1. Introduction

THE BELFAST METROPOLITAN TRANSPORT PLAN

1.1   This document presents the **Belfast Metropolitan Transport Plan (BMTP)**: a comprehensive and realistic local transport plan for the Belfast Metropolitan Area (BMA) up to 2015.

1.2   The transport plan has been prepared by the Department for Regional Development (DRD). It takes forward the strategic initiatives of the **Regional Transportation Strategy (RTS)** for Northern Ireland (NI) 2002-2012, setting out detailed transport proposals for the BMA in a form that will enable them to move towards implementation **(subject to detailed economic appraisal, funding availability and statutory processes)**.

1.3   The location of the BMA within NI is shown in Figure 1.1.

Figure 1.1 – The Belfast Metropolitan Area within the Northern Ireland Region

1.4   The BMA plays a number of vital functions as the heart of the NI region. It is the region's economic engine as well as being the regional centre for administration, specialised high order services and cultural amenities. It is also NI's major transport hub and the main transport gateway to the rest of the United Kingdom (UK) and Europe. As identified by **Shaping Our Future : Regional Development Strategy (RDS)**, **for Northern Ireland 2025** published by the DRD on 20th September 2001, a strong and vibrant metropolitan area is fundamental to the continuing social and economic development of the region. The RDS sets out a long-term strategy to create a thriving metropolitan area centred on a revitalised city of Belfast.

1.5   An efficient, safe, environmentally acceptable and sustainable transport system is an essential element of this long-term strategy for the city. Transport has suffered from many years of under-investment. The existing transport system needs substantial new investment to transform it into the modern integrated transport system which the RDS sees as critical to support its wider sustainable development, urban renewal and renaissance strategy for the BMA. The implementation of the BMTP within the framework set by the RTS would represent a major investment in existing and new transport infrastructure and services.

1.6   Transport problems are already adversely affecting the environment and the quality of life in the metropolitan area and, because of increasing congestion, are impacting upon the economic competitiveness of the BMA and NI as a whole. There are also increasing concerns about road safety on the BMA's highway network. The Plan sets out a range of proposals aimed at addressing these problems that, when implemented, would start the move towards the type of sustainable and safe transport system that can genuinely support the longer-term aspirations of the RDS.

1.7   The Plan's proposals as set out in this document represent a balanced and multi-modal approach to transport that takes into account the latest UK guidance and experience on sustainable local transport provision. It provides comprehensive proposals for all modes of transport throughout the BMA. The Plan will provide for and encourage greater use of public transport and greater levels of walking and cycling whilst also supporting an appropriate level of movement of cars and goods vehicles which, realistically, will remain the most used mode of travel in the BMA during the Plan period. The proposals also recognise the important role that transport can play alongside other government initiatives in helping social inclusion by providing better access to employment, health and leisure facilities.

1.8   Many of the transport problems faced in the BMA are not yet as severe as they are in other metropolitan areas in the UK so the timely implementation of the BMTP would represent a major opportunity to develop a more sustainable approach to transport before many of these problems become overwhelming.

1.9   The Plan builds on the substantial work already undertaken by the DRD in developing the RTS. As well as setting the strategic direction for transport across NI up to 2012, the RTS provides a clear funding framework, identifying the level of expenditure that needs to be directed at the various modes of transport over the coming years to upgrade the system. The costings in the BMTP are compatible with the funding guidance given by the RTS.

1.10   The development of the BMTP has been informed by extensive consultation with public representatives, stakeholders and reference groups. The consultation has shown that there is widespread support for the type of proposals that are being put forward as part of a balanced transport plan. The publication of the Plan maintains the considerable momentum that has been gathered in support of the modern transport system the BMA needs and deserves.

1.11   The development of a comprehensive Plan commanding widespread support is a major step forward in developing a more sustainable transport system for the BMA.

THE PURPOSE OF THIS DOCUMENT

1.12   This document describes the BMTP in detail identifying the transport schemes and measures expected to be implemented up to 2015.

1.13   It first describes the rigorous process that has been employed to develop the Plan – ensuring that its formulation has considered a wide range of transport solutions covering all modes of transport and the promotion of integration between land use and transport. It also describes how a very extensive consultation exercise to obtain views on emerging proposals, culminating in a Working Conference held in February 2003, has shaped the formulation of the Plan.

1.14   It then presents a programme for action in terms of transport proposals and priorities up until 2015. The programme identifies a range of initiatives aimed at delivering a modern integrated transport system for the BMA that is in line with the NI-wide RTS; is framed by a longer-term transportation vision for the metropolitan area and is supportive of the local sustainable development objectives and spatial development strategy for the BMA as set out in the RDS. **Implementation of the programme will be subject to statutory processes, economic appraisal and to the availability of resources.**

THE POLICY CONTEXT

1.15   The development of the BMTP has not been undertaken from scratch. It forms one part of an integrated planning process for NI and the BMA, shown in Figure 1.2.

1.16   As shown, the BMTP has been guided by UK and NI policy, including that set out in the 1998 Northern Ireland Transport Policy Statement '**Moving Forward**'. This statement outlined a strategy for implementing the UK Government's White Paper 'A New Deal for Transport: Better for Everyone' in the special context of NI. This informed the NI-wide strategies set out in the RTS and RDS.

1.17   The RTS, which is a daughter document of the RDS, published in November 2001, sets out a strategic framework for the future planning, funding and delivery of transportation[2] throughout the region over the 10 year period to 2012. The strategic direction and underlying principles of the RTS were approved by the Northern Ireland Assembly in July 2002.

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[2] Funding for schemes in the strategy will be dependent upon normal budgetary processes, economic and other appraisals and the completion of statutory processes.

1.18   The implementation of the RTS is through three transport plans covering the Regional Strategic Transport Network (RSTN), the Belfast Metropolitan Area (BMA) and the remainder of NI, known as the Sub-Region.

1.19   The BMTP is the local non-statutory transport plan for the BMA and sets out transport schemes and measures expected to be implemented up to 2015.

1.20   The BMTP has also been guided by a range of policy statements covering transportation and land use[3], environment, social inclusion, economy, health and education.
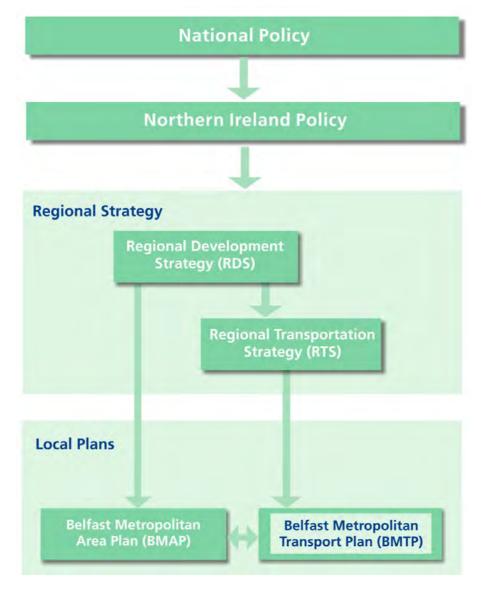

Figure 1.2 – The BMTP as Part of an Integrated Planning Process

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[3] PPS 3 (Access, Movement and Parking) and PPS 13 (Transportation and Land Use)

The Accessible Transport Strategy

1.21   The RTS committed the Department to prepare an Accessible Transport Strategy (ATS) for Northern Ireland (see panel). The developing ATS has given further guidance to the BMTP on issues of accessibility, specifically regarding issues faced by people with disabilities, older people and people with dependants.

> Accessible Transport Strategy
>
> The RTS acknowledged that many people in Northern Ireland are unable to use, or make full use of our transportation system because of the barriers they face. These can be physical barriers that are present in the built environment or due to the design of vehicles but they can also stem from issues such as society and individuals' attitudes, the design of services and ways in which information is provided.
>
> The Government is fully committed to an inclusive society in which nobody is disadvantaged. Work to improve the accessibility of the transportation system is a key part of that commitment. As a major element of this the RTS committed the Department to prepare an Accessible Transport Strategy for Northern Ireland (ATS).
>
> Work is currently underway in developing the ATS and the Department aims to publish in 2005.

Integration with the BMA Development Plan

1.22   The BMTP is integrated with the 2015 Development Plan for the BMA – the Belfast Metropolitan Area Plan (BMAP), with the plans being developed in parallel. On adoption, the BMAP replaces a number of existing plans.

1.23   The BMAP sets out the future land use for the BMA. It incorporates supporting proposals included in the transport plan which will then be subject to scrutiny through the development plan's statutory process.

1.24   BMTP and BMAP are fundamental elements in implementing the RTS and RDS. Close liaison and joint working arrangements between the teams developing BMTP and BMAP have ensured that the plans are mutually supportive and that land use and transportation proposals and strategies are co-ordinated and integrated. In this respect land use allocations in BMAP are closely linked with priorities and proposed transport investment set out in BMTP. In developing BMTP attention was paid to improving accessibility to key strategic sites and regeneration areas identified by the RDS and being progressed by BMAP. In addition, BMAP has taken into account the land use requirements for new transport infrastructure within its overall assessment of future land use within the BMA.

1.25   The 2015 transport plan has been developed and assessed making use of BMAP's projections of future land use and development. In particular, considerable attention has been paid to developing transport proposals that support BMAP's regeneration and employment initiatives including the development of major strategic employment sites.

1.26   The BMTP and BMAP teams have also worked closely in developing proposals for the main urban centres, balancing transport needs against wider urban design objectives.

> The Plan Period
>
> The BMTP covers the period up to the end of 2015. This is to enable the BMTP to support the Belfast Metropolitan Area Plan (BMAP) which, when published, will form the statutory development plan for the BMA up to the end of 2015.
>
> The Regional Development Strategy (RDS), which frames both the BMAP and BMTP, takes a much longer-term view of spatial development and sets out a strategy to 2025.
>
> The Regional Transportation Strategy (RTS), which also frames the BMTP, relates only to the 10-year period to 2012.

TRANSPORT IN THE BELFAST METROPOLITAN AREA

The Area Covered by the Plan

1.27   The BMTP area comprises the six District Council areas of Belfast, Carrickfergus, Castlereagh, Lisburn, Newtownabbey and North Down. This is shown in Figure 1.3. Additionally, the BMTP has taken account of the transport movements that lie outside these administrative areas but that are within the Belfast journey to work area. This equates to roughly a 30 mile radius from Belfast City Centre. Taken together, the six council areas and the remainder of the Belfast journey to work area are defined as the **BMTP Study Area**.

Figure 1.3 – The Belfast Metropolitan Area

The Transport Network

1.28 The BMA has a population of around 650,000 of which the majority live in the main built-up urban area. The transport network serving this area has evolved over many years and is illustrated in Figure 1.4. The main elements of the transport network comprise:

♦ an extensive road network of around 2800 kilometres made up of:

− an existing strategic road network formed by the motorway and "A-Road" network;

- an existing non-strategic road network formed by "B-roads", "C-roads" and residential and access roads;

♦ a walking network formed by the main road network and, in certain locations such as town and city centres, by dedicated pedestrian-only streets;

♦ a developing cycle network where in certain locations there is special provision for cyclists that segregates them from other road users;

♦ a comprehensive bus network made up of:

- an urban bus network focused on the built-up area of Belfast provided by Citybus services;

- an inter-urban bus network linking the built-up area of Belfast with the other towns and cities in the BMA and other parts of NI, provided by Ulsterbus services;

- a local bus network serving the main urban centres in the BMA outside the built up area of Belfast and also serving towns and villages in the rural parts of the BMA;

- an extensive system of dedicated school bus services provided by Citybus and Ulsterbus;

- Easibus services that provide a hail-and-ride service in many parts of the urban area that are not directly served by conventional bus services;

- demand responsive services operating on a pilot basis in parts of the rural areas of the BMA;

- a range of community transport services serving those with particular needs, including people with disabilities.

♦ a network of taxi services operating on fixed routes in parts of North and West Belfast, plus conventional taxi services provided by public hire and private hire taxis;

♦ a rail network operated by Northern Ireland Railways (NIR) that comprises:

- a commuter rail network that serves parts of the Belfast travel to work area; and

- the strategic rail network that links the BMA with other parts of NI and with Dublin.

THE REGIONAL PERSPECTIVE

1.29   The BMA is the main conurbation in NI. It includes a number of major locations of regional as well as local importance, ranging from Belfast city centre to regional employment and retail centres. These main centres are shown in Figure 1.4. Additionally, as also shown in Figure 1.4, the RDS identifies a number of Major Employment Locations (MELs) in the BMA which are expected to become major development locations. These include:

- ♦ Lisburn;
- ♦ Purdysburn;
- ♦ Mallusk/Ballyhenry; and
- ♦ Harbour Estate.

1.30 Importantly the BMA also includes two key regional gateways which link NI with the rest of the UK and with Europe. These are also shown in Figure 1.4 and comprise:

- ♦ Port of Belfast; and
- ♦ Belfast City Airport.

Although outside the BMA, the BMA's transport network also plays an important role in providing access to other regional gateways: Belfast International Airport and the Port of Larne.

TRANSPORT CORRIDORS

1.31 The BMA's transport network can be defined as a set of main transport corridors – termed Metropolitan Transport Corridors (MTCs). The definition of these corridors has been extensively used to develop and describe the proposals in the Plan. The corridor concept builds upon that employed in the RDS and RTS. The RDS and RTS use a network of Key Transport Corridors (KTCs) and Link Transport Corridors (LTCs) to define a Regional Strategic Transport Network (RSTN) for NI. These are shown in Figure 1.5. The RSTN, which comprises both road and rail infrastructure, is defined as the core transport network of important regional and metropolitan routes.

1.32 Metropolitan Transport Corridors (MTCs) within the BMA[4] have been defined as part of the BMTP development process, building upon the framework formed by the KTCs and LTCs and the guidance given by the RDS. These are shown in Figure 1.6.

1.33 The following MTCs have been defined:

- ♦ A – Antrim to Belfast MTC
- ♦ B – Lisburn to Belfast MTC
- ♦ C – Downpatrick to Belfast MTC
- ♦ D – Newtownards to Belfast MTC
- ♦ E – Bangor to Belfast MTC
- ♦ F – Carrickfergus to Belfast MTC
- ♦ G – Outer Orbital MTC
- ♦ H – Inner Orbital MTC.

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[4] The RDS states that the precise definition of the MTCs would be further considered as part of the work to develop the BMTP.

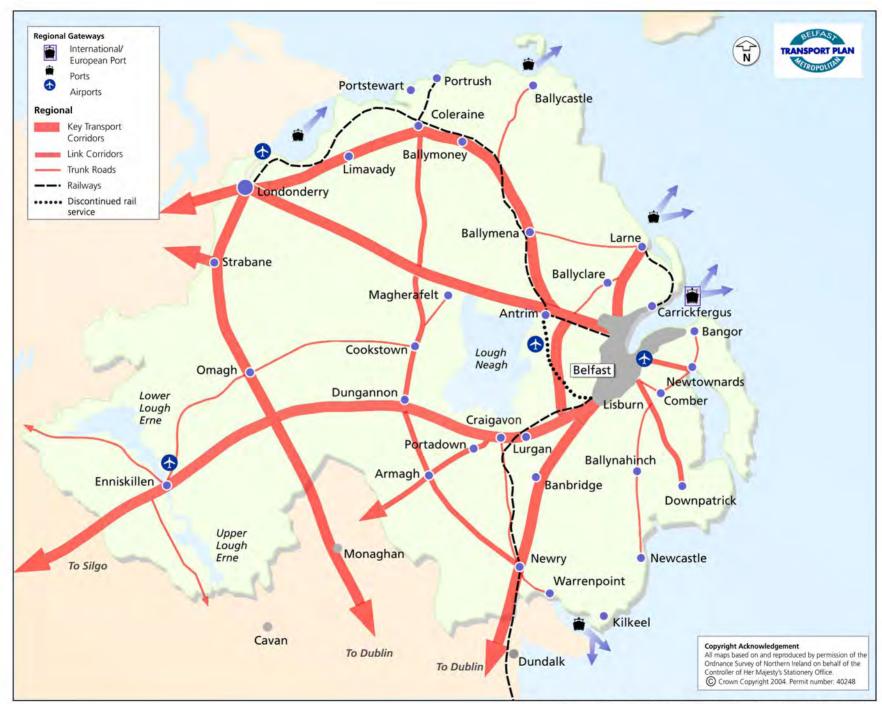# Figure 1.4 - **The Belfast Metropolitan Area's Transport Network**

KEY:
- —— Motorways
- —— A Roads*
- —— Secondary roads*
- ●—● Rail network
- Ⓖ Regional Gateways
- ▲ Major Employment Locations (indicative)
- ---- Discontinued rail service

* Note: Existing definition.
A review of the function of different roads has been undertaken and is described further in this document.

BELFAST
TRANSPORT PLAN
METROPOLITAN

To Larne Ⓖ

To Larne

Ballyclare

A8

Carrickfergus

Antrim - Bleach Green Line

To Antrim (and International Airport) Ⓖ

M2

A2

Belfast - Larne Line

M5

Belfast - Bangor Line

Bangor

M2

A2

To Antrim

Belfast

Ⓖ

Ⓖ

A20

Newtownards

A55

A22

A26

Comber

Belfast-Lisburn Portadown Line

A24

M1

Carryduff

Lisburn

To Ballygowan

A24

A7

To Portadown (and Dublin)

A1

To Newry (and Dublin)

To Newcastle

To Downpatrick

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Figure 1.5 - **Regional Strategic Transport Network**

The development of the BMTP has been structured around the examination of these main corridors of transport movement. Their use in developing the Plan:

♦ provides a clear linkage between the BMTP and the NI-wide corridors defined in the RDS and RTS; and

♦ ties in with the principles being adopted by BMAP in focusing development on transport corridors with high public transport accessibility.

ADDRESSING TRANSPORT PROBLEMS

1.34 The BMA's transport network is currently faced by a range of problems that the BMTP has set out to address. As part of the development of the BMTP, a comprehensive assessment of current and projected transport problems, issues and opportunities was made. The problems identified may be summarised as follows:

♦ **Traffic levels on some roads in the BMA** – The BMA's road network currently suffers from localised traffic congestion at peak times. While existing congestion levels at key locations in the network cause problems for a great number of people and result in additional costs for business they are not yet at the levels evident in other metropolitan areas of the UK.

♦ **The impact of traffic on the environment and the quality of life** – Traffic levels on many of the roads in the BMA already give rise to problems of pollution, road safety and severance that adversely affect the quality of life for many people.

♦ **Road Safety** – The road collision rate in NI is higher than the UK average. There are important issues to address in terms of highway engineering and changing the attitudes of road users to road safety.

♦ **The deteriorating quality of public transport provision** – This is evident both from consultation findings and from key indicators of system performance. Part of the problem is one of ageing infrastructure, vehicles and rolling stock. However, given that over 70% of public transport usage is represented by bus travel the other key problem is that traffic congestion can result in longer and less reliable public transport journey times.

♦ **A public transport system that does not meet people's travel needs** – A key finding from a range of consultation exercises is that existing public transport does not provide a service when and where it is required. Most services are focused on the radial routes into Belfast city centre and do not cater for orbital movements or for movements to other centres in the BMA. This includes major retail and employment sites as well as the town centres.
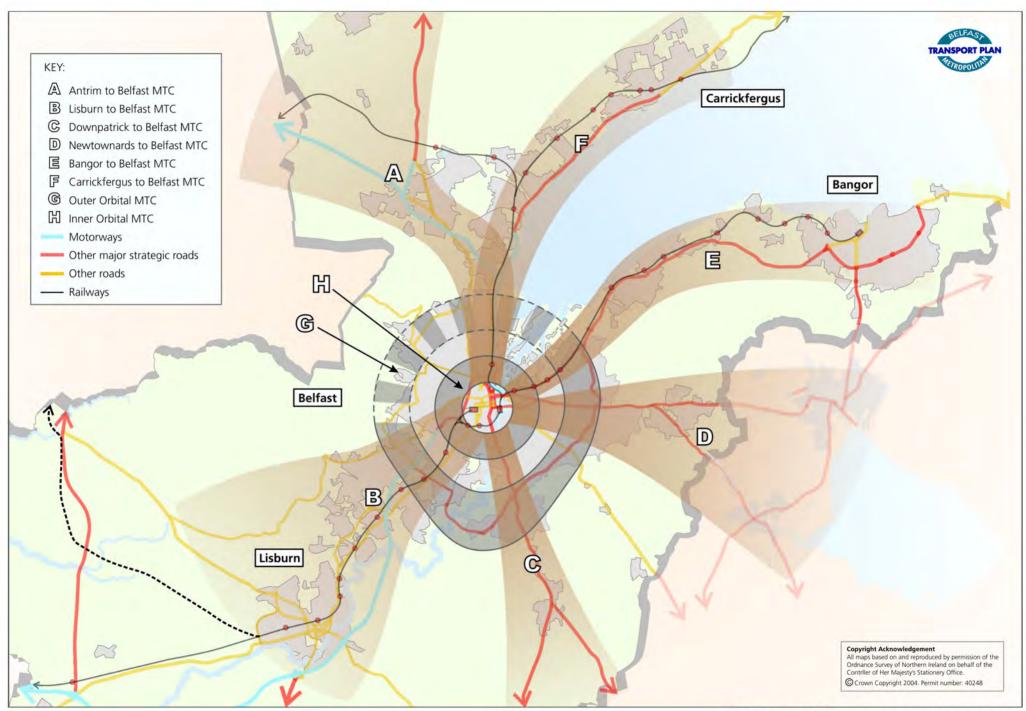
KEY:

Ⓐ Antrim to Belfast MTC
Ⓑ Lisburn to Belfast MTC
Ⓒ Downpatrick to Belfast MTC
Ⓓ Newtownards to Belfast MTC
Ⓔ Bangor to Belfast MTC
Ⓕ Carrickfergus to Belfast MTC
Ⓖ Outer Orbital MTC
Ⓗ Inner Orbital MTC

— Motorways
— Other major strategic roads
— Other roads
— Railways

Carrickfergus

Bangor

Belfast

Lisburn

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Figure 1.6 - **Metropolitan Transport Corridors**

♦ **Limited integration between modes** – Relatively few journeys make use of more than one motorised mode of transport – e.g. car-bus, bus-rail – and there are an even more limited number of journeys making use of a single mode more than once – e.g. bus-bus journeys. Some improvements have, however, been made, for example by providing park-and-ride sites, bus feeder services, improved bus-rail timetable co-ordination and the gradual introduction of integrated ticketing.

♦ **Limited provision for walking and cycling** – The BMA does not provide extensive facilities for cyclists, although significant progress has been made with the implementation of strategic cycle routes. Similarly, special provision for pedestrians is limited to certain parts of the urban centres. In general there is not enough to encourage greater levels of walking and cycling or to facilitate walking as a leg of a public transport journey.

Key Drivers of Change

1.35 Transport policy for NI and the BMA clearly points the way towards a future that relies less on use of the car and more on public transport, walking and cycling. It also emphasises the crucial link between land use and transport in order to reduce the need for travel and to better manage the impact of travel.

1.36 The problems affecting the current transport system are the result of many driving forces that have been in effect over many years. Many of these drivers of change are continuing to push the transport system in a direction incompatible with high-level policy vision, as follows:

♦ **Demographic trends** – household sizes in the BMA are currently higher than those in Great Britain (GB). Population densities in the built-up area of the BMA are similar to those in other UK metropolitan areas. Both household size and densities have been declining and this trend is expected to continue. Smaller households in general are likely to generate more car trips and fewer public transport trips. Lower population densities are also more difficult to serve by public transport. Both factors are therefore likely to contribute to greater car dependency.

Facts and Figures : Demographics

The BMA average household size in 2001 was 2.5 people per household, in comparison with the GB average for the same year of 2.3.

The population of the BMA is currently around 650,000. Given the housing allocation for BMAP (51,000 additional houses), it is anticipated that the population of the Plan area will increase.

The BMA (and NI as a whole) also has a significantly younger population than other UK metropolitan areas. NI-wide figures show that people younger than 16 years of age formed 24% of the population in 2001. The comparable figure for GB was around 20%
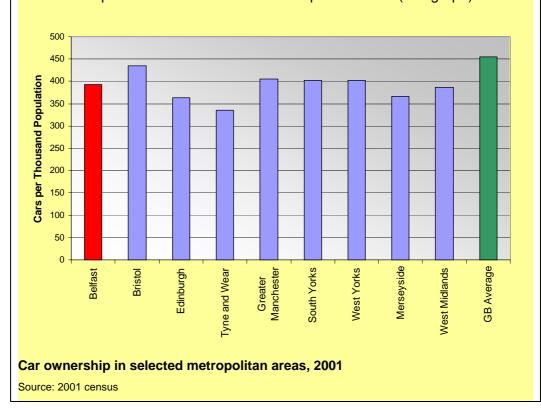

♦ **Economic and car ownership trends** – the BMA previously had relatively low levels of car ownership compared to the GB average and other similar metropolitan areas. However, improved economic conditions have led to a very significant increase in car ownership over the last decade. Ownership levels are likely to increase further, resulting in higher levels of car use.

Facts and Figures : Car Ownership

There has been a significant increase in car ownership in NI between 1991 and 2001, with the NI licensed vehicle stock increasing by 33% compared with 18% in GB[5].

While NI has always had lower than average levels of car ownership than elsewhere in the UK the 2001 census shows that car ownership levels in the BMA are now 393 cars per thousand of population (cpt). This is higher than car ownership levels in some other UK metropolitan areas (see graph).

Car ownership in selected metropolitan areas, 2001

Source: 2001 census

♦ **Increasing congestion levels** – Projections of traffic growth demonstrate that existing levels of congestion will become significantly worse over time, with high levels of peak period congestion becoming more widespread. Moreover, the knock-on effect of greater peak congestion is likely to be more traffic in off peak periods and more traffic on roads that are not suitable for high traffic volumes. This will have negative impacts on pollution, the economy, social inclusion and road safety.

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[5] NISRA annual abstract of statistics, 2002
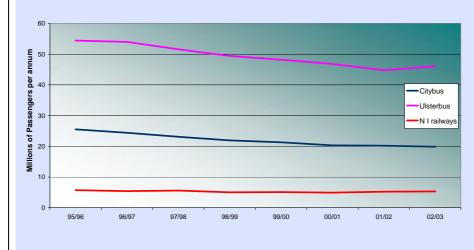
Facts and Figures : Traffic Growth

Data, drawn from the Roads Service Vehicle Kilometres of Travel Survey in Northern Ireland, indicates that there has been growth in road-based traffic of around 2.8% per annum in the region since 1991.

Within the BMA, however, traffic growth appears to be lower. Traffic monitoring data for a selection of key locations on the BMA's road network shows that traffic volumes have grown on average by 1.8% per annum between 1994 and 2003.

♦ **Challenges to Public Transport** – expectations of public transport continue to rise. For this reason it will remain a challenging task to attract people to public transport from the private car despite investment in certain areas such as new trains and buses. In addition, increasing highway congestion will affect the speed and reliability of bus services. The implication is that unless improvements are made to public transport it is likely to become progressively less attractive to many people than at present.

Facts and Figures : Public Transport

Analysis of annual patronage levels for each of the three public transport services provided by Translink shows that, over the last seven years, there has been a fall in patronage equivalent to an average of 3.5% per annum for Citybus, 2.4% per annum for Ulsterbus and 1.0% for NIR (excluding cross border services). However, over the last two years patronage levels have stabilised with small increases in patronage on Ulsterbus and NIR.
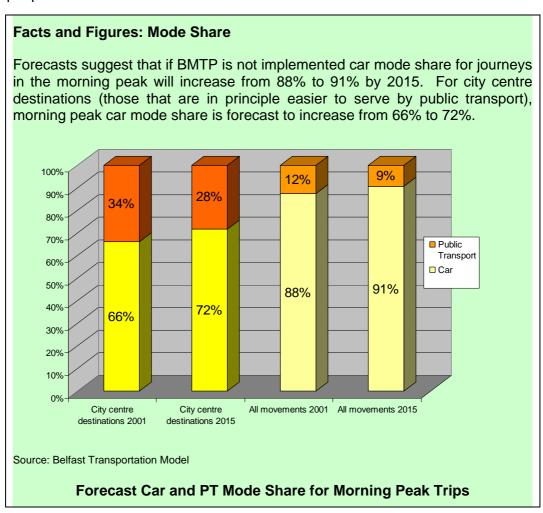

Source : Translink

Public Transport Patronage Trends (NI)

♦ **Changes in attitudes and travel patterns** – In the BMA, as in the rest of NI and the UK, many people view the car as an integral part of modern life. Many of those that currently do not own a car aspire to ownership and those that already own a car have modified their lifestyles to take advantage of the accessibility and convenience that, despite congestion, the car is able to offer. This has manifested itself in decisions on where to live, work, shop and undertake leisure activities. It also results in more travel to a more diverse range of destinations. Experience from other parts of the UK also indicates that congestion levels in the BMA would have to become very much worse before they start to undermine people's attachment to the car.

Facts and Figures: Mode Share

Forecasts suggest that if BMTP is not implemented car mode share for journeys in the morning peak will increase from 88% to 91% by 2015. For city centre destinations (those that are in principle easier to serve by public transport), morning peak car mode share is forecast to increase from 66% to 72%.

Source: Belfast Transportation Model

Forecast Car and PT Mode Share for Morning Peak Trips

♦ **Reducing rather than increasing social inclusion** – A fundamental objective that cuts across all policy areas in NI is increasing social inclusion. The combination of increasing car dependence (and the related provision of housing, jobs and facilities that lend themselves to car access) and deteriorating public transport serves to reduce accessibility for those without access to a car and thereby reduces social inclusion and widens the divisions in society.

THE CONTENT OF THIS DOCUMENT

1.37   The BMTP document is structured in three parts, as follows:

♦ **Part A** provides background information on the need for a transport plan for the BMA and on the approach adopted in developing the BMTP:

- Chapter 1 (this chapter) provides the introduction;

- Chapter 2 provides an outline of the Plan development process;

♦ **Part B**, sets out the transport proposals included in the 2015 Plan:

- Chapter 3 provides an overview of the main elements of the Plan including a summary table that provides a comprehensive list of transport proposals;

- Chapters 4 to 7 then define in more detail the transport proposals by transport mode;

- Chapter 8 describes in more detail the Plan's proposals according to the council areas within the BMA;

- Chapter 9 identifies how the Plan's proposals address transport issues across a range of key topic areas;

♦ **Part C**, then presents an implementation programme for the BMTP and associated expected outcomes:

- Chapter 10 presents the indicative implementation programme; and

- finally Chapter 11 presents the expected outcomes of the Plan alongside proposed targets, monitoring and review mechanisms.

1.38   Additional information is provided in Annexes, as follows:

♦ in Annex A a detailed statement of the local objectives that the implementation of the Plan would be expected to achieve;

♦ in Annex B a summary of the schemes listed in existing local and area plans that are included in the Plan;

♦ an Appraisal Summary Table (AST) is included at Annex C, which describes the benefits and costs (disbenefits) of the proposals included in the Plan;

♦ in Annex D an assessment of the distribution and equity impacts of the Plan; the affordability and financial sustainability of the Plan proposals; and practicality and public acceptability issues.

♦ references for supporting documents in Annex E; and

♦ a Glossary of Terms in Annex F.