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**STRATEGIC REVIEW OF PARK & RIDE:**

**REPORT OF THE PARK AND RIDE PROJECT GROUP**

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**Department for Regional Development  
Transportation Policy Division  
March 2011**

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## ABBREVIATIONS:

- **AESOP** Association of European Schools of Planning
- **BMA** Belfast Metropolitan Area
- **BMAP** Belfast Metropolitan Area Plan
- **BMTP** Belfast Metropolitan Transport Plan
- **BUAP** Belfast Urban Area Plan
- **CPRE** Campaign to Protect Rural England
- **DETR** Department of the Environment, Transport and the Regions
- **DfT** Department for Transport
- **DOE** Department of the Environment
- **DRD** Department for Regional Development
- **ESRC** Economic and Social Research Council
- **FDOT** Florida Department of Transportation
- **HTF** Historic Towns Forum
- **MTC** Metropolitan Transport Corridors
- **NITHC** Northern Ireland Transport Holding Company
- **OBC** Outline Business Case
- **P&R** Park and Ride
- **PAC** Planning Appeals Commission
- **PPG** Planning Policy Guidance
- **PPS** Planning Policy Statement
- **PTPB** Public Transport Partnership Board
- **QBC** Quality Bus Corridor
- **RSTNTP** Regional Strategic Transportation Network  
Transport Plan
- **RTS** Regional Transportation Strategy
- **SRTP** Sub-Regional Transport Plan
- **TACTRAN** Tayside and Central Scotland Transport  
Partnership
- **TPD** Transportation Policy Division
- **TTWA** Travel To Work Area

## 1. INTRODUCTION AND EXECUTIVE SUMMARY

- 1.1. The Regional Transportation Strategy (RTS) published in 2002 identified Park and Ride as a key element of a more integrated and sustainable transport infrastructure for Northern Ireland. The direction set out in the RTS was subsequently reflected in the development of detailed proposals for a comprehensive programme of investment in Park and Ride sites at regional and BMA level.<sup>1</sup>
- 1.2. On 14 September 2009, the Minister announced a review of the Regional Transportation Strategy. In light of that Review it was considered timely to revisit the Department's proposals for Park and Ride. A Project Group was therefore established in late 2009 to take forward a strategic review of Park and Ride. Chaired by Transportation Policy Division, the group also included representation from:
  - Ports and Public Transport Division
  - Regional Planning and Transportation Division
  - Rapid Transit Division
  - Public Transport Performance Division
  - Roads Service
  - Translink
- 1.3. This report sets out the findings and conclusions of the Project Group. The terms of reference for the Project Group are set out at Annex One, however, in broad terms the Group's work focused on revisiting the planned provision of Park and Ride as set out in the RTS and the associated transport plans taking account of progress to date in delivery and best practice.
- 1.4. Having considered the available evidence as to the role of Park and Ride in transport policy and best practice, and in light of

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<sup>1</sup> The proposals for Park and Ride and Park and Share are set out in the Regional Strategic Transport Network Transport Plan (RSTN TP), Belfast Metropolitan Transport Plan (BMTP) and the Sub-Regional Transport Plan (SRTP). Launched in 2005, 2004 and 2007 respectively, these are supporting documents to the RTS.

progress against plans this report sets out a number of conclusions and recommendations on the future provision of Park and Ride. Those recommendations are summarised below.

- 1.5. The recommendations aim to enhance the targeted provision of Park and Ride in a manner which takes account of traffic flows and will facilitate integration and accessibility with a view to maximising the potential for Park and Ride to contribute to the RTS objective of modal shift from private car to public transport. In addition to highlighting priority areas for investment, the recommendations also identify a number of sites which should cease to operate as Park and Ride or where future investment should not be undertaken.
  
- 1.6. The Project Group has also highlighted the need for Park and Ride to be delivered as part of an integrated framework of measures if it is to prove effective. Moreover, in light of progress in the delivery of those proposals set out in the Transport Plans, the Project Group has also recommended that a single division within DRD is responsible for Park and Ride policy and that clear structures be established to drive delivery of the proposals set out in this report and to monitor and evaluate impacts.

## RECOMMENDATIONS:

- **In delivering the proposals set out in Transport Plans, priority should be attached to the provision of Park and Ride at the following sites as funding permits:<sup>2</sup>**

### BMTP

- i. Templepatrick
- ii. Secure provision at Sprucefield in the short-term pending future viability of West Lisburn
- iii. Bangor Station
- iv. Lisburn Station
- v. Carrickfergus Station
- vi. Jordanstown Halt
- vii. MTCs B and D sites linked to Rapid Transit<sup>3</sup>
- viii. Sandyknowes
- ix. Safeguard provision at Moira [rail]

### SRTP

- i. Buncrana Road
- ii. Culmore Road or alternative serving inward bound traffic on the A2
- iii. Secure future provision at Toome
- iv. Ballymena
- v. Coleraine

- **The following schemes or proposed expansions should not proceed:**

### BMTP

- i. Fortwilliam
- ii. Kennedy Way
- iii. Troopers Lane<sup>4</sup>

### SRTP

- i. Larne Bus Station

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<sup>2</sup> These sites are not listed in order of priority, which will be determined in light of available funding.

<sup>3</sup> The current site identified is Millmount however the Department's aim is to identify alternative sites serving the Newtownards Corridor with the potential to tie in to Rapid Transit and to provide a similarly linked site in West Belfast either at Dairy Farm or at Monagh Bypass depending on the recommendations of the OBC which is currently being prepared.

- **The following BMTP Schemes should not proceed at this stage though the potential for future development should be kept under review pending developments**
  - i. Carryduff
  - ii. Tillysburn
  
- **Over the longer term and as Park and Ride capacity develops at alternative sites the following BMTP Schemes should cease to operate as Park and Ride though they may be retained as short-stay parking provision**
  - i. Northside
  - ii. Eastside
  - iii. Ravenscroft Avenue
  
- **The following SRTP proposals for additional parking capacity at sub-regional bus stations should be reviewed with the aim of enhancing their potential to contribute to modal shift while addressing local transport needs:**
  - i. Omagh
  - ii. Enniskillen
  - iii. Newry
  - iv. Armagh
  - v. Downpatrick
  
- **Additional rail based capacity should be provided at Coleraine and Ballymena, however in the longer term consideration should be given to the potential development of facilities at less central points on the line including possible new halts.**

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<sup>4</sup> Whilst expansion at the current Holywood site is not a viable proposition due to its limited capacity and the excessive expense that would be incurred, there is a recognition of a need for Park and Ride expansion at that location

- **To ensure a clear focus on delivery:**
  - i. A single division (TPD) within the core Department should be tasked with taking the lead on Park and Ride policy and monitoring of delivery to ensure a coordinated approach across delivery partners and complementary progression of associated and supporting measures, particularly in relation to parking controls and bus priority. The Division would not assume direct responsibility for the design and procurement of sites nor the enforcement of parking controls, rather its role would be one of challenge and oversight;
  - ii. An implementation group, chaired by TPD and incorporating representation from Roads Service, Rapid Transit Division and Translink should be established to progress the design and implementation of sites;
  - iii. Progress should be reported annually including assessment of emerging issues, utilisation and impact of Park and Ride;
  - iv. Dedicated funding streams should be established for Park & Ride / Share proposals, including for promotion and the provision of information; and
  - v. As an immediate priority the Department should establish a small group to bring forward definite proposals as to the long-term responsibilities and operation of enforcement of moving traffic offences in bus lanes.



- **In relation to the priority projects set out in this report, planning should be progressed immediately to facilitate future delivery as funding becomes available. This should include site design, approval and operational aspects and where practical land acquisition for future development.**
  
- **To complement the delivery of priority projects**
  - i. Provision for Park & Ride / Park and Share initiatives should be included within Strategic Road Improvement Schemes;
  
  - ii. In conjunction with the development of new facilities, consideration should also be given to the utilisation of existing sites such as, church car parks and community centre car parks which may serve as remote facilities within local communities and/or off-site car parks for major events such as sporting occasions or concerts;
  
  - iii. Where major out of town / edge of town retail and leisure developments are proposed on key corridors, the potential benefits of providing space for Park and Ride at such sites should be included as a planning consideration and potential developer contribution.

## 2. THE ROLE OF PARK AND RIDE, KEY SUCCESS FACTORS AND BEST PRACTICE

### ROLE OF PARK AND RIDE

- 2.1. For the purposes of this paper Park and Ride is defined as dedicated sites providing car parking linked to public transport. Typically located on urban fringes or on key transport nodes, such sites aim to provide an alternative to the private car for part of the journey into urban areas.<sup>5</sup> In that regard, Park and Ride is targeted at those commuters who do not have ideal public transport access from their journey origin and is not intended as an alternative to existing public transport particularly within urban areas.
- 2.2. Dedicated Park and Ride sites first emerged on these islands in the late 1960s. They were primarily seen as a means of responding to the dilemma of maintaining the accessibility and commercial vitality of urban centres in the face of increasing congestion and finite spatial capacity to accommodate continued traffic growth on urban networks.<sup>6</sup> It is perhaps for this reason that historic towns, such as Oxford, were among the first to introduce Park and Ride reflecting the shortage and value of available land within the urban area.
- 2.3. That objective of alleviating urban congestion is also reflected in the rationale for the programme of investment in Park and Ride as set out in the RTS and associated transport plans and planning policy.<sup>7</sup> The aim of Park and Ride policy in Northern Ireland, however, is significantly wider than that objective may imply, reflecting both the economic and the environmental role of Park and Ride. As such, Park and Ride is identified in the RTS

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<sup>5</sup> There are a wide range of definitions which can be applied to Park and Ride, from informal car parking and sharing in suburban areas to more formal arrangements. For the purposes of this report the focus is on the formal provision of parking linked to public transport.

<sup>6</sup> *Park and Ride – its role in local transport policy*, CPRE Transport Campaign Briefing, 1998

<sup>7</sup> PPS 13, *Transportation and Land Use*, supports the development of a network of well planned, high quality, park and ride schemes which can contribute to the alleviation of urban congestion.

as a critical element of an integrated and sustainable transport policy. In that context, the policy aim is to directly facilitate modal shift to public transport by enhancing integration between public transport and private car use.

### KEY SUCCESS FACTORS AND BEST PRACTICE

2.4. While Park and Ride has been operational in parts of GB for approximately 40 years, it is a relatively recent and less well established initiative in Northern Ireland. As a result, whilst there are a number of excellent surveys there is limited local evidence upon which to draw firm conclusions, particularly in relation to the impact of Park and Ride.<sup>8</sup> There is, however, considerable practical experience of park and ride, primarily bus-based, elsewhere in the United Kingdom and an emerging body of research upon which we can draw. That evidence and research has identified the potential for Park and Ride to have both positive and negative impacts. For information, an overview of potential impacts identified is set out in table 1.<sup>9</sup>

**Table 1: Pros and Cons of Park and Ride**

<b>Can Help to:</b>	<b>Can Cause Problems by:</b>
<ul style="list-style-type: none"> <li>• accommodate traffic growth, thereby preventing traffic congestion in town centres reaching a level that would be detrimental to the viability of that town;</li> </ul>	<ul style="list-style-type: none"> <li>• becoming eyesores on the periphery of towns – ‘urbanization’ road lighting, signs and associated development and the loss of Greenfield sites are often involved;</li> </ul>
<ul style="list-style-type: none"> <li>• attract people to use the town with the Park and Ride instead of other towns; thereby giving a competitive advantage;</li> </ul>	<ul style="list-style-type: none"> <li>• relying on car ownership, and therefore representing a further subsidy to car owners and promoting car use;</li> </ul>
<ul style="list-style-type: none"> <li>• reduce the need for major urban road construction;</li> </ul>	<ul style="list-style-type: none"> <li>• taking drivers away from existing public transport rendering it less viable. This can undermine public transport services.</li> </ul>
<p><b>In addition, Park and Ride is generally:</b></p> <ul style="list-style-type: none"> <li>• achievable within the present policy framework;</li> </ul>	<ul style="list-style-type: none"> <li>• encouraging extra journeys that people would not have made had it not been for the convenience of Park and Ride and fuelling traffic;</li> </ul>
<ul style="list-style-type: none"> <li>• popular – seen to be a ‘green’ solution by many people;</li> </ul>	<ul style="list-style-type: none"> <li>• leading some motorists to travel greater distances to reach the Park and Ride site than if they had just driven into the town centre with consequence increases in car mileage;</li> </ul>
<ul style="list-style-type: none"> <li>• gets people thinking in terms of public transport for at least part of the journey;</li> </ul>	

<sup>8</sup> Translink – Second Sprucefield Park & Ride Survey Report, 28<sup>th</sup> March 2007 and Second Black’s Road Park & Ride Survey Report, 17<sup>th</sup> April 2007.

<sup>9</sup> *Park and Ride – its role in local transport policy*, CPRE Transport Campaign Briefing, 1998

Can Help to:	Can Cause Problems by:
<ul style="list-style-type: none"> <li>• frees up space in the town centre for development other than parking e.g. housing;</li> </ul>	<ul style="list-style-type: none"> <li>• taking business away from other local towns and shops in the same catchment area;</li> </ul>
<ul style="list-style-type: none"> <li>• makes other policies like pedestrianisation and bus priority measures more feasible.</li> </ul>	<ul style="list-style-type: none"> <li>• encouraging more car use from urban to rural areas and fuelling traffic growth in rural areas;</li> </ul>
	<ul style="list-style-type: none"> <li>• using limited finances for construction and on-going subsidy.</li> </ul>

2.5. In light of the factors set out in the table above, this section of the report considers the evidence and sets out conclusions as to those measures which have the potential to enhance the contribution of Park and Ride to modal shift while minimising any unintended adverse impacts.

- ***Park and Ride as Part of an Integrated Parking Strategy***

2.6. While the environmental role of Park and Ride and in particular its potential to contribute to sustainable transport has become increasingly important, the focus of early Park and Ride schemes was much more limited with a specific focus on responding to congestion. As a consequence, those early schemes were often taken forward as stand alone measures, essentially providing overspill or additional parking capacity.<sup>10</sup> However, by the mid 1990s the effectiveness and impact of this approach was being increasingly questioned.

2.7. One of the most influential studies of the success factors impacting on Park and Ride remains the Good Practice Guide produced by the English Historic Towns Forum in 1993.<sup>11</sup> While providing useful guidance on the location and design of sites, that document concluded that Park and Ride could only be successful in contributing to traffic reduction or wider environmental objectives as part of an overall parking strategy. This reflects the fact that, as a supply side measure, unless the number of parking spaces within urban centres is reduced in line with the additional provision of Park and Ride spaces, the effect

<sup>10</sup> Meek et al, *Park and Ride: Lessons From the UK Experience*, Transport Studies Group, Loughborough University, November 2007

<sup>11</sup> *Bus-based Park and Ride: a good practice guide*, English Historic Towns Forum, 1993

is a net increase in parking capacity with the potential to induce additional traffic.<sup>12</sup>

- 2.8. Park and Ride is by definition car dependent and as a concept was developed to facilitate car use.<sup>13</sup> In line with that, the provision of Park and Ride in isolation from other measures has the potential to increase the accessibility of an urban area to car users thereby increasing traffic particularly on the periphery. If it is to contribute, therefore, to environmental or traffic management objectives, the provision of Park and Ride must be taken forward as part of an integrated transport strategy, including car restraint and parking measures.<sup>14</sup> In particular, the provision of additional Park and Ride spaces, must be complemented by reductions in the availability of parking spaces in the urban centres they serve. Such an approach, moreover, is also an essential element contributing to the utilisation of Park and Ride sites by drivers. Bos and van der Heijden's analysis for example, suggests that where there is convenient, affordable access to central parking, it is unlikely that drivers will switch to Park and Ride.<sup>15</sup>
- 2.9. Given the nature of Park and Ride and the particular focus on commuters, proposals for associated reductions in more central parking capacity have tended to focus on long stay parking. This approach is very much reflected in the proposals for parking in Belfast set out in the BMTP. The proposed reduction in long stay parking set out in the BMTP, however, is

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<sup>12</sup> *Park and Ride – its role in local transport policy*, CPRE Transport Campaign Briefing, 1998

<sup>13</sup> This position is reflected in the 1998 DETR white paper *A New Deal for Transport* which in referring to Park and Ride stated: *our new approach is about widening choice, not forcing people out of their cars when using a car is the preferred option ... we want to see more opportunities for cars to be used as part of an integrated transport system.*

<sup>14</sup> Parkhurst, *Influence of bus-based park and ride facilities on users' car traffic*, ESRC Transport Studies Unit, University College London, February 2000

In setting out GB planning guidance on transport, [PPG 13](#) had by 2001 been revised to suggest P&R *need[s] to be developed as an integral part of the planning and transport strategy for the area... [and] should not be designed to increase significantly the total public parking stock available in a town and care should be taken ... to avoid encouraging additional travel, and especially commuting, by car.*

Pickett & Gray, *The Effectiveness of Bus-based park and Ride*, 1996

<sup>15</sup> Bos and van der Heijden, [Multi-Modal Transport Services in Urban Areas: push or forget?](#) AESOP Conference paper, 2005

accompanied by proposals for an increase in the level of short stay parking. While there may be a clear rationale for such an approach, Parkhurst in particular cautions that such associated increases in short stay parking may generate additional traffic in the urban area despite fewer peak time trips.<sup>16</sup> This raises the question as to whether enhancing the provision of short-stay spaces encourages car use in the urban area off peak, including for leisure and shopping purposes, thereby negatively impacting on the potential for modal shift by undermining the attractiveness of existing public transport and any additional Park and Ride provision. An alternative approach may be to promote Park and Ride as an alternative to those accessing the urban area off-peak, particularly for shopping and leisure.

**Conclusion 1:** Park and Ride must be taken forward as part of an integrated transport strategy, it should not be implemented as a stand alone measure.

**Conclusion 2:** The provision of Park and Ride spaces must be accompanied by an equivalent phased reduction in the number of car park spaces available in the urban area.

**While the focus will be on reducing long-stay spaces, there should be no significant expansion in the provision of short-stay parking.**

- ***Promoting Patronage While Minimising Abstraction from Conventional Public Transport***

2.10. The availability of a high quality and frequent public transport link is a key requirement of a successful Park and Ride facility. Indeed, experience in GB and elsewhere has demonstrated that it is one of the primary factors in attracting drivers and generating demand for Park and Ride.<sup>17</sup> It is equally important, however, that services are not only frequent, but reliable. It is for this reason, that bus-based Park and Ride must be supported by

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<sup>16</sup> Parkhurst, *Influence of bus-based park and ride facilities on users' car traffic*, ESRC Transport Studies Unit, University College London, February 2000

<sup>17</sup> Robert J. Spillar, [\*Park-and-Ride Planning and Design Guidelines, Chapter 4: Making the Facility Location Decision\*](#), Parsons Brinckerhoff Inc, New York, October 1997

Bos, van der Heijden, Molin and Timmermans, *Cognitions and Relative Importances Underlying Consumer Valuation of Park and Ride Facilities*, 2003

bus prioritisation measures on key routes with the added benefit of increasing the relative attractiveness of Park and Ride by minimising the journey time and impact of congestion on users.

- 2.11. The provision of dedicated services while providing an attractive alternative for drivers may, however, heighten the potential for abstraction and trip generation, as existing public transport users switch to Park and Ride Services. Transport Scotland, for example, caution that “*where the public transport link [provided by Park and Ride] is more attractive than nearby alternatives, it is possible that existing public transport users will divert to the new service.*”<sup>18</sup> There is some evidence to support this conclusion and suggest in many cases there is a degree of abstraction from conventional public transport to Park and Ride services. In that regard, the Atkins study for DETR on *The Travel Effects of Park and Ride*<sup>19</sup> concluded that abstraction from public transport ranged from 10% - 28% of users in the eight schemes considered.
- 2.12. The key concern in this regard is that many of those who had previously utilised public transport for their whole journey begin to drive to access the Park and Ride site, as a consequence of which additional car trips are generated by the Park and Ride site. The Atkins study for example, highlighted a predominance of very short trips made by private car in order to access park and ride with 36% of users who travelled to the surveyed sites by car travelling less than 3 kilometres from their origin. Most of these trips would appear to have been made within urban areas which were well served by public transport. Parkhurst further cautions that by reducing the generalised cost of travel, Park and Ride will theoretically induce longer trips, including to access Park and Ride.<sup>20</sup> In light of the potential for abstraction, CPRE recommend that if Park and Ride is to deliver environmental benefits, schemes must be accompanied by

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<sup>18</sup> Louisa Martin, *TACTRAN Park & Ride Strategy: Best Practice Review*, Colin Buchanan & Partners Ltd, Edinburgh, 2008

<sup>19</sup> Harris et al, *The Travel Effects of Park and Ride*, WS Atkins, for DETR, 1998

<sup>20</sup> Parkhurst, *Environmental Cost Benefits of Bus Based Park and Ride Systems*, ESRC Transport Studies Unit, London, 1999

action to promote journeys by foot, bike and conventional public transport as the first choice, rather than becoming a second choice to Park and Ride<sup>21</sup>

- 2.13. The reasons for abstraction and trip generation will vary by site, but generally it is likely that key factors are the perceived convenience, cost and reliability of Park and Ride as apposed to established public transport.<sup>22</sup> This reflects the fact that in order to attract drivers, bus-based Park and Ride facilities tend to offer incentives such as low fares and high frequency dedicated services using modern buses. The quality of public transport offering is therefore often better than conventional public transport and where accessible is likely to prove attractive to existing users of public transport.<sup>23</sup> To some degree this may be overcome by ensuring that the price and service is sufficiently attractive as compared to more central parking to encourage motorists to use Park and Ride, but not to the level that it undercuts existing public transport.<sup>24</sup> Thus the TACTRAN (Tayside and Central Scotland Transport Partnership) best practice review suggests that abstraction can be reduced by setting fares in line with conventional public transport fares.<sup>25</sup>
- 2.14. The TACTRAN review, however, goes beyond this and highlights the potential to reduce abstraction by integrating Park and Ride services into the wider bus network. Similarly, Network Management Notes published by the Institution of Highways and Transportation, recommend that conventional services should be upgraded to make diversion to Park and Ride less attractive to existing users of public transport while affording opportunities to integrate Park and Ride with local services without diluting

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<sup>21</sup> *Park and Ride – its role in local transport policy*, CPRE Transport Campaign Briefing, 1998

<sup>22</sup> Stuart Meek, *Redefining car-bus interchange to reduce traffic*, Doctoral thesis, Loughborough University, June 2010

<sup>23</sup> Meek et al, *Park and Ride: Lessons From the UK Experience*, Transport Studies Group, Loughborough University, November 2007

<sup>24</sup> Based on the results of their 2007 survey, The TAS report [Park and Ride Great Britain](#) (2007) reports that in most cases Park and Ride is charged at between 20% and 60%, thus offering a significant discount against town centre parking.

<sup>25</sup> Louisa Martin, *TACTRAN Park & Ride Strategy: Best Practice Review*, Colin Buchanan & Partners Ltd, Edinburgh, 2008



quality.<sup>26</sup> The potential benefits of a more complementary integration are also highlighted by Parkhurst<sup>27</sup> and Meek<sup>28</sup> while recognising the importance of high quality bus services in attracting motorists to use Park and Ride. The suggested focus, therefore, is not on reducing the quality of Park and Ride offering, but rather in enhancing conventional public transport and providing for better integration. In addition to reducing the potential for abstraction, integration of services also has the potential to enhance the off-peak accessibility of Park and Ride sites.

**Conclusion 3:** Park and Ride must be supported by frequent and reliable transit services and the introduction of bus priority measures.

The quality, reliability and frequency of service must be sufficient to provide an attractive alternative to drivers, while not resulting in unnecessarily low passenger numbers.

**Conclusion 4:** The costs of Park and Ride to the user should be significantly lower than the cost of more central parking. However, to minimise abstraction, the cost of use should not be less than conventional public transport services.

**Conclusion 5:** Where practical, provision should be made to facilitate integration of dedicated services and conventional public transport.

- ***Location Decisions to Maximise Patronage and Impact***

2.15. The location of a Park and Ride site plays a key role both in determining the level of patronage and impact of the facility. As a result a considerable body of evidence and guidance is available on the location of sites to maximise patronage.<sup>29</sup>

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<sup>26</sup> Martin Higginson, [Park and Ride, Network Management Note](#), H&T, March 2001

<sup>27</sup> Parkhurst, *Influence of bus-based park and ride facilities on users' car traffic*, ESRC Transport Studies Unit, University College London, February 2000

<sup>28</sup> Stuart Meek, *Redefining car-bus interchange to reduce traffic*, Doctoral thesis, Loughborough University, June 2010

<sup>29</sup> Maricopa Association of Governments (MAG) Park-and-Ride Study, Executive Summary, Phoenix, Arizona January 2001; Farhan and Murray, *Siting park-and-ride facilities using a multi-objective spatial optimization model*, Center for Urban and Regional Analysis, Ohio State University, April 2007;

Across that guidance a number of common location features underpinning successful sites can be identified as set out below:

- close to main access routes to avoid unnecessary detours and the potential for additional congestion on the periphery;
- safe and easy to access with an emphasis on minimising access time to sites by drivers;
- upstream of congestion;
- offer good access to town centre including bus priority;
- surrounded by land for expansion;
- away from residential areas to avoid congestion but also to minimise abstraction; and
- visible from adjacent arterials to facilitate marketing and patron safety

2.16. In addition to maximising the potential for patronage, the location decision must also take full account of the intended role or impact of the facility. For example, the rationale of Park and Ride facilities in the early 1970s was the provision of additional parking capacity in the context of growing congestion and constrained parking capacity in the central urban area. The provision of stand alone sites on the periphery of the central urban area as was often the case with these early schemes reflected that objective. Where the aim of Park and Ride, however, is to contribute to modal shift and reduced car use then the issues impacting on location decisions become considerably more complex.<sup>30</sup>

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Chu, Land and Pendyala, *Update of FDOT State Park and Ride Lot Program Planning Manual*, Chapter3: Site Selection, Center for Urban Transportation Research, University of South Florida, April 2001;

Robert J. Spillar, [Park-and-Ride Planning and Design Guidelines, Chapter 4: Making the Facility Location Decision](#), Parsons Brinckerhoff Inc, New York, October 1997;

Louisa Martin, *TACTRAN Park & Ride Strategy: Best Practice Review*, Colin Buchanan & Partners Ltd, Edinburgh, 2008

<sup>30</sup> DfT's [Transport Analysis Guidance](#) (June 2003) cautions that *In some circumstances, park and ride may generate longer journeys and take part of its demand from passengers who previously used public transport for their whole journey. The net effect will depend on where the facility is located and implementation of complementary measures...*

- 2.17. While public transport abstraction, trip generation and the operation of high frequency buses have been identified as three main causes of inefficiency in reducing car use for Park & Ride<sup>31</sup>, the key role location plays in this regard has been recognised.<sup>32</sup> Concerns in this regard appear primarily to relate to the distance travelled by the car driver to access a Park and Ride site compared to the distance travelled from the Park and Ride site. Thus the further the site from the journey destination, the higher the potential impact on reducing the distance travelled by car.<sup>33</sup>
- 2.18. That potential, however, will only be realised if drivers utilise Park and Ride, and this places certain limitations as to the optimal distance of sites from the journey destination. If sites are located too far from the central urban area it becomes difficult to provide or maintain a regular transit service. This is particularly important given that the reliability of public transport and in particular the frequency of departures from the facility have been identified as the most important attribute influencing decisions to use Park and Ride.<sup>34</sup> In evaluating Park and Ride drivers will also consider the benefits as compared to making the journey by car. Thus, where drivers have to cope with severe congestion and limited central parking, the attractiveness of Park and Ride is enhanced<sup>35</sup> particularly where Park and Ride benefits from bus priority measures into the more central urban area. It is perhaps for this reason that Park and Ride facilities immediately upstream of recurring congestion on transportation networks

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<sup>31</sup> In relation to high frequency bus services, while recognising their importance in attracting users, the key concern is that where the frequency is not appropriately managed this may result in low passenger numbers per trip, particularly outside peak periods thereby reducing the benefits of modal shift both on congestion and emissions.

<sup>32</sup> Stuart Meek, *Redefining car-bus interchange to reduce traffic*, Doctoral thesis, Loughborough University, June 2010

<sup>33</sup> Chu, Land and Pendyala, *Update of FDOT State Park and Ride Lot Program Planning Manual*, Chapter3: Site Selection, Center for Urban Transportation Research, University of South Florida, April 2001.

<sup>34</sup> Bos, van der Heijden, Molin and Timmermans, *Cognitions and Relative Importances Underlying Consumer Valuation of Park and Ride Facilities*, 2003

<sup>35</sup> Bos and van der Heijden, [\*Multi-Modal Transport Services in Urban Areas: push or forget?\*](#) AESOP Conference paper, 2005

demonstrate higher levels of demand.<sup>36</sup> Where sites are located further upstream of the congested zone then it would be reasonable to assume that complementary initiatives, such as bus priority alongside car access and parking restraint measures in the urban centre become ever more important in enhancing the relative attractiveness of Park and Ride.

2.19. In addition to role, Park and Ride facilities can also be classified in terms of their location and distance from key activity centres. With regard to Northern Ireland context three basic types are identified:<sup>37</sup>

- **Peripheral:** Located on the edge of the central urban area. The driver for such sites tends to be limited spatial capacity for increased parking in the central urban area and as a consequence they aim primarily to provide increased parking capacity just beyond the core and where excess land is available. By increasing parking capacity, usually at low cost and supported by transit, peripheral sites have little impact on reducing traffic or promoting modal shift. Local examples include Northside, Eastside and Ravenscroft Avenue.
  
- **Sub-Urban Fringe:** Located significantly further from journey destinations, usually the outer edge of urban and metropolitan areas they aim to intercept traffic travelling into the urban area. The location of sites enables the provision of regular dedicated transit services at reasonable cost. Where located within the urban fringe, these sites,

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<sup>36</sup> Robert J. Spillar, [\*Park-and-Ride Planning and Design Guidelines, Chapter 4: Making the Facility Location Decision\*](#), Parsons Brinckerhoff Inc, New York, October 1997

<sup>37</sup> Adapted from Spillar (24), Stacey (26), FDOT State Park and Ride Lot Program Planning Manual (21) and Meek (20)

however, may also attract traffic from nearby residential areas. Where such areas are served by existing conventional public transport there is a significant potential for abstraction. To be effective, such sites need to be located on or within easy access of major arterial commuting routes. Local examples include Cairnshill, with Sprucefield an example of a more distant fringe site bordering on a remote or link and ride site.

- **Remote Sites** Sometimes referred to as ‘Link and Ride’ and occasionally regarded as an alternative or complementary measure to Park and Ride.<sup>38</sup> Remote sites are located farther from the journey destination, either on major commuting corridors or in small towns and villages using existing parking provision, such as church halls and community centres. These sites, which can also serve as Park and Share, are not served by dedicated Park and Ride transit services, but rather draw on existing conventional public transport. For that reason it is important that they are located on routes served by regular and high quality public transport. Local examples include Castledawson and the Ballygawley site currently under development.<sup>39</sup>

2.20. As set out above (2.18), the potential impact of Park and Ride on reduced car use is enhanced where facilities are located closer to the journey origin than the journey destination. In that regard, remote sites and those located on the urban fringe

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<sup>38</sup> Richard Stacey, *The Effectiveness and Sustainability of Park and Ride*, RPS, June 2009

<sup>39</sup> Work is due to commence on site in February 2011 on an interim Park & Ride / Park & Share scheme at Ballygawley, serving A4 and A5 traffic. The scheme will provide an initial 34 spaces with the potential for future expansion.

respectively offer the highest potential for modal shift, notwithstanding the potential for abstraction in the case of the latter. Peripheral sites offer negligible benefits in terms of reduced traffic or modal shift. Moreover, where developed in isolation from measures to reduce more central parking they are likely to increase overall parking capacity, thereby facilitating, potentially subsidising and encouraging car use. This is particularly relevant, given that across the UK and Ireland, the implementation of Park and Ride has rarely been complemented by reductions in more central parking.<sup>40</sup> As such, where the objective is one of modal shift, peripheral park and ride sites should not be considered as an appropriate policy instrument. The focus rather should be on urban fringe and remote facilities.

- 2.21. Remote sites located in small towns and villages and on key commuting routes closer to journey origins and some distance from the activity centre would appear to offer the most significant potential for reducing car use by commuters while minimising the potential for abstraction. The majority of UK Park and Ride sites, however, fall within the urban fringe category and are typically located 3 miles from activity centres with the aim of maximising the frequency and reliability of transit service while intercepting traffic just upstream of congested areas. This contrasts with US guidelines which recommend that such sites should be at least 10 miles from the activity centre. In part this variance in approach may be accounted for by the higher degree of urban sprawl associated with US conurbations and the longer commuting journeys and traffic volumes being intercepted.
- 2.22. The relative closeness of Park and Ride sites to urban centres in the GB context has drawn some criticism, with particular concerns that the longest portion of the journey continues to be undertaken by car. In light of the evidence that such sites tend to

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<sup>40</sup> Stacey (2009) reports that of Local Authorities surveyed only two cases were identified where the provision of parking in the town centre was reduced following the implementation of Park and Ride. Meek, Parkhurst and Bos report similar findings.

attract a high proportion of users from nearby residential areas,<sup>41</sup> any reductions in car use realised by Park and Ride may be offset by abstraction from conventional public transport and additional car journeys generated within the urban area.<sup>42</sup> As a consequence, Meek, referring to location as one of a number of characteristics, has suggested that *the current concept of P&R is, by design, potentially inefficient, particularly at reducing car use.*

2.23. Notwithstanding the concerns highlighted above, sites located on the urban fringe do offer significant potential to reduce traffic into the urban area and promote modal shift. In line with guidelines and best practice, this is likely to be enhanced where they are located on all key arterial approach routes into the urban area, thus reducing the need for diversion to access sites.<sup>43</sup> To maximise the impact on reducing car use over the entire journey, sites should be located as far from the urban centre as possible while continuing to allow for regular and frequent transit services during peak periods and providing an attractive alternative to continuing the journey by car. In that regard, and particularly where located further upstream from congested conditions, Park and Ride facilities must be supported by transit priority and traffic/parking restraint measures within the urban area. Additionally, in line with research and guidance set out above, to minimise abstraction and the potential for increased congestion on the urban periphery, the development and introduction of Park and Ride sites on the urban fringe should be supported by measures to enhance as appropriate and promote conventional public transport as the preferred travel mode for nearby residential areas. In line with that, Park and Ride is not an appropriate

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<sup>41</sup> Parkhurst, *Influence of bus-based park and ride facilities on users' car traffic*, ESRC Transport Studies Unit, University College London, February 2000

Harris et al, *The Travel Effects of Park and Ride*, WS Atkins, for DETR, 1998

<sup>42</sup> Stuart Meek, *Redefining car-bus interchange to reduce traffic*, Doctoral thesis, Loughborough University, June 2010

<sup>43</sup> Harris et al, *The Travel Effects of Park and Ride*, WS Atkins, for DETR, 1998

response to the travel needs of those commuters whose journey origin is within major residential settlements within the BMA.<sup>44</sup>

**Conclusion 6:** Peripheral Park and Ride sites should not be considered under the umbrella of sustainable transport policy levers.

**Conclusion 7:** Park and Ride sites on the urban fringe should be located adjacent to all major radial approach routes and providing convenient access to drivers.

Sites should be located as far from the urban centre as practical and viable and supported by the implementation where appropriate of complementary bus prioritisation and central parking restraint measures to enhance the attractiveness to potential users.

**Conclusion 8:** To minimise abstraction and trip generation, the development of Park and Ride sites accessible to residential areas on the urban fringe should be accompanied by measures to promote conventional public transport, walking and cycling as the first choice, including as appropriate the enhancement of facilities and services.

**Conclusion 9:** Priority should be attached to the provision of Park and Ride / Park and Share sites along the full length of key strategic commuting corridors, taking account of settlement and commuting patterns and the availability of high quality and frequent conventional public transport services.

- ***Layout & Facilities at Sites to Promote Patronage***

2.24. In addition to the more strategic considerations set out above, it is important to recognise that the actual layout and facilities at individual sites is of central importance in engendering confidence and creating the safe and secure environment necessary to attract drivers. In that regard, the following key design features are currently recognised as best practice.<sup>45</sup>

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<sup>44</sup> By way of example Manchester City Council in its Transport Policies and Programmes (TPP) bid for 1997/1998 rejected the need for large scale Park and Ride expansion, partly in light of constraints in relation to congestion and limited control over the availability of central parking, but also recognising that the majority of its population lived within 10 minutes walk of a bus stop. Its main objective was therefore to attract people onto buses without the need to use their car for even part of the journey.

<sup>45</sup> Adapted from Robert J. Spillar, [\*Park-and-Ride Planning and Design Guidelines, Chapter 6: Design Requirements for Park-and-Ride Facilities\*](#), Parsons Brinckerhoff Inc, New York, October 1997; Martin Higginson, *Park and Ride*, Network Management Note, H&T, March 2001; Chu, Land and Pendyala, *Update of FDOT State Park and Ride Lot Program Planning Manual*, Chapter 7: Conceptual Design



- **Site layout:** Adequate access including clear signage in advance from access routes and at town centre pick-up and drop off points. Well-sited bus pick-up and set-down points to minimise walking distance and dedicated parking spaces for those with disabilities. Clear information including pricing, payment and service times.
  
- **Security:** The perceived and actual safety of users and their vehicles is a key consideration impacting on decisions to use Park and Ride. This can be enhanced through a permanent staff presence, lighting, fencing and appropriate layout, Closed Circuit Television (CCTV) monitoring and natural surveillance – i.e. plenty of activity at the site, including where practical waiting transit during peak periods.
  
- **Landscape:** Direct walking routes to transit. Soft landscaping and planting, to make sites more attractive to users and safer by reducing hidden areas.
  
- **Additional facilities:** Provision of good quality waiting facilities including toilets, particularly where provision is made for pedestrian access to Park and Ride. This can be further enhanced through multi-function sites, where Park and Ride is

attached to shopping or entertainment complexes or public service offices.

- **Multi-modal access:** In addition to access for drivers, facilities should provide access for pedestrians and cyclists. This is likely to require the provision of bicycle racks and lockers, which should be placed so that they maximise the visibility of the storage area to enhance safety and security.

2.25. Locally the Public Transport Partnership Board's Park and Ride Working Group developed a toolkit to reflect best practice and which should be pursued in the development of Park and Ride facilities across Northern Ireland<sup>46</sup> Regardless of the quality of facility, it cannot attract users unless they are aware of its existence. As a consequence, signage and information along access routes are of key importance in raising awareness, but are only one element of a necessary programme to promote Park and Ride generally and sites specifically. The focus in this regard, must be on promoting the benefits to the user and providing the information that enables individuals to access the service. Those who access Park and Ride are unlikely to be a homogenous or indeed static group, as a result, there will be a requirement for ongoing marketing and information beyond the initial launch of sites. Branding of Park and Ride can play a key role in this regard, but equally important is the promotion of Park and Ride by users through word of mouth. For that reason facilities and services should aim to offer the highest levels of customer care.

**Conclusion 10:** Ongoing provision must be made to promote Park and Ride to potential users and ensure clear information is provided at all sites and access points and routes

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<sup>46</sup> See Annex Two

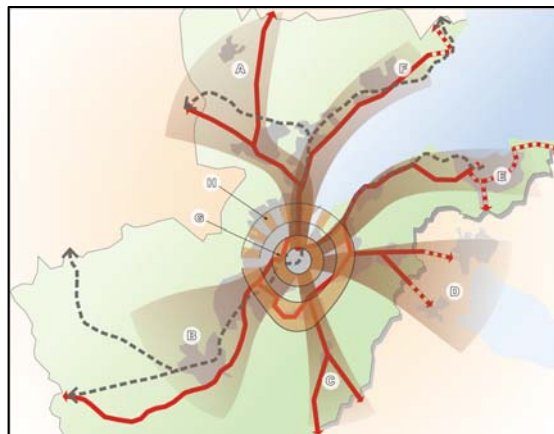
### 3. BMTP & SRTP PROPOSALS FOR PARK AND RIDE

- 3.1. The Regional Transportation Strategy (RTS) published in 2002 identified Park and Ride / Park and Share as a key element of a more integrated and sustainable transport infrastructure for Northern Ireland. The direction set out in the RTS was subsequently reflected in the development of proposals for a comprehensive programme of investment in Park and Ride sites through the Regional Strategic Transport Network Transport Plan, Belfast Metropolitan Transport Plan (BMTP) and the Sub-Regional Transport Plan (SRTP).

#### **BMTP Proposals for Park-and-Ride and Associated Measures**

- 3.2. The proposals for Park and Ride set out in the BMTP have three key elements:
- Local Park and Ride to be provided using dedicated bus services located on the edge of the main built up urban area. Whilst a small number of sites would be linked to Rapid Transit all Park and Ride sites were to be supported with bus priority measures;
  - Strategic Park and Ride sites served by existing rail or bus services from stations/stops located further away from the main built up area on the strategic road/rail network; and
  - Complementary parking restraint measures to discourage long-stay commuter parking in the central urban area.

**Figure 1: Belfast Metropolitan Transport Corridors**



- 3.3. Details of the proposals by site and transport corridor (MTC – see Figure 1) are set out in the table below with an illustration of MTCs provided in Figure 1. Collectively the BMTP proposals aimed to provide a total of 6693 Park and Ride spaces by 2015, representing an increase of some 5,535 on the Park and Ride spaces already in place at the time of the publication of the BMTP in 2004.

**Table 1: BMTP Park and Ride Capacity by MTC and Site<sup>47</sup>**

Metropolitan Transport Corridor	Site Name	Mode	2004 Capacity	2015 Capacity
<b>A</b>	Templepatrick	Bus/Rail	0	650
	Mosley West	Rail	59	59
	Sandyknowes	Bus	0	92
	Fortwilliam	Bus	0	500
	Ballyclare	Bus	10	10
	<b>Sub-Totals</b>			<b>10</b>
<b>B</b>	Moira	Rail	62	170
	Sprucefield	Bus	0	200
	West Lisburn	Rail	0	500
	Lisburn	Rail	47	247
	Kennedy Way	Bus	0	500
	Black's Road - Temp	Bus	0	220
	Finaghy	Rail	0	30
	<b>Sub-Totals</b>			<b>109</b>
<b>C</b>	Cairnshill	Bus	0	724
	Carryduff	Bus	0	60
	<b>Sub-Totals</b>		<b>0</b>	<b>784</b>
<b>D</b>	Millmount	Rapid Transit	0	644
	Ravenscroft Avenue	Bus	56	109
	Eastside	Bus	213	297
	<b>Sub-Totals</b>		<b>269</b>	<b>1050</b>
<b>E</b>	Bangor	Rail	123	243
	Carnalea	Rail	10	10
	Helen's Bay	Rail	12	12
	Seahill	Rail	0	10
	Hollywood	Rail	37	50
	Tillysburn	Bus	0	400
	<b>Sub-Totals</b>		<b>182</b>	<b>725</b>
<b>F</b>	Whitehead	Rail	29	50
	Carrickfergus	Rail	120	279
	Trooperslane	Rail	0	20
	Greenisland	Rail	13	85
	Jordanstown	Rail	0	46
	Whiteabbey	Rail	16	75
	Yorkgate	Rail	16	16
	Northside	Bus	394	394
	<b>Sub-Totals</b>		<b>588</b>	<b>956</b>
<b>TOTALS</b>			<b>1158</b>	<b>6693</b>

<sup>47</sup> Although proposals are included in the SRTP, Templepatrick is considered a key element of P&R to serve traffic entering the BMA and is therefore considered in this report alongside BMTP proposals.

3.4. As set out above, the proposals for Park and Ride set out in the BMTP were part of a wider programme linked to parking restraint measures within the Belfast Metropolitan Area. These can be summarised as follows:

- removal of all on street long stay parking (about 1500)
- increase in short stay spaces by about 2200 with a maximum of 6800 short stay spaces
- reduction in off street long stay spaces by about 4000
- 1000 new residents parking spaces

3.5. While tied to the implementation of Park and Ride, the development and delivery of the proposed parking restraint measures were based on a number of key assumptions as follows:

- conversion of all uncontrolled on street parking to controlled in core;
- new pricing structures in Roads Service and Northern Ireland Transport Holding Company (NITHC) car parks to deter long stay users;
- introduction of residents parking schemes;
- parking associated with development that has planning approval will be built;
- spaces lost to redevelopment of surface car parks will be replaced elsewhere;
- any further stand alone car parks approved will be for short stay use only; and
- spaces associated with development will be limited through application of TRAN4 of the draft Belfast Metropolitan Area Plan (BMAP).

3.6. In addition, and in support of Park and Ride and the wider objective of modal shift, the BMTP further set out associated proposals for a significant programme of investment of circa £27m for the implementation of Quality Bus Corridors on fourteen key routes within the BMA.

## SRTP Proposals for Park-and-Ride and Associated Measures

- 3.7. The proposals for Park and Ride set out in the SRTP were developed following consideration of the transport conditions in each of the 29 towns and cities in the SRTP area. Those studies identified the potential for Park and Ride only at 3 locations serving the Londonderry area (Buncrana Road, Culmore Road and Drumahoe) and possibly Ballymena. Beyond tentative recommendations in this regard, however, the SRTP did set out proposals for a number of Park and Ride/Share sites serving the strategic road and rail network. In addition, the SRTP made separate provision for car parking at bus and rail stations as part of local parking strategies and linked to the objective of promoting modal shift onto public transport.

**Table 2: SRTP Park and Ride Capacity by Site and Mode<sup>48</sup>**

Corridor	Site Name	Mode	2004	2015
A1	Newry Station	Train	80	300
	Newry Bus Station	Bus	0	25
A2	Castlerock	Train	6	6
	Londonderry	Train	58	58
	Larne	Bus	8	33
	Larne Station	Train	68	68
	Buncrana Rd	Bus	0	25
	Culmore Rd	Bus	0	25
A2/A26	Coleraine	Train/Bus	21	46
A4	Enniskillen Bus Station	Bus	0	25
A5	Strabane	Bus	0	45
	Ballygawley <sup>49</sup>	Bus		
	Omagh Bus Station	Bus	0	25
A6	Drumahoe	Bus	30	122
	Craigadick	Bus	36	122
	Castledawson	Bus	61	181
	Toome	Bus	100	100
A7	Downpatrick Bus Station	Bus	0	25
A26	Ballymoney	Train/Bus	27	27
A28	Armagh Bus Station	Bus	0	25
M1	Lough Road Lurgan	Bus	104	104
	Lurgan	Train	88	155
	Portadown	Train/Bus	110	300
M1/A4	Dungannon	Bus	47	72
M2	Templepatrick	Bus	27	70
	Dunsilly	Bus	100	258
	Antrim	Train/Bus	60	60
M22/A26	Ballymena	Train/Bus	35	204
	Ballee	Bus	40	84

<sup>48</sup> Includes proposals for additional parking capacity at bus and rail stations developed in the context of local parking strategies

<sup>49</sup> An interim scheme due to commence in February 2011 will provide an initial 34 spaces with the potential for future expansion.

3.8. Alongside the proposals for Park and Ride, parking strategies were developed for each of the 29 towns and cities in the SRTP. In general they were devised to provide:

- convenient short stay parking close to the town or city centre;
- longer stay parking located further from the town or city centre;
- appropriate additional exclusive provision for loading vehicles, taxi stands and Blue Badge vehicles; and
- where practical, parking convenient to bus and rail stations to encourage public transport use by commuters.

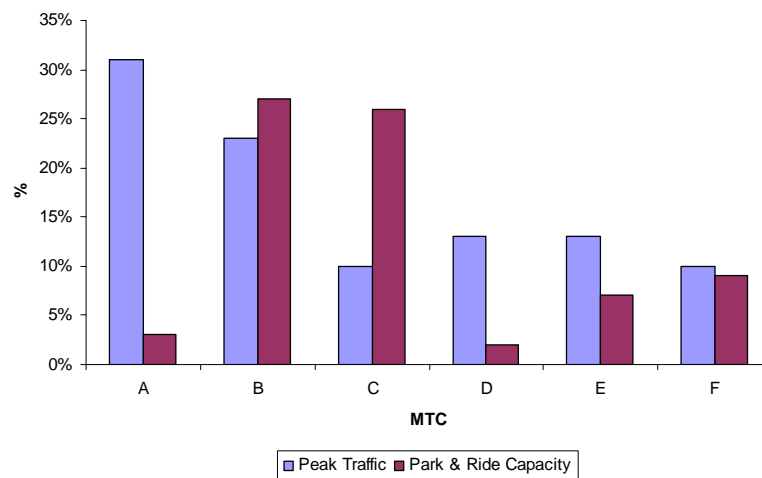
3.9. In support of the proposed development of Park and Ride in the Londonderry area, the SRTP also recommended the development of a cross-city bus corridor.

## 4. PROGRESS TO DATE AGAINST BMTP AND SRTP PROPOSALS

### BMTP

- 4.1. If we compare the provision of Park and Ride capacity in the BMTP in 2004 with traffic flows into the city (Figure 2), there appears to be a significant disjoint, with limited provision on 4 key corridors (A, B, C, D), and apparently more balanced provision on the E and F corridors. However, in some ways this picture is distorted by the provision of more central Park and Ride sites at Northside and Eastside which potentially are accessible to traffic travelling into Belfast on MTCs A, C and D in addition to MTC F, though their more central location, while enhancing parking provision, diminishes their potential impact on modal shift and reduced car use.

**Figure 2: Park and Ride Capacity and Peak Traffic Flows by MTC as Proportion of BMA Total: 2004<sup>50</sup>**



- 4.2. Table 3 below sets out an overview of progress by 2010 against the BMTP proposals for Park and Ride, with those sites where capacity has been increased highlighted. Clearly some, though limited, progress has been made, in that the Park and Ride capacity of the BMA has been increased by just over 1,000 spaces since the publication of the BMTP in 2004. Outwith the pace of progress, the figures set out in the table above raise a number of important issues and concerns. Firstly, much of the

<sup>50</sup> Data on traffic flows taken from Roads Service/Translink presentation to Park and Ride Project Group, 12 January 2010



increase in Park and Ride capacity since 2004 is based on the expansion of existing sites, primarily rail based, and the development of 2 temporary bus-based facilities (Sprucefield and Black's Road) not envisaged in the BMTP. Of an additional 14 Park and Ride sites set out in the BMTP, only one facility, Cairnshill, has now been delivered and is fully operational.<sup>51</sup>

**Table 3: Increase in BMTP Park and Ride Capacity by MTC and Site 2004-2010**

MTC	Site Name	2004 Capacity	2010 Capacity	2015 Capacity
A	Templepatrick	0	0	650
	Mossley West	59	59	59
	Sandyknowes	0	0	92
	Fortwilliam	0	0	500
	Ballyclare	10	10	10
B	Moira (1)	62	99	170
	Moira (2)	0	80	0
	Sprucefield	0	0	200
	Sprucefield - Temp	0	320	0
	West Lisburn	0	0	500
	Lisburn	47	47	247
	Kennedy Way	0	0	500
	Black's Road - Temp	0	220	220
	Finaghy	0	16	30
	Cairnshill	0	724	724
C	Carryduff	0	0	60
	Millmount	0	0	644
D	Ravenscroft Avenue	56	56	109
	Eastside	213	297	297
E	Bangor	123	123	243
	Carnalea	10	10	10
	Helen's Bay	12	12	12
	Seahill	0	0	10
	Hollywood	37	37	50
	Tillysburn	0	0	400
F	Whitehead	29	50	50
	Carrickfergus	120	120	270
	Carrickfergus - Temp	0	0	0
	Trooperslane	0	0	20
	Greenisland	13	85	85
	Jordanstown	0	0	46
	Whiteabbey	16	80	75
	Yorkgate	16	16	16
Northside	394	394	394	
<b>TOTALS</b>		<b>1158</b>	<b>2861</b>	<b>6693</b>

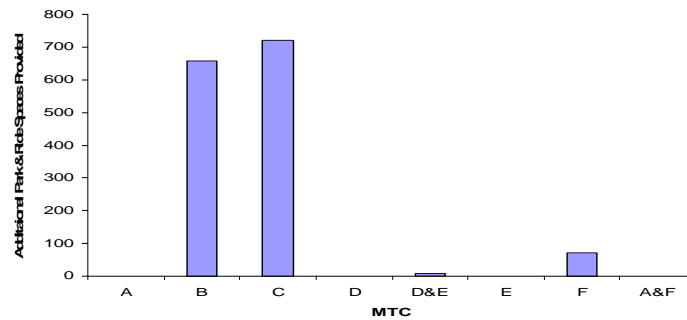
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- 4.3. As set out in Figure 3 below, the increase in capacity, reflecting the central role of Cairnshill and the temporary sites at Sprucefield and Black's Road, has been largely focused on MTCs B and C. A more modest increase in capacity is evident on MTC F, though this does reflect a focused programme of investment in rail based Park and Ride on the Carrickfergus line.

<sup>51</sup> Provision has now been made to secure permanent provision at the Black's Road site.

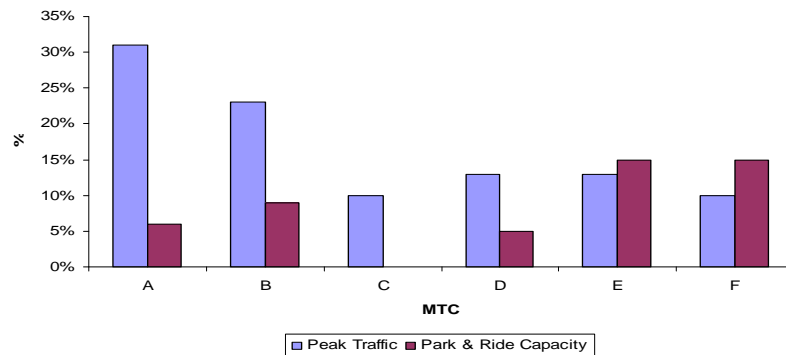
<sup>52</sup> Mossley West has an overflow facility which increases its capacity by an extra 75 spaces.

**Figure 3: Change in Park and Ride Capacity by MTC: 2004 - 2010**



4.4. As a consequence of the development of the temporary sites at Sprucefield and Blacks Road alongside the completion of works on the Cairnshill site, by 2010 there is a significant rebalancing of capacity, which begins to more appropriately reflect the traffic flows into the BMA. However, capacity on the A8/M2 corridor (MTC A) remains negligible as illustrated in Figure 4 below.

**Figure 4: Park and Ride Capacity and Peak Traffic Flows by MTC as Proportion of BMA Total: 2010**







4.5. As previously highlighted, the BMTP set out associated proposals for a significant programme of investment in a network of QBCs on fourteen key corridors within the BMA. Subsequent to the publication of those proposals, bus prioritisation measures have been launched on five of the fourteen corridors namely, Saintfield Road, Falls Road, Newtownards Road, Antrim Road and City Express. While progress has been made the level of bus prioritisation implemented on those corridors would appear to be more limited than that indicated by the programme of investment set out in the BMTP. While recognising the position

in this regard, it is important, however, to acknowledge that the degree or intensity of bus priority measures will be determined to a large extent by the political will to implement and the public reaction to them.

- 4.6. With regard to the associated parking restraint measures set out in the BMTP, the table below sets out an overview of progress to date. Across the four key measures identified, by 2010 progress has been made in only one area, an increase in short-stay parking, though progress has been ongoing in extending parking control zones in line with the BMTP. During the same period, there is limited evidence of a reduction in off-street long-stay spaces, contrary to the targeted reduction of 4000 by 2015. The additional provision of Park and Ride spaces since 2004, therefore, has not been accompanied by an associated reduction in more central parking. As a consequence, the overall parking capacity within the BMA has significantly increased since 2004, potentially facilitating increased car utilisation.

**Table 4: Progress Against BMTP Parking Restraint Proposals**

2004 BMTP Proposals	2010 Position	RAG STATUS
Removal of all on street long stay parking, a reduction of some 1500 spaces.	While no specific information is available, it is unlikely that progress has been made.	
Increase in short stay spaces by about 2200.	Short stay spaces have increased by approximately 1110 spaces, due primarily to the opening of Victoria Square and St Anne's Square car parks.	
Reduction in long-stay off street spaces by about 4000.	Off street spaces have increased by approximately 2000 spaces since the 2006 survey. Again, primarily due to the Victoria Square and St Anne's Square developments.	
1000 new residents parking spaces.	No spaces have been introduced to date reflecting on-going difficulties. In order to resolve outstanding issues, extensive consultation and engagement with residents has been undertaken and remains ongoing.	

- 4.7. It is likely that the draft nature of the Belfast Metropolitan Area Plan has contributed to the difficulties experienced in

implementation of parking restraint measures. Thus while planning permission for car park applications have been rejected by DOE, the department has lost appeals in such cases at the Planning Appeals Commission (PAC).

- 4.8. While reasons vary, of particular note is the position adopted by the PAC determining that as the BMAP remains a draft document and has yet to be formally adopted, its predecessor, the Belfast Urban Area Plan 2001(BUAP) is deemed to be the extant policy. Unlike the BMAP which reflects the need for parking restraint in the city centre, the BUAP identifies a need for enhanced provision of car parking spaces in the City Centre. The draft nature of the BMAP therefore presents a significant obstacle to the implementation of Executive policy on parking restraint measures and must be addressed as a priority.

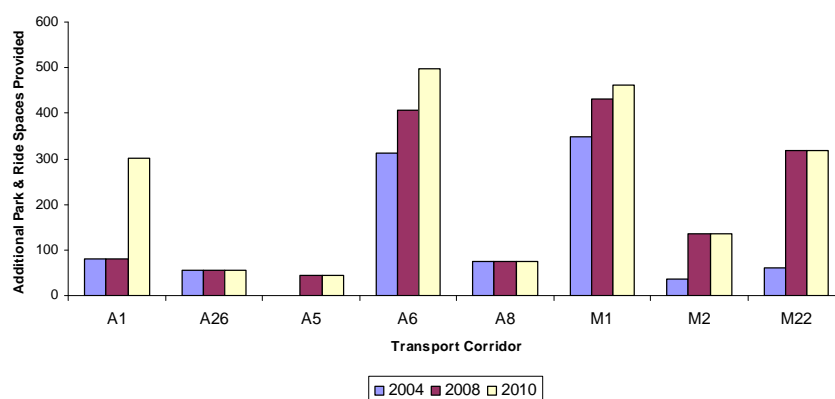
#### **SRTP**

- 4.9. Table 5 below sets out an overview of progress by 2010 against SRTP proposals, with those sites where capacity has been increased highlighted. In line with the table and as set out below in Figures 5 and 6 below, the principal increases in P&R capacity at the sub-regional level from 2004-2010 have been driven by increases to bus based P&R on the A6/M2/M22 and M1 corridors and significant enhancement of rail based Park and Ride capacity at Lurgan and Newry stations.

**Table 5: Progress Against SRTP Park and Ride Proposals**

Corridor	Site Name	Mode	2004 Capacity	2010 Capacity	2015 Capacity
A1	Newry Station	Train	80	300	300
	Newry Bus Station	Bus	0	0	25
A2/A8	Castlerock	Train	6	6	6
	Londonderry	Train	58	58	58
	Larne <sup>53</sup>	Bus	8	8	33
	Larne Station	Train	68	68	68
	Buncrana Rd	Bus	0	0	0
	Culmore Rd	Bus	0	0	0
A2/A26	Coleraine	Train/Bus	21	21	46
A4	Enniskillen Bus Station	Bus	0	0	25
A5	Strabane	Bus	0	45	45
	Ballygawley <sup>54</sup>	Bus			
	Omagh Bus Station	Bus	0	0	25
A6	Drumahoe	Bus	30	122	122
	Craigadick	Bus	36	88	122
	Castledawson	Bus	61	61	181
	Toome	Bus	100	100	100
A7	Downpatrick Bus Station	Bus	0	0	25
A26	Ballymoney	Train/Bus	27	27	27
A28	Armagh Bus Station	Bus	0	0	25
M1	Lough Road Lurgan	Bus	104	104	104
	Lurgan	Train	88	170	155
	Portadown	Train/Bus	110	110	300
M1/A4	Dungannon	Bus	47	79	72
M2	Templepatrick	Bus	27	70	70
	Dunsilly	Bus	100	258	258
	Antrim	Train/Bus	60	60	60
M22/A26	Ballymena	Train/Bus	35	169	204
	Ballee	Bus	40	84	84

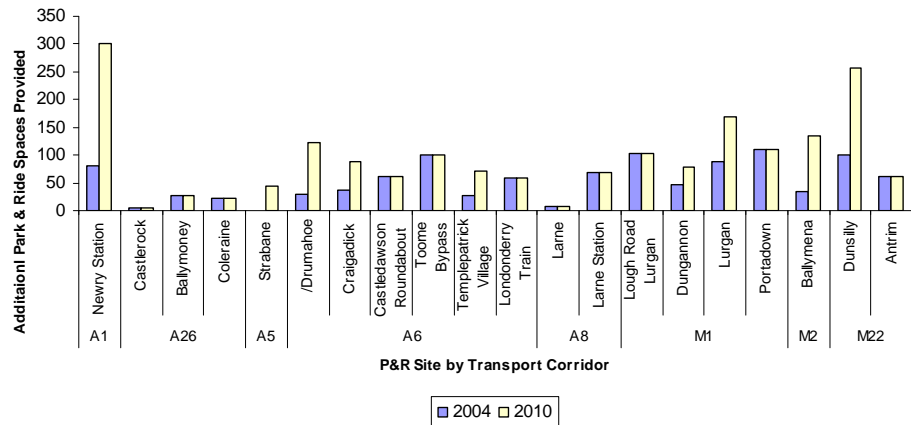
**Figure 5: Sub-Regional Increase in Park and Ride Capacity 2004-2010 by Key Strategic Corridor**



<sup>53</sup> Park and Ride/Share proposals are being developed for the A8 at Millbrook, Larne. To be served by passing bus service, it is anticipated that capacity will be in the order of 35

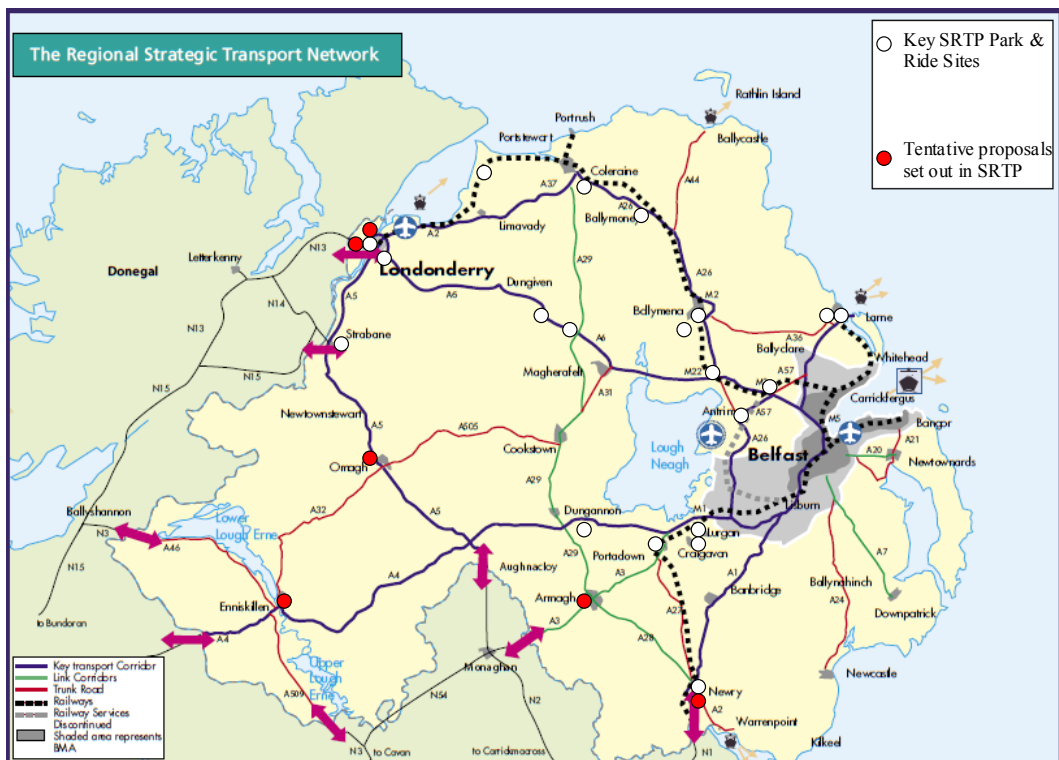
<sup>54</sup> An interim scheme due to commence in February 2011 will provide an initial 34 spaces with the potential for future expansion.

**Figure 6: Sub-Regional Increase in Park and Ride Capacity 2004-2010 by Site and Key Strategic Corridor**



4.10. Both the distribution of sites and the provision of additional capacity since 2004 are concentrated on the strategic road and rail network, as illustrated in Figure 7 below.

**Figure 7: Regional Strategic Transport Network Including Approximate Locations of SRTP Park and Ride Sites<sup>55</sup>**



<sup>55</sup> Including additional parking at key bus and rail stations

- 4.11. The distribution of sites highlighted above, therefore, reflects traffic flows at the regional level and in particular commuter movements to key employment centres with a primary focus on the Belfast travel to work area. That pattern of distribution would appear to align with the principles of best practice as set out in section 2 of this paper, with many of the SRTP sites operating as remote facilities and therefore offering the highest potential for reduced car utilisation. There is less evidence, however, of a focus in utilising Park and Ride to serve local commuting needs, particularly into the larger towns. This is reflected in the location of sites often at regional transport nodes within urban areas with on-ward bus and rail services facilitating movement outwith the area.
- 4.12. While progress has been made against the SRTP proposals, there has been minimal progress in taking forward the more tentative recommendations set out in the SRTP. The majority of the sites identified in those more tentative proposals are located in the South West region and attached to public transport hubs within the major towns. Although developed as part of local parking strategies, the aim of the proposals is to facilitate access to public transport by drivers, potentially operating as link and ride sites. They are not intended as Park and Ride sites to reduce traffic into those towns. Only the proposed sites at Buncrana Road and Culmore Road in Londonderry, are intended to promote modal shift into the local urban area. While recognising the constraints, there may be opportunities to begin to re-examine a number of the tentative proposals set out in the SRTP with a view to developing local Park and Ride sites which aim to provide both a connection to the strategic transport network and an alternative to those currently travelling by car into key urban areas and larger towns across Northern Ireland.

## **5. REVIEW OF PROPOSALS AND PROJECT GROUP RECOMMENDATIONS**

- 5.1 The key aim of the Department's Park and Ride policy is to directly facilitate modal shift to public transport by enhancing integration between public transport and private car use. In that context it has been identified in the RTS as a critical element of an integrated and sustainable transport policy.
- 5.2 As set out in section 2 of this paper, however, the success of Park and Ride in relation to modal shift will be impacted upon by a range of factors with implications for the design and delivery of proposals. If inappropriately developed and delivered in isolation, Park and Ride can, at both a strategic and local level, have a perverse impact on wider sustainable transport policy and objectives. Where developed as part of an integrated package of measures and appropriately located for maximum impact, however, Park and Ride can play a key role in promoting more sustainable transport arrangements and outcomes.
- 5.3 In light of that, and taking full account of the conclusions set out in section 2 of this paper and progress to date, it has been necessary to revisit the proposals set out in the BMTP and SRTP to determine how the future delivery of Park and Ride can be taken forward to ensure it fully aligns with the Department's stated policy aim.

### **BMTP**

- 5.4 Table 6 below sets out an overview by MTC and site of the BMTP proposals for Park and Ride. Those proposals were developed as part of an integrated package of measures, including parking restraint and bus priority on key corridors and were agreed in the context of an existing network of Park and Ride sites which at that time aimed to serve and intercept traffic entering Belfast City Centre. As set out in section 4 and illustrated in table 6, the distribution of park and ride in 2004 did not fully reflect traffic flows into the Belfast urban area, with very limited provision on a number of MTCs. By 2010, there had been some improvement with a more balanced distribution, (Figure 8)



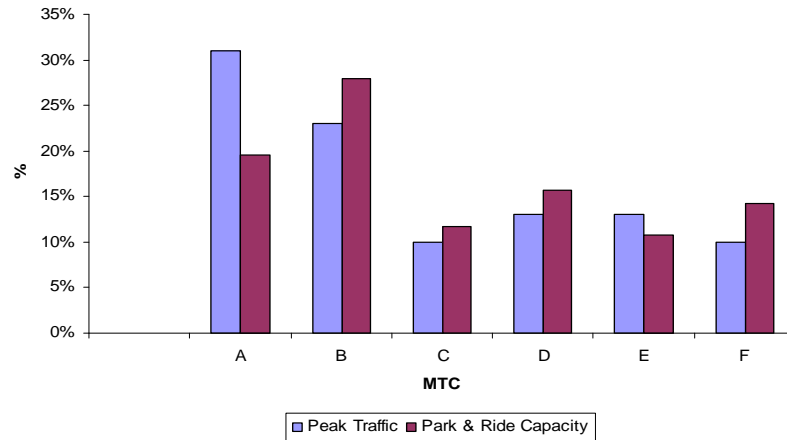
however, outwith enhanced rail based capacity on the Carrickfergus line this outcome was achieved primarily through the temporary sites at Sprucefield and Black's Road and the completion of Cairnshill.

**Table 6: BMTP Park and Ride Proposals** <sup>56</sup>

Metropolitan Transport Corridor	Site Name	Mode	2004 Capacity	2008 Capacity	2010 Capacity	BMTP Planned 2015 Capacity
<b>A</b>	Templepatrick	Bus/rail	0	0	0	650
	Mossley West	Rail	59	59	59	59
	Sandyknowes	Bus	0	0	0	92
	Fortwilliam	Bus	0	0	0	500
	Ballyclare	Bus	10	10	10	10
	<b>Sub-Totals</b>			<b>10</b>	<b>69</b>	<b>69</b>
<b>B</b>	Moira (1)	Rail	62	99	99	170
	Moira (2)	Rail	0	80	80	0
	Sprucefield	Bus	0	0	0	200
	Sprucefield - Temp	Bus	0	320	320	0
	West Lisburn	Rail	0	0	0	500
	Lisburn	Rail	47	47	47	247
	Kennedy Way	Bus	0	0	0	500
	Black's Road - Temp	Bus	0	220	220	220
	Finaghy	Rail	0	0	16	30
<b>Sub-Totals</b>			<b>109</b>	<b>766</b>	<b>782</b>	<b>1867</b>
<b>C</b>	Cairnshill	Bus	0	0	724	724
	Carryduff	Bus	0	0	0	60
	<b>Sub-Totals</b>		<b>0</b>	<b>0</b>	<b>724</b>	<b>784</b>
<b>D</b>	Millmount	Rapid Transit	0	0	0	644
	Ravenscroft Avenue	Bus	56	56	56	109
	Eastside	Bus	213	297	297	297
	<b>Sub-Totals</b>		<b>269</b>	<b>353</b>	<b>353</b>	<b>1050</b>
<b>E</b>	Bangor	Rail	123	123	123	243
	Carnalea	Rail	10	10	10	10
	Helen's Bay	Rail	12	12	12	12
	Seahill	Rail	0	0	0	10
	Hollywood	Rail	37	37	37	50
	Tillysburn	Bus	0	0	0	400
	<b>Sub-Totals</b>		<b>182</b>	<b>182</b>	<b>182</b>	<b>725</b>
<b>F</b>	Whitehead	Rail	29	50	50	50
	Carrickfergus	Rail	120	120	120	279
	Trooperslane	Rail	0	0	0	20
	Greenisland	Rail	13	13	85	85
	Jordanstown	Rail	0	0	0	46
	Whiteabbey	Rail	16	16	80	75
	Yorkgate	Rail	16	16	16	16
	Northside	Bus	394	394	394	394
<b>Sub-Totals</b>		<b>588</b>	<b>609</b>	<b>751</b>	<b>956</b>	
<b>ALL MTCs</b>	<b>TOTALS</b>		<b>1158</b>	<b>1979</b>	<b>2861</b>	<b>6693</b>

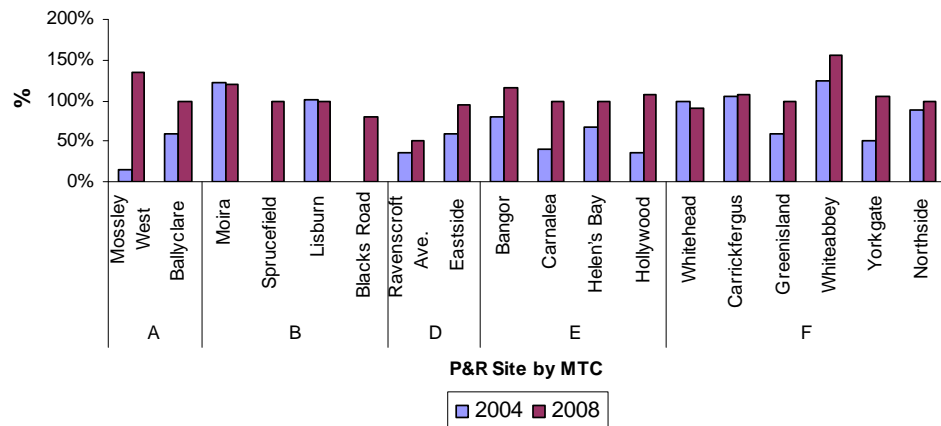
<sup>56</sup> Mossley West is supported by additional overflow capacity of 75 spaces

**Figure 8: Park and Ride Capacity and Peak Traffic Flows by MTC as Proportion of BMA Total: 2015 BMTP Proposals**



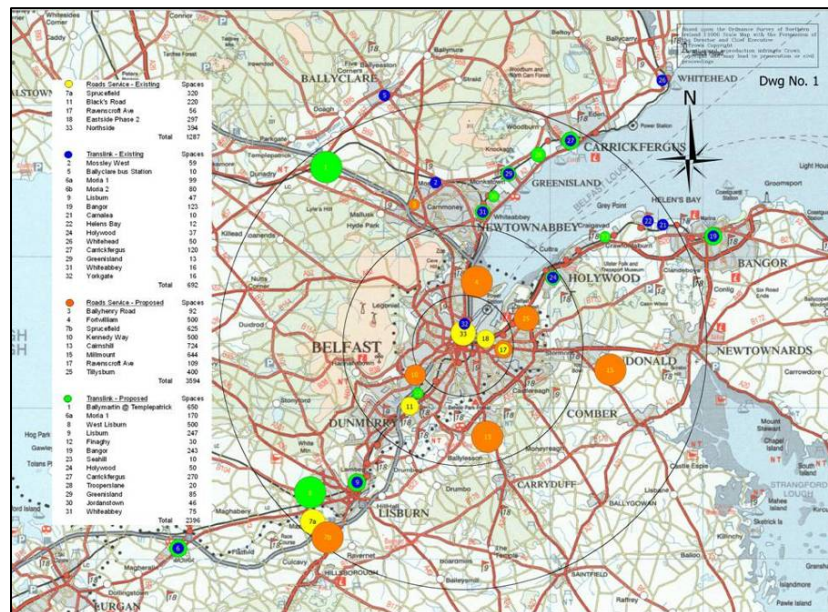
5.5 Across almost all sites, the provision of additional capacity has been reflected in increased utilisation of Park and Ride, as illustrated in Figure 9 below, with rail based Park and Ride in particular enjoying high levels of use. Broadly this indicates a clear demand for Park and Ride including at those sites located further from the urban centre, which are broadly comparable to the more centrally located facilities. The increased patronage between 2004 and 2008, may also point to the importance of information and awareness in promoting utilisation of Park and Ride by drivers.

**Figure 9: Average Utilisation of Park and Ride by Site and MTC 2004 and 2008**



5.6 A significant proportion of the planned Park and Ride capacity both as set out in the BMTP and delivered to date, is located in close proximity to the central urban area. For example, as illustrated in Figure 10, three substantial sites are identified within the central Belfast area providing approximately 800 spaces, with at least an additional 1,000 spaces proposed for locations well within the Belfast urban area (Kennedy Way and Fortwilliam). In addition given their proximity to residential areas there is a higher potential for such sites to contribute to abstraction from existing public services. The potential for these sites to contribute to modal shift and reduced traffic into the urban area is significantly less than those sites located further from the central Belfast area though on key corridors i.e. Templepatrick (Ballymartin), Lisburn and Sprucefield.

**Figure 10: BMTP Park and Ride Locations**



5.7 Where the objective of policy is to promote modal shift, then the provision of sites within or in close proximity to the central urban area is not fully aligned with that objective. Therefore, as set out in section 2 of this paper, peripheral Park and Ride sites should not be considered under the umbrella of sustainable transport policy levers. This remains the case even where sites are located immediately upstream of recurring congestion to maximise utilisation rates. In such circumstances, Park and Ride sites on the immediate periphery of the central urban area may

have a role to play as a traffic management tool in reducing central congestion. They will not, however, contribute to or incentivise modal shift.

- 5.8 Those sites located on the urban fringe do offer significant potential to reduce traffic into the urban area and contribute to modal shift. That potential impact is likely to be enhanced where they are located on all key arterial routes into the BMA, supported by bus prioritisation with sites located as far from the urban centre as practical while facilitating regular and reliable public transport provision.

### **Recommendations**

- 5.9 In line with the conclusions set out above and at Section 2, the general agreement of the Project Group is that as capacity is developed elsewhere, three of the four current Park and Ride sites located within the central Belfast area should cease to operate as Park and Ride facilities and may more appropriately operate as short-stay provision notwithstanding the BMTP proposals on parking provision. These are Eastside, Northside and Ravenscroft Avenue.
- 5.10 Similarly, it is recommended that proposed Park and Ride facilities at Fortwilliam and Kennedy Way should not proceed. Given their more central location and close proximity to residential areas, both sites have limited potential for reduced car use into the urban area while presenting a higher risk of abstraction from conventional public transport. In addition, reflecting developments subsequent to the publication of the BMTP and outstanding decisions on Rapid Transit, it is recommended that the proposed facilities at Carryduff and Tillysburn should not proceed at this stage, though the potential for future development, particularly at West Lisburn and Carryduff, should be kept under review. It is further recommended that due to site constraints and the significant expense required, additional capacity should not be provided at Hollywood or Troopers Lane. Whilst expansion at the current Hollywood site is not a viable proposition there is a strong case

for enhanced Park and Ride provision at an alternate location in the vicinity of Holywood.

5.11 All other sites set out in the BMTP should be pursued as funding permits. Priority, however, should be afforded to those sites located at key points on the arterial routes serving the BMA and offering maximum potential for reduced car use. The objective in that regard is to ensure the provision of Park and Ride on all Belfast MTCs. Taking account of existing provision, utilisation and peak traffic flows in line with best practice, it is recommended that priority should be attached to the delivery of Park and Ride at the following locations:

- i. Templepatrick [rail and bus]
- ii. Secure provision at Sprucefield [bus] in the short-term pending future viability of West Lisburn which remains the preferred longer term option.
- iii. Bangor Station [rail]
- iv. Lisburn Station [rail]
- v. Carrickfergus Station [rail]
- vi. Jordanstown Halt [rail]
- vii. MTCs B and D sites linked to Rapid Transit<sup>57</sup> [rapid transit]
- viii. Sandyknowes [bus]
- ix. Safeguard provision at Moira<sup>58</sup> [rail]

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<sup>57</sup> The development of a site to serve MTC D is regarded as a priority particularly given that all current provision on the corridor is centrally located and is not recommended for continued operation as Park and Ride. Proposals currently exist for the development of a site at Millmount linked to Rapid Transit, however, decisions on the location cannot be taken in advance of final decisions on Rapid Transit routes. Therefore, while a priority, a definitive site is not identified at this stage. In addition it is proposed to provide a site in West Belfast at Dairy Farm or at Monagh Bypass depending on the recommendations of the OBC which is currently being prepared.

5.12 These proposals are not listed in order of merit. Rather, delivery and phasing of projects will be determined by the availability of funding, ease of delivery and potential impact following consideration of available options. In addition, detailed modelling and option appraisal, including consideration of origin destination data, will be undertaken as part of the business planning process to ensure the design and operation of sites best addresses needs and maximises the potential impact of Park and Ride on modal shift.

5.13 A summary of the recommendations is set out below at Table 7 and Table 8. Table 7 details those schemes which it is recommended should not proceed or continue to operate as Park and Ride and the associated rationale for the recommendation. Table 8 provides an overview of priority schemes on key commuting corridors and the associated rationale in addition to the location of those sites on the key commuting corridors into Belfast. Table 9 provides an overview of all BMTP schemes and the Project Group recommendations. While providing for a reduced level of Park and Ride provision than proposed in the BMTP, this is largely accounted for by recommendations not to proceed with peripheral sites or with projects which are unlikely to prove feasible.

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<sup>58</sup> The current site at Moira continues to operate at capacity with overflow arrangements utilizing a local restaurant car park. That arrangement is temporary and there is a need to secure capacity in the longer term.

**Table 7: Key BMTP Proposals Recommended by Project Group Not to Proceed or Continue to Operate as Park and Ride**

		BMTP		Project Group Recommendation	Rationale
		Current	Planned		
1	Fortwilliam <sup>59</sup>	0	500	Schemes should not proceed	Both sites lie on the periphery of the central urban area and also may be too close to urban areas already well served by public transport, presenting a risk of encouraging existing PT users to move to P&R, while offering limited impact on modal shift more generally. In addition, Sprucefield and Black's Road sites may negate the need for Kennedy Way. A similar case may be made in relation to the proposed development at Fortwilliam given P&R plans for Templepatrick, Sandyknowes and Jordanstown.
	Kennedy Way	0	500		
2	Ravenscroft Avenue	109	109	Schemes should cease to operate as Park and Ride	All three schemes are in relatively close proximity to the central Belfast area. At 1.5 miles from the central area Ravenscroft Avenue is relatively less centrally located than Eastside or Northside, however, as with Kennedy Way and Fortwilliam it lies in close proximity to the central urban area and adjacent to significant residential areas well served by existing public transport with significant potential for abstraction. The central location of Northside and Eastside while possibly reducing traffic through the centre run counter to the RTS objective of reducing long-stay parking in the city centre and do not contribute to efforts to promote modal shift.
	Eastside	297	297		
	Northside	394	394		
3	Hollywood	13	50	Additional capacity should not be provided	There are considerable physical and capacity constraints to expansion at either site which could only be overcome at significant expense while providing very limited additional spaces. It would be extremely difficult to present a robust case.
	Troopers Lane	0	20		
4	West Lisburn	0	500	Should not proceed at this stage, potential for future development should be kept under review	The West Lisburn scheme does not appear to be achievable in the immediate future, however, it may be possible to provide a smaller scheme on the site. The potential development of West Lisburn should be revisited and progressed at a future date, funding permitting. The Cairnshill site has taken priority over Carryduff which should not be pursued at this stage. However, following decisions on Rapid Transit, there may be the potential to revisit proposals for Carryduff. Notwithstanding its close proximity to residential areas served by conventional public transport, the potential development of a Park and Ride at the IKEA site, opposite the proposed Tillysburn site would negate the need for Tillysburn. However, while the IKEA site is the preferred option at this stage, non-materialisation of the IKEA site in the short-term including commitments to long-term operation will require reconsideration of the preferred option.
	Carryduff	0	60		
	Tillysburn	0	400		

<sup>59</sup> The recommendation relates to permanent provision of P&R at Fortwilliam, it does negate the temporary provision at a site on that corridor which is likely to be an important element of the temporary traffic management plan for the proposed York Street interchange scheme. Non-progress of the Fortwilliam site will require additional P&R capacity elsewhere on the corridor at a later stage.

**Table 8: Priority Proposals Recommended by Project Group**

	<b>Site</b>	<b>Proposal</b>	<b>Rationale</b>
<b>1</b>	<b>Templepatrick</b>	Provision of rail and bus based P&R at Ballymartin site	Given the existing limited provision within the BMA serving MTC A, the development of Park and Ride on that corridor has been identified as the priority. The Ballymartin site is ideally located to maximise the impact on reduced car use, has been purchased and considerable progress has been made in the planning application. It is proposed that the site should operate as a combined rail and bus-based Park and Ride, served by passing express services and Airport Express 300. Additionally, the potential for bus prioritisation measures to enhance journey times into Belfast should be explored, initially estimated at £3m on basis of £1m per km with an additional 3km prioritisation potentially required.
<b>2</b>	<b>Sprucefield</b>	Secure on-going provision pending future viability of West Lisburn	The temporary Sprucefield site has proven highly popular and alongside the Blacks Road site provides the bulk of Park and Ride capacity on MTC B. Ongoing provision at Sprucefield in the short-medium term is critical to ensuring adequate capacity on MTC B, while its more distant location enhances the potential impact on reduced car use across the journey. However, in the longer term West Lisburn, if viable, is likely to be the more suitable location, particularly following completion of the Knockmore road link.
<b>4</b>	<b>Bangor Station</b>	Provision of additional 120 spaces by means of multi-storey	The potential for rail based Park and Ride is significant on this corridor (MTC E). Bangor station is ideally located to intercept a high volume of commuting journeys towards Belfast close to the journey origin, thereby offering maximum impact on reduced car use. Utilisation of existing provision remains high, with demand regularly outstripping supply. The proposal would provide for a multi-storey Park and Ride facility at Bangor Station. While expensive, it will secure and enhance provision and allow for continued integration of rail and bus services to promote modal shift on the corridor.
<b>5</b>	<b>Carrickfergus Station</b>	Increase current provision to 279 spaces	The potential for rail based Park and Ride is significant on this corridor (MTC F). Carrickfergus is ideally located offering the potential for significant impact on reduced car use and limited risk of abstraction. Demand for Park and Ride at the station remains high and the additional capacity should ensure that supply more appropriately reflects demand. Reflecting this, the business case has now been agreed for expansion at the Carrickfergus site.
<b>6</b>	<b>Jordanstown Halt</b>	Provision of 40-50 spaces at a new halt	As with Carrickfergus, there is considerable potential for rail based Park and Ride on MTC F intercepting commuters into the Belfast area while located in closer proximity to the journey origin than the journey destination for a significant commuting population. A previous scheme was not progressed due to funding issues, though could be quickly reinstated should funding be made available.



	Site	Proposal	Rationale
7	<b>MTCs B and D sites linked to Rapid Transit</b>	500-700 space sites linked to Rapid Transit	The provision of future capacity on MTC D is critical. Outwith the more centrally located sites at Eastside and Ravenscroft Avenue there is no provision to intercept traffic on MTC D. A site has been proposed at Millmount linked to Rapid Transit. However, pending confirmation of final decisions on Rapid Transit routes it is not possible to confirm the site location. Recognising that, it is proposed that the development of proposals for Rapid Transit should include the identification of a site for linked Park and Ride on MTC D. In addition it is proposed to provide a site in West Belfast either at Dairy Farm or at Monagh Bypass depending on the recommendations of the OBC which is currently being prepared.
8	<b>Sandyknowes</b>	Provision of 90 spaces at Ballyhenry or alternative site to intercept traffic on A8	Pending planning approval, the Ballyhenry site could be instigated at relatively low cost intercepting traffic on the A8.
9	<b>Lisburn Station</b>	Provision of an additional 200 spaces by means of multi-storey	Lisburn is centrally located in the Belfast Travel to Work Area with 32% of the resident population working in the Belfast area. <sup>60</sup> There is therefore considerable potential for Park and Ride at Lisburn to significantly impact on car use among commuters on MTC B.  The development of additional capacity at Lisburn station would not negate the potential future development of West Lisburn.

<sup>60</sup> Des McKibbin, *Rural to Urban Journeys*, Research Paper 81/10, Research and Library Services Northern Ireland Assembly, March 2010

**Table 9: Comparison of BMTP Park and Ride Proposals and Project Group Recommendations by MTC and Site**

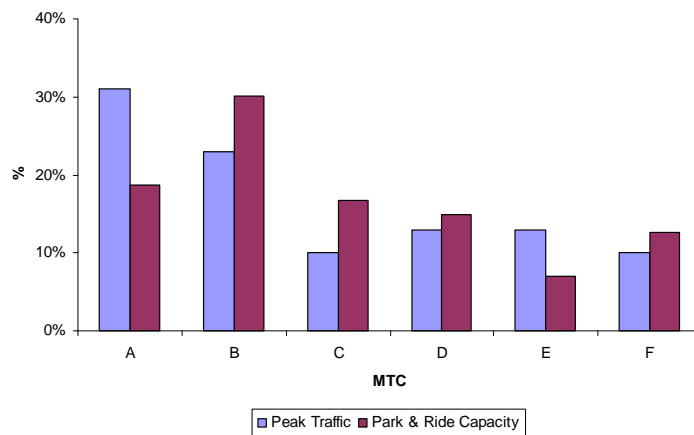
Metropolitan Transport Corridor	Site Name	Mode	2004 Capacity	2008 Capacity	2009/10 Capacity	BMTP Planned 2015 Capacity	PG Rec 2015 Capacity	PG Change on BMTP Capacity	
A	Templepatrick	Bus/Rail	0	0	0	650	650	0	
	Mossley West	Rail	59	59	59	59	59	0	
	Sandyknowes	Bus	0	0	0	92	92	0	
	Fortwilliam	Bus	0	0	0	500	0	-500	
	Ballyclare	Bus	10	10	10	10	10	0	
	<b>Sub-Totals</b>			<b>10</b>	<b>69</b>	<b>69</b>	<b>1311</b>	<b>811</b>	<b>-500</b>
	Moira (1)	Rail	62	99	99	170	99	-71	
	Moira (2)	Rail	0	80	80	0	80	80	
	Sprucefield	Bus	0	0	0	200	625	425	
	Sprucefield - Temp	Bus	0	320	320	0	0	0	
	West Lisburn	Rail	0	0	0	500	0	-500	
	Lisburn	Rail	47	47	47	247	247	0	
	West Belfast	Rapid Transit	0	0	0	0	500		
	Kennedy Way	Bus	0	0	0	500	0	-500	
	Black's Road - Temp	Bus	0	220	220	220	220	0	
	Finaghy	Rail	0	0	16	30	36	6	
B	<b>Sub-Totals</b>			<b>109</b>	<b>766</b>	<b>782</b>	<b>1867</b>	<b>1807</b>	<b>-560</b>
	Cairnshill	Bus	0	0	0	724	724	0	
	Carryduff	Bus	0	0	0	60	0	-60	
C	<b>Sub-Totals</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>784</b>	<b>724</b>	<b>-60</b>
	Millmount /Dundonald <sup>61</sup>	Rapid Transit	0	0	0	644	644	0	
	Quarry Inn - Temp	Bus	0	0	0	0	0	0	
	Ravenscroft Avenue	Bus	56	56	56	109	0	-109	
	Eastside	Bus	213	297	297	297	0	-297	
D	<b>Sub-Totals</b>			<b>269</b>	<b>353</b>	<b>353</b>	<b>1050</b>	<b>644</b>	<b>-406</b>
	Bangor	Rail	123	123	123	243	243	0	
	Carnalea	Rail	10	10	10	10	10	0	
	Helen's Bay	Rail	12	12	12	12	12	0	
	Seahill	Rail	0	0	0	10	0	0	
	Hollywood	Rail	37	37	37	50	37	-13	
	Tillysburn	Bus	0	0	0	400	0	-400	
E	<b>Sub-Totals</b>			<b>182</b>	<b>182</b>	<b>182</b>	<b>725</b>	<b>302</b>	<b>-413</b>
	Whitehead	Rail	29	50	50	50	50	0	
	Carrickfergus	Rail	120	120	120	279	279	0	
	Trooperslane	Rail	0	0	0	20	0	-20	
	Greenisland	Rail	13	13	85	85	85	0	
	Jordanstown	Rail	0	0	6	46	46	0	
	Whiteabbey	Rail	16	16	80	75	80	5	
	Yorkgate	Rail	16	16	16	16	16	0	
	Northside	Bus	394	394	394	394	0	-394	
F	<b>Sub-Totals</b>			<b>588</b>	<b>609</b>	<b>751</b>	<b>956</b>	<b>547</b>	<b>-409</b>
<b>ALL MTCs</b>	<b>TOTALS</b>		<b>1158</b>	<b>1979</b>	<b>2137</b>	<b>6693</b>	<b>4335</b>	<b>-2348</b>	

5.14 In addition to moving capacity further from the city centre in line with best practice, the proposals provide for a further

<sup>61</sup> The development of Park and Ride on MTCs B and D linked to Rapid Transit is a priority. However, final decisions will be dependent on the result of the Rapid Transit OBC.

rebalancing of the distribution of Park and Ride capacity in line with traffic flows on key MTCs into the Belfast Urban Area (Figure 11). In relation to the MTCs A, B and C the focus is primarily on bus based Park and Ride, while MTCs E and F are anticipated to be served largely by rail-based Park and Ride alongside further promotion of conventional public transport to local residents. Templepatrick on MTC A is identified as the top priority given both the high volume of traffic on MTC A and the very low level of current Park and Ride provision with no facilities within the BMA serving traffic on that corridor.

**Figure 11: Impact of Project Group Recommendations on Distribution of Park and Ride Capacity by MTC**



5.15 Reflecting the conclusions set out in section 2 of this paper and the direction established in the BMTP, the implementation of the Project Group's recommendations must be taken forward alongside a phased reduction in more central long-stay parking. In the absence of a more co-ordinated approach, it is highly unlikely that the objective of modal shift will be realised. This requires as an immediate priority, action to overcome the current difficulties associated with the draft status of the BMAP and the PAC interpretation of the extant policy in relation to planning applications for the provision of parking. Beyond this, however, there is a requirement to clarify how the proposed parking restraint measures established in the BMTP and endorsed by the Project Group will be delivered and monitored. It is therefore recommended that as a first step Roads Service review current

delivery mechanisms with a view to identifying gaps and necessary actions including in relation to enforcement.

- 5.16 The quality, reliability and frequency of transit service from the proposed Park and Ride sites, particularly on the key arterial routes, must be sufficient to provide an attractive alternative to drivers. In addition to regular services, including dedicated services which may be supported by conventional public transport, there is a key requirement to take forward associated bus priority measures to ensure reliable journey times.
- 5.17 The degree or intensity of bus priority measures will be determined to a large extent by the political will to implement and the public reaction to the operation and impact of measures. While recognising this, the Project Group was generally of the view that current bus priority provision is not sufficiently extensive to ensure that either existing or proposed Park and Ride facilities offer an attractive alternative to driving into the central Belfast area. In light of that, the general agreement of the Project Group was that, where practical, bus priority should be enhanced on all key routes served by Park and Ride to provide improvements to bus running speeds relative to other vehicles and ensure a convenient and reliable service. As with parking restraint, bus priority measures will only be effective, however, where there is an assurance that they can be enforced and this must be a key consideration in any further enhancement of such measures.
- 5.18 The majority of sites identified would appear, particularly taking account of current utilisation patterns, to offer limited potential for abstraction from existing public transport. However, to minimise the potential for abstraction, particularly on MTCs C and D, it is recommended that where practical, Park and Ride is complemented by measures to enhance conventional public transport and to maximise access for pedestrians and cyclists.

## S RTP

5.19 Table 10 sets out an overview of S RTP proposals for the provision of Park and Ride up to 2015, including additional parking provision at bus and rail stations across Northern Ireland. Clearly by 2010 significant progress had been made towards the 2015 target capacity. As with the B RTP, however, that progress has been based largely on the enhancement of facilities in place in 2004, driven by increases to bus based Park and Ride on the A6/M2/M22 and M1 corridors and significant enhancement of rail based Park and Ride capacity at Lurgan and Newry stations. In contrast, there has been minimal progress in taking forward the more tentative recommendations set out in the S RTP.

**Table 10: S RTP Park and Ride Proposals**

Corridor	Site Name	Mode	2004 Capacity	2010 Capacity	2015 Capacity
A1	Newry Station	Train	80	300	300
	Newry Bus Station	Bus	0	0	25
A2	Castlerock	Train	6	6	6
	Londonderry	Train	58	58	58
	Larne	Bus	8	8	33
	Larne Station	Train	68	68	68
	Buncrana Rd	Bus	0	0	0
	Culmore Rd	Bus	0	0	0
A2/A26	Coleraine	Train/Bus	21	21	46
A4	Enniskillen Bus Station	Bus	0	0	25
A5	Strabane	Bus	0	45	45
	Ballygawley <sup>62</sup>	Bus			
	Omagh Bus Station	Bus	0	0	25
A6	Drumahoe	Bus	30	122	122
	Craigadick	Bus	36	88	122
	Castledawson	Bus	61	61	181
	Toome	Bus	100	100	100
A7	Downpatrick Bus Station	Bus	0	0	25
A26	Ballymoney	Train/Bus	27	27	27
A28	Armagh Bus Station	Bus	0	0	25
M1	Lough Road Lurgan	Bus	104	104	104
	Lurgan	Train	88	170	155
	Portadown	Train/Bus	110	110	300
M1/A4	Dungannon	Bus	47	79	72
M2	Templepatrick	Bus	27	70	70
	Dunsilly	Bus	100	258	258
	Antrim	Train/Bus	60	60	60
M22/A26	Ballymena	Train/Bus	35	169	204
	Ballee	Bus	40	84	84

<sup>62</sup> An interim scheme due to commence in February 2011 will provide an initial 34 spaces with the potential for future expansion.

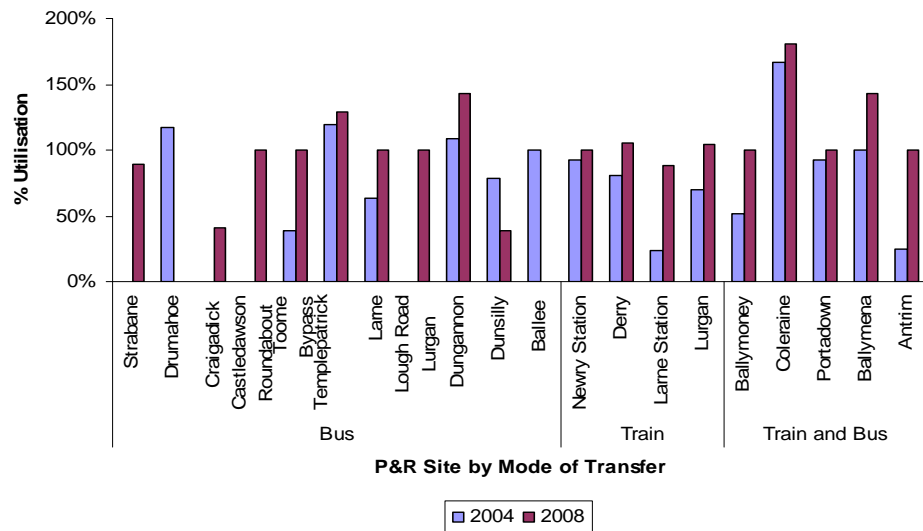
- 5.20 The location and distribution of Park and Ride proposals as set out in the SRTP and the additional capacity provided to date largely reflect best practice, with a clear focus on provision of facilities at key intercepting points on the strategic transport network. As a consequence of progress to date, however, and in particular the absence of progress as regards the more tentative projects, current Park and Ride provision is largely concentrated in the East and North, with no significant provision in the South West. Moreover, that capacity is orientated towards outward commuting traffic, rather than serving traffic entering the larger towns and urban areas at the sub-regional level. This reflects the direction of travel set out in the SRTP, with only the proposed sites at Bunrana Road and Culmore Road in Londonderry intended to promote modal shift into the local urban area.
- 5.21 As with BMTP sites, where the data is available there is evidence of an increase in the utilisation of Park and Ride over the period 2004 -2008 (Figure 12). Generally the highest rates of utilisation appear to relate to those Park and Ride sites which offer access to both bus and rail services. When examining the 2008 data there appears to be more variability in utilisation rates for bus based Park and Ride than other modes, ranging from 41% to 143%. The 41% rate associated with Craigadick may in part be attributed to its location on the edge of a Travel to Work Area (TTWA) and the close proximity of alternatives, particularly at Castledawson. However, other factors including site location and design are likely to be factors, given the low visibility of the site from the main road. Outwith Craigadick, only the Dunsilly Park and Ride site demonstrates a significant reduction in utilisation from 79% in 2004 to 39% in 2008.<sup>63</sup> During the same period utilisation of the nearby Park and Ride site at Antrim Station increased by 75%. Given the location and capacity of Dunsilly and Craigadick, both sites would appear to offer

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<sup>63</sup> The number of vehicles utilising the Dunsilly site increased over the period 2004-2010, however that increase at 27% was significantly lower than the increased provision of spaces of 158% thus accounting for the lower utilisation rate.

significant potential to intercept traffic on the A6/M2 and M22 corridors and there may be some merit in further considering how future utilisation may be most effectively maximised.

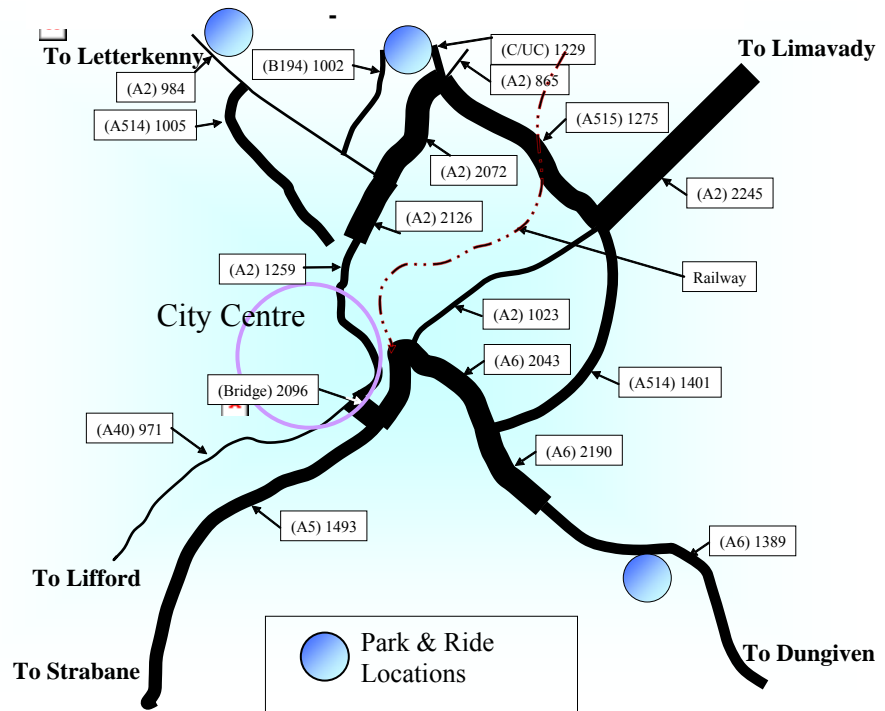
**Figure 12: SRTP: Average Utilisation of Park and Ride by Site and Mode of Transfer 2004 and 2008**



### Recommendations

- 5.22 The development of a regional network of Park and Ride sites will clearly require some progress with regard to the more tentative proposals set out in the SRTP. Those proposals focused on the Londonderry urban area and the larger towns and cities in the South and West.
- 5.23 The SRTP recommended the development of Park and Ride at three sites to intercept traffic into the Londonderry urban area. These were Drumahoe in the Waterside and Bunrana Road and Culmore Road on the Cityside, reflecting peak traffic flows into the city (Figure 12).

**Figure 13: Peak Flows (7 am – 9 am) Into the Londonderry Urban Area**



5.24 Subsequent to the publication of the SRTP, the Drumahoe Park and Ride site is now operational, though primarily serving outward rather than in-bound traffic, as reflected in the absence of a dedicated transit service. In part this may reflect commuting patterns, however, the operation of the Drumahoe site should be regularly reviewed to ensure it facilitates utilisation by inward traffic, taking account of demand. In the longer term there is likely to be a need for the provision of additional sites in the Waterside to serve inward bound traffic on the A5 and A2 and this should be explored as major roads schemes on these corridors are progressed.

5.25 Beyond the completion of the Drumahoe site, no progress has been made in relation to the development of firmer proposals for the Buncrana Road and Culmore Road corridors. While recognising that there are difficulties, particularly in relation to the Culmore Road, associated with the identification of locations and the operation of dedicated services on those corridors, the proposals continue to have merit and are reflective of best



practice. In light of that the implementation of Park and Ride on the Buncrana Road and, where practical, Culmore Road corridors should be taken forward as a priority. Where the development of Park and Ride at a Culmore Road site to continue to prove difficult in the short to medium term, then it may be necessary to turn to alternative provision serving inward bound traffic on the Waterside A2.

5.26 As with BMTP proposals, the enhanced provision of Park and Ride in the Londonderry area should be taken forward in parallel with the implementation of parking restraint and traffic management measures within the city centre. The provision of bus priority measures to ensure Park and Ride has the potential to provide a reliable and attractive alternative for drivers is equally important and the current absence of such measures presents a significant risk going forward. Therefore, the Project Group has generally endorsed the proposals set out in the SRTP recommending the establishment of a cross city QBC for the Londonderry area linked to the proposed Drumahoe and Buncrana Road sites.

5.27 With regard to the wider proposals set out in the SRTP, the Project Group was broadly supportive of the continued development of Park and Ride / Park and Share on the strategic road network in line with best practice. However, in light of the low levels of utilisation at the strategically located Craigadick and Dunsilly sites on the A6 and M2 respectively, the general agreement of the Project Group is that the operation of those sites, including design and layout, should be reviewed to identify appropriate opportunities to increase utilisation. To maximise the potential for modal shift, the Project Group further recommend that Park and Ride sites on the strategic road network should be located at points served by high quality public transport such as the Goldliner service. That includes efforts to ensure future provision at Toome.

- 5.28 In addition to the specific proposals for Park and Ride, the SRTP set out indicative proposals for the provision of enhanced parking at bus stations in a number of larger towns and cities across Northern Ireland. These were Omagh, Enniskillen, Newry, Downpatrick and Armagh. While not Park and Ride in its truest sense, the aim of these proposals was to facilitate and promote modal shift from the car to public transport among commuters and therefore they are considered in this report as part of the regional Park and Ride network. None of those proposals have been delivered at the time of compiling this report. As a consequence, there is a significant imbalance in Park and Ride provision across Northern Ireland with limited availability in the South West. The provision of Park and Ride in these areas is therefore recommended, however, it is considered that this should not take the form of additional parking capacity at bus stations within our larger towns.
- 5.29 Each of the towns identified above experience congestion during peak periods. In addition to the limited capacity for future expansion and the opportunity costs associated with town centre sites, the provision of additional parking capacity at centrally located bus stations is unlikely to contribute to a reduction in congestion or local car use. Rather, while potentially increasing the catchment population for public transport, the provision of parking at central bus stations can exacerbate congestion in the surrounding area and offers significant potential for abstraction by enabling those within the local catchment area to access the station by car rather than by local bus. Recognising that, the Project Group has generally concluded that Park and Ride should be developed on the outskirts of those towns, linked to regional public transport services and local public transport services. This offers potential to provide for increased accessibility and integration of regional and local public transport without the need for dedicated services. The Castledawson Park and Ride facility is recommended as an example of good practice in this regard.

- 5.30 In addition to proposals for bus-based Park and Ride, the SRTP set out a number of proposals for the enhancement of Rail based Park and Ride across Northern Ireland. A number of these have been progressed, including Newry and Lurgan with further proposals for the enhanced provision of Park and Ride at Coleraine and Ballymena. While there is a clear need for enhanced provision at Coleraine and Ballymena, both sites are centrally located with limited potential for future expansion in capacity beyond that set out in the SRTP. Therefore, while endorsing the expansion in capacity of rail-based Park and Ride at Coleraine and Ballymena stations, it is recommended that consideration is given to the potential development of facilities at alternative less central points on the line, including possible new halts.
- 5.31 A summary of the recommendations emerging from the Project Group's review in relation to the SRTP proposals is set out below at Table 11 and Table 12. Table 11 provides an overview of those schemes which should not proceed or should be reviewed. Table 12 provides an overview of all SRTP schemes and the Project Group recommendations.

**Table 11: Key SRTP Proposals Recommended by Project Group Not to Proceed or for Review**

				Project Group Recommendation	Reason
		Current	Planned		
1	Larne Bus Station	8	33	Proposed expansion should not proceed	While Larne Bus Station has high rates of utilisation, there is additional capacity at Larne train station. It is therefore unclear as to whether a case exists for a further increase in capacity at this stage.
	Craigadick	88			
2	Dunsilly	258		Improvement to Facilities	Both facilities demonstrate low utilisation rates yet are strategically located on the key A6/M2 corridor. The low utilisation may be attributable to a number of factors, including site design, accessibility and onward mode of transport. In light of that the operation/design of these sites should be reviewed to identify opportunities to increase utilisation.
2	Omagh Bus Station	-	-	Proposals should be reviewed	The proposals exist to enhance P&R at centrally based bus stations. While it is unlikely to be feasible to provide locally based P&R in smaller-medium sized towns, each of the areas experiences congestion during peak period. Centrally placed P&R may not be appropriate in this context, nor sustainable over the longer term. The proposals should therefore be reviewed to determine the potential for alternative locations serving both regional and local travel.
	Enniskillen Bus Station	-	-		
	Newry Bus Station	-	-		
	Armagh Bus Station	-	-		
	Downpatrick Bus Station	-	-		
3	Coleraine Rail Station	21	46	Additional capacity should be provided though in the longer term consideration of alternative sites	There is a clear need for enhanced provision at both sites. However, given their central location there is limited potential for future expansion in capacity beyond that set out in the SRTP, while potentially exasperating congestion. Therefore, before proceeding, consideration should given to the potential development of facilities at alternative less central points on the line, including possible new halts
	Ballymena Rail Station	169	204		

**Table 12: Comparison of SRTP Park and Ride Proposals and Project Group Recommendations by Site**

Site Name	Mode	2004 Capacity	2008 Capacity	2009/10 Capacity	SRTP Planned 2015 Capacity	PG Rec 2015 Capacity	PG Change on SRTP
Newry Station	Train	80	80	300	300	300	0
Castlerock	Train	6	6	6	6	6	0
Ballymoney	Train/Bus	27	27	27	27	27	0
Coleraine	Train/Bus	21	21	21	46	46	0
Strabane	Bus	0	45	45	45	45	0
/Drumahoe	Bus	30	30	122	122	122	0
Craigadick	Bus	36	88	88	122	88	-34
Castledawson	Bus	61	61	61	181	181	0
Toome	Bus	100	100	100	100	100	0
Templepatrick	Bus	27	70	70	70	70	0
Londonderry	Train	58	58	58	58	58	0
Larne	Bus	8	8	8	33	33	0
Larne Station	Train	68	68	68	68	68	0
Lough Road Lurgan	Bus	104	104	104	104	104	0
Dungannon	Bus	47	47	79	72	79	7
Lurgan	Train	88	170	170	155	170	15
Portadown	Train/Bus	110	110	110	300	300	0
Ballymena	Train/Bus	35	135	135	204	204	0
Dunsilly	Bus	100	258	258	258	258	0
Antrim	Train/Bus	60	60	60	60	60	0
Ballee	Bus	40	84	84	84	84	0
Buncrana Rd	Bus	0	0	0	TBC	Proceed	0
Culmore Rd	Bus	0	0	0	TBC	Proceed	0
Omagh Bus Station	Bus	0	0	0	25	TBD	Review
Enniskillen Bus Station	Bus	0	0	0	25	TBD	Review
Newry Bus Station	Bus	0	0	0	25	TBD	Review
Armagh Bus Station	Bus	0	0	0	25	TBD	Review
Downpatrick Bus Station	Bus	0	0	0	25	TBD	Review

5.32 Collectively the recommendations set out above aim to provide for a network of Park and Ride sites across Northern Ireland which facilitate integration of services and modes, thereby facilitating mobility and modal shift. The recommendations do not significantly depart from the SRTP proposals. Rather they highlight those areas where progress is perhaps required and where alternative approaches may enhance the potential for a positive impact on the policy objective to promote modal shift.

## 6. DELIVERY

6.1 One of the key issues to emerge from the Project Group's consideration of this area was the pace of progress in the delivery of those proposals set out in the RTS and the associated Transport Plans. In part this was attributed to the fact that at present policy responsibility for Park & Ride falls across a number of business areas within the Department with no single area driving policy and delivery. This approach appears to have contributed to fragmented decision making process and a failure to prioritise the delivery of Park and Ride provision at a number of levels. To ensure a clear focus on delivery, it is recommended that:

- i. A single division (TPD) within the core Department should be tasked with taking the lead on Park and Ride policy and monitoring of delivery across business areas to ensure a coordinated approach across delivery partners and complementary progression of associated and supporting measures, particularly in relation to parking controls and bus priority. That Division would not assume direct responsibility for the design and procurement of sites nor the enforcement of parking controls, rather its role would be one of challenge and oversight;
- ii. An implementation group, chaired by TPD and incorporating representation from Roads Service, Rapid Transit Division and Translink should be established to progress the design and implementation of sites;
- iii. Progress should be reported annually including assessment of emerging issues, utilisation and impact of Park and Ride;
- iv. Dedicated funding streams should be established for Park & Ride / Share proposals, including for promotion and the provision of information; and

- v. As an immediate priority the Department should establish a small group to bring forward definite proposals as to the long-term responsibilities and operation of enforcement of moving traffic offences in bus lanes.

6.2 The implementation of Park and Ride will be taken forward in a more constrained budgetary context than envisaged in the development of the BMTP and the SRTP. That more constrained context has clear implications for the delivery of Park and Ride and in the short to medium term it is highly unlikely that the full programme of priority projects can be delivered. In addition to further emphasising the need for an enhancement of delivery structures to ensure due prioritisation and maximum benefit is derived from limited public funds, there is, therefore, also a need to look at alternative approaches in the delivery of Park and Ride. In light of that, the Project Group recommends that;

- i. In relation to the priority projects set out in this report, planning should be progressed immediately to facilitate future delivery as funding becomes available. This should include site design, approval and operational aspects and where practical land acquisition for future development;
- ii. To complement the delivery of priority projects
  - Provision for Park & Ride / Park and Share initiatives be included within Strategic Road Improvement Schemes; and
  - Where major out of town / edge of town retail and leisure developments are proposed on key corridors, the potential benefits of providing space for Park and Ride at such sites should be included as a planning consideration and potential developer contribution.

6.3 This report has sought to identify, in light of best practice and guidance, those proposals set out in the Regional Strategic Transport Network, Belfast Metropolitan and Sub-Regional Transport Plans that offer the maximum opportunity for modal shift. Whilst recognising that, it is critical that as business cases are developed and options appraised, detailed modelling is undertaken including consideration of traffic flows, origin destination surveys, the potential for associated bus priority measures to ensure the design and operation of sites best addresses needs and maximises the potential impact of Park and Ride on modal shift.



**STRATEGIC REVIEW OF PARK AND RIDE PROVISION**

**Terms of Reference**

- To review the adequacy of current proposals for the provision of park and ride facilities linked either to bus or rail services, having regard to the aim of achieving the maximum possible modal shift from car travel to public transport;
- To develop proposals for future provision which would offer the best possible prospect of maximising modal shift;
- As part of this exercise, to include proposals for the development of Quality Bus Corridors linked to bus-based Park and Ride sites;
- To produce costed recommendations.

Following the first meeting of the Project Group it was agreed by the Group that the Terms of Reference should be expanded to include:-

- reference to delivery arrangements, funding and wider issues in relation to parking strategy.

**Project Group**

A project group will be established, led by Transportation Policy Division, with representation from:

- Ports and Public Transport Division
- Regional Planning and Transportation Division
- Rapid Transit Division
- Public Transport Performance Division
- Roads Service
- Translink

Input will also be obtained from the Department's statisticians and economists.

## Annex 2

### Toolkit for the Classification of Park & Ride Sites and Requirements for Facilities

Situation		Selected Goldline Stops	Terminus	Interchange	Special Events	Station	Parkway
<b>Onward Mode of Travel</b>		Bus	Bus	Bus	Bus	Rail	Bus or Rail
<b>On-Site Parking Capacity</b>							
	Small < 50	√	√				
	Medium < 200			√		√	
	Large < 600				√		√
<b>Facilities</b>							
<b>Comfort</b>	Shelter	√			√		
	Heated Waiting Area		√	√		√	√
	Seating	√	√	√		√	√
	Covered Walkway			√		√	√
	Toilets		√	√		√	√
	Telephone	√	√	√		√	√
	Free Call Point foot Taxis	√	√	√		√	√
	Shop		√				√
	Vending Machine		√	√		√	√
	Litter Bins (regularly emptied)	√	√	√	√	√	√
<b>Information</b>	Timetable / Route Map & Fare Info.	√	√	√	√	√	√
	Bus &/or Rail Network Maps	√	√	√		√	√
	Clock		√			√	
	Real Time Information	√		√			√
	Public Address System		√	√		√	√
<b>Security</b>	CCTV	√	√	√		√	√
	Help Points			√			
	Staff Presence		√		√	√	√
	Lighting / Floodlighting	√	√	√		√	√
	Boundary Fence		√	√		√	√
	Covered Cycle Racks		√			√	√
	Cycle Lockers	√		√			
	Secure Car Park Scheme		√	√		√	√

Situation		Selected Goldline Stops	Terminus	Interchange	Special Events	Station	Parkway
<b>Onward Mode of Travel</b>		Bus	Bus	Bus	Bus	Rail	Bus or Rail
<b>On-Site Parking Capacity</b>							
	Small < 50	√	√				
	Medium < 200			√		√	
	Large < 600				√		√
<b>Signage</b>	Advance Direction Signs	√	√	√	√	√	√
	VMS		√	√		√	√
	Name of Stop	√	√	√		√	√
	On-site Direction Signs	√	√	√	√	√	√
	Disclaimer Signs	√	√	√	√	√	√
	Warning re CCTV, clamping etc.	√	√	√		√	√
<b>Accessibility</b>	Tactile Paving and Hard Standing / Platform	√	√	√		√	√
	Disabled Spaces	√	√	√	√	√	√
	Vehicle Movements Segregated from passengers	√	√	√	√	√	√
	Level access or ramp to platform / toilet / booking office / etc.	√	√	√	√		
	Ramp or lifts between levels (including wheel ramps on footbridges for bicycles)					√	√
<b>Miscellaneous</b>	Bitmac Surfacing	√	√	√		√	√
	Well Maintained Landscaping (hard & soft)	√	√	√		√	√
	Entry / Exit Barrier Control		√	√		√	√
	Set-Down & Pick-up Point		√	√		√	√
	Taxi Rank		√	√		√	√
	Height Restrictor	√	√	√		√	√