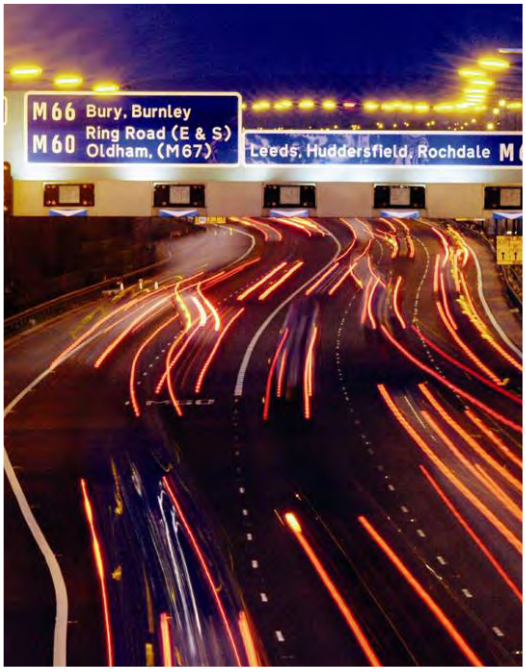
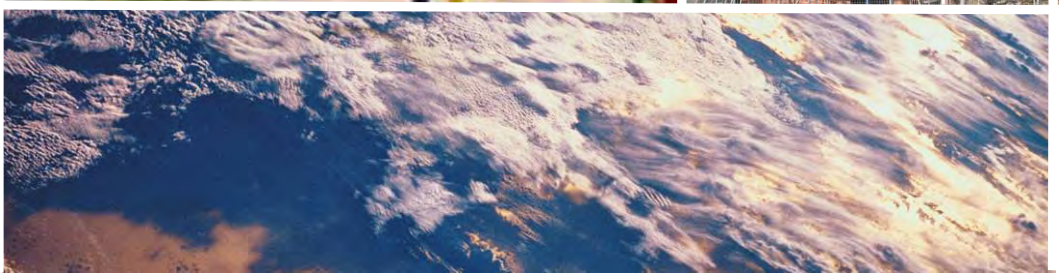
BURY
LOCAL PLAN

TRANSPORT TOPIC PAPER

July 2013





ENVIRONMENT AND DEVELOPMENT SERVICES

Bury COUNCIL

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1 Introduction

1.1 This Topic Paper highlights the current issues and challenges facing Bury's transport infrastructure and accessibility and identifies the key transport related issues which will need to be addressed to facilitate the Core Strategy's development aspirations. It forms a supplementary paper to the Bury Local Development Framework (LDF) and, in particular, will provide background information for the development of the Core Strategy and Site Allocations Development Plan Document (DPD).

1.2 The Paper draws on a number of sources of information including the 2001 Census, Transport for Greater Manchester Transport Statistics, Bury's LDF Annual Monitoring Report, Accession Modelling Software, Highways Agency Stress Mapping, and the Greater Manchester LDF Transport Modelling outputs.

1.3 Transport and travel are a key element of everyday life; however the journey's we make and the mode of travel we use is often determined by non-transport related factors such as where we live and the facilities available there. Coupled with this, new technologies and the dominance of the car over the last 50 years have made travelling substantially easier and more frequent than ever.

1.4 The planning process is crucial in helping to achieve more sustainable travel patterns that will assist in a modal shift away from the car. In recent years there has been a growing recognition that transport problems can form significant barriers to social inclusion. Although there has been a huge rise in mobility for people with access to a car, for those who rely on alternative modes to the car such as walking and public transport, access to work, learning and healthcare has become more difficult. Difficulties in accessing work places and key services are as much due to the location of those facilities as the quality of the transport links.

1.5 The Transport and Accessibility Topic Paper is one in a series of topic papers. The other topic papers are:

- Housing
- Economy
- Environment
- Community Facilities

1.6 Whilst each Topic Paper focuses on a particular theme, they are inter-related and when read together provide a strategic overview of current issues prevalent within the Borough.

2 Policy Context

2.1 This chapter examines the current planning policy framework that influences transport and accessibility issues.

National Planning Guidance

National Planning Policy Framework, 2012

2.2 The National Planning Policy Framework (NPPF) replaced the previous Planning Policy Statements and Guidance documents when it was published in March 2012.

2.3 The NPPF sets out the Government planning policies for England and how these are expected to be applied. The NPPF acknowledges that the purpose of the planning system is to contribute to the achievement of the sustainable development and sets out the Government's view of what sustainable development in England means.

2.4 Paragraph 7 sets out the three dimensions to achieving sustainable development:

Economic role – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;

Social role – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and

Environmental role – contributing to protecting and enhancing our natural, built and historic environment; and as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution and mitigate and adapt to climate change including moving to a low carbon economy.

2.5 Transport is therefore a significant component of achieving sustainable development and the NPPF provides guidance on promoting sustainable transport.

Core Principles of Planning System relating to Transport

2.6 Within the 'core planning principles' of the Framework it is highlighted that planning should 'proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs'. It goes on to state that the planning system should *'actively manage patterns of growth to make the fullest possible use of public transport, walking, cycling, and focus significant development in locations which are or can be made sustainable*'.

Promoting Sustainable Transport

2.7 The NPPF seeks to reduce the need to travel through mixing land uses, promoting sustainable modes of transport and ensuring that development is supported by viable infrastructure proposals.

2.8 The NPPF recognises that transport policies have an important role to play in facilitating sustainable development and contributing to wider sustainability and health objectives.

2.9 The NPPF seeks to promote patterns of development which facilitate the use of sustainable modes of transport, acknowledging that opportunities to maximise sustainable transport solutions will vary from urban to rural areas.

2.10 The NPPF states that Local Planning Authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development. Transport routes that are critical in developing infrastructure should be identified and protected, where there is robust evidence to do so.

2.11 The Framework identifies that plans and decisions should ensure that development which generate significant movement are located where the need to travel will be minimised and the use of sustainable modes of transport can be maximised. However it states that when doing so account should be taken of other policies in the Framework, particularly in rural areas. Policies should aim for a balance of land uses in the area to minimise journey lengths for employment, shopping and other activities. In larger scale residential developments planning policies should seek a mix of uses in order to provide opportunities to undertake day to day activities locally.

2.12 All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. The Framework states that 'development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

Plan making in relation to Transport

2.13 The Framework states that local plans should set out the strategic priorities for the area, including delivering the homes and jobs needed in the area and deliver the provision of infrastructure including transport.

2.14 Local plans must be based on adequate, up-to-date and relevant evidence. The quality and capacity of transport infrastructure and its ability to meet forecast demands and take account of the need for strategic infrastructure.

- Promote more sustainable transport choices for moving people and freight;
- Promote accessibility to jobs, shopping, leisure facilities and services by public transport, cycling and walking; and
- Reduce the need to travel especially by car.

Low Carbon Transport: a Greener Future, (2009)

2.15 A fifth of the UK's greenhouse gas emissions come from transport and the UK Low Carbon Transition Plan seeks to cut emissions from transport by 14% on 2008 levels[1]. The national strategy for low carbon transport is set out in Low Carbon Transport: a Greener Future[2] which prioritises:

- Cutting average carbon dioxide emissions from new cars;
- Providing investment in low carbon buses;
- Increased electrification of the rail network;
- Adopting a Renewable Transport Fuel Obligation and funding research and take up of sustainable bio fuels;
- Committing to source 10% of UK transport energy from sustainable renewable sources by 2020;
- Using demonstration vehicles to promote take up of new electric and lower carbon cars;

[1] http://www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/lc_trans_plan.aspx
[2] http://www.official-documents.gov.uk/document/cm76/7682/7682.pdf

- Offering grants to support the purchase cost of electric vehicles (EVs) of up to £5,000;
- Providing £30 million to support the installation of electric vehicles charging infrastructure in public places;
- Investing £140 million in promoting cycling in England (2008 – 2011);
- Seeking international agreements on capping emissions from all flights arriving through the EU Emissions Trading System and introducing a target to limit UK aviation emissions to below 2005 levels by 2050.

Sub-Regional Planning Policy

Greater Manchester's Third Local Transport Plan (LTP3), (2010/11 – 2015/16)

2.16 Transport Planning is conducted sub-regionally through the third Local Transport Plan. This is a statutory transport policy document but is also a shared work programme, involving the ten Greater Manchester Authorities, the Greater Manchester Combined Authority and Transport for Greater Manchester.

2.17 The core objectives for LTP3, which reflect the Greater Manchester Strategy's strategic objectives for transport, are:

- To ensure that the transport network supports the Greater Manchester economy to improve the life changes of residents and the success of business;
- To ensure that carbon emissions from transport are reduced in line with UK Government targets in order to minimise the impact of climate change;
- To ensure that the transport system facilitates active, healthy lifestyles and a reduction in the number of causalities and that other adverse health impacts are minimised;
- To ensure that the design and maintenance of the transport network and provision of services supports sustainable neighbourhoods and public spaces and provides equality of transport opportunities; and
- To maximise value for money in the provision and maintenance of transport infrastructure and services.

Greater Manchester Strategy, (2009)

2.18 The Greater Manchester Strategy is a shared vision, with accompanying strategic priorities, aimed a delivering a more prosperous Manchester City Region. The transport objectives contained within the Strategy are to:

- Prioritise cost effective major transport interventions that will create maximum economic benefit to the city region, subject to positive social and environmental outcomes overall;
- Improve access from residential areas, particularly housing growth points, to key education and employment areas, particularly the Regional Centres, Trafford Park and other strategic employment sites;
- Improve the efficiency and reliability of the transport networks;
- Improve surface access to Manchester Airport;
- Improve road safety;
- Enhance personal safety and security;
- Address the challenges of climate change through an integrated approach to transport network and demand management across all modes that optimises use of the network, provides users with a full range of affordable low carbon transport options, and reduces their need to travel.

Local Transport Policy

Unitary Development Plan (UDP), (1997)

2.19 The UDP identifies the Council's policies and proposals for the development of land and transportation in the Borough and provides the framework against which development proposals are assessed. The main objectives of the UDP in relation to Highways and Transportation are to:

- Promote a balanced transportation strategy;
- Encourage the use of public transport;
- Ensure that the highway network and car parking provision is appropriate to the objectives of a balanced transportation strategy;
- Reduce the environmental impact and pollution caused by traffic;
- Ensure that all movement can be made safely and conveniently
- Reduce road traffic accidents; and
- Ensure the needs of pedestrians, cyclists, the mobility impaired and those with spatial needs are properly catered for.

Local Development Framework (LDF), (2011)

2.20 The LDF has an important role to play in implementing the transport objectives set out in the RSS and LTP. The LDF is required to develop a strategy and policies to ensure that the location of new development supports LTP transport objectives. The main objective relating to transport identified in the Draft Publication Core Strategy is to:

Improve transport and connectivity by:

- Taking an integrated approach to land use and development with improved connectivity to services and facilities in order to reduce the reliance on the private car, create walkable neighbourhoods, limit the impact of transport on the environment, regenerate urban areas and support economic and social progress;
- Prioritising new housing, employment, service and retail development within existing urban areas, in particular, within locations offering a choice of transport modes such as existing centres or close to public transport interchanges; and
- Making provision for safer and more sustainable routes in order to encourage more travel by cycle or on foot.

Bury Cycling Strategy, (2004)

2.21 Bury's Cycling Strategy published in 2004 seeks to increase the number and proportion of journey's carried out by bike in order to reduce congestion and air pollution and improve the health of the Borough.

2.22 To support this, the strategy identifies a series of objectives including:

- To maximise the role of cycling as a transport mode;
- To reduce the number of accidents involving cyclists;
- To ensure that policies to increase cycling and meet the needs of cyclists are fully integrated into relevant plans, strategies and decisions;

2.23 In addition, the strategy identifies a network of cycle-friendly routes for short level journey's to district centres and major traffic generators such as schools, colleges, hospitals and key employment areas.

Bury Walking Strategy, (2004)

2.24 Bury's Walking Strategy (2004) aims to create a "walking friendly place for all who live work and visit Bury" and seeks to implement the following objectives:

- Increase the number of walking trips, particularly for short journeys;
- Seek to promote walking alongside other sustainable transportation modes;
- Apply the 'accessibility hierarchy' in line with Bury's UDP and the LTP;
- Emphasise the street as a space for living and address urban planning, design and maintenance issues to ensure quality and security;
- Identify and develop a network of walking routes which link key places and support walking as a leisure activity;
- Use the Greater Manchester pedestrian audit system when assessing scheme designs.

3 Local Transport Infrastructure

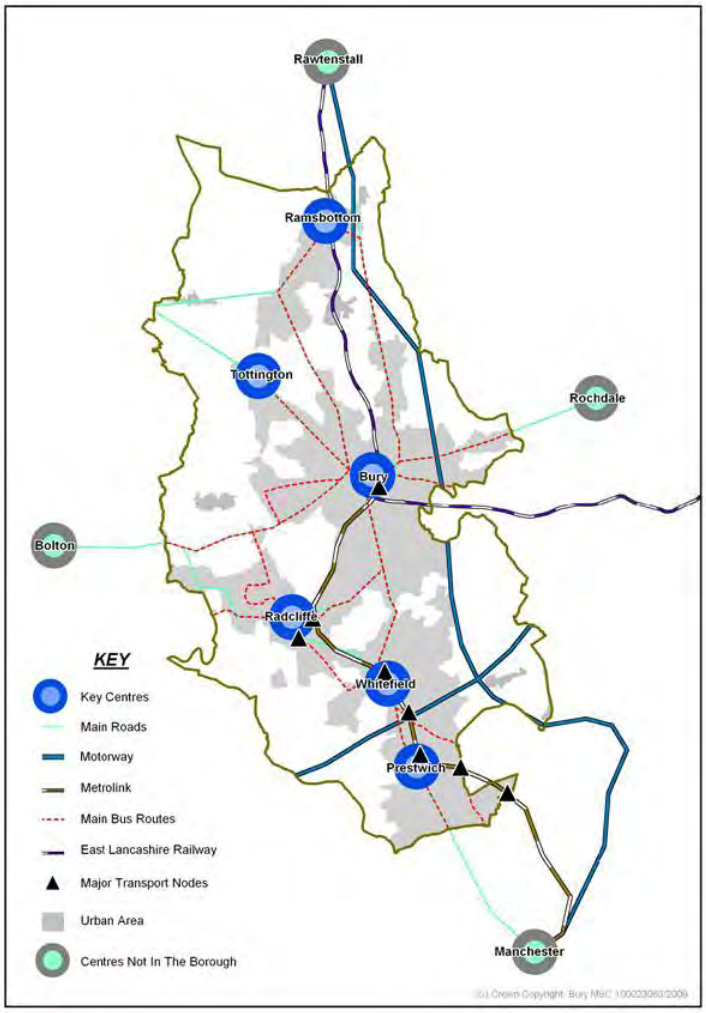
Introduction

3.1 Bury has an extensive primary route network, connections to the motorway network and a well connected public transport system including Metrolink and bus services.

3.2 The East Lancashire Railway also passes through the Borough. At present the line largely operates as a heritage attraction, however it does connect Rawstenstall to Heywood via Irwell Vale, Ramsbottom, Summerseat and Bury.

3.3 Figure 1 illustrates the main features of the transportation network in Bury.

Figure 1 – Local Transport Context



Highways

3.4 Bury has **686 km** of road consisting of:

- 21km motorway;
- 55km A road;
- 33km B road;
- 38km other classified road; and
- 539km unclassified road.

3.5 The **A58 and A56** are the main arterial routes, linking Bury to Manchester and the motorway network including the M60, M62 and M66.

3.6 There are five motorway junctions, either wholly or partly in the Borough including:

- **M66 Jct 1** – intersection with A56 Walmersley Road, Ramsbottom, Northbound off and Southbound On slip roads only;
- **M66 Jct 2** – intersection with the A58 Rochdale Road and Bury New Road, Heap Bridge;
- **M66 Jct 3** – Intersection with Pilsworth Road, Pilsworth;
- **M66 Jct 4/M60/M62 Jct 18** – Fully signalised motorway intersection – 'Simister Island';
- **M60 Jct 19** – Intersection with A576, Manchester Old Road, Heaton Park – this junction is only partly in the Borough;
- **M60 Jct 17** – Intersection with A56, Bury New Road, Prestwich.

Traffic Flows

3.7 The average daily traffic flow per kilometre in 2011 was 97,500 vehicles on motorways, 17,200 on A roads and 8,400 on B roads.

3.8 The Greater Manchester Transportation Unit (GMTU) monitors Annual Average Weekday Traffic (AAWT) within the Borough. In 2009, the busiest all-purpose road was the **A58 Bolton St in Bury** where the estimated 24-hour AAWT flow reached 68,500 vehicles, compared to 70,300 at the same location in 2008.

3.9 12-hour weekday flows on A and B roads in Bury fell by 1% between 2010 and 2011, whilst Greater Manchester saw a 2% decline.

3.10 Since 1993, traffic flows on A and B roads in Bury have decreased by 6% compared to a 5% decrease in Greater Manchester and a 2% increase nationally.

3.11 The Highways Agency monitor the same information on the Borough's motorways. The highest estimated 24-hour Annual Average Weekday Traffic (AAWT) flow in 2011 was 181,967 vehicles on the **M60 between Junctions 16 and 17**, compared to 180,143 at the same location in 2008, a decrease of 1%.

Table 1 – AAWT between J16 and J17 of M60

Year	Total
2008	180,143
2009	181,502
2010	181,523
2011	181,967

Source: Highways Agency, 2011

3.12 The site with the highest 12-hour pedal cycle flow in 2011 was the **A56 Bury New Road in Prestwich** with 291 cycles recorded between 07:00 and 19:00.

3.13 In 2011, the average 12-hour A and B road pedal cycle flows in Bury was 84 and 48 respectively, lower than the Greater Manchester averages of 113 and 107 for A and B roads.

Traffic Composition in Bury – 2011

3.14 **Motorways**: 74% cars, 15% light goods vehicles (LGVs) and 10% other goods vehicles (OGVs).
A roads: 84% cars, 12% LGVs and 2% OGVs.
B roads: 84.1% cars, 12% LGVs and 2% OGVs.
Minor roads: 84% cars, 11% LGVs and 1% OGVs.

3.15 Vehicle composition on Bury's roads is broadly similar to Greater Manchester as a whole.

Private Car

3.16 The private car plays a significant role in the movement of people across the Borough. Cars account for 84% of the traffic on Bury's A roads (2011)[3]. This proportion is higher than Greater Manchester's average of 81%[4].

[3] Greater Manchester Transport Unit, Bury Transport Statistics, 2011
[4] Greater Manchester Transport Unit, Greater Manchester Transport Statistics, 2011

Car Parking Provision

3.17 Car parking is a key consideration for people who travel by car in Bury. Bury Council manages and maintains most of the car parking in the Borough's town centres. Two main types of car parking exist: on street and off-street public car parking.

3.18 Currently there are 3104 off-street car parking spaces in Bury's town centres which provide access to facilities including shopping, work, leisure and education.

Table 2 – Car Parking Spaces

	No. of Car Parks	No of Bays
Bury Town Centre	11	1531
Outside Bury Town Centre	9	153
Tottington	2	40
Ramsbottom	7	150
Prestwich	9	452
Radcliffe	18	698
Whitefield	2	80
Total	**58**	**3104**

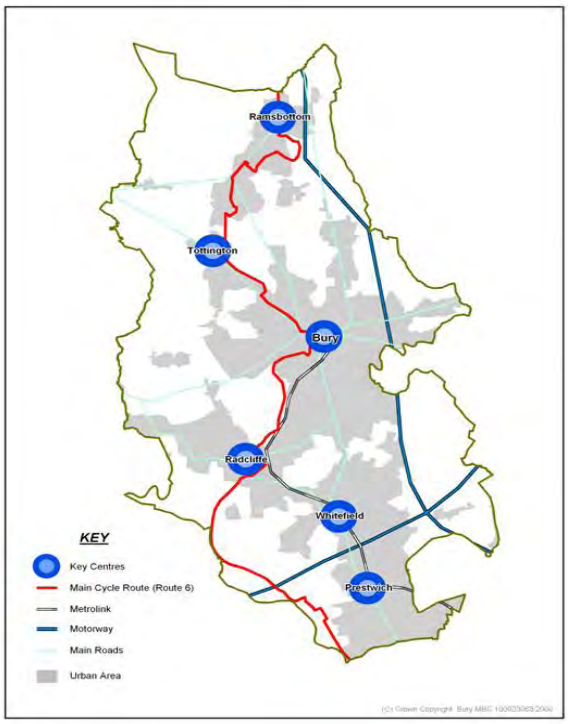
Source: BMC, 2013

3.19 There are a further 5 privately owned car parks in Bury town centre with 2384 spaces and 323 registered on-street pay and display bays, of which 30 are dedicated disabled spaces.

3.20 Three car parks have short stay spaces: Castle Leisure Centre (142 spaces), Parsons Lane North (21 spaces) and Parsons Lane South (143 spaces).

3.21 A 1250 multi-storey car park has been provided as part of the Rock Triangle development which opened in July 2010.

Figure 2 – Route 6 Cycle Network



Park and Ride Facilities

3.22 There are currently four Metrolink Park and Ride facilities within the Borough, at Bury, Radcliffe, Whitefield and Prestwich.

Cycle Routes

3.23 The National Cycle Network (NCN) is a 10,000 mile network of safe and attractive routes throughout the UK, and is co-ordinated by the charity Sustrans. Route 6 of the Network passes through Bury on its way between Manchester and Preston and interlinks with the Borough's local cycle network. Sections of the local network are being extended and improved as opportunities arise. In particular, new on-road and off-road routes are being developed in and around Bury Town Centre in conjunction with new development at Chamberhall and the Woolfold Gap project. A cycle hub is also open at Bury Interchange, which provides facilities for commuters to leave their bikes in a safe, secure and dry unit while they are at work.

Public Transport

3.24 Bury has a comprehensive network of public transport services which provides links to key local destinations and further afield. Metrolink operates from Bury town centre and points to the south of the Borough to Manchester City Centre and other areas of Greater Manchester including Eccles, Oldham, Rochdale, Chorlton, Didsbury, Droylsden and Media City, with further plans to link to Manchester Airport. Park and Ride sites provided at key stops including Bury, Radcliffe and Whitefield. Bus services in the district comprise local routes from the town centres to suburban housing areas and rural communities with inter-urban services providing frequent links to neighbouring towns including Bolton, Rawtenstall, Bacup and Rochdale. There are also several frequent routes to Manchester, serving various residential areas including those some distance away from Metrolink stops. Bury Interchange provides the largest public transport 'hub' for the district and enables convenient transfer between different bus services or between bus and Metrolink. The core public transport network is complemented by 'Ring and Ride' services which provide door-to-door accessible minibus service for people of all ages who find it difficult to use ordinary public transport.

Metrolink

3.25 The Metrolink running between Bury and Altrincham through central Manchester has been in operation since 1992. The system has been successful in achieving high patronage and securing a modal switch from the car.

3.26 On the Bury line, weekday peak boarders have increased by 81% between 1992 and 2011 to just over 3,500 passengers. Weekday off-peak boarders have increased by 75% over the same period to just over 3,500 passengers[5].

Table 3 - Weekday Peak Manchester Bound Boarders on Bury Metrolink Line 07.30 - 09.30

1992	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	% change 10 -11	% change 92 - 11
1966	3607	3588	3466	3048	2985	3038	3270	2898	3019	2664	3288	2471	3290	3564	8.3	81.3

Source: GMTU Transport Statistics, 2011

Table 4 - Weekday Off-Peak Manchester Bound Boarders on Bury Metrolink Line 09.30 – 13.30

1992	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	% change 10/11	% change 92/11
2081	2667	2845	2585	2422	2326	2592	2599	2945	2776	2752	3871	3086	3179	3641	14.5	75.0

Source: GMTU Transport Statistics, 2011

Bus

3.27 Buses account for around 80% of all public transport trips in Greater Manchester (LTP3). As the main mode of public transport, the bus has a key role to play in securing modal shift away from the car and also contributing to social inclusion.

3.28 4.4 million bus miles were operated in Bury in 2007. This was 4% less than in 2006 but 5% more than the pre-deregulation level in 1985.

3.29 Total bus mileage in Bury fell by 4% between 2006 and 2007. This compares with a fall of 6% in Greater Manchester.

[5] Greater Manchester Transport Unit, Bury Transport Statistics, 2011

3.30 Bury accounted for 7% of all bus mileage in Greater Manchester in 2007[6].

3.31 Quality Bus Corridors (QBC) are designed to reduce bus journey times, increase the comfort and convenience of bus travel, ensure that bus services provide a real alternative to car use and improve pedestrian and cycling facilities along the corridors. **The QBC's in Bury run along the A56/A665 from Bury to Manchester and along the A58**.

Accessible Transport

3.32 Taxis and private hire vehicles, Community Transport, Shopmobility, Ring and Ride, Local Link (Ramsbottom/Tottington and Little Lever/South Radcliffe) and Taxi Voucher schemes form part of the transport choice available to people with limited access to other transport. Bury currently licences 723 Private hire vehicles and 88 hackney carriages.

[6] Greater Manchester Transport Unit, Bury Transport Statistics, 2008. GMTU have not collected data on bus mileage since 2007.

4 Existing Travel Patterns

Journey to Work

4.1 Journeys to and from work contribute significantly to the overall use of transport networks.

4.2 Table 5 below summarises the commuter flows to and from Bury[7]. The commuter flows are split by those authorities adjoining Bury, and other authorities:

Table 5 – Commuter Flows

	Out-commuting from Bury		In- commuting to Bury		Net out-commuter flow	
Adjoining authorities	29,396	72.5%	13,444	68.6%	15,952	76.1%
Other flows	11,170	27.5%	6,160	31.4%	5,010	23.9%
Total commuters	**40,566**		**19,604**		**20,962**	

4.3 **72.5%** of commuter flows from Bury and **68.6%** of flows to Bury are between authorities adjoining Bury (Manchester, Salford, Bolton, Rochdale, Rossendale and Blackburn). These are relatively local movements and can be considered to be 'natural flows'. However, more than twice as many people travel out of the Borough for work than travel in.

Mode of Travel

4.4 Table 6 below highlights how Bury residents' mode of travel to work has changed between 1991 and 2011.

Table 6 – Mode of Travel - 1991 - 2011

Year	All People aged 16-74 in employment	Work at Home	Train Tram	Bus	Motor Cycle	Car Driver	Car Passenger	Pedal Cycle	Walk	Other
1991	82909	3.8	3.6	11.3	0.8	59.6	8.4	1.4	10.7	0.3
2001	83847	8	4.8	7.2	0.8	61.6	7.7	1.3	8.2	0.4
2011	88036	9.1	5.4	6.4	0.5	62.6	6.2	1.3	8	0.4

Source: Nomis, 2013

4.5 The proportion of residents using the private car to travel to work has increased to 62.6% whilst the proportion of residents who walk to work has declined to 8%. However the proportion of residents who work from home has increased by 5.3% to 9.1% and the proportion using the train or tram has increased by 1.8% to 5.4%.

4.6 Using the 2011 census information, Appendix 1 identifies residents' mode of travel by ward whilst Appendix 2 highlights those wards within the Borough with a high dependency on the car to travel to work.

4.7 Driving a car or van is the most popular mode of travel to work from all wards within the Borough.

4.8 A higher proportion of wards within the South of the Borough use public transport to commute to work and this is likely to be as a result of the Metrolink and more frequent bus services. Tottington and North Manor have the highest proportion of residents using the private car (70.4% and 70% respectively).

[7] Data Source: 2001 Census, Origin-Destination Statistics, Crown copyright 2004. As with all Census outputs, small counts were adjusted prior to release in order to protect confidentiality. This means that figures should not be treated as absolute but rather as estimates and counts may vary between tables.

4.9 Table 7 below provides a summary of flows to and from Bury by mode of transport, with figures for people who live and work in Bury as a comparison. Unfortunately 2011 census data was not available for this indicator.

Table 7 – Mode of Travel

		Works mainly at home	Underground, metro, light rail or tram	Train[8]	Bus, minibus or coach	Taxi	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Live and work in Bury	Count	6734	688	88	3107	536	**21395**	3289	278	665	6341	123
	%	15.6	1.6	0.2	7.2	1.2	**49.5**	7.6	0.64	1.5	14.7	0.3
Out-commuters	Count	0	2948	323	2947	155	**30201**	2494	423	385	509	181
	%	0.0	7.3	0.8	7.3	0.4	**74.5**	6.2	1.04	1.0	1.3	0.5
In-commuters	Count	0	239	125	1338	106	**15325**	1494	201	221	497	58
	%	0.0	1.2	0.6	6.8	0.5	**78.2**	7.6	1.03	1.1	2.5	0.3

Source: 2001 Census

4.10 Driving a car or van is clearly the most popular choice for all commuters. Buses and trams attract an equal share of out-commuters from Bury. Very few out-commuters or in-commuters travel by bicycle or on foot. This continued dependency on the car is not sustainable as it excludes those who don't have access to personal transport and the high level of car usage leads to congestion and contributes to climate change.

Out-commuting

4.11 Table 8 below summarises the dispersed trip patterns of working age commuters who live in the Borough and Appendix 3 summarises the destination of out-commuters from individual wards in Bury (more detailed information is contained within Appendices 4 and 5).

4.12 A third (18.4%) of commuters travel to Manchester, reflecting the dominance of the city centre, whilst a further third commute to authorities adjacent to Bury. However there are also a number of smaller movements to a wide range of key employment destinations, for example 2.8% of commuters travel to Trafford, which is likely to reflect the concentration of employment in Trafford Park.

Table 8 – Workplace destination of Bury residents in employment

Origin	Destination	No. Residents aged 16-74 in employment	%
Bury	Bury	42,220	49.4
Bury	Manchester	15,733	18.4
Bury	Bolton	5,121	6.0
Bury	Salford	4,962	5.8
Bury	Rochdale	4,316	5.1

[8] Whilst there are no train lines that pass through the Borough, the Census identifies a respondents main mode of transport. Therefore some respondents my travel to/from Manchester or Bolton via the train and then use an alternative mode of transport to commute into Bury.

Bury	Trafford	2,390	2.8
Bury	Rossendale	1,318	1.5
Bury	Oldham	1,050	1.2
Bury	Blackburn with Darwen	1,038	1.2
Bury	Stockport	760	0.9
Bury	Other Destinations	6,510	7.6
ALL BURY RESIDENTS IN WORK	ALL DESTINATION	85,418	100
Out-Commuters		**43,198**	**50.6**

Source: ONS Annual Population Survey – APS Commute 2011

4.13 Over 25% of out-commuters from Holyrood, St Mary's and Sedgley wards work in Manchester City Centre. This not surprising, given their proximity to the sub-regional centre. However, just over 50% of Bury residents work within the Borough.

4.14 Appendix 6 summarises the modes of transport used to commute out of the Borough, and also shows the travel methods used by those who live and work in the Borough as a comparison.

4.15 Significantly more people use public transport to commute out to Manchester than any other destination. This is likely to be due to the provision of Metrolink and the cost of car parking in the City Centre. However 68% of commuters continue to use the car when travelling into Manchester.

4.16 A considerably low proportion of people commute by public transport to the adjoining boroughs of Salford (11%) and Bolton (9%). This is despite regular bus services to and from both districts.

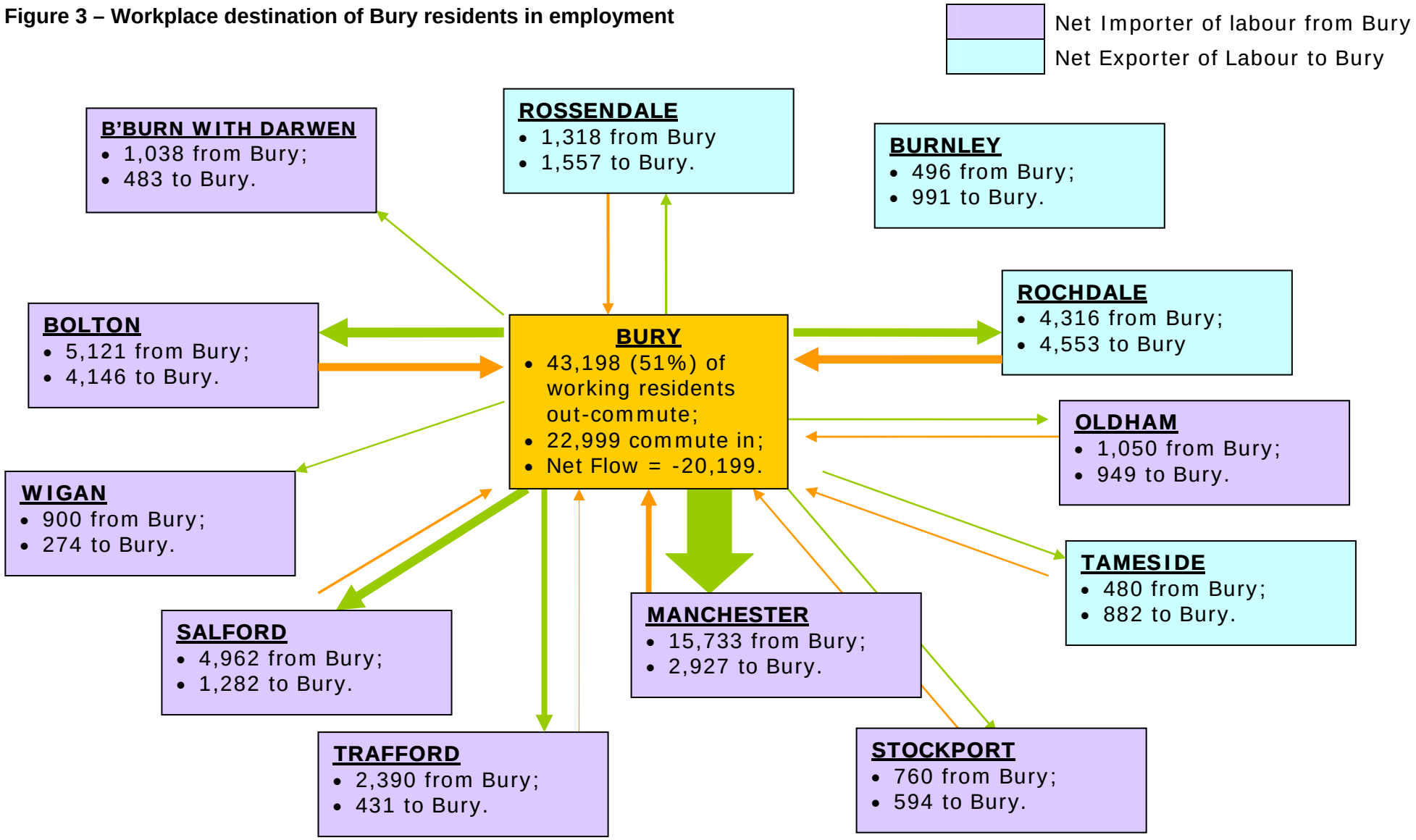
4.17 Appendix 7 shows the modes of transport used by commuters from Bury wards out of the Borough. A higher proportion of residents in the south of the Borough utilise public transport as a means of travelling to work out of the Borough although this does not extend beyond 11.4% of residents. This higher use in the south is no doubt due to access to the Metrolink. Areas without easy access to Metrolink, particularly the north of the Borough, consequently experience lower levels of public transport usage. More detailed information is contained within Appendices 8 and 9.

4.18 Over 70% of out-commuters from Church, Moorside, Pilkington Park, Radcliffe North, Ramsbottom and Tottington use a private motor vehicle to get to work in Manchester City Centre. Ramsbottom has a particularly high proportion with 80% of out-commuters using a private motor vehicle.

In-commuting

4.19 Figure 3 highlights that the Borough does draw in workers from surrounding districts – most notably from Rossendale, Bolton and Rochdale. However, on balance, levels of out-commuting by far exceed those travelling into the Borough to work.

Figure 3 – Workplace destination of Bury residents in employment



Source: ONS Annual Population Survey – APS Commute 2011

4.20 Table 9 below summarises the mode of transport used to commute into the Borough, and also shows the travel methods used by those who live and work in the Borough.

421 Public transport is utilised most by those in-commuting from Manchester, again this is likely to be as a result of the Metrolink. However it is clear that the private car is the most popular mode of transport for in-commuters.

Table 9 - In-Commuters Mode of Travel

Origin name	All people[9]	Public transport		Private motor vehicle		Bicycle / on foot		Other	
		Count	%	Count	%	Count	%	Count	%
Live and work in Bury	36,510	3,883	10.64	25,498	69.84	7,006	19.19	123	0.34
Bolton	4,342	322	7.42	3,868	89.08	142	3.27	10	0.23
Rochdale	3,680	468	12.72	3,058	83.10	145	3.94	9	0.24
Rossendale	1,921	107	5.57	1,779	92.61	35	1.82	0	0.00
Salford	1,664	175	10.52	1,386	83.29	100	6.01	3	0.18
Manchester	1,423	272	19.11	1,040	73.09	108	7.59	3	0.21
Oldham	893	54	6.05	797	89.25	39	4.37	3	0.34
Wigan	698	16	2.29	673	96.42	6	0.86	3	0.43
Trafford	547	62	11.33	471	86.11	14	2.56	0	0.00
Other authorities	4,436	226	5.09	4,054	91.39	129	2.91	27	0.61
Total[10]	**19,604**	**1,702**	**8.68**	**17,126**	**87.36**	**718**	**3.66**	**58**	**0.30**

Source: ONS Census 2001 – Origin Destination Statistics Local Authorities. Table W103

Travel to School Patterns

4.22 Increasing reliance upon the car for personal travel is generally reflected in children's travel patterns. During term time one in five cars on the road in urban areas at 8:50am are taking children to school, leading to localised congestion, increased air pollution, a rise in the number of children injured in road traffic accidents, and a reduction in health and fitness.

4.23 A Borough wide annual voluntary travel survey has been developed which asks students (aged 4 to 16) how they normally travel to school. Table 15 below shows the results of the January 2008 to 2011 surveys.

Table 10 – Mode of Travel to School (%)

Mode	Total on Roll, inc Nursery	Bus (type not known)	Car	Car Share	Cycle	Dedicated School Bus	Metro link	Other	Public Service Bus	Taxi	Walk	Total
2008	27700	0.4	25.0	1.0	0.5	5.70	0.8	0.1	8.4	0.3	35.5	77.7
2009	27675	0.7	32.0	1.1	0.7	6.31	1.0	0.2	8.1	0.3	41.8	92.1
2010	27667	1.1	32.8	1.0	0.6	6.45	1.0	0.2	7.7	0.4	42.3	93.3
2011	25896	1.6	34.0	1.2	0.6	7.00	1.2	0.1	7.4	0.4	41.9	95.4
% Diff 2008 - 2011	-6.51	1.2	9.0	0.2	0.1	1.30	0.	-0.0	-1.0	0.1	6.4	17.7

Note: Totals do not sum to 100% as some pupils did not provide any information.
There was a considerably lower total survey figure in 2008, which may impact on % change 2008-2011.
Source: Bury Council, 2011

4.24 There was a 6.4% rise in the number of children who walked to school between 2008 and 2011. However the car continues to be the dominant mode of travel to school with 34% of pupils travelling to school by single occupancy car in 2011.

[9] Excludes people who work from home in Bury
[10] Excludes people who live and work in Bury

5 Key Transport Issues and Problems

Congestion

5.1 GMTU monitors average journey time rates at various time periods throughout the day. In Bury, average journey time rates decreased in all periods between 2009/10 and 2010/11 whilst average speeds increased. In addition, average journey times are shorter in Bury than Greater Manchester as a whole during all time periods, indicating that average speeds were faster.

Table 11 - Bury and Greater Manchester Average Journey Time Rates (Mins/Mile)

Bury						
Year	0700-1000	0800-0900	1000-1600	1700-1800	1600-1900	0700-1900
2004/05	3.26	3.73	2.85	3.29	3.10	3.05
2005/06	3.30	3.88	2.89	3.43	3.20	3.09
2006/07	3.26	3.70	2.92	3.40	3.18	3.10
2007/08	3.20	3.62	2.90	3.30	3.14	3.05
2008/09	3.22	3.65	2.93	3.35	3.18	3.09
2009/2010	**3.25**	**3.69**	**2.93**	**3.44**	**3.26**	**3.12**
2010/2011	**3.14**	**3.55**	**2.87**	**3.36**	**3.22**	**3.04**
Greater Manchester						
2010/2011	3.37	3.81	3.11	3.75	3.53	3.30

Table 12 - Bury and Greater Manchester Average Speeds (MPH)

Bury						
Year	0700-1000	0800-0900	1000-1600	1700-1800	1600-1900	0700-1900
2004/05	18	16	21	18	19	20
2005/06	18	15	21	18	19	19
2006/07	18	16	21	18	19	19
2007/08	19	17	21	18	19	20
2008/09	19	16	20	18	19	19
2009/2010	18	16	20	17	18	19
2010/2011	19	17	21	18	19	20
Greater Manchester						
2010/2011	18	16	19	16	17	18

5.2 Congestion within the Borough is most prevalent in **the east, west and south of Bury town centre with some areas such as The Rock being affected because of retail developments** during the morning peak (08:00-09:00). The A6053 Spring Lane in Radcliffe and the junction of the A6044 and the A56 near Barnfield Park are also slow roads.

5.3 Despite these hot spots, congestion in Bury is not considered to be a Borough wide problem. However congestion is likely to increase and become more widespread due to increasing car ownership and use, reflecting improvements to economic prosperity in the district and as a result of regeneration and planned new development.

Car Ownership

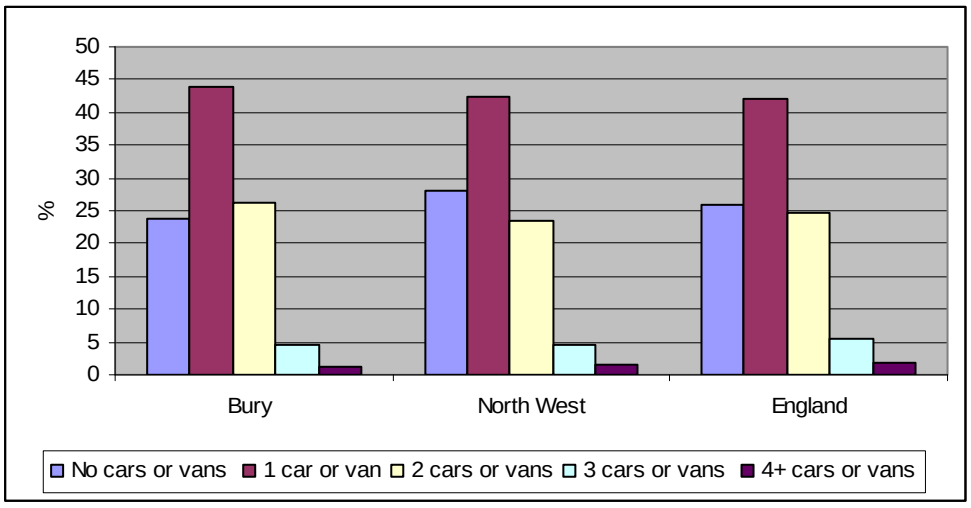
5.4 There are high levels of car ownership throughout Bury with 76% of households owning at least one car. This is a higher rate than the regional or national average.

5.5 Whilst high levels of car ownership and usage suggests a level of affluence across the Borough, its does present significant traffic related issues in terms of congestion, dispersed journey patterns, air pollution, increased CO^2 emissions and road accidents.

5.6 High levels of car ownership in Bury also mask the fact that 24% of households within the Borough do not have access to car. This highlights the importance of ensuring that there are high quality realistic alternatives to the private car, not simply for

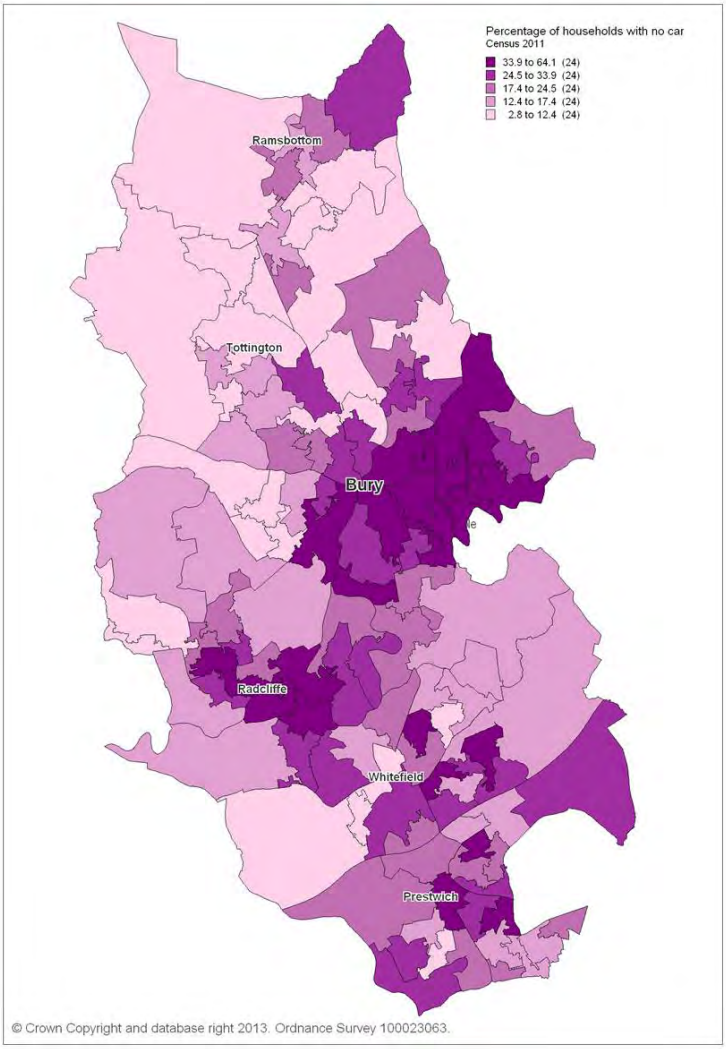
environmental reasons. Congestions has a significant cost to the economy and a lack of employment opportunities for those without access to a car also has social and economic impacts for individuals and society.

Figure 4 – Car Ownership – 2001



Source: 2011 Census

Figure 5 – Percentage of households with no car – 2011



Source: 2011 Census

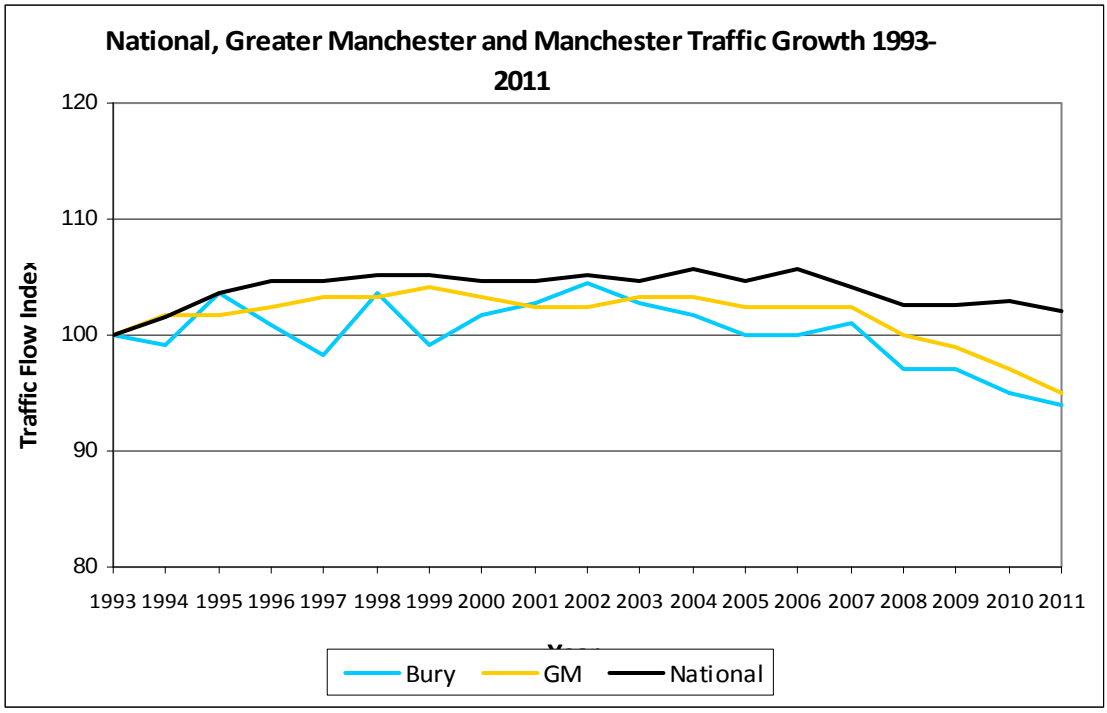
5.7 Figure 8 shows the spatial distribution of households with no access to a car. In particular it shows that East Bury has particularly low levels of car ownership highlighting the need for good public transport links in this area. Other areas with low car ownership include Radcliffe, and small pockets in Whitefield and Prestwich.

5.8 People who do not have access to a car are more likely to be prevented from accessing healthcare, food shopping and education and employment opportunities and this can contribute to social exclusion.

Traffic Growth

5.9 Figure 9 below identifies local and national traffic growth since 1993.

Figure 6 - Traffic Growth 1993 - 2011



Source: GMPTE, 2011
A base index figure of 100 was identified in 1993. Traffic growth has since been considered against this base figure. Traffic growth for Bury and Greater Manchester has been based on 12-hour average weekday flows on a sample of A and B road links throughout Bury and Greater Manchester. National growth is based on average 24hr daily traffic flow data for major urban A roads published in Table 2.1 Road Statistics 2007: Traffic Speeds and Congestion.

5.10 Traffic flows on A and B roads in Bury have fluctuated markedly between 1993 and 2011, however in 2011 they were 6% lower than in 1993, compared with a 5% decrease in Greater Manchester and 2% increase nationally over the same period.

5.11 The likely explanation for this reduction in traffic however is the economic downturn and not a change in travel behaviour and therefore as levels of economic growth begin to increase, it is expected that levels of traffic growth will also increase.

M66 and M60/Simister Island Stress Levels

5.12 The M60, M62 and M66 motorways run through the Borough. All three motorways' are part of the Trans-European Road Network and are an integral part of the main east-west transport spine in the North West, linking Merseyside and Greater Manchester with the Yorkshire and Humber.

5.13 The motorways carry a large volume of traffic with a diverse range of origins and destinations and fulfil two distinct roles, providing for national and inter-regional Trans-Pennine traffic using the M62 together with regional and sub-regional orbital traffic using the M60 around Greater Manchester (GM). The M62 is of strategic importance for the movement of freight, hence journey time reliability is a key issue.

5.14 All three motorways experience varying degrees of stress. **Junction 18** is one of the most important junctions on the **M60 motorway**. Situated within Bury and in the north east corner of the M60 orbital motorway, it forms the connecting hub between the M60, the M62 and the M66 motorways. This junction, otherwise known as 'Simister Island' is considered to be a hot spot but as this is entirely motorway routes, it is the responsibility of the Highways Agency and thus the Council has very little influence on how it is managed.

5.15 The most congested junction under the Council's remit is the **M60 Jct 17** and specifically the **southbound carriageway of the A56 leading to Junction 17** where traffic levels are considered high, particularly in the morning peak which is extending in duration. The M66 Jct 2 at Heap Bridge suffers from heavy traffic, however the junction is kept moving for the majority of the time and thus is not considered to be a 'hot spot'.

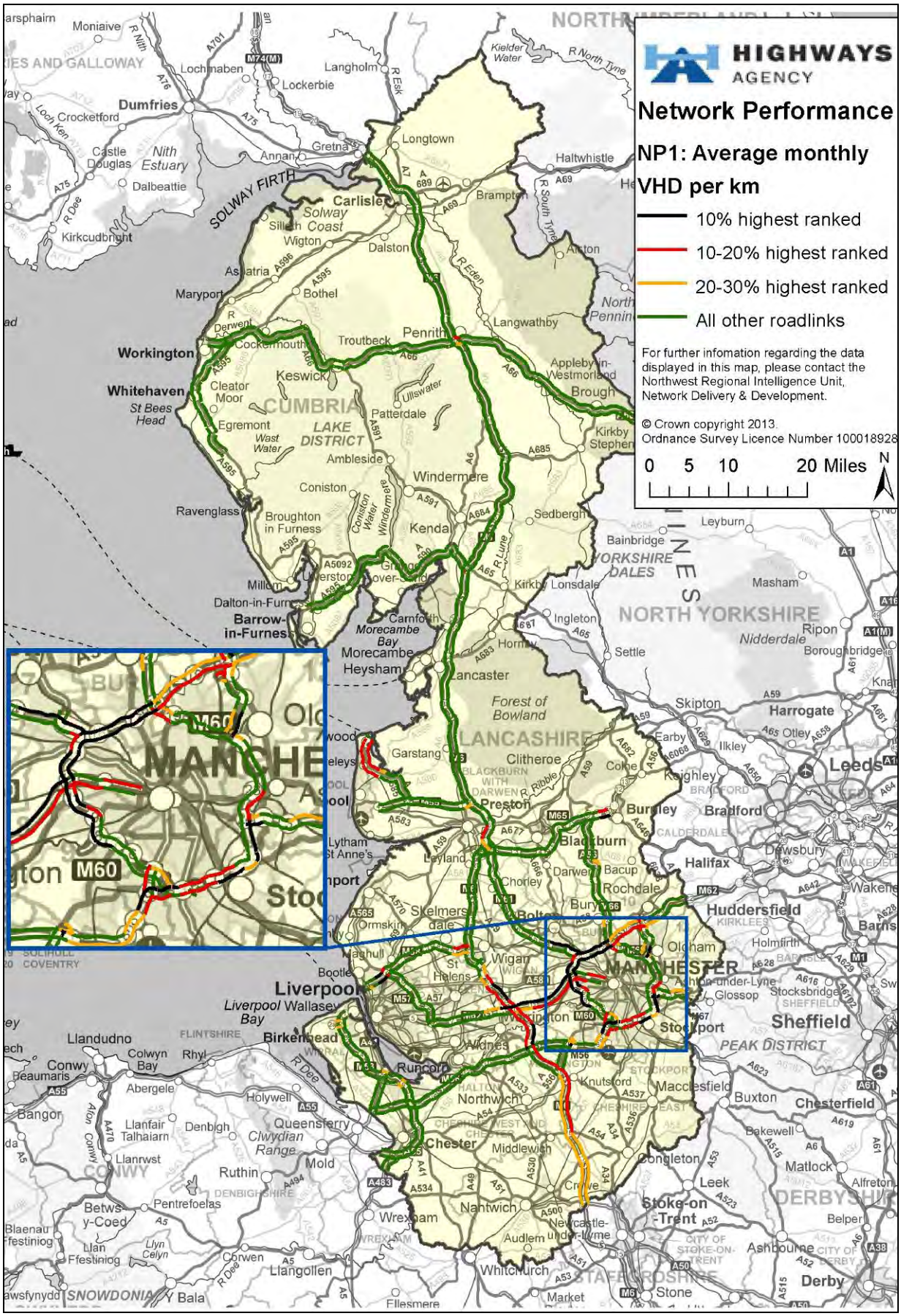
5.16 The Highways Agency produce Network Performance Maps. These maps are most useful in identifying stretches of the network which are particularly vulnerable to stress rather than identifying the impact of individual junctions.

5.17 Figure 10 highlights that the majority of the M60 experiences vehicle hour delays (VHD) and at minimum is ranked within the top 30% highest ranked roadlinks[11].

5.18 The M60 between Junctions 18 and 17 is ranked in the highest ranked (worst) 10%. This may be as a result of operational issues on the wider M60 north western quadrant.

[11] The Highways Agency ranks road links in terms of vehicle hour delay.

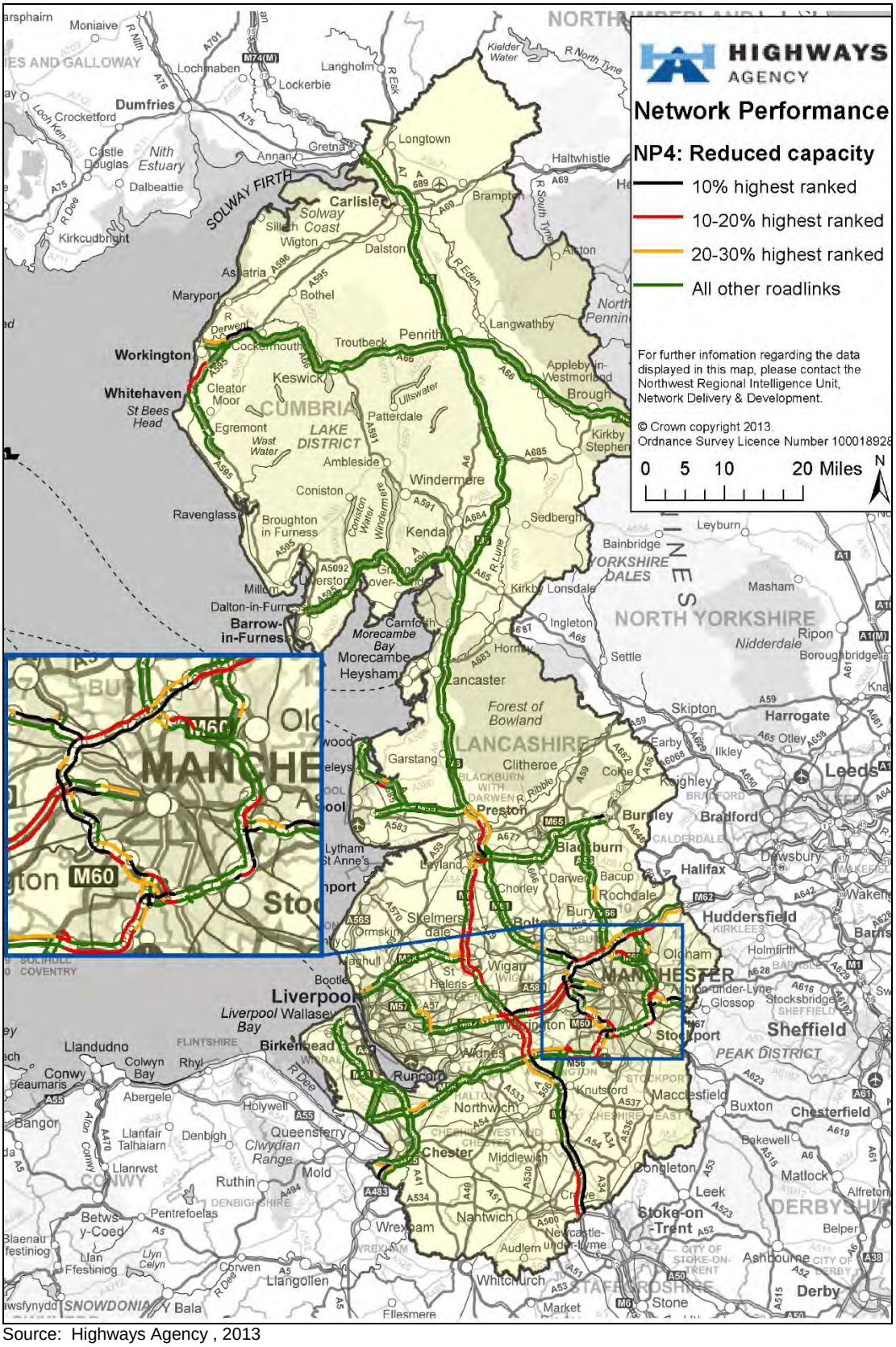
Figure 7 – Average Monthly VHD per km, 2013



Source: Highways Agency , 2013

5.19 Reduced network capacity is shown in Figure 11, the stretch of the M60 between Junction 18 and Junction 22 of the M62 (anticlockwise) is ranked in the highest 10% indicating that this stretch of the motorway will experience prolonged busy periods.

Figure 8 – Network Capacity



Source: Highways Agency , 2013

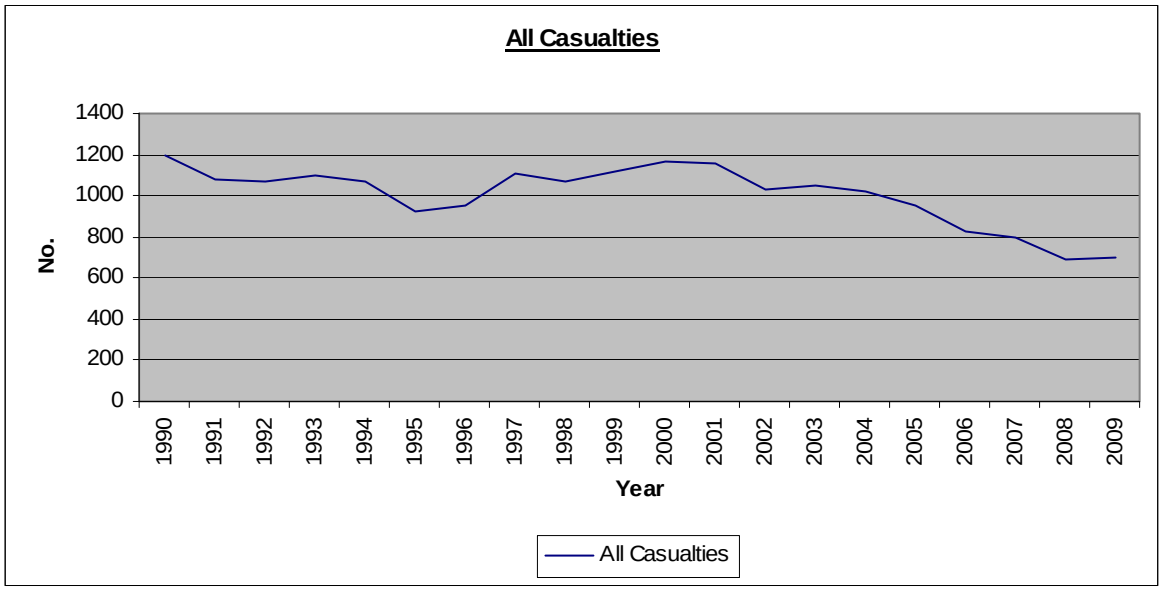
5.20 The close spacing of junctions on all three motorways in the Borough combined with the large volume of traffic using the motorway for short distances results in a

considerable amount of lane changing, often causing significant disruption to traffic flow. Steep gradients on either side of the Irwell Valley between Junctions 15 and 17 compound this problem on the M60. Congestion also impacts on the local road network as traffic is unable to access the motorway. This has an adverse effect on pedestrians, cyclists, local residents and buses passing through the motorway junctions

Road Safety

5.21 Road accident casualties in Bury have declined in recent years. There has been an approximate 37% reduction in total casualty numbers over the last ten years (1999 to 2009).

Figure 9 – Road Accident Casualties - 1990 - 2009



Source: GMTU Transport Statistics, 2009

5.22 There were 338 accidents in Bury during 2011 resulting in 445 causalities. This compares with an average of 1026 causalities in the base years (the average annual casualties in the years 1994 to 1998 (57% reduction).

5.23 There were 59 killed or seriously injured (KSI) casualties in 2011 compared with an average of 72 KSI in the base year (18% reduction). This remains above the LTP2 target of 36 (50% causality reduction on 1994-1998 baseline by 2010).

5.24 Table 13 highlights the location of road traffic collisions between 2008 and 2010. Over the two year period, East ward had the greatest number of collisions over the three year period (189) whilst Tottington had the least amount of collisions (28). The Motorways witnessed the highest number of killed or seriously injured collisions (20), whilst Holyrood saw the least (4).

Table 13 - Road Traffic Collisions– 2008 - 2010

Ward Name	Total KSI Collisions	Total Slight Collisions	Total Collisions
Motorways	20	155	175
East	17	172	189
Radcliffe West	15	35	50
Redvales	14	80	94
Moorside	12	58	70
North Manor	10	28	38
Tottington	9	19	28
St Mary's	8	58	66
Sedgley	7	72	79
Pilkington Park	7	71	78
Elton	7	47	54
Radcliffe North	7	42	49
Church	6	52	58
Ramsbottom	6	45	51
Besses	6	44	50
Unsworth	5	39	44
Radcliffe East	4	72	76
Holyrood	4	46	50
Total:	**164**	**1135**	**1299**

Source: Bury Council – Traffic Management Strategies and Programmes, 2011
NOTE; Data relates to collisions recorded in the three-year period from 1-April 2008 to 31-March 2010 inclusive. The numbers of collisions quoted for each ward may not necessarily be exact. Many ward boundaries follow the centrelines of roads (including A56, A665 & B6222). Collisions recorded on such roads have therefore been allocated to one or other of the wards concerned at the discretion of the compiler

Air Pollution and Climate Change

5.25 Growth in road traffic causes concern over not only congestion and road safety but also its contribution to climate change and local air pollution.

5.26 Table 14 highlights that road transport emissions are a significant contributor to carbon emissions within Bury, however these emissions have declined slightly between 2005 and 2010 (down 3.8%).

5.27 In 2010, at 6.4 tonnes per capita Bury had lower per capital CO2 emissions than the North West (7.8 tonnes per capita) and UK (7.6 tonnes per capita)

Table 14 – Bury's CO2 Emissions 2005 – 2010

	Industry and Commercial	Domestic	Road Transport	Total CO2 emissions (t)	Population mid-year estimate (thousands)	Per capita emissions (t)
2005	410.8	475.0	450.6	1,336.4	181.1	7.4
2006	410.8	474.7	460.5	1,346.0	181.2	7.4
2007	401.0	461.0	463.4	1,325.4	181.7	7.3
2008	391.9	454.8	439.5	1,286.2	181.6	7.1
2009	328.9	405.9	431.8	1,166.6	182.6	6.4
2010	346.5	430.4	433.3	1,210.2	183.8	6.4
% Change since 2005	-15.7	-9.4	-3.8	-9.4	1.5	-13.5%

Source: Department of Energy and Climate Change data, available from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/136018/Full_dataset.xls#'Per capita'!A1
Note: These figures include emissions from motorways which are not the responsibility of the Council.

5.28 5.32 In order to address the impacts of road transport, road network emissions have been analysed to establish which routes are affected most.

5.29 Table 15 identifies the carbon emissions from road transport.

Table 15 – Carbon Emissions from Road Transport 2005 -2009

Year	A roads	Motorways	Minor roads	Other	Total Road
2005	97	221	133	2	**452**
2006	95	223	141	2	**460**
2007	93	226	143	2	**463**
2008	89	213	137	2	**441**
2009	88	211	132	2	**432**

Source: DECC 2009 Carbon Dioxide Emissions at LA and Regional Level - http://www.decc.gov.uk/en/content/cms/statistics/climate_stats/gg_emissions/uk_emissions/2009_laco2/2009_laco2.aspx

5.30 Table 15 highlights that the majority of road emissions in Bury are generated on motorways. However, as discussed in paragraph 5.27, carbon emissions from road transport have reduced over the period 2005-2009, with the biggest decline on A roads (down 9.5%).

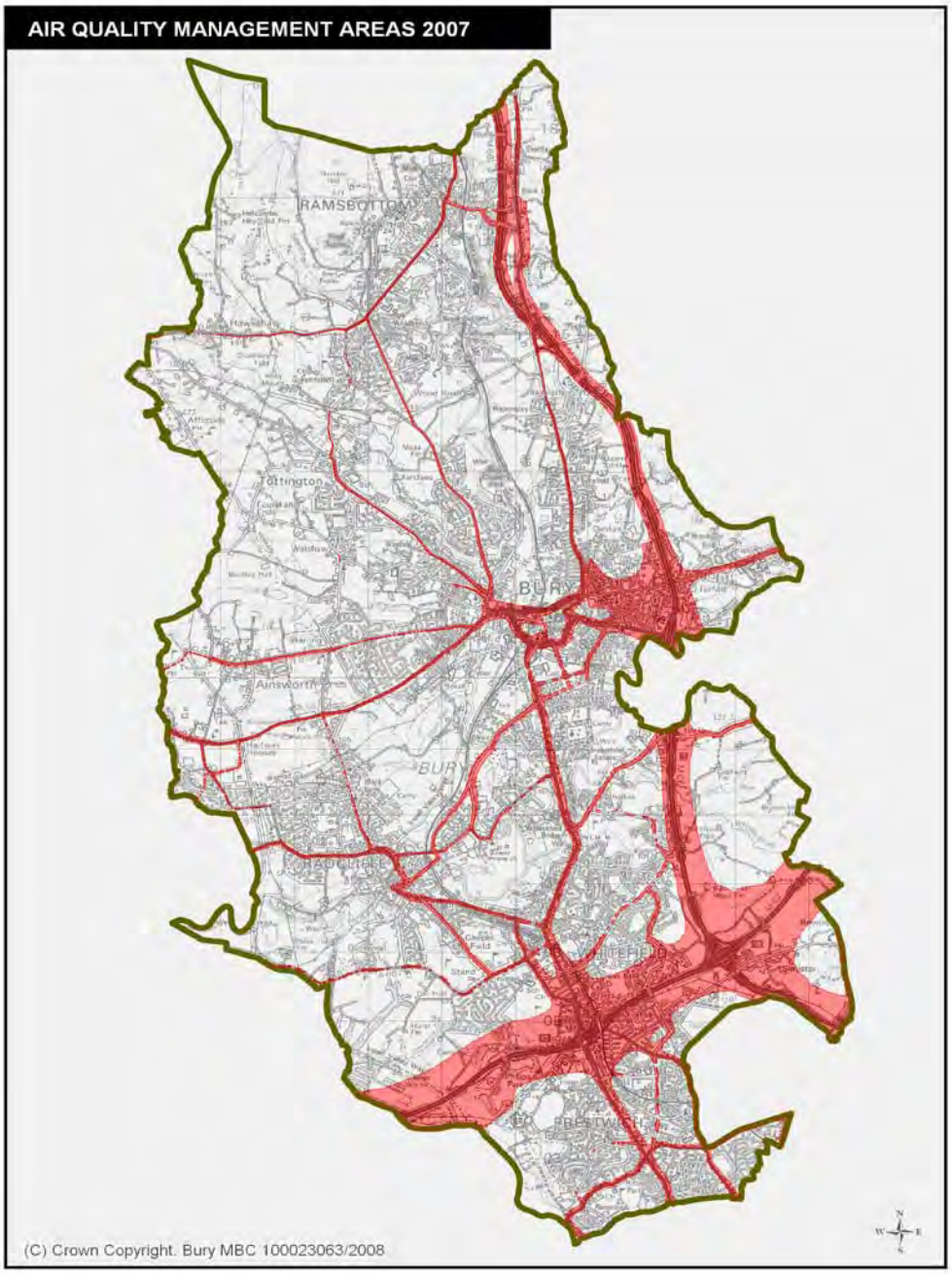
5.31 Coupled with high levels of CO2 emissions from road transport, the Government target for the pollutant known as nitrogen dioxide is not likely to be met in some areas of the Borough. The main source of this pollutant is also road transport. High levels of nitrogen oxide and other pollutants which significantly impact upon local air quality can have significant health implications for residents.

5.32 In areas where Government targets are not likely to be met, the Council is required to designate Air Quality Management Areas and develop Air Quality Management Plans which identify measures to improve air quality.

5.33 Figure 10 identifies Bury's Air Quality Management Area (AQMA) and clearly highlights the link between the AQMA and the major roads and motorways in the Borough.

5.34 18,455 properties (21.8%) currently fall within the AQMA, the majority of these are found in Bury East and Whitefield and Unsworth.

Figure 10 – Air Quality Management Areas



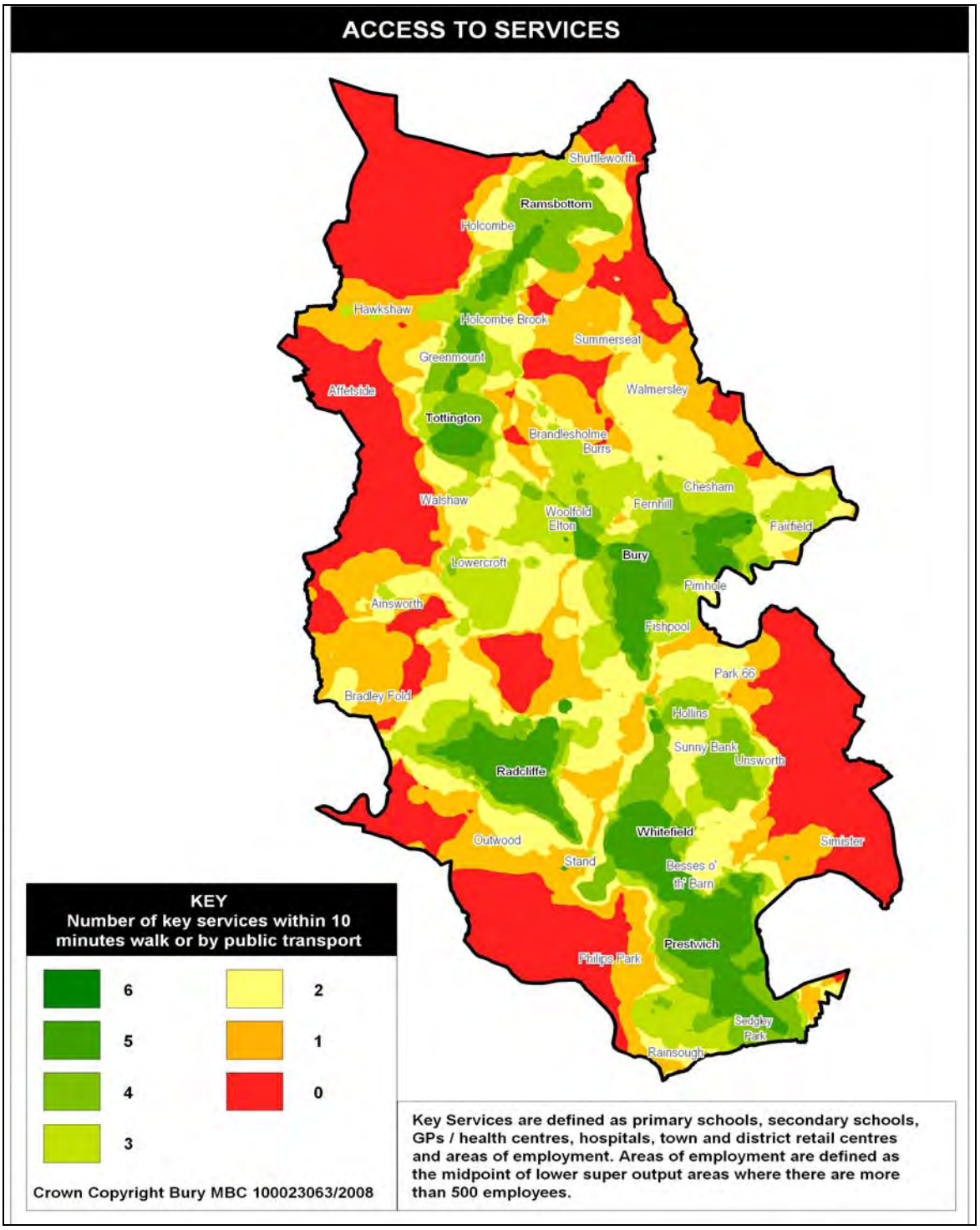
Accessibility

5.35 Accessibility relates to the ease with which people can get to key services and opportunities, such as places of work and learning, health care, shops and leisure venues. Accessibility is not simply concerned with transport, but also about the location, design and delivery of services, it is not enough to simply locate new development near existing services, it is also important to ensure that barriers such as busy roads or complex junctions are removed. Poor accessibility can have a significant impact on people's quality of life and the development of sustainable communities.

5.36 Accessibility within the Borough has been mapped using the DfT approved 'Accession' software. This has identified locations considered to have poor access to healthcare, further education, employment and fresh food by public transport.

5.37 Figure 11 below shows that Bury's areas of high accessibility are primarily the six towns of Bury, Radcliffe, Ramsbottom, Tottington, Prestwich and Whitefield and radial road corridors of the A56 and the A58. The villages of Affetside and Simister have poor access to services by public transport largely because they are not located on heavily trafficked road corridors.

Figure 11 – Access to Services



Source: Bury Council, 2011

5.38 It is important to note, however, that accessibility is not only influenced by where development is located and the available transport links. A number of other factors must also be considered including:

- the distance people are willing to travel to employment opportunities, both within the Borough and to destinations beyond the district boundaries;
- whether the local community has the appropriate skills and training to work in the areas they are connected to; and
- the culture and diversity of the local community.

6 Future Transport Challenges

6.1 Chapters 3 and 4 of this topic paper have outlined the current transport and accessibility context within the Borough whilst Chapter 5 has identified the main transport issues and problems currently impacting upon the Borough. The key points to emerge from these chapters and which the LDF will need to consider, include:

- Bury has an extensive primary route network and a well connected public transport system;
- 50.6% of residents commute out of the Borough for work. A third of commuters travel to the regional centre, whilst a further third commute to authorities adjacent to Bury;
- There are high levels of car ownership in Bury with 76% of households owning at least one car. As a result the private car plays a significant role in the movement of people across the Borough with cars accounting for 84% of traffic on the Borough's A roads in 2009;
- High levels of car ownership disguise the fact that 24% of households do not have access to a car. **The LDF will need to ensure equal access to housing, employment and services for all the community through an integrated public transport network and through locating and delivering services so people can access them via non-car modes;**
- The private car is the most popular form of travel to work. Higher rates of public transport usage are found in the South, particularly in Whitefield and Prestwich. Levels of accessibility by public transport and on foot are much poorer in the north of the Borough and in semi rural areas such as Affetside and Shuttleworth. **The LDF will need to consider how it can contribute to making alternatives to the car more attractive and reliable, particularly for shorter distance journeys and for residents who live in the North of the Borough;**
- The private car is the dominant mode of travel to school. **The LDF will need to consider options for the protection and enhancement of safe and convenient pedestrian and cycle routes as well as improved infrastructure and the implementation of School Travel Plans.** Private car travel to school adds congestion at peak times, increased risk of road accidents, increased pollution and CO^2 emissions and other social issues such as childhood obesity.
- Significant private car use has resulted in increasing emission levels of both carbon dioxide and nitrogen oxide which are contributing to negative impacts upon climate change and more locally the designation of Air Quality Management Areas within the Borough. **The LDF will need to contribute to delivering an integrated public transport system and ensure a policy framework is in place which promotes sustainable travel options and encourages a mode shift.** It is recognised that Air Quality Management Areas relate to many of the Borough's main transport corridors. Where development is proposed in these areas, **the LDF will need to ensure that Low Emission Strategies and/or mitigation measures are required.**
- **The need to ensure joint working with the Highways Agency, Greater Manchester Joint Transport Team (GMJTT) and Transport for Greater Manchester (TFGM)** to foster a partnership led approach to the production of an agreed programme of future work and actions to ensure LDF issues related to transport are adequately researched, assessed and mitigated.

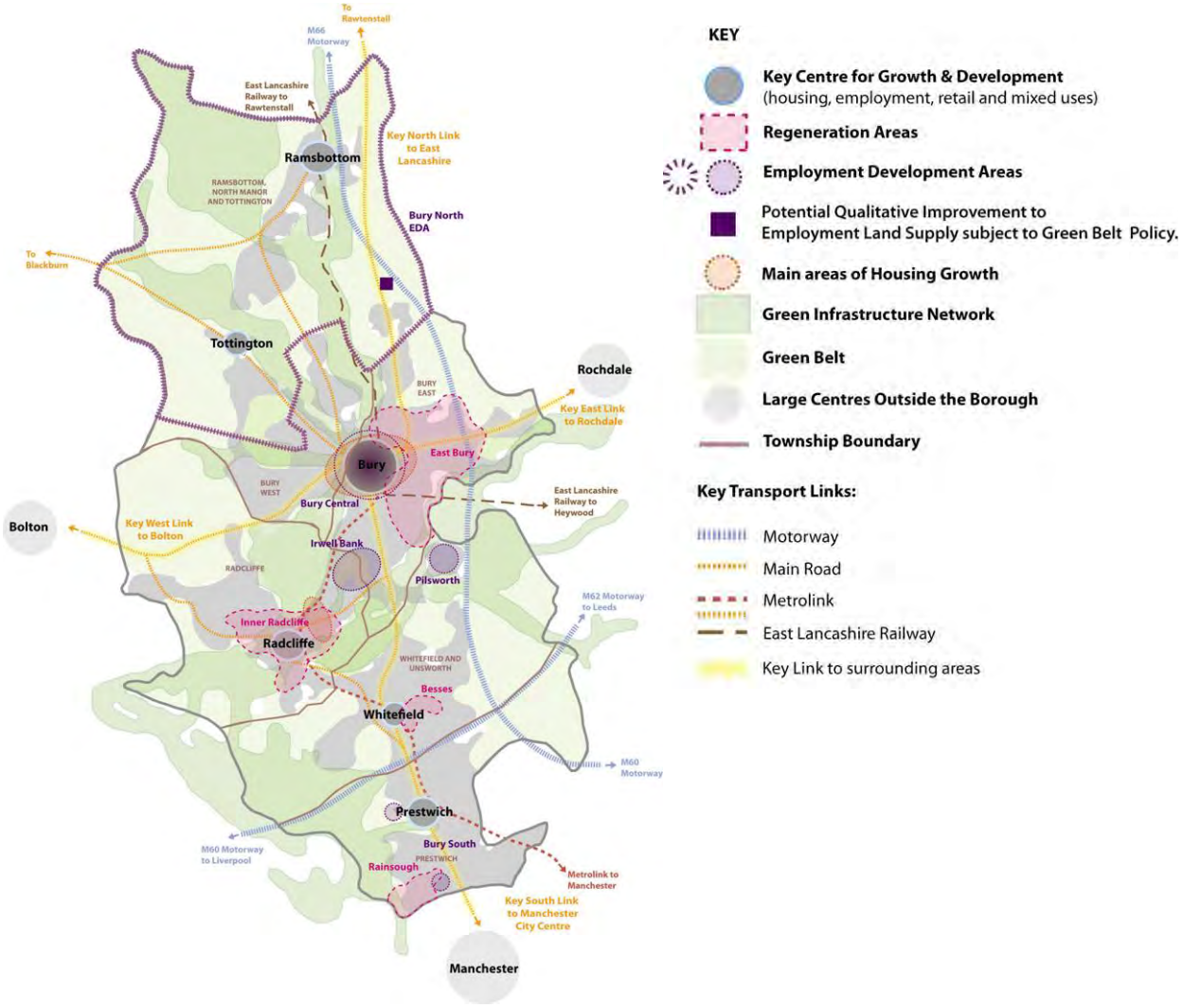
7 Local Development Framework

7.1 Work commenced on the first document in Bury's LDF, the Core Strategy, in February 2006 when the Council undertook informal consultation on the Core Strategy Key Issues Discussion Paper in order to achieve consensus as to what the most prevalent issues facing the Borough were. The Council progressed through the Issues and Options stage and onto the Preferred Options which described the Council's preferred approach towards the future development in the Borough in May 2008. The Council is now in the process of developing the Proposed Submission version of the Core Strategy which the Council will submit to the Secretary of State for independent examination.

7.2 Figure 12 below identifies the preferred location for future development within the Borough. Development is directed towards accessible and previously developed locations to encourage regeneration using a sequential approach. In particular, future growth will be directed towards:

- The key centres of Bury, Ramsbottom, Radcliffe, Prestwich, Tottington and Whitefield;
- Areas accessible to the Borough's main regeneration areas of East Bury, Inner Radcliffe and the Besses area of Whitefield; and
- Accessible locations along the Borough's sustainable transport corridors.

Figure 12 – Preferred Location of Future Development



Source: Bury Core Strategy, July 2013

7.3 As part of the evidence base for the Core Strategy, the Council has produced a Strategic Housing Land Availability Assessment (SHLAA) (April 2013) and Employment Land Review (ELR) (April 2013). Whilst it is important for both documents to demonstrate that numerical housing (400 dwellings per annum) and employment land (approximately 50-62 hectares) provision will be met over the plan period, it is also important to ensure that development will be delivered in accordance with the spatial distribution advocated by the Core Strategy (Figure 14), is supported by appropriate infrastructure and seeks to address the existing transport challenges identified in Chapter 6.

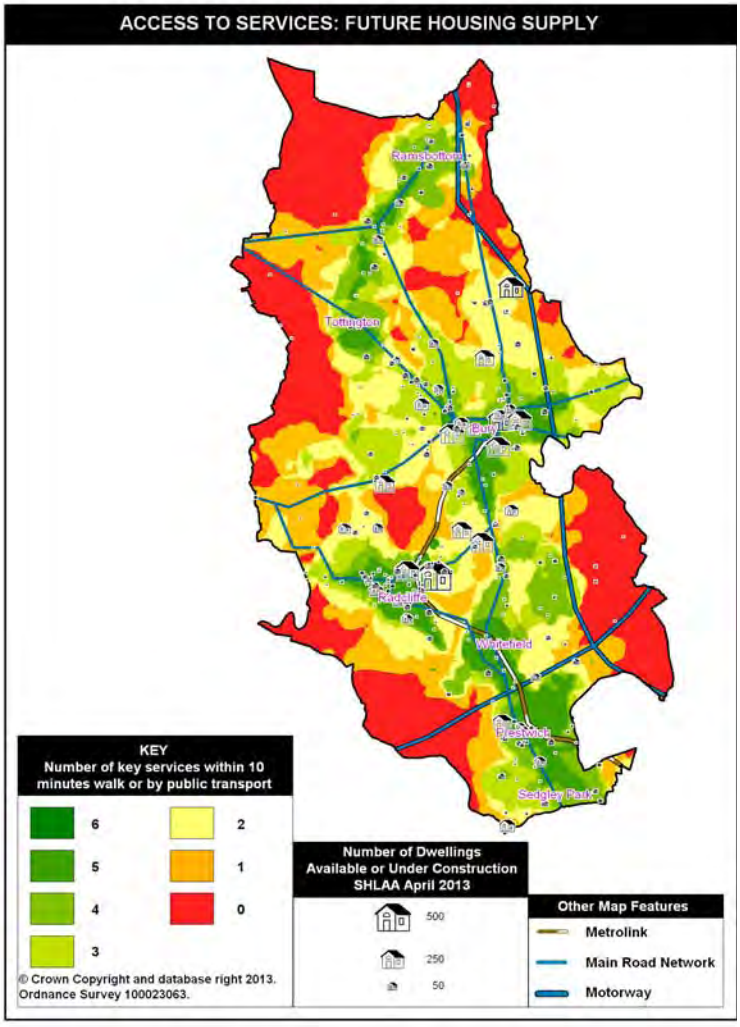
Future Residential Development

7.4 The LDF is seeking to concentrate future residential development within the urban area as it contains the vast majority of the Borough's existing services and provides good access to public transport facilities. In addition, sites in locations which seek to minimise the need to travel will be promoted.

Accessibility

7.5 Figure 13 and Table 16 present the location and accessibility of sites identified in the 2013 SHLAA.

Figure 13 – Accessibility of Future Housing Supply



Source: Bury Council, 2013

Table 16 – Accessibility of 2013 SHLAA Sites

	Number of services within 10 minutes walk or public transport							
	0	1	2	3	4	5	6	Total
Number of Sites *	13	13	49	45	78	86	0	284
Proportionally allocated dwellings available and under construction #	31	479	1543	959	1867	1762	0	6641
Site area within each zone (hectares)	4.5	18.3	53.1	37.0	54.3	43.2	0	210.3

Source: Bury Council, 2013

* Number of accessible services is based on the centre of the site

Most sites overlap several accessibility zones, therefore the number of dwellings available and under construction has been divided based on the proportion of the site within each zone

7.6 A large proportion of residential sites are located within the existing urban areas with 30% located within 10 minutes walk or public transport time of 5 key services (1,762 dwellings). A further 27% are located within 10 minutes of 4 key services (1,867 dwellings). However no sites included in the future supply are located within 10 minutes of all 6 key services.

7.7 Locating future residential developments in accessible areas should reduce reliance on the private car and the associated impacts on traffic growth and air quality, two key requirements of the LDF. In addition ensuring future residential developments can access key services is essential to reducing social exclusion, particularly in East Bury, where there are low levels of car ownership.

Air Quality

7.8 As well as directing development towards the urban area, the Core Strategy is also seeking to direct development to accessible locations along the Borough's sustainable transport corridors. However the Strategy is mindful that AQMA relate to many of these transport corridors.

7.9 Chapter 6 highlighted the extent of the AQMA within Bury, Table 17 identifies that 1652 (25%) dwellings which are available or under construction (as identified in the 2013 SHLAA) will be located within this designated area. The potential impacts of new development within the AQMA will need to be determined through Air Quality Impact Assessments submitted with individual planning applications and which assess the potential impacts of a development both separately and cumulatively with other sources of pollution in the vicinity. It may be appropriate in some circumstances for developers to develop Low Emission Strategies or to fund mitigating measures elsewhere inside the AQMA to offset any increase in local pollutant emissions as a consequence of the proposed development.

Table 17 – No. of Dwellings identified in 2013 SHLAA located in AQMA

Total Dwellings Available and Under	Total Site Area (ha)	Dwellings in AQMA*		Site Area in AQMA	
No.	Ha	No.	%	Ha	%
6641	210.3	1652	24.9	41.9	19.9

Source: Bury Council, 2013

* Proportional split based on individual site area

Congestion

7.10 In previous versions of the Transport Topic Paper, the Council utilised the Highways Agency Traffic Impact Assessment Tool (TIAT) and the PENELOPE toolkit to assess the impact proposed new development identified within the Strategic Housing Land Availability Assessment (SHLAA) and the Employment Land Review (ELR) may have on the highway network.

7.11 Both evaluate the potential trip generation of a development site and identify the cumulative impact that could arise in each of the Borough's wards should all developments identified in the SHLAA and ELR be completed by 2028.

7.12 Unfortunately neither of these tools were available for use in the 2013 update of the Topic Paper, however it was still felt useful to include the results of the analysis provided by TIAT and PENELOPE in 2011. Whilst the SHLAA and ELR have both been updated since 2011, it is considered that the TIAT and PENELOPE outputs are still relevant as there have been limited changes to either the SHLAA or the ELR and it is unlikely that these changes would impact significantly on the outputs.

7.13 In terms of residential development, the TIAT identified that the following wards would witness an impact of more than 100 two way trips on any link on the strategic road network (SRN):

- Church;
- East;
- Elton;
- North Manor;
- Radcliffe East; and
- St Mary's

7.14 When considering the cumulative impact of the proposed residential developments, the TIAT identified that by 2028, stress levels on the following motorway junctions would be greater than 100% during the morning peak:

- Junctions 18 and 19 (clockwise) on the M60;
- Junctions 1-2 on the M66;
- Junctions 2-3 on the M66;
- Junctions 18-19 on the M62;
- Junctions 17-18 on the M60; and
- Junctions 18-19 on the M60

7.15 The PENELOPE toolkit supported these findings and concluded that the impact of the additional trips will be experienced most notably between Junction 2 of the M66 and Junction 18 (Simister Interchange) of the M62/M60. Coupled with this, all the main A roads in the Borough will see an increase in trips by 2028.

Future Employment Development

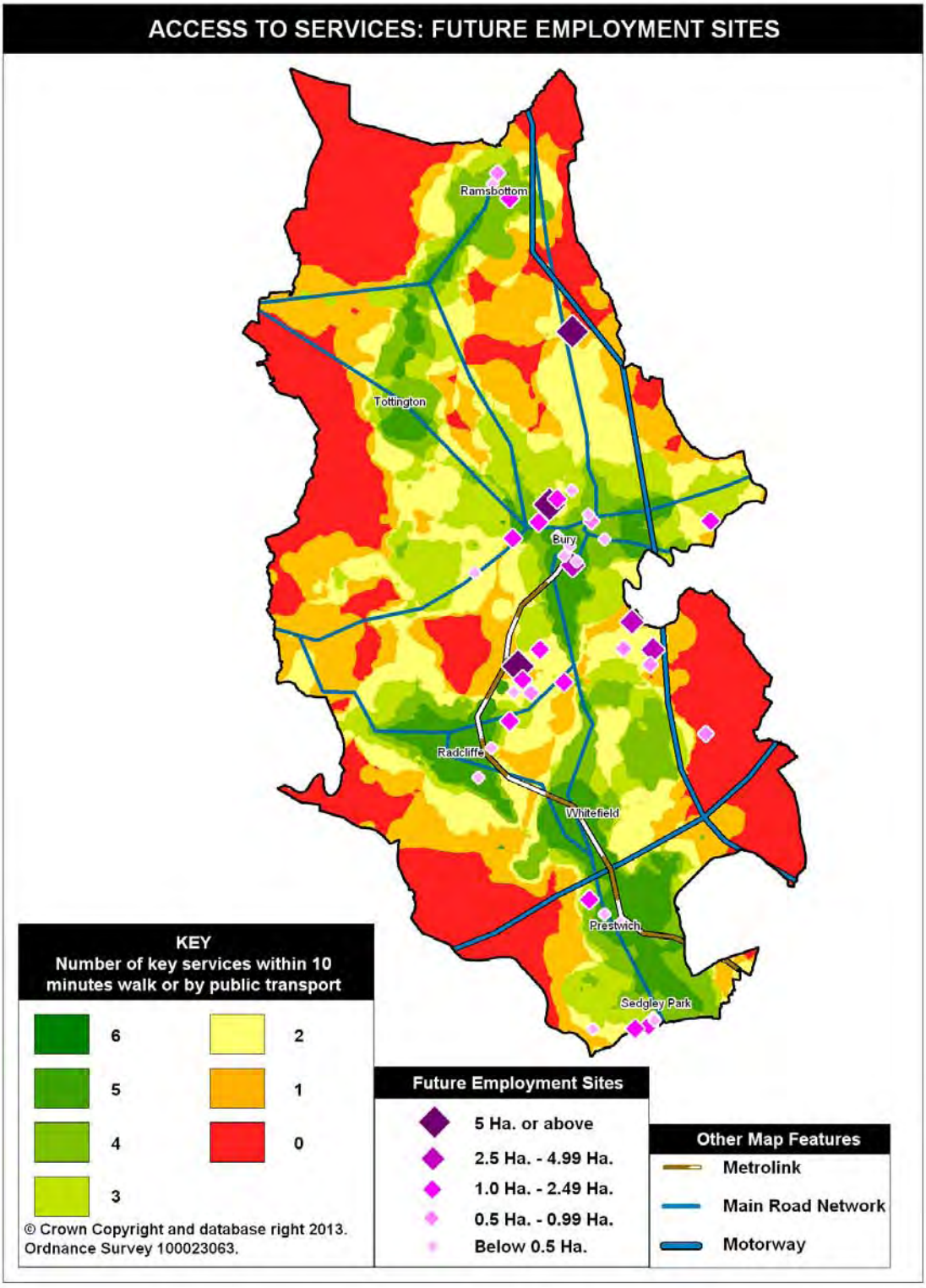
7.14 There is currently a significant geographic disparity in the dispersal of employment land with the majority concentrated in the traditional industrial areas of Bury and Radcliffe and distinct deficiencies in both the north and south of the Borough.

7.15 The Bury ELR 2013 has sought to identify sufficient land to meet future employment land requirements whilst also seeking to redress this imbalance and ensure equal access to employment opportunities.

Accessibility

7.16 Figure 14 and Table 18 identify the location and accessibility of potential employment sites.

Figure 14 – Accessibility of 2013 Future Employment Land Supply



Source: Bury Council, 2013

7.17 22% of potential employment sites are within 10 minutes walk or public transport time of 5 key services whilst a further 24% are within 10 minutes of 4 key services. Good access from future employment sites to other key services will encourage more linked trips (those which serve more than one purpose).

Table 18 – Accessibility of 2013 Future Employment Land Supply

	Number of services within 10 minutes walk or public transport							
	0	1	2	3	4	5	6	Total
Number of Sites *	1	5	11	6	10	9	0	41
Site area (hectares) #	1.6	15.6	28.0	12.4	6.2	5.1	0	69

Source: Bury Council, 2013
* Number of accessible services is based on the centre of the site
# Site area is based on the actual site area within each accessibility zone

Air Quality

7.18 10.9ha or 15.8% of new employment land is proposed to be located within the existing AQMA. As discussed earlier, where new employment development is proposed within the AQMA, the potential impacts on air quality will need to be determined through Air Quality Impact Assessments submitted with individual planning applications. Where necessary, Low Emission Strategies or appropriate mitigation measures will be required.

Table 19 – ELR Site Area located in AQMA

Site Area (ha)	Area within AQMA (ha)	% of site area within in AQMA
69	10.9	15.8

Source: Bury Council, 2011

Congestion

7.19 When considering the cumulative impact of the proposed employment developments, the TIAT identified that by 2028, stress levels on the following junctions would be greater than 100% during the morning peak:

- Junctions 18 and 19 (clockwise) on the M60;
- Junctions 1-2 on the M66;
- Junctions 18-19 on the M62;
- Junctions 17-18 on the M60; and
- Junctions 18-19 on the M60

7.20 In line with the analysis carried out on proposed new residential development, the PENELOPE toolkit concluded that the proposed employment development would result in significant additional **trips on the M60, M66 and A56**.

Conclusions

7.21 Tables 16 and 18 identify that a large proportion of proposed residential and employment development is located within the existing urban areas and has good access to key services.

7.22 The least accessible service is Fairfield Hospital. The hospital is located to the east of the Borough and consequently only a small part of the Borough is within 10 minutes walk or public transport time of the hospital.

7.23 Hospitals have specific transport needs and associated traffic and transportation issues. NHS guidelines recommend the production of travel plans by hospitals to address the problems of travel to and from sites, and to promote the health benefits of reducing the reliance on the private car. Fairfield Hospital currently does not have a Travel Plan however discussions are in place to develop one.

7.24 Tables 17 and 19 highlighted that 20% of proposed residential land and 16% of proposed employment land is located within the existing Air Quality Management Area (AQMA). Whilst any applications for new development within an AQMA will be treated on their own merit, more weight, for example, may need to be given to air

quality considerations where a development would have a significant, adverse impact on air quality. The Council will seek to ensure the production of Low Emission Strategies and/or mitigation measures in all developments which impact on air quality.

7.25 The PENELOPE analysis highlighted that the **M60, M66 between Junction 2 and Junction 18 and the A56** will all experience a significant increase in trips (between 1,000 and 1,250 additional trips by 2028) as a result of the proposed residential and employment development over the LDF plan period. As traffic management on Motorways is the responsibility of the Highways Agency, the Council is working closely with the Highways Agency to identify measures designed to reduce the number of car based trips associated with the planned development.

7.26 The LDF will also need to consider the impact on the public transport network and ensure that new development does not have an adverse impact on existing or future public transport operations. The operation of the public transport within Bury is conducted by Transport for Greater Manchester (TFGM) and therefore it will be necessary to work closely with TFGM to ensure that where extra traffic is generated by new development and which will hinder the operation of existing services, mitigation measures are identified and implemented.

8 LDF Transport Modelling

8.1 A transport modelling study was undertaken on behalf of the Greater Manchester (GM) Authorities to investigate the potential impacts on the transport network of the ten core strategies currently being produced. The study involved using information derived from each district's Strategic Housing Land Availability (SHLAA) and Employment Land Review (ELR)[12] coupled with the land use and transport forecasting models that have been developed for the Greater Manchester sub-region. The models assume levels of economic growth that are consistent with the Greater Manchester Forecasting Model (GMFM) Accelerated Growth scenario.

8.2 Whilst the SHLAA and ELR have both been updated since the GM Transport Modelling took place, it is considered that the outputs from the modelling are still relevant as there have been limited changes to either the SHLAA or the ELR and it is unlikely that these changes would impact significantly on the model outputs. However, Bury's LDF Core Strategy plan period is 2013 – 2029 and not 2011 – 2026 as proposed in the model.

8.3 The model outputs consider the impacts both within Bury and in neighbouring areas and highlight where investment in the transport network is required to ensure delivery of the Core Strategy.

8.4 Two scenario's were considered through the model:

- **Do Minimum Scenario** – this assumes that levels of economic and demographic growth will increase in line with the Greater Manchester Forecasting Model Accelerated Growth Scenario but there will be no additional development after 2011 and no changes to the transport network beyond schemes already committed.

- **Greater Manchester Proposals Scenario** – this incorporates proposals for the development of sites up to 2026 identified in the emerging LDF's and a package of planned transport interventions, with the assumptions made within the Do Minimum scenario.

8.5 The outputs from the model presented in the topic paper assume that all the developments proposed within Bury's LDF up to 2026 are completed but not necessarily occupied, and that all the planned GM transport schemes are constructed (although it must be noted that there are no such schemes in Bury). The expansion of the Metrolink network across Greater Manchester was included in the model and this will have an affect on travel patterns in Bury. Improved access by Metrolink between Bury and other destinations within Greater Manchester is likely to encourage a modal shift and have an impact on the number of car journeys on the highway network.

General Trends

8.6 Under the Greater Manchester Proposals Scenario, between 2011 and 2026 Bury is forecast to see:

- A 2% increase in the overall population;
- An 8% increase in the number of households;
- A 13% increase in the number of jobs

Changes in Trip Making

8.7 Table 20 identifies changes in the number of trips to, from and within Bury between 2011 and 2026. Increasing levels of population, households and employment all

[12] Bury's 2009 SHLAA and ELR were used in the LDF Transport Modelling.

appear to result in significant increases in car trips across all time periods. Conversely, public transport trips are predicted to decline.

Table 20 – Change in Trips to/from/within Bury – Greater Manchester Proposals Scenario

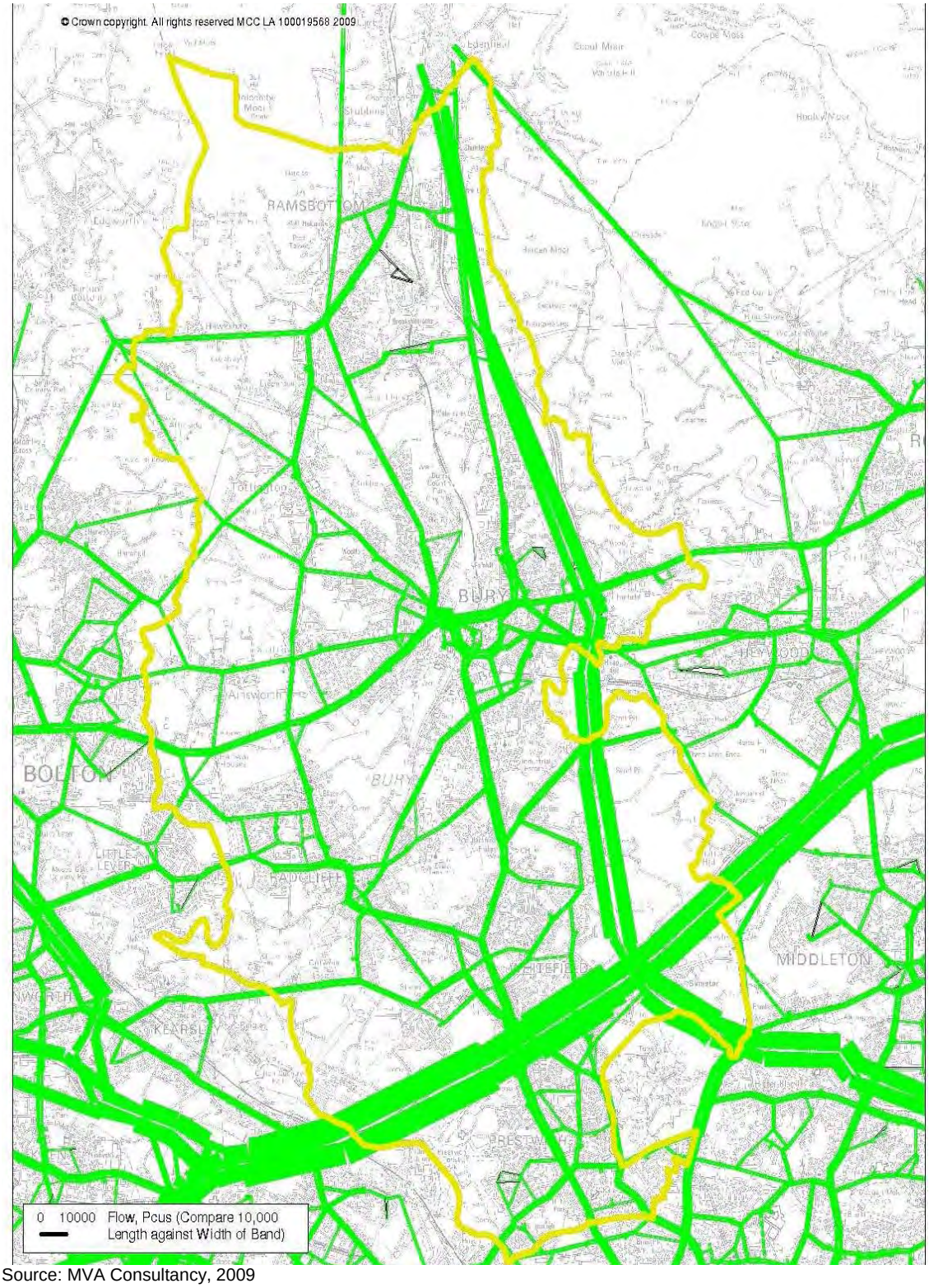
	2011	2026	Difference	GM Difference
Car				
Morning Peak	120,461	137,341	+14%	+15%
Inter-peak	192,842	219,370	+14%	+15%
Evening Peak	151,675	171,884	+13%	+14%
Rest of Day	73,878	88,330	+20%	+19%
Total	**538,856**	**616,925**	**+15%**	**+15%**
Public Transport				
Morning Peak	18,716	18,322	-2%	-2%
Inter-peak	22,269	20,706	-7%	-6%
Evening Peak	17,421	16,953	-3%	-3%
Rest of Day	4,091	4,183	+2%	-1%
Total	**62,498**	**60,165**	**-4%**	**-4%**

Source: MVA Consultancy, 2009

Impact on Highway Network

8.8 The forecast morning peak traffic flows for 2026 are shown in Figure 15. The morning peak flows are predicted to be heaviest on the motorways, the A58 and the A56.

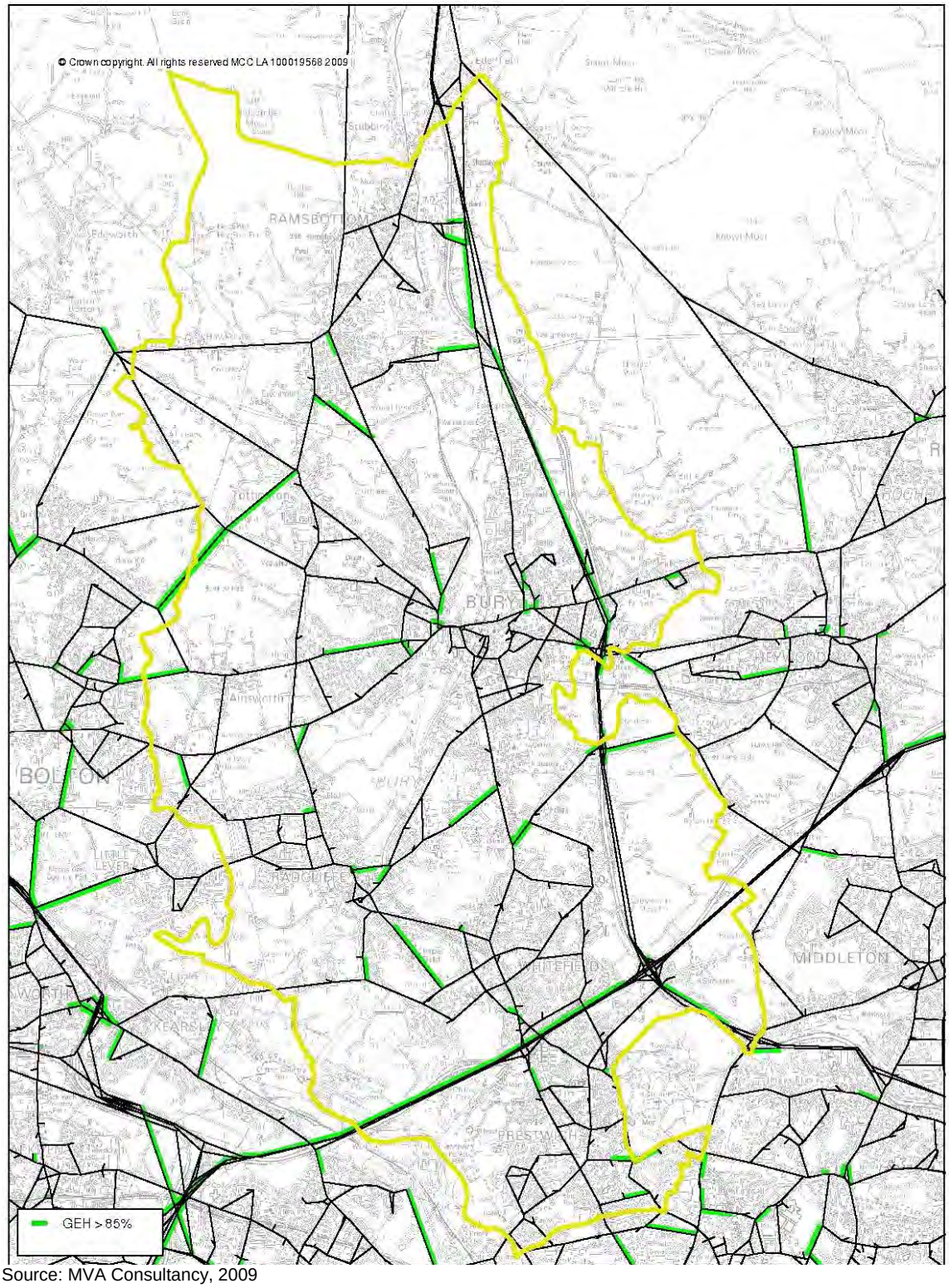
Figure 15 – 2026 Morning Peak Traffic Flows in Bury – Greater Manchester Proposals Scenario



Source: MVA Consultancy, 2009

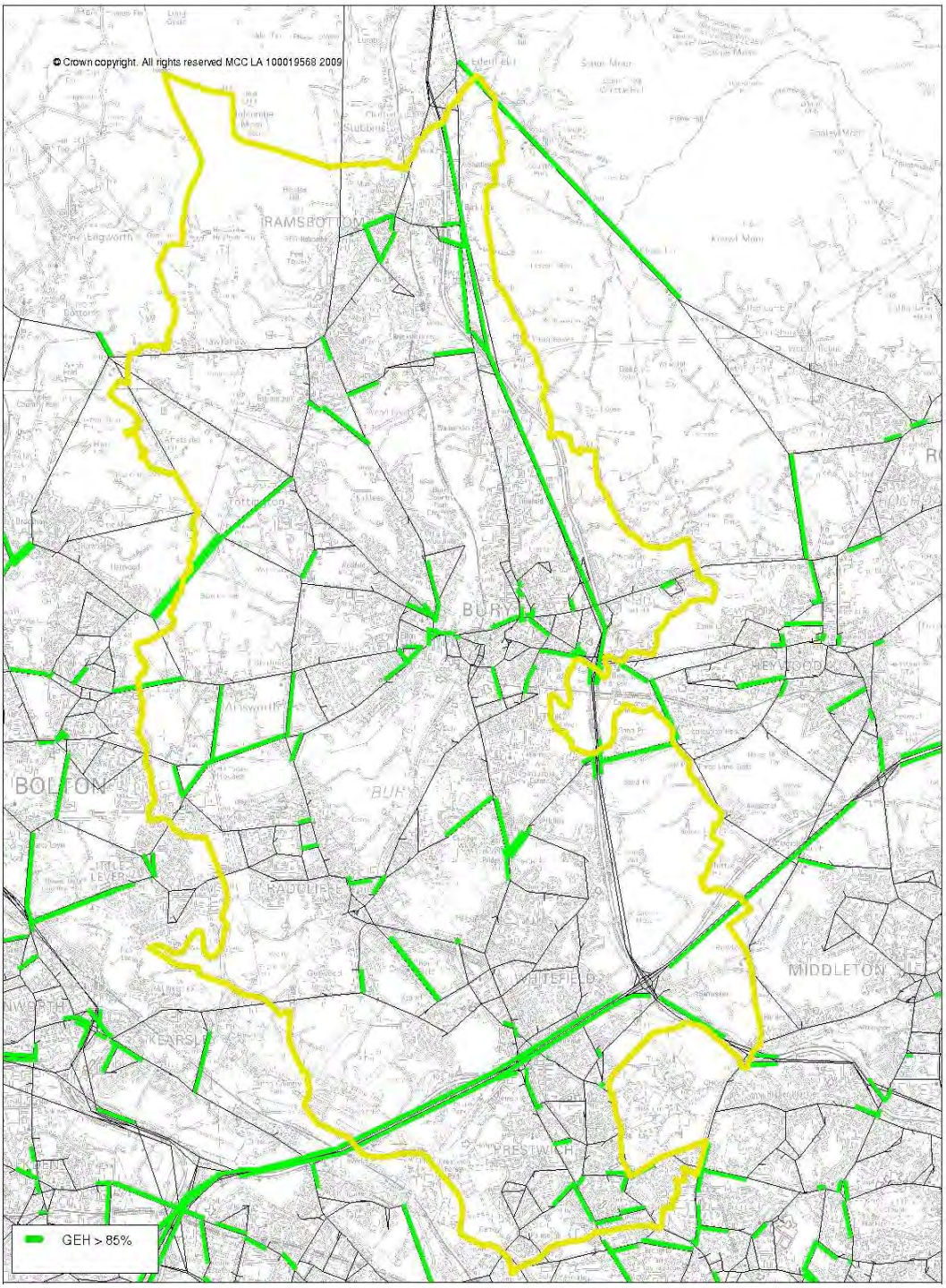
8.9 Figure 16 shows the links in Bury where the road capacity exceeds 85% in 2011 and Figure 17 presents the same information for 2026. Although only a few sections of the road network in Bury are approaching capacity in 2011, by 2026 the motorways passing through the district are at or exceeding capacity and the roads approaching Bury town centre are showing capacity issues by 2026. There are also some noticeable capacity issues to the west of the district.

Figure 16 – Road Links in Bury with Capacity Greater than 85% in 2011 – Greater Manchester Proposals Scenario



Source: MVA Consultancy, 2009

Figure 17 – Road Links in Bury with Capacity Greater than 85% in 2026 – Greater Manchester Proposals Scenario



Source: MVA Consultancy, 2009

Impact on Journey Times

8.10 The forecast changes on Motorway journey times within Bury are shown in Table 21 Generally journey times are increasing along all motorway sections with the exception of the M66 southbound between the A58 and the M60 which shows a slight decrease in the morning peak.

8.11 The biggest increase in journey time is forecast to be on the M60 Anticlockwise especially in the evening peak on the section between the A576 and the M66.

Table 21– Change in Motorway Journey Times in Bury – Greater Manchester Proposals Scenario

	Morning			Evening		
	2011	2026	Diff	2011	2026	Diff
M60 Clockwise						
A666-A56	4:08	4:26	+7%	3:51	4:11	+9%
A56-M66	3:53	3:58	+2%	3:10	3:35	+13%
M66-A576	1:55	2:10	+14%	1:35	2:00	+27%
Total	**9:56**	**10:34**	**+6%**	**8:35**	**9:46**	**+13%**
M60 Anticlockwise						
A576–M66	**1:14**	**1:44**	**+40%**	**3:08**	**6:39**	**+113%**
M66-A56	1:49	2:15	+23%	2:11	2:14	+2%
A56-A666	2:39	3:13	+21%	2:43	3:09	+17%
Total	**5:43**	**7:12**	**+26%**	**8:01**	**12:02**	**+50%**
M66 Northbound						
M60-A58	2:54	3:09	+9%	3:37	4:18	+19%
A58-A56/6576	5:00	5:23	+8%	7:50	8:27	+8%
Total	**7:54**	**8:32**	**+8%**	**11:27**	**12:45**	**+11%**
M66 Southbound						
A676/A56-A58	8:27	11:10	+32%	6:06	6:46	+11%
A58-M60	3:39	3:30	-4%	2:57	3:33	+20%
Total	**12:06**	**14:41**	**+21%**	**9:03**	**10:19**	**+14%**

Source: MVA Consultancy, 2009

8.12 Table 22 shows the changes in journey times on the key radial routes into Manchester city centre, which show significant increases (40-50%) inbound in the morning peak and approximately 30% in the evening peak. These changes result in an additional journey time of between 10 and 15 minutes for people travelling between Bury and Manchester city centre.

Table 22– Change in Bury to Regional Centre Journey Times – Greater Manchester Proposals Scenario

	Morning Peak			Evening Peak		
	2011	2026	Diff	2011	2026	Diff
Bury to Regional Centre						
M66/M60/A576	25:31	39:02	+53%	22:22	23:32	+5%
A56	30:58	44:36	+44%	26:01	28:19	+9%
Regional Centre to Bury						
A576/M60/M66	20:38	25:36	+24%	26:58	35:51	+33%
A56	27:35	32:17	+17%	33:05	42:27	+28%

Source: MVA Consultancy, 2009

8.13 The model forecasts also predict significant impacts on some of the other key routes in Bury (Table 23). The greatest increases are seen along the A56 between Edenfield and Bury in the evening peak. In the morning peak there are forecasts to be increases of the order of 30% along the A58 between Bury and Bolton and the A58 between Bury and Rochdale. The outbound route along the A56 to the M60 is also forecast to increase by 42%.

Table 23– Change in Journey Times on Major Routes in Bury – Greater Manchester Proposals Scenario

	Morning Peak			Evening Peak		
	2011	2026	Diff	2011	2026	Diff
Bury IRR Clockwise	9:52	10:16	+4%	9:46	12:37	+29%
Bury IRR Anti-Clockwise	7:28	7:33	+1%	8:29	10:49	+28%
A58 Bury to Bolton (A666)	**17:30**	**22:58**	**+31%**	18:37	18:46	+1%
A58 Bolton (A666) to Bury	**17:30**	**22:58**	**+31%**	18:37	18:46	+1%
A56 Bury to Edenfield (M61)	**15:28**	**20:09**	**+30%**	15:21	17:57	+17%
A56 Edenfield (M61) to Bury	10:57	11:37	+6%	**11:25**	**16:03**	**+41%**
A58 Bury to Rochdale (A6060)	**13:08**	**17:32**	**+34%**	15:03	25:05	+67%
A58 Rochdale (A6060) to Bury	17:38	22:25	+27%	17:09	19:49	+15%
B6222 Bury to Rochdale	16:03	17:27	+9%	16:01	16:52	+5%
B6222 Rochdale to Bury	21:10	24:59	+18%	22:05	28:02	+27%
A56 Bury to M60	**14:29**	**20:36**	**+42%**	12:01	13:01	+8%
A56 M60 to Bury	13:30	15:16	+13%	15:22	16:53	+10%

Source: MVA Consultancy, 2009

Impact on Public Transport

8.14 The forecast changes in public transport boardings and alightings in Bury are shown in Table 24. During the morning peak and inter-peak time periods there is a slight decline in the numbers of boardings and alightings on the bus but a similar increase on the tram. It is likely that the shift away from bus towards tram will be a result of increasing bus journey times with the increased levels of congestion on the road network. In the evening peak bus boardings are unchanged whilst alightings are forecast to increase by 1%. The tram boardings are anticipated to increase by 3% and alightings by 8%. These increases in tram patronage may have an impact on the levels of crowding on tram services, which are already crowded in the peak periods.

Table 24 – Change in Bury Public Transport Boardings and Alightings – Greater Manchester Proposals Scenario

	Boardings			Alightings		
	2011	2026	Diff	2011	2026	Diff
Morning Peak						
Bus	4,184	4,046	-3%	3,992	3,906	-2%
Tram	2,035	2,090	+3%	1,046	1,065	2%
Total	6,219	6,135	-1%	5,038	4,971	-1%
Inter-peak						
Bus	2,807	2,717	-3%	2,545	2,465	-3%
Tram	718	741	+3%	639	665	+4%
Total	3,525	3,458	-2%	3,184	3,130	-2%
Evening Peak						
Bus	3,058	3,052	0	3,741	3,772	+1%
Tram	**670**	**688**	**+3%**	**1,424**	**1,541**	**+8%**
Total	3,728	3,740	0	5,165	5,313	+3%

Source: MVA Consultancy, 2009

Impact on the Environment

8.15 The forecast changes in air pollutants are shown in Table 25. The forecasts have included Department for Transport's guidance that fuel efficiency will improve over time and that engine standards for emissions will continue to improve. This means that despite the increases in traffic levels, NO_x emissions are forecast to reduce by 21% over the period 2011 and 2026. However PM10 and CO2 are forecast to continue increasing, with CO2 projected to increase by 17%.

Table 25 – Change in Environmental Indicators in Bury – Greater Manchester Proposals Scenario

	2011	2026	Diff
NO_x	1,159	918	-21%
PM10	115	122	+6%
CO_2	108,628	126,745	+17%

9 Conclusions

9.1 The LDF Transport Modelling discussed in Chapter 8 has identified where on the transport network, expansion and investment is required in order to deliver the level of planned growth identified in the Core Strategy. The majority of growth proposed in the Core Strategy is focussed within the urban areas of the Borough which are largely well served by a range of transport modes. However, the transport modelling has identified that additional measures, including additional public transport provision, are likely to be required to reduce congestion on the following routes and enable the creation of sustainable developments which allow easy connectivity between homes, jobs, services and facilities:

- The M60 anticlockwise between the A576 and the M66
- The M66 southbound between the A676 and the A56-A58
- The A56 between Bury and Manchester
- The A58 between Bury and Bolton
- The A56 north of Bury
- The A58 between Rochdale and Bury
- The A56 between Bury and the M60

9.2 In addition to the impacts identified through the LDF transport modelling, this transport topic paper has identified a number of additional issues, which if not addressed, will hinder future development within Bury. These include:

- Peak period capacity constraints on the Metrolink network;
- Low public transport patronage levels;
- Poor air quality, particularly along the A56 in the South of the Borough
- A national requirement to reduce CO2 emissions;

9.3 To deliver the Core Strategy and address the associated issues identified above, it is recognised that a partnership approach between the Council, the Highways Agency, Transport for Greater Manchester, private developers and other GM authorities is required at both the local and sub-regional level.

9.4 A protocol arrangement between the 10 GM Authorities, TfGM and the Highways Agency has been implemented. This document sets out the joint working arrangements and shared approach to defining and addressing the transport impacts on the strategic road network of new developments across Greater Manchester.

9.5 As part of the Protocol, the Highways Agency has identified a series of Key Issues for each of the 10 Local Authorities. It is envisaged that these Key Issues will be championed through the protocol and are fundamental factors which will need to be integrated within individual authorities Core Strategy's. The Key Issues for Bury are identified in Table 26.

Table 26 - Protocol Key Issues for Bury

Key Issue	Theme
1	Public Transport patronage and capacity constraints;
2	M60 Junction 19 to Junction 18 Journey times;
3	M66 Corridor (southbound journey times on the approach to Junction 2);
4	Air Quality and the adoption of Low Emission Strategies, particularly with regard to CO2;
5	Delivering accessible development (close to sustainable modes of transport and key services).

9.6 In identifying these issues for Bury, the Highways Agency is keen to ensure that the Core Strategy seeks to address patronage and capacity issues where possible (in

conjunction with public transport providers) to ensure that sustainable travel is a viable alternative when new sites are brought forward. In addition, given the findings of the transport modelling discussed in Chapter 8, the Highways Agency have identified that further investigation of issues associated with journey times along particular sections of the M60 and M66 is required during the development of the Site Allocations DPD. These collective undertakings will also be accompanied by the need for individual assessments where proposed developments are likely to affect the Strategic Road Network. The impact of new development on the air quality levels of existing transport corridors and AQMA will need to be assessed, given the findings of the transport modelling and finally the delivery of sites will need to be continually appraised to ensure that sustainable travel opportunities are maximised.

9.7 The protocol seeks to ensure that satisfactory arrangements are in place to deliver the development planned for the first five years of the emerging Core Strategies and an agreed approach is in place which will allow transport impacts and infrastructure delivery issues in the medium to longer term to be properly addressed. The protocol recognises that due to the nature of funding transport schemes, planned interventions which address the transport impacts of LDF's in the short term (0-5 years) will be confined to those schemes already committed and those that have arisen out of the AGMA Accelerated Transport Package, further details of which are provided in paragraph 9.10.

9.8 The protocol recognises that continual monitoring of new development sites will be required in order to determine the future transport requirements and feasible interventions during the latter phases of the LDF plan period (5-10 and 10-15 years). It will be particularly important to consider the impact of the Highways Agency planned schemes on the strategic network and consider other possible interventions which may need to be incorporated into future LTP reviews.

9.9 The protocol identifies that the impact on the transport network of specific development sites being promoted through the LDF will be assessed both individually and cumulatively, during the development of the Site Allocations DPD, in partnership with the Highways Agency. Sustainable transport measures and any infrastructure improvements required to enable the sustainable delivery of development, will also be identified and appraised in terms of the level of mitigation afforded and will be supported by evidence to demonstrate the deliverability of each measure.

Accelerated Transport Package

9.10 In 2009, AGMA agreed to a prioritised list of transport projects which would be delivered as part of the sub-regional Accelerated Transport Package. The projects were identified on the basis that they can deliver economic benefits for the sub-region. £20million has been earmarked for new or improved park and ride facilities at Metrolink and railway stations across Greater Manchester. Park and ride facilities promote the use of public transport to access main urban areas, improve access to jobs and services and, by reducing the number of cars, help to use highway space more efficiently and reduce the need for town centre parking. If introduced as part of a demand management strategy, including measures which give priority to public transport in the use of road space, park and ride can help to alleviate problems of air quality, safety and congestion and improve accessibility in a manner that is equitable and socially inclusive. However, it is important to ensure that Park and Ride sites are chosen carefully to ensure they are used and that they themselves do not generate additional car journeys.

9.11 Table 27 identifies the three Metrolink sites in Bury which have been earmarked for park and ride improvements as part of the AGMA scheme. It is recognised that there is currently a shortage of car parking at Metrolink stations, particularly on weekdays. Implementation of these Park and Ride schemes will encourage more people to use

the Metrolink and reduce the number of cars travelling on key routes both into Bury Town Centre and Manchester City Centre. A reduction of cars along these routes will not only alleviate problems of congestion (as identified through the LDF transport modelling), but the air quality along these corridors will also be improved.

Table 27 – Proposed Park and Ride Sites within Bury

Site	Existing Spaces	New Spaces	Total Spaces	Notes
Radcliffe	250	100	350	Approx 100 space single storey modular deck construction built over levelled area of existing car park.
Whitefield	133	83	216	Approx 100 space single storey modular deck construction built over southern area of existing car park.
Prestwich	36	100	136	Approx 100 space new surface car park built on land formerly used for sidings.

Source: Metrolink, 2009

East Lancashire Railway

9.12 A study has been completed which sought to identify and appraise options to improve transport links from Rawstenstall via Ramsbottom to Manchester City Centre and other key employment locations. The development of a commuter service along the East Lancashire Railway has being considered as part of this study. If implemented, a commuter service would begin to mitigate many of the impacts identified by the transport modelling along this corridor, including air quality (both the M66 and A56 are located within a AQMA), congestion on the A56 north of Bury and social exclusion, through widening travel choice and improving access to job opportunities, particularly for residents who live in the north of the Borough. Implementation of a commuter service along the East Lancashire Railway would be subject to additional funding being secured.

Velocity 2025

9.13 Transport for Greater Manchester(TfGM) has drawn up a 12 year cycling strategy called Velocity 2025, on behalf of the Greater Manchester Combined Authority. The aim is to make cycling mainstream and increase the number of people cycling by 300% by 2025.

9.14 Velocity 2025 includes a new network of cycle routes, some integrated and some segregated from other traffic linking employment centres, schools and leisure facilities. Prestwich is one of the destinations in the planned network. Cycle and ride facilities would also be developed to help people connect with Metrolink and rail services from the outskirts of the regional centre.

9.15 TfGM are awaiting the outcome of a bid for funding from the Government's Cycle City Ambition Grant programme in order to implement the strategy.

9.16 On their own, these AGMA schemes will not mitigate all the potential transport related impacts of future development planned for Bury and achieve wider sustainability objectives. Consequently, measures which not only tackle congestion but also provide a well planned transport network with good quality cycling and walking facilities, which will help to reduce air and noise pollution and increase road safety, are required.

9.17 The LDF can contribute to implementing such measures through the development of policies which seek to improve accessibility, reduce the need to travel, demand management and promotion of alternatives to the car. Such policies could be broken down into the following categories:

- Design and Layout
- Travel Planning

- Walking and Cycling
- Public Transport
- Parking
- Air Quality/Low Emission Strategies
- Developer Contributions

Design and Layout

9.18 The location, type and design of development will all influence the level of use of public transport. The layout of sites, the orientation of buildings, attractive, safe and convenient pedestrian environments and pedestrian priority over car users can all contribute to encouraging a modal shift away from the private car. Therefore the design and layout of development should maximise the potential for public transport use and should give non-car modes priority over the car.

9.19 The aim should be to ensure that public transport where possible can link through development and that there is convenient pedestrian access to stops and stations. To achieve this, it is important that major new developments are within reasonable walking distance of a bus stop or Metrolink station. The indicative criteria TFGM currently use to assess this are:

- Within 400m of a bus stop;
- Within 800m of a Metrolink stop;
- Served by a demand responsive transport service such as Local Link

9.20 TFGM advise that these distances should be regarded as guidelines and do not mean that sites falling just outside the criteria are 'inaccessible'. However, where a site does not meet accessibility standards, significant new development should only be located there if additional services are being provided as part of the development.

Travel Plans

9.21 Travel plans outline a series of practical measures and initiatives to manage the travel needs of all of users to and from a development. They identify clear aims and targets which promote and encourage a range of sustainable travel modes in keeping with the specific needs and geography of the site and users. Successful travel plans can improve the health and safety of the population, reduce environmental impacts of transport and congestion, increase travel choices for people who do not have access to a car and mitigate the impacts of travel to school patterns.

9.22 Travel Plans traditionally address peak time, particular commuter journeys but are increasingly being developed to mitigate the impacts of tourist, hospital, residential and newly built or located school developments on local communities. They can also address business travel, fleet management, visitors and delivery services to and from a development.

9.23 Regular journey patterns are often easier to target with road safety programmes or travel demand management strategies since large numbers of people travelling to the same place at the same time increase not only the efficiency with which programmes can be implemented but also the potential for shared services. In addition, targeted travel plans (for example school travel plans) provide a well-defined target audience.

9.24 National guidance on Travel Plans is included in 'Guidance on Transport Assessment (GTA)' (2007) issued jointly by the Department for Communities and Local Government and the Department for Transport. This guidance is intended to assist in determining whether a Travel Plan may be required and, if so, what the level and scope of that plan should be.

9.25 In addition, the Council has a Development Control Guidance Note 12 (DCGN12) – Travel Plans in Bury which requires travel plans to be submitted:

- with all major developments[13];
- smaller developments which would generate significant amounts of travel;
- new residential developments, where there are 80 or more dwellings;
- all new and expanded school facilities.

9.26 Both these documents will need to be incorporated into the LDF to ensure that Travel Plans continue to be submitted with proposals for developments which are likely to have significant transport impacts.

Walking and Cycling

9.27 The design and location of new development is integral to increasing levels of walking and cycling. People will want to use the most direct route to facilities, but will only do so if these are within attractive and safe environments.

9.28 New approaches to the design of residential areas such as Home Zones for example have proven a beneficial tool in making residential streets more accessible and less traffic dominated. This initiative designs streets to be places for people and not just thoroughfares for traffic, by changing the way they are used and reducing unnecessary traffic in principally residential areas. 'Manual for Streets' provides a useful guide for practitioners involved in the planning, provision and approval of new residential streets and modifications to existing ones.

9.29 Both walking and cycling will need to play an important role as part of an integrated strategy that seeks to promote more sustainable modes of travel whilst reducing reliance on the car, particularly in the urban areas of the Borough.

9.30 It will be important to ensure that development sites are linked to public transport stops and stations by safe and direct walking and cycling routes and ensure that there are safe and direct routes from new residential developments to the nearest school. Passive surveillance and active frontages are also important factors to take into consideration.

9.31 The Council has developed a Walking and a Cycling Strategy, both of which set objectives and targets for waking and cycling and identify a network of routes for the provision and enhancement of walking and cycling facilities. In addition, the Council is working with schools to introduce Walking Buses, Safe Routes to School and other schemes designed to increase the number of children who walk and cycle to school. The LDF will need to reflect these documents within its strategy.

Public Transport

9.32 A large proportion of the community rely on public transport to access key services and social activity. However high levels of car ownership can result in low levels of public transport use which can result in services becoming more expensive, less frequent, less reliable and further impact on the social inclusion agenda.

9.33 Bury benefits from a range of public transport services, however the quantity and quality of this varies throughout the Borough. An integrated and efficient public transport system is an important factor in securing good accessibility to services and ensuring that residents can access jobs.

9.34 During 2010, 8 additional trams were added to the Metrolink fleet on the Bury to Altrincham Metrolink line. This has resulted in capacity increasing on the line by 50% and enables more double trams to be operated during peak periods.

[13] Size thresholds can be found in Table 1 in DCGN12.

9.35 The provision of Metrolink and scheduled bus services is largely beyond the control of the Council and it must be recognised that development plans can only have a limited influence on the overall transport patterns within the Borough. Improvements to the public transport system will largely be delivered through the Local Transport Plan, however it will be important to ensure that major new development should only be planned where they can maximise the use of existing public transport or secure new public transport facilities. The existing partnership approach between the Council and TfGM coupled with the protocol arrangements discussed in paragraph 9.4 should aid this process.

Parking

9.36 Whilst encouraging people to car share, use public transport, cycle or walk is important in reversing the trend of growing traffic levels, other more direct means can be used to reduce car usage. The availability of a parking space at the end of a journey is one of the most influential factors in a person's decision whether or not to use a car. Reducing car parking at a destination can encourage people to make sustainable transport choices and reduce the environmental effects of traffic. Bury's current parking standards are maximum standards and are a means of restraining car usage.

9.37 Lower parking standards can however lead to increased on-street parking and can affect the viability of town centres when insufficient parking is provided compared to other competing facilities. It is important that changes in parking provision do not undermine the economic viability of town centres and therefore parking control will need to be considered as part of a wide package of measures which incorporates attractive alternatives to the car.

9.38 Development Control Policy Guidance Note 11 (DCPGN11) – Parking Standards in Bury outlines the current parking standards that operate within the Borough. The LDF and RSS have an important role to play in setting the policy framework for car parking, determining appropriate standards of provision and controlling the amount and location of car parking in new development.

Air Quality/Low Emission Strategies

9.39 To manage and control the impact new development may have on air quality, the Council can require developers to produce Low Emissions Strategies. Such strategies would describe all measures the developer will take to reduce the emissions impact of a proposed development. The developer would be expected to make all reasonable efforts to reduce emissions, firstly using design features and secondly by mitigation measures. Where site specific mitigation is not possible, financial contributions can be made by the developer to fund local low emission plans and other measures to offset the impact of the development.

9.40 Low Emission Strategies (LES) are particularly important for developments proposed within AQMA, however the objectives of LES are to tackle emissions from all developments. This is particularly important as transport emissions from developments outside AQMA may increase emissions inside these areas and such negative impacts will be difficult to reverse.

Electric Vehicles (EVs)

9.41 The promotion of EVs as an alternative to diesel and petrol engine vehicles will require a major shift in vehicle technology, sales and new electricity charging infrastructure. There are currently 4,500 EVs in the UK, but this figure is predicted to grow rapidly with the introduction of models by most major car manufacturers underway and some estimates predicting it will reach 2 million by 2020. This is largely in response to the anticipated increase in carbon taxes and fossil fuel prices. In addition to private cars, growth is also expected in electric buses, commercial vehicles, scooters and bicycles.

9.42 EVs provide a number of environmental benefits:

- Reduced emissions of greenhouse gasses;
- Improvements in air quality (especially the pollutants that are commonly found at elevated levels within AQMA such as nitrogen dioxide and particulates);
- Reduced noise.

9.43 A major hurdle facing greater take up of EVs is the provision of charging infrastructure. However, the government has recently confirmed that new permitted development rights allow for the installation of electrical outlets for recharging electric vehicles in off-street public and private car parks, and clarified that local authorities can install on-street charging points for electric vehicles as permitted development.

9.44 In addition, the Greater Manchester authorities have agreed that charging points for electric vehicles should benefit from the same permitted development rights as those that apply to street furniture. A protocol has been drafted and signed by all ten planning authorities agreeing to this approach. As a safety net, local authorities are consulted on the proposed location of charging points to ensure impacts on heritage features or designations are sufficiently addressed.

9.45 Furthermore, Greater Manchester has been awarded funding through the national Plugged in Places programme to encourage take up of EVs through focusing on public and private sector fleet operators.

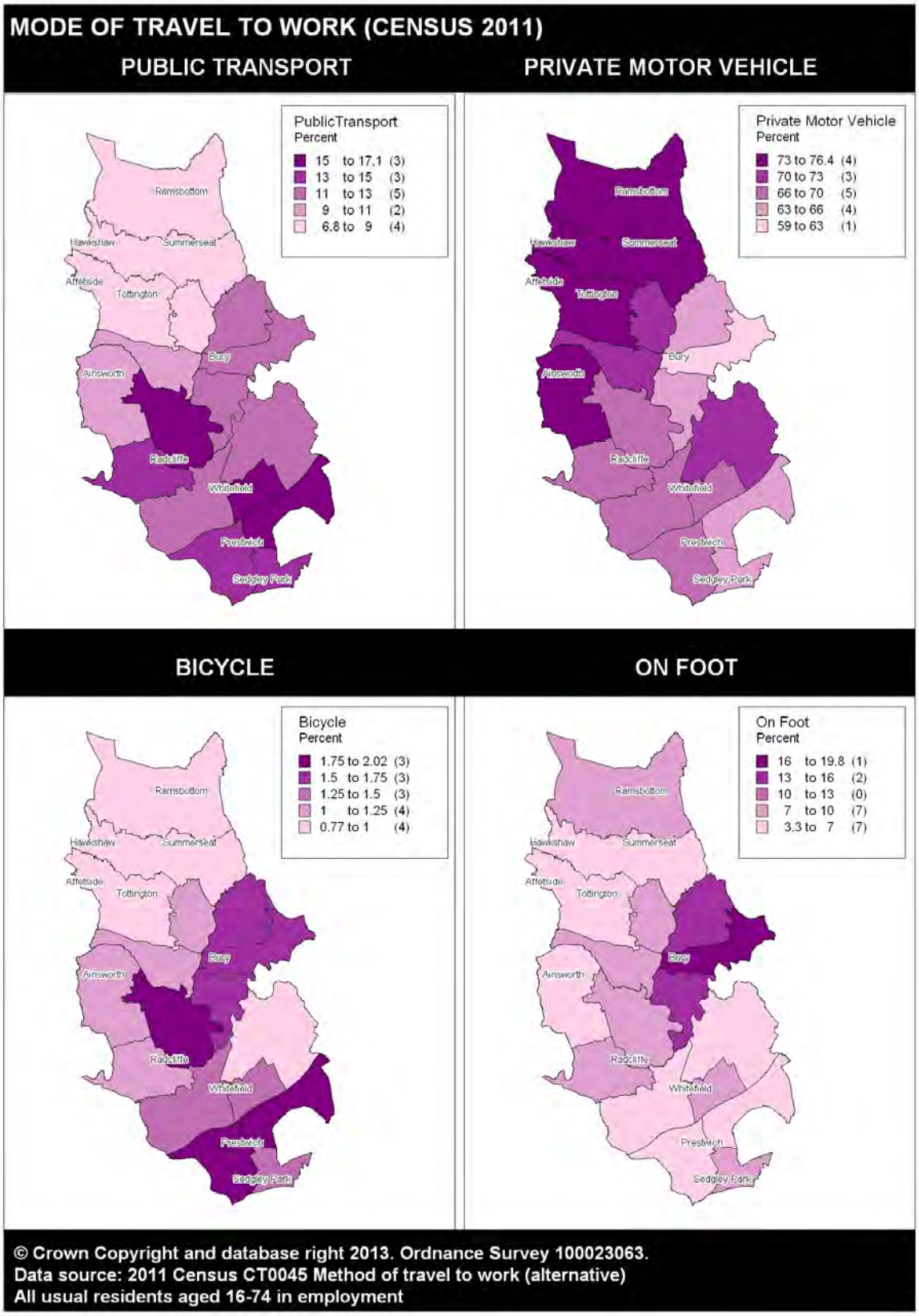
9.46 Manchester Electric Car Company (MECC) has been set up as a delivery agency to operate the scheme which will provide a combination of over 300 on-street charge points across the sub-region and dedicated ‘pods’ where electric vehicles can be charged alongside EV supply chain operators, food and retail space and other attractions.

Appendix 1 – Mode of Travel by Ward, 2011

	All people aged 16-74 in employment	Work at Home	Metro, light rail, tram	Train	Bus, minibus or coach	Taxi	Motorcycle, scooter or moped	Driving a car or van	Passenger in a car or van	Bicycle	On foot	Other method of travel to work
Besses	4882	6.66	8.30	0.55	8.23	0.90	0.45	59.98	5.88	1.33	7.33	0.37
Church	4819	9.77	3.44	0.48	5.19	0.58	0.56	66.98	4.38	1.18	7.22	0.37
East	4330	7.62	3.37	0.55	7.55	1.92	0.79	49.88	6.47	1.73	19.77	0.37
Elton	5799	9.09	3.26	0.34	5.38	0.97	0.48	65.03	5.41	1.21	8.40	0.37
Holyrood	5589	8.93	8.28	0.84	7.78	0.75	0.45	58.96	5.24	1.77	6.60	0.37
Moorside	5145	7.00	3.67	0.51	7.64	1.44	0.43	56.56	6.34	1.63	14.54	0.37
North Manor	4772	13.20	2.10	0.38	4.36	0.36	0.31	69.66	5.26	0.78	3.39	0.37
Pilkington Park	4841	12.31	7.17	0.78	4.07	0.45	0.33	64.08	4.42	1.26	4.71	0.37
Radcliffe East	5399	7.26	7.87	0.83	6.98	0.59	0.59	59.94	6.06	2.02	7.48	0.37
Radcliffe North	5436	7.80	2.98	0.53	6.36	0.70	0.79	68.49	6.20	1.09	4.51	0.37
Radcliffe West	5273	7.28	6.26	0.68	6.94	0.61	0.63	62.60	6.03	1.16	7.53	0.37
Ramsbottom	6203	10.62	1.08	0.31	5.61	0.16	0.34	69.16	4.59	0.82	7.04	0.37
Redvales	5142	6.71	3.13	0.56	8.15	1.13	0.49	57.35	6.26	1.61	14.18	0.37
Sedgley	5573	11.74	6.64	0.79	6.85	1.09	0.54	57.11	5.04	1.35	8.42	0.37
St Mary's	5047	8.94	6.26	1.05	7.47	0.71	0.53	60.81	5.27	1.98	6.50	0.37
Tottington	5211	9.90	2.73	0.31	4.68	0.44	0.59	70.37	4.93	0.90	4.76	0.37
Unsworth	4575	9.81	5.20	0.61	5.92	0.63	0.46	65.79	4.94	0.79	5.44	0.37
Bury	**88036**	**9.10**	**4.79**	**0.59**	**6.42**	**0.78**	**0.51**	**62.64**	**5.45**	**1.33**	**8.02**	**0.37**

Source: 2011 Census

Appendix 2 – Mode of Travel to Work 2011



Source: 2011 Census

Appendix 3 – Destination of Out-Commuters

	Bury	Blackburn	Rossendale	Bolton	Rochdale	Salford	Manchester	Manchester Central ward
Besses	46.42	0.32	0.55	3.13	3.73	9.46	22.77	12.17
Church	57.12	0.57	1.30	7.54	5.55	4.05	11.48	6.52
East	66.15	0.22	1.29	2.99	9.08	3.59	7.58	4.42
Elton	60.05	0.73	1.77	5.75	5.66	4.23	10.29	5.90
Holyrood	36.29	0.24	0.30	2.18	4.52	10.80	29.69	16.21
Moorside	64.16	0.76	2.71	3.29	6.66	3.80	8.46	4.64
Pilkington Park	41.94	0.39	0.45	3.36	3.43	9.69	24.90	13.54
Radcliffe Central	58.53	0.25	0.84	8.35	4.29	5.06	11.74	6.77
Radcliffe North	53.47	0.57	0.78	13.86	3.68	5.50	10.46	5.90
Radcliffe South	54.11	0.57	0.50	5.51	3.53	6.89	16.39	9.26
Ramsbottom	53.54	1.24	5.38	5.06	4.50	4.32	11.18	6.10
Redvales	62.48	0.63	1.31	4.33	6.23	3.75	12.10	7.82
St. Mary's	34.57	0.28	0.41	2.38	3.61	13.94	27.49	14.63
Sedgley	32.81	0.15	0.32	1.66	3.03	13.09	33.65	17.19
Tottington	57.43	1.24	2.75	6.92	4.70	3.62	10.32	6.42
Unsworth	48.71	0.55	0.59	3.14	4.86	7.29	19.32	10.86
Bury Total	**51.82**	**0.58**	**1.47**	**5.29**	**4.75**	**6.66**	**16.28**	**9.03**

Source: 2001 Census

Appendix 4 – Commuting Flows to and from Bury Wards – Percentage of Origin Total

	Besses	Church	East	Elton	Holyrood	Moorside	Pilkington Park	Radcliffe Central	Radcliffe North	Radcliffe South	Ramsbottom	Redvales	St. Mary's	Sedgley	Tottington	Unsworth	BURY
Besses	14.27	0.55	1.74	0.53	1.24	1.31	4.99	1.34	0.60	2.29	0.58	5.39	6.07	0.97	0.39	4.15	46.42
Church	0.30	17.24	3.70	2.89	0.28	3.68	1.11	1.91	1.48	2.41	1.74	14.28	0.89	0.41	1.96	2.85	57.12
East	0.22	2.31	24.82	2.38	0.36	7.12	0.85	1.97	0.66	1.60	2.14	14.98	0.95	0.32	1.07	4.42	66.15
Elton	0.26	2.75	4.27	18.55	0.22	4.91	1.21	1.31	0.90	1.97	2.81	13.55	0.85	0.31	2.89	3.30	60.05
Holyrood	0.34	0.42	0.78	0.32	15.75	0.92	2.18	0.54	0.38	1.46	0.30	3.02	6.72	2.04	0.14	0.98	36.29
Moorside	0.24	1.60	7.20	2.38	0.29	23.47	0.82	2.00	0.62	1.87	3.82	13.81	0.84	0.24	1.27	3.69	64.16
Pilkington Park	0.60	0.30	1.11	0.58	1.24	1.01	20.30	1.05	0.19	2.57	0.32	3.96	4.33	1.67	0.36	2.34	41.94
Radcliffe Central	0.71	1.02	2.33	1.56	0.42	2.13	1.91	19.83	2.13	9.32	0.67	8.95	2.13	0.31	0.47	4.64	58.53
Radcliffe North	0.58	1.67	2.27	1.39	0.33	2.24	1.58	4.61	16.87	6.47	1.22	8.60	1.45	0.40	0.89	2.91	53.47
Radcliffe South	0.37	0.48	1.72	0.81	0.52	1.53	3.75	5.36	0.72	24.36	0.41	5.88	3.33	0.72	0.46	3.68	54.11
Ramsbottom	0.17	1.13	2.86	2.04	0.15	3.17	0.72	0.69	0.60	1.15	26.16	9.25	0.67	0.40	2.52	1.87	53.54
Redvales	0.37	1.75	5.23	2.29	0.22	4.89	0.88	2.58	0.68	1.97	1.17	31.17	1.53	0.24	0.71	6.79	62.48
St. Mary's	0.30	0.09	0.89	0.19	0.89	0.54	1.40	0.43	0.30	0.80	0.34	2.46	22.99	1.81	0.17	0.99	34.57
Sedgley	0.38	0.13	0.59	0.27	1.20	0.40	1.37	0.36	0.15	1.13	0.19	2.27	5.55	17.70	0.13	1.01	32.81
Tottington	0.09	1.69	3.62	3.42	0.32	3.35	0.89	1.35	0.61	2.01	4.36	12.14	0.80	0.37	20.05	2.35	57.43
Unsworth	1.02	0.63	2.21	0.90	0.94	1.76	2.99	1.72	0.27	2.34	0.78	8.46	2.75	0.98	0.39	20.59	48.71
BURY total	1.02	2.17	3.79	2.72	1.45	3.73	2.72	2.99	2.00	3.90	3.68	9.73	3.73	1.69	2.49	4.02	51.82

Source; 2001 Census
Note: Total people aged 16-74 in employment
Ward boundaries are pre 2004 Boundary Changes

Appendix 5 – Commuting Flows to Adjoining Districts– Percentage of Origin Total

	Blackburn	Rossendale	Bolton	Rochdale	Salford	Manchester	Manchester Central ward	Other Districts
Besses	0.32	0.55	3.13	3.73	9.46	22.77	12.17	60.04
Church	0.57	1.30	7.54	5.55	4.05	11.48	6.52	69.51
East	0.22	1.29	2.99	9.08	3.59	7.58	4.42	75.25
Elton	0.73	1.77	5.75	5.66	4.23	10.29	5.90	71.57
Holyrood	0.24	0.30	2.18	4.52	10.80	29.69	16.21	52.28
Moorside	0.76	2.71	3.29	6.66	3.80	8.46	4.64	74.33
Pilkington Park	0.39	0.45	3.36	3.43	9.69	24.90	13.54	57.78
Radcliffe Central	0.25	0.84	8.35	4.29	5.06	11.74	6.77	69.47
Radcliffe North	0.57	0.78	13.86	3.68	5.50	10.46	5.90	65.15
Radcliffe South	0.57	0.50	5.51	3.53	6.89	16.39	9.26	66.62
Ramsbottom	1.24	5.38	5.06	4.50	4.32	11.18	6.10	68.31
Redvales	0.63	1.31	4.33	6.23	3.75	12.10	7.82	71.63
St. Mary's	0.28	0.41	2.38	3.61	13.94	27.49	14.63	51.88
Sedgley	0.15	0.32	1.66	3.03	13.09	33.65	17.19	48.11
Tottington	1.24	2.75	6.92	4.70	3.62	10.32	6.42	70.45
Unsworth	0.55	0.59	3.14	4.86	7.29	19.32	10.86	64.26
BURY total	0.58	1.47	5.29	4.75	6.66	16.28	9.03	13.15

Source; 2001 Census
Note: Total people aged 16-74 in employment
Ward boundaries are pre 2004 Boundary Changes

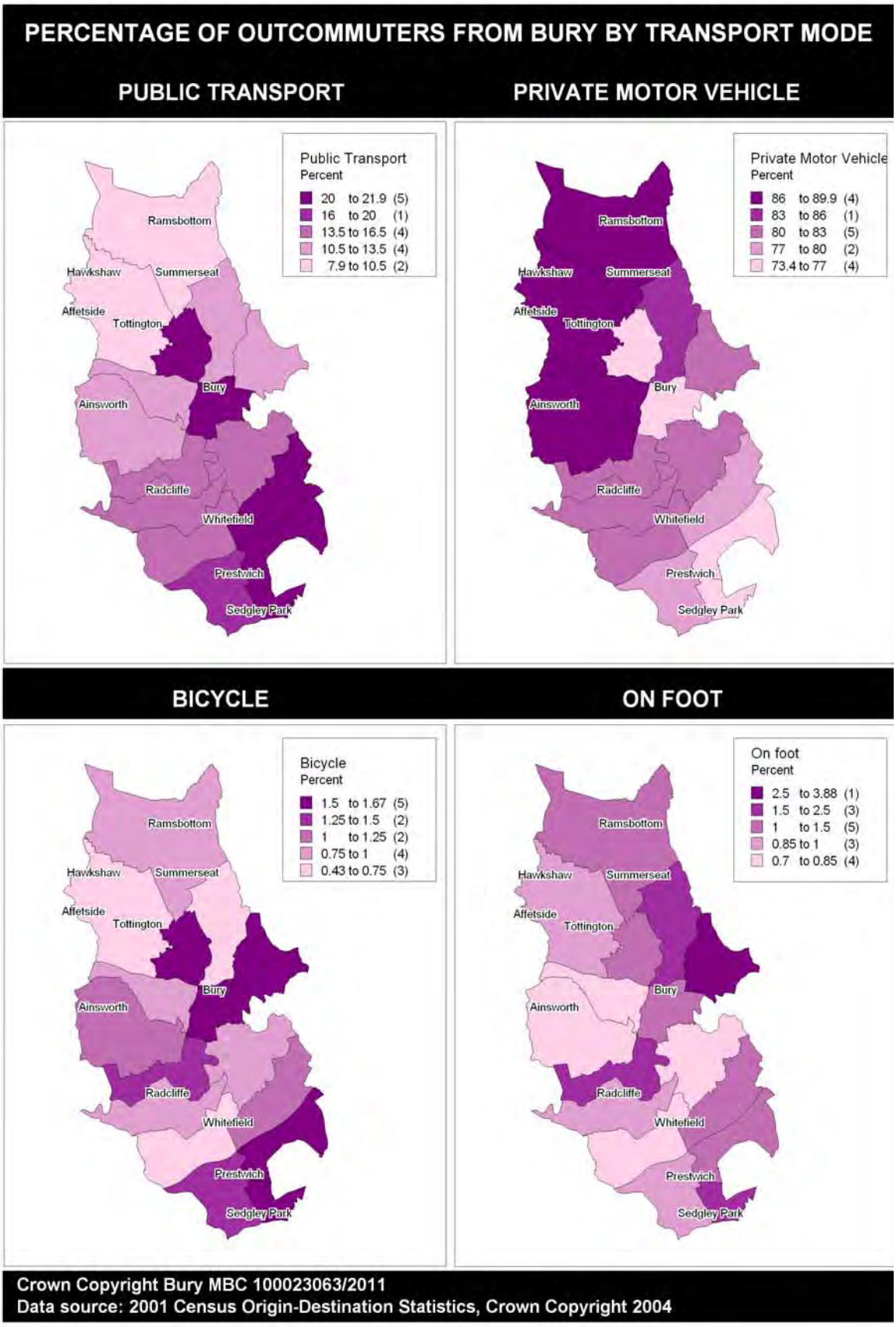
Appendix 6 – Out-commuters Mode of Travel

Destination name	All people [14]	Public transport		Private vehicle		Bicycle / on foot		Other	
		Count	%	Count	%	Count	%	Count	%
Live and work in Bury	36,510	3,883	10.64	25,498	69.84	7,006	19.19	123	0.34
Manchester	13,635	**4,073**	**29.87**	9,306	68.25	218	1.60	38	0.28
Salford	5,633	616	10.94	4,856	86.21	151	2.68	10	0.18
Bolton	4,418	399	9.03	3,921	88.75	89	2.01	9	0.20
Rochdale	4,002	261	6.52	3,564	89.06	171	4.27	6	0.15
Trafford	2,718	301	11.07	2,382	87.64	25	0.92	10	0.37
Oldham	1,593	85	5.34	1,449	90.96	54	3.39	5	0.31
Rossendale	1,222	38	3.11	1,148	93.94	36	2.95	0	0.00
Stockport	852	58	6.81	791	92.84	3	0.35	0	0.00
Tameside	615	65	10.57	545	88.62	5	0.81	0	0.00
Warrington	523	18	3.44	502	95.98	3	0.57	0	0.00
Wigan	515	25	4.85	484	93.98	6	1.17	0	0.00
Other Authorities	4354	275	6.32	3852	88.47	124	2.85	103	2.37
Total [15]	**40,566**	**6,218**	**15.33**	**33,273**	**82.02**	**894**	**2.20**	**181**	**0.45**

Source: 2001 Census

[14] Excludes people who work from home in Bury
[15] Excludes people who live and work in Bury

Appendix 7 – Percentage of Out-commuters from Bury by Mode of Transport



Appendix 8 – Commuting Flows by Public Transport – Percentage of Origin

	Bury	Blackburn	Rossendale	Bolton	Rochdale	Salford	Manchester	Manchester Central ward	Other Districts	Total
Besses	13.02	0.00	0.00	21.85	12.68	14.17	33.14	0.00	1.53	17.01
Church	7.46	0.00	0.00	5.41	3.33	5.94	26.77	0.00	0.88	8.78
East	9.51	0.00	5.66	14.63	8.29	8.11	31.73	1.65	0.48	10.61
Elton	9.14	6.98	5.77	9.76	11.41	8.84	28.43	0.00	0.90	10.80
Holyrood	8.98	0.00	0.00	14.68	8.41	13.33	33.27	0.00	2.83	16.75
Moorside	9.21	17.65	3.28	10.14	10.67	10.53	24.41	0.00	1.20	10.53
Pilkington Park	7.92	0.00	0.00	7.64	1.88	10.62	27.54	0.00	2.15	12.77
Radcliffe Central	12.62	0.00	0.00	14.81	4.24	8.99	33.33	0.00	1.34	14.10
Radcliffe North	9.03	0.00	5.77	11.72	3.64	7.86	25.78	0.00	0.39	10.02
Radcliffe South	11.52	0.00	0.00	13.04	11.73	7.59	30.72	0.00	1.24	13.75
Ramsbottom	8.16	0.00	5.20	3.68	4.44	9.26	19.67	0.66	0.70	8.11
Redvales	8.07	0.00	11.11	12.36	9.38	11.69	40.64	0.93	2.14	13.20
St. Mary's	9.48	0.00	0.00	11.72	4.64	10.81	29.72	0.00	3.55	15.25
Sedgley	8.01	0.00	0.00	11.39	10.42	10.11	31.11	0.37	5.02	17.34
Tottington	6.66	0.00	0.00	3.55	1.96	5.51	22.62	0.00	0.72	7.20
Unsworth	7.78	0.00	0.00	7.45	5.22	9.38	28.11	0.00	1.82	11.56
Bury	**9.06**	**1.85**	**3.49**	**9.95**	**6.83**	**9.96**	**29.34**	**0.16**	7.33	12.01

Source; 2001 Census
Note: Total people aged 16-74 in employment
Ward boundaries are pre 2004 Boundary Changes

Appendix 9 – Commuting Flows by Private Motor Vehicle – Percentage of Origin

	Bury	Blackburn	Rossendale	Bolton	Rochdale	Salford	Manchester	Manchester Central ward	Other Districts	Total
Besses	54.64	100.00	100.00	92.44	76.76	82.50	64.32	50.32	20.32	66.64
Church	64.83	100.00	100.00	93.86	90.67	92.69	71.29	58.52	16.78	74.62
East	53.30	100.00	94.34	82.93	82.09	85.81	64.42	52.20	11.04	62.89
Elton	63.73	93.02	94.23	89.35	87.99	85.94	69.42	53.60	14.80	72.10
Holyrood	51.74	100.00	100.00	88.07	84.96	82.78	63.37	51.79	26.27	66.55
Moorside	58.08	82.35	94.26	87.84	87.00	84.80	73.75	59.81	11.80	67.36
Pilkington Park	56.97	100.00	85.71	92.36	92.50	88.72	70.91	57.75	24.81	71.54
Radcliffe Central	57.91	78.57	100.00	81.70	89.41	86.69	63.41	49.73	14.01	67.16
Radcliffe North	65.35	100.00	94.23	85.91	93.93	89.70	72.36	58.59	17.07	75.23
Radcliffe South	54.01	100.00	100.00	85.77	92.59	86.39	66.22	51.29	17.21	66.55
Ramsbottom	61.22	100.00	88.12	95.53	90.24	88.89	79.98	71.83	20.34	74.34
Redvales	50.43	88.46	88.89	85.96	84.38	80.52	56.34	42.68	10.20	59.36
St. Mary's	50.13	100.00	100.00	83.59	85.57	85.31	67.50	54.07	29.92	69.08
Sedgley	49.71	100.00	100.00	88.61	85.42	81.86	64.58	50.98	25.78	65.68
Tottington	68.72	96.30	100.00	95.12	97.06	93.22	75.74	66.75	16.98	77.71
Unsworth	61.99	89.29	100.00	90.68	94.78	88.20	69.97	55.76	21.46	72.46
Bury	**58.96**	**95.69**	**93.83**	**88.82**	**88.68**	**86.12**	**68.09**	**55.16**	**89.86**	**70.04**

Source; 2001 Census
Note: Total people aged 16-74 in employment
Ward boundaries are pre 2004 Boundary Changes

Appendix 10 – 2010 Protocol for joint working on planning issues between AGMA Authorities and the Highways Agency[16]

Introduction

This protocol sets out agreed arrangements for joint working and a shared approach in the preparation of Local Development Frameworks (LDFs) and their supporting transport evidence base between the following parties:

- the constituent authorities of the Association of Greater Manchester Authorities (AGMA)
- Greater Manchester Integrated Transport Authority (GMITA)
- Greater Manchester Passenger Transport Executive (GMPTE); and
- the Highways Agency (HA)

Context

This protocol is set within the context of the emerging arrangements for the Greater Manchester Combined Authority (GMCA), Central Government policy, the Regional Strategy (RS) and any successor, and the emerging Greater Manchester Spatial Framework (GMSF). Government Office for the North West (GONW) supports the joint working on transport issues being carried out by AGMA, and the principle of co-operation between AGMA and the HA. GONW has encouraged the drawing up of a protocol setting out how AGMA will work in partnership with the HA on transport matters.

Key Aims

The key aims are as follows:

1. To foster partnership in the parties' approach to identifying the transport impacts of the development proposed within LDFs.

2. To jointly determine how best to mitigate such impacts in the most sustainable way, consistent with meeting RSS requirements and subsequent RS 2010 requirements.

3. To ensure that the HA is able to support the approach to the production of DPDs at Examinations in Public and that such DPDs are considered sound.

4. To ensure that agreement is reached on satisfactory arrangements to deliver the development planned for the first five years of the emerging Core Strategies, and that an agreed approach is in place which will allow transport impacts and infrastructure delivery issues in the medium to longer terms to be properly identified and addressed.

5. To provide aligned, cohesive and deliverable infrastructure plans for transport within Greater Manchester.

6. To demonstrate that the following policy requirements are being adequately addressed in Greater Manchester:

    - Planning Policy Statement 12 (PPS12) is based on the principle that there should be a sound evidence base to underpin proposals and policies in LDFs;
    - Planning Policy Statement 1 (PPS1) includes the general principle that new development should be located where it can be accessed on foot, by bike or public transport and should not be reliant on access by car; Circular 02/2007 also

[16] The Protocol was drawn up in April 2010, since then the Transport Governance Structure within Greater Manchester has evolved. At the time of writing, a revised Protocol, reflecting the new governance structures had yet to be drawn up and agreed by all parities. When such revisions are made, the Transport Topic Paper will be updated.

sets out how the impact of LDFs on the Strategic Road Network (SRN) should be assessed.

- RSS sets the broad framework for the scale and location of development within the region and for Greater Manchester; in some cases specific policy guidance is provided for specific authorities or parts of the sub-region.

Principles and Approach

All parties recognise the need for, and are committed to:

- embracing the philosophy that, as the spatial interpretation of local Sustainable Community Strategies, LDFs are not just instruments of local authorities, but are for all parties responsible for delivering development and associated infrastructure to influence future transport priorities;
- understanding the need to deliver the development requirements set out in RS, and subsequently RS 2010, whilst recognising and seeking to address the related broad transport implications (see Appendix D for an initial assessment of key issues from the Highways Agency):

    - working at the local and conurbation level to understand both individual and cumulative impacts of policies and proposals in the LDFs and the emerging GMSF;
    - working at the local authority level to understand the transport implications of emerging LDFs by the use of TIAT and Accessibility Mapping and/or other modelling capabilities to assist in determining the impact of their development aspirations, and achieving Key Aims 1 and 2, which parties will use as part of the evidence base for developing the LDF;
    - working at the City Region level to understand the cumulative impact of emerging and draft LDFs, when taken together, through full participation in joint modelling (such as that currently being undertaken with the Greater Manchester Joint Transport Team (GMJTT) and GMTU) and other studies as appropriate, and in particular issues that cannot be resolved at the local level;

- understanding and acknowledging the current issues and constraints on the operation of the SRN within Greater Manchester, and the need to maintain its strategic function, both for Greater Manchester and as part of the national network. This will take place through targeted dialogue and data exchange, and will form a key element of the baseline within each authority's evidence base;
- recognising that planned interventions which address the transport impacts of LDFs in the short term (0-5 years) will largely be confined to those schemes already committed and those which have arisen out of the AGMA Scheme Prioritisation process. A review of Local Transport Plan 2 (LTP2), and subsequently LTP3 during this period may, however, provide opportunities to address some of the issues identified through the Greater Manchester transport modelling, particularly in relation to public transport. However it is recognised that there may be an opportunity to tailor phasing of development to coincide with these transport interventions where considered appropriate;
- ensuring that for the latter phases of the LDF plan period (5-10 and 10-15 years), further work is undertaken to determine future transport requirements and feasible interventions. It will be particularly important to consider the impact of the HA's planned schemes on the SRN and consider other possible interventions which may need to be incorporated in Regional Strategy 2010 (RS2010), which replaces the RSS, and future LTPs;
- working across the City Region to ensure that further reviews of LTPs appropriately respond to the level and location of development proposed and promoted through LDFs;

- including within any assessment the impacts of other major initiatives or programmes related either to planned development (for example, the Government's Housing Growth Point programme) or to highways infrastructure improvements (for example, the HA's Programme of Major Schemes and Local Network Management Projects) as well as wider transport investment programmes (including those for public transport through the LTP, RFA and DaSTS process incorporating the SRN and national rail networks);
- working to provide aligned, cohesive and deliverable infrastructure plans for transport within Greater Manchester, by aiming to:

    - address potential impacts by using spatial planning techniques to ensure that development is located sustainably and is accessible by public transport, walking or cycling and is appropriately phased;
    - reduce potential impacts by identifying improvements to public transport infrastructure and services;
    - promote behavioural change to more sustainable modes of travel;
    - manage any potential impacts by investing in and making best use of the existing highway network asset through improved technology and other operational mechanisms;
    - seek to identify highway infrastructure measures which need to be delivered alongside key developments to support them, where these remain insufficient to accommodate necessary development;

- assisting all AGMA local authorities to maintain the project plans for preparing and approving LDFs agreed with Government;
- assisting in the delivery of the plans with a presumption to minimise the Highways Agency's use of its powers of direction, for development consistent with those plans, subject to the commitments in this protocol being fulfilled.

Working Arrangements

All parties recognise and agree that the principles and approach set out above requires continued joint working, and that the production of an agreed rolling programme of future work and actions will be necessary to ensure that measures to address LDF issues related to transport are adequately researched/assessed, developed, delivered and refreshed.

The parties further agree that joint working will require regular joint and individual forums, and are committed to:

- regular individual district liaison;
- full participation in joint modelling and other studies, as appropriate (reporting through AGMA Planning Officers Group);
- discussion through AGMA Strategic Planning Information Group (SPIG) or a suitable subgroup, focused on LDF issues related to transport;
- discussion and representation through the Greater Manchester Local Transport Plan (GMLTP) Steering Group in relation to LTP development;
- as needed, meetings to discuss overall progress towards achieving the aims of this protocol, any amendments necessary, and more general policy issues, between the parties involved and GONW.

These forums will provide the means by which the parties can collectively agree on what future evidence may be required to support the continuing preparation, and in due course the review, of the different elements of LDFs.

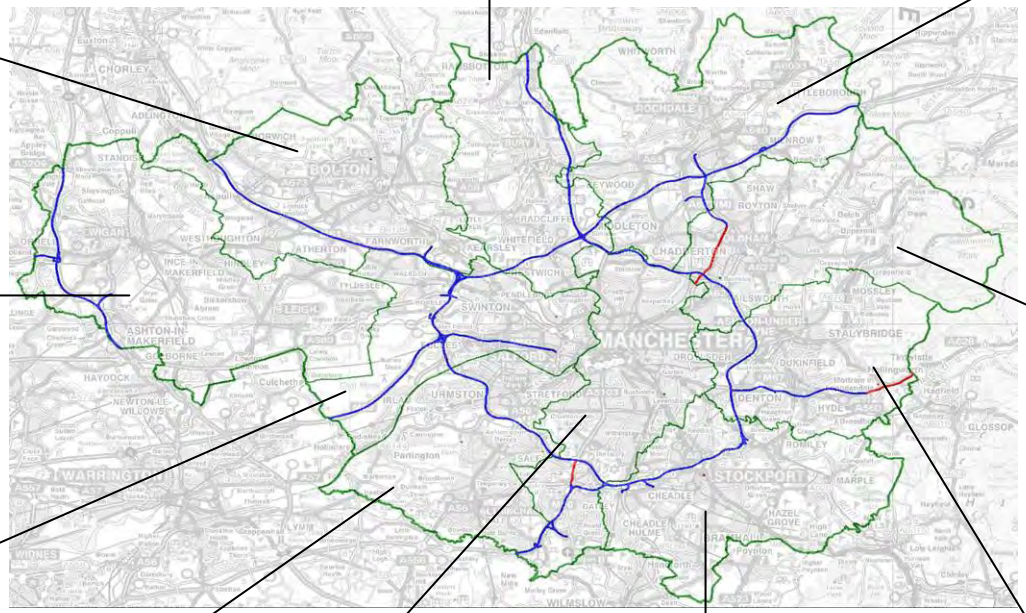
Bury
- Public Transport patronage and capacity constraints
- M60 J19 to J18 Journey Times;
- M66 Corridor (southbound journey times on the approach to J2)
- Air Quality and the adoption of Low Emission Strategies particularly with regard to CO_2
- Delivering accessible development (close to sustainable modes of transport, key services and ELR opportunities).

Bolton
- Journey times along the M61 (principally J6 to J3)
- Sustainable delivery of Cutacre & Horwich Loco Works
- The interrelationship between capacity constraints on the strategic and local road network and the movements on

Wigan
- Overall increase in car usage
- Increase in journey times on the M6 – potential connectivity problems for the City Regions
- Accessibility to the Regional Centre
- CO_2 emissions
- Employment development aspirations within the Wigan LDF

Salford
- Overall increase in car usage and impacts on public transport
- Development pressures on the M60
- Increased journey times to the Regional Centre
- CO_2 emissions
- The public transport issue of increased patronage vs. potential capacity problems

Trafford
- Growth in traffic and increase in journey times between Junction 5 and 11 of the M60
- Carrington
- CO_2 emissions
- Increase in traffic and journey times on key public transport corridors
- Increase in overall car use and reduction in public transport use across the modelling period



Manchester
- Regional Centre attracts journeys from across Greater Manchester - improving accessibility is a priority for the City Region
- Main focus of SRN related impacts on much of M60 and M56 (in both morning and evening peak periods)
- Current (rail, metrolink, bus) and future (additional metrolink routes) offer good sustainable alternatives to private car. Most sustainable location for development in GM?
- Some specific locations (e.g. Manchester Airport / Roundthorn) likely to have specific impacts on SRN
- Approach to 'Infrastructure Plan' is reasonable

Stockport
- The main impacts of the SRN are on the southern elements of the M60 Junctions 24 to 27
- A balance needs to be struck between promoting sustainable development in the town centre and the proximity of town centre to the M60
- A concern regarding office development focus on "M60 gateway"
- Other specific locations (e.g. Bredbury Industrial Estate) are likely to have specific impacts on SRN
- Further development is required in respect of the Infrastructure Planning

Rochdale
- Shift to Rail and Tram from Bus – PT interaction;
- M62 West Bound J20-J18 Journey Times and J19 link;
- Significant increase in journey times on local roads, primarily on the radial routes to the Regional Centre and between Rochdale and Bury (A58)
- Air Quality and the adoption of Low Emission Strategies particularly with regard to 14% increase in CO_2; and
- Delivering accessible development (close to sustainable modes of transport, key services & ELR opportunities).

Oldham
- Addressing the forecasted drop in walk/cycle movements alongside decreasing PT patronage & capacity constraints on the PT network
- Clustering of sites & Journey Times along the M60 (between J20 & J22)
- Journey times along key radial routes (principally those close to SRN)
- Air Quality and the adoption of Low Emission Strategies particularly with regard to 19.4% increase in CO_2
- Delivering accessible development (close to sustainable modes of transport and key services).

Tameside
- Key issues likely to be in relation to operation of M60/M67 corridors
- Future sustainable transport provisions (metrolink) likely to assist
- Given the early stages of the LDF, specific focus of development in relation to SRN is unknown

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(July 2013)