

Department for Social Development
Department for Regional Development

ACCESS AND MOBILITY STUDY FOR BELFAST CITY CENTRE



ARUP





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EXECUTIVE SUMMARY

Arup were commissioned by the Department for Social Development, in conjunction with the Department for Regional Development, in 2008 to undertake a study for Belfast City Centre focusing on the needs of people with disabilities. The key purpose of this study is to provide a broad understanding of the issues faced by people with disabilities in Belfast and to explore how the initiatives introduced in other cities and the application of best practice can be used for the benefit of all users in the city centre.

The starting point for the study was to establish a clear understanding of the key issues in Belfast and review these in light of current proposals that will influence the development of the city centre over the coming years. Projects that have been considered include:

- public realm improvements being taken forward as part of the DSD 'Belfast Streets Ahead' project;
- traffic management proposals being developed by DRD Roads Service; and
- the introduction of Rapid Transit onto city centre streets.

The study builds upon consultation work undertaken with various groups representing people with disabilities, including the Access and Mobility workshop held on 28 August 2008 at the Mount Conference Centre in Belfast. A total of 53 organisations were invited to attend the workshop, where people had the opportunity to raise and discuss the issues relating to access and mobility in Belfast City Centre. This workshop proved to be an informative and positive experience for the various parties involved, identifying several key issues in Belfast. These are outlined below:

- lack of co-ordination between government departments and disability groups;
- potential reductions in disabled parking provision in central locations as a result of pedestrianisation proposals could reduce car-based options for people with disabilities;
- maintaining the service provided by existing Shopmobility centres and the practical integration into the 'mobility hub' concept developed as part of the Streets Ahead work;
- lack of integration between current 'Door-to-door' transport services and other services, such as Shopmobility;
- abuse of the Blue Badge Parking scheme;

- further investigation needed into the 'Eco bus' proposals, explored as part of the work on Streets Ahead;
- interaction between public transport providers and disabled customers;
- availability of Shopmobility at public transport interchanges;
- unsatisfactory facilities on pedestrian routes between public transport interchanges and the city centre core area;
- issues associated with 'street clutter';
- crossing facilities which hinder safe and convenient access around the city centre;
- issues regarding surfacing in pedestrian areas; and
- use of pedestrian areas by cyclists.

Investigation into how other major cities in the UK have implemented initiatives to encourage an inclusive urban environment has assisted in providing an understanding of how the future operation of Belfast City Centre could be improved. Information on initiatives from other cities has been gathered from a range of locations such as Birmingham, Bristol, Brighton and Hove, Edinburgh, Cambridge and Swansea.

It is clear that the ongoing projects in the city centre and future proposals will allow for the reallocation of city centre road space to pedestrians, cyclists and public transport.

However, it is important that these developments result in an inclusive environment that is accessible for all users.

The output from this study is a series of recommendations that will assist in improving facilities in the city centre. These are summarised in **Table 7.1** included to the rear of this report.

Groups representing the various disabled bodies were also issued a draft consultation version of the study report in July 2009. The comments received as part of this consultation have been collated and considered by DSD and DRD and have informed this latest revision of the study.

1.0 INTRODUCTION



BACKGROUND

The Department for Social Development (DSD), in conjunction with the Department for Regional Development, commissioned Arup in 2008 to carry out an Access and Mobility Study for Belfast City Centre (BCC) focused on the needs of people with disabilities.

It is essential that design for people with a disability is carried out in accordance with the best practice and to the highest possible standards to cater for a wide range of varying disabilities. The term “disability” is broad in its definition and is not just confined to physical attributes, but also includes sensory or mental impairment. For the purposes of this study, and the associated consultation carried out, the focus has been on the issues and needs of groups with disabilities and elderly people. Although groups directly representing people with small children, people carrying large or heavy shopping and luggage, and people with temporary accident injuries were not incorporated into the consultation for the study, it is considered that such groups will also benefit from the findings of this study.

The Disability Discrimination (NI) Order 2006 places a legal duty on all those who provide services to the public to make reasonable adjustments to the physical environment of their premises to ensure that disabled people can access their goods, services and facilities. All government departments involved in this study are fully committed to complying with Section 75 obligations of the Northern Ireland Act 1998, which deal with the promotion of equality of opportunity and good relations.

PURPOSE

The key purpose of this study is to provide a broad understanding of the accessibility and mobility issues faced in central Belfast by people with disabilities and to explore the examples of how initiatives introduced in other cities and the application of best practice can be used for the benefit of all users of the city centre. The area considered for this study is shown in **Figure 1.1** opposite.

This study also includes recommendations on how key stakeholders including government departments and disability groups can move forward to help improve the access and mobility facilities in Belfast City Centre. It is intended that this study will help inform the ongoing infrastructure changes to be carried as part of the DSD Streets Ahead work and the potential future Department for Regional Development

(DRD) work as part of the Belfast City Centre Traffic Management Project (BCCTMP) and the emerging Belfast Rapid Transit proposals. It should be noted that since the initiation of this study, the consultation aspect of the BCCTMP due to commence in the autumn of 2008 was postponed but has recently recommenced with a Workshop for disability groups held on 31 March 2010. It should also be noted that a Rapid Transit Division was established by DRD in early 2009 to take forward the proposals for the introduction of Rapid Transit onto city centre streets. A public consultation exercise on the Rapid Transit policy proposals commenced on 23 November 2009 and closed on 19 February 2010.

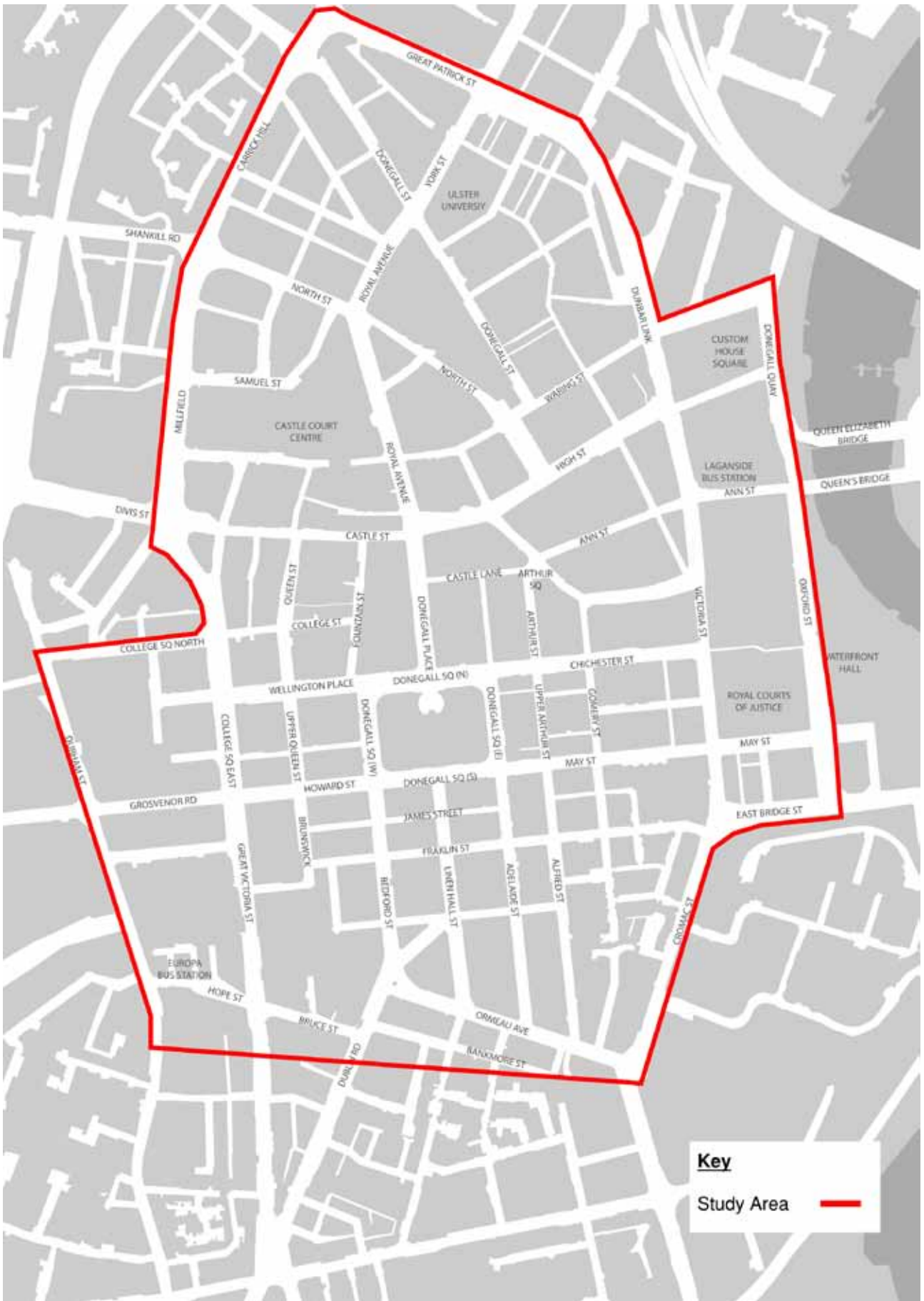


Figure 1.1 Belfast City Centre study area

INTRODUCTION

EMERGING PROPOSALS

Given the potential schemes proposed for the city centre there is a need to ensure that the current issues and opportunities for disabled provision in Belfast is fully considered. Following on from the aspirations of the Belfast Metropolitan Transport Plan (BMTP), **Figure 1.2** opposite provides an indication of some of the potential schemes due to emerge for the city centre including the pedestrianisation of Donegall Place and Donegall Square North, the improvements to the City Centre Ring Road and the introduction of Rapid Transit.

Current DSD proposals on Donegall Place, which have received planning permission, herald the introduction of improved pedestrian facilities and southbound only traffic. These proposals, which will remove some parking opportunities on Donegall Place for private vehicles displaying a blue badge permit, will herald an improved public realm environment with less vehicular traffic and improved pedestrian space but with reduced opportunities for disabled parking and servicing.

It is clear from the potential further proposals for the city that there is an emphasis on controlling the level of vehicular access to the city centre, whilst improving the provision for pedestrians, cyclists and public transport. The key proposals for the city centre are for increased pedestrianisation and public transport priority, which will result in a decrease in the space available for private vehicular traffic access and parking in central areas. There will be a clear need therefore for compromise between the various users of the city centre in order to accommodate the envisaged modal shift away from private car travel. Although some of these city centre proposals may result in greater walking distances for some people with mobility impairments, this should be offset by lower levels of traffic, less conflict, a better pedestrian environment and crossing facilities, and better public transport penetration. It is important however that the future development of the city centre is carefully managed to ensure an appropriate balance is provided for all people wishing to access the city.

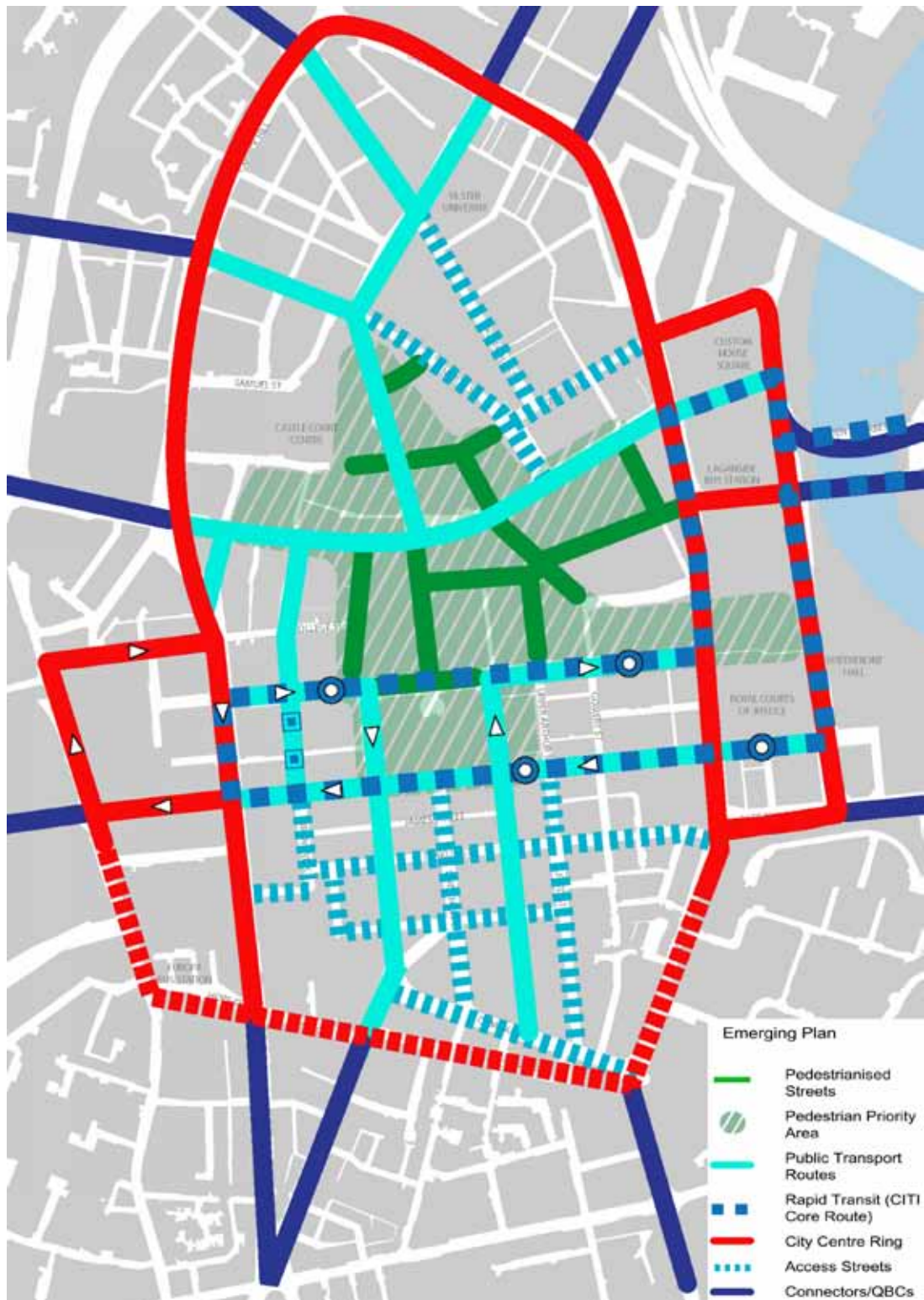


Figure 1.2 Potential schemes in the City Centre

CONSULTATION

This study builds upon consultation work, undertaken by Arup with a variety of disability groups, including the Access and Mobility workshop on 28 August 2008 at the Mount Business and Conference Centre in Belfast. Arup invited 53 organisations (see Appendix B for list of stakeholders invited) to attend the workshop which proved to be an informative and positive experience for the various parties involved. In addition to the workshop, separate focus group meetings were held with other groups who requested further input beyond that discussed at the workshop, including Disability Action, the Royal National Institute for the Blind (RNIB) and the Shopmobility charity.

STRUCTURE

This study will review relevant policy and guidance and summarise existing disabled facilities and schemes in Belfast. Existing case studies of other major cities in the UK demonstrating successful integration of disabled users in pedestrian areas inform the recommendations made within this study. Recommendations will be made to identify any potential

measures and schemes that will encourage the development of an inclusive Belfast with an accessible city centre environment, to the benefit of all users.

The structure of this report is as follows:

- Chapter 2 summarises the relevant policy for disabled users in Belfast City Centre;
- Chapter 3 reviews the recent and ongoing studies which have relevance to catering for disabled people in Belfast City Centre;
- Chapter 4 outlines the key issues raised through the consultation carried out with disabled groups and representatives as part of the study;
- Chapter 5 looks at some of the key issues and opportunities in more detail including the current work and initiatives underway;
- Chapter 6 summarises the benchmarking exercises reviewing the initiatives which other cities in the UK have put in place and a review of best practice; and
- Chapter 7 outlines the proposed opportunities and recommendations to help tackle the issues faced.



2.0 POLICY AND GUIDANCE



THE DISABILITY DISCRIMINATION (NI) ORDER 2006

The Disability Discrimination (NI) Order 2006 aims to end the discrimination that many disabled people face. It gives disabled people rights in the areas of employment, education and access to goods, facilities and services, including transport services. The Order requires public bodies to promote equality of opportunity for disabled people. It also allows the government to set minimum standards so that disabled people can use public transport easily. Section 49A of the Order sets out that every public authority shall, in carrying out its functions, have due regard to:

- (a) the need to promote positive attitudes towards disabled persons; and
- (b) the need to encourage participation by disabled persons in public life.

The Disability Discrimination Order (DDO) clarifies the existing exclusion of transport services making it clear it relates only to transport services consisting of the provision and use of a vehicle. However, there is also power within the DDO for regulations to lift the exemption for buses, coaches, taxis, trains, rental vehicles and breakdown recovery services. The Disability Discrimination (Transport Vehicles) Regulations 2005 have been passed in England, Scotland and Wales and came into effect on 4 December 2006. As a result, the transport provider must not discriminate and is under a duty to make reasonable adjustments. The Disability Discrimination (Transport Vehicles) Regulations (Northern Ireland) 2009 came into operation on 25 January 2010. These Regulations lift the exemption which applied to transport providers from Part 3 of the DDA, meaning that transport providers must not discriminate against disabled people when providing goods, facilities or services.

THE ACCESSIBLE TRANSPORT STRATEGY (2005)

The Accessible Transport Strategy (ATS) aims at reducing barriers to transport in Northern Ireland for older and disabled people, barriers that often lead to these groups becoming socially excluded. Stemming from the Regional Transport Strategy, it highlights various points including:

- Older people and people with disabilities make up an increasingly significant proportion of society in Northern Ireland;
- The range of disabilities that people experience is wide, in both nature and severity, which impacts on the type of transport requirements they have and the transport opportunities available to them; and
- Both older people and people with disabilities typically have low incomes.

While it may be difficult to satisfy every individual transport need, the ATS suggests several structured objectives that aim to reduce social exclusion and optimising disabled access to the transport network hence building toward a more inclusive society. This includes the development of an integrated and fully accessible public transport network allowing disabled and older people a more fluid interchange between modes.

In conjunction with tackling physical barriers to accessibility, the ATS also proposes to address attitudinal and psychological barriers to the existing transport services. Confidence will be instilled by providing information that is readily available across a range of different media and in a number of formats to suit varying needs. This allows all people to plan their journeys effectively and with ease. The processes defined in the ATS will require consistent review if it is to be successfully implemented in its entirety. The ATS is being implemented through the development of Action Plans. The Action Plan for the period 2009 - 2012 was published by DRD in January 2010 following a full public consultation process in 2009.

POLICY AND GUIDANCE

BELFAST METROPOLITAN TRANSPORT PLAN 2015 (BMTP)

The BMTP, which was prepared by the DRD and published in November 2004, provides a comprehensive local transport plan for the Belfast Metropolitan Area (BMA) up to the year 2015.

The BMTP reinforces and furthers the strategic initiatives set within the Regional Transportation Strategy (RTS) by providing realistic and structured transport proposals that can be carried through to implementation effectively.

The detailed transport proposals and priorities identified within the BMTP are integrated within the overall planning process for the BMA as shown in **Figure 2.1**. The core objectives identified within the BMTP may be summarised as:

- Protecting the BMA's natural and built environment;
- Improving health, safety and security in the BMA;
- Supporting sustainable economic growth in the BMA;
- Improving access to regional gateways and tourist locations in and around the BMA;

- Promotion of a more inclusive society in the BMA;
- Supporting the revitalisation of the BMA's urban areas; and
- Improving integration between transport modes, land use and other Government policies.

One of the key outcomes of the BMTP focuses on accessibility issues across the BMA transport network – these are as follows:

- Rail services – the net effect of the Plan proposals is to significantly increase train kilometres on the Belfast commuter rail network. This represents the effect of the proposed frequency enhancements;
- Rail passengers – the Plan is forecast to very significantly increase the number of rail passengers comparing the 2015 Plan with 2001. A significant proportion of this increase is due to the impact of the introduction of new trains;
- Citybus, bus and rapid transit services – the combined effect of the introduction of Quality Bus Corridors (QBCs) with enhanced service frequencies, park-and-ride services and the proposed commencement of the rapid transit network would significantly increase services relative to both the current situation and the 2015 reference case;

- Citybus, bus and rapid transit patronage – the combined effect of the introduction of QBCs, park-and-ride and the proposed commencement of the rapid transit network would increase patronage relative to existing levels; and
- Rural demand responsive bus services in the BMA would experience a large increase in bus kilometres provided.

CONSULTATION ON THE BELFAST CITY CENTRE REGENERATION FRAMEWORK

Northern Ireland General Consumer Council document 'Consultation on the Belfast City Centre Regeneration Framework' (September 2003) identifies that sufficient access and parking spaces should be provided for disabled drivers. In addition, monitoring is needed to gauge the balance between the numbers of parking spaces needed to give access to the mobility impaired.

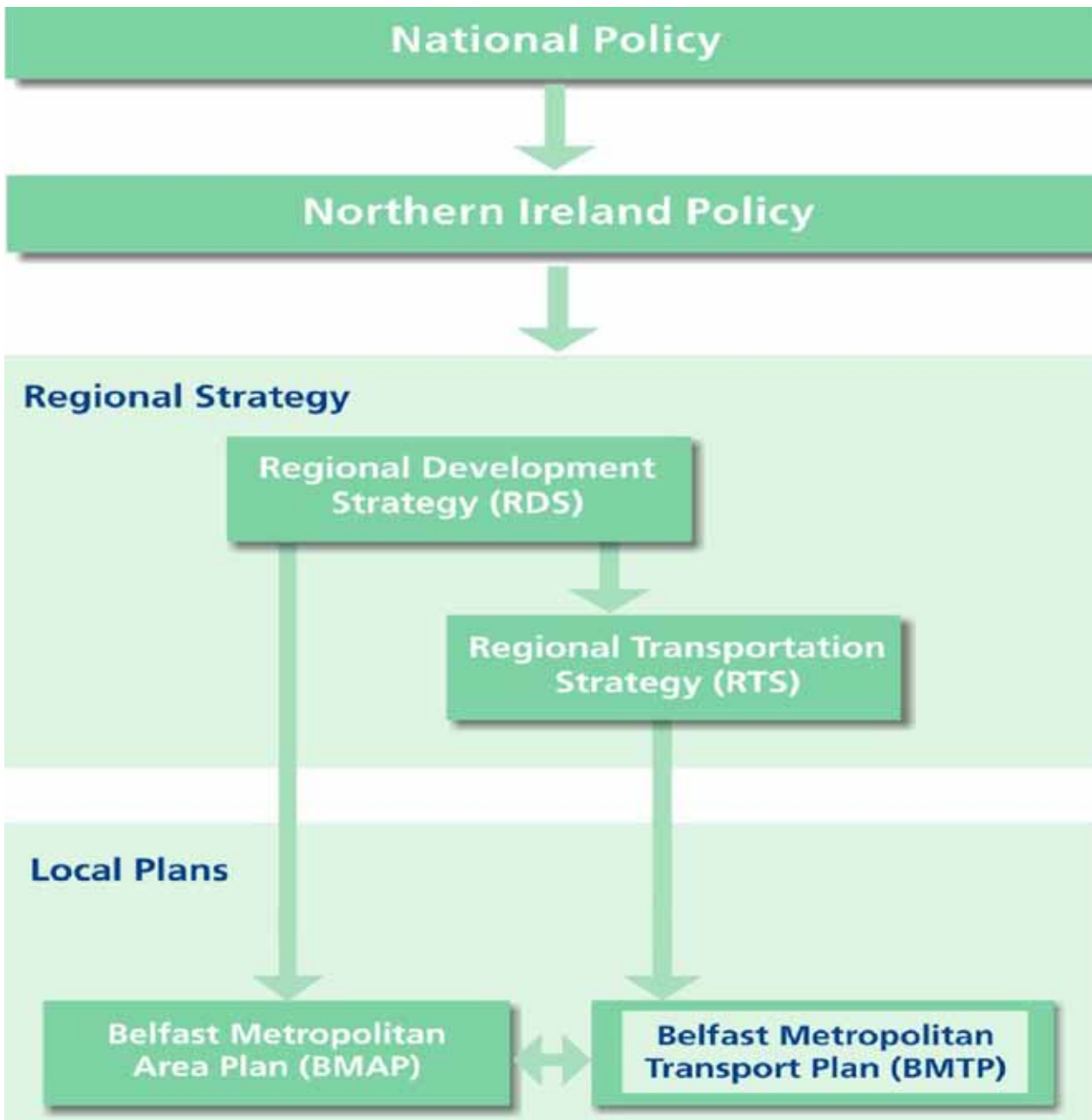


Figure 2.1 The BMTP as part of the Integrated Planning Process



3.0 REVIEW OF RECENT CITY CENTRE STUDIES



REVIEW OF RECENT CITY CENTRE STUDIES

SUMMARY

In order to establish a clear understanding of the key issues in Belfast City Centre it is vital to assess a wide spectrum of current policy documents. For the purpose of this study it is necessary to review current proposals that, in conjunction with existing plans and legislation, will influence the evolving demography of Belfast City Centre.

BELFAST STREETS AHEAD

In 2005 the Department for Social Development appointed consultants to prepare a masterplan for the regeneration of the public realm in the centre of Belfast. The Belfast Streets Ahead project aims to improve the parts of the city centre the public have access to. Through improving the appearance and quality of the City Centre the project also aims to:

- bring investment in from outside Northern Ireland;
- encourage business development;
- attract more tourists; and
- contribute to a reduction in crime by making the city centre safer and more people-friendly with well lit and active streets.

Work on the first phase of the Streets Ahead project commenced in June 2007 and aims to be completed in May 2010. The first phase includes proposals to pedestrianise Donegall Place in the city centre.

As part of the ongoing and future proposals within the Belfast Streets Ahead project the DSD have considered the impact of their schemes against the access and mobility requirements of all users in the city centre. The Belfast Streets Ahead 'Access and Mobility' Paper (August 2007), prepared by consultants, EDAW, on behalf of the DSD, identifies that illegal parking by legitimate badge holders needs to be greatly reduced by a new parking enforcement regime. Illegal use by friends and relatives of blue badge holders and the use of stolen and counterfeit badges must be tackled. The application criteria for the scheme must also be strictly monitored and enforced. In addition, to assist disabled and older people to access the city centre, the most appropriate access and mobility services should be provided from the most appropriate locations. Mobility Centres could act as hubs that hold a number of grouped facilities including bus stops, taxi ranks, mobility services and toilets/ changing facilities.

It should be noted that as part of the consultation process carried out for the Belfast Streets Ahead (BSA) project, commendation and support was received by the design team from local disability groups such as Disability Action, Shopmobility and the Inclusive Mobility and Transport Advisory Committee (IMTAC).

The Royal National Institute of Blind People (RNIB) also gave their support to the proposed pilot wayfinder scheme to be introduced as part of the BSA project. The DSD, with the support of RNIB, are also due to review the potential introduction of GPS technology for the Stage 2 proposals for the Donegall Place area.

The DSD also commissioned the preparation of the “Disabled Parking and Movement Survey” report (September 2008) prepared by Mouchel. This survey details the current availability and level of usage of the parking for blue badge holders within the City Centre. The results indicate that the majority of disabled drivers attempting to find a car parking space during the week and at the weekend within the study area were able to do so during the first attempt with only a small percentage of drivers having to return for second and third attempts.

As a result of the public realm proposals, there are a number of disabled parking opportunities to be relocated. The report also provides analysis on this area suggesting 47 opportunities could be relocated from Donegall Place, Castle Place and Castle Street to College Street, Bank Square and Chapel Lane.

The DSD have also recently commissioned consultants, Mouchel, to prepare an updated “Disabled Parking and Movement Survey” which further reviews the parking behaviour in and around the Donegall Place area.

BELFAST CITY CENTRE TRAFFIC MANAGEMENT PROJECT (BCCTMP)

The Department for Regional Development (DRD) through its publication of the Belfast Metropolitan Transport Plan 2015 (BMTP) set out its strategy for Belfast City Centre and improving accessibility to the city centre is a key objective of the Plan.

The Belfast City Centre Traffic Management Project (BCCTMP) is currently being developed by DRD Roads Service to deliver the BMTP and this project will take account of the needs of all road users including the mobility impaired. The objective of the project is to reduce the dominance of the private car in central Belfast and increase the priority given to public transport and pedestrians, with provisions also being made for cyclists. This project will consider a number of other major initiatives being undertaken, such as the DSD Streets Ahead project, the DSD Regeneration Masterplans and the DRD Rapid Transit proposals.

A clear understanding of the key issues in Belfast City Centre was vital in formulating local objectives for the BCCTMP project and for providing a sound basis for the development of an appraisal framework of the alternative

strategies. The process of gaining this understanding has involved a number of approaches, including consultation with key stakeholders and a high level audit of the city centre transport network – this has included:

- reviewing statutory and other relevant documents and reports; and
- analysing existing and new transport data.

Implementation of the BCCTMP would result in strong beneficial impacts when appraised against both local and central government objectives and is deliverable, subject to the southern section of the City Centre Ring being implemented in advance. Whilst it is acknowledged that the scheme will decrease the level of private car travel in central Belfast, there are benefits for public transport, pedestrians and cyclists, encouraging a modal shift to more sustainable forms of transport. As a matter of procedure, in the development of any proposals DRD and DSD will engage in a full consultation process with key stakeholders, including Disability groups and those directly affected by the proposals.

Building a better Belfast will not be straightforward and disruption and compromise will be inevitable. Indeed like many cities, Belfast faces a significant challenge if it is to succeed in enhancing the vitality and attractiveness of the city centre (attracting people and business to the city) whilst continuing to operate a transport system that provides the necessary access between people, goods, services and opportunities that form the lifeblood of a sustainable urban environment.

RAPID TRANSIT FOR BELFAST

A dedicated Rapid Transit Division was established by DRD in order to progress the rapid transit proposals for Belfast. Current proposals are for the introduction of a high quality bus

rapid transit system including three high frequency routes to and from the centre of Belfast, namely the Titanic Quarter Route, the East Belfast Route and the West Belfast Route. Proposals are for the Titanic Quarter route (CITI Route) to be operational in Spring 2012 to coincide with the Signature Project in the Titanic Quarter.

It is anticipated that the scheme will improve the overall accessibility to Belfast City Centre and reduce the need for reliance on private cars. Although the detailed design of the infrastructure required to facilitate these proposals are not yet available it is clear that they will have an impact on the future layout of streets in the city centre, specifically in and around Belfast City Hall as this area will be a key link for all three potential routes.

A photograph of a meeting room. In the foreground, several people are seated in black chairs, viewed from behind. They are facing a room where a presentation is taking place. A woman stands at the front, holding a large yellow poster or whiteboard. To her left, another person is seated at a table with a laptop. The room has a grey carpet, white walls, and a large window on the left. The ceiling features circular air vents and recessed lighting. A white box with the text '4.0 CONSULTATION' is overlaid on the top right of the image.

4.0 CONSULTATION

FEEDBACK FROM THE ACCESS AND MOBILITY STUDY CONSULTATION

As part of the consultation for this study, Arup invited 53 organisations to attend an Access and Mobility workshop on 28 August 2008, a summary of which can be found in the Appendix of this report.

The workshop identified several key existing issues in Belfast associated with provision for disabled groups. In addition to this workshop, separate focus group meetings were held with other groups who requested further input beyond that discussed at the workshop, including Disability Action, the Royal National Institute for the Blind (RNIB) and the Shopmobility charity.

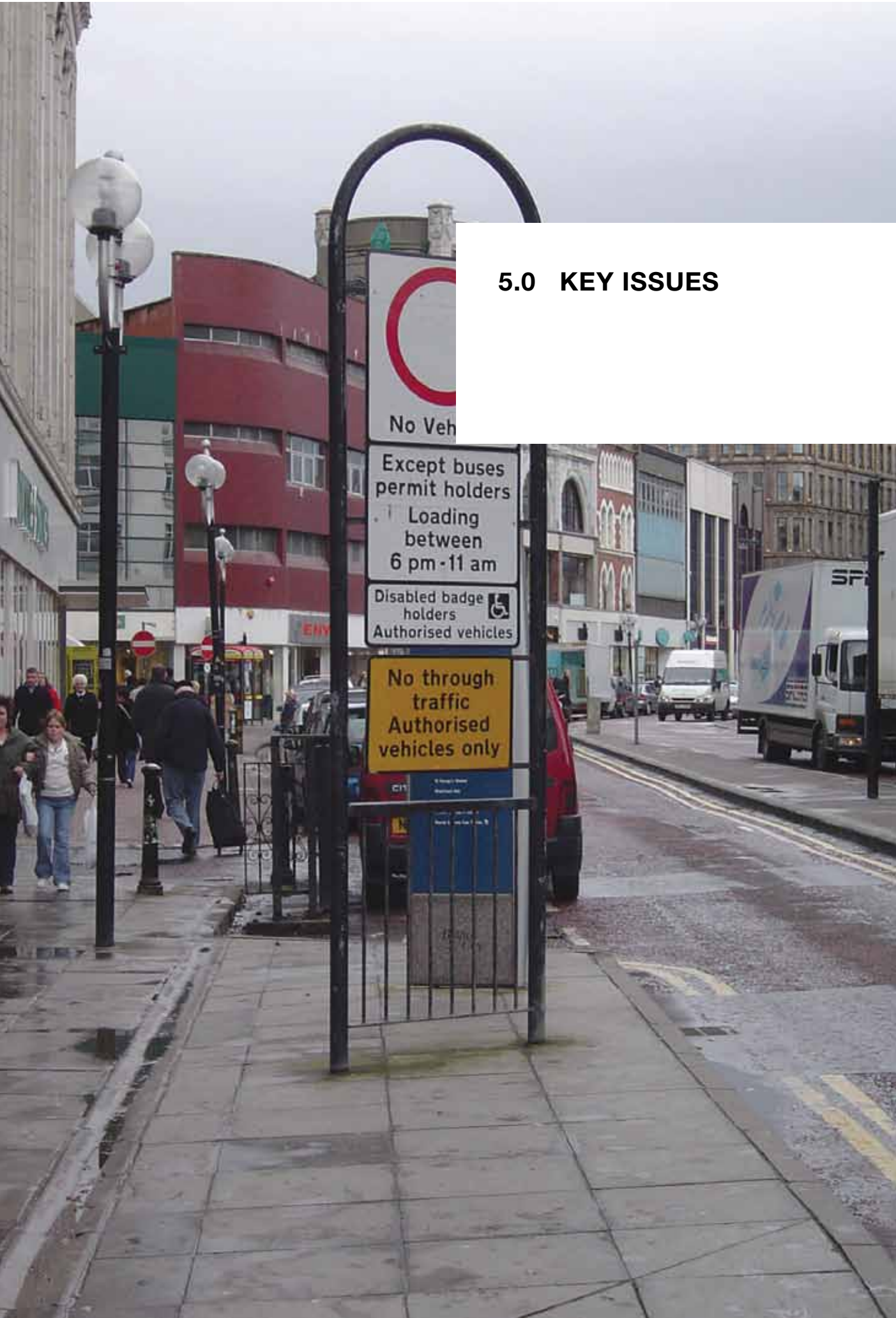
The key issues identified in this consultation were as follows:

- Shared surfaces present significant safety issues for disabled users, notably for the visually impaired in terms of on street physical obstacles and a lack of indication for where pedestrian areas end;
- It was agreed that the current level of on-street parking provision for disabled people within Belfast is very good. The car remains the main mode of transport for disabled people to access the city centre and as such the need to maintain the current provision was expressed;
- Misuse of disabled parking spaces by non disabled people and service vehicles presents an additional pressure on the level of accessible disabled parking available in the city centre;
- There is currently the impression that there is little or no enforcement of the Blue Badge scheme;
- The cost of multi-storey car parks and other off street parking provision was considered very high and it was felt this does, and would continue to, discourage a large number of disabled people from using such facilities;
- Several pedestrian streets were considered unsafe as they have not been adequately managed and maintained to ensure that surfaces remained even;
- Poor drain design, with gullies and wide gratings present serious difficulties for disabled people, notably wheelchair users;
- Increased prevalence of street clutter from the growing 'café culture' in the city centre was a significant concern;

- There is a deficit of regularly available taxis and they charge above the usual rate for journeys. People were also frustrated that taxis had to be booked a long time in advance and often their departure and pick up times are dictated by the taxi company, removing a sense of freedom over their travel choices;
- It was raised that buses are often unable to stop in the correct/ appropriate position next to the drop kerb, resulting in disabled people having to wait on the bus whilst others get off;
- There is a lack of accessible public toilets and changing areas. Disabled users often plan their trips into the city around toilet provision, restricting their freedom during their time in the city centre;
- There is a lack of understanding of disabled peoples needs by the wider public and that often there is a lack of common courtesy towards disabled people. It was felt that this culture needed to be addressed;
- It was felt that signage/travel information to advise disabled people as to the location of services was vital;
- Poorly positioned signage and street furniture limits the amount of space on the pavement and makes journeys very difficult for people with physical disabilities, particularly blind and partially sighted people;
- Safety concerns were raised about the conflict between disabled people and cyclists on shared surfaces;
- It was suggested that attempts to make Belfast City Centre more aesthetically attractive sacrifices some of the components that make it easier for disabled people to negotiate the various types of street pavement; and
- The Belfast Panic Button System is considered to be a positive addition to the city.

Full details of the issues raised as part of the consultation are included in the Appendix of this report, which includes a summary of the issues raised in the various workshop discussion groups as well as the additional focus group meeting held in parallel.

5.0 KEY ISSUES



KEY ISSUES

Further to the consultation exercise carried out for the study we have identified and expanded upon a number of the key issues identified. These key issues have also been summarised under the general themes of Co-ordination; Access to the city centre and services; Enforcement; and Moving around the city centre.

CO-ORDINATION

Given the level of ongoing and planned work in the city centre it is crucial that all of the government departments involved can work in close partnership with a variety of stakeholder groups including local disability groups and representatives, transport operators, health authorities and other community interest groups. Feedback from the consultation exercise carried out as part of this study has clearly indicated that many of the local disability groups and representatives feel their involvement in informing policy and development in the city centre in terms of access for disabled users has been limited. There is a palpable viewpoint that input from such groups into the development of Belfast City Centre has been given unsatisfactory consideration, by government departments.

Key Issue: *Lack of co-ordination between government departments and disability groups.*

ACCESS TO THE CITY CENTRE SERVICES

Parking and Use of the Car

A key concern realised, through the consultation carried out for this study, is the potential loss of disabled parking bays in Belfast City Centre, due to schemes such as the DSD public realm proposals for Donegall Place.

The Belfast Streets Ahead 'Access and Mobility' Paper (August 2007) identifies access and mobility issues in Belfast. The document states that due to the reliance on the use of the car in Belfast; there is a predominant focus on parking being the key issue for disabled people's access and mobility within the city centre. It is explained that although there have been significant recent improvements in public transport, the poor connectivity between modes results in a disincentive for disabled people to travel by means other than the car.

The 'Disabled Parking and Movement Survey' (latest report dated September 2008) by Mouchel identifies blue badge holder (BBH) parking and movement patterns in Belfast City Centre. The survey was undertaken prior to parking enforcement being managed by National Car Parks (NCP). The document draws attention to the fact

that parking provision will be affected as the Streets Ahead proposals are progressed, with displacement of disabled parking facilities from Donegall Place, Castle Street and Queen Street. However, the report states that the surrounding streets around the heart of the city centre are sufficient to accommodate vehicles displaced by the proposals. It must be noted however, that at the time of writing of the 'Disabled Parking and Movement Survey' report, Mouchel were unaware as to what role the surrounding streets would have to perform to accommodate future schemes such as the Belfast Rapid Transit.

Parking provision in Belfast City Centre is currently very high when compared to other similar UK cities. **Table 5.1** shows the car parking numbers, for comparative cities in the UK and Ireland. Based on the population of Belfast it is clear that Belfast has a much more generous parking provision than comparable cities in the UK and Ireland. Assuming a uniform percentage provision for disabled parking (typically 5%) this would suggest that the parking available for disabled users per population is also very generous in Belfast.

KEY ISSUES

Table 5.1: Car Parking Provision in UK Cities compared to Population (GOAD 2007)

City Centre	Population	Off-Street	On-Street	Total Spaces	Comparative Provision (Spaces per 1000 people)
Belfast	276,549	8,851	3,243	12,094	44
Birmingham	1,010,200	19,697	743	20,440	20
Bristol	420,556	7,071	1,638	8,709	21
Cardiff	292,150	5,886	2,159	8,045	27
Dublin	506,211	12,561	8,043	20,604	41
Glasgow	581,900	9,563	3,775	13,338	23
Manchester	458,100	15,857	2,860	18,717	41
Nottingham	288,700	8,974	2,200	11,174	39
Sheffield	439,866	4,987	1,418	6,405	15
Coventry	303,475	4,815	232	5,047	17
Edinburgh	430,082	4,227	694	4,921	11

(Source: UK Office National Statistics, Central Statistics Office Ireland & GOAD 2007)

The table above demonstrates the significant focus on the use of the private car as the preferred transport mode in Belfast City Centre. It is evident that disabled parking provision and parking provision in general is significantly greater in Belfast than in other similar UK cities. This is supported by the GOAD 2007 data identifying that provision is approximately three times greater in Belfast when compared to Edinburgh.

Although there does seem to be evidence that suggests parking provision for disabled users in Belfast is relatively high, there is still a concern among the disabled groups consulted for this study that this provision will diminish.

Figure A1 to the rear of this report gives an indication of the existing parking provision within the city centre study area.

On-Street Provision

Table 5.2 summarises the on-street parking opportunities for the key streets in the city centre core area, prior to the commencement of the Streets Ahead proposals in Donegall Place, Queen Street and Castle Street. However, it must be noted that the opportunities shown against single yellow line (SYL) and double yellow line (DYL) are estimations based on site measurements.

Table 5.2: On Street Parking Opportunities along Key Streets in City Centre Core Area (pre-Streets Ahead measures in Donegall Place, Castle Street and Queen Street)

Street Name	Parking Bays / Opportunities				Total Spaces
	Ticket Bay	Disabled Bay	SYL	DYL	
May Street	33	0	38	0	71
Donegall Sq East	0	0	0	0	0
Donegall Sq South	0	0	0	0	0
Donegall Sq West	0	0	0	0	0
Howard Street	0	0	27	0	27
College Square East	11	0	2	0	13
Wellington Place	15	4	1	20	40
Donegall Place	0	0	50	0	50
Donegall Sq North	0	3	0	0	3
Chichester Street	30	5	0	3	38
Victoria Street	8	0	0	0	8
High Street	2	2	0	16	20
Castle Place	0	1	0	11	12
Royal Avenue	0	0	0	0	0
Castle Street	8	0	33	6	47
Queen Street	31	5	6	5	47
Upper Queen Street	17	0	3	8	28

The above table indicates that there are around 385 on street car parking opportunities in the above key centrally located streets in Belfast City Centre.

KEY ISSUES

Off-Street Provision

As previously stated, parking provision on-street for blue badge holders plays a large role in maintaining accessibility levels for the city centre area. However, there are also off street parking opportunities within the core area that have a number of disabled parking bays. **Table 5.3** shows the capacity of major car parks in the core area and provision of disabled bays.

Table 5.3: Off Street Car Parking Provision

Key Off Street City Centre Car Parks	Number of Parking Bays*	Number of Disabled Bays*
Castle Court	1500	79
City Parks	600	4
Dublin Road	547	2
Lanyon Place	585	24
Montgomery Street	472	5
Donegall Quay	282	2
Hi Park	570	10
Waterfront Hilton	230	18
Victoria Square	1000	85
TOTAL	5,786	229

*figures provided by car park operators

The above table indicates that when the key city centre off street car parks are considered these constitute over 5700 centrally located off street parking opportunities available. From discussions with car park operators it was gleaned that almost 230 dedicated disabled parking bays are also provided within these car parks and these are often under-used. It should be noted that these spaces are currently not free of charge for Blue Badge holders.

Key Issue: *Further reductions in on street disabled parking provision in central locations due to pedestrianisation proposals may decrease car-based access options for disabled users.*

Shopmobility Scheme

Shopmobility is a key scheme which helps give disabled users the confidence to gain access to the city centre. This charity scheme lends manual wheelchairs, powered wheelchairs and powered scooters to members of the public with limited mobility to shop and to visit leisure and commercial facilities within the town, city or shopping centre.



Figure 5.1 Image of Shopmobility unit, Westgate House (Source: Shopmobility Belfast)

Shopmobility schemes aim to actively encourage inclusion and equality by providing facilities for disabled users. The Shopmobility Belfast charity provides daily equipment free of charge although users also have the option to rent a fully electric scooter or wheelchair for a full week for a sum of £40. Along with the provision of physical mobility aids, there is also the opportunity to seek guidance on accessibility issues within the city centre. If required, Shopmobility will also provide escorts to the City Centre.

Shopmobility currently employs around 35 volunteers and are readily available to answer questions and demonstrate operation of the equipment. Shopmobility Belfast membership base continues to expand annually and currently has around 7,182 members. Despite a total of 96 wheelchairs and 80 electric scooters, there are often times when Shopmobility is operating at full capacity and there is no equipment available. **Table 5.4** shows the breakdown of new members per month, usage of equipment and total hours of usage.

Table 5.4: Breakdown of new Members per month & usage of equipment (2007/2008)

Month	Total Usage of Equipment	Total Hours Used	New Members Signed up
April 07	501	990	57
May 07	361	720	28
June 07	412	887	31
July 07	424	875	21
August 07	416	875	43
September 07	429	902	46
October 07	607	1221	46
November 07	603	1264	60
December 07	573	1200	35
January 08	392	746	15
February 08	460	1406	29
March 08	612	2187	20
TOTAL	5,671	16,269	431

The existing city centre Shopmobility centres are located at Queen Street and Gresham Street with centres located at Victoria Square and Europa Bus Station.

Following a decision by Shopmobility the Castle Court facilities, which were the busiest of the Shopmobility Centres, relocated in late 2008 to Gresham Street. It should be noted that this new location has considerably lower levels of accessibility and only half the capacity of the current Castle Court location.

Shopmobility centres are also linked up to some of the City's hotels, ensuring that a disabled person requiring a wheelchair or scooter can have the equipment at their hotel upon arrival.

Communication with various Shopmobility users provided the opportunity to highlight areas where the service could be optimised. Shopmobility at the Victoria Centre currently suffers from lack of effective signage within the Centre itself, with many users having to ask security staff for directions. However, the main service that users hoped would be officially introduced was the provision of disabled toilets and adult changing rooms at each Shopmobility centre.

Shopmobility aspirations for the future included extended service hours, including opening on Saturdays, and improved/increased provision of disabled car parking at the Westgate House Shopmobility centre at Queen Street.

As part of previous work developed by AECOM (formerly EDAW) for the DSD Streets Ahead proposals the 'Mobility Hub' concept was introduced to help establish how disabled people can access the key city centre locations through access to each hub. Connectivity to services such as taxis and public transport would offer a flexible and integrated approach and improve access for various groups with a range of disabilities.

It is considered that mobility hubs, where possible, should include as much of the following facilities in the immediate or close proximity to accommodate the needs of disabled users:

- Toilet Facilities;
- Disabled Parking facilities;
- Accessible Taxi Facilities;
- Accessible Bus or Rail facilities;
- Access to Shopmobility facilities;
- Wayfinder signage and mapping information;
- Good pedestrian facilities; and
- "Set down" and "pick up" facilities.

Although the Shopmobility facilities available in Belfast seem to be generous in comparison to other cities in the UK, there is a concern that the service is under threat due to funding / lack of marketing and poor access and that more needs to be done to integrate these services to mobility hub type facilities. Shopmobility services can, for example, be enhanced through integration with taxis and bus services in order to provide a more cohesive mobility hub concept.

Key Issue: *Threat to the service which existing Shopmobility centres can provide and how these centres can be practically integrated into the mobility hub concept.*

Door to door Services

The Door-to-Door scheme, funded by DRD, has been operating in 29 urban areas of Northern Ireland from 2007. Prior to that date it was operated in Belfast by Disability Action.

To use the Door-2-Door scheme members need to meet one of the criteria, as set out below, and to live within one of the membership catchment areas of the service.

The eligibility criteria for the scheme are:

- in receipt of the higher rate mobility component of Disability Living Allowance;
- in receipt of the higher rate care component of Disability Living Allowance;
- in receipt of the higher rate of Attendance Allowance;
- registered blind;
- 80 years of age or older.

If none of the above applies application can still be made for membership through a doctor (he/she will need to confirm that the applicant finds it difficult or impossible to use mainstream public transport).

The cost of a single journey is charged as a flat fare of £1.50, to travel anywhere within the local area (known as the Operational Area). It is possible to travel beyond this distance but it will cost more than the flat fare.

In the Belfast area an average of 3000 journeys are undertaken each month, which compares with an average of 10,000 per month for the all other areas combined. Additionally 3200 members of the scheme, representing 29% of the total membership, are based in Belfast.

Although feedback from the consultation exercise indicated that the existing service works well and continues to operate effectively, there was a concern that the penetration of the future door to door services will be adversely impacted by the future proposals for the city centre.

Key Issue: *There is a current lack of integration between the door to door service and other services such as Shopmobility, and a concern that the future proposals in the city centre may impact on the penetration of the existing door to door service.*

ENFORCEMENT

Abuse of the Blue Badge Parking System

A key concern raised in the consultation was that there is little enforcement to address the issue of fraudulent activity associated with misuse of the Blue Badge and abuse of the parking system.

DRD Roads Service has increased enforcement and introduced a 'crackdown' on Blue Badge abuse (see Figure 5.2), following consultation with the Inclusive Mobility and Transport Advisory Committee (IMTAC), who identified that abuse of Blue Badges is a major problem. Common abuse of the badge scheme includes: family or friends using a badge without the badge holder travelling in the vehicle; overstaying the concession time allowed; and displaying the badge back to front, which prevents traffic attendants from identifying the serial number.

Roads Service and their contractor for decriminalised parking enforcement, NCL Services Ltd, have made a determined effort towards enforcing the misuse of parking concessions available to Blue Badge holders. The Parking Enforcement Unit has always enforced rigorously against vehicles not displaying a valid Blue Badge which are parked in bays reserved for Blue Badge holders. This is a clear contravention that is easily identified by the traffic attendants and Roads Service has never been lenient in this area. Roads Service has issued over 20,200 penalty charge notices (PCN) in such circumstances from November 06 – March 10.

In addition to this a specialist Blue Badge enforcement team of two traffic attendants is deployed to every main town on a rotational basis - but primarily in Belfast. These traffic attendants are easily identifiable by their high visibility waistcoats displaying the words "Blue Badge Parking Enforcement", which serves not only as a deterrent but also a demonstration to legitimate Blue Badge holders/users that action is being taken to protect the proper use of Blue Badges.

KEY ISSUES

Established patterns of misuse include;

- Hot Spots;
- Suspected vehicles displaying fake badges; and
- Persons using other family members Blue Badge to avail of free city centre parking.

With this information Road Service Parking Enforcement Unit can effectively enforce parking contraventions which occur as a result of the misuse of Blue Badges.

The initial penalty comprises a standard penalty charge notice (PCN) for which the fine is set at £60 or reduced to £30 if paid within 14 days. If Roads Service Disabled Persons Badge Section believe there to be a pattern of misuse, the Blue Badge may be withdrawn from the disabled user responsible for it whether or not they were actually the person responsible for the acts of misuse. It is a criminal offence for non-disabled people to use a Blue Badge. If they do so they could be liable to a fine of up to £1,000.



Figure 5.2 Parking Enforcement in Belfast

Parking attendants carry out targeted checks in Belfast and ticket vehicles where it is believed the Blue Badge is being used incorrectly. Roads Service is very careful to ensure that enforcement action is only taken when it is identified that the badge is being misused. Since the start of misuse enforcement in September 08 to end of March 10 parking attendants have detected 1567 vehicles where misuse is suspected. From these 1567 cases 296 badge holders were contacted at home proving misuse was taking place. PCN's were issued to 209 vehicles, of which 185 were issued in Belfast.

MOVING AROUND THE CITY CENTRE

Misuse enforcement covers:

- The enforcement of parking on yellow lines. In most cases, a disabled user may display their Blue Badge properly and park on yellow lines for up to three hours. Parking for longer than this is presently enforced by the Blue Badge TA's; and
- The correct display of the Badge, ensuring it is faced the correct way up and clearly visible. It is essential that traffic attendants are able to see the serial number and expiry date, in order to verify that a badge is valid.

Key Issue: *The Access and Mobility Workshop identified the broad agreement by disabled groups that current levels of blue badge misuse and abuse of the parking system are unacceptably high and they would also like to see more stringent regulations to enable a greater level of enforcement so that genuine users can avail of accessible parking facilities.*

Shopmobility and Mobility Hubs

As well as gaining access to the city, the service which Shopmobility provides is an obvious benefit for disabled people to gain access around the city. From the recent consultation carried out with the various disabled groups and representatives and taking on board the work carried out by AECOM on behalf of DSD it is clear that there is wide approval for the improvement of the existing service through the introduction of mobility hubs in connection with existing and potential Shopmobility services within Belfast City Centre. In order to meet the aspirations of DRD and Shopmobility of providing a coherent service for the city it is imperative that all relevant key stakeholders can work in close consultation. The concept of Mobility Hubs and how the existing Shopmobility services can be incorporated have been further explored in Chapters 6 and 7 of this report.

Key Issue: *Limited opportunities for Shopmobility services to be expanded to support additional mobility hubs in city centre area. Also lack of detailed research into appropriate locations for mobility hubs.*

KEY ISSUES

Eco Bus

In connection with the Mobility Hubs concept the potential to introduce an Ecobus system in Belfast City Centre, similar to those in operation in Italy, has been explored as part of the DSD Streets Ahead and is seen by the disabled groups consulted for the study as a good opportunity to improve the access around the city centre for disabled people.

The eco-bus aspiration has been successfully implemented in the cities of Lucca and Florence in Italy by Tecnobus of Frosinone. These vehicles have been designed to allow for ease of movement within their pedestrianised historic centres. The vehicles provide a loading capacity of 8 seated persons and have a typical length of 5.09m; width of 2.07m; and are 2.58m in height.

The minibuses are powered by electric battery units, which provide an approximate longevity of 5 hours. 'The electric battery unit could be charged at depots or transport hubs between journeys. However, battery life can be further extended using systems such as 'regenerative braking' which reduces vehicle speed by converting kinetic energy and using it to recharge the battery. Therefore the eco-buses contribute to creating a greener and less congested environment. The concept of an Ecobus system is further explored in Chapters 6 and 7 of this report.

Key Issue: *The potential to introduce an 'Ecobus' type system in the city centre would require further research into costs, possible routes and the operational aspects.*

Public Transport Provision

Translink

During the Access and Mobility Workshop it was highlighted by a number of the attendees that they had experienced issues with regard to poor levels of disability awareness and customer service from Translink staff while using the bus services. As a result of this their decision to use bus services to access the city centre have been affected and many would often seek alternative transport methods.

At present approximately 97% of the Metro bus fleet which serves Belfast City Centre are considered 'accessible for disabled users' by Translink, with 86% wheelchair accessible and 97% with low floors. Depending on the funding available, Translink has estimated that they will have a fully accessible fleet by 2012/13.

Translink currently has in place Disability Awareness Training for all frontline staff to help them understand the needs of their passengers with a disability. The current measures taken by Translink to increase awareness include:

- photographs / images of disabled people using 'mainstream' public transport are used in practically all promotional and information material, including television advertising, corporate publications, policies and passenger information;
- design staff receive training to maintain best practice in all aspects of communication with / information for disabled people;
- Translink has an Equal Opportunities Policy which includes an appendix on the employment of disabled people;
- all front line staff are given specific disability awareness training – e.g. a new specific programme for bus drivers is currently under development with IMTAC;
- bespoke information sources for disabled people are provided – e.g. text phones, timetables in Braille or audio, etc; and
- a steering group chaired at senior executive level has been established with a specific accessibility remit.

Following a public consultation exercise in 2009, the Disability Discrimination (Transport Vehicles) Regulations (Northern Ireland) 2009 came into operation on 25 January 2010.

KEY ISSUES

Key Issue: *Lack of disability awareness displayed by some bus drivers when dealing with disabled customers. Also poor communication with disabled users when informing customers of changes to services.*

Bus Rapid Transit

Current proposals are for the introduction of a high quality bus rapid transit system including three high frequency routes linking Belfast City Centre to key surrounding areas. It is anticipated that the scheme will improve the overall accessibility to Belfast City Centre and reduce the need for reliance on private car.

It is envisaged that this service, including the new vehicles and the bus stop infrastructure, will be designed to be fully accessible for customers with a disability and that drivers will also be fully trained in disability awareness.

Park and Ride

Park and Ride facilities at Sprucefield, Black's Road, Eastside and Northside have become very popular and provide an alternative mode of transport for some users to access the city centre. In most existing Park and Ride operations and for all future proposed operations the Department specify fully accessible low floor buses. In addition dedicated disabled spaces are provided as close as possible to the Terminal/ bus stops.

The new site being developed at Cairnshill, to the south of the City, will further enhance opportunities for all visitors to the city centre to use public transport for at least part of their journey.

Shopmobility and Public Transport

In May 2006 Translink and Shopmobility created a partnership to offer Translink customers at the Europa Bus and Rail Station the convenience and benefits of having a Shopmobility service at one of the main transport hubs in Belfast. Similar services have not yet been provided at the other main transport hubs of Laganside Buscentre and Central Railway Station. The service, however, runs on a pre-registered

basis only, with users having to book the use of a scooter or wheelchair at least the day before travel through the main Shopmobility store at Queen Street, Belfast. The scooter is then delivered to the Europa/ Great Victoria Street Station on the day of travel. If passengers at any of these stations enquire about the Shopmobility service they are informed of the service at the Europa Buscentre, but that they would have needed to pre-book a scooter for delivery. In this event the passenger would be directed to one of the other Shopmobility services throughout Belfast which may be convenient.

Key Issue: *Shopmobility service not currently available at all key public transport interchanges. Disabled users are also required to pre-book in advance in order to make use of Shopmobility services at a key public transport interchange, deterring users from spontaneous travel.*

Taxi Provision

Similar to the customer experiences found with Translink, disabled groups have indicated that the service provided by taxi drivers can vary depending on the experience of the individual drivers. It is clear that the level of disability awareness training given to individual drivers does not provide a uniform and considerate service for disabled customers. Access facilities at taxi ranks were also described as less than ideal at some locations in the city centre. Unsuitable waiting space and poor paving design were registered complaints with respect to gaining easy access to taxi facilities for disabled users.

Key Issue: *Lack of disability awareness displayed by some taxi drivers when dealing with disabled customers. Also poor standard waiting facilities at some taxi ranks.*

KEY ISSUES

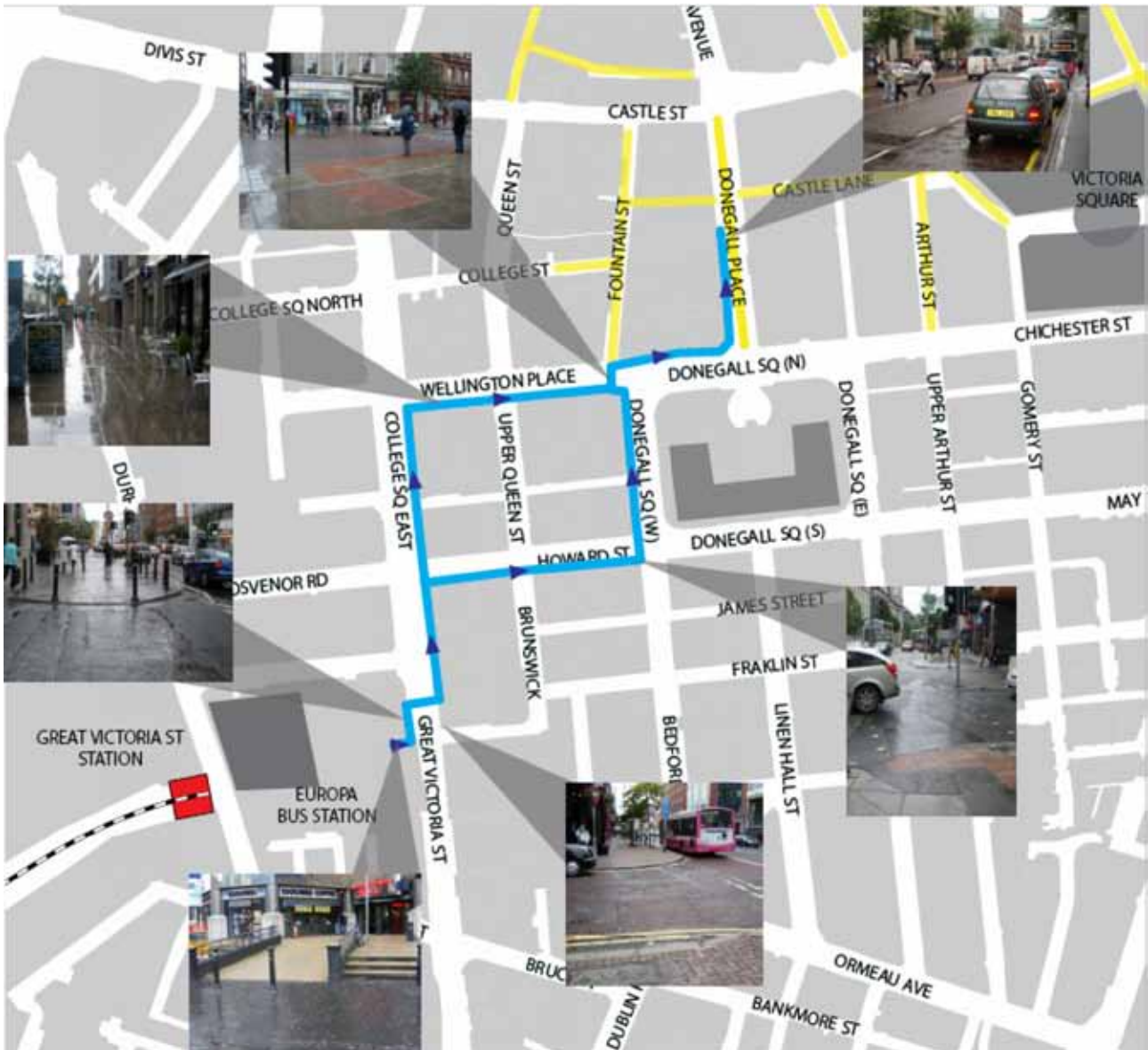


Figure 5.3 Pedestrian Route between Europa Bus & Rail Station and the City Centre

Pedestrian Desire Lines between Public Transport and the City Centre

As part of our audit of the city centre we have reviewed the issues and obstacles experienced between the existing key Public Transport Interchanges in Belfast and the city centre area. Figures 5.3 to 5.5 illustrate some of the difficulties faced on such routes, while Table 5.5 summarises the mobility issues experienced on each of the routes.

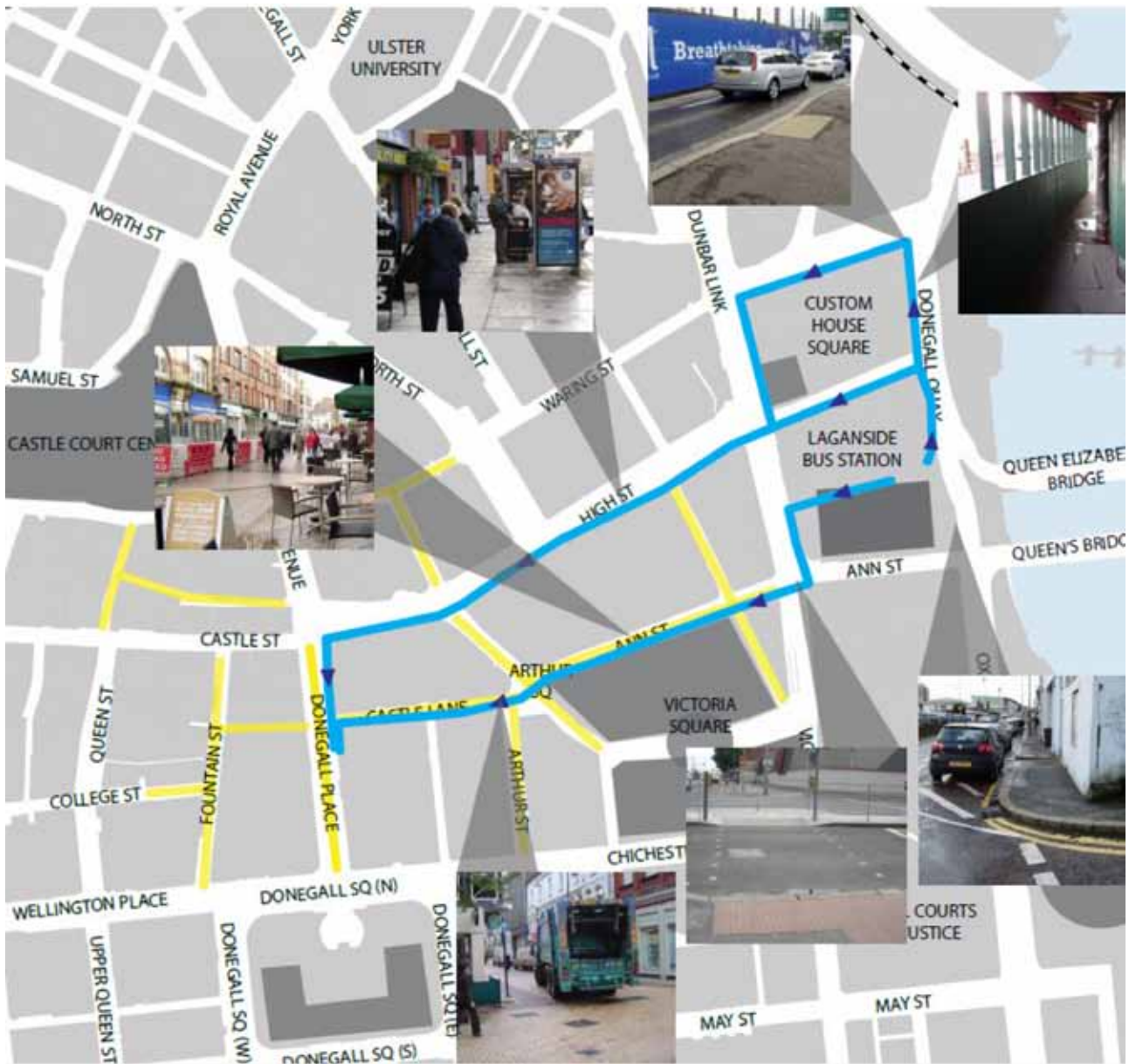


Figure 5.4 Pedestrian Route between Langanside Bus Station and the City Centre

KEY ISSUES

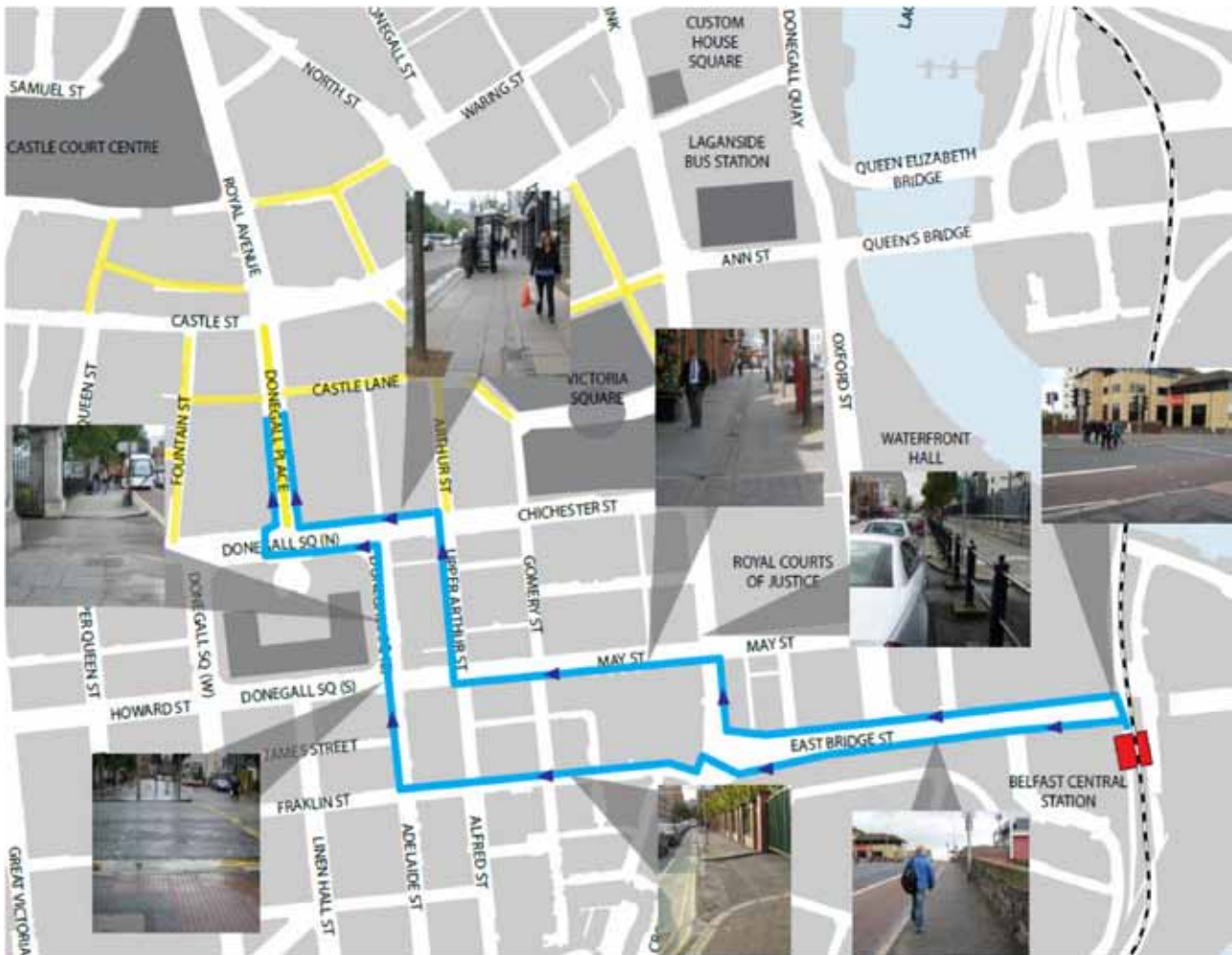


Figure 5.5 Pedestrian Route between Central Rail Station and the City Centre

Table 5.5: Issues impeding mobility along key Pedestrian routes in Belfast City Centre

Route	Location	Issues Impeding Mobility			
		Lack of Tactile Paving	Lack of Dropped Kerb	Street Clutter	Uneven Damaged Surfacing
Europa to City Centre	Bedford St / Howard St	√			
	Great Victoria St / Brunswick St		√		
	Great Victoria St / Europa Hotel		√		
	Wellington Place			√	
	Donegall Sq North		√		
	Donegall Place	√			
Laganside to City Centre	Ann Street			√	
	Castle Lane / Arthur Street			√	
	High Street			√	
	Donegal Quay		√		
	Donegal Quay		√		
	Donegal Quay / Ann St	√	√		
Central Station to City Centre	Hamilton Street		√		
	Donegal Sq South / Adelaide St				√
	Donegal Sq East		√		
	Donegal Sq North			√	√
	May Street				√
	May St / Courts		√		

Key Issue: Key pedestrian routes between the main public transport interchanges in the city and the city centre core area are not fully accessible for disabled users.

KEY ISSUES

As a result of this preliminary review, AECOM met onsite with IMTAC and Disability Action to travel the routes from the main public transport stations in the city centre to Donegall Square. The results of this exercise emphasised the points raised in the initial review by Arup, highlighting that there are some areas where physical features could be improved. The following recurring issues were identified:

- inconsistent use and application of tactile on crossings and vehicle entrances;
- incorrect layout to crossings, which can cause confusion;
- vehicle over run and parking on footways;
- inappropriate maintenance reinstatements or replacements of tactile slabs;
- high drop kerbs, which can pose a tripping hazard to the infirm and an obstruction to wheelchair or powerchair users; and
- obstructions caused by parked cars, A boards, external seating and other street furniture on the pedestrian desire line.

Details of the specific items found were forwarded to Roads Service for consideration and action as considered appropriate.

Street Clutter & Café Culture

Street furniture is the term used to denote objects within the streetscape, commonly located within the footways. The responses to the Access and Mobility workshop consultation identified that disabled groups find it increasingly difficult to navigate through streets and pedestrianised areas in which there is street furniture in uncoordinated and inappropriate locations. Outdoor café seating can be an obstruction to a safe pedestrian movement. As shown previously in **Figures 5.3 to 5.5** there are many examples of these types of obstructions, which can be hazardous for disabled users, on key routes between the city centre and surrounding key transport interchanges.

The “Belfast City Centre (BCC) Public Realm Design Codes” document outlines the recommended manner in which the provision of street furniture should be provided and how it should be integrated into street pavements while providing minimum obstruction. This document points to case studies in London Borough of Kensington and Chelsea. These projects looked at reducing the amount of visual clutter including street furniture, which in turn has led to an overall reduction in accidents of 64%.

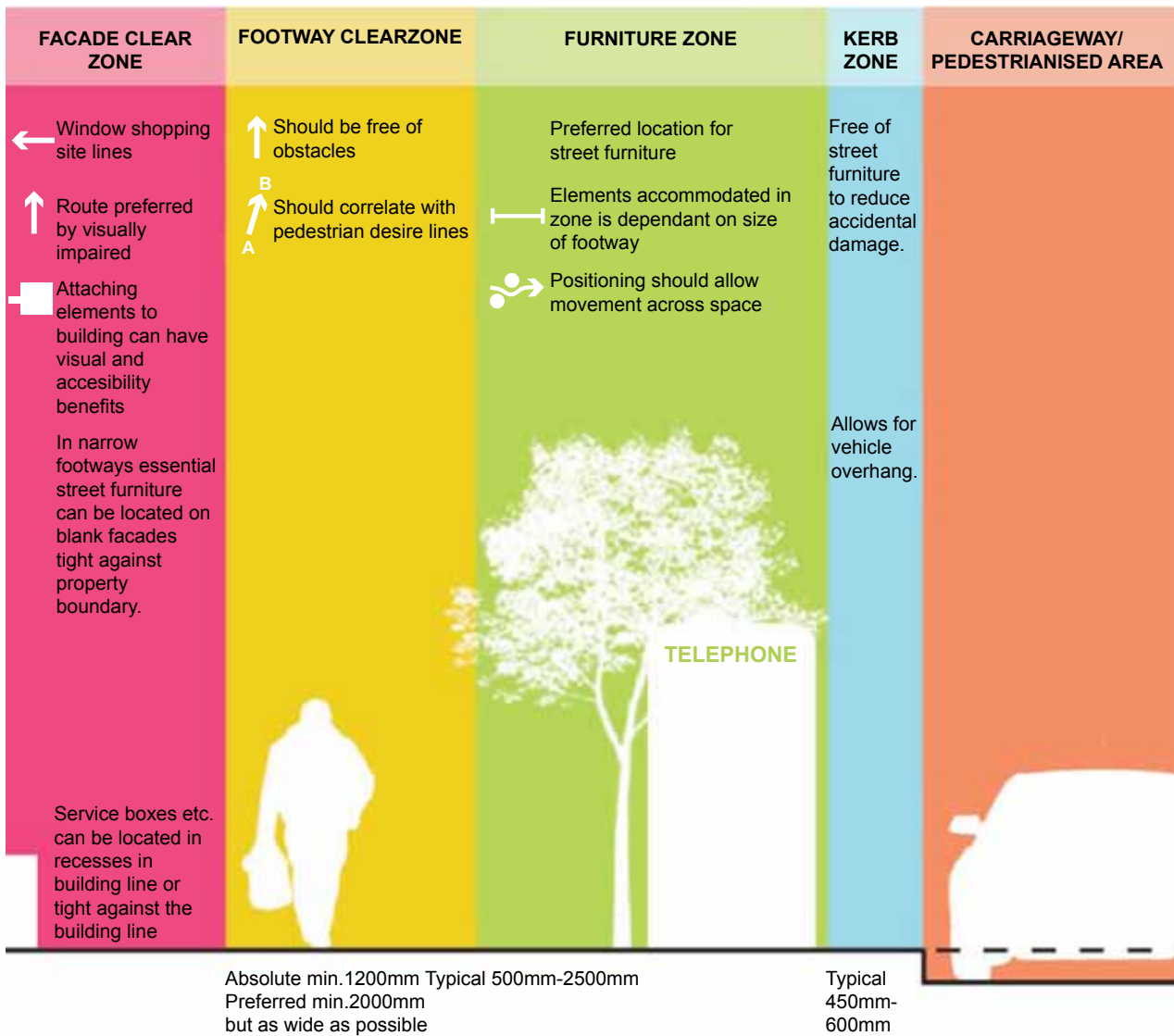


Figure 5.6: Location of street furniture in relation to the preferred street layout

KEY ISSUES

Integration and provision of various elements street furniture for the City Centre should be approached in a coordinated manner. Figure 5.6 shows the location of street furniture in relation to the preferred street layout. According to “Belfast City Centre (BCC) Public Realm Design Codes” the furniture zone can vary in width but is typically between 500-2500mm, and is the preferred location for street furniture such as benches, bins, signs and lamp posts and street trees. The furniture zone is a means of separation between carriageway and footway and wider zones lead to an increased perception of safety and comfort by the pedestrian.

DCAN 11 ‘Access for All, Designing Accessible Environments’ provides the planning policy context in relation to controlling the location and suitability of street furniture and seating. The document sets out in Section 7 that street furniture should be located so that it does not obstruct pedestrian movement along pathways. In addition, ‘A’ boards, menu stands or other freestanding or mobile display material should not be located on pathways because of their potential to act as an obstruction and hazard for blind and partially sighted people. This is extended to where seating is proposed on the forecourts of premises such as bars or restaurants

and states that care should be taken to ensure that this will not obstruct pedestrian movement or represent a potential hazard to people who are blind or partially sighted.

Belfast City Centre Management (BCCM) has provided a “Memorandum of Understanding” for businesses in relation to sitting out areas for Belfast City Centre. This document is entered into solely with BCCM and does not legitimise or authorise the placing of a sitting out area or furniture on the public footway.

The Department for Social Development has recently commissioned research into pavement cafes in Northern Ireland with a view to developing a consultation document towards the end of 2010.

However legislation does exist that restricts businesses from:

- Obstructing the public footway;
- Selling alcohol outside their defined licensed boundary; and
- Providing loudspeakers broadcasting to the street including music speakers, TVs, etc

Key Issue: *The quantity, positioning and dimensions of street clutter and café furniture in pedestrian areas are creating unsafe obstacles for disabled users travelling around the city.*

Crossing Facilities

Both within the consultation for this study and as part of the audit of existing facilities in the city centre it was evident that there are numerous examples of poorly designed crossing facilities impeding the safe and easy access of people with disabilities. These examples included facilities with no provision for disabled users and facilities which are inadequately installed or poorly maintained. Some of these examples are shown previously in **Figures 5.3 to 5.5**.

Key Issue: *The existing crossing facilities in the city centre are in some instances unavailable, poorly designed or poorly maintained, and as such hinder the safe and convenient access around the city for disabled users.*

Surfacing in Pedestrian Areas

It was also suggested during consultation that attempts to make Belfast City Centre more aesthetically attractive has sacrificed some of the components that make it easier for disabled people to negotiate the various types of street pavement. Cobbled surfaces are problematic for wheelchair users or pedestrians using a walking stick for guidance. Similarly, surfaces that are too smooth can become slippery when wet and are dangerous for people with impairments. Effective drainage is of course important to minimise water gathering on pavement surfaces, which makes some pavements difficult to navigate, but drainage needs to be suitably designed to allow disabled people to cross them safely.

Key Issue: *The choice of surfacing used in pedestrian areas can pose a safety risk for disabled users.*

KEY ISSUES

Signage

The availability of appropriate signage was considered an issue by the disabled groups and representatives during the consultation for this study. Signage which is inaccurate, illegible or non-existent were the key complaints.

The DSD, in consultation with Disability Action, have made a recent commitment to install a new wayfinder signage system at a number of locations in the city centre as part of the Belfast Streets Ahead development, with Donegall Place being first as a pilot scheme.

Key Issue: *Current signage provision within the city centre can be unhelpful or misleading for disabled users.*

Cyclists in Pedestrian Areas

The use of pedestrianised areas by cyclists has been highlighted in the consultation as a concern for disabled users moving around the city centre, which can impact on their confidence. Recommendations have been made by the disabled groups that cyclists should dismount in all pedestrianised areas.

Key Issue: *The use of pedestrianised areas by cyclists can impact on the confidence of disabled users when navigating around the city centre.*



6.0 CASE STUDIES



CASE STUDIES

INTRODUCTION

Examples of how other major cities in the UK have implemented initiatives to encourage an inclusive urban environment, provides essential understanding of how the future operation of Belfast City Centre can be improved. The text below identifies how several Local Authorities have improved the provision for people with disabilities in their city centres. It should be noted that the information on initiatives has been gathered directly from the Local Authorities responsible for implementation of the schemes.

BIRMINGHAM

Initiative

The Wayfinder talking signs system is available in Birmingham City Centre to help blind and partially sighted people to find their way around and improve access to transport, shopping, public services and visitor attractions. Using the REACT units developed through the Royal National Institute of the Blind (RNIB), users can access practical, audible information to help them to get to their destination. A total of 57 REACT units are currently available in the city centre, around railway stations, bus stops and taxi ranks, retail areas and civic



Figure 6.1: Example of Birmingham Wayfinder (Source: Birmingham City Council)

buildings. It is hoped that a further two units will be added soon, with more planned for later in the year. The units have been mounted on either existing street furniture, such as street lamp columns or in new purpose built stainless steel posts located at the sides of pavements.

According to the Local Government Association, half of the blue badges in Birmingham are being abused. An investigation by BBC's Inside Out in the West Midlands identified that drivers parking illegally in spaces for disabled motorists are costing Birmingham City Council £500,000 in lost parking fees each year. Transport chiefs stated that the most common misuse was people using badges awarded to their relatives, without the relatives being in the car. The city council has

vowed to take tough action against those caught, threatening fines of up to £1,000. The City Council have started to use private prosecutions to bring people to court, which allows them to impose higher fines and leave the drivers with a criminal record. Extra patrols have been put on the streets to improve enforcement levels.

Result

This initiative by Birmingham City Council resulted in the increased accessibility of the city centre to the visually impaired. The Wayfinder scheme allows for disabled users to navigate the city centre with greater ease, which is vital in ensuring that the city centre is an accessible and safe environment for pedestrians with limited or no vision. The City Council's approach to blue badge enforcement aims to reduce fraudulent activity that threatens the accessibility of the City to the mobility impaired. It should be noted that as part of the Streets Ahead project, DSD have agreed to implement a pilot wayfinder system in Donegall Place.



Figure 6.2: The i+ initiative in Bristol City Centre (*Source: Bristol City Council*)

BRISTOL

Initiative

Bristol Legible City is a unique concept to improve people's understanding and experience of the city through the implementation of identity, information and transportation projects. This project includes direction signs, on street information panels with city and area maps, printed walking maps, visitor information identity and arts projects. It is designed to communicate the city consistently and effectively to visitors and residents alike. The pedestrian signing system helps visitors find their way around the city centre and encourages people to explore the local area on foot or by using public transport.

CASE STUDIES

Bristol has introduced a new, integrated pedestrian signage system and maps, linking main points of arrival with key attractions, visitor destinations and landmarks.

The maps are unique in that they are 'heads-up', not north facing, so that what the reader sees on the map what is in front of them. The i+ points (see Figure 6.2) are street based touch-screen information kiosks. They provide live and relevant information about the immediate location and are a key part of Bristol City Council's aim to provide a diverse range of ways for people to find out about the city. Over 19 i+ points are sited around Bristol City Centre. They provide a variety of information, including up to date news from the BBC, tourist information from VisitBristol, details of where to shop, events and what to do.

In addition, a clutter reduction scheme is underway to remove unnecessary street furniture, - up to 30 pieces of redundant furniture, including street plates, have been removed from Queen Square, for example, including poles, no waiting and one-way signs.

Result

Through the provision of a comprehensive public information scheme, all users within the city centre can easily identify and plan routes to key destinations with ease. This provides disabled groups with greater confidence and encourages interchange with other transport modes through identifying public transport locations. However, consultation by Disability Action with the local access groups has indicated that, while the heads-up maps were a good idea, they were disappointed that the audible element of the scheme was not implemented. The i+ points were not considered as accessible by the local access groups, as they only provide visual information and the units were not positioned at an accessible height.

The reduction of street clutter is beneficial to disabled groups through the removal of obstructive furniture, which increases mobility space.

BRIGHTON AND HOVE

Initiative

Brighton and Hove City has introduced several initiatives to demonstrate the Council's ambition to achieve an inclusive urban environment for all groups of people.

The Council has introduced a door-to-door transport service for disabled and elderly people, including people in wheelchairs, who cannot use the bus service. Easylink buses serve all parts of Brighton and provide a service to and from superstores, the city centre and local shops. In addition, the Council runs a taxi voucher scheme for residents who qualify for a Sussex Countycard bus pass, but cannot use buses because of a disability. Taxi vouchers are provided free of charge and the current issue is £45 of vouchers per annum. Concessionary rates are offered to bus users with disabilities.

Brighton & Hove was awarded second place in the 2007 British Toilet Association's Loo of the Year Awards. This was largely achieved through the acknowledgement of the provision of accessible RADAR (The Royal Association for Disability and Rehabilitation) public toilets. The RADAR key scheme is a nationwide scheme which enables people with

disabilities to gain entry to disabled accessible toilets where the RADAR key lock is in place. RADAR keys are for use by disabled people and enable disabled people to engage in their communities and take part in everyday activities with the knowledge that they can access a toilet where the key scheme is in place. RADAR keys are supplied free of charge to Brighton and Hove disabled residents who have access to 54 accessible public toilets. These are wheelchair accessible and especially designed to make their usage as easy as possible. Brighton and Hove City Council has commissioned Wetton Cleaning Services to commence works to raise the standards in disabled accessible toilets. This work commenced in 2007 and is expected to be completed by the end of 2008. Works include the installation of new toilet pans, alarms, grab rails and other equipment such as colostomy shelves. New signage has also been erected at public toilets which includes the use of tactile and braille.

Brighton offers a learning disability service where specialist help is available from the Integrated Learning Disability Team. This initiative aims to enable adults with learning disabilities to achieve greater life ambitions, including being able to access the city centre via public transport.

CASE STUDIES

Result

The schemes implemented by Brighton and Hove City Council has resulted in an inclusive city centre environment in which disabled users feel secure and confident. The provision of accessible public toilets has allowed for disabled users to access all areas of the city and the RADAR scheme ensures that this provision cannot be exploited. The learning disability service further enhances the confidence and ability of disabled people to use the city centre services, which are made accessible via the door-to-door and taxi initiatives.

EDINBURGH

Initiative

Edinburgh City Council requires taxi drivers to undertake a compulsory training course as part of their licence conditions; although this does not currently extend to Private Hire Vehicle drivers in the city. The course is operated by Telford College, Edinburgh, and covers six elements:

- conditions of licence and road safety issues;
- wheelchair accessibility and disability awareness;
- first aid;
- handling conflict and stress;
- vehicle maintenance; and
- customer care.

General professional etiquette and passenger awareness guidance is given, followed by specific assistance information for partially sighted passengers, passengers with hearing loss, passengers with walking difficulties and wheelchair users. Practical sessions showing how to assist a partially sighted person and how to manoeuvre a wheelchair are included.

Result

This taxi driver training initiative has encouraged an inclusive public transport system in which service providers have the necessary skills to accommodate disabled users. By offering a service that disabled people feel assured and confident in using, the city centre has become a more attractive destination for the mobility impaired.



Figure 6.3: Outdoor cafe seating in Swansea City Centre

SWANSEA

Initiative

In 2007 Swansea published a 'highways information pack' in order to provide basic guidance on where planning permission has an impact on the public highway. This document addresses the issue of outdoor café seating needing to be regulated. It sets out that the use of chairs and tables outside café, pub and restaurant premises in the city centre is supported by the Council where there is sufficient space, as they bring life and vitality to the city's streets.

However, in order that they do not cause problems for pedestrians and emergency service vehicles, permission is required with the application for a licence. A condition requiring the cordoning off of the seating area is common and

important for the guidance of blind and partially sighted people, and is also helpful to elderly people and to parents with young children.

Swansea City Council sets standards for a minimum unobstructed footway width of 1.80 metres (see **Figure 6.3**), which must be provided for safe and convenient pedestrian movement. This distance is measured from the edge of the licensed area to any significant street furniture.

Where there is a heavy pedestrian flow, additional footway space may be required. In these cases, applications for permission may be refused where full footway widths are required to maintain heavy pedestrian flows.

Result

The regulation of outdoor café seating in busy pedestrian streets ensures that the pedestrian movement problems that café culture creates can be dealt with effectively and that the accessibility of the city centre to the mobility impaired is maintained. As noted earlier in this report, DSD have commissioned research into café culture and aim to publish a document for consultation in late 2010.

CASE STUDIES

GLOUCESTER

Initiative

The City Council's Shopmobility Team is a past winner of the National Federation of Shopmobility UK Tom Hillier Award for outstanding customer service. The team has a fleet of 70 pavement vehicles which include:

- manual wheelchairs with both small and large wheels;
- powered wheelchairs with either right or left hand occupant control;
- powered wheelchairs with attendant control;
- scooters with four wheels; and
- scooters with three wheels.

The scheme provides a free service within the inner ring road between 9.30am and 5.00pm from Monday to Saturday.

If the vehicle breaks down the team will send out a repair service or provide a replacement vehicle. In addition, it offers information that provides the location of all the accessible toilets in the city centre. In poor weather conditions the service provides a supply of rain capes and rugs.

Shopmobility in Gloucester runs a 'Friends of Shopmobility' group that comprises people who want to be involved in developing the services offered for the overall good of people who experience limited mobility. Anyone can become a member of the group, which:

- advises on the choice of Shopmobility vehicles;
- advises on the arrangement of Shopmobility accommodation;
- raises funds for equipment for Shopmobility;
- organises social events; and
- acts as consultants on mobility matters relating to the city centre.

As part of its role in encouraging people who use mobility aids to use all the facilities in Gloucester, it maintains an "Obstacle Course" database. This lists a number of elements in the city that could be improved. The list is then discussed at 'Friends Management Committees'. These meetings co-ordinate the Shopmobility activities and communicate information.

Result

Gloucester Shopmobility provides an essential service for people who have limited mobility to help them use all the facilities in the city centre. It should be noted, however, that this example is not typical of other schemes in the UK and most receive little or no government funding. The scheme in Belfast receives up to £30,000 per annum in funding from DRD and the Department is currently funding a full time member of staff to promote the various schemes throughout Northern Ireland.

LEICESTER

Initiative

Leicester City Council is in the process of introducing a new and convenient system to encourage the participation of disabled people in public life. This includes:

- expanding the pedestrianised area;
- providing measures to ensure a new 'vehicle access restriction' whereby pedestrians are not exposed to any noise/air pollution or the need to compromise with traffic;
- making access to work easier for Disabled employees by allowing entry through the Pedestrian Preference Zone with the use of unique serial numbers;
- providing seating at frequent intervals;
- creating a public transport corridor, which will remove buses from busy pedestrianised areas;
- providing additional on-street Blue Badge Parking and free car parking for Blue Badge holders in all city council operated car parks; and
- providing a free Shopmobility scheme.

Result

Leicester City Council has taken a proactive approach to implementing much of the previously identified best practice as published by the Department for Transport. In particular, disabled groups are encouraged to work in the city by the initiative to provide unique serial numbers to disabled people to facilitate access to the pedestrianised zone in the city centre. A public transport corridor also ensures the removal of vehicles from pedestrian areas, which increases the safety of all users.

CASE STUDIES

PEDESTRIANISATION AND DISABLED PARKING PROVISION

Pedestrianisation of key streets and spaces within towns and cities has become the forefront of urban design and sustainability ideology. The approach aims to improve pedestrian safety and mobility by restricting the access of non-essential vehicles. The motivation for Local Authorities is the potential generation of increased economic profitability as well as public demand for safe and attractive areas with a clean environment in which to enjoy the shopping experience, to socialise and to be entertained. Pedestrianisation schemes can additionally help to reduce both noise and air pollution in key city spaces. Furthermore the concept of pedestrianising city centres promotes walking and cycling as primary transport modes by making the experience more feasible and enjoyable. However, it is also important to consider the needs of the mobility impaired in any pedestrianisation scheme. This subsection of the report aims to identify how some major cities in the UK have accommodated such groups, with a concluding comparison to the existing Belfast provision.

Cambridge

Cambridge has a vehicle free pedestrian zone that provides a safe shopping area and protects the historic city centre environment.

The pedestrian zone operates 24 hours a day, 7 days a week, and access is further restricted between 10am and 4pm Monday to Saturday. In between these hours access for vehicles is prohibited unless the vehicle meets strict requirements. Access to most parts of the pedestrian zone is blocked by the use of automatic bollards. Entry through the bollards is only given to those vehicles which have a transponder such as buses or emergency vehicles or to those drivers who are given a swipe card. These include permits to allow those with more severe disabilities access to the city centre. To qualify the user must hold a Blue Badge and be in receipt of one of the following benefits:

1. Mobility Allowance
2. The higher rate of Disability Living Allowance
3. War Pension Mobility Supplement

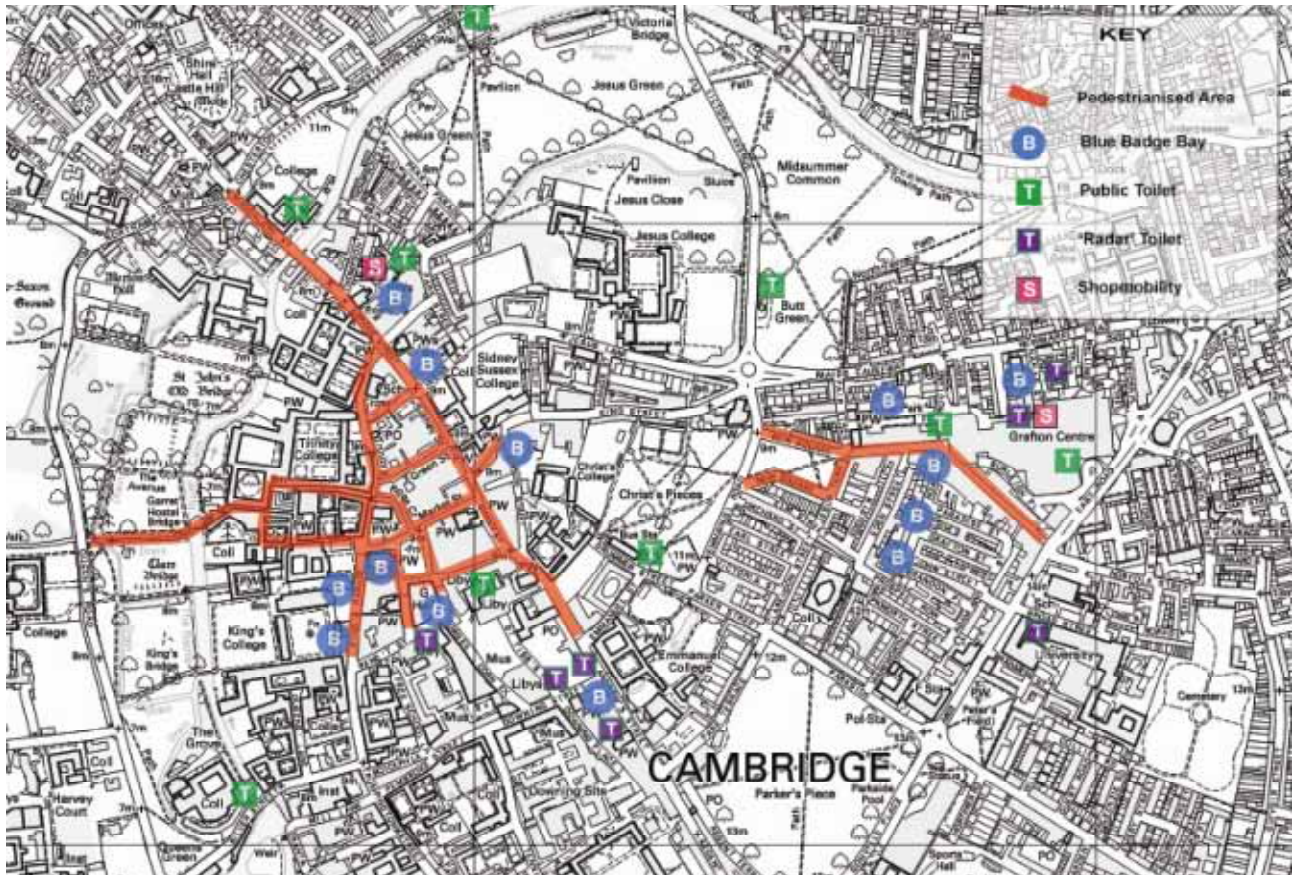


Figure 6.4: Cambridge Pedestrian Area and Facilities

CASE STUDIES

Access to the pedestrian zone is strictly controlled because of the possibility of compromising the safety of pedestrians by allowing additional vehicles into an area that is advertised as for pedestrians only. However, the Council acknowledges that those with severely limited mobility require additional support. Therefore the Disabled Access Permit was introduced but the issue of the permits is strictly controlled.

This initiative by Cambridge City Council makes allowances for the severely disabled on a given criteria basis. This ensures that the pedestrian zone remains vehicle free, with the exception of strictly monitored and limited exceptions of the most immobile disabled users - all users are therefore provided with a safe environment.

Figure 6.4 identifies the pedestrian area in Cambridge, in relation to disabled parking, public toilet and Shopmobility centre provision.

Nottingham

In Nottingham, 'The Clear Zone' has been introduced to make it easier for people to use the shops and businesses in the centre of the city. Most vehicles (including delivery vehicles) are not allowed in the Clear Zone after 10:00 or before 16:30. Between 10:00 and 16:30 Blue Badge holders are not allowed to park in these areas. The Special Access Scheme is a concession for people who have particular mobility difficulties. It allows their vehicle access to pedestrian areas in Nottingham.

In addition, Blue Badge holders are advised that when in the pedestrian zone:

- pedestrians have right of way;
- only park in the pedestrian area if absolutely necessary;
- permit holders may park for a maximum of three hours;
- never park where it would cause an obstruction or danger to pedestrians; and
- drive slowly.

Nottingham has approached the issue of limiting parking in the city centre through implementing a time restriction initiative. However, in order to address the needs of people with severe mobility problems, a special concession scheme provides flexibility to ensure that accessibility is provided for these disabled users within the city centre 'Clear Zone'. Feedback from disability groups is varied in relation to a 'clear zone', with the Disabled Drivers being in favour of such a scheme in Belfast, while others, such as IMTAC and Disability Action are opposed.

As highlighted later, Nottinghamshire County Council was awarded Beacon status based on its achievements in improving its accessibility in the city centre area.

York

York has published a city centre access guide, which contains maps of wheelchair accessible routes in the city centre, information on disabled parking and also the locations of talking signs. The map was produced by disabled people, based on their own experiences of getting around the city centre using wheelchairs or electric scooters. The grading of routes takes into account pavement width, pavement surfaces, availability of dropped kerbs, gradient and camber, bollards and pavement furniture.

Rising bollards limit access to certain roads for vehicles but pedestrians, cyclists and emergency vehicles have access at all times. People with a blue badge parking permit may park on certain city centre streets. There is also additional parking available for people with severe disabilities. The council issues discretionary green permits to severely disabled people who have Blue Badges. These permits allow further access to disabled parking in the pedestrian areas of York. Residents of York can apply for a green permit if they:

CASE STUDIES

- receive disability living allowance higher rate mobility component or, in severe cases, incapacity benefit; or
- use a motor vehicle supplied by the benefits agency or receive a grant towards your own vehicle.

Talking signs help people with visual impairments find their way around the city centre. They automatically speak information to anyone who approaches the sign wearing a small REACT unit.

Shopmobility is a scheme provided by York City Council that enables people who find walking distances an obstacle to enjoy the shopping and other facilities of city centre areas by lending them powered scooters, electric wheelchairs and manual chairs.

York City Council provides an accessible and inclusive environment for all users within the city centre. An access guide has been prepared in partnership with disabled groups and therefore offers robust guidance on suitable routes to key locations for disabled people within the city centre. Disabled user accessibility to key services and facilities within York is further increased by the provision of 'talking signs' which aid visually impaired users in their navigation around the city centre.

In order to ensure the safety of all users, a series of pedestrian areas restrict vehicular access. However, the successful green permit scheme provides severely disabled users with discretionary access to disabled parking in the pedestrian areas of York. Therefore parking is strictly restricted to the most immobile of users, which limits vehicular use in the pedestrian areas.

In order to compare the relative pedestrian areas and the key facilities between the case study cities and Belfast, the surface areas and the proximity of facilities such as dedicated blue badge parking, toilet and Shopmobility units has been assessed. Table 6.1 summaries the facilities for a number of cities.

City	Pedestrian Area (m ²)	Designated Disabled Bays Available (proximity to the pedestrianised area)			Accessible Toilets (proximity to the pedestrianised area)		Shopmobility Centre
		0-20m	20-50m	50-100m	0-50m	50-100m	
		Birmingham	25,400	63	15	20	
Leeds	23,000	18	9	14	20	3	1
Newcastle	18,100	23	50	4	12	8	1
Sheffield	21,700	14	5	0	11	5	1
Cambridge	19,000	21	10	5	5	6	1
York	16,800	11	0	0	11	2	1
Nottingham	17,700	25	38	32	9	4	1
Belfast	9,900	7	13	7	2	10	3

(Source: Directgov's interactive mapping)

Table 6.1: A Quantitative Comparison of Pedestrian Areas and Facilities in Major UK Cities

It should be noted, of course, that the characteristics of each of the cities listed above does vary in terms of existing public transport provision.

Nottingham and Sheffield for example are served by light rail with associated park and ride facilities.

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The table opposite does indicate however that, in comparison to other major cities in the UK, the amount of pedestrianised area in Belfast is comparatively low. The table also suggests that in comparison to other key cities the level of dedicated blue badge parking bays in close proximity to the core pedestrian areas is low. As stated previously in **Table 5.1** of the report the level of overall on street and off street parking provision in the city centre relative to the population is comparatively better than any of the other key cities in the UK assessed. In addition to the generous overall available parking in Belfast it should be noted that disabled road users can park on-street on any single or double yellow line markings. This may suggest therefore that there is a comparative lack of dedicated disabled parking

bays in Belfast because there is a relative overprovision in general disabled parking opportunities, when the amount of on-street and off-street general parking bays and the permitted use of single/double yellow lines are considered.

Belfast is also well off in terms of Shopmobility with 3 units compared to typically 1 in the other key UK cities. On review of the available toilet facilities it is clear that Belfast has fewer facilities in close proximity to the main pedestrianised areas compared to all the other cities assessed.

DOOR-TO-DOOR SERVICE

Despite the increasing availability of accessible public transport, some disabled people will still need access to door-to-door transport services due to their disability or residual location resulting in social exclusion from using traditional public transport modes.

The Door-to-Door scheme, funded by DRD, has been operating in 29 urban areas of Northern Ireland from 2007. Prior to that date it was operated in Belfast by Disability Action.

To use the Door-to-Door scheme members need to meet one of the criteria, as set out below, and to live within one of the membership catchment areas of the service.

The eligibility criteria for the scheme are:

- in receipt of the higher rate mobility component of Disability Living Allowance;
- in receipt of the higher rate care component of Disability Living Allowance;
- in receipt of the higher rate of Attendance Allowance;
- registered blind;
- 80 years of age or older.

If none of the above applies application can still be made for membership through a doctor (he/she will need to confirm that the applicant finds it difficult or impossible to use mainstream public transport).

The cost of a single journey is charged as a flat fare of £1.50, to travel anywhere within the local area (known as the Operational Area). It is possible to travel beyond this distance but it will cost more than the flat fare.

In the Belfast area an average of 3000 journeys are undertaken each month, which compares with an average of 10,000 per month for the all other areas combined. Additionally 3200 members of the scheme, representing 29% of the total membership, are based in Belfast.

CASE STUDIES

THE BEACON SCHEME

The Beacon Scheme is a prestigious award scheme that recognises excellence in local government. Innovative and ambitious Councils who provide excellent transport services are considered for Beacon status. The scheme sets out a series of themes, which are selected for each 'round' by government ministers. The themes aim to reflect key government priorities and the third theme included 'Better Access and Mobility'. The Department for Transport's Beacon Council Research Report on Better Access and Mobility (2001) set out examples of best practice that were required to earn Beacon status:

- At a strategic level, establishing a hierarchy of town centres to identify preferred locations for major retail and leisure investment and ensuring new developments are directed towards accessible and sustainable locations through use of the sequential test and supporting accessibility measuring techniques;
- Devising and applying standards for the provision of local facilities within new developments;
- Promoting through economic development policies and protecting through development control policies local shopping facilities;
- Ensuring that the pedestrian environment of town and shopping centres is fully accessible, including the promotion of Shopmobility schemes;
- Promoting sustainable transport connections to existing centres and using planning conditions and developer contributions to ensure public transport is provided to new facilities (such as supermarket buses);
- Dial a ride, demand responsive services and matching service provision with infrastructure investment;
- Promoting mobile services, such as doctors and libraries, especially in rural areas or deprived housing urban areas;
- Promoting shoppers' services through transport provision work and collaboration with community transport providers;
- Promoting internet access in local communities and other innovative approaches to promote home deliveries and other methods for remote shopping; and
- Working with local community partnerships, to provide local, affordable goods and services.

Nottinghamshire County Council was awarded Beacon status based on its achievements that included the Robin Hood rail line initiative, a community transport fleet, an effective school travel plan and several mobility management centres. The County is considered to have effective Travel Demand Management policies, and was one of the first local authorities to introduce interim maximum parking standards. A similar approach by Belfast to achieve the best practice examples as set out above would encourage an inclusive and accessible city centre.

BEST PRACTICE DESIGN GUIDES

There are many methods that have been identified through research projects and existing schemes that encourage the safe and successful operation of pedestrian areas that are inclusive to disabled people. Standards of best practice are taken from the “DfT Inclusive Mobility Study” and the “IHT Walking and Cycling Action Plan”.



Figure 6.5: Use of surfaces, textures and planting to define kerb free level access parking bays (Source: *Planning and access for disabled people: a good practice guide 2003*)

Space and Accessibility

Manual wheelchair users need sufficient space to be able to propel the chair without causing physical injury through colliding with door frames or other obstacles. A disabled pedestrian who walks with sticks or crutches also needs more space than a non-disabled walker; so too does a long cane user. Thus providing adequate clear space on pavements, along passages in public buildings and through doorways, is vital to disabled people.

The height of feature buttons/handles, which the wheelchair user has to reach, is also important. Forward reach measurements are also important. Some wheelchair users find it difficult or impossible to lean forward. Manoeuvring space is needed for a wheelchair to turn corners or turn around.

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Impaired Group	Recommended Distance Limit Without a Rest
Wheelchair users	150m
Visually impaired	150m
Mobility impaired without walking aid	100m
Mobility impaired using stick	50m

Distance and Resting Facilities

Walking distances were researched in some detail in the late 1980s and, based on the findings from these studies, the following are recommended:

Research based on a follow-up study to the London Area Travel Survey found that of all the people with a disability who were able to walk at all, approximately 30% could manage no more than 50m without stopping or suffer severe discomfort and a further 20% could only manage between 50 and 200 metres. The findings from this study emphasize the importance of providing plenty of appropriately placed and designed seating at places where people may have to wait and along pedestrian routes.

Visibility

Visually impaired people need a good level of lighting in transport buildings and along pedestrian routes. In addition, information such as a train or bus timetable displays should use a print size that they can read easily.

Street Furniture and Obstruction

Street furniture can cause problems for both wheelchair users and for people who are visually impaired. It is therefore essential to consider both the position of any furniture and the means of making it apparent to people with reduced vision. Posts, poles, bollards etc should be positioned to leave sufficient footway widths. This is required to help visually impaired people aware of the positioning of potential obstructions and ensure that wheelchair users have sufficient widths to pass any street furniture. It is beneficial to disabled groups that lighting and signage is mounted on walls or buildings whenever possible; if not, then placing them at the back of the footway as near the property line as possible is acceptable.

Materials and Tactile Paving

Tactile paving surfaces can be used to convey important information to visually impaired pedestrians about their environment. Tactile paving methods can identify hazard warnings, directional guidance, or the presence of an amenity, as shown in **Figure 6.6**. Research has determined that visually impaired people can reliably detect, distinguish and remember a limited number of different tactile paving surfaces and the distinct meanings assigned to them.

Street Design

Layouts of all pedestrian areas should be simple, logical and consistent. This will enable people to memorise environments that they use regularly and predict and interpret environments that they are encountering for the first time. Contrasts in colour and tone should be used to accentuate the presence of certain key features. This will enable many people to use their residual vision to obtain information. Orientation and wayfinding information should be provided by the use of high visibility and, where appropriate, tactile signing. Many visually impaired people can read signs if they are properly positioned, and if the design incorporates contrasting colours and tones, adequately sized and styled text, and a matt finish. Lighting levels should be even and adequate and



Figure 6.6: Surface texture and level difference used to denote pedestrian areas in Manchester (Source: Alex Sully)

should minimise glare. Once again, this will enable effective use to be made of residual vision, especially to detect contrasts in colour and tone and read high visibility signs.

Conflict with other Groups

Where a cycle track runs alongside a footway or a footpath best practice is to physically segregate the two as advocated in Local Transport Note (LTN) 2/08 ‘Shared Use by Cyclists and Pedestrians’. If this is not possible, appropriate tactile surfaces should be used to identify the cycle and pedestrian paths. A well-defined level difference is particularly helpful to visually impaired people by allowing them to readily locate the edge of the path. They are accustomed to the concept of “Up equals Safe” and this arrangement is an important element

in the training of guide dogs. Where cyclists are to share the space with pedestrians without segregation, the use of surfacing materials and the design and siting other features, such as seating areas, should create an environment in which cycle speeds are low and pedestrians have priority.

Cycle England advises that the use and the spacing of street furniture should also reflect the natural path for cyclists. Different coloured surfacing or materials can help to reinforce this. In cases where other vehicles are allowed and where the surface is level, bollards or trees can be used to mark out pedestrian only areas. In addition, consideration should be given to the provision of guidance paving to ensure that there is a legible route for blind and partially sighted people in such areas, as used within Manchester (see **Figure 6.6**).

Information and Signage

Signs and information must be in forms that can be used by disabled people. It is particularly important to take account of the needs of visually impaired and hard of hearing people and to make information as simple and easily understood as possible. Simplicity helps everyone but particularly people with learning disabilities. The placing of signs is also important: reasonably close to, but not impeding passenger circulation areas.

7.0 RECOMMENDATIONS



RECOMMENDATIONS

INTRODUCTION

It is clear that the ongoing and future work in Belfast City Centre including the DSD Streets Ahead work in the central retail area, the DRD work on the Traffic Management Measures for the city centre, the completion of the south section of the City Centre Ring Road and the Bus Rapid Transit proposals will allow for the reallocation of city centre road space to pedestrians, cyclists and public transport. The removal of through traffic from Donegall Place and Donegall Square North, for example, will improve crossing opportunities for pedestrians and generally improve road safety for pedestrians. However, it is important that all ongoing and future developments result in an inclusive environment that is accessible by disabled users, in order to help ensure that Belfast is accessible by all. It is evident that best practice guidelines have been successfully implemented by other large cities with pedestrian areas, to ensure the safety and increased participation of all users in the city centre through inclusive design and the provision of suitable facilities for all disabled groups.

In order to increase accessibility and the successful integration of disabled groups in the Belfast City Centre; provision for the disabled user must be improved. Specifically to Belfast, the following measures could be implemented in order to achieve the targets set out within the Disability Discrimination (NI) Order 2006 and the Belfast Metropolitan Transport Plan (2004).

CO-ORDINATION

Considering the level of ongoing and planned work in the city centre it is crucial that all of the government departments involved can work in close partnership with a variety of stakeholder groups including local disability groups and representatives, transport operators, health authorities and other community interest groups. Feedback from the consultation exercise carried out as part of this study has clearly indicated that many of the local disability groups and representatives feel their involvement in informing policy and development in the city centre in terms of access for disabled users has been limited. There is a palpable viewpoint that input from such groups into the development of Belfast City Centre has been given unsatisfactory consideration, by government departments.

Given that the various schemes in Belfast City Centre are being managed and led by different departments there is a clear risk that the consideration of their impact on and the involvement of disabled groups and representatives is varied from scheme to scheme. The overall management and responsibility for the schemes and the engagement with disabled groups and representatives needs to be clear and consistent.

The existing Belfast City Centre Change Working Group (BCCCWG), which is a sub group of the Public Transport Partnership Board, with a remit to deliver public transport aspects of the BMTP, is attended on a three-monthly basis by the groups below, to discuss the ongoing Transport proposals for Belfast City Centre:

- DRD Roads Service;
- DRD Rapid Transit Division;
- DRD Ports and Public Transport Division;
- DSD Belfast City Centre Regeneration Directorate;
- DOE Planning Service;
- Department of Finance and Personnel (DFP);
- Belfast City Council;
- Belfast City Centre Management Group;
- Translink; and
- Police Service of Northern Ireland.

As part of this working group the issues and opportunities for all users are considered in the ongoing planning for the city. As a result of discussions following feedback on the consultation draft of this document, it has been agreed that IMTAC should join BCCM's Urban Management Group, which will allow issues to be raised and brought to the attention of the City Centre Change Working Group by the Belfast City Centre Management Group representative.

Recommendation 1

Government departments should consider how they can engage with disability groups at as early a stage as practicable, and in a consistent manner, in order to ensure their views are considered at the concept stage of a scheme. Such early consultation can help ensure that the specific views of the disabled groups are given full consideration in the early design of proposals, whilst ensuring the groups experience a consistent approach to consultation across all schemes.

RECOMMENDATIONS

ACCESS TO THE CITY CENTRE AND SERVICES

Potential Displacement of Disabled Parking Provision

A key issue raised, through the consultation carried out for this study, is the potential loss of disabled parking opportunities in Belfast City Centre, due to schemes such as the DSD public realm proposals for Donegall Place. Although it is clear that the level of parking opportunities in Belfast City Centre is comparatively high compared with other cities in the UK, there is a clear view among the disabled groups that any loss in this provision would be unwelcome.

DSD through the commissioning of previous studies, such as the Mouchel Parking Study 2006 and the ongoing AECOM work, has reviewed the impact of the pedestrianisation of Donegall Place on parking provision for disabled users. Measures such as the provision of Mobility Hubs and Eco-bus services and a review of the potential areas for relocating disabled parking provisions have been explored through this work. In addition, DSD appointed Mouchel (2008) to undertake a further assessment to review the preferred locations for the relocation of the existing disabled parking provision on Donegall Place.

The findings of the latest Mouchel report into the impact of the Donegall Place scheme on disabled parking opportunities in and around the city centre suggests that parking for disabled people can be relocated onto the surrounding areas and that the proposed relocation and accommodation of disabled parking facilities is not foreseen to have an impact on availability of parking spaces. The study states:

“The aspirations of the Belfast Streets Ahead Project would result in the displacement of disabled parking facilities from Donegall Place, Castle Street and Queen Street. The options outlined (within the study) show various scenarios for how Blue Badge Holders can be partly and fully accommodated in proximity to the commercial heart of Belfast City Centre.”

It should be noted however, that at the time of writing Mouchel was unaware as to what need the surrounding streets would facilitate in the future such as the Bus Rapid Transit proposals.

Although a report has been prepared by Mouchel in support of the DSD Belfast Streets Ahead proposals, there

is a need to review the approach to disabled parking for the wider Belfast City area. It should be noted that this process is underway, Roads Service supported by Rapid Transit Division and DSD Streets Ahead arranged a workshop with disability groups on 31 March 2010 in The Mount Business and Conference Centre in Belfast to examine existing disabled provision and to discuss future disabled parking opportunities in the city centre.

On-Street Provision

As stated previously in Chapter 5 there are around 385 on street car parking opportunities in the key centrally located streets in Belfast City Centre. Future DSD proposals such as the pedestrianisation of Donegall Place and Donegall Square North will of course remove the parking opportunities on these streets. It is crucial therefore that the loss of such opportunities, and also the impact of any future traffic management proposals in the city centre including Bus Rapid Transit on parking opportunities for disabled users, is mitigated against. Measures which should be explored in order to mitigate against the impact of such futures schemes are examined further in this section of the report.

Off-Street Provision

As previously indicated in Chapter 5 when the key city centre off street car parks are considered these constitute over 5700 centrally located off street parking opportunities available, with over 200 dedicated disabled parking bays available. It is recognised, however, that these spaces are not currently free of charge for Blue Badge holders and because of their locations can present difficulties for some people due to the walking distance to the activities in the central core.

Discussions with both the car park operators and the disabled groups during the consultation indicated however that these dedicated spaces can be underused at times. Information from the Roads Service Consultancy 'Parking Supply & Management in Belfast City Centre' report also indicates that generally in central areas off street parking spaces are around 53% occupied in the weekday AM peak, 73% occupied in the weekday PM peak and 53% occupied in the Saturday peak.

Given this available capacity it is considered that more should be done to encourage the use of well located off street spaces which have adequate available capacity to accommodate disabled parking, where appropriate. Where off-street

RECOMMENDATIONS

parking is to be promoted however, it must be ensured that the internal access within the car parks between the allocated spaces and the ground level, and onto street level, is reviewed to ensure this is as convenient as practicably possible for disabled users. Given that on-street parking is currently free of charge for Blue Badge holders, there should be some investigation into the possibility of reduced charges for off-street parking.

Future Provision

As part of the ongoing Belfast City Centre Traffic Management Project (BCCTMP), Roads Service will also play a key role in determining the future accommodation for disabled parking in the city as a whole, and will therefore need to work closely with the DSD in taking forward city wide plans which fully considers the needs of disabled users. This project will consider the needs of the disabled users in conjunction with that of the pedestrians, cyclists, public transport including taxis and general traffic, whilst accommodating the aspirations of a variety of major schemes including the proposed pedestrianisation of Donegall Place and Donegall Square North by DSD, the proposed Bus Rapid Transit Improvements, the proposed City Centre Ring Southern Section and any ongoing major private sector developments in the city.

Roads Service is currently developing proposals for the city centre, in line with BMTP, and have begun consultations with the disability sector in an attempt to identify appropriate locations for on-street parking opportunities in the city centre. **Figure 7.1** gives an indication where disabled parking provision could be focused in the future, taking cognisance of the BMTP aspirations to provide a central pedestrian priority area with limited access and a civic spine area with reduced traffic and increased priority for public transport, walking and cycling; and the DSD proposals for pedestrianising Donegall Place and Donegall Square North.

As stated above this figure gives an indication of where dedicated parking facilities for disabled people could be focused, if the DSD improvements go ahead and the BMTP aspirations for the city are realised. It is clear that the future provision will need to be considered by Roads Service taking cognisance of the evolving Bus Rapid Transit proposals and emerging Traffic Management Project for Belfast.

Recommendation 2

The findings of the study should be used to inform the development of proposals for other projects in the city centre, eg BCCTMP, Streets Ahead and Rapid Transit.

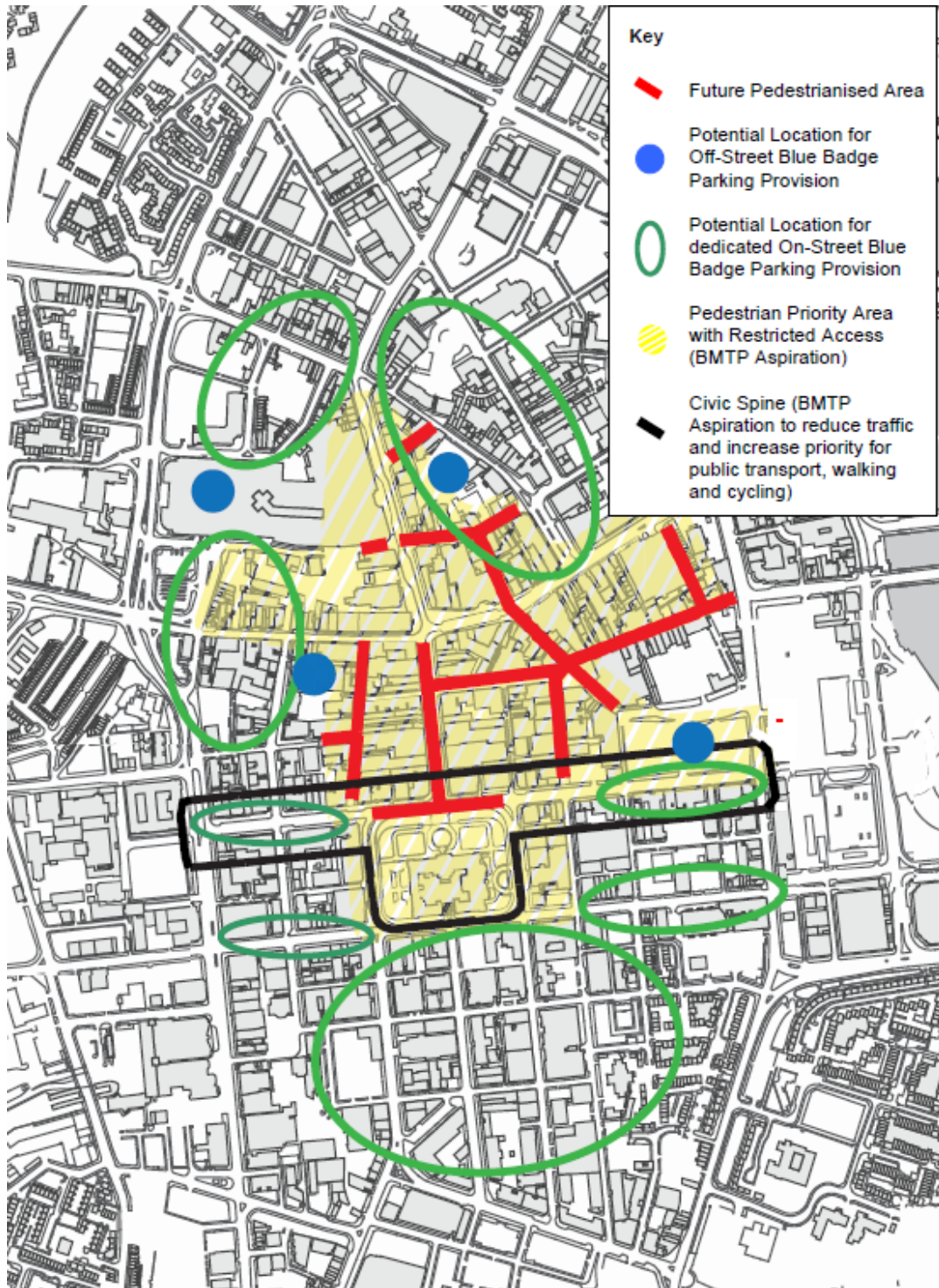


Figure 7.1: Potential areas for focus of future dedicated disabled parking facilities

RECOMMENDATIONS

As discussed later it will be important that potential future provision for disabled parking is progressed in line with other measures such as the introduction of mobility hubs, as proposed as part of the DSD Streets Ahead proposals, which will ensure that the overall future access for disabled users is maintained and where possible improved upon. The loss of parking locations for disabled people in the central core will have to be mitigated against with improvements in alternative modes of accessible transport as well as suitable relocated dedicated parking facilities.

Roads Service has stipulated that although there is not currently a specific parking strategy in place for Belfast there is an operational policy which reflects the parking recommendations within the BMTP. **It is suggested that the development of any traffic management and regeneration projects in the city centre should take account of the need to accommodate parking for those with disabilities.**

Maintaining Flexibility for Disabled Groups in the City Centre (Clear Zone)

In order to make any pedestrianised scheme viable for disabled users, it is important to consider their mobility needs. In order to accommodate groups with severe mobility impairments, it is sometimes necessary to ensure flexibility within restricted access locations where it is safe to do so. As previously discussed earlier in Section 6 of this report, Nottingham has successfully introduced 'The Clear Zone' which has included the implementation of the Special Access Scheme. This initiative is a concession for people who have particular mobility difficulties, which allows their vehicle access to identified pedestrian areas in Nottingham. However, it is important to the viability and feasibility of such a scheme that it is effectively administered, enforced and regulated.

Recommendation 3

It is noted that a significant number of representatives within the disability sector would not favour a Special Access Scheme. If the disabled sector wish to identify and pursue a deliverable option, the practical implementation and management of such a Special Access Scheme could be considered by the relevant government departments.

Shopmobility

The provision of Shopmobility units in Belfast features heavily in providing access to the city centre for people with disabilities. People with mobility impairments can make use of this charity service in order to ensure that they have a point of call and a base by which they can carry out their journey(s) in the city centre.

In comparison to other main cities throughout the UK it is clear that the current provision of four centres in Belfast at Queen Street, Gresham Street, Victoria Square Shopping Centre and Europa Bus Station is very good given that cities such as Birmingham and Sheffield have two centres and Bristol, Cardiff and Nottingham have only one. It is also recognised that Shopmobility currently benefit from funding from the Department to help provide its service.

The Queen Street centre is the main city centre Shopmobility provision and acts as the headquarters in Belfast. In terms of disabled parking provision there is currently limited disabled provision in close proximity to the centre that would encourage its increased use. Also due to ongoing improvements in the Queen Street

and Castle Street area there is a risk that the existing provision will be further threatened. Ideally this unit could be relocated to another location with better nearby parking provision; however, it is clear that as this centre is well established as the main Shopmobility office, and due to financial reasons, this may not be possible.

The Gresham Street facility is a recent replacement to the previous Shopmobility centre in Castle Court Shopping Centre which was the most frequently used of the four locations. Disabled users can make use of the existing off-street parking provisions in Castle Court allowing them to conveniently access the Shopmobility centre and make use of the surrounding retail facilities.

The Gresham Street facility is a recent replacement to the previous Shopmobility centre in Castle Court Shopping Centre which was the most frequently used of the four locations. Disabled users can make use of the existing off-street parking provisions in Castle Court allowing them to conveniently access the Shopmobility centre and make use of the surrounding retail facilities.

RECOMMENDATIONS

Recommendation 4

It is recommended that the existing Shopmobility facilities are reviewed and promoted as part of any future mobility hubs providing better access for people with disabilities to the whole of the city centre. In addition Shopmobility should work closely with the relevant government authority to establish where further Shopmobility facilities could be made available (perhaps remotely) in association with other proposed mobility hubs.

The existing Shopmobility centre in Victoria Square Shopping Centre is the newest unit in the city centre. Although these facilities are of a good standard and off-street parking is available, its usage has been relatively low in comparison to the other centres. There seems to be a lack of awareness that this centre is in place and is an option for disabled people to gain access into the new shopping centre and the city centre as a whole. The existing off street parking provision has also been criticised as being inconvenient in terms of location, layout and cost.

Mobility Hubs

The concept of Mobility Hubs has been explored by DSD as part of the Belfast Streets Ahead Project. Work carried out by AECOM in conjunction with People Friendly Design, examined how the existing Shopmobility centres in Belfast could be utilised as Mobility Hubs. This work included where other potential Mobility Hub locations could be established, based on the principles of potential new Shopmobility facilities, locations with good public transport provision such as taxi ranks and bus stops and where off-street parking opportunities could be utilised to provide disabled parking. As stated previously it is considered that mobility hubs, where possible, should include as much of the following facilities in the immediate or close proximity to accommodate the needs of disabled users:

- Toilet Facilities;
- Disabled Parking facilities;
- Accessible Taxi Facilities;
- Accessible Bus or Rail facilities;
- Access to shopmobility facilities;
- Wayfinder signage and mapping information;
- Good pedestrian facilities; and
- “Set down” and “pick up” facilities

Given the comparative good provision of existing Shopmobility centres in Belfast, in relation to other key cities in the UK, it is unlikely that the introduction of further Shopmobility centres in line with future Mobility Hub locations is feasible.

It is reasonable however to assume that Mobility Hubs that include some of the provisions which Shopmobility currently provide at its main centres, such as travel information and the potential to provide remote access to mobility vehicles could be incorporated. Hubs where Shopmobility information can be provided and a phone number where a remote access request can be made to have a Shopmobility buggy for example delivered and picked up would be a beneficial service.

Building on the work already carried out by DSD on the Streets Ahead scheme and their principles for locating such hubs a review of where further mobility hubs could be located to cater for the wider Belfast City Centre Area has been undertaken. These hubs as well as focusing on providing access in and around the retail and pedestrianised areas of Belfast, also suggest locations to integrate with key public transport interchanges and as such

better linking Belfast with the main surrounding towns and cities in Northern Ireland. **Figure 7.2** shows some examples of locations where the mobility hub idea could be expanded upon to cater for the city wide area of Belfast.

It should be noted that, further to consultation with Belfast City Council, the potential mobility hub location at the front entrance to City Hall, previously proposed by EDAW as part of the DSD Streets Ahead work, has been ruled out given the requirements for access and the various temporary events which are held on Donegall Square North.

In addition to those already established as part of the DSD Streets Ahead work, five potential mobility hub locations have been identified as shown on **Figure 7.2**. Based upon the same principles these have been chosen to make best use of the existing public transport locations in the wider Belfast City Centre area, including the Europa (Great Victoria Street) Bus and Railway Station, Belfast Central Railway Station and Laganside Bus Station. Mobility hubs in the northern and southern areas of the city centre have also been chosen on the broad assumption that dedicated disabled parking could be accommodated at these locations.

RECOMMENDATIONS

These new locations together with those associated with the main public transport interchanges and those established in the retail core area by the DSD Streets Ahead offer a reasonable coverage of the whole Belfast City Centre area.

This chapter of the report also makes recommendations on how best to link up these additional Mobility Hubs with the potential Ecobus service and how the pedestrian environment between these areas and the city centre can be improved to improve access.

Figure 7.3 shows the potential locations for mobility hubs in the city centre in relation to other disabled facilities to enable easier navigation and aid in accommodating a varying range of specialist needs.

It is essential that the potential mobility hubs are not isolated and are accessible to enable connectivity of all the facilities shown in **Figure 7.3**. It is recommended that these potential hub locations are considered as part of the emerging traffic management proposals for the Belfast City.

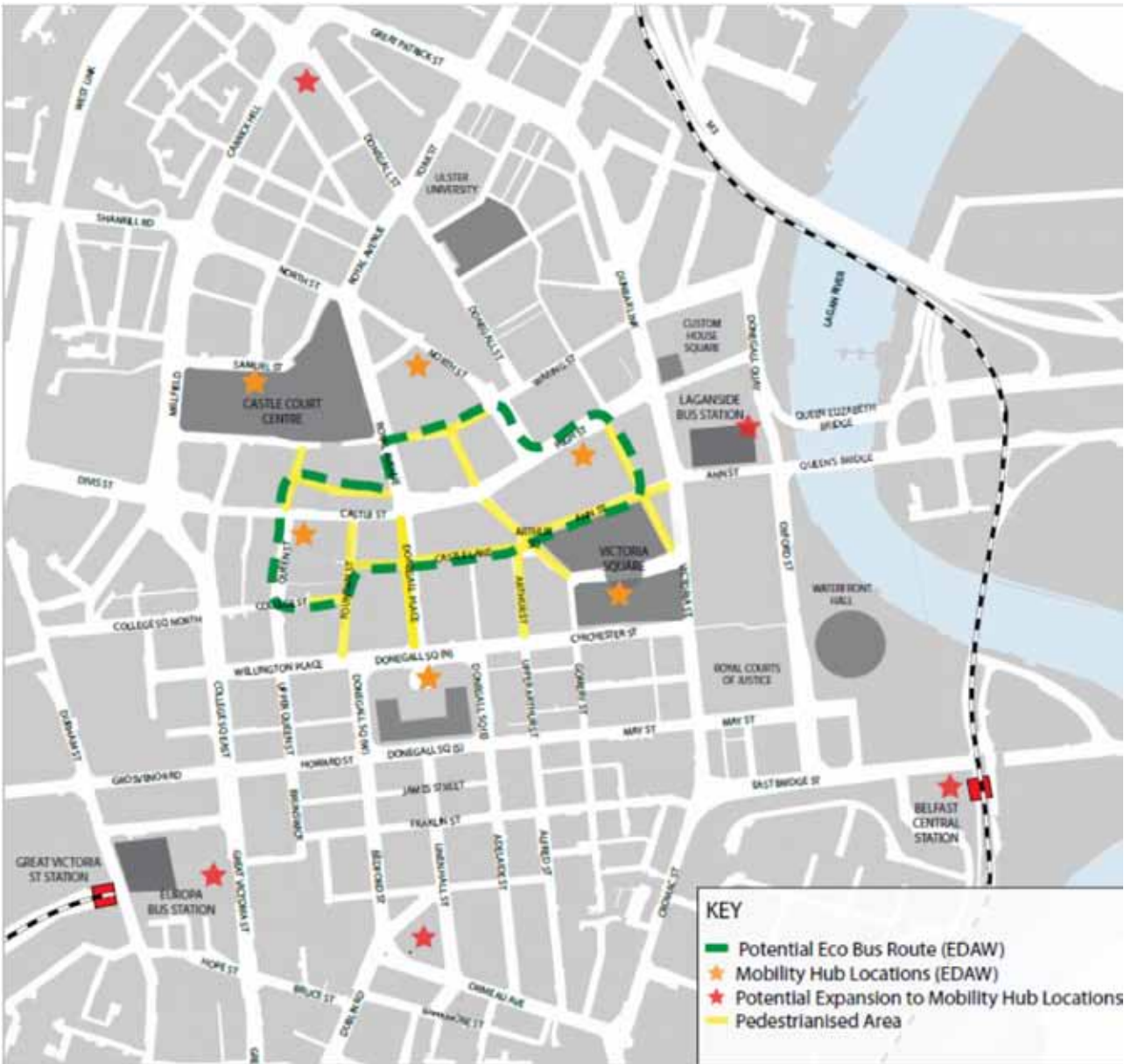


Figure 7.2: Potential mobility hub locations for wider city centre area

RECOMMENDATIONS

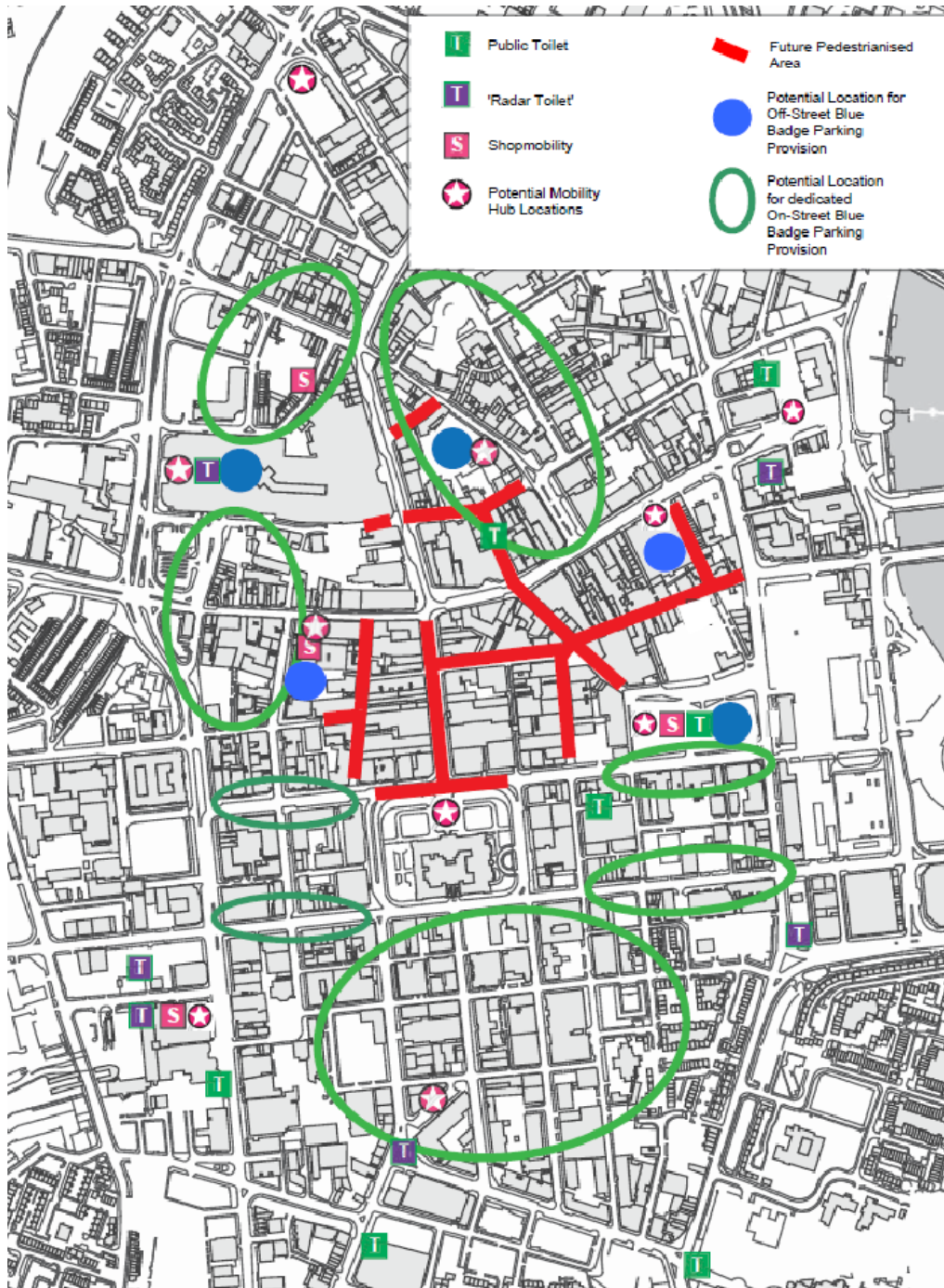


Figure 7.3: Potential Mobility Hub locations and disabled facilities for wider City Centre Area

Door to Door Services

The existing door to door service for the Belfast is principally run by Disability Action on behalf of the DRD offering a valuable public transport link for disabled and elderly members of the public living in remote areas who wish to access the city centre. Feedback from the consultation exercise indicated that the service works well and continues to operate effectively.

DRD have indicated that together with Disability Action and Shopmobility they are examining the potential to integrate the existing door-to-door and Shopmobility services. It is intended that these services could be combined to provide a more integrated service for users with a disability. Although this is still an aspirational initiative, it is an indicator of what could be achieved through the partnership if agreed by all parties involved.

A clear opportunity exists also to combine this research into the concept of providing a series of Mobility Hubs around the city centre area and promoting better access for all.

A key factor to the success of accommodating groups with mobility impairments is afforded to the door-to-door initiatives discussed previously in Chapter 6 of this report. The case studies of Manchester and Liverpool have demonstrated that door-to-door services such as the community schemes of 'Dial-a-Ride' can be provided efficiently, at a reasonable cost to users and make transport for groups with severe mobility impairments viable. In addition, the door-to-door services have helped break down social exclusion barriers to persons with mobility impairments, who through the use of the initiatives aforementioned are able to access the city centre by other means than conventional public transport. It should also be noted that the current service in Belfast is considered to provide a good service to its users and continues to operate effectively.

Recommendation 5

It is recommended that consideration should be given to how future access restrictions in the city centre can be mitigated against to minimise any impact on existing services.

RECOMMENDATIONS

ENFORCEMENT

Blue Badge Enforcement

Enforcement of the blue badge scheme remains a key factor in maintaining existing access to the city centre for disabled users. Since implementation of the new decriminalised parking regime in 2006 DRD Roads Service has taken steps to increase surveillance of the misuse of disabled parking bays in the city centre, with the view of penalising inappropriate behaviour. **Table 7.1** shows the number of tickets issued to vehicles without a valid blue badge while parked in a disabled bay in key city centre areas, between April 2007 and March 2010.

Table 7.1: Number of tickets issued to vehicles parked in contravention in disabled bays

Street Name	Number of tickets issued 07/10
Donegall Square North	31
Wellington Place	168
Chichester Street	88
High Street	22
Castle Place	2
Queen Street	201
TOTAL	512

Feedback from disabled groups has suggested that the enforcement issue remains a significant concern in the city centre.

The majority of drivers are fully aware that the misuse of such bays causes a major problem for genuine disabled users in the city centre. The high visibility of the enforcement operation provides a deterrent for that minority of drivers who may otherwise be prepared to abuse the system. Additionally, any successful convictions for fraudulent use of blue badges will generate publicity, further raising public awareness of the implications of abusing the scheme.

Another point stressed in the consultation was that disabled users obviously make use of the existing on-street parking areas in the city centre and that the abuse of these should also be considered within any government crackdown on inappropriate parking behaviour. The on-street parking areas in Belfast are routinely patrolled by traffic attendants, to the benefit of all road users.

It will also be necessary that any current and future initiatives to tackle the mis-use of parking facilities are incorporated into any detailed parking strategies for the city as a whole.

MOVING AROUND THE CITY CENTRE

Shopmobility and Mobility Hubs

Given the feedback from the Access and Mobility workshop and further to the work carried out by AECOM, on behalf of DSD, it is clear that there is wide approval for the introduction of Mobility Hubs in connection with existing and potential Shopmobility centres within the city centre. In order to meet the aspirations of DSD and Shopmobility of providing a coherent service for the city it is imperative that all relevant key stakeholders can work in close consultation.

Although potential locations for Mobility Hubs are suggested in order to fully assess the suitability of these potential hub locations an in depth study is required to assess a number of factors which would have an influence on a suitable location including:

- Potential to incorporate Shopmobility facilities;
- Potential to provide travel information for disabled users;
- Potential to link hubs with remote access facilities;
- Availability of surrounding public transport facilities such as bus stops and taxi ranks;

- Availability of suitable disabled parking provision;
- A suitable pedestrian desire line to key generators and attractors in the city centre;
- Influence of ongoing work as part of the DSD Streets Ahead scheme and the DRD work associated in the wider Belfast City Centre area including Bus Rapid Transit;
- Potential to incorporate disabled toilet facilities; and
- Potential to incorporate improved signage, mapping and information such i+ touch screen systems or 'heads up' mapping.

Although this study and the previous Streets Ahead work review some potential locations within the city centre, it is recommended that a detailed assessment is undertaken in parallel with the ongoing city centre projects.

Eco Bus

The potential to introduce an Eco-Bus system in the city centre, similar to those in operation in Italy, has been explored as part of the Streets Ahead Project. As shown in **Figure 7.2**, a route passing in and around the existing pedestrian city core was considered linking with the proposed

RECOMMENDATIONS

Mobility Hub concept. As pointed out in the consultation the aspiration of such a scheme in the city would be welcomed by the disabled groups and representatives making the city more accessible and attracting more disabled people into the city. It is considered that an Eco-Bus scheme could have the potential to remove the need for the existing excessive car parking levels in Belfast by providing an effective transport alternative.

Building upon this previous work a review of the potential to expand the Eco-Bus concept to incorporate the wider city centre area and potential additional city wide Mobility Hubs has been undertaken. It may be appropriate that a shuttle bus service which can link with a central Eco-Bus route could be provided, resulting in an integrated service with the main public transport interchanges in the city centre as well as services such as Shopmobility and Door-2-Door. Additional route options, as shown in Figure 7.4, indicate how these hubs could be linked, providing an integrated service throughout the city centre.

A high-level review of the potential cost implications for the central Eco-Bus service and those additional services shown in **Figure 7.4** has been carried out to give an indication of how sustainable the service may be. The figures in **Table 7.2** are based on assumptions of the typical purchase cost, fuel consumptions, operating hours and the likely frequency and headway of the service.

Table 7.2: Potential Cost for Eco-Bus / Shuttle Bus Service

Eco / Shuttle Bus Service	Total Cost per Annum (£)
Retail Core Service Only	£121,030
Option 1 – Wider Service Only	£249,750
Option 2 – Wider Service Only	£257,940
Retail Core Service & Option 1 Wider Service	£370,780
Retail Core Service & Option 2 Wider Service	£378,970

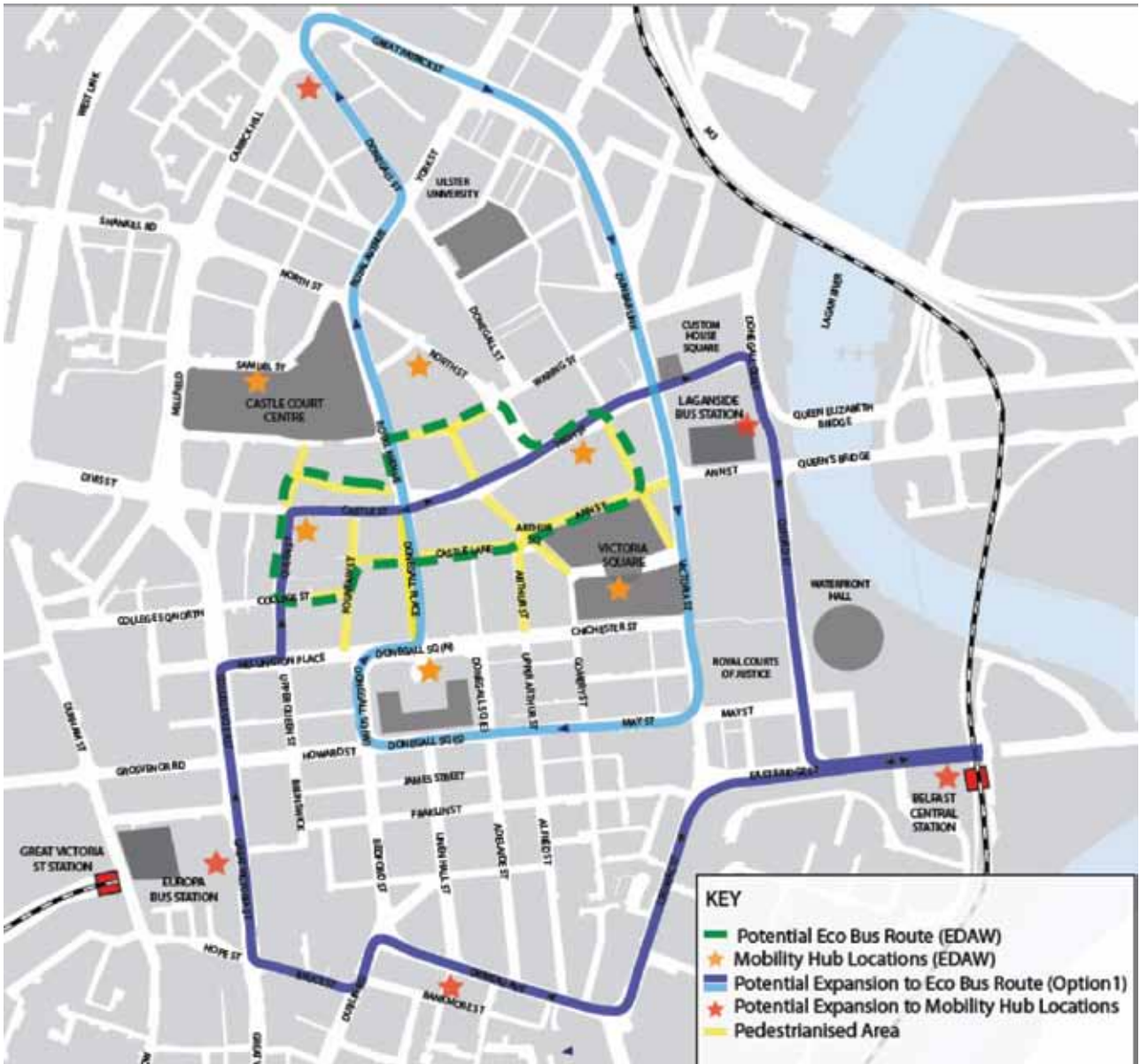
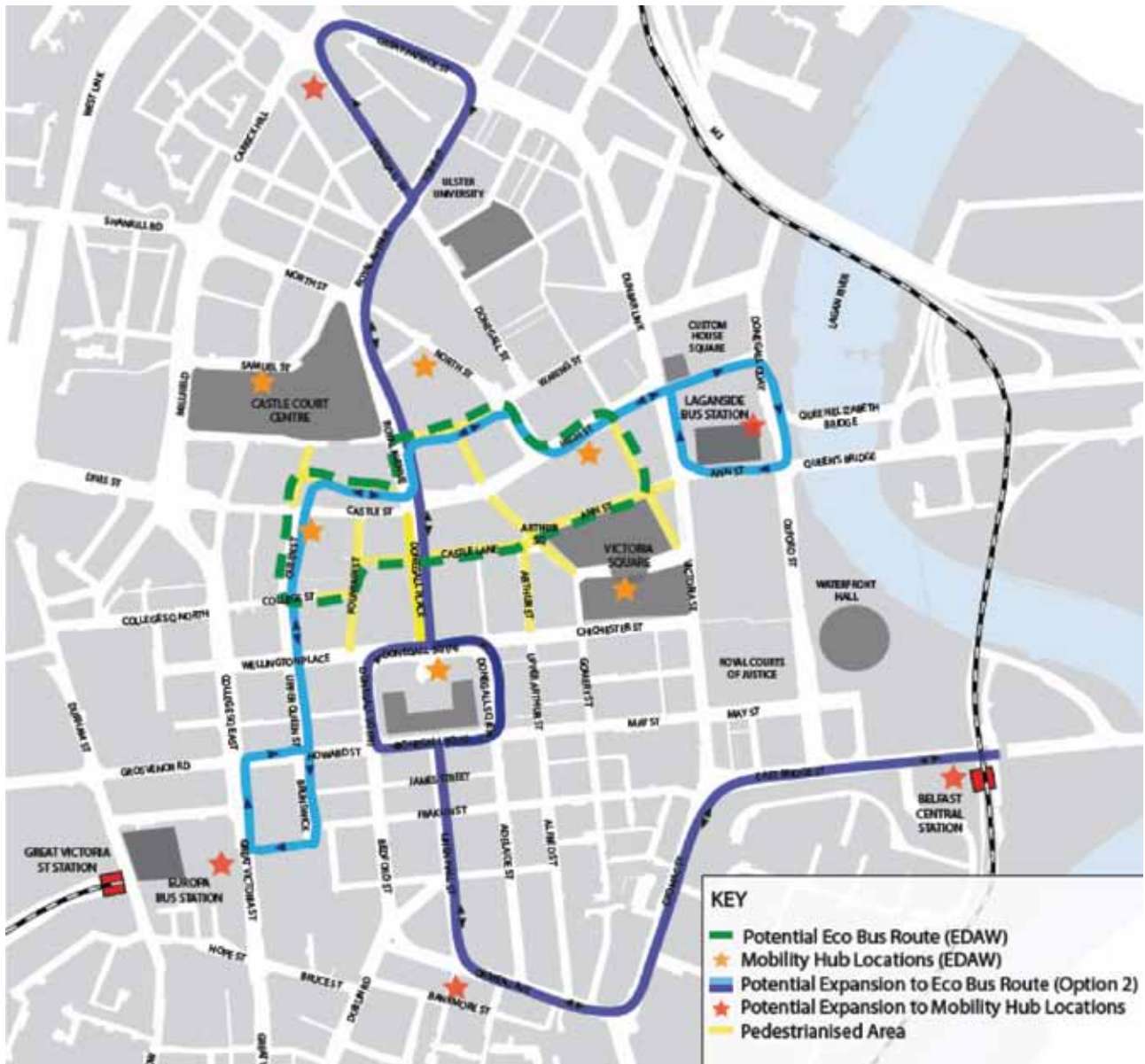


Figure 7.4: Potential additional bus services linking with wider city area

RECOMMENDATIONS



Recommendation 6

It is recommended that further assessment of the potential to introduce Eco-Bus services in conjunction with Mobility Hubs is carried out for the city in the context of the future development of Rapid Transit and the city centre traffic management proposals. This should include establishing the need or demand for such a service, consideration of potential routes, the responsibility for funding, required funding levels and operational aspects of the service.

Public Transport Provision

Confidence in the use of public transport has a key impact on the attractiveness of bus, rail and taxi services in the city. Visually impaired people, for example, who tend to have a greater reliance on public transport than the availability of disabled parking provision, can suffer frustration due to inconsistencies in the service they receive when travelling.

Key transport interchanges such as the Europa (Great Victoria Street) Bus and Railway Station, Belfast Central Railway Station and Laganside Bus Station should be as accommodating as possible for people with disabilities.



Figure 7.5: Belfast Central Station

The figure above shows an example of the facilities available at Belfast Central Station where disabled users can be met by Translink staff who are trained in disability awareness and can be escorted to or from the train.

The service provided by bus drivers, however, to disabled customers, can vary depending on the driver and his or her relative experience. Regular drivers on a particular route, may become familiar with frequent disabled users and can often provide a pleasurable experience for disabled customers whereas those who are generally inexperienced may be unaware of the specific needs of disabled users, proving it more difficult for them to provide a satisfactory service.

Translink are currently providing updated disability awareness training for its drivers.

RECOMMENDATIONS

Recommendation 7

We recommend that Translink ensure that disability awareness training is carried out to ensure compliance with the new duties of the Disability Discrimination (Transport Vehicles) Regulations (Northern Ireland) 2009, which became effective on 25 January 2010.

The difficulties experienced by disabled users, also extends to the service provided by taxis in the city centre.

Recommendation 8

We recommend that the DOE Road Transport Licensing Branch adopt an approach similar to that established in Edinburgh which introduces a training programme as part of the taxi licensing requirements in order to ensure a higher standard of service can be achieved and provided to disabled users.

Crossing Facilities

Monitoring of defects etc. on the public highway is already carried out by Roads Service to an agreed standard and defects are actioned as appropriate. However, both within the consultation for this study and as part of the audit of existing facilities in the city centre it was evident that there are examples of crossing facilities that do not fully accommodate people with disabilities. These examples included facilities with no provision for disabled users and facilities which are inadequately installed or poorly maintained. The locations of some of these examples are shown on **Figures 5.3 to 5.5** and in **Table 5.5**.

Recommendation 9

It is recommended that adherence to the appropriate design standards for inclusive mobility is thoroughly monitored to help ensure that appropriate provisions such as dropped kerbs and tactile paving are installed to assist disabled users. Specific locations where improvements are identified should be addressed as part of Roads Service's ongoing assessment of pedestrian needs in the city centre.

Street Clutter & Café Culture

As identified in the consultation for the study and demonstrated further in Chapter 5, street clutter is a key hindrance for disabled people gaining access around the city centre. The locations of some examples of this are shown previously in **Figures 5.3 to 5.5** and in **Table 5.5**.

There is a need for appropriately placed and designed seats to accommodate disabled users. However, the design and sighting of features such as seating areas, street bins, signage and lighting columns, should create an environment in which disabled users can safely navigate. As recommended above inclusive design principles should be developed to in order to ensure that pedestrian routes provide suitable mobility space. Street clutter should be minimised to ensure minimal obstruction to disabled users along pedestrian routes. The example of cities such as Bristol, where pedestrianised areas have been designed such that street furniture are aligned to ensure that disruptions to pedestrians are minimised, should be followed.

Although there is planning policy in relation to controlling the location and suitability of street furniture, cafe seating and 'A' boards or menu stands it is clear that shop and restaurant owners are unaware or regularly ignore the policy.

Recommendation 10

It is recommended that the following guidance documents should be adhered to when implementing new elements of street furniture for the city centre:

- The Belfast City Centre Public Realm Design Code;
- The DCAN 11 'Access for All, Designing Accessible Environments'; and
- The draft 'Memorandum of Understanding' in relation to sitting out areas for Belfast City Centre.

Recommendation 11

It is recommended that specific locations where difficulties with street furniture have been identified are brought to the attention of the relevant body for consideration.

RECOMMENDATIONS

Recommendation 12

It is also recommended that Belfast City Council together with the relevant statutory agencies consider the approach adopted by Swansea City Council who regulate outdoor café seating areas through licensing in order to ensure the safety of pedestrians and to maintain access to services. It is noted from consultation with Belfast City Council that a legal framework would be required in order to regulate outdoor seating and that this will require consideration by all the relevant statutory authorities.

Surfacing in Pedestrian Areas

As stated previously in Chapter 5, it was felt from the consultation carried out, that attempts to make the city centre more aesthetically attractive has sacrificed some of the components that make it easier for disabled people to negotiate. Cobbled surfaces are problematic for wheelchair users or pedestrians using a walking stick for guidance. Similarly, surfaces that are too smooth can become slippery when wet and are dangerous for people with impairments. Effective drainage is of course important to minimise water gathering on pavement surfaces, which makes some pavements difficult to navigate, but drainage needs to be

suitably designed to allow disabled people to cross them safely. The locations of some of these examples are shown on Figures 5.4 to 5.6 and in Table 5.5.

Recommendation 13

It is recommended therefore that specific locations where improvements are required are brought up to the appropriate design standards.

Signage

The availability of appropriate signage was considered an issue by the disabled groups and representatives during the consultation for this study. Signage which is inaccurate, illegible or non-existent were the key complaints.

There are several examples from cities such as Birmingham and Bristol who have introduced improved signage systems such as the 'wayfinder' talking signs system which has advanced REACT technology to help assist those who are visually impaired and the 'head ups' systems which provide signage and mapping in the same orientation as the user.

The DSD, in consultation with Disability Action Regional Access Committee (DARAC), has made a recent commitment to install 8 new wayfinder signage units on Donegall Place as part of the Belfast Streets Ahead Project.

Recommendation 14

It is recommended that the introduction of the new wayfinder signage units are positioned in close consultation with disabled groups especially the RNIB and that their usage and performance is closely monitored for effectiveness.

Cyclists in Pedestrian Areas

The use of pedestrianised areas by cyclists has been highlighted as a concern for disabled users moving around the city centre. Recommendations have been made by the disabled groups that cyclists should dismount in all pedestrianised areas.

The use and the spacing of street furniture should reflect the natural path for cyclists in order to prevent conflict with disabled users. Different coloured surfacing and the use of materials can help to identify paths and end of routes to visually impaired people. It is recommended therefore the approach to cyclists in pedestrianised areas should consider the layout of street furniture present, the available footway width and the potential allowance for different coloured surfacing and/or differences by level, particularly where former carriageways are subject to

new vehicle restrictions. In pedestrian areas with relatively high levels of street furniture and little availability of footway space to accommodate pedestrians and cyclist, cyclists should therefore be encouraged to dismount and walk with their bicycle during peak hours to allow sufficient room to accommodate all safely. Consideration should also be given to permitting cycling during off-peak hours in the early morning, later evening, or to coincide with times where access for loading is permitted, where this will not unduly inconvenience other users.

As part of the BCCTMP Arup, on behalf of Roads Service, are currently preparing a Cycling Study Report which will review the needs and opportunities with respect to cycling provision within Belfast City Centre. To inform this study consultation was undertaken with both cycling and disability groups, and it is intended that the study will make recommendations with respect to cycling in pedestrian areas in the city centre. The findings of this cycling study, together with this access and mobility study, will be considered by Roads Service, in addition to the impact on all other modes of travel, before a change to the approach on access restrictions in the city centre pedestrian areas are adopted.

RECOMMENDATIONS

Recommendation 15

It is recommended that consideration should be given to the findings of the Cycling Study and the corresponding view points of disabled groups when considering any access restrictions in the city centre.

Disabled Access Toilets

It is clear from the consultation carried out for the study that the provision of toilets within the city is a definite concern for those with disabilities. In many cases, visitors to the city who have a disability will plan their journey around the proximity of appropriate public toilet facilities. As stated previously in Chapter 6, Belfast has a low provision of accessible toilets, especially in proximity to pedestrianised areas, in comparison to similar cities around the UK.

Recommendation 16

It is recommended that consideration should be given to the provision of new accessible toilets in suitable locations in the city centre.

Beacon Status

The Beacon Scheme is a prestigious award scheme that recognises excellence in local government. Innovative and ambitious Councils who provide excellent transport services are considered for Beacon status. The key theme in achieving Beacon status is providing 'Better Access and Mobility'.

Recommendation 17

It is recommended that the principles of 'Beacon' status should be considered and applied as a role model for providing an improved city centre for all users. Council areas such as Nottinghamshire County Council, the London Borough of Lewisham and Telford & Wrekin Council have all recently received Access and Mobility awards following initiatives to improve their accessibility for all in built up city centre areas. Given the level of ongoing and future transport related work in Belfast City Centre there is now a clear opportunity to make a significant improvement in the access and mobility provision in Belfast.

Recommendations	Key Partners
1 Government departments should consider how they can engage with disability groups at as early a stage as practicable, and in a consistent manner, in order to ensure their views are considered at the concept stage of a scheme.	DRD / DSD
2 The findings of the study should be used to inform the development of proposals for other projects in the city centre, eg BCCTMP, Streets Ahead and Rapid Transit.	DRD / DSD
3 It is noted that a significant number of representatives within the disability sector would not favour a Special Access Scheme. If the disabled sector wish to identify and pursue a deliverable option, the practical implementation and management of such a Special Access Scheme could to be considered by the relevant government departments.	Disability Sector / DRD / DSD
4 It is recommended that the existing Shopmobility facilities are reviewed and promoted as part of any future mobility hubs providing better access for people with disabilities to the whole of the city centre. In addition Shopmobility should work closely with the relevant government authority to establish where further Shopmobility facilities could be made available (perhaps remotely) in association with other proposed mobility hubs.	DRD / DSD
5 It is recommended that consideration should be given to how future access restrictions in the city centre can be mitigated against to minimise any impact on existing services.	DRD / DSD
6 It is recommended that further assessment of the potential to introduce Eco-Bus services in conjunction with Mobility Hubs is carried out for the city in the context of the future development of Rapid Transit and the city centre traffic management proposals. This should include establishing the need or demand for such a service, consideration of potential routes, the responsibility for funding, required funding levels and operational aspects of the service.	DRD / DSD

RECOMMENDATIONS

<p>7 We recommend that Translink ensure that the disability awareness training is carried out to ensure compliance with the new duties of the Disability Discrimination (Transport Vehicles) Regulations (Northern Ireland) 2009, which became effective on 25 January 2010.</p>	Translink
<p>8 DOE Road Transport Licensing Branch adopt an approach similar to that established in Edinburgh that includes a training programme as part of the taxi licensing requirements in order to ensure a higher standard of service can be achieved and provided to disabled users.</p>	DOE-RTL B
<p>9 Adherence to appropriate design standards for inclusive mobility is monitored and any locations where improvements are identified should be addressed as part of Roads Service's ongoing assessment of pedestrian needs in the city centre</p>	DRD-Roads Service/DSD
<p>10 It is recommended that the following guidance documents should be adhered to when implementing new elements of street furniture for the city centre:</p> <ul style="list-style-type: none"> • The Belfast City Centre Public Realm Design Code • The DCAN 11 'Access for All, Designing Accessible Environments'; and • The draft 'Memorandum of Understanding' in relation to sitting out areas for Belfast City Centre 	DSD/DRD / Belfast City Council/ BCCM
<p>11 It is recommended that specific locations where difficulties with street furniture have been identified are brought to the attention of the relevant body for consideration.</p>	DRD-Roads Service/ Belfast City Council

12	It is also recommended that Belfast City Council together with the relevant statutory agencies consider the approach adopted by Swansea City Council who regulate outdoor café seating areas through licensing in order to ensure the safety of pedestrians and to maintain access to services. It is noted that a legal framework would be required in order to regulate outdoor seating and that this will require consideration by the relevant statutory authorities.	Belfast City Council / DoE / DRD
13	Specific locations where improvements in the surfacing in the pedestrian areas are required are brought up to the appropriate design standards.	DRD-Roads Service
14	The introduction of the new wayfinder signage units are positioned in close consultation with disabled groups especially the RNIB and that their usage and performance is closely monitored for effectiveness.	DSD
15	Consideration should be given to the findings of the Cycling Study and the corresponding viewpoints of disabled groups when considering any access restrictions in the city centre.	DRD Roads Service / DSD
16	Consideration should be given to provision of new accessible toilets in suitable locations in the city centre	Belfast City Council/DSD
17	The principles of 'Beacon' status should be considered and applied as a role model for providing an improved city centre for all users	Belfast City Council / DSD/DRD/ BCCM

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