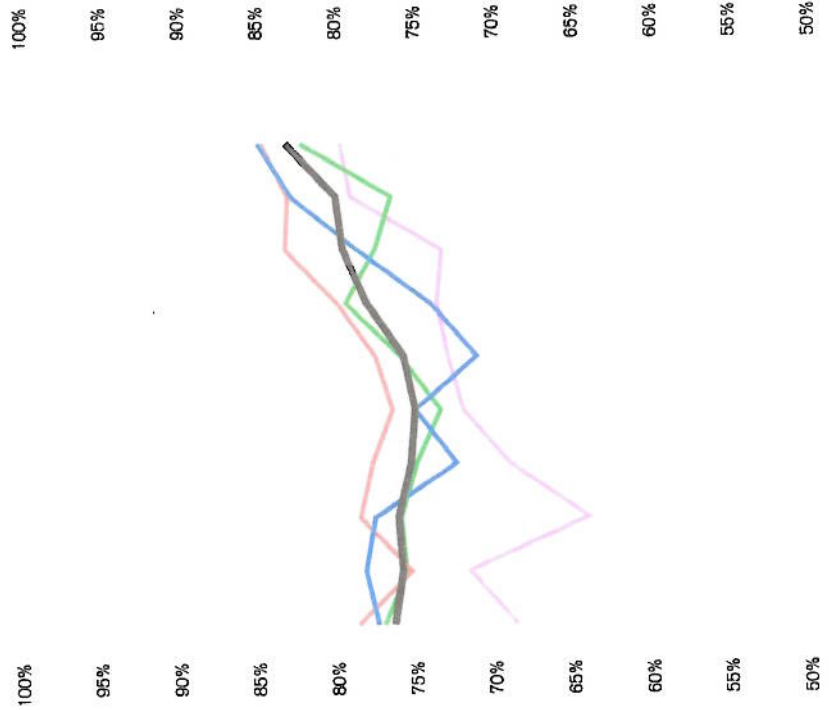
Chart 5.5a National and sector level
Percentage of passengers satisfied 2005 to 2009

Legend:
- London and South East
- Regional
- Long distance
- National total
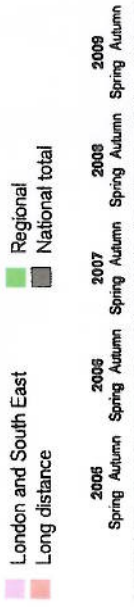
Chart 5.5b Long distance operators
Percentage of passengers satisfied 2005 to 2009

Legend:
- CrossCountry
- National Express East Coast
- East Midlands Trains
- Virgin Trains
- First TransPennine Express
- Long distance sector

5.5 Connections with public transport
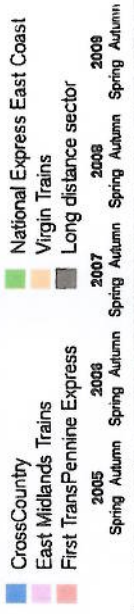
Chart 5.5c Regional operators
Percentage of passengers satisfied 2005 to 2009

Legend:
- Arriva Trains Wales
- Merseyrail
- Northern Rail
- ScotRail
- Regional sector

X-axis: 2005 2006 2007 2008 2009 (Spring Autumn Spring Autumn Spring Autumn Spring Autumn Spring Autumn)

Y-axis: 50% 55% 60% 65% 70% 75% 80% 85% 90%

Chart 5.5d London and South East operators (part one)
Percentage of passengers satisfied 2005 to 2009

Legend:
- c2c
- Chiltern Railways
- First Capital Connect
- First Great Western
- London Midland
- London and South East sector

X-axis: 2005 2006 2007 2008 2009 (Spring Autumn Spring Autumn Spring Autumn Spring Autumn Spring Autumn)

Y-axis: 50% 55% 60% 65% 70% 75% 80% 85% 90%

Chart 5.5e London and South East operators (part two)
Percentage of passengers satisfied 2004 to 2009

Legend:
- London Overground
- National Express East Anglia
- South West Trains
- Southeastern
- Southern
- London and South East sector

X-axis: 2005 2006 2007 2008 2009 (Spring Autumn Spring Autumn Spring Autumn Spring Autumn Spring Autumn)

Y-axis: 50% 55% 60% 65% 70% 75% 80% 85% 90%

5.5 Connections with public transport

Chart 5.7a National and sector level
Percentage of passengers satisfied 2005 to 2009

Legend:
- London and South East
- Long distance
- Regional
- National total

Y-axis: 80%, 75%, 70%, 65%, 60%, 55%, 50%, 45%, 40%, 35%, 30%, 25%, 20%

X-axis: 2005 Spring Autumn, 2006 Spring Autumn, 2007 Spring Autumn, 2008 Spring Autumn, 2009 Spring Autumn
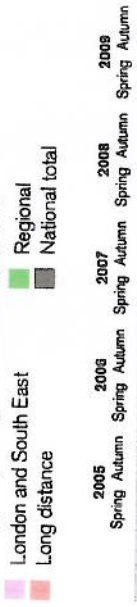
Chart 5.7b Long distance operators
Percentage of passengers satisfied 2005 to 2009

Legend:
- CrossCountry
- East Midlands Trains
- First TransPennine Express
- National Express East Coast
- Virgin Trains
- Long distance sector

Y-axis: 80%, 75%, 70%, 65%, 60%, 55%, 50%, 45%, 40%, 35%, 30%, 25%, 20%

X-axis: 2005 Spring Autumn, 2006 Spring Autumn, 2007 Spring Autumn, 2008 Spring Autumn, 2009 Spring Autumn

5.7 Value for money

Chart 5.7c Regional operators
Percentage of passengers satisfied 2005 to 2009

Arriva Trains Wales
Merseyrail
Northern Rail
ScotRail
Regional sector

2005 2006 2007 2008 2009
Spring Autumn Spring Autumn Spring Autumn Spring Autumn Spring Autumn

80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
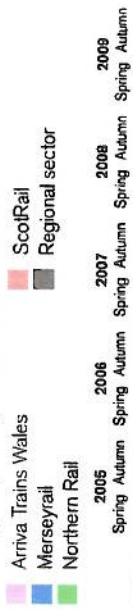
Chart 5.7d London and South East operators (part one)
Percentage of passengers satisfied 2005 to 2009

c2c
Chiltern Railways
First Capital Connect
First Great Western
London Midland
London and South East sector

2005 2006 2007 2008 2009
Spring Autumn Spring Autumn Spring Autumn Spring Autumn Spring Autumn

80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%
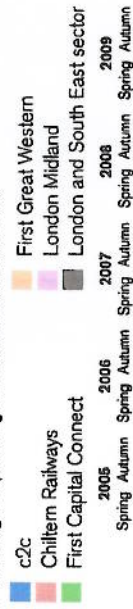
Chart 5.7e London and South East operators (part two)
Percentage of passengers satisfied 2005 to 2009

London Overground
National Express East Anglia
South West Trains
Southeastern
Southern
London and South East sector

2005 2006 2007 2008 2009
Spring Autumn Spring Autumn Spring Autumn Spring Autumn Spring Autumn

80%
75%
70%
65%
60%
55%
50%
45%
40%
35%
30%
25%
20%

5.7 Value for money
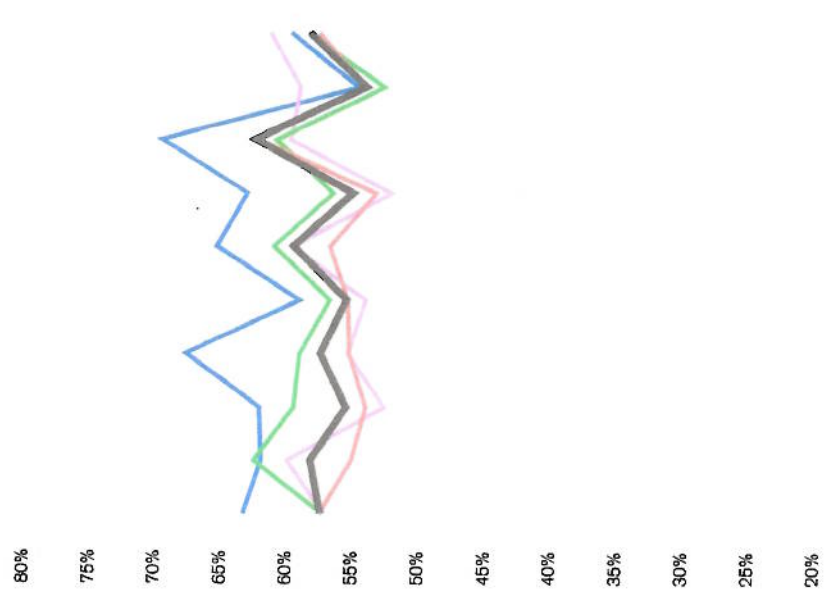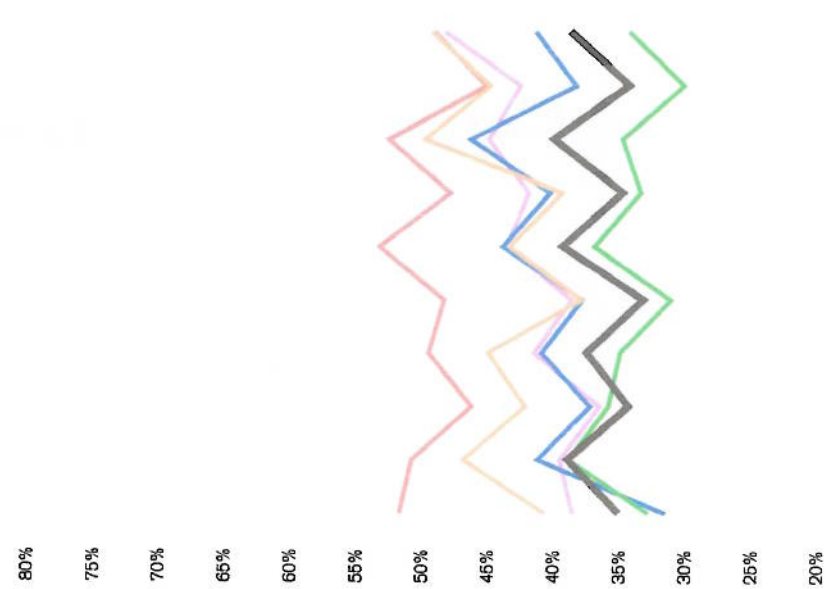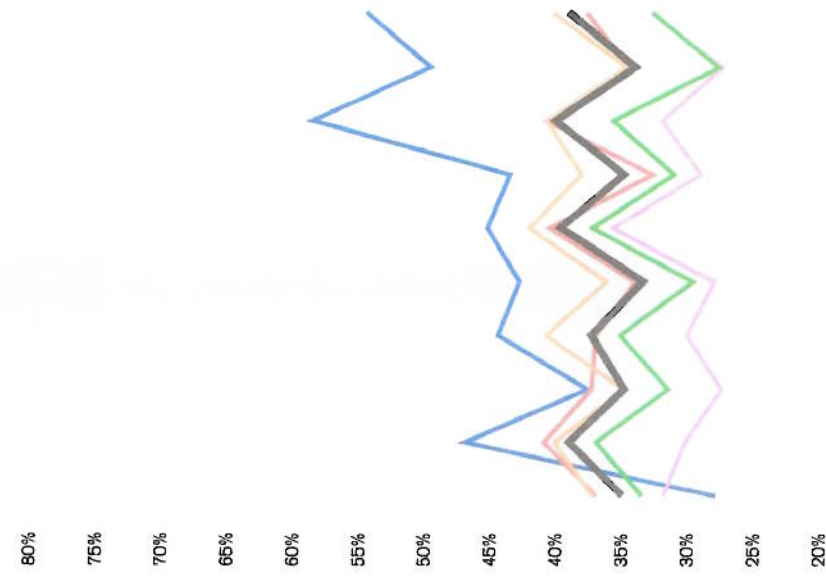
Technical appendix

Appendix

Questionnaires are handed out at stations to passengers about to board a train, with a reply paid envelope provided for returning questionnaires.

Each Train Operating Company (TOC) is sampled separately. Interviewers are given a number of questionnaires to hand out at a station. At Gatwick and Heathrow Airports and for some shifts at certain London termini, questionnaires are handed out to passengers of a specific TOC. From Autumn 2003 onwards, at all other stations, questionnaires are handed out to passengers of any TOC (in the past, these were also targeted). The number of questionnaires handed out will depend on three main factors: the size of the station, time of day, and the length of shift. On Grand Central, Wrexham & Shropshire and most of Heathrow Connect questionnaires are handed out on the train.

Approximately 35% of questionnaires that are given out are returned each survey. Returned questionnaires are checked to confirm that details provided are for a real journey and then the questionnaire response is assigned to the appropriate TOC.

TOC data is compiled to provide a national sample.

Fieldwork is carried out each Spring (principally in February/March) and in the Autumn (principally in September/October). Up to Spring 2003, fieldwork took place over three weeks. In Autumn 2003, the fieldwork was extended to an 11 week period to provide a better

representation of journeys (though if Easter is early, the fieldwork period may be slightly shorter and start earlier than normal).

Quotas for returned questionnaires are set overall and by weekday/weekend, journey purpose and station size. All data for a TOC presented in this report are weighted up to the number of passenger journeys annually on the TOC and the profile of these journeys by: weekday/weekend, journey purpose (commuter, business, leisure) and station size.

The data for number of journeys and profiles by these variables were collected from TOCs in 1999 and updated prior to the Autumn 2003 and Autumn 2008 surveys. The stations for each TOC were stratified by number of passengers and a number of stations in each size stratum is sampled. This sample design and weighting ensures that data is representative of all passenger journeys made on each TOC. National results are constructed by combining data for all TOCs together, weighting by number of journeys.

To allow simple reprocessing of data in line with franchise boundaries the sample design for NPS utilises a 'building block' approach from Autumn 2003 onwards. For some of the new TOCs it is not possible to provide reliable data for before Autumn 2003.

For the Autumn 2007 survey about 100 NPS shifts were moved from the morning peak to the evening peak. Shifts were also staggered for the first time so that they started every hour

as opposed to every three hours. For example morning shifts that were previously 7am–10am and then 10am–1pm were changed to 7am–10am, 8am–11am, 9am–12pm, etc. This methodology gives a better representation of passenger opinions of their journey.

If you would like to know more about how the survey is carried out or how data is compiled including more details of methodology please visit **www.passengerfocus.org.uk/nps**

```
GET
  FILE='C:\Documents and Settings\GFS\.spss\waves10to19.sav'.
DATASET COPY conectionvsage12.
DATASET ACTIVATE conectionvsage12.
FILTER OFF.
USE ALL.
SELECT IF (wave=12).
DATASET ACTIVATE DataSet1.
EXECUTE.
DATASET ACTIVATE conectionvsage12.
CROSSTABS
  /TABLES=c602 BY c10
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT ROW COLUMN TOTAL
  /COUNT ROUND CELL.
```

Crosstabs

[conectionvsage12]

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE	28074	100.0%	0	.0%	28074	100.0%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

			Q.56 AGE						
			16-25	26-34	35-44	45-54	55-59	60-64	65+
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	DID NOT MAKE A CONNECTION	Count	2631	3304	3780	3464	1529	938	1051
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	15.6%	19.5%	22.4%	20.5%	9.0%	5.5%	6.2%
		% within Q.56 AGE	60.5%	62.8%	63.6%	61.4%	58.3%	55.3%	50.6%
		% of Total	9.4%	11.8%	13.5%	12.3%	5.4%	3.3%	3.7%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

			Q.56 AGE	
			NOT STATED	Total
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	DID NOT MAKE A CONNECTION	Count	214	16911
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	1.3%	100.0%
		% within Q.56 AGE	44.1%	60.2%
		% of Total	.8%	60.2%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

			Q.56 AGE						
			16-25	26-34	35-44	45-54	55-59	60-64	65+
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	YES - HANDLED ADEQUATELY	Count	1348	1485	1562	1590	764	530	642
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	16.8%	18.5%	19.5%	19.8%	9.5%	6.6%	8.0%
		% within Q.56 AGE	31.0%	28.2%	26.3%	28.2%	29.1%	31.3%	30.9%
		% of Total	4.8%	5.3%	5.6%	5.7%	2.7%	1.9%	2.3%
	NO - NOT HANDLED ADEQUATELY	Count	298	374	402	348	177	89	111
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	16.3%	20.4%	22.0%	19.0%	9.7%	4.9%	6.1%
		% within Q.56 AGE	6.9%	7.1%	6.8%	6.2%	6.8%	5.3%	5.3%
		% of Total	1.1%	1.3%	1.4%	1.2%	.6%	.3%	.4%
	DON'T KNOW/ NO ANSWER	Count	70	96	203	238	152	138	275
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	5.3%	7.3%	15.4%	18.0%	11.5%	10.5%	20.8%
		% within Q.56 AGE	1.6%	1.8%	3.4%	4.2%	5.8%	8.1%	13.2%
		% of Total	.2%	.3%	.7%	.8%	.5%	.5%	1.0%
Total		Count	4347	5259	5947	5640	2622	1695	2079
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	15.5%	18.7%	21.2%	20.1%	9.3%	6.0%	7.4%
		% within Q.56 AGE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	15.5%	18.7%	21.2%	20.1%	9.3%	6.0%	7.4%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

| | | | Q.56 AGE | |
			NOT STATED	Total
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	YES - HANDLED ADEQUATELY	Count	91	8012
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	1.1%	100.0%
		% within Q.56 AGE	18.8%	28.5%
		% of Total	.3%	28.5%
	NO - NOT HANDLED ADEQUATELY	Count	32	1831
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	1.7%	100.0%
		% within Q.56 AGE	6.6%	6.5%
		% of Total	.1%	6.5%
	DON'T KNOW/ NO ANSWER	Count	148	1320
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	11.2%	100.0%
		% within Q.56 AGE	30.5%	4.7%
		% of Total	.5%	4.7%
Total		Count	485	28074
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	1.7%	100.0%
		% within Q.56 AGE	100.0%	100.0%
		% of Total	1.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1401.991 [a]	21	.000
Likelihood Ratio	970.291	21	.000
Linear-by-Linear Association	460.534	1	.000
N of Valid Cases	28074		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 22.80.

```
DATASET ACTIVATE DataSet1.
DATASET CLOSE conectionvsage12.
DATASET COPY  conectionvsage14.
DATASET ACTIVATE  conectionvsage14.
FILTER OFF.
USE ALL.
SELECT IF (wave=14).
DATASET ACTIVATE  DataSet1.
EXECUTE.
DATASET ACTIVATE conectionvsage14.
CROSSTABS
  /TABLES=c602 BY c10
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT ROW COLUMN TOTAL
  /COUNT ROUND CELL.
```

Crosstabs

[conectionvsage14]

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE	26388	100.0%	0	.0%	26388	100.0%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

		Q.56 AGE						
		16-25	26-34	35-44	45-54	55-59	60-64	65+
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	DID NOT MAKE A CONNECTION							
	Count	2219	3148	3582	3511	1497	875	1020
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	13.9%	19.7%	22.4%	21.9%	9.3%	5.5%	6.4%
	% within Q.56 AGE	60.1%	62.8%	63.8%	63.2%	59.8%	53.8%	51.6%
	% of Total	8.4%	11.9%	13.6%	13.3%	5.7%	3.3%	3.9%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

		Q.56 AGE NOT STATED	Total
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	DID NOT MAKE A CONNECTION		
	Count	163	16015
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	1.0%	100.0%
	% within Q.56 AGE	40.0%	60.7%
	% of Total	.6%	60.7%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

		Q.56 AGE						
		16-25	26-34	35-44	45-54	55-59	60-64	65+
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	YES - HANDLED ADEQUATELY							
	Count	1186	1470	1586	1538	784	558	814
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	15.2%	18.8%	20.3%	19.7%	9.8%	7.1%	7.9%
	% within Q.56 AGE	32.1%	29.3%	28.2%	27.7%	30.5%	34.3%	31.1%
	% of Total	4.5%	5.6%	6.0%	5.8%	2.9%	2.1%	2.3%
	NO - NOT HANDLED ADEQUATELY							
	Count	243	281	291	285	123	84	96
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	17.0%	19.7%	20.4%	20.0%	8.6%	5.9%	6.7%
	% within Q.56 AGE	6.6%	5.6%	5.2%	5.1%	4.9%	5.2%	4.9%
	% of Total	.9%	1.1%	1.1%	1.1%	.5%	.3%	.4%
	DON'T KNOW/ NO ANSWER							
	Count	46	115	157	219	119	108	245
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	4.1%	10.2%	13.9%	19.4%	10.5%	9.6%	21.7%
	% within Q.56 AGE	1.2%	2.3%	2.8%	3.9%	4.8%	6.6%	12.4%
	% of Total	.2%	.4%	.6%	.8%	.5%	.4%	.9%
Total	Count	3694	5014	5616	5553	2503	1625	1975
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	14.0%	19.0%	21.3%	21.0%	9.5%	6.2%	7.5%
	% within Q.56 AGE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	14.0%	19.0%	21.3%	21.0%	9.5%	6.2%	7.5%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

			Q.56 AGE	Total
			NOT STATED	Total
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	YES - HANDLED ADEQUATELY	Count	100	7816
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	1.3%	100.0%
		% within Q.56 AGE	24.5%	29.6%
		% of Total	.4%	29.6%
	NO - NOT HANDLED ADEQUATELY	Count	25	1428
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	1.8%	100.0%
		% within Q.56 AGE	6.1%	5.4%
		% of Total	.1%	5.4%
	DON'T KNOW/ NO ANSWER	Count	120	1129
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	10.6%	100.0%
		% within Q.56 AGE	29.4%	4.3%
		% of Total	.5%	4.3%
Total		Count	408	26388
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	1.5%	100.0%
		% within Q.56 AGE	100.0%	100.0%
		% of Total	1.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1222.911[a]	21	.000
Likelihood Ratio	820.153	21	.000
Linear-by-Linear Association	378.521	1	.000
N of Valid Cases	26388		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.46.

```
CROSSTABS
/TABLES=c602 BY c10
/FORMAT=AVALUE TABLES
/STATISTICS=CHISQ
/CELLS=COUNT ROW COLUMN TOTAL
/COUNT ROUND CELL.
```

Crosstabs

[wave18]

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE	25313	100.0%	0	.0%	25313	100.0%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

		Q.56 AGE							
		16-25	26-34	35-44	45-54	55-59	60-64	65+
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	DID NOT MAKE A CONNECTION	Count	2062	2706	3293	3332	1407	1119	1140
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	13.6%	17.8%	21.7%	21.9%	9.3%	7.4%	7.5%
		% within Q.56 AGE	61.0%	82.5%	63.5%	60.6%	59.5%	53.7%	53.5%
		% of Total	8.1%	10.7%	13.0%	13.2%	5.6%	4.4%	4.5%
	YES - HANDLED ADEQUATELY	Count	1034	1273	1489	1637	713	711	685
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	13.6%	16.7%	19.6%	21.5%	9.4%	9.3%	9.0%
		% within Q.56 AGE	30.6%	29.4%	28.7%	29.8%	30.2%	34.1%	32.2%
		% of Total	4.1%	5.0%	5.9%	6.5%	2.8%	2.8%	2.7%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

		Q.56 AGE NOT STATED	Total
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	DID NOT MAKE A CONNECTION — Count	126	15185
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	.8%	100.0%
	% within Q.56 AGE	37.0%	60.0%
	% of Total	.5%	60.0%
	YES - HANDLED ADEQUATELY — Count	69	7611
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	.9%	100.0%
	% within Q.56 AGE	20.2%	30.1%
	% of Total	.3%	30.1%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

		Q.56 AGE						
		16-25	26-34	35-44	45-54	55-59	60-64	65+
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	NO - NOT HANDLED ADEQUATELY — Count	245	276	287	341	136	108	94
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	16.2%	18.3%	19.0%	22.6%	9.0%	7.2%	6.2%
	% within Q.56 AGE	7.2%	6.4%	5.5%	6.2%	5.8%	5.2%	4.4%
	% of Total	1.0%	1.1%	1.1%	1.3%	.5%	.4%	.4%
	DON'T KNOW/ NO ANSWER — Count	41	72	120	186	108	147	210
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	4.1%	7.1%	11.9%	18.4%	10.7%	14.6%	20.8%
	% within Q.56 AGE	1.2%	1.7%	2.3%	3.4%	4.6%	7.1%	9.9%
	% of Total	.2%	.3%	.5%	.7%	.4%	.6%	.8%
Total	Count	3382	4327	5189	5496	2364	2085	2129
	% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	13.4%	17.1%	20.5%	21.7%	9.3%	8.2%	8.4%
	% within Q.56 AGE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	13.4%	17.1%	20.5%	21.7%	9.3%	8.2%	8.4%

c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED * Q.56 AGE Crosstabulation

				Q.56 AGE	
				NOT STATED	Total
c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED	NO - NOT HANDLED ADEQUATELY	Count		21	1508
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED		1.4%	100.0%
		% within Q.56 AGE		6.2%	6.0%
		% of Total		.1%	6.0%
	DON'T KNOW/ NO ANSWER	Count		125	1009
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED		12.4%	100.0%
		% within Q.56 AGE		36.7%	4.0%
		% of Total		.5%	4.0%
Total		Count		341	25313
		% within c602 OPINION OF HOW ANY CONNECTIONS WERE HANDLED		1.3%	100.0%
		% within Q.56 AGE		100.0%	100.0%
		% of Total		1.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1442.252 [a]	21	.000
Likelihood Ratio	852.557	21	.000
Linear-by-Linear Association	358.187	1	.000
N of Valid Cases	25313		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.59.

```
GET
  FILE='C:\Documents and Settings\GFS\.spss\waves10to19.sav'.
DATASET COPY connectionswave10.
DATASET ACTIVATE connectionswave10.
FILTER OFF.
USE ALL.
SELECT IF (wave=10).
DATASET ACTIVATE DataSet1.
EXECUTE.
DATASET ACTIVATE connectionswave10.
CROSSTABS
  /TABLES=c37 BY c60303
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT ROW COLUMN TOTAL
  /COUNT ROUND CELL.
```

Crosstabs

[connectionswave10]

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM, * c603:"NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	1791	5.7%	29498	94.3%	31289	100.0%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM, * c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION M. c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY Crosstabulation

			c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY		Total
			No	Yes	Total
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM,	VERY GOOD	Count	175	49	224
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM,	78.1%	21.9%	100.0%
		% within c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	13.5%	9.9%	12.5%
		% of Total	9.8%	2.7%	12.5%
	FAIRLY GOOD	Count	367	131	498
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM,	73.7%	26.3%	100.0%
		% within c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	28.3%	26.5%	27.8%
		% of Total	20.5%	7.3%	27.8%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G TUBE, TRAM, * c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE:c603 ASPECTS WHICH WERE HANDLED ADEQUATELY Crosstabulation

| | | | c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY | | |
			No	Yes	Total
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	NEITHER GOOD NOR POOR	Count	179	72	251
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	71.3%	28.7%	100.0%
		% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	13.8%	14.6%	14.0%
		% of Total	10.0%	4.0%	14.0%
	FAIRLY POOR	Count	139	48	187
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	74.3%	25.7%	100.0%
		% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	10.7%	9.7%	10.4%
		% of Total	7.8%	2.7%	10.4%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G TUBE, TRAM, * c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE:c603 ASPECTS WHICH WERE HANDLED ADEQUATELY Crosstabulation

			c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY		Total
			No	Yes	Total
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	VERY POOR	Count	106	36	142
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	74.6%	25.4%	100.0%
		% within c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	8.2%	7.3%	7.9%
		% of Total	5.9%	2.0%	7.9%
	NO OPINION/ DID NOT USE	Count	331	158	489
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	67.7%	32.3%	100.0%
		% within c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	25.5%	32.0%	27.3%
		% of Total	18.5%	8.8%	27.3%

		c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY		Total
		No	Yes	
Total	Count	1297	494	1791
	% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	72.4%	27.6%	100.0%
	% within c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	100.0%	100.0%	100.0%
	% of Total	72.4%	27.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.383[a]	5	.065
Likelihood Ratio	10.400	5	.065
Linear-by-Linear Association	6.963	1	.008
N of Valid Cases	1791		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 39.17.

```
DATASET ACTIVATE DataSet1.

DATASET CLOSE connectionswave10.

DATASET COPY  connectionswave14.

DATASET ACTIVATE connectionswave14.

FILTER OFF.

USE ALL.

SELECT IF (wave=14).

DATASET ACTIVATE DataSet1.

EXECUTE.

DATASET ACTIVATE connectionswave14.

CROSSTABS

  /TABLES=c37 BY c60303

  /FORMAT=AVALUE TABLES

  /STATISTICS=CHISQ

  /CELLS=COUNT ROW COLUMN TOTAL

  /COUNT ROUND CELL.
```

Crosstabs

[connectionswave14]

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM, * c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	1347	5.1%	25041	94.9%	26388	100.0%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM, * c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION M... c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY Crosstabulation

			c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY		Total
			No	Yes	
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	VERY GOOD	Count	116	27	143
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	81.1%	18.9%	100.0%
		% within c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	11.7%	7.6%	10.6%
		% of Total	8.6%	2.0%	10.6%
	FAIRLY GOOD	Count	300	80	380
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	78.9%	21.1%	100.0%
		% within c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	30.2%	22.6%	28.2%
		% of Total	22.3%	5.9%	28.2%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G TUBE, TRAM, * c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE:c603 ASPECTS WHICH WERE HANDLED ADEQUATELY Crosstabulation

			c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY		Total
			No	Yes	
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	NEITHER GOOD NOR POOR	Count	130	52	182
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	71.4%	28.6%	100.0%
		% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	13.1%	14.7%	13.5%
		% of Total	9.7%	3.9%	13.5%
	FAIRLY POOR	Count	75	40	115
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	65.2%	34.8%	100.0%
		% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	7.6%	11.3%	8.5%
		% of Total	5.6%	3.0%	8.5%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G TUBE, TRAM, * c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE:c603 ASPECTS WHICH WERE HANDLED ADEQUATELY Crosstabulation

			c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY		Total
			No	Yes	
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	VERY POOR	Count	82	25	107
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	76.6%	23.4%	100.0%
		% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	8.3%	7.1%	7.9%
		% of Total	6.1%	1.9%	7.9%
	NO OPINION/ DID NOT USE	Count	290	130	420
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	69.0%	31.0%	100.0%
		% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	29.2%	36.7%	31.2%
		% of Total	21.5%	9.7%	31.2%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHE FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM, " c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE:c603 ASPECTS WHICH WER NOT HANDLED ADEQUATELY Crosstabulation

| | | c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY | | |
		No	Yes	Total
Total	Count	993	354	1347
	% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	73.7%	26.3%	100.0%
	% within c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	100.0%	100.0%	100.0%
	% of Total	73.7%	26.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.387[a]	5	.002
Likelihood Ratio	19.531	5	.002
Linear-by-Linear Association	11.885	1	.001
N of Valid Cases	1347		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 28.12.

```
GET
   FILE='C:\Documents and Settings\GFS\.spss\waves10to19.sav'.

DATASET COPY   connectionswave18.

DATASET ACTIVATE   connectionswave18.

FILTER OFF.

USE ALL.

SELECT IF (wave=18).

DATASET ACTIVATE DataSet1.

EXECUTE.

DATASET ACTIVATE connectionswave18.

CROSSTABS
   /TABLES=c37 BY c60303
   /FORMAT=AVALUE TABLES
   /STATISTICS=CHISQ
   /CELLS=COUNT ROW COLUMN TOTAL
   /COUNT ROUND CELL.
```

Crosstabs

[connectionswave18]

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM, * c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	1446	5.7%	23867	94.3%	25313	100.0%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM, * c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION M. c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY Crosstabulation

			c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY		Total
			No	Yes	
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM,	VERY GOOD	Count	111	42	153
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM,	72.5%	27.5%	100.0%
		% within c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	10.7%	10.2%	10.6%
		% of Total	7.7%	2.9%	10.6%
	FAIRLY GOOD	Count	295	117	412
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM,	71.6%	28.4%	100.0%
		% within c603:**NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	28.5%	28.4%	28.5%
		% of Total	20.4%	8.1%	28.5%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G TUBE, TRAM, * c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE;c603 ASPECTS WHICH WERE HANDLED ADEQUATELY Crosstabulation

			c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY		Total
			No	Yes	
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	NEITHER GOOD NOR POOR	Count	143	46	189
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	75.7%	24.3%	100.0%
		% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	13.8%	11.2%	13.1%
		% of Total	9.9%	3.2%	13.1%
	FAIRLY POOR	Count	88	40	128
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	68.8%	31.3%	100.0%
		% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	8.5%	9.7%	8.9%
		% of Total	6.1%	2.8%	8.9%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E.G TUBE, TRAM, * c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE:c603 ASPECTS WHICH WERE HANDLED ADEQUATELY Crosstabulation

			c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE:c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY		Total
			No	Yes	
c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	VERY POOR	Count	64	27	91
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	70.3%	29.7%	100.0%
		% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	6.2%	6.6%	6.3%
		% of Total	4.4%	1.9%	6.3%
	NO OPINION/ DID NOT USE	Count	333	140	473
		% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,	70.4%	29.6%	100.0%
		% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY	32.2%	34.0%	32.7%
		% of Total	23.0%	9.7%	32.7%

c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHI
FORMS OF PUBLIC TRANSPORT E.G. BUS, TUBE, TRAM, * c603:***NOT ENOUGH
INFORMATION AT STATION WHERE CONNECTION MADE:c603 ASPECTS WHICH WER
NOT HANDLED ADEQUATELY Crosstabulation

| | | | c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY | | Total |
			No	Yes	
Total	Count		1034	412	1446
	% within c37 RATING OF STATION WHERE TRAIN WAS BOARDED... CONNECTIONS WITH OTHER FORMS OF PUBLIC TRANSPORT E. G. BUS, TUBE, TRAM,		71.5%	28.5%	100.0%
	% within c603:***NOT ENOUGH INFORMATION AT STATION WHERE CONNECTION MADE: c603 ASPECTS WHICH WERE NOT HANDLED ADEQUATELY		100.0%	100.0%	100.0%
	% of Total		71.5%	28.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.507[a]	5	.775
Likelihood Ratio	2.548	5	.769
Linear-by-Linear Association	.602	1	.438
N of Valid Cases	1446		

a. 0 cells (.0%) have expected count less than 5. The minimum
expected count is 25.93.

```
GET
  FILE='C:\Documents and Settings\GFS\.spss\waves10to19.sav'.
DATASET COPY survey10.
DATASET ACTIVATE survey10.
FILTER OFF.
USE ALL.
SELECT IF (wave=10).
DATASET ACTIVATE DataSet1.
EXECUTE.
DATASET ACTIVATE survey10.
CROSSTABS
  /TABLES=c27 BY c28 c1701
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT ROW COLUMN TOTAL
  /COUNT ROUND CELL.
```

Crosstabs

[survey10]

Warnings

The crosstabulation of c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE * c1701 RATING OF... THE EASE OF TICKET PURCHASE is empty.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE * c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	25847	82.6%	5442	17.4%	31289	100.0%

c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE * c28 RATING OF... THE RANGE OF TICKETS AVAILABLE

c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE		c28 RATING OF... THE RANGE OF TICKETS AVAILABLE				
		VERY GOOD	FAIRLY GOOD	NEITHER GOOD NOR POOR	FAIRLY POOR	VERY POOR
VERY GOOD	Count	1531	599	174	50	35
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	58.3%	22.8%	6.6%	1.9%	1.3%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	68.0%	10.5%	4.3%	3.0%	3.4%
	% of Total	5.9%	2.3%	.7%	.2%	.1%
FAIRLY GOOD	Count	382	3122	662	231	90
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	8.1%	65.8%	14.0%	4.9%	1.9%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	17.0%	54.9%	16.4%	13.9%	8.8%
	% of Total	1.5%	12.1%	2.6%	.9%	.3%
NEITHER GOOD NOR POOR	Count	88	747	1914	330	89
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	2.6%	22.4%	57.4%	9.9%	2.7%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	3.9%	13.1%	47.3%	19.8%	8.7%
	% of Total	.3%	2.9%	7.4%	1.3%	.3%
FAIRLY POOR	Count	39	430	571	708	156
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	1.9%	20.5%	27.2%	33.7%	7.4%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	1.7%	7.6%	14.1%	42.6%	15.2%
	% of Total	.2%	1.7%	2.2%	2.7%	.6%

Crosstab

c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE			c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE	Total
			NO OPINION/ DID NOT USE	
VERY GOOD	Count		237	2626
	% within c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE		9.0%	100.0%
	% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE		2.1%	10.2%
	% of Total		.9%	10.2%
FAIRLY GOOD	Count		256	4743
	% within c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE		5.4%	100.0%
	% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE		2.3%	18.4%
	% of Total		1.0%	18.4%
NEITHER GOOD NOR POOR	Count		166	3334
	% within c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE		5.0%	100.0%
	% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE		1.5%	12.9%
	% of Total		.6%	12.9%
FAIRLY POOR	Count		198	2102
	% within c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE		9.4%	100.0%
	% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE		1.8%	8.1%
	% of Total		.8%	8.1%

Crosstab

		c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE				
		VERY GOOD	FAIRLY GOOD	NEITHER GOOD NOR POOR	FAIRLY POOR	VERY POOR
c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY POOR					
	Count	23	129	188	179	572
	% within c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	1.8%	10.2%	14.8%	14.1%	45.0%
	% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE	1.0%	2.3%	4.6%	10.8%	55.9%
	% of Total	.1%	.5%	.7%	.7%	2.2%
	NO OPINION/ DID NOT USE					
	Count	188	660	537	165	82
	% within c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	1.6%	5.6%	4.6%	1.4%	.7%
	% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE	8.4%	11.6%	13.3%	9.9%	8.0%
	% of Total	.7%	2.6%	2.1%	.6%	.3%
Total						
	Count	2251	5687	4046	1663	1024
	% within c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	8.7%	22.0%	15.7%	6.4%	4.0%
	% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	8.7%	22.0%	15.7%	6.4%	4.0%

Crosstab

			c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	
			NO OPINION/ DID NOT USE	Total
c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY POOR	Count	179	1270
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	14.1%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	1.6%	4.9%
		% of Total	.7%	4.9%
	NO OPINION/ DID NOT USE	Count	10140	11772
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	86.1%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	90.7%	45.5%
		% of Total	39.2%	45.5%
	Total	Count	11176	25847
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	43.2%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	100.0%	100.0%
		% of Total	43.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	37345.255 [a]	25	.000
Likelihood Ratio	28389.340	25	.000
Linear-by-Linear Association	14846.809	1	.000
N of Valid Cases	25847		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 50.31.

```
DATASET ACTIVATE DataSet1.
DATASET CLOSE survey10.
DATASET COPY survey14.
DATASET ACTIVATE survey14.
FILTER OFF.
USE ALL.
SELECT IF (wave=14).
DATASET ACTIVATE DataSet1.
EXECUTE.
DATASET ACTIVATE survey14.
CROSSTABS
  /TABLES=c27 BY c28 c1701
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT ROW COLUMN TOTAL
  /COUNT ROUND CELL.
```

Crosstabs

[survey14]

Warnings

The crosstabulation of c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE * c1701 RATING OF... THE EASE OF TICKET PURCHASE is empty.

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE * c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	22378	84.8%	4010	15.2%	26388	100.0%

c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE * c28 RATING OF... THE RANGE OF TICI S AVAILABLE

Crosstab

			c28 RATING OF... THE RANGE OF TICKETS AVAILABLE				
		VERY GOOD	FAIRLY GOOD	NEITHER GOOD NOR POOR	FAIRLY POOR	VERY POOR
c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	**VERY GOOD**					
	Count	1317	488	141	51	19
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	60.8%	22.4%	6.5%	2.3%	.9%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	69.1%	10.2%	4.0%	3.2%	2.0%
	% of Total	5.9%	2.2%	.6%	.2%	.1%
	FAIRLY GOOD					
	Count	311	2723	591	226	74
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	7.5%	66.1%	14.3%	5.5%	1.8%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	16.3%	56.7%	16.7%	14.3%	7.7%
	% of Total	1.4%	12.2%	2.6%	1.0%	.3%
	NEITHER GOOD NOR POOR					
	Count	67	635	1652	297	87
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	2.3%	22.0%	57.3%	10.3%	3.0%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	3.5%	13.2%	46.7%	18.8%	9.1%
	% of Total	.3%	2.8%	7.4%	1.3%	.4%
	FAIRLY POOR					
	Count	26	285	462	673	144
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	1.5%	16.4%	26.5%	38.6%	8.3%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	1.4%	5.9%	13.1%	42.6%	15.0%
	% of Total	.1%	1.3%	2.1%	3.0%	.6%

Crosstab

			c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	
			NO OPINION/ DID NOT USE	Total
c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY GOOD	Count	159	2175
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	7.3%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	1.7%	9.7%
		% of Total	.7%	9.7%
	FAIRLY GOOD	Count	195	4120
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	4.7%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	2.0%	18.4%
		% of Total	.9%	18.4%
	NEITHER GOOD NOR POOR	Count	144	2882
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	5.0%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	1.5%	12.9%
		% of Total	.6%	12.9%
	FAIRLY POOR	Count	152	1742
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	8.7%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	1.6%	7.8%
		% of Total	.7%	7.8%

Crosstab

		c28 RATING OF... THE RANGE OF TICKETS AVAILABLE				
		VERY GOOD	FAIRLY GOOD	NEITHER GOOD NOR POOR	FAIRLY POOR	VERY POOR
c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY POOR					
	Count	16	80	172	156	526
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	1.5%	7.5%	16.1%	14.6%	49.3%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	.8%	1.7%	4.9%	9.9%	55.0%
	% of Total	.1%	.4%	.8%	.7%	2.4%
	NO OPINION/ DID NOT USE					
	Count	169	594	518	176	107
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	1.6%	5.7%	5.0%	1.7%	1.0%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	8.9%	12.4%	14.6%	11.1%	11.2%
	% of Total	.8%	2.7%	2.3%	.8%	.5%
Total						
	Count	1906	4805	3536	1579	957
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	8.5%	21.5%	15.8%	7.1%	4.3%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	8.5%	21.5%	15.8%	7.1%	4.3%

Crosstab

			c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	
			NO OPINION/ DID NOT USE	Total
c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY POOR	Count	116	1066
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	10.9%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	1.2%	4.8%
		% of Total	.5%	4.8%
	NO OPINION/ DID NOT USE	Count	8829	10393
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	85.0%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	92.0%	46.4%
		% of Total	39.5%	46.4%
Total		Count	9595	22378
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	42.9%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	100.0%	100.0%
		% of Total	42.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33731.671 [a]	25	.000
Likelihood Ratio	25148.190	25	.000
Linear-by-Linear Association	13101.134	1	.000
N of Valid Cases	22378		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 45.59.

```
DATASET ACTIVATE DataSet1.
DATASET CLOSE survey14.
DATASET COPY survey18.
DATASET ACTIVATE survey18.
FILTER OFF.
USE ALL.
SELECT IF (wave=18).
DATASET ACTIVATE DataSet1.
EXECUTE.
DATASET ACTIVATE survey18.
CROSSTABS
  /TABLES=c27 BY c28 c1701
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT ROW COLUMN TOTAL
  /COUNT ROUND CELL.
```

Crosstabs

[survey18]

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE * c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE	22811	90.1%	2502	9.9%	25313	100.0%
c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE * c1701 RATING OF ... THE EASE OF TICKET PURCHASE	21369	84.4%	3944	15.6%	25313	100.0%

c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE * c28 RATING OF ... THE RANGE OF TICI
S AVAILABLE

Crosstab

		c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE				
		VERY GOOD	FAIRLY GOOD	NEITHER GOOD NOR POOR	FAIRLY POOR	VERY POOR
c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY GOOD					
	Count	3102	820	244	69	36
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	68.7%	18.2%	5.4%	1.5%	.8%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	83.2%	12.0%	4.9%	3.8%	3.4%
	% of Total	13.6%	3.6%	1.1%	.3%	.2%
	FAIRLY GOOD					
	Count	457	4710	960	346	108
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	6.7%	69.3%	14.1%	5.1%	1.6%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	12.3%	69.0%	19.4%	18.9%	10.1%
	% of Total	2.0%	20.6%	4.2%	1.5%	.5%
	NEITHER GOOD NOR POOR					
	Count	69	779	2907	402	134
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	1.6%	17.5%	65.5%	9.1%	3.0%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	1.9%	11.4%	58.8%	22.0%	12.5%
	% of Total	.3%	3.4%	12.7%	1.8%	.6%
	FAIRLY POOR					
	Count	35	343	560	812	188
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	1.7%	16.7%	27.3%	39.6%	9.2%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	.9%	5.0%	11.3%	44.4%	17.6%
	% of Total	.2%	1.5%	2.5%	3.6%	.8%

Crosstab

			c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	Total
			NO OPINION/ DID NOT USE	
c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY GOOD	Count	245	4516
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	5.4%	100.0%
		% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE	5.5%	19.8%
		% of Total	1.1%	19.8%
	FAIRLY GOOD	Count	217	6798
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	3.2%	100.0%
		% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE	4.9%	29.8%
		% of Total	1.0%	29.8%
	NEITHER GOOD NOR POOR	Count	150	4441
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	3.4%	100.0%
		% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE	3.4%	19.5%
		% of Total	.7%	19.5%
	FAIRLY POOR	Count	114	2052
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	5.6%	100.0%
		% within c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE	2.6%	9.0%
		% of Total	.5%	9.0%

Crosstab

| | | c28 RATING OF ... THE RANGE OF TICKETS AVAILABLE | | | | |
		VERY GOOD	FAIRLY GOOD	NEITHER GOOD NOR POOR	FAIRLY POOR	VERY POOR
c27 RATING OF ... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY POOR					
	Count	24	73	152	165	583
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	2.2%	6.8%	14.1%	15.3%	54.2%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	.6%	1.1%	3.1%	9.0%	54.5%
	% of Total	.1%	.3%	.7%	.7%	2.6%
	NO OPINION/ DID NOT USE					
	Count	40	101	119	35	21
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	1.0%	2.6%	3.0%	.9%	.5%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	1.1%	1.5%	2.4%	1.9%	2.0%
	% of Total	.2%	.4%	.5%	.2%	.1%
Total						
	Count	3727	6826	4942	1829	1070
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	16.3%	29.9%	21.7%	8.0%	4.7%
	% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	16.3%	29.9%	21.7%	8.0%	4.7%

Crosstab

			c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	
			NO OPINION/ DID NOT USE	Total
c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY POOR	Count	78	1075
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	7.3%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	1.8%	4.7%
		% of Total	.3%	4.7%
	NO OPINION/ DID NOT USE	Count	3613	3929
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	92.0%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	81.8%	17.2%
		% of Total	15.8%	17.2%
	Total	Count	4417	22811
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	19.4%	100.0%
		% within c28 RATING OF... THE RANGE OF TICKETS AVAILABLE	100.0%	100.0%
		% of Total	19.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	42404.925 [a]	25	.000
Likelihood Ratio	30664.539	25	.000
Linear-by-Linear Association	14262.502	1	.000
N of Valid Cases	22811		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 50.43.

c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE * c1701 RATING OF... THE EASE OF TIC PURCHASE

Crosstab

		c1701 RATING OF... THE EASE OF TICKET PURCHASE					Total
		VERY GOOD	FAIRLY GOOD	NEITHER GOOD NOR POOR	FAIRLY POOR	VERY POOR	
c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY GOOD						
	Count	3944	478	62	33	22	4539
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	86.9%	10.5%	1.4%	.7%	.5%	100.0%
	% within c1701 RATING OF... THE EASE OF TICKET PURCHASE	43.0%	5.8%	2.8%	3.1%	3.4%	21.2%
	% of Total	18.5%	2.2%	.3%	.2%	.1%	21.2%
	FAIRLY GOOD						
	Count	2150	3897	459	221	75	6802
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	31.6%	57.3%	6.7%	3.2%	1.1%	100.0%
	% within c1701 RATING OF... THE EASE OF TICKET PURCHASE	23.5%	47.2%	20.6%	20.9%	11.5%	31.8%
	% of Total	10.1%	18.2%	2.1%	1.0%	.4%	31.8%
	NEITHER GOOD NOR POOR						
	Count	1075	1943	1030	289	107	4444
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	24.2%	43.7%	23.2%	6.5%	2.4%	100.0%
	% within c1701 RATING OF... THE EASE OF TICKET PURCHASE	11.7%	23.5%	46.3%	27.3%	16.3%	20.8%
	% of Total	5.0%	9.1%	4.8%	1.4%	.5%	20.8%
	FAIRLY POOR						
	Count	335	896	340	328	152	2051
	% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	16.3%	43.7%	16.6%	16.0%	7.4%	100.0%
	% within c1701 RATING OF... THE EASE OF TICKET PURCHASE	3.7%	10.8%	15.3%	31.0%	23.2%	9.6%
	% of Total	1.6%	4.2%	1.6%	1.5%	.7%	9.6%

Crosstab

| | | | c1701 RATING OF... THE EASE OF TICKET PURCHASE | | | | |
			VERY GOOD	FAIRLY GOOD	NEITHER GOOD NOR POOR	FAIRLY POOR	VERY POOR	Total
c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	VERY POOR	Count	201	320	164	130	263	1078
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	18.6%	29.7%	15.2%	12.1%	24.4%	100.0%
		% within c1701 RATING OF... THE EASE OF TICKET PURCHASE	2.2%	3.9%	7.4%	12.3%	40.2%	5.0%
		% of Total	.9%	1.5%	.8%	.6%	1.2%	5.0%
	NO OPINION/ DID NOT USE	Count	1461	729	171	58	36	2455
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	59.5%	29.7%	7.0%	2.4%	1.5%	100.0%
		% within c1701 RATING OF... THE EASE OF TICKET PURCHASE	15.9%	8.8%	7.7%	5.5%	5.5%	11.5%
		% of Total	6.8%	3.4%	.8%	.3%	.2%	11.5%
Total		Count	9166	8263	2226	1059	655	21369
		% within c27 RATING OF... THE INFORMATION PROVIDED ABOUT TICKETS AVAILABLE	42.9%	38.7%	10.4%	5.0%	3.1%	100.0%
		% within c1701 RATING OF... THE EASE OF TICKET PURCHASE	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	42.9%	38.7%	10.4%	5.0%	3.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8987.820[a]	20	.000
Likelihood Ratio	8038.746	20	.000
Linear-by-Linear Association	1197.713	1	.000
N of Valid Cases	21369		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 33.04.

```
GET
  FILE='C:\Documents and Settings\GFS\.spss\waves10to19.sav'.
DATASET COPY mainpurpose.
DATASET ACTIVATE mainpurpose.
FILTER OFF.
USE ALL.
SELECT IF (wave=12).
DATASET ACTIVATE DataSet1.
EXECUTE.
DATASET ACTIVATE mainpurpose.
CROSSTABS
  /TABLES=c76 BY c71
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT ROW COLUMN TOTAL
  /COUNT ROUND CELL.
```

Crosstabs

[mainpurpose]

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP	27572	98.2%	502	1.8%	28074	100.0%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

			c71 OVERALL SATISFACTION WITH TRIP				
			VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
c76 MAIN PURPOSE OF TRIP	"DAILY COMMUTING TO/ FROM WORK	Count	1637	3971	1537	845	405
		% within c76 MAIN PURPOSE OF TRIP	19.5%	47.3%	18.3%	10.1%	4.8%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

			c71 OVERALL SATISFACTION WITH TRIP	
			NO OPINION/ DON'T KNOW	Total
c76 MAIN PURPOSE OF TRIP	*DAILY COMMUTING TO/ FROM WORK	Count	8	8403
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

c76 MAIN PURPOSE OF TRIP		c71 OVERALL SATISFACTION WITH TRIP				
		VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
*DAILY COMMUTING TO/ FROM WORK	% within c71 OVERALL SATISFACTION WITH TRIP	19.2%	30.9%	42.6%	47.7%	51.5%
	% of Total	5.9%	14.4%	5.6%	3.1%	1.5%
*LESS REGULAR COMMUTING TO/ FROM WORK	Count	600	1144	341	170	60
	% within c76 MAIN PURPOSE OF TRIP	25.9%	49.3%	14.7%	7.3%	2.6%
	% within c71 OVERALL SATISFACTION WITH TRIP	7.0%	8.9%	9.5%	9.8%	7.6%
	% of Total	2.2%	4.1%	1.2%	.6%	.2%
**DAILY COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SCHOOL/ U	Count	182	419	150	53	15
	% within c76 MAIN PURPOSE OF TRIP	22.1%	50.8%	18.2%	6.4%	1.8%
	% within c71 OVERALL SATISFACTION WITH TRIP	2.1%	3.3%	4.2%	3.0%	1.9%
	% of Total	.7%	1.5%	.5%	.2%	.1%
**LESS REGULAR COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SC	Count	255	462	103	51	11
	% within c76 MAIN PURPOSE OF TRIP	28.9%	52.3%	11.7%	5.8%	1.2%
	% within c71 OVERALL SATISFACTION WITH TRIP	3.0%	3.6%	2.9%	2.9%	1.4%
	% of Total	.9%	1.7%	.4%	.2%	.0%
ON COMPANY BUSINESS (OR OWN IF SELF EMPLOYED)	Count	1406	2301	554	251	100
	% within c76 MAIN PURPOSE OF TRIP	30.5%	49.9%	12.0%	5.4%	2.2%
	% within c71 OVERALL SATISFACTION WITH TRIP	16.5%	17.9%	15.4%	14.2%	12.7%
	% of Total	5.1%	8.3%	2.0%	.9%	.4%
ON PERSONAL BUSINESS	Count	582	699	153	54	26
	% within c76 MAIN PURPOSE OF TRIP	38.4%	46.1%	10.1%	3.6%	1.7%
	% within c71 OVERALL SATISFACTION WITH TRIP	6.8%	5.4%	4.2%	3.0%	3.3%
	% of Total	2.1%	2.5%	.6%	.2%	.1%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

c76 MAIN PURPOSE OF TRIP		c71 OVERALL SATISFACTION WITH TRIP — NO OPINION/ DON'T KNOW	Total
*DAILY COMMUTING TO/ FROM WORK	% within c71 OVERALL SATISFACTION WITH TRIP	22.2%	30.5%
	% of Total	.0%	30.5%
*LESS REGULAR COMMUTING TO/ FROM WORK	Count	5	2320
	% within c76 MAIN PURPOSE OF TRIP	.2%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	13.9%	8.4%
	% of Total	.0%	8.4%
**DAILY COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SCHOOL/ U	Count	5	824
	% within c76 MAIN PURPOSE OF TRIP	.6%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	13.9%	3.0%
	% of Total	.0%	3.0%
**LESS REGULAR COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SC	Count	1	883
	% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	2.8%	3.2%
	% of Total	.0%	3.2%
ON COMPANY BUSINESS (OR OWN IF SELF EMPLOYED)	Count	3	4615
	% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	8.3%	16.7%
	% of Total	.0%	16.7%
ON PERSONAL BUSINESS	Count	2	1516
	% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	5.6%	5.5%
	% of Total	.0%	5.5%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

		c71 OVERALL SATISFACTION WITH TRIP				
		VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
c76 MAIN PURPOSE OF TRIP	VISITING FRIENDS OR RELATIVES					
	Count	1730	1822	367	184	91
	% within c76 MAIN PURPOSE OF TRIP	41.2%	43.4%	8.7%	4.4%	2.2%
	% within c71 OVERALL SATISFACTION WITH TRIP	20.3%	14.2%	10.2%	10.4%	11.6%
	% of Total	6.3%	6.6%	1.3%	.7%	.3%
	SHOPPING TRIP					
	Count	640	540	84	39	15
	% within c76 MAIN PURPOSE OF TRIP	48.4%	40.9%	6.4%	3.0%	1.1%
	% within c71 OVERALL SATISFACTION WITH TRIP	7.5%	4.2%	2.3%	2.2%	1.9%
	% of Total	2.3%	2.0%	.3%	.1%	.1%
	TRAVEL TO/ FROM HOLIDAY					
	Count	305	305	50	32	12
	% within c76 MAIN PURPOSE OF TRIP	43.3%	43.3%	7.1%	4.5%	1.7%
	% within c71 OVERALL SATISFACTION WITH TRIP	3.6%	2.4%	1.4%	1.8%	1.5%
	% of Total	1.1%	1.1%	.2%	.1%	.0%
	A DAY OUT					
	Count	578	544	118	40	20
	% within c76 MAIN PURPOSE OF TRIP	44.4%	41.7%	9.1%	3.1%	1.5%
	% within c71 OVERALL SATISFACTION WITH TRIP	6.8%	4.2%	3.3%	2.3%	2.5%
	% of Total	2.1%	2.0%	.4%	.1%	.1%
	SPORT					
	Count	94	129	22	12	4
	% within c76 MAIN PURPOSE OF TRIP	36.0%	49.4%	8.4%	4.6%	1.5%
	% within c71 OVERALL SATISFACTION WITH TRIP	1.1%	1.0%	.6%	.7%	.5%
	% of Total	.3%	.5%	.1%	.0%	.0%

c76 MAIN PURPOSE OF TRIP		c71 OVERALL SATISFACTION WITH TRIP	Total
		NO OPINION/ DON'T KNOW	
VISITING FRIENDS OR RELATIVES	Count	3	4197
	% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	8.3%	15.2%
	% of Total	.0%	15.2%
SHOPPING TRIP	Count	3	1321
	% within c76 MAIN PURPOSE OF TRIP	.2%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	8.3%	4.8%
	% of Total	.0%	4.8%
TRAVEL TO/ FROM HOLIDAY	Count	1	705
	% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	2.8%	2.6%
	% of Total	.0%	2.6%
A DAY OUT	Count	3	1303
	% within c76 MAIN PURPOSE OF TRIP	.2%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	8.3%	4.7%
	% of Total	.0%	4.7%
SPORT	Count	0	261
	% within c76 MAIN PURPOSE OF TRIP	.0%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	.0%	.9%
	% of Total	.0%	.9%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

		c71 OVERALL SATISFACTION WITH TRIP				
		VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
c76 MAIN PURPOSE OF TRIP	OTHER LEISURE TRIP					
	Count	521	504	127	42	28
	% within c76 MAIN PURPOSE OF TRIP	42.6%	41.2%	10.4%	3.4%	2.3%
	% within c71 OVERALL SATISFACTION WITH TRIP	6.1%	3.9%	3.5%	2.4%	3.6%
	% of Total	1.9%	1.8%	.5%	.2%	.1%
Total	Count	8530	12840	3606	1773	787
	% within c76 MAIN PURPOSE OF TRIP	30.9%	46.6%	13.1%	6.4%	2.9%
	% within c71 OVERALL SATISFACTION WITH TRIP	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	30.9%	46.6%	13.1%	6.4%	2.9%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

		c71 OVERALL SATISFACTION WITH TRIP	
		NO OPINION/ DON'T KNOW	Total
c76 MAIN PURPOSE OF TRIP	OTHER LEISURE TRIP		
	Count	2	1224
	% within c76 MAIN PURPOSE OF TRIP	.2%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	5.6%	4.4%
	% of Total	.0%	4.4%
Total	Count	36	27572
	% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	100.0%	100.0%
	% of Total	.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1784.645[a]	55	.000
Likelihood Ratio	1778.800	55	.000
Linear-by-Linear Association	1248.661	1	.000
N of Valid Cases	27572		

a. 9 cells (12.5%) have expected count less than 5. The minimum expected count is .34.

CROSSTABS

/TABLES=c76 BY c71

/FORMAT=AVALUE TABLES

/STATISTICS=CHISQ

/CELLS=COUNT ROW COLUMN TOTAL

/COUNT ROUND CELL.

Crosstabs

[mainpurpose14]

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP	25948	98.3%	440	1.7%	26388	100.0%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

		c71 OVERALL SATISFACTION WITH TRIP				
		VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
c76 MAIN PURPOSE OF TRIP	*DAILY COMMUTING TO/ FROM WORK	Count	1797	4353	1490	742	315
		% within c76 MAIN PURPOSE OF TRIP	20.6%	50.0%	17.1%	8.5%	3.6%
		% within c71 OVERALL SATISFACTION WITH TRIP	21.1%	35.1%	49.7%	51.1%	56.6%
		% of Total	6.9%	16.8%	5.7%	2.9%	1.2%
	*LESS REGULAR COMMUTING TO/ FROM WORK	Count	732	1271	316	167	58
		% within c76 MAIN PURPOSE OF TRIP	28.8%	49.9%	12.4%	6.6%	2.3%
		% within c71 OVERALL SATISFACTION WITH TRIP	8.6%	10.3%	10.5%	11.5%	10.4%
		% of Total	2.8%	4.9%	1.2%	.6%	.2%

			c71 OVERALL SATISFACTIO N WITH TRIP	
			NO OPINION/ DON'T KNOW	Total
c76 MAIN PURPOSE OF TRIP	*DAILY COMMUTING TO/ FROM WORK	Count	11	8708
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	37.9%	33.6%
		% of Total	.0%	33.6%
	*LESS REGULAR COMMUTING TO/ FROM WORK	Count	2	2546
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	6.9%	9.8%
		% of Total	.0%	9.8%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

			c71 OVERALL SATISFACTION WITH TRIP				
			VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
c76 MAIN PURPOSE OF TRIP	**DAILY COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SCHOOL/ U	Count	182	382	102	31	16
		% within c76 MAIN PURPOSE OF TRIP	25.5%	53.4%	14.3%	4.3%	2.2%
		% within c71 OVERALL SATISFACTION WITH TRIP	2.1%	3.1%	3.4%	2.1%	2.9%
		% of Total	.7%	1.5%	.4%	.1%	.1%
	**LESS REGULAR COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SC	Count	223	445	79	28	8
		% within c76 MAIN PURPOSE OF TRIP	28.4%	56.8%	10.1%	3.6%	1.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	2.6%	3.6%	2.6%	1.9%	1.4%
		% of Total	.9%	1.7%	.3%	.1%	.0%
	ON COMPANY BUSINESS (OR OWN IF SELF EMPLOYED)	Count	1305	2092	380	197	54
		% within c76 MAIN PURPOSE OF TRIP	32.4%	51.9%	9.4%	4.9%	1.3%
		% within c71 OVERALL SATISFACTION WITH TRIP	15.3%	16.9%	12.7%	13.6%	9.7%
		% of Total	5.0%	8.1%	1.5%	.8%	.2%
	ON PERSONAL BUSINESS	Count	590	684	109	44	17
		% within c76 MAIN PURPOSE OF TRIP	40.9%	47.4%	7.5%	3.0%	1.2%
		% within c71 OVERALL SATISFACTION WITH TRIP	6.9%	5.5%	3.6%	3.0%	3.1%
		% of Total	2.3%	2.6%	.4%	.2%	.1%
	VISITING FRIENDS OR RELATIVES	Count	1665	1470	280	144	49
		% within c76 MAIN PURPOSE OF TRIP	46.1%	40.7%	7.7%	4.0%	1.4%
		% within c71 OVERALL SATISFACTION WITH TRIP	19.6%	11.9%	9.3%	9.9%	8.8%
		% of Total	6.4%	5.7%	1.1%	.6%	.2%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

c76 MAIN PURPOSE OF TRIP			c71 OVERALL SATISFACTION WITH TRIP — NO OPINION/ DON'T KNOW	Total
**DAILY COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SCHOOL/U		Count	2	715
		% within c76 MAIN PURPOSE OF TRIP	.3%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	6.9%	2.8%
		% of Total	.0%	2.8%
**LESS REGULAR COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SC		Count	1	784
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	3.4%	3.0%
		% of Total	.0%	3.0%
ON COMPANY BUSINESS (OR OWN IF SELF EMPLOYED)		Count	6	4034
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	20.7%	15.5%
		% of Total	.0%	15.5%
ON PERSONAL BUSINESS		Count	0	1444
		% within c76 MAIN PURPOSE OF TRIP	.0%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	.0%	5.6%
		% of Total	.0%	5.6%
VISITING FRIENDS OR RELATIVES		Count	6	3614
		% within c76 MAIN PURPOSE OF TRIP	.2%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	20.7%	13.9%
		% of Total	.0%	13.9%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

		c71 OVERALL SATISFACTION WITH TRIP				
		VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
c76 MAIN PURPOSE OF TRIP	SHOPPING TRIP					
	Count	650	479	75	30	10
	% within c76 MAIN PURPOSE OF TRIP	52.3%	38.5%	6.0%	2.4%	.8%
	% within c71 OVERALL SATISFACTION WITH TRIP	7.6%	3.9%	2.5%	2.1%	1.8%
	% of Total	2.5%	1.8%	.3%	.1%	.0%
	TRAVEL TO/ FROM HOLIDAY					
	Count	342	299	35	14	11
	% within c76 MAIN PURPOSE OF TRIP	48.8%	42.7%	5.0%	2.0%	1.6%
	% within c71 OVERALL SATISFACTION WITH TRIP	4.0%	2.4%	1.2%	1.0%	2.0%
	% of Total	1.3%	1.2%	.1%	.1%	.0%
	A DAY OUT					
	Count	554	434	65	24	8
	% within c76 MAIN PURPOSE OF TRIP	51.0%	40.0%	6.0%	2.2%	.7%
	% within c71 OVERALL SATISFACTION WITH TRIP	6.5%	3.5%	2.2%	1.7%	1.4%
	% of Total	2.1%	1.7%	.3%	.1%	.0%
	SPORT					
	Count	71	102	15	6	3
	% within c76 MAIN PURPOSE OF TRIP	36.0%	51.8%	7.6%	3.0%	1.5%
	% within c71 OVERALL SATISFACTION WITH TRIP	.8%	.8%	.5%	.4%	.5%
	% of Total	.3%	.4%	.1%	.0%	.0%
	OTHER LEISURE TRIP					
	Count	403	388	52	24	8
	% within c76 MAIN PURPOSE OF TRIP	46.1%	44.3%	5.9%	2.7%	.9%
	% within c71 OVERALL SATISFACTION WITH TRIP	4.7%	3.1%	1.7%	1.7%	1.4%
	% of Total	1.6%	1.5%	.2%	.1%	.0%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

c76 MAIN PURPOSE OF TRIP			c71 OVERALL SATISFACTION WITH TRIP	
			NO OPINION/ DON'T KNOW	Total
c76 MAIN PURPOSE OF TRIP	SHOPPING TRIP	Count	0	1244
		% within c76 MAIN PURPOSE OF TRIP	.0%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	.0%	4.8%
		% of Total	.0%	4.8%
	TRAVEL TO/ FROM HOLIDAY	Count	0	701
		% within c76 MAIN PURPOSE OF TRIP	.0%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	.0%	2.7%
		% of Total	.0%	2.7%
	A DAY OUT	Count	1	1086
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	3.4%	4.2%
		% of Total	.0%	4.2%
	SPORT	Count	0	197
		% within c76 MAIN PURPOSE OF TRIP	.0%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	.0%	.8%
		% of Total	.0%	.8%
	OTHER LEISURE TRIP	Count	0	875
		% within c76 MAIN PURPOSE OF TRIP	.0%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	.0%	3.4%
		% of Total	.0%	3.4%

		c71 OVERALL SATISFACTION WITH TRIP				
		VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
Total	Count	8514	12399	2998	1451	557
	% within c76 MAIN PURPOSE OF TRIP	32.8%	47.8%	11.6%	5.6%	2.1%
	% within c71 OVERALL SATISFACTION WITH TRIP	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	32.8%	47.8%	11.6%	5.6%	2.1%

		c71 OVERALL SATISFACTION WITH TRIP	
		NO OPINION/ DON'T KNOW	Total
Total	Count	29	25948
	% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	100.0%	100.0%
	% of Total	.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1977.779[a]	55	.000
Likelihood Ratio	1986.913	55	.000
Linear-by-Linear Association	1439.774	1	.000
N of Valid Cases	25948		

a. 12 cells (16.7%) have expected count less than 5. The minimum expected count is .22.

```
GET
  FILE='C:\Documents and Settings\GFS\.spss\waves10to19.sav'.
DATASET COPY mainpurpose18.
DATASET ACTIVATE mainpurpose18.
FILTER OFF.
USE ALL.
SELECT IF (wave=18).
DATASET ACTIVATE DataSet1.
EXECUTE.
DATASET ACTIVATE mainpurpose18.
CROSSTABS
  /TABLES=c76 BY c71
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ
  /CELLS=COUNT ROW COLUMN TOTAL
  /COUNT ROUND CELL.
```

Crosstabs

[mainpurpose18]

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP	24875	98.3%	438	1.7%	25313	100.0%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

		c71 OVERALL SATISFACTION WITH TRIP				
		VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
c76 MAIN PURPOSE OF TRIP	"DAILY COMMUTING TO/ FROM WORK" Count	1535	3487	1250	612	255
	% within c76 MAIN PURPOSE OF TRIP	21.5%	48.8%	17.5%	8.6%	3.6%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

c76 MAIN PURPOSE OF TRIP			c71 OVERALL SATISFACTION WITH TRIP	
			NO OPINION/ DON'T KNOW	Total
c76 MAIN PURPOSE OF TRIP	*DAILY COMMUTING TO/ FROM WORK	Count	7	7146
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

c76 MAIN PURPOSE OF TRIP		c71 OVERALL SATISFACTION WITH TRIP				
		VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
*DAILY COMMUTING TO/ FROM WORK	% within c71 OVERALL SATISFACTION WITH TRIP	19.2%	29.3%	41.4%	44.6%	46.2%
	% of Total	6.2%	14.0%	5.0%	2.5%	1.0%
*LESS REGULAR COMMUTING TO/ FROM WORK	Count	655	1233	344	158	59
	% within c76 MAIN PURPOSE OF TRIP	26.7%	50.3%	14.0%	6.4%	2.4%
	% within c71 OVERALL SATISFACTION WITH TRIP	8.2%	10.4%	11.4%	11.5%	10.7%
	% of Total	2.8%	5.0%	1.4%	.6%	.2%
**DAILY COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SCHOOL/ U	Count	161	360	91	31	13
	% within c76 MAIN PURPOSE OF TRIP	24.5%	54.8%	13.9%	4.7%	2.0%
	% within c71 OVERALL SATISFACTION WITH TRIP	2.0%	3.0%	3.0%	2.3%	2.4%
	% of Total	.8%	1.4%	.4%	.1%	.1%
**LESS REGULAR COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SC	Count	202	390	80	26	9
	% within c76 MAIN PURPOSE OF TRIP	28.5%	55.1%	11.3%	3.7%	1.3%
	% within c71 OVERALL SATISFACTION WITH TRIP	2.5%	3.3%	2.6%	1.9%	1.6%
	% of Total	.8%	1.6%	.3%	.1%	.0%
ON COMPANY BUSINESS (OR OWN IF SELF EMPLOYED)	Count	1179	2094	452	191	60
	% within c76 MAIN PURPOSE OF TRIP	29.6%	52.6%	11.4%	4.8%	1.5%
	% within c71 OVERALL SATISFACTION WITH TRIP	14.7%	17.6%	15.0%	13.9%	10.9%
	% of Total	4.7%	8.4%	1.8%	.8%	.2%
ON PERSONAL BUSINESS	Count	549	606	152	48	21
	% within c76 MAIN PURPOSE OF TRIP	39.8%	44.0%	11.0%	3.5%	1.5%
	% within c71 OVERALL SATISFACTION WITH TRIP	6.9%	5.1%	5.0%	3.5%	3.8%
	% of Total	2.2%	2.4%	.6%	.2%	.1%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

c76 MAIN PURPOSE OF TRIP			c71 OVERALL SATISFACTION WITH TRIP — NO OPINION/DON'T KNOW	Total
*DAILY COMMUTING TO/ FROM WORK		% within c71 OVERALL SATISFACTION WITH TRIP	29.2%	28.7%
		% of Total	.0%	28.7%
*LESS REGULAR COMMUTING TO/ FROM WORK	Count		1	2450
		% within c78 MAIN PURPOSE OF TRIP	.0%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	4.2%	9.8%
		% of Total	.0%	9.8%
**DAILY COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SCHOOL/ U	Count		1	657
		% within c76 MAIN PURPOSE OF TRIP	.2%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	4.2%	2.6%
		% of Total	.0%	2.6%
**LESS REGULAR COMMUTING FOR EDUCATION (TO/ FROM COLLEGE/ SC	Count		1	708
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	4.2%	2.8%
		% of Total	.0%	2.8%
ON COMPANY BUSINESS (OR OWN IF SELF EMPLOYED)	Count		4	3980
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	16.7%	16.0%
		% of Total	.0%	16.0%
ON PERSONAL BUSINESS	Count		2	1378
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	8.3%	5.5%
		% of Total	.0%	5.5%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

			c71 OVERALL SATISFACTION WITH TRIP				
			VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
c76 MAIN PURPOSE OF TRIP	VISITING FRIENDS OR RELATIVES	Count	1540	1695	300	150	66
		% within c76 MAIN PURPOSE OF TRIP	41.0%	45.2%	8.0%	4.0%	1.8%
		% within c71 OVERALL SATISFACTION WITH TRIP	19.3%	14.2%	9.9%	10.9%	12.0%
		% of Total	6.2%	6.8%	1.2%	.6%	.3%
	SHOPPING TRIP	Count	668	508	82	27	16
		% within c76 MAIN PURPOSE OF TRIP	51.3%	39.0%	6.3%	2.1%	1.2%
		% within c71 OVERALL SATISFACTION WITH TRIP	8.4%	4.3%	2.7%	2.0%	2.9%
		% of Total	2.7%	2.0%	.3%	.1%	.1%
	TRAVEL TO/ FROM HOLIDAY	Count	292	341	52	35	14
		% within c76 MAIN PURPOSE OF TRIP	39.7%	46.3%	7.1%	4.8%	1.9%
		% within c71 OVERALL SATISFACTION WITH TRIP	3.7%	2.9%	1.7%	2.6%	2.5%
		% of Total	1.2%	1.4%	.2%	.1%	.1%
	A DAY OUT	Count	650	555	90	49	18
		% within c76 MAIN PURPOSE OF TRIP	47.7%	40.7%	6.6%	3.6%	1.3%
		% within c71 OVERALL SATISFACTION WITH TRIP	8.1%	4.7%	3.0%	3.6%	3.3%
		% of Total	2.6%	2.2%	.4%	.2%	.1%
	SPORT	Count	80	125	30	12	5
		% within c76 MAIN PURPOSE OF TRIP	31.6%	49.4%	11.9%	4.7%	2.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	1.0%	1.0%	1.0%	.9%	.9%
		% of Total	.3%	.5%	.1%	.0%	.0%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

			c71 OVERALL SATISFACTION WITH TRIP	Total
			NO OPINION/ DON'T KNOW	
c76 MAIN PURPOSE OF TRIP	VISITING FRIENDS OR RELATIVES	Count	1	3752
		% within c76 MAIN PURPOSE OF TRIP	.0%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	4.2%	15.1%
		% of Total	.0%	15.1%
	SHOPPING TRIP	Count	2	1303
		% within c76 MAIN PURPOSE OF TRIP	.2%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	8.3%	5.2%
		% of Total	.0%	5.2%
	TRAVEL TO/ FROM HOLIDAY	Count	2	736
		% within c76 MAIN PURPOSE OF TRIP	.3%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	8.3%	3.0%
		% of Total	.0%	3.0%
	A DAY OUT	Count	1	1363
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	4.2%	5.5%
		% of Total	.0%	5.5%
	SPORT	Count	1	253
		% within c76 MAIN PURPOSE OF TRIP	.4%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	4.2%	1.0%
		% of Total	.0%	1.0%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

			c71 OVERALL SATISFACTION WITH TRIP				
			VERY SATISFIED	FAIRLY SATISFIED	NEITHER SATISFIED NOR DISSATISFIED	FAIRLY DISSATISFIED	VERY DISSATISFIED
c76 MAIN PURPOSE OF TRIP	OTHER LEISURE TRIP	Count	488	515	97	32	16
		% within c76 MAIN PURPOSE OF TRIP	42.5%	44.8%	8.4%	2.8%	1.4%
		% within c71 OVERALL SATISFACTION WITH TRIP	6.1%	4.3%	3.2%	2.3%	2.9%
		% of Total	2.0%	2.1%	.4%	.1%	.1%
	Total	Count	7999	11909	3020	1371	552
		% within c76 MAIN PURPOSE OF TRIP	32.2%	47.9%	12.1%	5.5%	2.2%
		% within c71 OVERALL SATISFACTION WITH TRIP	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	32.2%	47.9%	12.1%	5.5%	2.2%

c76 MAIN PURPOSE OF TRIP * c71 OVERALL SATISFACTION WITH TRIP Crosstabulation

			c71 OVERALL SATISFACTION WITH TRIP	
			NO OPINION/ DON'T KNOW	Total
c76 MAIN PURPOSE OF TRIP	OTHER LEISURE TRIP	Count	1	1149
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	4.2%	4.6%
		% of Total	.0%	4.6%
	Total	Count	24	24875
		% within c76 MAIN PURPOSE OF TRIP	.1%	100.0%
		% within c71 OVERALL SATISFACTION WITH TRIP	100.0%	100.0%
		% of Total	.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1451.326 [a]	55	.000
Likelihood Ratio	1439.618	55	.000
Linear-by-Linear Association	967.633	1	.000
N of Valid Cases	24875		

a. 11 cells (15.3%) have expected count less than 5. The minimum expected count is .24.