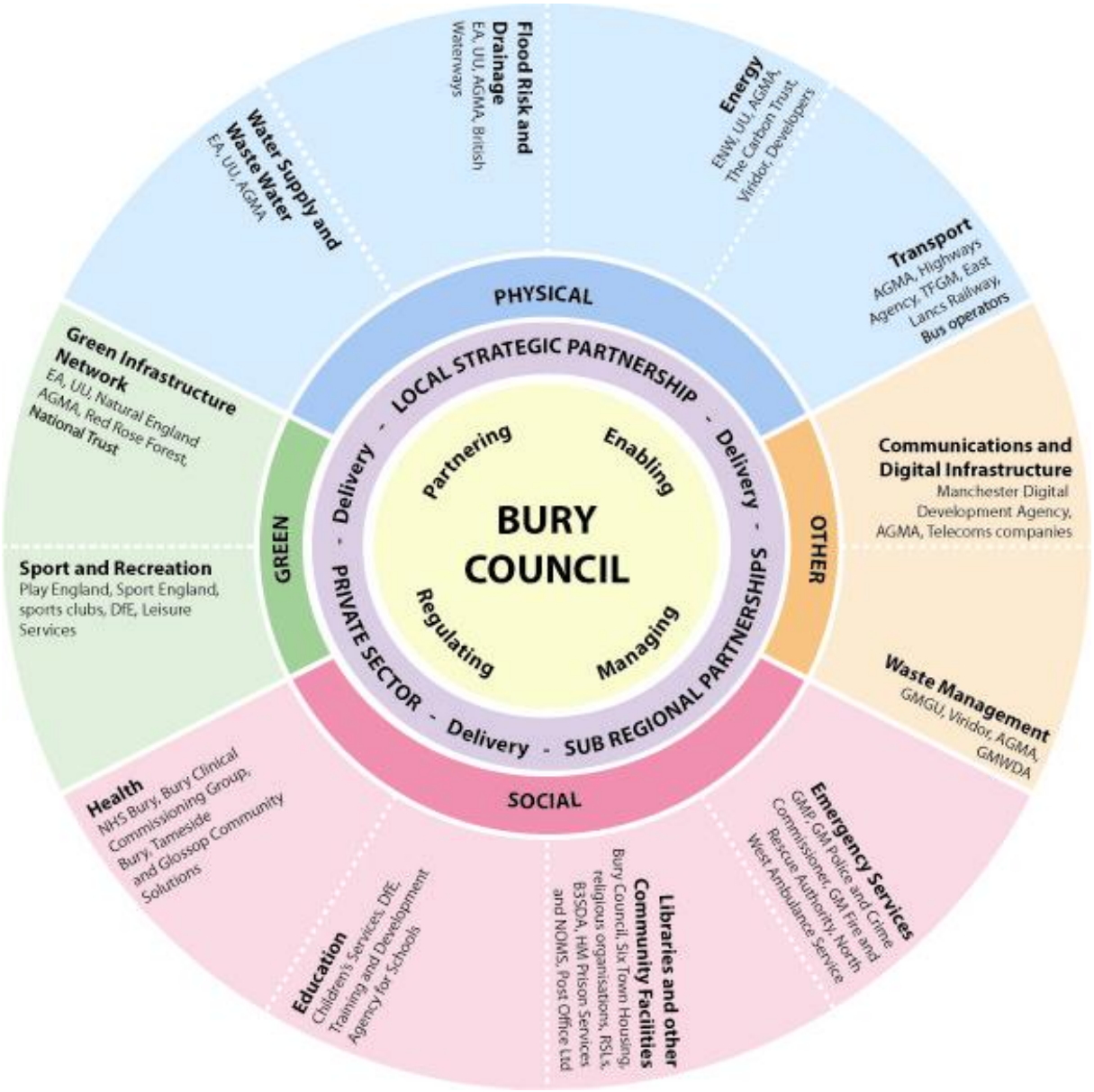
Bury Infrastructure Delivery Plan 2013

July 2013



Bury COUNCIL

IMPORTANT NOTICE – DISCLAIMER

With regard to the information contained in this Infrastructure Delivery Plan the Council makes the following disclaimer, without prejudice:

- The Infrastructure Delivery Plan has a base date of 1 July 2013 and the findings are only a 'snap-shot' of information held at that time. Therefore, some of the information may be subject to change. The Council intends to use the Infrastructure Delivery Plan as a 'living document' which will be reviewed accordingly.

- The identification of the provision of infrastructure within the Infrastructure Delivery Plan does not imply that the Council would necessarily grant planning permission. All planning applications for new or improved infrastructure will continue to be treated against the appropriate development plan and material planning considerations.

Contents

1 BACKGROUND

1.1 Introduction

1.1.1 This is the Infrastructure Delivery Plan (IDP) for Bury Council's Core Strategy. The report is a supporting document for the Core Strategy and covers the plan period 2012 to 2029 (though it will be periodically reviewed and monitored).

1.1.2 This written report includes details of the infrastructure requirements and explains the approach as to how and why we have identified this need. In some cases the need is a specific and fully costed physical infrastructure project and in others the need is to achieve more integrated working and programme alignment with key stakeholders. This report also informs the Infrastructure Action Plan outlined in section 10 of this report.

1.1.3 The IDP includes the key infrastructure components which are required to meet the growth objectives set out in the Core Strategy. It is not a shopping list for planning obligations contributions, nor is it a way of capturing every project being planned for each council service. The IDP recognises there are other plans and strategies that exist which provide more detail in regard to what, how and when key elements of infrastructure will be delivered, and strongly draws upon these in order to populate and inform this IDP.

1.1.4 Bury is also part of the Manchester City Region (MCR). The 10 local authorities have been working together collaboratively on many matters of mutual interest since 1986 under the umbrella of AGMA (Association of Greater Manchester Authorities). Bury Council is committed to working with city regional partners to provide the infrastructure necessary to support the regeneration of the MCR, provide the 'quality of place' and secure a sustainable future for our residents. On 1 April 2011 the AGMA authorities became the first UK sub-region to become a Combined Authority, and the Greater Manchester Local Enterprise Partnership has also been created, which will further strengthen sub-regional working in the Manchester City Region.

1.1.5 Many forms of infrastructure (e.g. water, energy and transport) operate across administrative boundaries. Transport and waste infrastructure matters are already addressed at a Greater Manchester level and the 10 districts are progressing flood risk, water management and energy planning within a coherent GM context and Governed by the MCR commissions.

1.2 Purpose

1.2.1 The IDP has a tripartite remit:

- a spatial planning role;
- a Bury Council corporate role; and
- sub regional commission role.

1.2.2 It has a formal planning role in that the IDP must satisfy the requirements of the National Planning Policy Framework (NPPF) and to complement and inform the Core Strategy. It does this through identifying the key infrastructure required to achieve the objectives and policies in the Core Strategy, and setting out an action plan for infrastructure delivery.

1.2.3 However, it also has a corporate role for the Local Strategic Partnership "Team Bury", for which it will be a key document to support and inform other strategies and decisions relating to capital investment, and how funding should be distributed from sources such as planning obligations, the proposed Community Infrastructure Levy and the Council's Capital Programme.

1.2.4 The IDP will also inform Bury's Councils engagement with AGMA's commissions ensuring that progression of city regional priorities is informed by top down and bottom up engagement and evidence.

1.2.5 The IDP like infrastructure planning is a living and iterative process. This is the second version of the IDP and subsequent versions will include updates to the proposals and information contained within this report. This allows the infrastructure planning process to take account of any further evidence and reviews of the various plans and strategies on which this IDP is based. It is intended that the IDP action plan will be monitored through the Annual Monitoring Report and any significant changes will trigger the review of the IDP.

1.2.6 The IDP contains information regarding the context to infrastructure planning, background to key issues and illustration of infrastructure type, timing and potential costs of infrastructure needed to support the growth proposed by the Core Strategy. The IDP and its subsequent updates will enable the Council to plan effectively for this growth and to maximise the opportunities to achieve wider sustainability objectives.

1.2.7 The infrastructure identified in this document will need to be considered by all delivery processes that the Council manages or influences. The IDP is therefore a key consideration for delivery documents including Development Plan Documents and master plans, as well as through mainstream service plans, budgets and strategies and these in turn will inform the review of the IDP. Ultimately the goal is to achieve:

- Delivery;
- Joined up working;
- Participation;
- Better intelligence;
- Better understanding of interdependencies; and
- Added value

1.3 Links with other Plans and Strategies

1.3.1 **Bury Community Strategy**

Collectively Team Bury, our Local Strategic Partnership, has agreed a vision to make ***Bury a great place to live, work, study and visit***.

Within our Sustainable Community Strategy (2008-2018) Team Bury set out nine ambitions to deliver this vision:

- The place to live in Greater Manchester;
- An area where people feel safe and secure;
- Healthiest borough in the North West;
- Popular visitor destination;
- Premier retail town in the north of Greater Manchester;
- Centre of excellence for education and training in the North West;
- Each township thriving;
- An area with first class services; and
- Quality jobs for Bury people.

1.3.2 This Infrastructure Delivery Plan will support the delivery of the vision and the nine ambitions, in identifying the infrastructure needs of the Borough.

1.3.3 **Bury Local Plan**
Bury's Local Plan will outline the spatial planning strategy for the local area. Bury's Local Plan will include a Core Strategy, Site Allocations DPD, a Gypsies and Travellers DPD and a proposals map. Joint DPDs have also been prepared with other Greater Manchester districts on the subjects of Waste and Minerals. These documents will be supported by Supplementary Planning Documents, setting out further detailed guidance on the implementation of policies. Other supporting documents include the Local Development Scheme and Authority's Monitoring Reports.

1.3.4 This Infrastructure Delivery Plan has been prepared to support the Core Strategy, which is currently being prepared, and will also contribute to the delivery of the overall Local Plan.

1.4 Infrastructure and the Core Strategy

1.4.1 The National Planning Policy Framework advises that Local Planning Authorities should work with other authorities and providers to:

- Assess the quality and capacity of infrastructure for transport, water supply, wastewater and its treatment, energy (including heat), telecommunications, utilities, waste, health, social care, education, flood risk and coastal change management, and its ability to meet forecast demands; and
- Take account of the need for strategic infrastructure including nationally significant infrastructure within their areas.

1.4.2 The importance of viability and deliverability are also highlighted in the NPPF, in terms of ensuring that the sites and scale of development identified in the plan is deliverable and viable, and that there is a reasonable prospect that planned infrastructure is deliverable in a timely fashion.

1.4.3 In this context infrastructure planning is as much about the process of engagement with infrastructure providers, influencing where investment should be directed and how infrastructure will be funded, as the process of identifying existing and planned investment projects.

Figure 1 - Infrastructure Planning Cycle.

1.4.4 Physical infrastructure provides the energy, water, telecommunications, waste management and disposal that allow businesses to thrive and make homes habitable. Green Infrastructure provides the much needed open spaces for communities, helps prevent flooding and improves biodiversity and air quality. Transport infrastructure, including public transport, highways, streets and cycle routes ensure a highly accessible borough. Social infrastructure provides health, education and community services.

1.4.5 Infrastructure is therefore defined as 'any facility, service or physical structure which supports or enables proposed development' - these can be privately funded. Generally this means facilities and services that are key to the function of Bury and our neighbouring districts.

1.4.6 Infrastructure has a very broad definition and infrastructure in which the Council is involved in delivering can cover anything from large scale transport schemes down to streetscape improvements and signage. It is important to be clear about what infrastructure is needed to support the Core Strategy and what is not, in order to be able to prioritise and manage funding and resources.

1.4.7 To aid this process and ensure the IDP remains a clear, focused and effective document and tool, criteria have been developed as a means to agree its content. The criteria for including items in the IDP are when the Council has a role in:

- The direct delivery of the infrastructure through its spatial policies (such as linking key regional projects into local plans, or allocating specific sites in later Development Plan Documents);
- The direct funding of the infrastructure;
- Indirect funding of infrastructure through enabling private sector investment including planning obligations;

- Indirect funding through influencing third party public sector investment
- Providing a statutory service which impacts on its spatial policies (such as schools).

1.5 Sub-Regional Working

1.5.1 Bury is part of AGMA, which acts as the voice of the ten local authorities of Greater Manchester and works in partnership with a wide range of private, public and voluntary organisations within the city-region and beyond. AGMA's Chief Executives and Council Leaders meet regularly to work together on a range of key strategic and policy issues which impact on Greater Manchester. In Greater Manchester 10 local authorities are working together with a common objective of ensuring that by 2020 we will be able to confidently call ourselves a world class city region at the heart of a thriving North of England. In many areas of work this includes arrangements for a "single conversation"[1] with infrastructure and service providers.

1.5.2 On 1 April 2011 the AGMA authorities became the first UK sub-region to become a Combined Authority. This sub-regional body has its own legal identity and can act across the whole of Greater Manchester, taking on functions and responsibilities for economic development, regeneration and transport. A new Transport for Greater Manchester committee will assist the GM Combined Authority in carrying out its transport functions. Transport for Greater Manchester (formerly GMPTE) are responsible for implementing the transport policy decisions of the Greater Manchester Combined Authority and Transport for Greater Manchester Committee.

1.5.3 The aims of the Combined Authority will be complimented by the work of AGMA which will continue to collaborate across the sub region. AGMA have adopted a constitution to reflect the City Region's ambitions and provide a legal framework to manage strategic development and financial resources delegated from national and regional levels. To co-ordinate strategic city region programmes, AGMA has established seven commissions, these are:

- Planning and Housing
- New Economy
- Improvement and Efficiency
- Health
- Environment
- Public Protection
- Transport

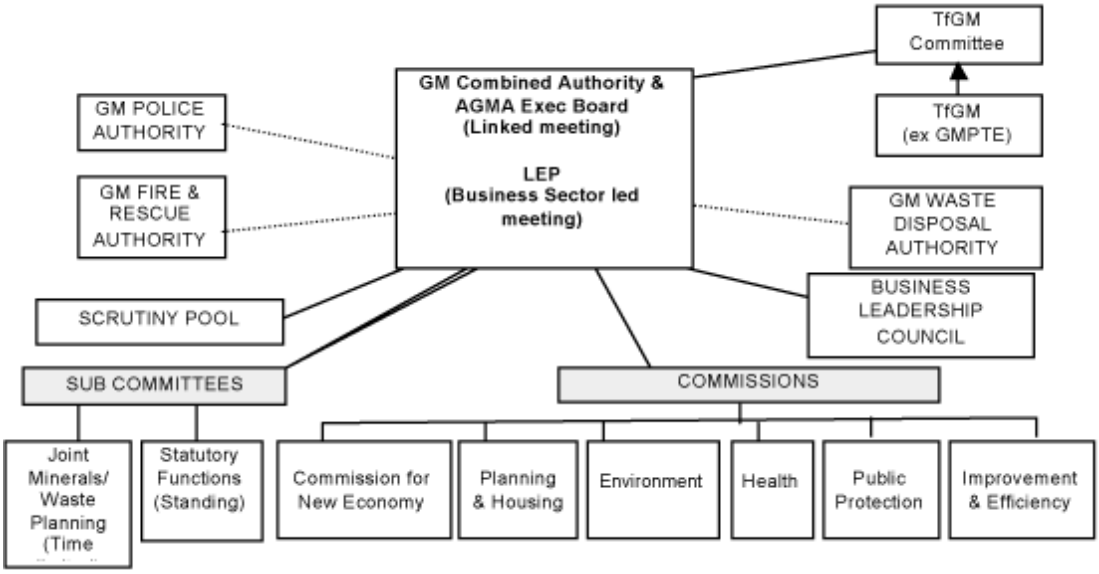
1.5.4 During April 2011 the Greater Manchester Local Enterprise Partnership (LEP) also became operational. The LEP is private sector led and consists of a non-local authority chair with up to 12 board members, comprising four from local government and eight from outside local government.

[1] The term 'Single' Conversation refers to its comprehensive coverage including the full range of housing, infrastructure, regeneration and community activities. It draws on the priorities for a local area as set out in key local plans and is an ongoing, evolving and dynamic process. It will always be a negotiation and have at its core, shared visions and objectives for places.

The Greater Manchester LEP will play a key role in shaping the strategy for Greater Manchester and overseeing delivery in areas such as employment and skills, support for new businesses, inward investment, planning, housing and transport.

1.5.5 The diagram below is a pictorial description of the new governance arrangements for the GMCA and AGMA[2].

Figure 2: GMCA and AGMA structure



1.6 Strategic Infrastructure

1.6.1 At the Manchester City Region level and in line with the Greater Manchester Strategy, the Manchester Multi Area Agreement (MAA), and PAS guidance, it is suggested that infrastructure which should be considered strategically comprises (although some are more critical than others i.e. where they are necessary to make places habitable):

- Energy supply (electricity, renewables, district heating networks, gas supply);
- Water supply;
- Waste water treatment;
- Digital Information technology networks;
- Strategic highway and public transport network;
- Waste management;
- Cross boundary flood and water management issues and
- Green Infrastructure (defined as strategic networks of multifunctional green / blue spaces).

1.6.2 There are other forms of infrastructure which cross district boundaries (e.g. strategic scale health and education facilities) and infrastructure that is specific to individual sites and allocations, for example local highway improvements and site connections, site-specific flood risk management measures, or affordable housing. The AGMA arrangements identified above will ensure effective planning of strategic infrastructure and cross-boundary issues.

[2] Source: www.agma.gov.uk/about_us/index

2 METHODOLOGY

2.1 Rationale for Approach

2.1.1 This IDP and supporting schedule initiates a process of identifying whether specific infrastructure is required to support the Core Strategy. For each type of infrastructure this IDP asks a number of questions. These key questions are answered for each infrastructure component through a written narrative supported by a separate action plan providing a summary of the key infrastructure requirements.

2.1.2 The key questions include the following:

2.1.3 **Why?** Is new infrastructure required and is it needed? Is this need generated by the new development or is the need already there? Can the need for new infrastructure be reduced by better design or phasing of development? In this instance 'need' is determined by utilising the development projections and locations as identified in the Core Strategy and the supporting evidence.

2.1.4 The status of each action is determined by whether this is **critical** (to the delivery of the Core Strategy), **required** (by the Core Strategy to make development sustainable and ensure delivery) or **desirable** to add value and to integrate spatial planning into wider infrastructure delivery activities.

2.1.5 **What?** To identify the scale and type of infrastructure needed according to the evidence identified in the above and costs. This will be an iterative process as the evidence will inform the strategy and ongoing dialogue with infrastructure providers to identify whether the assumptions on why, what and how are correct.

2.1.6 **How?** This is to identify how the infrastructure will be delivered, including the lead delivery partner, the delivery mechanism and any identified funding sources. The IDP only states costs where it is appropriate to do so – this is based on current knowledge in relation to the priority of the project.

2.1.7 It is important to remember that a mechanistic approach that provides a fully costed infrastructure scheduled for specific items such as Waste Water Treatment Works may work for large scale urban extensions but not necessarily within the Manchester City Region. This is because growth will be accommodated through intensification and infill rather than urban expansion and existing infrastructure is going to be utilised, already exists and investment is dependent on a separate price review process. Therefore, communication and governance arrangements agreed with infrastructure providers and other key stakeholders are vital to ensure that the Core Strategy has the right strategic and supporting policies in place and process to defray the costs of new / upgraded infrastructure.

2.1.8 **Where?** The IDP identifies the proposed locations for new infrastructure. The geographical level at which this location is provided takes into account the type of infrastructure and its catchment. The geography at which locations are identified in the IDP is chosen to ensure that it does not prejudice the outcome of the Site Allocations DPD, and so uses areas of search and broad locations rather than specific sites.

2.1.9 Various geographies are used in the IDP, including Borough-wide and townships (as identified by the Core Strategy township frameworks), or sub-regional. The principles of the spatial strategy will also be incorporated within this IDP to ensure infrastructure needs are aligned with growth areas. This also allows some flexibility and pragmatism so appropriate locations for infrastructure can be identified through the subsequent Site Allocations DPD and individual service plans and strategies.

2.1.10 **When?** Timescales have been indicated as to when the infrastructure will need to be delivered. These timescales reflect impacts on capacity, and are determined by the Core Strategy growth assumptions. These relate to five-year blocks from 2012, which is used as the base date in the Core Strategy: 2012-2017, 2017-2022, and 2022 and beyond where relevant.

3 INFRASTRUCTURE PLANNING

3.1 Context

3.1.1 Delivering development and infrastructure in a coordinated and timely manner is fundamental to delivering our economic growth aspirations and creation of sustainable communities. However, it is important to remember that spatial planning is not comprehensive and that whilst specific infrastructure requirements for individual sites can be brought forward e.g. access, upgrades to electricity sub stations; most of the infrastructure required to support new development is provided by private sector companies operating within the utilities market.

3.1.2 The plan is also trying to balance two contrasting approaches. Whilst it is acknowledged that new development needs to be aligned with supporting infrastructure, as already discussed growth will be through intensification and infill and unitisation of existing infrastructure. Within this context the emphasis is on the creation of sustainable communities and use of spatial planning as a framework to improve the quality of life of existing as well as future residents.

3.2 Planning Obligations and Community Infrastructure Levy

3.2.1 Currently local authorities may require developers to make provisions or financial contributions to mitigate the impacts of new development through Section 106 Planning Obligations to make acceptable development proposals which might otherwise be unacceptable. This can include requiring developers to make financial contributions to mitigate a development's impact, for example through increased pressure on local infrastructure.

3.2.2 The Government has now introduced the Community Infrastructure Levy (CIL), which is a new levy that local authorities can choose to charge on new developments in their area. Money collected through the CIL can be used to support development by funding a wide range of infrastructure that is needed as a result of development. CIL will replace Section 106 contributions for general types of community infrastructure, however S106 obligations will still be used for site specific mitigation measures that are required to make a development acceptable, as well as for provision of affordable housing.

3.2.3 **The Community Infrastructure Levy**
CIL is set locally through a Charging Schedule, which must be supported by evidence and subject to an independent examination. In order to justify a levy, the Council will have to provide evidence that infrastructure funding gaps remain once existing sources of funding have been taken into account. The rate at which the levy is set must also strike an appropriate balance between the desirability of funding infrastructure from the levy and potential effects of the levy upon the economic viability of development across the area. The evidence may

show that it is not viable to charge a CIL on certain types of development or in certain areas, if it will put too much development at risk.

3.2.4 Following the adoption of a levy, most new build development will make a contribution towards additional infrastructure that is needed as a result of development. CIL will become a standard charge per square metre applied to all new developments, with the exception of social housing, buildings used by charities and buildings into which people do not normally go.

3.2.5 Unlike S106, CIL funds are not tied to a specific development or the provision of specific infrastructure. CIL funds can be used flexibly to fund any infrastructure as defined within the regulations, including facilitating better use of existing infrastructure or facilities. The definition of infrastructure is deliberately broad, but includes roads and other transport facilities, flood defences, schools and other educational facilities, medical facilities, sporting and recreational facilities, and open spaces. Funds collected through the CIL will be used to support the delivery of the Core Strategy.

3.2.6 The Community Infrastructure Levy Regulations require a proportion of the CIL income to be spent in the neighbourhood where the development took place. The purpose of this requirement is to help communities to accommodate the impact of new development and to strengthen the role of neighbourhoods.

3.2.7 **Restrictions on the use of S106 planning obligations**
The CIL Regulations also introduced restrictions on the use S106 planning obligations. These restrictions mean that on adoption of a CIL Charging Schedule, or after 6 April 2014[3] (whichever is sooner), pooled contributions may only be sought through S106 from up to five separate planning obligations for an item of infrastructure that is not intended to be funded by the levy. Obligations that have been entered into since 6 April 2010 will count towards the five obligation limit. The regulations also prevent S106 obligations being used to provide infrastructure that will be funded by the CIL, in order to prevent double charging (Reg. 123 of the Community Infrastructure Levy Regulations).

3.2.8 In addition the CIL Regulations place into law three tests of planning obligations. In order for a planning obligation to be taken into account when determining a planning application for a development that is capable of being charged the levy, the obligation must be:

a) necessary to make the development acceptable in planning terms;
b) directly related to the development; and
c) fairly and reasonably related in scale and kind to the development.

3.2.9 In Bury it is intended that S106 Planning Obligations will continue to be used during a transitional period in advance of the adoption of a CIL system, prior to the implementation of forthcoming further restrictions on the use of planning obligations. Following the adoption of the CIL

[3] N.B. The Government has consulted on whether this should be extended to 1 April 2015. The outcomes of the consultation are not yet known.

charging schedule, planning obligations will be scaled back to ensure that they are compliant with the five obligation limit, and that the local use of the levy and S106 planning obligations do not overlap. Currently, affordable housing will continue to be delivered through planning obligations, as set out in Policy CO5, rather than through the Community Infrastructure Levy.

3.3 Core Strategy Infrastructure Contributions

3.3.1 As outlined in the Publication Core Strategy (July 2013) it is intended that S106 Planning Obligations will continue to be used during a transitional period in advance of the adoption of a Community Infrastructure Levy Charging Schedule, prior to the implementation of forthcoming further restrictions on the use of planning obligations. Policy DEL1 sets out the basis on which the current and future systems will operate.

INFRASTRUCTURE CONTRIBUTIONS	DM Policy **DEL1**

Development proposals will be expected to provide or contribute towards the cost of providing appropriate infrastructure, and of meeting social and environmental requirements, where these are necessary to make the development acceptable in planning terms; directly related to the development; and fairly and reasonably related in scale and kind to the development. Arrangements for the management and maintenance of services and facilities provided through an obligation may also be required where appropriate.

The range and level of contributions required will be assessed in a comprehensive manner, taking into account strategic infrastructure requirements and using standard charges where appropriate. Standards and formulae for calculating contributions will be set out in separate Supplementary Planning Documents, Development Plan Documents or the Community Infrastructure Levy Charging Schedule.

Where appropriate, the particular requirements of specific sites, including any additional or special requirements will be set out in other DPDs.

The Council will safeguard against situations whereby a landowner/developer seeks to avoid making contributions through the sub-division or phased development of a larger site. Therefore, requirements will be calculated on the complete developable area.

The nature and scale of any planning obligations sought will be related to the form of development and its potential impact upon the surrounding area. Where appropriate, any such provision will be required to be provided on site. Where this is not possible, a commuted sum payment is likely to be sought. In determining the nature and scale of any planning obligation, specific site conditions and other material considerations including viability, redevelopment of previously developed land or mitigation of contamination may be taken into account.

The timing of provision of infrastructure and facilities will be carefully considered in order to ensure that appropriate provision is in place before development is occupied.

Contributions that may be required include the following:

- Affordable housing;
- Recreation - including leisure, children's play and sports facilities;
- Green infrastructure and biodiversity enhancement/mitigation;
- Waterside improvement;
- Transport – including travel planning, public transport, provisions for walking and cycling, parking and highways;
- Economic development – compensation for loss of employment land and providing for employment skills and training;
- Community facilities - including library and information services, youth activities, cultural facilities and meeting places;
- Education, health and social care and community safety;
- Utilities infrastructure and low carbon/renewable energy;
- Emergency and essential services;
- Public realm and environmental improvements;
- Drainage/flood prevention and protection;
- Waste recycling facilities; and
- Public art, heritage and archaeology.

3.4 Bury Council Capital Programme

3.4.1 Although Bury Council has a capital programme of approximately £39 million covering the budget period 2013 – 2016, financially there is little room for manoeuvre and the programme is limited to schemes and projects that are fully funded from external sources / schemes which are self financing based upon a viable proved business case. The Council is not undertaking any new borrowing to fund the capital programme. The Council has a rolling capital programme covering a three year period, and although the current programme is limited to schemes that are fully funded, this may change in future. The budget for 2014 – 2017 will be prepared for approval in February 2014, in the context of reduced levels of funding and the need to make savings.

3.4.2 Council funded infrastructure investment may still be brought forward through invest to save programmes, where Council investment will generate financial savings or net income streams, and the potential remains for Council funding to be used to act as match funding to attract other funding sources to maximise external funding opportunities.

3.4.3 It is expected that some capital schemes will be identified as part of the budget setting process that the Council does not have the resources to fund. Where appropriate, if they support the delivery of new development, they will be considered as part of establishing a framework for spending future Community Infrastructure Levy contributions.

3.5 The Utilities Market

3.5.1 The regulatory framework for the utilities industry and many forms of infrastructure such as electricity, telecoms, gas, water (potable and waste water) is highly complex. The Gas Act 1986, the Electricity Act 1989, the Utilities Act 2000 and the Water Act 2003 facilitated the replacement of the former public sector utilities monopolies, with the aim to open the market to private sector competition and as a consequence drive better service provision and lower prices for consumers. Whilst many of these objectives have been achieved the framework put in place to regulate these new markets, which are essentially private sector regional monopolies is extensive and complicated, resulting in a lack of understanding of how utility infrastructure and services are delivered and the associated costs and timescale.

3.5.2 There is also a recognition that driving down costs through 'sweating assets' whilst beneficial to shareholders and the customers (i.e. increased profits, investor confidence and reduced bills) makes longer term and strategic planning of infrastructure to support growth and climate change adaptation more difficult. Within this context it is critical that Bury Council through AGMA's commissions develop long term communication plans and strategies as these are the mechanisms through which development will be aligned with infrastructure investments at the borough wide, cross boundary and strategic scale.

4 FUTURE DEVELOPMENT WITHIN BURY, POPULATION CHANGE AND DEMAND FOR INFRASTRUCTURE

4.1 Existing and Forecast Population

4.1.1 The Borough has an overall population of 186,200[4]. There was an overall population increase of 2.6% over the ten year period from mid 2000 to mid 2010 and the population is forecast to increase by a further 7.5% over the period mid-2011 to mid-2021, which equates to an additional 13,850 people[5]. The population is forecast to continue growing to 213,900 in 2029[6].

4.1.2 There is a projected increase in the Borough's population of age 65 and above which is forecast to increase by 44% from 2010 to 2029. In comparison, the population aged 0 to 15 is forecast to increase by 20% over the same period.

4.1.3 In 2012 there were an estimated 78,100 households in Bury [7]. The number of households in Bury is projected to steadily rise to 81,500 households in 2018, and 87,200 households by 2029[8]. However the household projections are only an indication of the likely net increase in households based on the continuation of recent demographic trends.

4.2 The Core Strategy

4.2.1 Chapter 4 of the Publication Core Strategy sets out the spatial framework for the quantity and broad locations for future growth, investment and regeneration as well as policies designed to effectively manage future development within the Borough. The foundation of the spatial development strategy is Policy SF1 which sets the broad framework for the location of new built development to 2029 whilst also identifying areas where built development will be restrained and limited. This is further developed by a series of spatial policies that set out more specifically the proposed scale and distribution of particular types of growth, investment and development throughout the Local Plan period.

4.2.2 The following section provides a summary of the spatial development strategy which, in turn, gives an indication of the potential demands on infrastructure and forms the basis of this Infrastructure and Delivery Framework.

[4] Source: ONS mid-2012 population estimate
[5] Source: ONS 2011-based population projections.
[6] Source: ONS 2010-based population projections.
[7] Source: CLG 2008-based household projections.
[8] Source: CLG 2008-based household projections.

4.3 Broad Spatial Priorities for New Development

4.2.1 In March 2012, the Government issued the National Planning Policy Framework (NPPF) which sets out how the planning system can contribute towards the delivery of sustainable development by performing economic, social and environmental roles.

4.2.2 The Spatial Framework set out in Policy SF1, below, has been designed to reflect the approach set out in the NPPF in a way that seeks to achieve a network of thriving and sustainable townships and communities across the Borough.

4.2.3 The Policy underpins other Spatial Policies within the Core Strategy and, in pursuing this approach, the Council will take an integrated approach towards development proposals with the aim of delivering the Core Strategy's Objectives for:

- Delivering High Quality Development in Sustainable Locations
- Delivering of a competitive and diverse local economy;
- Promoting strong, vibrant and healthy communities;
- Improving and managing the Borough's environment; and
- Improving transport and connectivity.

BURY'S SPATIAL FRAMEWORK

Core Policy

SF1

In seeking to create a network of thriving and sustainable communities across the Borough, the Council will adopt an integrated approach towards the achievement of the Core Strategy's economic, social and environmental objectives. In particular, the Council will, through Local Plan policies and proposals, seek to:

Deliver a competitive and diverse local economy by:

- Protecting existing and suitable sources of employment and encouraging new, high quality investment and job opportunities focused on a limited number of Employment Development Areas at Bury North, Bury Central, Irwell Bank, Pilsworth and Bury South (see Policy EC1);
- Maintaining and enhancing the vitality and viability of the Borough's Key Centres of Bury, Ramsbottom, Tottington, Radcliffe, Whitefield and Prestwich through the encouragement of appropriately-scaled town centre uses and supporting the evening economy of Key Centres through increased provision other uses such as leisure, entertainment, cultural and 'lifestyle' amenities (see Policy EC4);
- Supporting the retail functions of the Borough's existing hierarchy of centres and prioritising these centres as locations for accommodating appropriately-scaled, new retail development in accordance with identified capacity (see Policy EC6); and
- Encouraging growth in the Borough's tourism and visitor economy by supporting and protecting existing and potential assets and encouraging further appropriate visitor-related development (see Policy EC9).

Promote strong, vibrant and healthy communities by:

- Making provision for an appropriate supply of land for new housing across

all of the Borough's Townships but with a focus on Bury and Radcliffe and ensuring that new housing development meets the needs of the Borough's communities (see Policy CO1);
- Ensuring that the location and type of new development assists in addressing issues associated with the Borough's deprived communities in East Bury, Inner Radcliffe, Besses and Rainsough (see Policy CO7); and
- Ensuring that communities have adequate access to high quality community facilities and open space, sport and recreation (see Policy CO8).

Improve and manage the Borough's environment by:
- Protecting and improving areas of Green Belt and village settlements (see Policy EN1);
- Creating and enhancing a network of multi-functional green infrastructure (see Policy EN3);
- Conserving and enhancing an ecological network and the Borough's natural assets (see Policy EN5);
- Managing flood risk and ensuring that new development complies with the flood risk management hierarchy and does not result in unacceptable levels of risk either to the development itself or elsewhere (see Policies EN7 and EN8);
- Promoting opportunities for investment in decentralised, low and zero carbon energy infrastructure (see Policy EN10);
- Conserving and enhancing the Borough's built heritage assets and landscape character (see Policy EN13);
- Effectively managing minerals resources (see Policy EN16);
- Managing waste in a sustainable way (see Policy EN17); and
- Promoting opportunities for the reclamation and beneficial use of derelict land.

Improve transport and connectivity by:
- Promoting development in accessible locations, such as close to public transport nodes and frequent bus routes, in order to encourage sustainable transport choices and reduce the number and length of car-borne journeys (see Policy T1).

In identifying specific locations for new development and in determining development proposals, the Council will encourage the effective use of land by re-using land that has been previously developed (brownfield land), provided that it is not of high environmental value.

4.4 The Type, Scale and Spatial Distribution of New Development

4.4.1 In addition to the identification of broad priority locations for growth and development, the Core Strategy goes on to identify the scale and spatial distribution of various forms of development.

4.4.2 However, it is expected that a majority of new build development will arise from employment, housing and retail uses and, consequently, it is these that are considered to be the forms of development that will potentially result in the most significant demands on infrastructure.

4.5 Employment

4.5.1 In terms of employment, Policy EC1 identifies the need to make provision for a comprehensive portfolio of employment sites that are attractive to the market and are sufficient to meet the Borough's quantitative, qualitative and spatial needs as identified through the Bury Employment Land Review.

PROTECTING EXISTING AND PROVIDING FOR NEW EMPLOYMENT OPPORTUNITIES

Spatial Policy

EC1

The Council will seek to positively and proactively encourage sustainable economic growth in the Borough. In doing so, the Council will seek to:

- Protect existing sources of employment, where appropriate (see Policies EC2 and EC3)[9]; and
- Make provision for a supply of employment land that is sufficient to:
  a) Meet quantitative needs for between 50 and 62 hectares of employment land to 2028/29;
  b) Meet qualitative needs in terms of supporting the continued restructure of the local economy by encouraging a move towards a better quality, knowledge-based local economy;
  c) Provide a good balance of sites in terms of location and site size in order to maximise the supply's attractiveness to the market; and
  d) Create a more balanced spatial distribution of employment land that reflects sustainable and inclusive patterns development and which focuses employment growth in the following broad Employment Development Areas (EDAs):

  Bury North – which will be an area promoted for an increase in employment provision in a range of Business (B1), General Industrial (B2) and Warehousing (B8) uses including the encouragement of small and creative businesses by capitalising on opportunities to recycle existing, older employment areas as well as through the provision of additional employment land in the north of the Borough. This EDA has the potential to accommodate around 3% of the Borough's supply within its urban area but could accommodate growth in small and creative businesses through the re-use of existing buildings. The additional provision at Gin Hall (identified below) also sits within the Bury North EDA and could, subject to other policies, add to the level of employment land in this area;

  Bury Central – which will be an area promoted as the Borough's main focal point for the accommodation of higher density and high quality B1 office-based employment with the potential to

[9] On 30 May 2013, the Government introduced changes to permitted development rights under the Growth and Infrastructure Act. These changes are valid until 30 May 2016 and allow for a change of use of a building used as an office falling under Use Class B1(a) to residential (C3). Consequently, until 30 May 2016, the use of this Policy for employment premises falling within B1(a) use where it is proposed to change the use of an office building to residential will be affected. The use of the Policy thereafter will be dependent on whether these permitted development rights are extended.

accommodate around 28% of the Borough's total future supply of employment land;

Irwell Bank – which will be an area promoted for more indigenous and localised growth in a range of lower density Business (B1), General Industrial (B2) and Warehousing (B8) uses through the provision of new employment land as well as through the recycling of older, existing employment sites. This area has the potential to accommodate around 34% of the Borough's total future supply of employment land;

Pilsworth – which will be promoted as an area for growth in a range of Business (B1), General Industrial (B2) and Warehousing (B8) uses predominantly through the provision of new employment land as well as through the recycling of older, existing employment sites and sites in other uses. This area has the potential to accommodate around 15% of the Borough's total future supply of employment land;

Bury South – which will be an area promoted for an increase in employment provision in B1 office development in and around Prestwich Key Centre as well as capitalising on opportunities to recycle and regenerate existing, older employment areas. This area has the potential to accommodate around 9% of the Borough's total future supply of employment land; and

Additional Provision – In addition to the above and, in the interests of making significant improvements to the quality of the employment land supply and its spatial distribution, the Council will also encourage additional provision for employment at Gin Hall on Junction 1 of the M66. However, the Green Belt status of the site means that the Council will only support proposals where an applicant is able to successfully demonstrate 'very special circumstances' as required under the NPPF and Core Strategy Policy EN2. The potential inclusion of this additional provision within the Bury North EDA would increase its contribution to around 8% of the Borough's total supply on employment land.

In seeking to encourage sustainable economic growth and reducing the need to travel, the Council will also support appropriate opportunities for home working.

4.5.2 Appendix A reflects the broad locations for growth and development in employment.

4.6 Housing

4.6.1 Policy CO1 sets out the Borough's quantitative housing targets and identifies the broad locations within which this requirement will be met over the period of the Local Plan.

DELIVERING A CHOICE OF QUALITY HOUSING FOR EVERYONE

Spatial Policy

CO1

The Council will seek to ensure that:

- sufficient land is released to deliver a minimum of 6,800 dwellings (net) between 2012/13 to 2028/29 (an average of 400 dwellings per annum);
- the plan, monitor and manage approach is used to ensure that the Borough's housing target is delivered;
- encouragement is given to re-using suitable previously developed land for residential use, to aid local regeneration efforts;
- the targets for affordable housing on large sites are met, taking account of viability issues and site characteristics;
- the specific housing needs of particular groups are catered for, including older persons and those in need of specialist housing;
- the accommodation requirements of travelling communities[10] are catered for in appropriate locations;
- housing sites deliver an appropriate mix of house types, sizes and tenures that reflect the specific housing needs in a particular area; and
- best use is made of the existing housing stock and vacancy rates are reduced.

Spatially[11], residential growth will be concentrated within the existing urban area in the following Townships:

- **Ramsbottom, Tottington and North Manor –** There are some opportunities for large scale residential development in this area but most housing sites are likely to be smaller, infill previously developed sites. Around 10 % of the Borough's housing target is expected to be delivered in this part of the Borough.

- **Bury West –** The main opportunity for housing growth in Bury West is focused on the land on the edge of the Town Centre, which is earmarked for mixed use development. A mix of other larger and smaller opportunities exist elsewhere, some of which benefit from extant planning permissions. Around 10% of the Borough's residual housing target is expected to be delivered in this part of the Borough.

- **Bury East -** The areas in and around Bury town centre provide some of the Borough's key strategic opportunities for housing and mixed-use developments, which will help to attract investment and promote regeneration over the plan period. Around 30% of the Borough's residual housing target is expected to be delivered in this part of the Borough.

- **Radcliffe –** A number of large sites have the potential to deliver residential units in the short to medium term within the Radcliffe

[10] For the purposes of this Policy, travelling communities refers to the range of groups that exist under the collective names of Gypsies, Travellers and Travelling Showpeople, although it is recognised that some members of these groups do not necessarily travel.
[11] The broad spatial distribution of anticipated residential development is based on sites that have specifically been identified in the SHLAA and apportioned windfall allowance.

Township. Around 35% of the Borough's residual housing target is expected to be delivered in this part of the Borough.

- **Whitefield and Unsworth –** Opportunities in this area are limited given the fact that much of the urban area is already developed. Future residential development in this area is likely to consist of small scale infill developments. Only around 5% of the Borough's residual housing target is expected to be delivered in this part of the Borough.
- **Prestwich –** The main opportunities for future residential development in this area are focused in and around Prestwich Town Centre, including the proposed mixed use redevelopment of the Longfield Centre. Around 10% of the Borough's residual housing target is expected to be delivered in this part of the Borough.

Windfall Development

It is likely that further opportunities for residential development will arise over the plan period on sites that have not been specifically identified in the SHLAA or allocated in the Site Allocations Plan. Planning applications on such 'windfall' sites will be considered against the criteria set out in Development Management Policy CO2.

MANAGING 'WINDFALL' HOUSING DEVELOPMENT

DM Policy

CO2

Any planning application for housing development on a site that is not allocated for residential use will generally be allowed to come forward if the site is:

a) within the urban area or on suitable previously developed land within the Green Belt;
b) on land that is not protected for other purposes;
c) adequately serviced by appropriate infrastructure requirements;
d) not in an area of flood risk (or it can be demonstrated that any flood risk can be managed in accordance with Development Management Policy EN8);
e) suitable in land use terms, with particular regard to amenity, local environment and surrounding land uses; and
f) not in conflict with the overall Spatial Framework and other policies in the Local Plan.

Applications for residential development on sites that do not meet all of the above criteria will generally be deemed unacceptable unless it can be demonstrated that particular circumstances exist to justify approval.

4.6.2 Appendix B identifies the anticipated distribution of housing growth as at April 2013.

4.7 Retail

4.7.1 With regard to retail development, Policy EC6 identifies the Council's approach to accommodating new retail development.

ACCOMMODATING NEW RETAIL DEVELOPMENT

Spatial Policy

EC6

The Council will prioritise the Borough's existing hierarchy of centres as locations for new retail development of a scale that is consistent with identified levels of quantitative and qualitative needs for both convenience (food) and comparison (non-food) retailing.

The majority of the need for new retail development will be met within the Borough's town centres of Bury, Ramsbottom, Radcliffe and Prestwich.

It should be noted, however, that the Council's priority for accommodating additional expenditure capacity will be for this to be absorbed through the reoccupation of vacant retail space within the main shopping area of these centres.

In considering when this priority should be applied, the Council will have regard to whether the level of vacant retail space is considered to be undermining the vitality and viability of the centre and whether the vacant space is suitable, available and viable.

Proposals for new retail development within the Borough's district, local and neighbourhood centres may also be acceptable, provided that it is of a scale that is appropriate to the role and function of the centre, as set out in Development Management Policy EC5, and satisfies the impact considerations set out in national policy on retail development.

Quantitative Need

In considering the allocation of sites and in determining retail proposals, the Council will have regard to the following cumulative levels of quantitative need for additional convenience and comparison retail provision:

Convenience:

	Year			
	2014	2019	2024	2029
Zone	Expenditure Capacity (£m)			
Bury	31.02	34.52	40.82	46.74
Ramsbottom/ Tottington	0.29	0.97	2.34	3.61
Radcliffe	13.10	14.24	16.17	17.95

Prestwich/ Whitefield	0	0	1.33	5.10

Comparison:

	Year			
	2014	2019	2024	2029
Zone	Expenditure Capacity (£m)			
Bury	8.01	48.53	101.15	164.81
Ramsbottom/ Tottington	0	0	0	0
Radcliffe	0	0	2.33	6.37
Prestwich/ Whitefield	0	0	0	0

In determining the acceptability of a specific retail proposal, the Council will have regard to the level of identified expenditure capacity set out above and will consider these alongside a number of other factors, including:

- The vitality and viability of a centre;
- the level of existing vacant retail units and whether the proposal could be occupied within a vacant unit or units;
- the particular characteristics of the scheme including the likely retail operator, the retail format and anticipated levels of turnover;
- the distance of the proposal from the main shopping areas of town and district centres;
- the anticipated level of impact; and
- the regeneration benefits arising from a proposal.

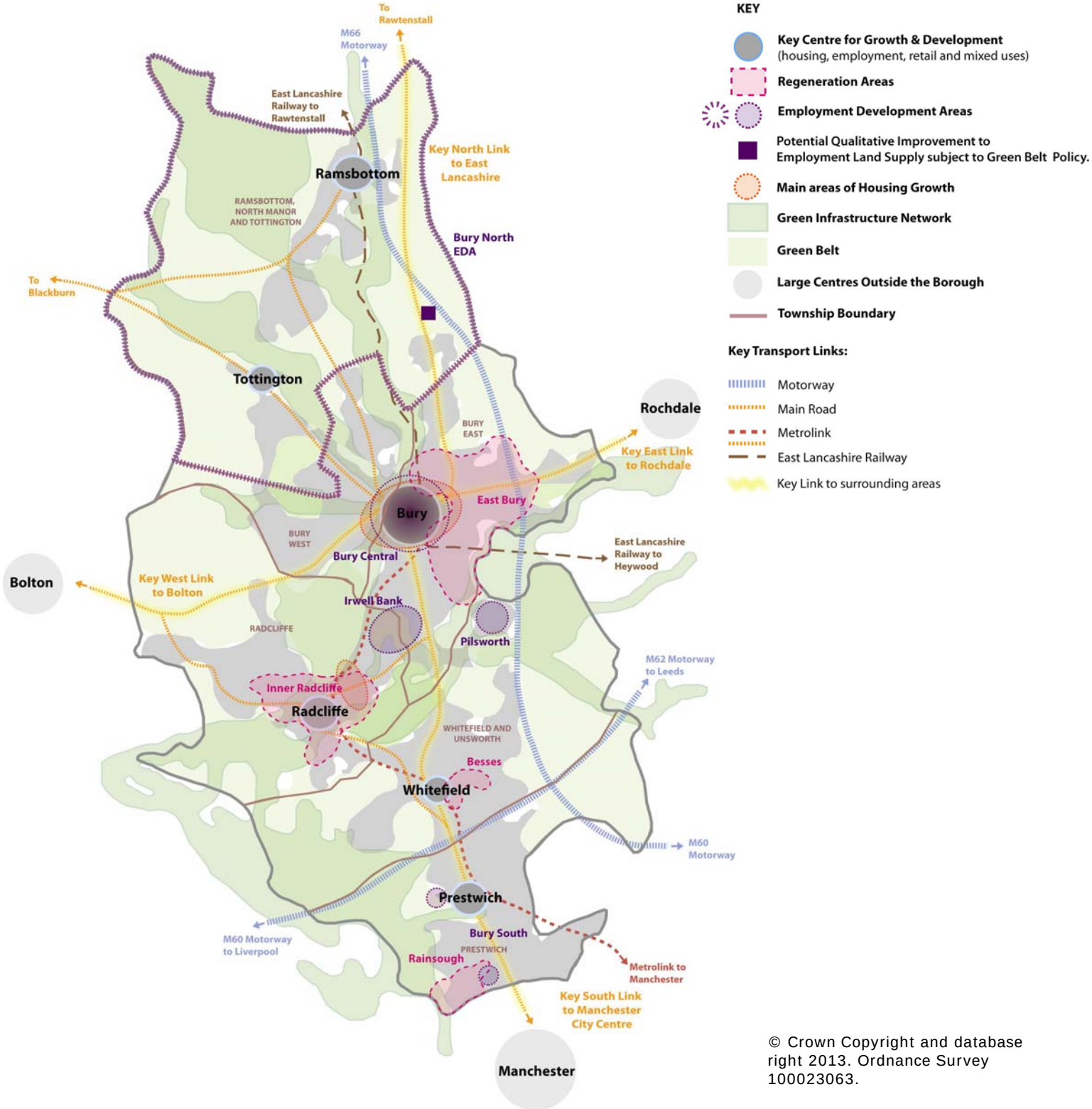
Qualitative Needs

In addition to the quantitative needs set out above, there is also considered to be a particular need for qualitative improvements to retail provision in Bury, Radcliffe and Prestwich Town Centres that justifies the need for additional retail development in excess of that identified from a quantitative perspective.

4.8 Core Strategy Key Diagram

4.8.1 The Core Strategy includes the Key Diagram below, which expresses the main spatial features of the Core Strategy at the Borough-wide level, and provides a useful interpretation of the spatial strategy.

Figure 3: Core Strategy Key Diagram



5 PHYSICAL INFRASTRUCTURE

5.1 Water Supply and Waste Water

5.1.1 Water Infrastructure and Investment Cycles

5.1.2 Water infrastructure covers the supply of potable water and treatment of foul water. Within Bury this service is provided by United Utilities.

5.1.3 The water industry works on five-year investment cycles known as 'Asset Management Plans' (AMPs). The AMP is the result of a lengthy process known as the Price Review Process (PRP). Ofwat, the industry watchdog, sets price limits and service targets for water companies and takes a lead role in conducting the PRP. This determines both the level and cost of improvements in services allowed over the next five years, and the impact on prices for customers. The whole process treads a fine line between increasing costs to the consumer, maintaining and enhancing services whilst also meeting the requirements of the Drinking Water Inspectorate (DWI), the Environment Agency (EA), UU customers and Natural England (NE).

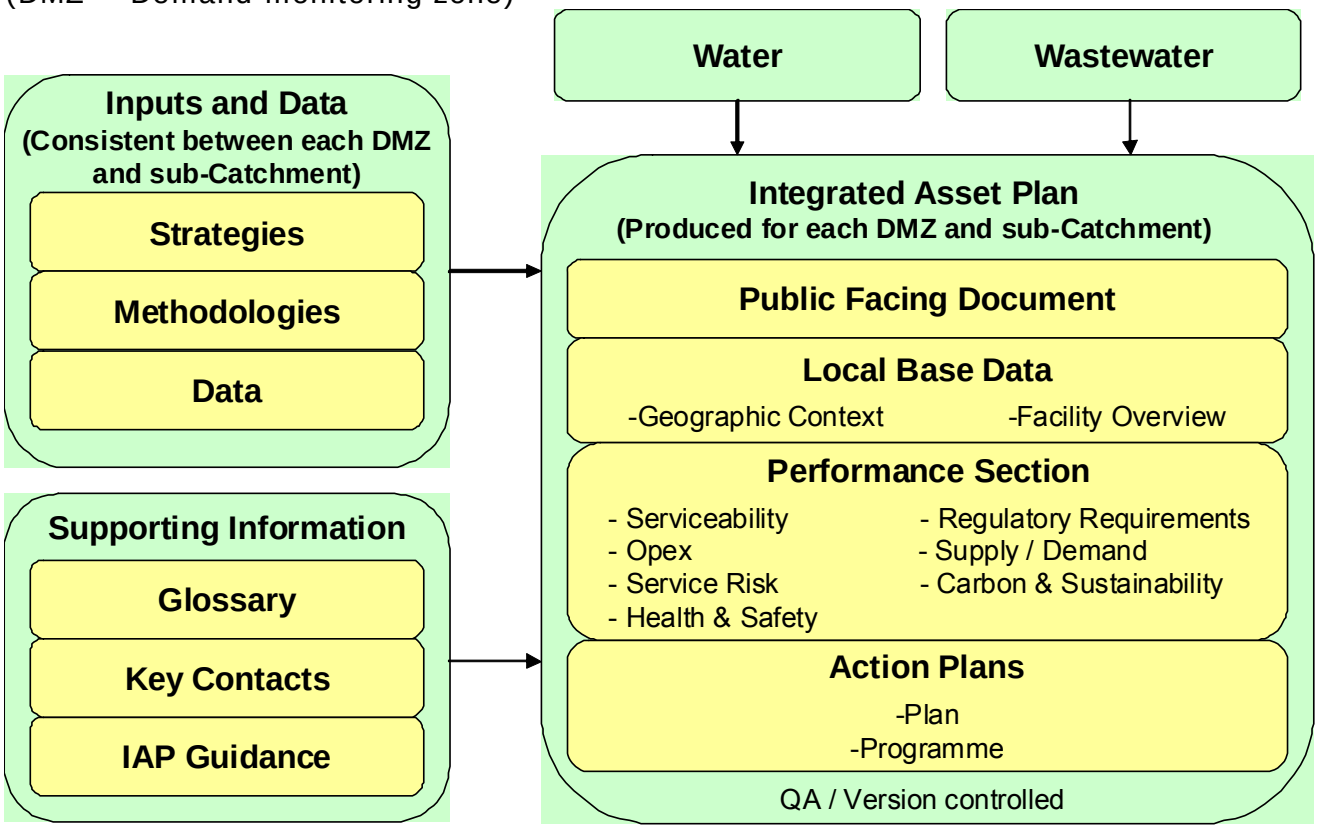
5.1.4 The AMP is supported by Water Resource Management Plans (WRMPs) and a Strategic Direction Statement which cover the period 2010 to 2035 and explain how UU intend to maintain water supplies and treatment services in the long term across the North West. The WRMP must take account of the impact of changes in consumption in new developments and must forecast future growth using Department for Communities and Local Government population / economic growth forecasts. The WRMP for the North West was published September 2009.

5.1.5 Under the remit of the Planning and Housing Commission (P&HC), AGMA has established a Technical Flood Risk Officers Group who meet on a regular basis with UU and the Environment Agency. AGMA have also agreed a memorandum of understanding (MoU) with United Utilities and the Environment Agency. This is to facilitate the alignment of strategies, including the development of Integrated Asset Planning to support the next PRP (AMP6 from 2015 - 2020) and development of Surface Water Management Plans (SWMPs).

5.1.6 Collaborative work with United Utilities is being coordinated by AGMA, with a key aim of improving data sharing. Details of Bury's future development sites have been shared with UU to help inform their investment planning process and establish where the potential capacity issues are. In addition to this work the Council will consult UU and EA on this draft IDP and the Core Strategy.

Figure 4. United Utilities Catchment Planning Process and Delivery of Capital Projects.

(DMZ = Demand monitoring zone)



5.1.7 The Environment Agency is responsible for granting consent for the discharge of materials into watercourses in England and Wales. This includes discharges made by United Utilities. To meet the Water Framework Directive (WFD) and climate change predictions some of these consents will need to be restricted or removed, particularly for combined sewer storm drains.

5.1.8 The current AMP5 covers the period 2010 to 2015. This determines what UU can charge and therefore what their investment programme will be, and had to be approved by the water regulator Ofwat. AMP5 which will deliver over £3.5bn capital investment programme in the North West. Specific schemes relating to Bury include:

- Construction of a bi-directional "West to East Link" pipeline between Merseyside and Bury to move water more easily across the region;
- £1 million investment to modernise equipment and improve the sludge treatment process at Bury waste water treatment works.

5.1.9 **Water Supply**

5.1.10 United Utilities (UU) supplies drinking water to homes and businesses in the North West, and is responsible for statutory provision of new connections to the water network within the region. Developers are responsible for the cost of connection, including new water mains, reinforcements and diversions if necessary. United Utilities can also raise infrastructure charges for new connections which contribute to the

costs of local system enhancement which may be needed as a result of the extra demand new premises may impose on the water and sewerage network.

5.1.11 In Bury the bulk of the water supply to the Borough comes from the Haweswater reservoir in the Lake District via Haweswater Aqueduct and Woodgate Hill Water Treatment Works and a variety of connections on the Manchester Ring Main. There are some supplies from Wayoh Water Treatment Works which primarily feeds Tottington and parts of Ainsworth. The northern areas of the Borough such as Holcombe and Ramsbottom receive a mixture of Haweswater and Haslingden Grane Water Treatment Works supplies.

5.1.12 Water supplies to the majority of the region (comprising 95% of the total population) are managed in a fully integrated manner through a single resources zone (Integrated Resources Zone). The Integrated Resources Zone serves people living in South Cumbria, Lancashire, Greater Manchester, Merseyside, most of Cheshire and a small part of Derbyshire.

5.1.13 The integrated zone is centred upon the major aqueducts which deliver water from the Lake District to South Cumbria, Lancashire and Greater Manchester and from mid-Wales and the River Dee to Cheshire and Merseyside. There are connections from the aqueducts to all towns and centres of population in these areas, so that local sources (impounding reservoirs and boreholes) can be operated in a fully integrated manner with the major regional sources. Following the 1995-96 droughts, a new strategic pipeline was constructed to link the Merseyside and Manchester supply systems.

5.1.14 UU have recently completed a new bi-directional pipeline, known as the “West-to-East Link”, between Merseyside and North Manchester. The pipeline runs between Prescot Reservoirs to the East of Liverpool and Woodgate Hill Reservoirs to the East of Bury It is due to come into operation in 2012. This will help maintain adequate supplies to Greater Manchester or Merseyside in the event of needing to temporarily reduce supply from a major reservoir, for example due to maintenance work or drought conditions. This will be an enhancement to their supply network to further increase the integration and flexibility of the supply within the Integrated Zone.

5.1.15 The “West-to-East Link” facilitates UU’s integrated strategy and it will help to meet future demand requirements, transferring water in the summer from Cheshire and Merseyside to Manchester to replace the reductions in water source yield from the Lake District and Pennine supplies. It will help maintain security of supply to customers and address the long-term challenges arising from the European Union Habitats and Water Framework Directives and from climate change. The link will also provide an adequately integrated resource zone beyond 2015 and will reduce the risk of loss of supply due to asset failure.

5.1.16 In addition to security of supply, the “West-to-East Link” will enable UU to deliver two further projects that currently present a major challenge, which involve the inspection and maintenance of their large diameter

trunk mains. Without the link in place, UU would be required to construct duplicate mains, which would subsequently become large redundant assets, or else water supplies would be placed at high risk during internal inspection of the mains. The "West-to-East Link" provides multiple benefits and UU is convinced that it provides a unique opportunity to secure the robustness of the water supply system in the North West of England for the next 100 years.

5.1.17 United Utilities are also due to start work on a £9 million improvement scheme at the Ogden and Holdenwood Reservoirs. These reservoirs feed water to the nearby Haslingden Grane water treatment plant which can supply 14 million litres a day to homes and businesses in Haslingden and parts of Bury. The main construction project began in Spring 2012, and is due for completion in Winter 2013. The work will involve building new overflows and spillways as part of a safety improvement project, and will ensure the reservoirs can continue to provide water for decades to come by upgrading them to meet modern safety standards.

5.1.18 United Utilities have prepared a Water Resources Management Plan[12] which identifies projected water demands up to 2035 and actions to be taken to ensure a water supply-demand balance. The plan identifies that projected demands for the integrated zone which covers Bury can be met through the delivery of the West-to-East link, reducing leakage levels, water efficiency and demand reduction measures and implementing water source enhancements (particularly groundwater extraction). If increased water capacity is required for a development, the developer is required to pay for the cost of provision up to the point of a treatment works, and obtain approval from United Utilities. United Utilities are currently preparing a new Water Resources Management Plan, which will cover the years 2015-2040.

5.1.19 **Wastewater Treatment and Disposal**

5.1.20 Waster water within Greater Manchester is treated at 48 Waste Water Treatment Works (WwTW). Parts of Wigan are served by the Warrington North WwTW. (Please see Appendix C). Five WwTW serve more than one individual district. These are:

- Oldham – Oldham and Rochdale;
- Rochdale – Oldham and Rochdale;
- Davyhulme – Manchester, Rochdale, Stockport, Tameside and Trafford;
- Bolton – Bolton, Bury and Salford; and
- Bury – Bury and Rochdale.

5.1.21 Waste water from Ramsbottom, Tottington, Bury and Whitefield is treated in Bury WwTW at Blackford Bridge, whilst Radcliffe and Prestwich are served by Bolton WwTW at Ringley Fold (see Appendix C). We are aware from liaison with UU that the WwTWs at Bury and Bolton are at hydraulic and close to treatment capacity. The response from UU (David Hardman email (12/01/09)) notes that:

[12] United Utilities Final water resources management plan, September 2009. www.unitedutilities.com/WaterResourcesPlan

"Bury is operating at hydraulic capacity and close to treatment capacity as advised in our letter of 5th Nov 2008. In planning for future demand we take into account many different factors. These include predicted population growth and housing development which may be offset to some extent by predicted reductions in domestic per capita consumption and the anticipated reduction in trade effluent discharges resulting from waste minimisation. Also, as advised in our letter of 5th Nov 2008, we are looking to manage hydraulic constraints by working with your Development Control colleagues and Developers to ensure separate surface water management on new developments in order to reduce the risk of foul flooding, the impact on storm sewage overflows, the hydraulic impact on the wastewater treatment works and reduce our carbon footprint.

Therefore, whilst we expect to be able to accommodate the growth in Bury over the next 5 years (until 2015) without upsizing the capacity of the wastewater treatment works in this period, this is subject to appropriate planning control on new development and is based on our current understanding of the predicted growth".

5.1.22 Drainage capacity issues and critical drainage areas within Radcliffe and Ramsbottom have also been identified by the SFRA (see below). There are also odour issues associated with Bury WwTW, although investigations will be carried out through UU AMP5.

5.1.23 In June 2010 the Environment Agency published a report on the costs of environmental infrastructure needed to support new housing up to 2031 (based on RSS housing targets). This concludes that, if the methodology applied by the Environment Agency is correct, that the additional investment required could be in the region of £427 million (less than 0.1% of the city region's economic output over the same period). However these costs could be reduced by taking steps to manage demand and by building in the right location. By taking action to manage demand, such as reducing the rate at which household waste is generated and learning to use water more sustainably, the additional investment required could be reduced to £250 million up to 2031. These issues will be addressed by collaborative working between the AGMA authorities, the Environment Agency, United Utilities and other infrastructure partners.

5.1.24 From the perspective of Bury's Core Strategy water supply and waste water treatment is a regional and sub regional issue. No issues have been identified for the 2011-2016 period and the policies within the strategy on green infrastructure, flood risk and water management provide a robust response to managing and delivering new development, including actions to manage demand.

Conclusion, intended approach to potable water and waste water infrastructure and delivery action plan
Overall our understanding from dialogue with UU is that **Waste Water treatments should not be an issue for development in Greater Manchester and Bury in the short term (next 5 years)**, although issues may arise in the future (10 years) if surface water is not carefully managed. Additional infrastructure to support the Core Strategy in

the short term is not required and additional need generated by development can be met through planning obligations and the policy framework.

The approach to potable water and waste water overlaps with flood risk management (see section 5.2).

No.	Action	Status	Timeframe
1	Enforce the water efficiency standards in the Code for Sustainable Homes and BREEAM best practice for other buildings.	**Required**	2012-2029
2	Implement SuD techniques to reduce potable water usage (where water harvesting is utilised) and manage surface water.	**Required**	2012-2029
3	Maintain the partnership and collaborative approach with EA and UU to bring about more sustainable water management at the development and community scale and deliver necessary investment in a co-ordinated manner.	**Required**	2012-2029
4	Maintain and review if necessary the Protocols for joint working and regular liaison meetings.	**Required**	2012-2029
5	Work with UU to deliver AMP 5 projects and investments.	**Required**	2012-2029
6	If necessary, phase development to coincide with AMP investments such as flood resilience at Bury WwTw and public surface water sewer networks which may come forward through AMP 6 (2016 - 2020) and AMP 7 (2021 - 2025)	**Required**	2016 - 2025
7	Implement drainage rates recommended by the SFRA to reduce surface water within the sewer network (see below) and develop Green Infrastructure strategy.	**Required**	2012-2029
8	Implement the SWMP.	**Required**	2012-2029

Main Partners Involved

- Environment Agency
- United Utilities
- AGMA

5.2 Flood Risk and Drainage

5.2.1 Introduction to Flood Risk

5.2.2 Flooding is a natural process and does not respect political and administrative boundaries; it is influenced principally by natural elements of rainfall, tides, geology, topography, rivers and streams and man made interventions such as flood defences, roads, buildings, sewers and other infrastructure. As has been seen in recent years in other parts of the country, flooding can cause massive disruption to communities, damage to property and possessions and even loss of life.

5.2.3 The Council is now a Lead Local Flood Authority under the provisions of the Flood and Water Management Act 2010. As such, the Council must fulfil a range of new statutory duties and responsibilities in relation to flood risk. These duties include:

- Developing, maintaining, applying and monitoring a strategy for local flood risk management in the area;
- A duty to act consistently with local and national strategies;
- Investigating flooding incidents in the area;
- Maintaining a register of structures or features which have a significant effect on flood risk in the area;
- The power to do works to manage flood risk from surface runoff and groundwater;
- The power to designate structures and features that affect flooding, in order to protect them;
- Establishing SuDS Approving Bodies, responsible for the approval of proposed drainage systems in new developments and redevelopment, and for adopting and maintaining SuDS which serve more than one property where they have been approved.

5.2.4 **Strategic Flood Risk Assessment**

5.2.5 The risk of flooding from rivers, surface water, sewers, groundwater, canals and reservoirs has been explored for Greater Manchester and Bury within the Sub Regional (2008) and Level 1 and 2 Strategic Flood Risk Assessments (SFRAs) (2009).

5.2.6 All forms of flooding and their impacts on the natural and built environment are material planning considerations. Risk needs to be managed at all scales, strategically and at the sites level. This means following the flood risk management hierarchy, which is:

(1) Assess risk
(2) Avoid risk
(3) Substitute uses
(4) Control and manage risk
(5) Mitigate for any residual risk

5.2.7 The SFRA is a tool that is used to inform spatial planning and ensure that new development is located in appropriate locations, can be made safe, whilst also providing opportunities to reduce risk (e.g. manage green space, switching more vulnerable land uses (schools / housing) for less vulnerable uses (offices)). The SFRA is also the trigger for identifying the need for SWMPs.

5.2.8 The Sub Regional SFRA for Greater Manchester (2008), identifies flood risk from all sources and the hydrological connections, this is to enable a catchment wide and positive planning approach to flood risk management. The Greater Manchester Sub Regional SFRA identified that 2,920 residents live within Flood Zone 3.

5.2.9 The River Irwell catchment in Bury is relatively steep, which tends to promote surface water flooding, and there are 5,910 properties at risk (DEFRA rankings, 2009). This is a particular problem in Ramsbottom and Radcliffe, both of which have been identified as Critical Drainage Areas (CDAs). There is also a residual risk of reservoir and canal flooding.

5.2.10 As identified within the Greater Manchester Sub Regional SFRA (2008), there are significant hydrological connections within the City Region and especially within the Irwell catchment. Therefore, it is essential that developments within Bury incorporate measures to reduce run off from sites and areas to ensure that there are no cumulative impacts on downstream locations within the Borough and the regional centre (Salford, Manchester and Trafford). This will be achieved by the application criterion (c) of the Exceptions Tests and development of Green Infrastructure corridors.

5.2.11 The GM SFRA is an example of a high level and cross boundary assessment that introduced the concept of flood risk to the Manchester City Region and the hydrological connectivity that links the City Region together. By carrying out a strategic document, it has allowed the partnership and familiarity to be created between the LA and key stakeholders in flood risk issues and the need for greater understanding and single belief in flood risk management.

5.2.12 Following the completion of the Sub Regional SFRA, Bury Council has worked with our AGMA partners and locally to produce a protocol for joint working with the Environment Agency and United Utilities (January 2009).

5.2.13 **Level 1 and 2 SFRA for Bury**

5.2.14 Following on the Sub Regional SFRA, a more detailed Bury, Oldham and Rochdale Level 1 SFRA was produced to make an assessment of flood risk from all sources, and confirmed that the main source of flood risk for the Borough is from the River Irwell and its tributaries, including Holcombe Brook, Pigs Lee Brook, Kirklees Brook and the River Roch. It also identified that three areas in particular face flood risk from rivers. These are in Ramsbottom and the 'Irwell Bank' corridor between Bury and Radcliffe town centres.

5.2.15 Following this assessment a more detailed Level 2 SFRA was produced and it focused on key areas where future development aspirations coincided with flood risk. It considers the detailed nature of flood hazard taking account of the presence of flood risk management measures such as flood defences. The Level 2 SFRA concluded:

- Ramsbottom is at risk from the river and surface water. The town centre is defended but is at risk from a flow path which originates in Stubbins but flows alongside the East Lancashire Railway via the swimming pool and then down Crow Lane. Water can then pond behind the river defences. In order to address the issues connected with flood risk in Ramsbottom, the Council will work with partners to:
  - Remove and/or manage the flow path into Ramsbottom;
  - Increase awareness of flood warnings and evacuation plans; and
  - Resist piecemeal development which will increase flood risk elsewhere.

- There is some risk of flooding from fluvial (river) sources in Bury, particularly within Bury Ground (Chamberhall) and the former canal wharf (Western Waterside). Any proposals within these areas will need to be accompanied by detailed flood risk assessments.

- Large parts of Radcliffe are at high risk of flooding, including a major flow route running through the Dumers Lane areas. The issues are complex with interactions between the rivers, canal, reservoirs, sewers (also at capacity) and goits. Flood defences in this area are piecemeal or non-existent. Radcliffe is at the confluence of the Roch and Irwell whose flow is constricted by the various bridges and therefore "backs up" towards the Dumers Lane area and beyond.

5.2.16 An integrated, planned and engineered solution for the Radcliffe Dumers Lane area would be the most sustainable approach and would help to deliver reductions in flood risk to both new and current developments. In response to this, the Environment Agency is to produce an integrated flood mitigation strategy for the area. This strategy will examine the particular issues associated with flood risk and will establish a strategic approach towards mitigating risk in this area. This strategy will be used to inform the specific approach to development proposals, including the identification of circumstances and opportunities for developer contributions towards investment in additional flood risk and water management infrastructure.

5.2.17 A precautionary approach will be applied to new single site development and there may be a strong case for allowing some previously-developed sites to return to functional floodplain in this critical flood risk area, where they can act to convey and store flood water and reduce risk to current development, rather than continuing the cycle of placing development in flood risk areas that could be present for the next 50-100 years.

5.2.18 Until the flood mitigation strategy for the Bury-Radcliffe area is produced, the sequential approach, currently set out in national guidance, will be applied to single site development and development layouts. The Exception Tests will need to be passed for housing allocations and even less vulnerable development should be accompanied by a significant and detailed FRA.

5.2.19 **Preliminary Flood Risk Assessment**

5.2.20 As part of its responsibilities under the Flood and Water Management Act 2010 the Council has worked with JBA Consulting alongside the other Greater Manchester authorities to prepare a Preliminary Flood Risk Assessment (PFRA), which was submitted to the Environment Agency on 22 June 2011. The PFRA is a high level screening to determine whether there is a local flood risk within the area based on historic and potential future flood risk data. **Local** flood risk includes that arising from surface water, groundwater, ordinary water courses and canals – it excludes risk from main rivers and reservoirs, for which the Environment Agency has responsibility. This information supplements the SFRA, rather than superseding it.

5.2.21 The initial stage of the PFRA found that 86,500 people in Greater Manchester live in areas at risk of flooding, 9,500 of which are within Bury. This level of risk means that the next stage of the PFRA process is triggered. The next stage will be to produce flood hazard maps and flood risk maps by June 2013 and flood risk management plans for the area at risk by June 2015. This work is being progressed at the Greater Manchester level through the AGMA Flood Risk Officers Group. Government has made funding available for work on future flood risk plans, including staff resources and working with the public, in recognition of the additional responsibilities being placed on local authorities under the Flood and Water Management Act 2010. Bury's grant for future work, including AGMA collaborative work, is £121,500 in 2011/12 increasing to £162,100 in 2012/13, paid as part of the Local Services Support Grant. Current work is being funded by separate DeFRA grant support. Going forward, the situation will need to be monitored to ensure responsibilities can be met within the resources available.

5.2.22 **Greater Manchester Surface Water Management Plan**

5.2.23 A Surface Water Management Plan is also being prepared for Greater Manchester. Initial work has been undertaken to identify surface water flood risk hot spots. Selected priority hot spots with differing characteristics are being identified for further more detailed investigation to identify opportunities for solutions to surface water flood risk. This analysis will then form a toolkit, which can be applied to other hotspots, and built up into Local Flood Risk Management Strategies, to be prepared by 2015.

5.2.24 **Flood Risk Asset Register**

5.2.25 As part of its duty under Section 21 of the Flood and Water Management Act 2010, Bury Council, as Lead Local Flood Authority (LLFA), is in the process of establishing and maintaining a "register of structures or features which in the opinion of the authority, are likely to have a significant effect[13] on a flood risk in its area".

5.2.26 This register will collate and map the main flood risk management and drainage assets (over and underground) and include a record of their ownership and condition. The asset register will be available for public inspection as and when required.

5.2.27 It is envisaged that the initial data collection exercise required to populate such the register will be 'risk-based' and related to the requirement to record structures which have a 'significant effect' on flood risk management. It is anticipated that the information contained within the register will build up over time as the Council responds to flood incidences, conducts investigations and carries out maintenance works.

[13] Reference to 'significant effect' in the Flood and Water Management Act should be interpreted with a general meaning. It is not equivalent to working in S.14 of the Flood Risk Regulations.

5.2.28 **Surface Water and Drainage**

5.2.29 Development has the potential to cause an increase in impermeable area, an associated increase in surface water runoff rates and volumes, and a consequent potential increase in downstream flood risk due to overloading of sewers, watercourses, culverts and other drainage infrastructure. The sewer network in places across the Borough was designed to drain less development than exists today. New development has added flow over time and the network is known to be at capacity in many places. The frequent localised flooding experienced in many parts of the Borough, Radcliffe and Ramsbottom in particular is testament to this problem.

5.2.30 We are aware from our discussion with UU that that they will not routinely upsize assets to accommodate climate change but will use a risk based approach. This strategy is based on the fact that UU will not receive funding from Ofwat to continually upsize assets and the treatment and processing of surface water is not a sustainable solution. Collaborative working is required between all stakeholders to achieve sustainable urban drainage systems and is being developed as part of the city regions Surface Water Management Plan process.

5.2.31 Managing surface water discharges from new development is therefore crucial in managing and reducing flood risk to new and existing development downstream. Carefully planned development can reduce the number of properties that are directly at risk from surface water flooding. Developers should liaise closely with the relevant sections of the Council (including Highways and Drainage), United Utilities and the Environment Agency to determine the appropriate discharge rates and developers will need to demonstrate that surface water discharges from the site will not have an adverse impact on flood risk elsewhere.

5.2.32 Core Strategy Policy EN9 requires all new development proposals to minimise the impact of development on surface water run-off, and where possible, seek to reduce it. It sets out the following allowable drainage rates across the Borough:

- Development should deliver Greenfield runoff on Greenfield sites up to a 1 in 100 year storm event, considering climate change.
- Development should aim for a minimum reduction in surface water runoff rates of 30% (increasing to 50% within Critical Drainage Areas) for Brownfield sites up to a 1 in 100 year storm event, considering climate change.
- Development should be designed so that there is no flooding to the development in a 1 in 30 year event and no property flooding in 1 in 100 year plus climate change event.

5.2.33 The priority options identified by United Utilities for the management of surface water discharges are:

- Continue and/or mimic the site's current natural discharge process;
- Store for later use;
- Discharge into infiltration systems located in porous sub soils
- Attenuate flows into green engineering solutions such as ponds, swales or other open water features for gradual release to a watercourse and/or porous sub soils;

- Attenuate by storing in tanks or sealed systems for gradual release to a watercourse;
- Direct discharge to a watercourse;
- Direct discharge to a surface water sewer; and finally
- Controlled discharge into the combined sewerage network - this option is a last resort when all other options have been discounted.

5.2.34 The Planning System has a key role to play in settings standards for sustainable drainage from new developments and ensuring that developments are designed to take account of the risk from surface water flooding. Sustainable drainage plays an important part in reducing flows in the sewer network and in meeting environmental targets, alongside investment in maintenance and new capacity by United Utilities. These investments by United Utilities are planned on a five year rolling cycle, in consultation with key partners, including the Environment Agency.

5.2.35 Sustainable drainage and the use of Sustainable Drainage Systems (SuDS) is supported by the Environment Agency, Defra and the Flood and Water Management Act (2010)[14], that provides for more sustainable management of the water cycle, working in partnership across different agencies and new responsibilities for local flood risk management. In particular, the Flood Risk Regulations (2009) and Flood and Water Management Act (2010) clearly designate local authorities as the lead flood authority.

5.2.36 Sustainable Urban Drainage Systems (SuDs) can play an important part in reducing flows in the sewer network and in meeting environmental targets. The Flood and Water Management Act 2010 requires developers where practical, to include sustainable drainage in new developments to reduce flood risk and improve water quality. It includes a requirement on developers to demonstrate that they have met national standards for the application of SuDs techniques before they can connect any residual surface water drainage to a public sewer (amending section 106 of the Water Industry Act 1991).

5.2.37 The future ownership and maintenance of SuDs systems should be discussed at the planning application stage with the Council and there may be opportunities to deliver SuDs through integrated solutions to groups of sites. Such solutions can provide benefits besides water management, including the provision of recreation facilities, biodiversity improvements and improving the local environment. This approach should be taken unless it can be demonstrated that the implementation of SuDs is not feasible and that there will be no adverse impact caused by the development elsewhere.

5.2.38 As part of their new responsibility for local flood risk management, from April 2012 local authorities will be responsible for approving SuDs for new developments and adopting and maintaining them. More detail on SuDS is available within the SFRA and associated user guide.

[14] HM Government (2010) *Flood and Water Management Act*

5.2.39 **Overland flow paths**

5.2.40 Underground drainage systems have a finite capacity and regard should always be given to larger events when the capacity of the network will be exceeded. In addition, consideration should be given to any surface water flows likely to enter a development site from the surrounding area.

5.2.41 Master planning should ensure that existing overland flow paths are retained within the development. As a minimum developers should investigate, as part of a FRA, the likely depths and extents of surface water flooding on a development site when the national Areas Susceptible to Surface Water Flooding map and/or the surface water mapping produced for the Level 2 SFRA indicate that there is a risk of surface water flooding. This is a precautionary but appropriate approach to reduce the risk of flooding to new developments. Undeveloped land should be used wherever possible to accommodate such flow paths. Floor levels should always be set a minimum of 300mm above adjacent roads to reduce the consequences of any localised flooding.

5.2.42 The effectiveness of a flow management scheme within a single site is heavily limited by site constraints including (but not limited to) topography, geology (soil permeability), development density, existing drainage networks within the site and surrounding area, adoption issues and available area. The design, construction and ongoing maintenance regime of such a scheme must be carefully defined at an early stage and a clear and comprehensive understanding of the catchment hydrological processes (i.e. nature and capacity of the existing drainage system) is essential.

5.2.43 **Critical Drainage Areas**

5.2.44 Certain locations are particularly sensitive to an increase in the rate of surface water runoff and/or volume from new development. These areas have been defined as Critical Drainage Areas (CDAs) in the SFRA. The SFRA has designated CDAs as high flood risk areas as they have complex surface water flooding problems and require specific drainage requirements to help reduce local flood risk.

5.2.45 Given the significant risk from surface water flooding, the Level 2 SFRA designated Ramsbottom and Radcliffe as critical drainage areas (CDAs). These locations are both particularly sensitive to an increase in the rate of surface water runoff and/or volume from new development. The SFRA designated CDAs as high flood risk areas and specific drainage requirements are required in these areas to help reduce local flood risk.

5.2.46 The CDAs identified in the SFRA will be refined over time as more detailed information on flood risk and local flood management assets, including sewered catchments, becomes available.

5.2.47 For all proposed development (over 0.5 hectares) in these areas, a detailed FRA is required, regardless of which Flood Zone that applies. This should demonstrate that new development is not at risk from flooding from existing drainage systems or potential overland flow

routes. It should also demonstrate that the development will not adversely affect existing flooding conditions by the use of appropriate mitigation measures. The FRA should define and address the constraints that will govern the design of the drainage system and layout of the development site.

5.2.48 Through the Surface Water Management Plan the Council will determine in more detail and establish the evidence base for set reductions in surface water runoff from development sites. With regard to this, the developer should liaise closely with the Environment Agency, United Utilities and LPA as soon as possible to determine an appropriate reduction in runoff rate and volume with reference to discharge limits as laid down by any completed SWMP or drainage strategy for that area.

5.2.49 **Integrated drainage**

5.2.50 There is the potential for groups of development sites coming forward to share a central and integrated solution for managing surface water runoff. This is best investigated further through a Surface Water Management Plan (SWMP) or a Drainage Strategy, which may or may not be undertaken at the same time as a SWMP. Such solutions can provide great benefits besides water management, including providing recreational facilities, improving biodiversity and making communities a better place to live. Green and open space, sports and recreation provisions can contribute towards addressing surfacewater and climate change issues. Building green infrastructure assets such as ponds, swales and wetlands will not only contribute towards meeting the Borough's Green Space needs but also the local existing and/or future surface water/ climate change needs.

5.2.51 On each of these water-related infrastructure issues planning officers have established very good working arrangements with key players such as the EA and UU. These organisations are involved as partners in the projects that form part of AGMA's Planning and Housing Commission work programme.

5.2.52 The Council will continue work with UU and EA in accordance with AGMA protocols for joint working to follow an integrated approach to drainage to reduce risk of flooding against a backdrop where climate change makes severe storms events more frequent. This will reduce the volume of storm water which enters the sewer network via the proactive involvement in the development and implementation of SWMPs, together with the sharing of knowledge, expertise and information. Investment will be coordinated where this is a realistic and reasonable action.

Conclusion, intended approach to flood risk management and drainage infrastructure and delivery action plan			
Additional **infrastructure investment will be necessary to serve existing communities and new development in Radcliffe and Ramsbottom.** The SFRA has identified that Flood Risk is an issue for the Core Strategy.			
No.	**Action**	**Status**	**Timeframe**

		(critical / required / desirable)	
1	Apply the sequential test and, if necessary, the exceptions tests, in order to reduce the need for additional infrastructure.	**Required**	2012-2029
2	Prepare an integrated strategy for Radcliffe to align with the SWMP, integrate and coordinate investment planned by EA and UU and the private sector.	**Required**	2012-2029
3	Commence an integrated and partnership approach to flood risk management. This will be determined by ongoing programmes for joint working, with the EA and UU, implementation of the Surface Water Management Plan and new responsibilities outlined in the Flood and Water Management Act (2010) and Flood Risk Regulations (2009).	**Required**	2012-2029
4	Work with the Environment Agency and UU to produce an integrated flood mitigation strategy for the Bury-Radcliffe area. Funding has been committed by EA to progress this work. Until the flood mitigation strategy for the Bury-Radcliffe area is produced, the sequential approach to single site development and development layouts will be applied.	**Required**	2012 - 2017
5	Utilise developer contributions / CIL to bring forward additional infrastructure within areas of need.	**Required**	2012-2029
6	Work closely with the Environment Agency and other partners to cut off the flood flow route in Ramsbottom on the west side of the Irwell.	**Desirable**	2012-2029
Main Partners Involved • United Utilities • Environment Agency • British Waterways • AGMA			

5.3 Energy and Carbon Management

5.3.1 Context

5.3.2 Within the context of this IDP, energy is the supply and distribution of electricity from the national grid to places and buildings, the deployment and generation of decentralised energy for electricity, heating and/or cooling and utilisation of gas for heating/cooling and generation of electricity.

5.3.3 Carbon emissions per capita within the Borough are one of the highest in Greater Manchester (5.9 tonnes per capita) with only Salford (6.2) and Trafford (7.6) having higher per capita emissions. In 2011, industry and commercial emissions accounted for 28% of CO_2 emissions,

domestic emissions accounted for 35% of CO_2 emissions and road transport accounted for 37% of total emissions[15].

5.3.4 There are key drivers at the national level including legal requirements through the Climate Change Act 2008 for an 80% reduction in the UK's CO_2 emissions by 2050, relative to 1990 levels, and binding commitments to generate 15% of the UK's total energy from renewable sources by 2020. The Government's Strategy for delivering these challenges and targets is set out in The Carbon Plan[16] (December 2011), which identifies energy efficiency and the ways in which we generate energy as two of the most critical areas to address. In particular it identifies the following actions which will influence Bury's energy and carbon management infrastructure planning:

- Improve the energy efficiency of residential and commercial buildings;
- Deliver zero carbon new homes from 2016 and zero carbon new non-domestic buildings from 2019;
- Support the deployment of low carbon heating, to deliver 12% of heat from renewable sources by 2020;
- Support opportunities for industry to move to low carbon fuels;
- Drive deployment of renewable energy across the UK, to deliver around 30% of electricity from renewable sources by 2020; and
- Reform the electricity grid to ensure sufficient capacity and access to connect new forms of energy generation.

5.3.5 In order to support sustainable renewable energy deployment, the UK Government has set in place a system of three major financial incentives to support sustainable renewable energy deployment:

- the Renewables Obligation, under which electricity suppliers are required to source a proportion of their energy from renewable generation;
- feed-in tariffs, which provide a financial incentive for the generation of small-scale low carbon electricity; and
- the Renewable Heat Incentive, which will support the generation of renewable heat. The non-domestic RHI was launched in November 2011, and the domestic RHI is due to open from Spring 2014.

5.3.6 The requirement to deliver zero carbon new buildings will be through Part L of the Building Regulations which relate to the conservation of fuel and power. The Government is committed to successive improvements in standards through tightening the strengthening the requirements in line with the programme for achieving zero carbon developments.

5.3.7 There are also strong economic drivers for making a transition to a low carbon economy. The Mini-Stern report for Manchester[17] analysed the impact of legislation on a low carbon economy and demonstrated that

[15] Source: DECC Local and regional CO2 emissions estimates for 2005-2011 https://www.gov.uk/government/publications/local-authority-emissions-estimates The road transport emissions figures include motorways, which are outside the scope of local authority control.
[16] www.decc.gov.uk/en/content/cms/tackling/carbon_plan
[17] Deloitte, 2008. Commissioned by AGMA

up to £20 billion may be lost to the economy up to 2020 if Greater Manchester fails to respond effectively to new and emerging legislative frameworks.

5.3.8 In December 2009 the Manchester city region was designated as a Low Carbon Economic Area (LCEA) by the Government. By 2015, this 5 year programme will help support an additional 34,800 jobs in the built environment sector, and £1.4 billion in economic activity against a baseline business as usual forecast of £0.9 billion, whilst reducing CO_2 emissions by an additional 1.8 million tonnes raising the total figure for carbon savings to 6.1 million tonnes. The programme covers a range of activities from new development, retrofitting and low carbon infrastructure.

5.3.9 **Electricity Network**

5.3.10 The electricity transmission and distribution network in the UK consists of the National Grid which takes electricity from large power stations and transmits it though a high voltage network (400kV and 275kV) to grid supply points where it is transformed down to 132kV for distribution to customers through networks which are owned by 14 regulated network operators.

5.3.11 Electricity North West Limited (ENW) operates under a licence to distribute electricity through its network, with a specified distribution service area covering the North West of England. Previously part of the United Utilities Group, ENW is now a separately owned business. ENW owns the electricity distribution network in North West England, distributing electricity to customers on behalf of the electricity supply companies. Customers receive their electricity bills from their supplier who pays ENW for use of the electricity network. ENW currently has around 13,000 km of overhead lines, almost 44,000 km of underground cables, and more than 34,000 transformers serving 2.4 million customers in the North West of England. At a more site specific scale Independent Distribution Network Operators (IDNOs) may provide connections from ENWs network to specific sites e.g. in Bury the IDNO for the Rock Triangle is Energetics.

5.3.12 The price that ENW can charge for distributing electricity is regulated by the Gas and Electricity Markets Authority ('GEMA'), operating through the Office of Gas and Electricity Markets ('OFGEM') under a price regime which is reviewed every five years. The current price control (referred to as DPCR5) runs from 1 April 2010 to 31 March 2015. The current price control allows for network expenditure of £14bn, and introduces a new £500m Low Carbon Networks Fund. The next price review starting in 2015 will use a new methodology to place more emphasis on network operators playing a full role in developing a more sustainable energy sector, to take account of the nature and pace of change needed if Britain is to make the transition to a low-carbon economy.

5.3.13 Looking ahead to the future ENW, have produced a strategic direction statement looking forward to 2050[18], to help them plan for the future

[18] Available online at www.enwl.co.uk/about-us/the-future

development of their network in the face of uncertainty. Key drivers for change identified by ENW are changing customer expectations and needs, stewardship of the existing network, regional growth and development, moves to a low carbon economy, introduction of electric vehicles, adapting to the impacts of climate change, and new technology. ENW are taking account of ONS population projections in their strategic direction statement, and anticipate the need to develop the low voltage network to cope with a larger population, living in a higher number of households in urban environments. ENW's plans also take into account economic growth, particularly as although less than 10% of their customers are commercial and industrial, they consume almost two thirds of the electricity. Their consumption has fallen over the last few years as a result of the economic recession. ENW's Long Term Development Statement confirms that in general there are no particular restrictions on the development of generation in the Greater Manchester area – each case will be assessed on its merits, and cetain local issues may arise.

5.3.14 In addition to their strategic direction statement, ENW have prepared a Network Investment Plan for 2010-2015. ENW's investment includes expanding and replacing the network to cater for changes in demands, provide for new connections and replace assets as they reach the end of their useful life ('load-related' capital expenditure); and maintaining and repairing the existing network ('non-load related' capital expenditure). Between 2010 and 2015 ENW plan to invest over £400 million on load related projects, representing a 12% increase over the previous 5 years; and £680 million on non-load related projects, representing a 52% increase over the previous five years[19]. The exact details of much of the investment will depend on exactly what supplies are requested, where and also on what network capacity may already be available there. When work is undertaken to provide new supplies most of this is paid for by the customer requesting the supply.

5.3.15 **Network Connections in Bury**

5.3.16 The connection point to National Grid's network is at Kearsley Grid Supply Point. From Kearsley there are two 132kV circuits which feed Bury Bulk Supply Point (BSP) which is just north of Bury Town Centre.

5.3.17 Bury BSP feeds several primary substations in the town including Chamberhall, Bury Town Centre, Woolfold and Dumers Lane. There is a mixed 11 & 6.6kV High Voltage network in Bury fed from the primary substations.

5.3.18 Local distribution substations transform High Voltage to Low Voltage and there are approximately 100 of theses substations in the Borough. Prestwich is fed from Prestwich Primary 33/6.6kV substation, which is fed from Kearsley Local 275/33kV Grid Supply Point (GSP). Radcliffe is fed from Radcliffe 132/11kV substation, which is again fed from Kearsley 132kV GSP. Ramsbottom & Whitefield are fed from the Bury network as above.

[19] Source: ENW Network Investment Plan 2010-2015. www.enwl.co.uk/docs/about-us/network-investment-plan.pdf

5.3.19 There are areas within Bury (Bury town centre and northern part of the Borough) where the electricity utilisation loads are at +90%.

5.3.20 Supply and distribution issues were discussed with ENW during the AGMA Decentralised and Zero Carbon Energy Planning Study and more recently through AGMA's GM Energy Group and a number of issues have emerged. These are outlined below.

5.3.21 **The Distribution Network and New Development**

5.3.22 There are a number of key issues for the distribution network relating to the plans for new developments in the Manchester City Region and the achievement of low/zero carbon outcomes:

- Distribution Network Operators (DNO's) operate a 'first developer pays' principle. This is because under the terms of their DNO licences they are not allowed to speculatively invest in infrastructure which is not already within their 5-year investment plan, and they therefore have to recover the full cost of all of the new or improved infrastructure created. This can lead to circumstances where a developer on a major development who only has an interest in part of the site may be asked to pay for the full costs of delivering the infrastructure that will service the entire site, despite only having an interest in part of it. A new connected 1000KVA substation will cost approx £65,000 and laying of high voltage cable in the highway between £150 to £250 a metre.

- Distributed generation (DG) poses a number of challenges since it involves the connection of smaller generators (e.g. wind turbines, gas/biomass CHP etc) to the local distribution network rather than the traditional large power stations which are connected to the high voltage network owned by the National Grid. This can cause problems especially with fault levels depending on the size and type of generator involved. For example the connection of a medium-sized CHP plant (3 to 5MW), can cause problems since it is likely to be connected to a local sub-station and there may be fault level issues particularly since much of the GM network is at 6.6kV rather than 11kV. A larger CHP plant (say 10MW) would probably have its own transformer and switchgear and hence there would not be such a problem.

- ENW has to guarantee supply when the DG plant is not operating (e.g. due to maintenance, breakdown or intermittent operation), hence it needs to provide sufficient network capacity to back-up the supply even though this may only be needed occasionally. This can result in additional costs associated with reinforcing the network.

- DG plant could be used to avoid network reinforcement costs if the network operator could contract with the generator to call on the plant when demand in a specific area and time of day is close to the maximum capacity of the network. OFGEM is encouraging the network operators to consider this as an option in the next price control review period.

- OFGEM is also encouraging the network operators to consider demand side management (DSM) options to avoid network reinforcement. This could be considered as one of the options for particular areas of GM e.g. where there are some large industrial and/or commercial loads. However, the firms involved would need to receive a financial incentive to reduce their demands at specific times of the day/year and this would need to be balanced against the savings made from not reinforcing the network. ENW has proposed a trial 'Capacity to Customers' project through the Government's Low Carbon Networks Fund, which will seek to release spare capacity in the network by allowing business customers to receive payments or lower connection charges in exchange for reducing their demand during a fault. This will reduce the need for traditional reinforcement, cutting the cost and time required to provide new connections whilst also enhancing quality of supply for customers.

- OFGEM's price controls have placed constraints on the network operators which mean they are not able to invest speculatively in capacity for which there is uncertain demand. This can cause problems in a phased project since the network development is undertaken in stages and those involved in the later stages of the project may have to bear the full costs for any reinforcements rather than the costs being spread over the whole project. A more strategic approach to investment in the network for the whole of the development would help to deliver a more cost-effective solution for all those involved.

- ENW is sometimes involved at a relatively late stage in the project cycle and this can lead to problems if there is insufficient capacity or a fault level issue with any DG plant in the development. In the past, this has resulted in projects being cancelled due to the additional costs which have not been included in the budgets. Involvement of ENW at an early stage in a new development would help to address this problem and ENW might also be able to offer guidance on the network implications and how to avoid or minimise any reinforcement costs.

- Developers and their M&E consultants often build-in significant margins in to their calculations of maximum demand. This can lead to an unrealistic assessment of the network requirements and hence additional costs which may not be justified in practice. This practive also means that whilst the network may be at 90% in some areas a large % of the capacity is taken up with speculated demand which is then ring fenced to the site, even though this capacity is not being utilised. There are many example of this across GM e.g. Trafford centre, the Grand Arcade (Wigan) and The Rock (Bury) all of which run at 50% capacity (source: Envirolink NW Engineer, 2010).

- It is getting more difficult to site new electricity substations because of demands on visual appearance, and in-fill development pushing up values. Substations are having to be placed more remotely from development areas and designed to be more aesthetic (especially in

city and town centres), all of which are pushing up contributions from developers.

5.3.23 **Bury Town Centre and the Rock**

5.3.24 As identified above, Bury town centre falls within an area where electrical utilisation loads are at 90%. However, the central commercial/retail shopping complex is supplied by an Independent Distribution Network Operator (IDNO) who owns and operates the new 15/23 MVA primary substation and high voltage infrastructure that supplies 14 substations. To date the connected load is approximately 4 MVA taking into account additional take up and peak demands in winter or summer the likely average will be in line with other development: only 50% usage, this is because ME consultants and end users always over engineer their requirements, however this additional load availability subject to agreement with Energetics[20]. If Bury attracts new larger commercial/ industry businesses requiring several megawatts; then this may present a problem that the DNO would have to resolve, however any new load requirement like the Rock would pay the full costs of bring new capacity to site.

5.3.25 **Gas**

5.3.26 The gas transmission and distribution system in the UK is owned and operated by National Grid and comprises three main tiers: gas travels from the National Transmission System (NTS) to the Local Transmission System (LTS) and reaches most consumers via the distribution system. The majority of customers are supplied from the below 7 bar distribution network, although some very large users, including big CHP plants, will receive their gas from high pressure networks or directly from the National Transmission System.

5.3.27 The National Grid Gas Transportation Ten Year Statement 2012[21] sets out an assessment of future demand and supply for natural gas, and the consequences for investment in the gas transmission network. Overall it forecasts a reduction in overall demand by 2030, largely as a result of increased renewable energy generation and energy efficiency. It also identifies that additional flexibility in the network may be necessary to accommodate greater flow variations, to accommodate variability in generation of energy from renewable sources, and identifies planned investments to deliver this, none of which will directly affect the Borough.

5.3.28 National Grid Gas Distribution (NGGD) is responsible for the operation of the distribution system and it operates under a similar OFGEM regulatory regime as ENW. The price control period is 2008 to 2012/13. The NGGD Long Term Development Plan (October 2012)[22] forecasts total investment of £7,822 million between 2012/13 and 2020/21. The majority of this is for replacement of existing metal pipes with plastic

[20] Source: Envirolink NW (2010) and www.energetics-uk.com/networked-energy/case-studies.php
[21] Available from http://www.nationalgrid.com/uk/Gas/tys
[22] Available from http://www.nationalgrid.com/uk/Gas/TYS/LTDP/index.htm

pipes. £289 million is forecast for connecting new consumers to the gas supply network. Although overall demand is reducing, new consumers may connect in areas where there is inadequate capacity, and the presence of surplus capacity elsewhere e.g. resulting from industrial decline, may be of little use in fulfilling new local consumer needs. This is less likely to be an issue for Bury because the majority of new development will be on previously developed sites rather than greenfield sites which have not been previously connected to the gas network. The gas supply system is more flexible than the electricity network because it is possible to store gas to cope with peaks in demand.

5.3.29 Although gas supply is not an issue, distributed generation may be, because it involves the connection of a smaller number of biogas or CHP (if gas) engines to the local distribution networks. National Grid consider that significant investment in such capacity may be required depending upon the rate of development of new sources of gas and the requirement upon National Grid to fund such connections.

5.3.30 **Renewable and Low Carbon Energy Systems**

5.3.31 Energy demand is determined by a number of factors such as the age of the building, diversity and density of uses. All of these factors impact on the total energy demand and the energy profile e.g. residential uses peak in the morning and evenings, offices uses during the day time. An important principle in approaching local and decentralised energy supplies is to look to efficiently integrate disparate processes and patterns of energy use within the 'mixed use' of buildings and across the neighbourhoods.

5.3.32 Energy systems make a profit and it is clear from the AGMA and Bury and Radcliffe town centre opportunity studies that energy infrastructure and new development needs to align with existing buildings to maximise the economic viability and strengthen the business case of energy investments (e.g. the bigger the energy network the more demand there is for supply the more attractive this is to a 3rd party investor such as an Energy Service Company (ESCo) to install, finance and manage the community scale energy network). This approach is supported by national policy which will have a positive impact on delivery of decentralised energy in Bury. These policies include:

- The introduction of the Feed in Tariffs (April 2010), which are paid to energy users who invest in small-scale, low-carbon electricity generation systems for the electricity they generate and use, and for unused electricity they export back to the grid;
- The Renewable Heat Incentive (non-domestic scheme launched November 2011) which pays commercial, industrial, public, not-for-profit and community generators of renewable heat for a 20-year period;
- Renewable Heat Premium Payment, which gives one-off payments to householders, communities and social housing landlords to help them buy renewable heating technologies like solar thermal panels, heat pumps and biomass boilers. This will be replaced by the Renewable Heat Incentive domestic scheme, scheduled for Spring 2014;

- The 'connect and manage network access regime' to make sure new generators can connect to the electricity network in a timely, secure and cost-effective way.

5.3.33 New energy infrastructure (e.g. at swimming pools / schools) could source heat from a Combined Heat and Power (CHP) facility and be connected to buildings that require cooling such as offices and in doing so use energy more efficiently. Most of the heat generation technologies discussed here can be used for decentralised generation and some (such as CHP) only become commercially viable if used in this way. A wide range of energy generation technologies are suitable for site-wide energy distribution systems, with a slightly reduced range also applicable to block-based community systems.

5.3.34 **AGMA Decentralised and Zero Carbon Energy Planning Study**

5.3.35 The AGMA Decentralised and Zero Carbon Energy Planning Study (DZCEPS) (January 2010) was commissioned to:

- Identify opportunities for linking new development and supporting energy infrastructure with existing communities;
- Identify the most appropriate energy mix for delivering new development and growth aspirations across Greater Manchester; and
- To clearly set out the spatial planning actions required to deliver this 'new' critical infrastructure.

5.3.36 The study delivered a number of high level messages (as well as more detailed recommendations). These are:

- Firstly, that the provision of decentralised energy infrastructure, placing low and zero carbon technologies at its core, is required both for the delivery of economic growth and prosperity and to reduce carbon emissions within the Manchester City Region; and
- Secondly, that the use of spatial planning is a key tool in delivering this infrastructure, but it needs to be supported by complementary enabling mechanisms. These include new finance and development models, a co-ordinated approach across the public sector, new energy services delivery vehicles, and new skills.

5.3.37 Since the Decentralised and Zero Carbon Energy Planning Study was published a number of further studies and strategies have been prepared for Greater Manchester which will support action on reducing carbon emissions and addressing climate change. The GM Sustainable Energy Action Plan (June 2010) recommends CO_2 reduction targets for Greater Manchester of 34% by 2020 and 88% by 2050.

5.3.38 The Greater Manchester Climate Change Strategy (July 2011) outlines four headline visions for Greater Manchester by 2020:

- A rapid transition to a low carbon economy;
- Collective carbon emissions reduced by 48% on 1990 levels;
- Be prepared for and actively adapting to a rapidly changing climate; and
- 'Carbon literacy' will have become embedded into the culture of organisations, lifestyles and behaviours.

5.3.39 The Greater Manchester Energy Plan is being prepared by the GM Energy Group to address the energy challenges identified in the GM Climate Change Strategy. The GM Energy Plan will set out the current situation, potential issues and proposed solutions to energy security in Greater Manchester. It will provide a strategic overview of the market, legislative and policy context, including the key drivers and challenges affecting the energy system. It will identify the actions and opportunities already in place within Greater Manchester to address these, and recommend the steps needed to address the gap between targets and actions in a way which aims to strengthen Greater Manchester's economic, social and environmental performance. Further details of the GM Energy Plan will be provided in the next review of this Infrastructure Delivery Plan, when the Energy Plan has published.

5.3.40 **Achieving the Maximum Carbon Reductions for Minimum Cost**

5.3.41 Different character areas and development types will have different opportunities for reducing carbon emissions and in some cases it may not be possible to meet all of the baseline energy standards on-site.

5.3.42 The AGMA Decentralised and Zero Carbon Energy Planning Study (DZCEPS) (2010) took a pragmatic approach to the delivery of CO_2 emissions reductions based on the concept of 'allowable solutions' which have been proposed by the Government as a means of meeting the national 'zero carbon' standard. Potential allowable solutions identified by the study include:

- Contributing to larger and more economic micro-generation installations;
- Connecting existing building with large heat loads via district heating;
- Using waste heat from existing and proposed power stations;
- Investing in off-site renewable energy resources within each district.

5.3.43 Allowable solutions provide the opportunity to make off-site financial contributions towards energy infrastructure which reduce carbon emissions and offset any remaining on-site emissions that can not be addressed through energy efficiency or carbon compliance measures. Allowable solutions will include both near and off-site solutions such as retrofitting existing buildings to large scale stand alone renewable energy generating schemes.

5.3.44 The Council intends to create a Community Energy Fund to manage this process. It is envisaged that developers will make contributions to the fund where allowable solutions are required. Monies collected by the fund will be used to contribute to wider low carbon initiatives, including the development of the energy opportunities identified in Policy SDS7. The fund will also ensure that a co-ordinated approach towards the funding of strategic energy opportunities is adopted.

5.3.45 The Government is expected to provide detailed guidance on allowable solutions. When this information is available, further local guidance will be developed in conjunction with other Greater Manchester districts and partners and outlined within a Supplementary Planning Document.

5.3.46 One of the key outcomes of the AGMA Decentralised and Zero Carbon Energy Planning study has been to demonstrate that it is not possible to achieve the greatest sub-regional reduction of CO_2 emissions unless work is undertaken jointly with other Districts. The Council will, therefore, work together with other local authorities to promote a co-ordinated approach to planning energy infrastructure across the City Region with the aim of achieving greater CO_2 reductions than would be possible through Bury acting unilaterally.

5.3.47 **Renewable Energy Capacity Installed**

5.3.48 Table 4 below identifies the 2010 renewable energy capacity installed by type within the Borough. This data is from OFGEM Renewables Obligation data. The Renewables Obligation is a requirement on electricity suppliers to provide a proportion of electricity from renewable sources. Landfill gas is currently defined as 'renewable' energy generation for the purposes of obtaining ROCs. The figures only provides a rough indication of the renewable energy capacity within the Borough, as the renewables obligation only relates to accredited generators supplying customers through a licensed electricity supplier. It will exclude installations such as small scale on-site electricity generation.

Table 4: Renewable Energy Capacity Installed by Type (2012)

Energy Type	Capacity (megawatts)
Landfill gas	8.524
Sewage gas	1.064
Total	**9.588**

5.3.49 The main sources of renewable energy in the Borough are electricity from waste, specifically landfill gas at Pilsworth and sewage gas at Bury sewage works. There may also be small scale heat or electricity generation that will not be recorded as it isn't exported from its generation site or isn't registered for the feed-in tariff.

5.3.50 Introduced in April 2010, the feed-in tariff is expected to encourage an expansion in small scale energy production. Planning approval has been granted for a number of schemes, including hydro plants on the Roch at Heap Bridge and the Irwell at Warth, and for stand alone wind turbines at various places around the Borough, including Brookvale Home, Simister; Sillinghurst Farm, Bury; Meadowcroft Farm, Tottington; and Veterans Farm, Ainsworth. A 50kw photovoltaic array has been installed on the roof of Bury College and a number of applications have been approved for solar panels on new and existing buildings.

5.3.51 The opportunities identified through existing studies for encouraging low-carbon energy developments are discussed further below.

5.3.52 **Energy Opportunity Frameworks and Case Studies**

5.3.53 In Bury the Bury Town Centre Energy Framework (2010) and Inner Radcliffe and Town Centre Energy Framework were commissioned to identify the opportunities, constraints and delivery mechanisms for low carbon technologies within those areas. Together, the AGMA and Bury studies have identified the following opportunities (see Appendix I for a map of these locations):

- **Bury, Radcliffe and Prestwich Town centres –** where opportunities (for example heat networks) exist in conjunction with new development;
- **Bury Waste Water Treatment Works –** where there are opportunities to capitalise further on sewage gas and the existing electricity generating plant;
- **Pilsworth –** where there are opportunities to harness landfill gas and the development of a heat pipeline to Bury town centre;
- **Along the western boundary, north eastern boundary and north of the Irwell Valley along the M60 corridor**, plus Pilsworth Industrial Estate and Rhodes Farm Sewage Works **-** where there are opportunities to harness wind energy;
- **Radcliffe and Prestwich –** where there are opportunities to capitalise on geothermally heated mine water;
- **Chamberhall, Castlestead, Irwell Bank and Mount Sion works –** where the River Irwell provides opportunities to produce hydroelectricity; and **Heap Bridge,** where the River Roch provides opportunities; and
- **Waste management sites and areas** where Combined Heat and Power will be utilised as an energy source or where there is excess heat from the waste management process.

There are likely to be other opportunities that the existing studies have not identified.

5.3.54 **Heat Networks**

5.3.55 At present, Bury largely relies on centralised gas and electricity for its heating needs. Local networks can be an efficient way of providing heat and electricity as they can reduce transmission losses and can make use of 'waste heat'. For heat networks to be feasible, it is necessary for there to be a source of heat and adequate demand for the heat.

5.3.56 Pilsworth 1 & 2 landfill sites are located to the south east of Bury Town Centre. At present the methane from each site is piped to a single point, where it is burnt to generate electricity. Heat from the exhaust gas and jacket cooling system of each of the eight gas engines is currently emitted to the atmosphere. However, the Bury Town Centre energy study identified that this could provide a minimum of 2.9MWth of thermal capacity available to supply hot water at 80-90^{0}C to Bury Town Centre via a district heating pipeline. Investment would be required in heat off-take and storage equipment – including heat exchangers and large-scale thermal storage to buffer supply and demand. There are a number of potential routings for such a pipeline to the town centre. The shortest and most direct routing for a district heating pipeline would be

alongside the East Lancashire Railway (ELR), at an estimated distance of 1.6km.

5.3.57 The piped heat could supply a number of town centre buildings, including Council offices, schools, Bury College, Castle Leisure Centre, the PCT and Six Town Housing Offices.

5.3.58 Whilst the pipeline connecting the energy centre at Pilsworth to the town centre would have a substantial capital cost the need for a stand alone CHP plant would be avoided and a cheaper heat price could be negotiated. A new heat plant would be required between 2020 and 2030 as the landfill gas resource declines but the existing electricity[23] and heat network would be a long term asset and could be reused reducing (e.g. switching from landfill gas to biomass CHP) the capital investment needed and reducing the need for a large energy centre and CHP plant in Bury town centre.

5.3.59 The Council is working with the Carbon Trust and Viridor (landfill operator) to scope the technical issues associated with delivering the heat pipeline. These include:

- Heat sources - engagement with Viridor to examine capacity;
- Determine costs and potential heat availability;
- Review impact on the gas engines;
- Evaluate heat availability;
- Review anticipated use and persistence;
- Network design;
- Define network plan;
- Outline design parameters for the pipeline and town centre routing; and
- Route from Pilsworth to the town centre via the railway line or an alternative.

5.3.60 In Radcliffe Town Centre, there are a number of buildings which could act as 'anchor loads' for a district heating network and subsequently reduce their carbon emissions. These include, Radcliffe Swimming Pool and Fitness Centre, Radcliffe Library and Civic Suite and the Post Office delivery office. In addition, Six Town Housing, the Arms Length Management Organisation (ALMO) for Bury's housing stock, has 96 units of housing at the Thomas' Estate on the edge of the town centre. A town centre heat network in Radcliffe could initially be supplied by a Combined Heat and Power generator. In the longer term, other sources of heat could be used, such as the Outwood mine workings (if found to be feasible) and biomass fuel.

5.3.61 Redevelopment potential at the former East Lancashire Paper Mill and Former Radcliffe High School in Radcliffe and the Longfield Centre in Prestwich could provide additional opportunities to develop district heating networks.

[23] Currently supplied through three caterpillar and four Jenbacher gas engines - with no heat off take.

5.3.62 **Bio-Gas**

5.3.63 Bury Waste Water Treatment Works is located on the River Irwell approximately 1.7km north east of Radcliffe. The works is owned and operated by United Utilities and treats 30,157,000m^3 of wastewater per annum. Treated effluent is discharged into the River Irwell at a temperature of 13^{o}c.

5.3.64 Sewage sludge from the primary and secondary processes on-site are subject to tertiary treatment in an Anaerobic Digestion plant. The methane gas produced by this process is burnt in a series of 3 engines with the capacity to generate 1.06MWe of electricity. Approximately 78% of the waste heat from these engines is recovered from the engines for use on-site to maintain the temperature of the digesters.

5.3.65 Investigations are now on-going to consider the potential for further waste heat recovery from the on-site anaerobic digestion and from the waste water outfall which discharges into the River Irwell. If there is a resource available then it could be used to supply a potential district heating network serving Radcliffe Town Centre.

5.3.66 Pilsworth landfill site produces methane which fuels a 4.12MW electricity generating plant. As stated above, the potential for piping waste heat to Bury town centre is being explored.

5.3.67 **Wind Energy**

5.3.68 Electricity can be generated from a suitable wind resource by modern wind turbines. These can range in scale from small micro-wind turbines of a few kWe with a hub height of 10-15 metres and a blade diameter of several metres, to large turbines with a rating of between 2 and 5 MWe, a hub height of over 60 metres and a blade diameter of over 80 metres – as demonstrated by Scout Moor in Rochdale / Rossendale. Within the Borough there are existing turbines at Simister (2 x 11KW) and Birtle (80KW).

5.3.69 Wind power is a mature technology, with the industry having a track record of nearly 30 years. Reduction in cost and increases in turbine size and efficiency, together with market mechanisms such as the Renewables Obligation and Feed in Tariffs mean that even medium-scale (1-10 MWe) projects can now achieve a simple payback of between five and ten years based on a modest rate of return. The amount of energy that can be extracted from a given wind resource is subject to the cube rule, so a turbine in a location with an average wind speed of 7 metres per second will be able to generate nearly 60% more power than a turbine in a location with an average wind speed of 6 metres per second.

5.3.70 Several studies have been prepared which consider the potential for wind energy across the Bury, including the AGMA Decentralised and Zero Carbon Energy Study, the Bury and Radcliffe Town Centre Energy Frameworks and a joint study with five other neighbouring Local Authorities (Rochdale, Rossendale, Burnley, Calderdale, Kirklees) to

assess the cumulative impact of wind energy developments in the landscape of the South Pennines.

5.3.71 In Bury wind speeds of 6.5 metres per second (at height of 45 metres) are limited to the north western and eastern boundaries. At this point in time this is at the upper limit of commercial viability for standalone wind farm clusters. However, there are other areas, including within the south of the Borough and along the M60 / M62 and M66 motorway corridors where wind speeds at 6 metres per second. In addition the Bury town centre energy framework has identified Pilsworth industrial estate as an opportunity area for 1-2 large wind turbines developed on a 'merchant wind' basis and the Radcliffe Energy Framework has identified the former Rhodes Farm Sewage Works in the south west of the Borough as a potential opportunity for 2-3 large (1-1.5 MWe) turbines. These are illustrated on the map in Appendix I.

5.3.72 The South Pennines Landscape Capacity Study for Wind Energy Developments (January 2010) has concluded that although the wind capacity to the north of Bury town centre may be feasible in terms of wind speed the capacity is limited because of the sensitivity of the landscape and proximity of adjacent wind farms. The report suggests that it is possible to accommodate wind energy developments in the Borough, although it is imperative that full consideration be given to the potential visual impacts on sensitive landscapes, particularly to the north of the Borough. The best large-scale opportunities relate to the expansion or repowering of existing sites, although there are widespread small-scale peripheral opportunities, particularly around the M62 corridor where the landform is relatively open. In general terms, where wind resources are best, landscape value tends to be higher. In areas of lower landscape value, there are still some opportunities for wind but the power output is not anticipated to be as great.

5.3.73 By overlaying national wind speed data against planning constraint map layers the Bury and Radcliffe Energy Studies considered a number of broad locations of opportunity for wind energy developments. Based on a wind speed of 6.5 metres per second at a hub height of 45m, two broad locations were identified to the west and east of Bury Town Centre, each with the potential for wind clusters of 2-3 large (1-1.5MWe) turbines. Based on a wind speed of 6.0 metres per second at a hub height of 45 metres, one broad areas of potential was identified in and around the Pilsworth industrial estate and landfill site. If a suitable location in and around the estate could be found this could create the potential for 1-2 large (1.5-2.0MWe) turbines. Based on a wind speed of 6.0 metres per second and a wind turbine hub height of 45 metres, the Radcliffe Energy Study identified a potential site for 2-3 large (1-1.5MWe) turbines at the former Rhodes Farm Sewage Works in the south west of the Borough.

5.3.74 **Minewater Geothermal**

5.3.75 The Irwell Valley has a history of coal mining dating from the early industrial revolution. All of these colliery sites are now closed. However, depending on their depth and extent they could have the potential to supply geothermally-heated water to buildings via a district

heating network. Feasibility studies would be needed to establish whether, for example, Radcliffe or Prestwich town centres could benefit from such a source of heat.

5.3.76 **Hydro-electricity**

5.3.77 The River Irwell which passes through Bury has a number of weirs which could have the potential for electricity generation from low head hydroelectric generators. A number of potential low head hydroelectric sites have been identified at Chamberhall, Castlestead in Burrs Country Park (estimated rating for electricity generating plan would be 145kWe), Warth Bridge (estimated rating for electricity generating plan would be 258kWe) and Mount Sion Works in Radcliffe.

5.3.78 **Solar power**

5.3.79 There are permitted development rights covering the installation of photovoltaic panels on domestic properties. A number of commercial property roofs will also be suitable for pv. However, the main determinant of future installations is probably the feed-in tariff rate, which fell from 43 pence per KW hour, to 21 pence on 1 April 2012, and to 16 pence on 1 August 2012, for schemes below 4kW. From 1 August 2012, evidence will also have to be provided to show a property meets certain energy efficiency requirements, otherwise a lower rate will be payable. In future tariffs are to be reviewed every 3 months and will be revised according to deployment rates. Development of large scale solar power is not anticipated within the Borough. However, there are now a number of small installations on domestic properties and a 50KW array on the roof of Bury College.

Conclusion, intended approach to energy infrastructure and delivery action plan

Additional **investment in energy infrastructure is necessary to support the delivery of the Core Strategy and key development areas.** This presents both an issues and opportunity, part of the electricity distribution network in Bury may be at capacity and additional investment by ENW / developers may be required. This may be resolved in part by new decentralised generation, which will also provide social, economic and environmental benefits, helping Bury work towards a low carbon economy.

No.	Action	Status (critical / desirable)	Timeframe
1	Bring forward Energy Opportunity Frameworks / master plans for key regeneration and development areas and delivery plans for identified opportunities.	Required	2012-2029
2	Identify the feasibility of connecting new development in Bury Town centre to the IDNO infrastructure at the Rock.	Required	2012-2029
3	Undertake feasibility assessments for strategic energy opportunities to support new development.	Required	2012-2017

4	Undertake financial modelling and develop a business case for Bury Heat Pipeline.	**Required**	2012-2017
5	Continue to engage ENW and other stakeholders through AGMA's Governance structures, the Greater Manchester Energy Group and LCEA work programme.	**Required**	2012-2029
6	Provide the right planning framework at the sub-regional and local level to enable decentralised, low and zero carbon energy to come forward, especially within key growth areas and other areas of constrained electricity supply and distribution capacity.	**Required**	2012-2029
7	Work with AGMA's Governance structure to develop a city region ESCo framework and establish a delivery mechanism to lead investors to identified energy opportunity areas and other developments proposals as they are identified.	**Required**	2012-2029
8	Establish an energy delivery team with representatives from Planning, Building Control and regeneration.	**Desirable**	2012 - 2017
Main Partners Involved • ENW • Viridor • United Utilities • The Carbon Trust • AGMA • Developers			

5.4 Transport

5.4.1 The provision of adequate transport infrastructure is essential to delivering the Core Strategy. Bury has an extensive primary route network, connections to the motorway network and a well connected public transport system including Metrolink and bus services. There is also the East Lancashire Railway which connects Rawtenstall to Heywood via Irwell Vale, Ramsbottom, Summerseat and Bury. Taxis and private hire vehicles, Community Transport, Shopmobility, Ring and Ride, Local Link and Taxi Voucher schemes form part of the transport choice available to people with limited access to other modes of transport.

5.4.2 **Future Requirements**

5.4.3 Ensuring that both the public transport infrastructure and the transport network are adequate to support the levels of residential and employment growth envisaged for the Borough is a key element of this Infrastructure Plan.

5.4.4 Whilst it is important for the Local Plan to identify sufficient land to meet numerical residential and employment land requirements over the plan period, it is also important to ensure that development will be supported

by appropriate infrastructure and seeks to address the existing transport challenges.

5.4.5 In 2009, AGMA appointed David Simmonds Consultancy and MVA Consultancy to investigate the potential impacts on the transport networks of the Local Plan core strategies for each of the districts in Greater Manchester.

5.4.6 The outputs of the study have been used to inform the further development of Local Plan strategies by identifying how the potential travel demand created from new development will impose stresses on the transport network. The outputs consider the impacts both in individual districts and across the sub-region, and highlight where investment in the transport network is required to deliver the Core Strategy.

5.4.7 In Bury, the model has identified the following potential impacts of the Local Plan:

- A growth in population and employment, changes in car ownership and declining relative affordability of public transport compared to the car, which will result in an **increased number of trips** and a shift away from the use of public transport, walking and cycling by 2026.

- Some sections of the motorways and junctions may reach capacity by 2026. In particular, **the M60 anticlockwise – between A576 and M66** and the **M66 southbound** in the morning peak between **A676 and the A56-58.**

- The main routes to and from the regional centre during peak periods are forecast to show significant delays, resulting in additional journey times of between 10 and 15 minutes by 2026. In particular, **the A58 between Bury and Bolton, the A56 north of Bury, the A58 Rochdale to Bury and the A56 between Bury and the M60.**

- Public transport patronage in the district is forecast to decline by 2026, however it will continue to be an attractive mode of transport for travelling into Manchester City Centre.

- There is likely to be a shift away from bus, and on to tram for public transport journeys, which will impact on the capacity of Metrolink services.

5.4.8 The GM transport modelling process has identified where future development will impact on the transport network and the Highways Agency have identified further issues that may result from development promoted through the Local Plan. These impacts are not restricted to individual district boundaries and therefore a joined up approach is required to determine how best to accommodate and mitigate these impacts.

5.4.9 In 2011 the Council utilised the Highways Agency Traffic Impact Assessment Tool (TIAT) and the PENELOPE toolkit to assess the impact proposed new residential and employment development may have on the highway network. Both evaluate the potential trip generation of each residential site in the 2011 SHLAA and Employment Site in the 2011 ELR 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.

5.4.10 Whilst the SHLAA and ELR have both been updated since the TIAT and PENELOPE 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 Local Core Strategy plan period is 2012 – 2029 and not 2011 – 2028 as identified in the assessment outputs.

5.4.11 In relation to the sites identified in the SHLAA 2011, 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) by 2028:

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

5.4.12 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

5.4.13 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.

5.4.14 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

5.4.15 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.

5.4.16 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.

5.4.17 The Local Plan also needs 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.

5.4.18 **Highways Agency Protocol**

5.4.19 A protocol has been drawn up between AGMA authorities and the Highway's Agency which sets out agreed arrangements for joint working and regular liaison in preparation of Local Plans and supporting transport evidence bases (see Appendix N). 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 authority Core Strategies. The key issues for Bury are:

- Public transport patronage and capacity constraints;
- M60 Junction 19 to Junction 18 journey times;
- M66 Corridor (southbound journey times on the approach to Junction 2);
- Air Quality and the adoption of Low Emission Strategies particularly with regard to CO_2; and
- Delivering accessible development (close to sustainable modes of transport and key services).

5.4.20 The protocol will 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.

5.4.21 The protocol recognises that due to the nature of funding transport schemes, planned interventions which address the transport impacts of Local Plans 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 below.

5.4.22 The protocol identifies that the impact on the transport network of specific development sites being promoted through the Local Plan 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.

5.4.23 **Highways Agency Road Projects**

5.4.24 The approach adopted by the Highways Agency is to prioritise and promote development in sustainable locations, encourage behavioural change and demand management and apply technological innovation to the day-to-day operation of the network, rather than build extra capacity. Their approach to improving capacity and reliability includes the proposed introduction of 'Managed Motorways', introducing 'Hard Shoulder Running' (HSR) on sections of the Greater Manchester network in addition to limited lane gain.

5.4.25 The following schemes are included in the Agency's programme for the next 3 years, and although not all are within Bury, they are likely to have some impact on the Borough's highway network:

- M60 J8-J12 Managed Motorway
- M60 J12-J15 lane gain
- M62 J18-J20 Managed Motorway
- Improvements to M66 J4 southbound link to M62

5.4.26 The overall purpose of these schemes is to relieve congestion, improve journey time reliability by improving and better managing traffic flow conditions and improve safety.

5.4.27 **Accelerated Transport Package**

5.4.28 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. £20 million has been earmarked for new or improved park and ride facilities at Metrolink and railway stations across Greater Manchester, including Radcliffe, Whitefield and Prestwich. 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 Local Plan transport modelling), but the air quality along these corridors will also be improved.

5.4.29 In addition, 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.

5.4.30 **Local Transport Plan (LTP3)**

5.4.31 A key part of the delivery of transport investment and improvement will be Local Transport Plans, prepared by Transport for Greater Manchester in partnership with local authorities. The current Local Transport Plan (LTP3) sets out a short term implementation plan covering the period from 2011 to 2016, and a long term strategy to 2026, the delivery of which depends on the availability of funding. LTP3 encompasses five core objectives:

- To ensure that the transport network supports the Greater Manchester economy to improve the life chances 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 casualties 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.

5.4.32 In Bury the focus is making best use of existing highway resources through maintaining and improving the existing network; appraising opportunities for a commuter service along the East Lancashire Railway; Radcliffe bus station remodelling; completion of the Bury to Bolton cycle route; provision of additional Metrolink park and ride spaces; and working with bus operators to improve bus network efficiency. Funding has been secured through the Local Sustainable Transport Fund for cycle storage at Bury interchange, and further bids have been submitted to support schemes to enhance cycle networks around the Borough.

5.4.33 A Better Bus Fund application has also been submitted and proposes improved bus movement at Bury Interchange, by providing a new exit from the interchange directly onto the A58 Angouleme Way; reducing bus travelling distances through a congested area of the town centre, and delivering improvements to the pedestrian access and lighting. [24]

[24] http://www.tfgm.com/journey_planning/LTP3/Documents/BBAF-TfGM-Application.pdf

5.4.34 The LTP Implementation plan will be reviewed annually to take account of any changes to financial circumstances and priorities. The strategy itself will be reviewed after no more than five years (2015/16), but this may need to happen sooner, should circumstances change.

5.4.35 **'Velocity 2025' Cycling Strategy**

5.4.36 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.

5.4.37 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.

5.4.38 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.

5.4.39 **Electric Vehicles**

5.4.40 An emerging infrastructure requirement will be the need to provide charging infrastructure for electric vehicles, numbers of which are predicted to grow rapidly with the introduction of models by most major car manufacturers underway. Forecasts for plug-in vehicle uptake range from 2% to 12% of new car sales by 2020. Increased demand for plug-in vehicles is largely in response to the anticipated increase in carbon taxes and fossil fuel prices, and is supported by the Government's plug-in car grant and plugged-in places programme. In addition to private cars, growth is also expected in electric buses, commercial vehicles, scooters and bicycles.

5.4.41 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.

5.4.42 A major hurdle facing greater take up of EVs is the provision of charging infrastructure. The government has recently confirmed that new permitted development right 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.

5.4.43 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. 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.

Conclusion, intended approach to delivering transport infrastructure and delivery action plan			
Additional transport **investment is required to support the delivery of the Core Strategy.** At a local level, the Council is working with partners to address the potential impacts identified by the GM modelling.			
No.	**Action**	**Status (critical / required / desirable)**	**Timeframe**
1	Work with TFGM to deliver schemes which seek to increase the capacity and frequency of Metrolink services and provide additional Park and Ride facilities at Radcliffe, Whitefield and Prestwich Metrolink sites.	**Required**	2012-2017
2	Work with TFGM, bus operators and private developers to increase the capacity and frequency of bus services to Irwell Bank, Pilsworth and Bury North.	**Required**	2012-2029
3	Work with partners through the East Lancashire/West Rochdale Study to identify and appraise opportunities to improve public transport links from Ramsbottom to Manchester City Centre, in particular the development of a potential commuter service along the East Lancashire Railway.	**Required**	2012 - 2017
4	Support Local Transport Plan priorities which aim to reduce congestion and deliver improved local bus services, particularly along the Quality Bus Corridors which run along the A56/A556 from Bury to Manchester and along the A58 – Rochdale to Bolton corridor and increase opportunities for interchange between these corridors and the Metrolink stations in Bury town centre, Whitefield and Prestwich.	**Required**	2012-2029
5	Identifying extensions and upgrades to the pedestrian and cycle route network, particularly to EDA's and key residential areas. Support Local Sustainable Transport Fund bids for cycle network enhancements.	**Required**	2012-2029
6	Encourage modal shift for school travel, and support school travel initiatives that will reduce congestion and improve sustainability of the school run.	**Required**	2012-2029
7	Provide the appropriate planning framework at the sub-regional and local level to enable Low Emission Strategies and Travel Plans to be prepared and implemented, particularly within	**Required**	2012-2029

	Air Quality Management Areas.		
8	Review the Key Issues at regular intervals and implement the Transport Protocol for joint working within defined timescales.	**Required**	2012 - 2017
Main Partners Involved • AGMA • Highways Agency • TFGM • East Lancashire Light Railway • Private Developers			

6 COMMUNICATIONS AND DIGITAL INFRASTRUCTURE

6.1 Broadband Delivery

6.1.1 Provision of high speed quality digital infrastructure is considered a key requirement of attracting business and investment. The UK Infrastructure Plan 2011 seeks to encourage the private sector to invest in the deployment of superfast broadband networks, remove barriers to private sector investment and maximise the use of existing public sector assets. The Government has announced that it is committed to the UK having the best superfast broadband network in Europe by 2015, and to ensuring that everyone has access to a basic level of broadband on the same timescale.

6.1.2 Data published by Ofcom gives an indication of fixed broadband coverage across the UK, based on 6 indicators shown in the table below. To allow easier comparison between authorities, Ofcom have allocated each indicator a rating on a 5 point scale (shown in the 'score' columns below, '1' being the best) which have then been totalled to produce an overall score for each authority area.

Local authority	Average sync speed		Percentage not receiving 2Mbit/s		Superfast broadband availability		Take-up (including superfast broadband)		Superfast take-up	Overall total of scores	Quality score	Average Data Throughput per residential connection
	Mbit/s	Score	%	Score	%	Score	%	Score	%	Score	Score	GB
UK	12.7		10.1		65.0		71.0					23.0
Bolton	15.9	2	8.2	2	87.8	2	69.9	3	9.1	9	1	21.5
Bury	**13.1**	**2**	**9.4**	**2**	**91.1**	**1**	**72.5**	**2**	**8.4**	**7**	**1**	**19.1**
Manchester	13.0	2	7.8	2	81.4	2	66.5	3	7.8	9	1	27.3
Oldham	15.2	2	13.2	3	94.6	1	66.9	3	10.6	9	1	24.2
Rochdale	10.9	2	13.7	3	81.7	2	69.6	3	5.7	10	2	21.9
Salford	16.9	1	5.6	2	85.0	2	65.9	3	9.5	8	1	25.0
Stockport	16.8	1	5.2	2	96.2	1	73.6	2	11.3	6	1	21.0
Tameside	12.7	2	7.3	2	92.1	1	71.0	2	7.3	7	1	21.5
Trafford	14.6	2	6.0	2	91.4	1	74.9	2	11.0	7	1	23.5
Wigan	13.9	2	8.6	2	86.6	2	71.4	2	9.3	8	1	24.2

Source: Ofcom UK Fixed Broadband Data 2012, updated 14/11/12 http://maps.ofcom.org.uk/broadband/

6.1.3 Bury therefore has relatively good availability of broadband connections, particularly when compared to the UK average. However, there are a number of rural communities (e.g. Affetside, Ainsworth, Nangreaves, Hawkshaw and Holcombe) where residents are reporting poor levels of connectivity. There are some locally-specific issues in some of these

areas that are causing slower than expected speeds, such as aluminium rather than copper infrastructure, and premises being connected to neighbouring exchanges further away rather than the local exchange[25].

6.1.4 Greater Manchester Local Broadband Plan

6.1.5 The Greater Manchester Local Broadband Plan (LBP) has been submitted to the Department for Culture, Media and Sport on behalf of the Greater Manchester Combined Authority. The AGMA Commission for the New Economy has led the work on behalf of the Combined Authority.

6.1.6 Greater Manchester's ambition is to become one of the world's top 20 digital cities by 2020. The Local Broadband Plan seeks to deliver a world-class solution for the whole of Greater Manchester, to ensure that the provision of superfast broadband goes wider, deeper and faster than could otherwise be provided by the market without intervention. The LBP will ensure that coverage across the whole of Greater Manchester is at least and in most areas significantly better than 90% coverage of superfast (30Mb/s) broadband and 10% basic (2Mb/s) broadband.

6.1.7 The Greater Manchester LBP objectives for broadband are:

- To target 'white' areas to ensure universal provision by 2015 of basic broadband of at least 2Mb/s for all premises in Greater Manchester using the most appropriate technology.
- To target 'white Next Generation Areas' to maximise the availability of superfast (>30Mb/s), and wherever possible, ultrafast (100Mb/s) broadband across Greater Manchester, particularly for SMEs, and as a minimum for our key employment sites and town centres.
- To ensure ducting is constructed during the development process of our key employment sites to facilitate the delivery of open access fibre networks.
- To provide final 10–100 metre connections for SMEs requiring very high-capacity services
- To provide direct fibre infrastructure into multiple occupancy residential and business premises.
- To provide high-speed wireless in high footfall public areas, particularly key town centres, extending the reach of Manchester's UBF bid across Greater Manchester.
- To deliver a Greater Manchester-wide information, education, and demand building programme for businesses and residents to ensure that European 2020 targets are met.

6.1.8 Manchester and Salford have secured funding as part of the Super-Connected Cities programme funded by the Urban Broadband Fund. The other eight GM authorities are covered by the national broadband scheme 'final third' project, which refers to the third of premises in the UK that are the least commercially viable for next generation broadband provision by broadband providers. UK government funding of £990,000 from BDUK has also been secured, which will be used to support the

[25] Greater Manchester Smart Communities Information Pack http://www.agma.gov.uk/cms_media/files/smart_community_gm_information_pack_web_final3lh.pdf

provision of superfast broadband infrastructure for at least 90% of residential and business premises across the eight districts and at least basic broadband (Mb/s) for all premises as far as possible. A bid has also been submitted for £4.9 million of European Regional Development Fund (ERDF) funding to deliver superfast broadband in these eight districts, with a particular focus on the eight principal town centres and key employment sites.

6.1.9 **GM LBP – Next Steps**

6.1.10 As is evident from the information above the GM LBP is a wide programme of interventions related to enabling rural areas, growing the regional economy, encouraging growth within SMEs and promoting digital inclusion.

6.1.11 The GM Broadband project is currently in procurement and a shortlist of suppliers has been selected. An Open Market Review has been issued for all suppliers to confirm their current infrastructure, planned infrastructure and gaps in infrastructure including locations that suffer from slow speeds. A related element of the Open Market Review is a consultation exercise where communities can submit their views and give evidence of demand for faster speeds within their communities. It is intended that GM will have selected a supplier by the end of 2013 with delivery completed by June 2015.

6.1.12 Government funding from Broadband Delivery UK requires match funding. At a GM level, New Economy is investigating using EU funds from European Regional Development Funds (ERDF) as match. This is currently being appraised by the UK Government.

6.1.13 **GM LBP and Bury**

6.1.14 The GM LBP incorporates a much wider remit than enabling rural communities. The GM LBP incorporates an ambition to make the sub region super connected to enable economic growth in the region by connecting people and businesses to faster broadband speeds.

6.1.15 There is a very strong economic interplay between the regional centre; the key town centres and the residential communities across all 10 Greater Manchester local authorities.

6.1.16 Over the last 2 years previously identified ‘white’ areas across Bury (defined as <2Mb) have been enabled due to the work undertaken by the BRIF Community Group (Bury Rural Inequalities Forum). Nangreaves, Holcombe, and parts of Ainsworth/Radcliffe now enjoy faster connectivity as a result of joint working with BT and BRIF.

6.1.17 Affetside to the North East of the borough received poor broadband connectivity between 0.5 – 2 Mb and this varies with the time of the day and geography of the premises in relation to the current cabinets. BT has worked with the community and has researched a solution for the village and residents amounting to a cost of £50,000. This will cover the cost of two new cabinets at either end of the village. Without BDUK

funding and match funding BT have judged the village to be non-commercial for their investment.

6.1.18 Given the information received from New Economy it would seem that the village of Affetside would benefit from Government funding as part of the GM LBP. However, there is a risk that match funding via the ERDF route may not be possible for rural communities as the emphasis from ERDF funding streams is on assisting businesses, in particular SMEs.

6.1.19 It should also be considered that there is a limited amount of funding from Government for funding next generation Broadband. The consultation process may result in some rural communities being deemed more in need than others across GM. This will not be clear until the Open Market Review and the consultation process has been completed. Completion for delivery of the programme is scheduled for 2015. BRIF and the Affetside community may wish to explore other and quicker avenues of enabling their village.

Conclusion, intended our approach to Communications and Digital Infrastructure and delivery action plan

Additional **investment in digital infrastructure is needed in support of economic development but this is not critical to the delivery of the Core Strategy.**

No.	Action	Status (critical / required / desirable)	Timeframe
1	Continue to support the delivery of this infrastructure through our joint working and AGMA Governance structures.	**Desirable**	2012-2017

Main Partners Involved

- Manchester Digital Development Agency (MDDA)
- AGMA
- Digital infrastructure providers

7 WASTE MANAGEMENT

7.1 Greater Manchester Waste Planning

7.1.1 Greater Manchester Joint Waste DPD

7.1.2 Under the provisions of the Planning and Compulsory Purchase Act 2004 the ten unitary authorities in Greater Manchester have produced a Joint Waste Development Plan Document (JWDPD) for Greater Manchester, which was adopted on 1 April 2012. This identifies how Greater Manchester will deliver the spatial vision for waste development to 2027.

7.1.3 The Waste Plan sets out policies to guide future waste development and identifies sites and areas suitable for the location of waste development across Greater Manchester to 2027. The purpose of the Waste Plan is to provide sufficient opportunities for new waste management facilities to come forward within Greater Manchester that are of the right type, in the right place and provided at the right time. However, it is anticipated that future waste management facilities will be developed and operated by the private sector and, therefore, not require direct public investment.

7.1.4 The adopted Greater Manchester Joint Waste DPD identifies the following headline waste capacity requirements in Greater Manchester between 2012 and 2027:

- A total of 5.2 million tonnes of energy recovery capacity will be required, which will be accommodated at a maximum of five energy recovery facilities;
- A total of 7.8 million tonnes of waste disposal capacity will be required, which will be accommodated at two landfill facilities;
- A total of 272,000 tonnes of hazardous waste disposal capacity will be required, which will be accommodated at a specially engineered cell within one of the landfill facilities above;
- The evidence indicates that there is sufficient recycling, composting and treatment capacity for all other waste streams throughout the plan period, therefore no additional facilities have been allocated for this purpose.

7.1.5 The JWDPD includes detailed development control policies and identifies sites and preferred areas for a range of waste management facilities required up until 2027. Sites have been identified in order to meet the forecast growth in waste arisings and the decline in available landfill availability. The plan forms an integral part of each authorities' Local Plan.

7.1.6 Greater Manchester Municipal Waste Management Strategy

7.1.7 The Greater Manchester Municipal Waste Management Strategy, was adopted in 2004 and updated in 2007. It sets out a framework for managing Local Authority collected waste arisings to 2030. The headline targets of the Strategy include:

- Arresting the increases in Local Authority collected waste arisings no more than 1% per annum by 2010, zero by 2020 and no growth through to 2030.
- Achieving levels of recycling and composting of household waste of 33% by 2010 and a minimum of 50% by 2020 and through to 2030.

7.1.8 Table 5 below indicates the forecast Local Authority collected waste arisings within the Greater Manchester Waste Disposal area, at five year intervals throughout the plan period, illustrating the predicted arrest in growth in waste arisings in line with the targets above.

Table 5: Waste Arisings

Local collected waste arisings (tonnes per annum) 2009 – 2027	
Waste Arisings 2009	1,111,271 tonnes
Forecast Waste Arisings 2012	1,115,480 tonnes
Forecast Waste Arisings 2017	1,114,077 tonnes
Forecast Waste Arisings 2022	1,114,077 tonnes
Forecast Waste Arisings 2027	1,114,077 tonnes

7.1.9 To assist in delivering the strategy, in 2009 the GMWDA signed a 25 year Private Finance Initiative waste and recycling contract with Viridor Laing (Greater Manchester) Limited. The contract has started a £640 million construction programme which is creating a network of state-of-the-art recycling facilities across the whole of Greater Manchester. The introduction of the facilities will divert more than 75% of Greater Manchester's waste away from landfill.

7.1.10 The waste facilities required will be developed and operated by the private sector and will therefore not require public infrastructure investment.

Approach and actions to support the delivery of waste management infrastructure			
No.	**Action**	**Status**	**Timeframe**
1	Use the Adopted Greater Manchester Joint Waste DPD to determine planning applications for waste management infrastructure.	**Required**	2011-2027
Main Partners Involved ▪ GMWDA ▪ Greater Manchester Minerals and Waste Planning Unit ▪ Viridor / Viridor Laing ▪ AGMA			

7.2 Local waste

7.2.1 Bury has 2 dedicated Household Waste Recycling Centres (HWRCs) at East Bury (Fern Hill) and Radcliffe (Cemetery Road) which are operated by Greater Manchester Waste Disposal Authority (GMWDA). The HWRC at Prestwich closed in September 2011, but is not considered to have a

major effect on provision. Residents are free to use any of the HWRCs in Greater Manchester. All of the centres have received a major overhaul as part of the Waste PFI agreement between GMWDA and Viridor Laing, including green waste shredding and facilities and transfer loading stations at the Every Street site in Fern Hill.

7.2.2 Kerbside collections have become increasingly popular and now cover 100% of households in the Borough. Domestic waste no longer presents an issue as residential developers are generally wise to what is required within designs, particularly for semi detached and detached houses. However, it has been found on some occasions that multi-occupancy developments do not include adequate provision for storage of both general waste and recycled waste within developments, and are therefore often left on the street.

7.2.3 All Greater Manchester authorities have agreed to a target of 50% of all waste to be recycled by 2020. The rate of recycling and composting in the Borough has steadily increased over the past six years, to 37% of household waste sent for re-use, recycling and composting in 2011/12 and the trend suggests the 50% target is achievable.

Approach and actions to support the delivery of local waste management infrastructure			
No.	**Action**	**Status**	**Timeframe**
2	Include guidance in a review of the Design and Layout SPD in consultation with Waste Management Services which requires developers to incorporate space for a dedicated bin storage area within developments involving multi-occupancy, therefore allowing segregation between general waste and recycling facilities.	**Desirable**	2012-2017
Main Partners Involved ▪ GMWDA ▪ Greater Manchester Minerals and Waste Planning Unit ▪ Viridor / Viridor Laing ▪ AGMA			

8 GREEN INFRASTRUCTURE

8.1 Green Infrastructure Network

8.1.1 Green Infrastructure North West defines Green Infrastructure (GI) as 'the network of natural environmental components and green and blue spaces that lie within and between the North West's cities, towns and villages which provides multiple social, economic and environmental benefits. In the same way that the transport infrastructure is made up of a network of roads, railways, airports etc., green infrastructure has its own physical components, including parks, rivers, street trees and moorland'.

8.1.2 GI encompasses recreational spaces and areas of ecological value and these have a considerable role to play in promoting healthier lifestyles, adapting to the challenges posed by climate change, maintaining food production, protecting wildlife and attracting investment to an area. The emphasis nationally is therefore to maintain, improve and add to this resource by encouraging greater access and connectivity to deliver the above benefits across key areas in a strategic manner. Natural England place importance on a 'strategically planned and delivered network' which should be 'designed and managed as a multifunctional resource capable of delivering those ecological services and quality of life benefits required by the communities it serves and needed to underpin sustainability'.

8.1.3 Following a commitment in the 2011 Natural Environment White Paper, in October 2011 the Government launched a Green Infrastructure Partnership to facilitate the provision of local GI. The partnership will run for 2 years and will be made up of planning professionals, landscape architects and environmental interest groups alongside organisations such as Natural England and the Environment Agency. Its aims will include a review of the GI resources across England, a consideration of the scope for improvements and a look at how communities can be aided in securing investment for new GI projects.

8.1.4 Work has taken place for a number of years across Greater Manchester to identify a strategic network of green infrastructure, in 'Towards a Green Infrastructure Framework for Greater Manchester'. TEP Consultants were engaged to assist with this and put forward a network based on river valleys, uplands and major parks, with key linkages being identified between Bury and Rochdale, Salford and Bolton. The Irwell and Roch Valleys and West Pennine Moors are clearly outlined in this suggested network as being 'priority areas of GI investment'.

8.1.5 The same consultants were subsequently engaged to identify a more local network in Bury and Rochdale. This study, 'Bury's Green Infrastructure', takes the GM network identified above and considers Bury's contribution to the city region's GI. The report reviews the supporting evidence base on biodiversity, flood risk, recreation, regeneration proposals, etc. before advising that policies should enhance existing GI functions and promote multi-functionality as well as provide

measures for protecting assets. Four 'GI action areas' are put forward for the Upper Irwell Valley, Irwell Bank, Lower Irwell Valley, and Roch Valley, with each requiring a different approach towards protecting, managing and enhancing assets. The table below shows the actions that are recommended for each of the four areas.

Green Infrastructure Actions

Action Area	Policy Direction
Upper Irwell Valley	• Conservation of the existing high quality of the river valleys • Promoting their role in access to the wider countryside, especially the West Pennine Moors
Irwell Bank	• Create new assets • Enhance, restore and connect existing assets • Promote community usage of GI • Improve flood risk • Provide opportunities for healthy outdoor activity • On sites with high flood risk, priority should be given to their positive use as GI.
Roch Valley and Lower Irwell Valley	• Manage existing assets so they become more multi-functional • Restoration of brownfield land • Increase in flood storage • Promote linear access for active travel • Promote a range of outdoor leisure opportunities • Enhance biodiversity and heritage

8.1.6 The study also suggests that negative impacts on the network should be avoided and that compensation should be offered in the form of creation or enhancement of GI elsewhere, or should contribute to strengthening functionality and connectivity of the network where there are deficiencies.

8.1.7 Two Policies for creating and enhancing Bury's GI (Policy EN3) and protecting/enhancing existing GI (Policy EN4) are to be included in the Core Strategy. The four GI action areas above form the thrust of Policy EN3 in developing a strategic GI network for the Borough. Also the recommendations on strengthening the network when new proposals are put forward have been incorporated within Policy EN4.

8.1.8 The local GI network identified by TEP is informed by local evidence base conclusions and therefore largely follows the Borough's river valleys around the Irwell and Roch, major recreational sites, ecological corridors and open land areas such as Holcombe Moor. Notwithstanding the soundness of following the above approach, it should be noted that the Council believe this is not the only GI in the Borough with potential and that there are other sites of significance which would benefit from investment to improve quality and connectivity.

8.1.9 The Council intend to develop a strategic green infrastructure network designation through the Site Allocations DPD which will be largely based on the work by TEP consultants and UDP designations such as those for

river valleys, but will also be informed by officer knowledge of the many GI functions that sites provide and could potentially offer with further action.

Conclusion, intended approach to green infrastructure and delivery action plan			
Additional **investment in Green Infrastructure is required to support the delivery of the Core Strategy** and help serve existing communities.			
No.	**Action**	**Status (critical / required / desirable)**	**Timeframe**
1	To continue to work within the AGMA Governance arrangements and partners at Natural England and Red Rose Forest to deliver a Green Infrastructure Framework for Greater Manchester.	**Required**	2012-2029
2	To formulate Green Infrastructure Strategies and investments programmes for the Bury Green Infrastructure network and align with developer contributions and river management activities undertaken by the Environment Agency.	**Required**	2012-2017
3	Inform and influence the Council's Infrastructure capital programme to ensure that this aligns with the Core Strategy objectives, spatial strategy and developer contributions.	**Required**	2012-2017
4	To redirect Red Rose Forest projects towards Green Infrastructure priority areas.	**Required**	2012-2017
Main Partners Involved • Environment Agency • United Utilities • Natural England • Red Rose Forest • AGMA			

8.2 Sport and Recreation Facilities

8.2.1 The Greenspace Strategy (June 2010) incorporates an Open Space, Sport and Recreation Assessment which has identified standards in quantity, quality and accessibility for typologies (see Appendix K) of open space across the Borough, and has compared actual provision against these standards to highlight areas of deficiency.

8.2.2 The Greenspace Strategy has highlighted the following issues:

- Parks and gardens: significant quantity deficiencies in south of Borough
- Natural/semi-natural greenspace: Significant and major quantity deficiencies of poor quality everywhere except the south
- Outdoor sports: Playing pitches below provision standard in all areas

- Amenity greenspace: Performance generally to standard, although pockets of access deficiency around town centre, Tottington, E Radcliffe and Prestwich
- Provision for children/young people: 2 Local Areas Partnerships are without skate parks
- Allotments: General under-provision across the Borough apart from Prestwich

8.2.3 The Greenspace Strategy incorporates a strategy and action plan which take forward the findings of the needs assessment by targeting areas where current provision does not meet the established standards for quantity, quality and accessibility; identifying actions, funding, timescales and responsibilities; and informing work on identifying potential new sites or sites where improvements are required. Some issues identified above, such as the under-provision in natural/semi-natural greenspace have not been addressed as it is considered that it is not a concern despite the quantitative finding i.e. Bury's urban areas have direct access to un-managed countryside and are in the vicinity of Holcombe Moor (in north of Borough), therefore there is no need to identify new provision.

8.2.4 The Council published a Sports Pitch Strategy in September 2011 that includes a sports pitch assessment report with an audit of existing outdoor sports pitch provision facilities looking at supply and demand and using the 'Towards a Level Playing Field' methodology developed by Sport England. The strategy utilises these findings to provide a framework for the improvement, maintenance and development of the playing pitch stock which may or may not require rationalisation. The strategy concludes with a site-specific action plan and the setting of new provision standards for playing pitches.

8.2.5 Key findings from the Sports Pitch Strategy include:

- The undersupply of junior and mini football pitches across the Borough;
- The undersupply of cricket pitches in Ramsbottom, Tottington & North Manor and Prestwich;
- Significant deficiency in rugby pitches in Whitefield and Unsworth.

8.2.6 The Sports Pitch Strategy advises that in most cases deficiencies in sports pitches be remedied by remarking pitches of other types that are in surplus for the type in shortfall. Other objectives include the greater use of school pitches for community use and the protection of pitches to maintain current levels of provision. The provision standards for outdoor sports set out within the Sports Pitch Strategy will be incorporated into the next review of the Greenspace Strategy.

Conclusion, intended approach to sport and recreation facilities			
Additional infrastructure for open space, sport and recreation facilities is required, as identified in the Greenspace Strategy and Action Plan, which has found that any issues with quantity, quality or accessibility can be remedied through proposed short and long term new provision from Leisure Services, and the use of developer contributions to meet the needs arising from new development. Some recorded shortfalls in areas are considered to be insignificant due to the proximity of sufficient facilities in adjacent areas. Actions are to be funded by Section 106 agreements, potential CIL and other potential funding sources will be investigated. A Sports Pitch Strategy has also been prepared to respond to the need for outdoor sports pitches.			
No.	**Action**	**Status (critical / required / desirable)**	**Timeframe**
1	Continue to work with Leisure Services to implement the Greenspace Strategy and Action Plan.	**Required**	2012-2029
2	Require housing developers to make a contribution towards the recreational needs of the prospective residents through SPD1 on Open Space, Sport and Recreation Provision in New Housing Development.	**Required**	2012-2029
3	Support the work carried out by other partners within the Council to address quantity, quality and accessibility deficiencies in open space.	**Desirable**	2012-2029
Main Partners Involved • Bury Council – Leisure Services and Children's Services • Play England • Sport England • Department for Education • Sports clubs and associations			

9 SOCIAL INFRASTRUCTURE

9.1 Health

9.1.1 From 1 April 2013, Bury Primary Care Trust was replaced by NHS Bury Clinical Commissioning Group (CCG). The new CCG is responsible for planning and commissioning (buying) health services for the local population. NHS Bury CCG is made up of the 33 GP Practices in the Borough, and has a budget of around £215m in 2013/14 to plan and purchase a range of health services, including those provided in hospitals and out in the community, for over 190,000 registered patients.

9.1.2 The CCG is clinically led, with doctors and nurses who sit on the Board and Clinical Cabinet. There is also a Patient Cabinet, made up of 12 patient representatives and a Patients' Champion, to provide views and feedback from local communities. The CCG works closely with Bury Council and other partners through the Health and Wellbeing Board, which brings together key leaders from the health and care system.

9.1.3 The Community Facilities topic paper has identified that there are 33 GP practices, 29 dental surgeries, 21 opticians and 40 pharmacies across the Borough. Existing health services are located within or in close proximity to the key centres and are well served by bus, rail or Metrolink for those who live in remote areas. The 33 Bury NHS GP practices cover a registered population of around 190,000 patients. Throughout these 33 Practices are a total of 113 GPs which equates to roughly 1,681 people per GP. These figures are similar to the national average of 1,800 people per GP.

9.1.4 NHS Property Services, known as 'PropCo' also launched on 1st April 2013 and will be responsible for the development and management of estate, property and facilities previously overseen by Primary Care Trusts and Strategic Health Authorities. Primary care centres have recently been completed at Radcliffe and at Moorgate and Townside in Bury town centre, funded by the Local Improvement Finance Trust (LIFT) project and via third-party developers, through a public-private partnership (BTGCS). Due to the current NHS financial challenges, the planned expansion of the LIFT programme has been put on hold. In the interim the PCT's estate focus will be on the improvement of existing premises through capital funding.

9.1.5 The primary care centres ensure services are delivered in modern fit-for-purpose premises, delivering a wide range of services during core and non-core hours with an appropriate skilled workforce, along with access to local authority support and advice, therefore, ensuring joined-up effective healthcare delivery. It is believed that delivering these services in a local setting increases choice, availability and accessibility for the whole population.

9.1.6 The Uplands Health Centre at Whitefield hosts a GP practice and local community services, and has a limited life span. BTGCS had previously

sought planning permission for a replacement facility in November 2008 which was refused, and were advancing plans to provide a new, but smaller health centre on the existing site located towards the east adjacent Bury New Road, with the existing health centre then being demolished. However this scheme has now had to be put on hold and NHS Bury PropCo are currently undertaking some refurbishment to the existing health centre in light of the LIFT Programme being put on hold.

9.1.7 Previous plans for a new primary care centre in Prestwich, improvements to the centres at Tottington and Ramsbottom are also on hold pending resolution of the financial position.

9.1.8 Hospital services are provided at Fairfield Hospital in Bury, and Royal Bolton Hospital and North Manchester General are also easily accessible from the Borough. Fairfield Hospital maternity unit recently closed with services moving to Royal Bolton Hospital as part of a £120 million revamp under the Coalition Government's 'Making It Better' project. This scheme will create 'supercentres' in Bolton and North Manchester Hospitals, with the former facility serving Bolton, Bury, Salford and surrounding areas. The Council will continue to monitor the impact of the decision to relocate maternity services in collaboration with Bury NHS, but do not consider it will have an impact on the delivery of the Core Strategy.

9.1.9 Construction is currently underway on a £2.25 million expansion to the Accident and Emergency department at Fairfield Hospital, which is on target for completion in November 2013. Two extensions will provide dedicated A&E facilities for children and young people and will allow staff to separate major and minor cases. The expansion of clinical treatment spaces and improved layout will help to meet increased demand for A&E at the hospital which has recently had to treat higher levels of patients than it is designed to serve.

9.1.10 Greater Manchester West Mental Health NHS Foundation Trust operate in-patient services at Prestwich Hospital and have plans to modernise and rationalise the estate on their existing site off Bury New Road to improve estate condition and increase bed capacity within the existing site. The strategy includes plans to improve the patient environment at the Edenfield Centre and Gardener Unit and the replacement of the McGuinness Unit, the latter now implemented with the opening of the 'Junction 17' unit in July 2013. These are likely to involve significant rationalisation of the site which may enable some older surrounding unsuitable buildings to be replaced. In the longer term it is recognised that the older buildings at the Edenfield Centre will need replacing as they are not considered fit for purpose. Facilities at the Edenfield Centre will be improved with a new 407 square metre multi-use sports hall for use by patients within the Medium Secure Unit, with completion expected in Summer 2013.

9.1.11 Bury Hospice moved from Radcliffe to a new £5m facility at Fairfield in March 2013, increasing the number of in-patient beds for people with life-limiting illnesses from five to 12.

Conclusion and intended approach to health and delivery action plan			
All current health facilities are relatively evenly distributed across the Borough and **no significant gaps have been identified by NHS Bury**. The primary care centres have introduced modern facilities and services to Bury and Radcliffe in accessible locations to much of the Borough's population, and the focus of NHS Bury on improving existing centres rather than new provision is not considered to be of concern. The improvements to Prestwich Hospital are all within the existing site off the M60, and Bury Hospice's relocation is still central and accessible to much of the Borough. Therefore there are no major issues which would jeopardise the delivery of the Core Strategy.			
No.	**Action**	**Status (critical / required / desirable)**	**Timeframe**
1	Continue to support the delivery of the NHS capital programme and other programmes supporting the investment in Bury's primary care centres.	**Desirable**	2012-2029
Main Partners Involved • NHS Bury CCG and NHS Bury Property Services • Bury Tameside & Glossop Community Solutions Ltd • Greater Manchester West Mental Health NHS Foundation Trust			

9.2 Education

9.2.1 Extensive improvements to the provision of education facilities have been made over recent years. The Council believes that the quality of school buildings is a key factor in the success of schools and has a commitment, through its capital strategy, to improve access to quality community services through its primary, secondary and special schools and children's centres. The focus of the Council is to work with all schools to ensure limited resources are available to support the maintenance of the school estate and to ensure that all schools provide a safe and secure environment for their pupils. There is increasing evidence nationally of demand for primary school places due to inward migration and demographic shifts across the UK, however Bury has not experienced significant growth in demand and continues to develop contingency plans to provide additional pupil capacity should it be needed. Accommodating new development is not expected to generate demands which cannot be met within the existing facilities and proposed improvement plans.

9.2.2 The Council will support new and improved education provision across the Borough, including the modernisation, rebuilding and refurbishment of primary and secondary schools and the expansion and enhancement of further education. With the demise of major school building programmes such as Building Schools for the Future and the Primary Capital Programme, the Council has developed a new capital strategy,

implemented in 2012, which focuses investment on the maintenance of existing facilities and meeting future pupil place demand.

9.2.3 **Childcare provision:** In relation to provision for younger children, the Bury Childcare Sufficiency Assessment 2012 has measured the supply of, and demand for childcare in Bury, and has helped to identify gaps and establish plans to meet the needs of parents. The overall quantity of childcare provision has received a 'Green' rating and is judged to be adequate, although there are parts of the Borough that are underserved. Parents across the Borough are now supported by 14 Children's Centres which offer a range of services for families with children under five years old.

9.2.4 **Primary schools:** There are 64 primary schools in the Borough, 38 of which have maintained nursery classes and one of which is a maintained special school. There are 15,279 pupils currently attending maintained primary schools, with a further 1,626 attending maintained nursery classes attached to primary schools. Significant capital investment has been made in primary schools in the last ten years, which has enabled major condition and suitability deficiencies to be addressed in a number of schools.

9.2.5 Demand for primary school places is growing at a modest rate and is sufficient to justify current overall capacities being maintained, but with localised short-term pressures. Consideration may need to be given to increasing capacity in some parts of the Borough, in particular East Bury, Whitefield and Radcliffe where there is increased demand for primary school places – the situation in these areas will continue to be monitored. Millwood Special School in Radcliffe opened in April 2012 and in addition to catering for pupils with learning difficulties and disabilities, the facility offers co-located services delivered by the NHS and Council-run sensory support.

9.2.6 **Secondary Schools:** There are fifteen secondary schools in the Borough, one of which is a maintained special school and one a hospital school. There are currently 10,781 pupils attending maintained secondary schools. In terms of secondary school places, the current surplus capacity is forecast to fall significantly by 2018. Initially, the Council will work with its existing schools to address these demand pressures which are not seen as an issue at present as there is currently flexibility in admission numbers to deal with any increased demand in the resident population. Elton High School is to be rebuilt under the Priority School Building Programme with completion expected in 2015.

9.2.7 **Further education:** Post-16 learning is offered at a number of independent institutions including Holy Cross College, Bury College, St. Monica's RC Sixth Form Centre, Bury Grammar (Boys and Girls), Darul Uloom Al Arabiya Al Islamiya and Elms Bank Specialist Arts College.

9.2.8 3 of the above facilities have recently improved their offer on or adjacent to their existing sites. There are no issues for the Local Plan.

- Bury College have invested over £40 million to make significant improvements to their Woodbury Centre campus and Millennium Campus sites. A new 5 storey teaching building at the Woodbury

Centre named 'The Venture Centre' opened in April 2013 and has enhanced IT and modern classrooms whilst the Construction Skills Centre opened in November 2012 on the Millennium Campus site offering courses including bricklaying, carpentry, joinery and plastering.

- A new £4 million teaching block named the Kentigern Centre opened at Holy Cross College in July 2013, offering 16 new classrooms, offices and chaplaincy facilities.
- A post-16 applied learning centre opened in September 2011 at St. Monica's RC Sixth Form Centre offering BTEC and NVQ courses.

9.2.9 In prioritising schools for capital investment, emphasis will be placed on schools where the potential impact of investment is the greatest in terms of addressing poor condition and suitability of buildings. Thanks to significant investment in recent years and the ability to accommodate future growth in demand in existing schools, no critical education infrastructure issues for the delivery of the Core Strategy are envisaged, other than to support the following Action Points.

Conclusion and intended approach to education and delivery action plan

The current priority is to focus investment on the maintenance of existing facilities and meeting future pupil place demand. No critical education infrastructure issues are envisaged.

No.	Action	Status (critical / required / desirable)	Timeframe
1	Support initiatives to improve educational facilities at all levels.	Desirable	2012-2029

Main Partners Involved

- Bury Council Children's Services
- Department of Children, Schools and Families
- Training and Development Agency for Schools
- Partnership for Schools

9.3 Emergency Services

9.3.1 **Fire service:** Greater Manchester Fire and Rescue Authority are responsible for the fire service in Bury and they oversee three fire stations within the Borough at Bury town centre, Whitefield and Ramsbottom. The approach is to improve response times by using a smaller number of stations in more appropriate locations to provide an improved and flexible level of service.

9.3.2 The Fire Station and Borough Command headquarters relocated from The Rock in July 2012 to a new purpose built fire station at Chamberhall. The new community fire station is strategically located to enable firefighters to continue to respond to incidents effectively whilst also continuing their work in all areas of public safety. The community fire station will be an important part of the local community and include a room for use by community partners, groups and adult education

providers and a gymnasium suitable for children aged 6-16 years. The new fire station has been designed with sustainability in mind and incorporates green features, such as natural ventilation, heat recovery, air source heat pumps, solar photovoltaics and a solar thermal hot water system.

9.3.3 The GM Fire and Rescue Service announced in December 2012 that fire stations will be opened up to the public for a range of community activities. Bury has an internet café in the foyer whilst Ramsbottom runs a bee-keeping club and has joined forces with a local community group to grow vegetables and host gardening classes.

9.3.4 **Ambulance service:** Bury, Whitefield and Ramsbottom are again the locations for the local stations, allowing an even geographical spread across the Borough for responding to the national eight-minute response time target. It is deemed by the North West Ambulance Service (NWAS) that there is a sufficient level of resource for the Borough and that any increase in demand for services is likely to have an impact for the workforce and ambulance fleet rather than on land requirements.

9.3.5 North West Ambulance Service is carrying out a review of its estate with regard to the rationalisation of ambulance stations in order to ensure it obtains value for money from its estate, in the light of financial challenges facing the Trust. A 'hub and spokes' model is proposed, with hub stations acting as a base for a large number of vehicles, where they can be cleaned and fully stocked, with ambulance crews taking vehicles out to 'spokes' or deployment points at the start of each shift. These 'spokes' will be strategically placed in communities and ambulances will respond from these locations. Whitefield Ambulance Station is currently being considered in Phase 1 as part of the Central Manchester 'hub and spoke' group, covering the North and East of Manchester. Consideration of demand will be part of the review, and maintaining service quality will be a fundamental part of the evaluation process. It is important to remember that it is not always the case that responding vehicles are from the nearest station. Details of the estates review are available from http://www.estates.nwas.nhs.uk/

9.3.6 NWAS have bid to become a Foundation Trust and this was approved in Autumn 2012. This means that, when the application process is complete, the body will remain part of the NHS and will be locally-run having more influence over how services are developed and provided in the future. This freedom from Government control allows surplus funds to be invested in better facilities and services for patients.

9.3.7 **Police service:** Greater Manchester Police delivers policing in the Borough with the GM Police and Crime Commissioner owning and managing the Police Estate. There are five local police stations at Bury, Ramsbottom, Radcliffe, Whitefield and Prestwich. A Divisional Police station opened in June 2010 at Chamberhall, replacing the existing headquarters on Irwell Street. The new station comprises office accommodation together with facilities for conferencing and training and houses various services such as Major Incident and Crime Enquiries, Crown Prosecution, judicial support, operation policing unit and a custody facility. The Domestic Violence Unit, formerly based at The

Wylde, has been incorporated within the new headquarters. There are no plans for development at any of the five local police stations at present. There is a continuing emphasis on community policing by the Neighbourhood Policing teams and GMP moved to a neighbourhood policing model in March 2013 which may require consultation to seek views on possible options for around its operational footprint. The public enquiry counter at Prestwich was closed and replaced by a phone mounted on the station wall in 2012 as part of efficiency measures.

Conclusion and intended approach to emergency services and delivery action plan			
No additional infrastructure investment is required at present to maintain the emergency services network in the Borough, as all three services have adequate coverage and operate in bases located within the majority of the key centres. Tottington is the only centre to be without any stations, although it is considered that this is not an issue as the area is in close proximity to services in Ramsbottom and Bury, with Tottington well within the catchment area of the new police and fire headquarters at Chamberhall. The loss of the enquiry desk at Prestwich is not expected to affect provision as the control room is based in Whitefield.			
No.	**Action**	**Status (critical / required / desirable)**	**Timeframe**
1	Endeavour to improve the relationship between the Council and service providers through continued engagement.	**Desirable**	2012-2029
Main Partners Involved • Greater Manchester Fire and Rescue Authority • North West Ambulance Service • Greater Manchester Police			

9.4 Libraries and Other Community Facilities

9.4.1 **Libraries:** Bury has 17 libraries, two of which are in the town centre. Each key centre at Ramsbottom, Tottington, Radcliffe, Whitefield and Prestwich has a branch. The remaining facilities are smaller in scale serving local communities. Investment has recently been made in new and upgraded community library provision, and funding from the Big Lottery Fund has helped to deliver improved provision in Bury and Radcliffe. Many of the libraries have Community Information Points which provide easy access to Council services. The Library Service across the Borough has been subject to a Plan for Change Review, including public consultation. The Council is supportive of continuing to develop libraries as community hubs via the roll-out of the Asset Management Strategy and this may involve looking at co-location of facilities for both libraries and civic halls. Savings of £570,000 will be made in 2014/15 by the use of self-service technology, by reducing staffing levels and by cuts in sundry budgets.

9.4.2 **Youth centres:** As a result of budget cuts and consequent restructure to focus youth work to targeted groups there has been a contraction in the Youth Service both in terms of the number of centres and staffing.

All staff are now based at the New Kershaw Centre, Deal Street, Bury. Youth work is delivered at this Council-owned facility and other locations across Bury using venues in partnership with other agencies. The Youth Service targets its work and provision to the most vulnerable young people. It works in partnership with local agencies and the voluntary sector to ensure that there is relevant provision and effective use of staffing and resources to meet the needs of vulnerable young people. The potential impact of the restructure of Bury youth service is not yet known and will be monitored closely.

9.4.3 **Leisure centres:** There are four purpose-built leisure facilities across the Borough, located at Ramsbottom in the north, Bury town centre, and Radcliffe and Goshen in the south. All have either recently been refurbished or have plans to expand or diversify their offer. The Council also manage five facilities at schools in Pimhole, Radcliffe, Unsworth, Prestwich and Ramsbottom. An outline application has been submitted as of July 2013 for the relocation of Castle Leisure Centre to another town centre site at Knowsley Street.

9.4.4 **Civic venues –** There are four civic venues within the Borough, the Civic Hall in Ramsbottom, the Elizabethan Suite in Bury, the Civic Suite in Radcliffe and the Longfield Suite in Prestwich. All provide a variety of self-contained function rooms for both the Council and members of the public to utilise. As with the outcome of the review on libraries, all civic halls are to remain open and co-location of services may be considered as part of a forthcoming Asset Management Strategy.

9.4.5 **Post offices:** Following the decision by Post Office Limited in 2008 to close 5 branches in Bury at Elton, Greenmount, Limefield, Rochdale Road and Radcliffe, there are 19 post offices in the Borough. These 19 branches are well located in or around the Borough's key sustainable transport corridors across the urban areas of the borough and within outlying villages. Consequently, these vital services are still within reach of the majority of Bury's communities despite the recent closures.

9.4.6 **Religious facilities:** The 2011 census found that 62.7% of those surveyed in Bury identified Christianity as their religion. Muslim is the next major religious group in the Borough at 6.1%, followed by Judaism at 5.6% which also represents the largest Jewish group in Greater Manchester. There is a wide range of religious facilities across the Borough including those relating to Buddhism, Islamic, Orthodox, Catholic, Church of England, Evangelical, Pentecostal and Salvation Army.

9.4.7 **Custodial services:** There are no current prison facilities within the Borough, or any specific proposals or sites identified for new prison development at present. Any proposals will be discussed with the National Offender Management Service (NOMS) based on the demand for provision.

9.4.8 **Cemeteries:** There are three cemeteries in the Borough - Bury Cemetery, Ramsbottom Cemetery and Radcliffe Cemetery, the latter of which includes a crematorium. There is currently adequate provision for future cemetery requirements within the Borough, however, this will

need to be reviewed, particularly with reference to Radcliffe which has the lowest capacity of the three and is the priority for increasing provision. Sites adjacent Radcliffe and Ramsbottom cemeteries have been earmarked for possible future extensions, although this is not expected to be necessary in the next 5 years. In the short term, efforts will be focussed on alleviating issues of poor drainage, particularly at Ramsbottom in its valley location below Holcombe Hill, as this can have an impact on availability of space both within the existing site and for expansion.

9.5 Adult Care Services

9.5.1 Demographic changes, advances in healthcare, increasing wealth and other improvements in people's quality of life mean that people in the UK are living longer. In the Borough, the population aged 65 and over is projected to increase by 47.9% from mid-2012 to mid-2035[26] (from 33,012 in 2012 to 48,835 in 2035).

9.5.2 The results of the Housing Needs and Demand Assessment 2011/12[27] have indicated that there is a growing need for additional housing to cater for elderly persons. There is a particular need for additional sheltered and extra care facilities across the Borough.

9.5.3 Given these trends, the requirements for housing and care services from the Council's Adult Care Services are changing significantly. A wide range of housing choice is required, including appropriate mainstream housing and specialist provision such as retirement or Extra Care housing that enables older people with more complex needs to be supported, while retaining as much independence as possible. This reflects current social care and health policy of promoting independence and in providing care 'close to home' because people want to stay in their own homes as opposed to moving to specialist care institutions.

9.5.4 With these needs in mind, the Council and Six Town Housing have worked in partnership resulting in the recent opening of the 40 unit Red Bank Extra Care Scheme in Radcliffe, part-funded by the Homes and Communities Agency's (HCA) Affordable Housing Programme. Extra Care housing is designed to give people the security of their own front door coupled with the privacy and living space to maintain independent lives whilst having care support close at hand. Following the success of this scheme, a further bid to the Care & Support Specialised Housing Fund for a 60 unit extra care scheme for tenants and residents with dementia has been submitted by St. Vincent's Housing Association and the results are expected in Summer 2013.

9.5.5 In response to changing demographics, needs and requirements, Adult Care Services have undertaken a review of all care facilities within the Borough and subsequently developed a modernisation plan that outlines the Council's future plan for accommodation and services for older people. The Housing Strategy for Older People sets out the diverse and changing housing and care needs of older people in the short and longer

[26] ONS 2011-based population projections
[27] Bury Housing Need and Demand Assessment, Final Report, 2011/12

term, and identifies links between housing, social care and health. It should be noted that this is in the process of being updated and should be revised within the next 12 months.

9.5.6 The Strategy is a detailed document but identifies five key challenges and priorities for future housing programmes for the older population. These reflect the range of different initiatives and strategies that have been developed (or are being developed) to tackle general housing issues but these also relate to the potential issues that an ageing population will bring. They are briefly outlined in the table below.

Key Priorities for Older Persons

Key Priority	Issues	Proposed Actions
1. Improve the Quality of Housing Provision	Only 48% of private sector homes are decent. 90% of Council Housing stock was considered decent.	All Council housing to meet decency standards. Six Town Housing have now completed the Decent Homes Programme (Dec 2010). 100% of council housing has been made decent and this will continue to be met through repair and refurbishment work.
	3.6% (2,400) private sector homes are empty	Improve private sector housing and reduce empty properties
	Over 9,000 households in Bury are in fuel poverty, with older people being particular vulnerable	Improve energy efficiency across all sectors. Promote the Government funded Warm Front Grant
2. Establish Innovative Housing and Care Solutions	Currently there are 470 sheltered units across the Borough, which accommodates 6.6% of the Borough's older population. Although 96% of service users were generally satisfied, they considered that more support was required. At April 2009, 95 sheltered units were void and some units provided poor standards of accommodation.	Review and improve sheltered housing in the Borough (to determine whether buildings/land need to be remodelled). A report on 3rd March 2011 outlined the Council's commitment to ensuring that sheltered housing remained an option for older people and that this needed to be improved. Bedsits are to be phased out by 2025 and progress has been made already with three sheltered schemes (Elton Square, Wesley House and St

		Marys Court) all closed. These will be replaced with housing. There are currently only 375 council owned sheltered within the Borough.
	There is a range of other pressures being put on housing services including Intermediate Care, which is designed for people recovering after a spell in hospital. Also, it is estimated that an additional 500 units are required for specialised extra care in the next ten years. It is also expected that there will be extra pressures to provide dementia care – currently around 900 residents have dementia but this is expected to increase significantly as the population grows older.	Improved housing choice with care for vulnerable individuals. There are proposals to provide two care villages to meet the range of housing needs for older people. (Update – There are 69 council owned extra care units in the Borough at present and a further 40 have recently been provided on the Red Bank site).
3. Support Independent Living	71.5% of Bury's Older People want to remain living in their own homes.	Increase take up of support at home services
	There are a significant amount of households that contain older people with a support need (e.g. help maintaining homes).	More households to take up self directed support
	There are a range of new assistive technologies available that will help promote independent living for older people. However, the use of new technologies needs to be balanced to ensure that older people are not isolated due to lack of social contact.	Cost effective in-house services for self directed support.
	There are currently 24,000 carers in Bury, many of which are family members. Many of these need support to provide the level of care and facilities required.	Improved services for carers including access to suitable housing.
	To support independent living, older people must have access to local amenities and facilities, with	Safer residential environments

	safety and security key issues.	
	Some properties lend themselves to a range of adaptations that will allow older people to live there longer. New homes should be encouraged to be built to Lifetime Homes standards to enable this in future.	Enhance adaptation services and promote Lifetime Homes Standards in new residential developments
4. Develop housing choice that is affordable	A large number of older person households expected or needed to move in the foreseeable future because their current home is not/will not be suitable.	Understand and meet need and demand for housing in the Borough, including affordable housing.
	Most older person households own at least 1 car, so new housing developments should consider these parking requirements.	Ensure that new developments meet the requirements of older people, including parking standards
5. Practice Equality and Diversity	Equality legislation has helped to challenge discrimination and prejudice but there are still equality gaps between different ethnic groups and ages. The Council aims to respond to the diverse needs of the community, regardless of ethnic background or age.	Improve communication and community engagement
	Older people can sometimes face problems accessing suitable housing and support services because of inadequate or poor access to advice or information. This can be an even greater problem for BME communities due to language and cultural differences.	Increase awareness of customers and their needs

9.5.7 Good progress is already being made to implement the recommendations of this strategy and action plan, including a number of the issues identified above.

Conclusion and intended approach to libraries and other community facilities and delivery action plan
Libraries: Healthy distribution of facilities, with no plans to develop new libraries. The Council will continue to liaise internally to determine whether the outcome of the Asset Management Strategy will alter the current situation.

Youth centres: Youth services are based at the New Kershaw Centre in East Bury. The impacts of closures of other centres will be monitored.

Leisure centres: All facilities in purpose-built leisure centres have either recently been refurbished or have plans to expand or diversify their offer. Additional facilities are also provided at five schools. Future plans will be kept under review in future updates of this IDP.

Civic venues: There are currently no issues to address for the Local Plan. The Council will continue to liaise internally to determine whether the outcome of the Asset Management Strategy will alter the current situation.

Post offices: There is an even spread of post offices across the six towns and outlying villages.

Religious facilities: It is not considered that there is an issue of under-provision in the Borough for religious institutions. The Council will continue to consult faith communities as part of the Local Plan process to ascertain whether the current situation is likely to change.

Custodial services: There are no issues to address for the Local Plan. We will continue to liaise with NOMS on future requirements.

Cemeteries: Capacity at Ramsbottom and Radcliffe are the priorities for Bereavement Services at present, although extensions are not considered necessary within the next five years. Sites adjacent Radcliffe and Ramsbottom cemeteries have been earmarked for possible future expansion, which may be required later in the plan period.

Adult care: Adult Care Services have developed a strategy and action plan to address future needs, and the implementation of this will be supported by the Core Strategy.

OVERALL: No major infrastructure issues over the plan period as there are either strategies in place to address any needs, or existing facilities are judged to be sufficient. The situation will be kept under review.

No.	Action	Status (critical / required / desirable)	Timeframe
1	Support investment in community facilities which aims to enhance and diversify provision.	Required	2012-2029
2	Liaise with partners within Council to ensure that any foreseen issues for social infrastructure i.e. for cemeteries and youth centres are discussed at an early stage to help facilitate replacement provision through the planning process	Desirable	2012-2022

Main Partners Involved

- Bury Council – Bereavement Services, Children's Services, Adult Care Services, Leisure Services, Team Bury and Department of Communities and

Neighbourhoods (Waste Management)

- Religious organisations and faith groups
- Six Town Housing
- Registered Social Landlords (RSLs)
- HM Prison Service
- National Offender Management Service (NOMS)
- Post Office Limited

10 DELIVERY ACTION PLAN

10.1.1 This IDP has been produced so that it can be a living document which can updated through active monitoring to inform service and spatial planning decisions and deliver the action plans associated with the individual infrastructure types.

10.1.2 The ongoing aim of the IDP and the infrastructure planning process is to integrate the investment programmes of various services and organisations with planning for new development. The baseline position within this IDP will allow the Council and its partners in the LSP and AGMA to continue to prioritise spending and address funding gaps over the lifetime of the Core Strategy.

10.1.3 As the infrastructure planning process continues, it is intended that subsequent versions of the IDP will be able to draw upon the monitoring and management processes that will be established which will allow more accurate costs, priorities and needs to be identified, as the monitoring and updating process established through this IDP matures.

10.1.4 The table below provides a summary of all the actions. Although no critical actions have been identified that are immediately essential to allow development to take place, that is not to say that the other actions are not necessary to support the development of the Borough and the delivery of the overall Core Strategy.

Summary of Infrastructure Actions

Action	Status	Timeframe
Physical		
Water Supply and Waste Water		
Enforce the water efficiency standards in the Code for Sustainable Homes and BREEAM best practice for other buildings.	**Required**	2012-2029
Implement SuD techniques to reduce potable water usage (where water harvesting is utilised) and manage surface water.	**Required**	2012-2029
Maintain the partnership and collaborative approach with EA and UU to bring about more sustainable water management at the development and community scale and deliver necessary investment in a co-ordinated manner.	**Required**	2012-2029
Maintain and review if necessary the Protocols for joint working and regular liaison meetings.	**Required**	2012-2029
Work with UU to deliver AMP 5 projects and investments.	**Required**	2012-2029
If necessary, phase development to coincide with AMP investments such as flood resilience at Bury WwTw and public surface water sewer networks which may come forward through AMP 6 (2016 - 2020) and AMP 7 (2021 - 2025)	**Required**	2016 - 2025
Implement drainage rates recommended by the SFRA to reduce surface water within the sewer network (see below) and develop Green Infrastructure strategy.	**Required**	2012-2029

Implement the SWMP.	Required	2012-2029
Flood Risk and Drainage		
Apply the sequential test and, if necessary, the exceptions tests, in order to reduce the need for additional infrastructure.	Required	2012-2029
Prepare an integrated strategy for Radcliffe to align with the SWMP, integrate and coordinate investment planned by EA and UU and the private sector.	Required	2012-2029
Commence an integrated and partnership approach to flood risk management. This will be determined by ongoing programmes for joint working, with the EA and UU, implementation of the Surface Water Management Plan and new responsibilities outlined in the Flood and Water Management Act (2010) and Flood Risk Regulations (2009).	Required	2012-2029
Work with the Environment Agency and UU to produce an integrated flood mitigation strategy for the Bury-Radcliffe area. Funding has been committed by EA to progress this work. Until the flood mitigation strategy for the Bury-Radcliffe area is produced, the sequential approach to single site development and development layouts will be applied.	Required	2012 - 2017
Utilise developer contributions / CIL to bring forward additional infrastructure within areas of need.	Required	2012-2029
Work closely with the Environment Agency and other partners to cut off the flood flow route in Ramsbottom on the west side of the Irwell.	Desirable	2012-2029
Energy and Carbon Management		
Bring forward Energy Opportunity Frameworks / master plans for key regeneration and development areas and delivery plans for identified opportunities.	Required	2012-2029
Identify the feasibility of connecting new development in Bury Town centre to the IDNO infrastructure at the Rock.	Required	2012-2029
Undertake feasibility assessments for strategic energy opportunities to support new development.	Required	2012-2017
Undertake financial modelling and develop a business case for Bury Heat Pipeline.	Required	2012-2017
Continue to engage ENW and other stakeholders through AGMA's Governance structures, the Greater Manchester Energy Group and LCEA work programme.	Required	2012-2029
Provide the right planning framework at the sub-regional and local level to enable decentralised, low and zero carbon energy to come forward, especially within key growth areas and other areas of constrained electricity supply and distribution capacity.	Required	2012-2029
Work with AGMA's Governance structure to develop a city region ESCo framework and establish a delivery mechanism to lead investors to identified energy opportunity areas and other developments proposals as they are identified.	Required	2012-2029
Establish an energy delivery team with representatives from Planning, Building Control and regeneration.	Desirable	2012 - 2017
Transport		
Work with TFGM to deliver schemes which seek to increase the	Required	2012-2017

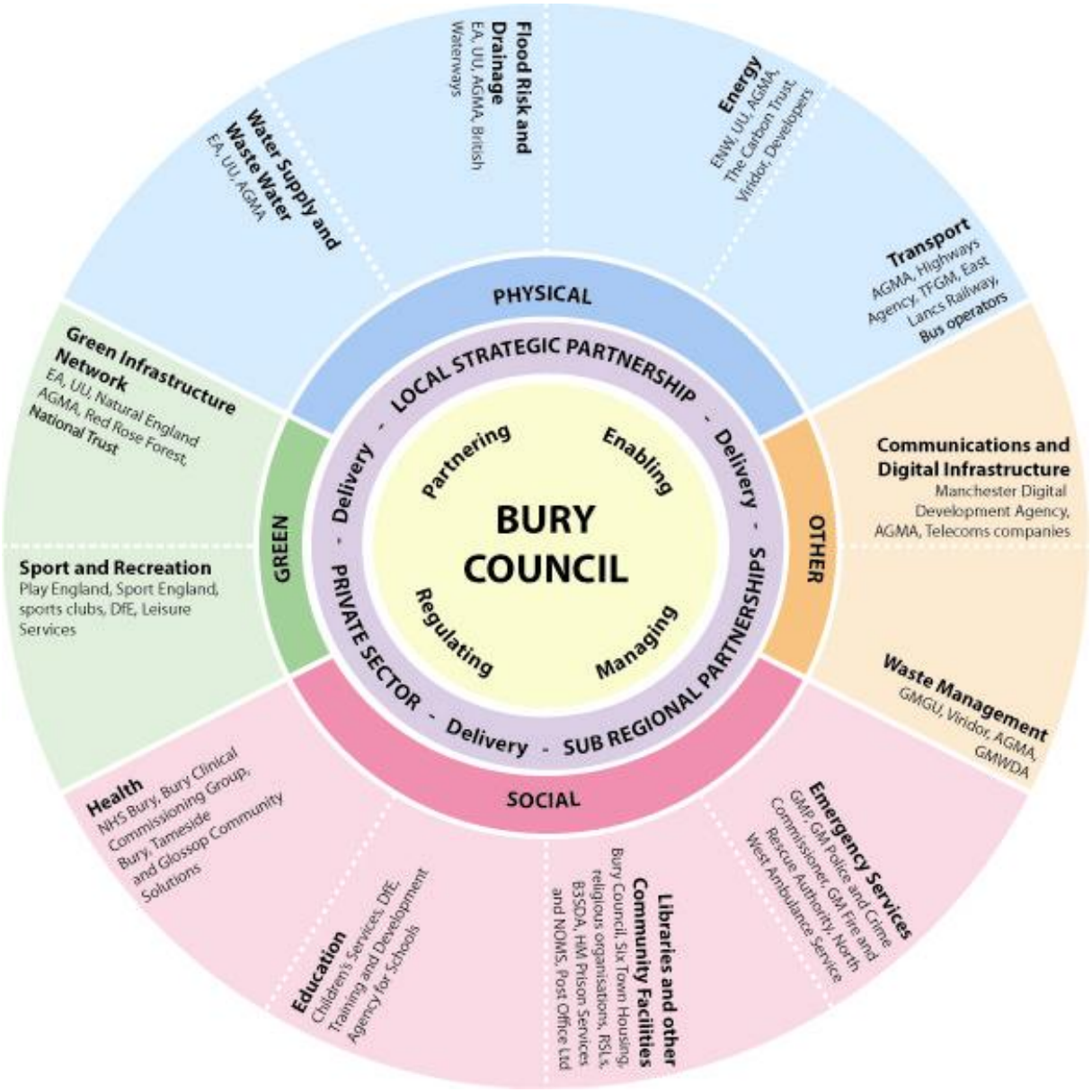
capacity and frequency of Metrolink services and provide additional Park and Ride facilities at Radcliffe, Whitefield and Prestwich Metrolink sites.		
Work with TFGM, bus operators and private developers to increase the capacity and frequency of bus services to Irwell Bank, Pilsworth and Bury North.	**Required**	2012-2029
Work with partners through the East Lancashire/West Rochdale Study to identify and appraise opportunities to improve public transport links from Ramsbottom to Manchester City Centre, in particular the development of a potential commuter service along the East Lancashire Railway.	**Required**	2012 - 2017
Support Local Transport Plan priorities which aim to reduce congestion and deliver improved local bus services, particularly along the Quality Bus Corridors which run along the A56/A556 from Bury to Manchester and along the A58 – Rochdale to Bolton corridor and increase opportunities for interchange between these corridors and the Metrolink stations in Bury town centre, Whitefield and Prestwich.	**Required**	2012-2029
Identifying extensions and upgrades to the pedestrian and cycle route network, particularly to EDA's and key residential areas. Support Local Sustainable Transport Fund bids for cycle network enhancements.	**Required**	2012-2029
Encourage modal shift for school travel, and support school travel initiatives that will reduce congestion and improve sustainability of the school run.	**Required**	2012-2029
Provide the appropriate planning framework at the sub-regional and local level to enable Low Emission Strategies and Travel Plans to be prepared and implemented, particularly within Air Quality Management Areas.	**Required**	2012-2029
Review the Key Issues at regular intervals and implement the Transport Protocol for joint working within defined timescales.	**Required**	2012 - 2017
Other		
Communications and Digital		
Continue to support the delivery of this infrastructure through our joint working and AGMA Governance structures.	**Desirable**	2012-2017
Waste		
Use the Adopted Greater Manchester Joint Waste DPD to determine planning applications for waste management infrastructure.	**Required**	2011-2027
Include guidance in a review of the Design and Layout SPD in consultation with Waste Management Services which requires developers to incorporate space for a dedicated bin storage area within developments involving multi-occupancy, therefore allowing segregation between general waste and recycling facilities.	**Desirable**	2012-2017

Green		
Green Infrastructure		
To continue to work within the AGMA Governance arrangements and partners at Natural England and Red Rose Forest to deliver a Green Infrastructure Framework for Greater Manchester.	**Required**	2012-2029
To formulate Green Infrastructure Strategies and investments programmes for the Bury Green Infrastructure network and align with developer contributions and river management activities undertaken by the Environment Agency.	**Required**	2012-2017
Inform and influence the Council's Infrastructure capital programme to ensure that this aligns with the Core Strategy objectives, spatial strategy and developer contributions.	**Required**	2012-2017
To redirect Red Rose Forest projects towards Green Infrastructure priority areas.	**Required**	2012-2017
Sport and Recreation		
Continue to work with Leisure Services to implement the Greenspace Strategy and Action Plan.	**Required**	2012-2029
Require housing developers to make a contribution towards the recreational needs of the prospective residents through SPD1 on Open Space, Sport and Recreation Provision in New Housing Development.	**Required**	2012-2029
Support the work carried out by other partners within the Council to address quantity, quality and accessibility deficiencies in open space.	**Desirable**	2012-2029
Social		
Health		
Continue to support the delivery of the NHS capital programme and other programmes supporting the investment in Bury's primary care centres.	**Desirable**	2012-2029
Education		
Support initiatives to improve educational facilities at all levels.	**Desirable**	2012-2029
Emergency Services		
Endeavour to improve the relationship between the Council and service providers through continued engagement.	**Desirable**	2012-2029
Libraries and Other Community Facilities		
Support investment in community facilities which aims to enhance and diversify provision.	**Required**	2012-2029
Liaise with partners within Council to ensure that any foreseen issues for social infrastructure i.e. for cemeteries and youth centres are discussed at an early stage to help facilitate replacement provision through the planning process	**Desirable**	2012-2022

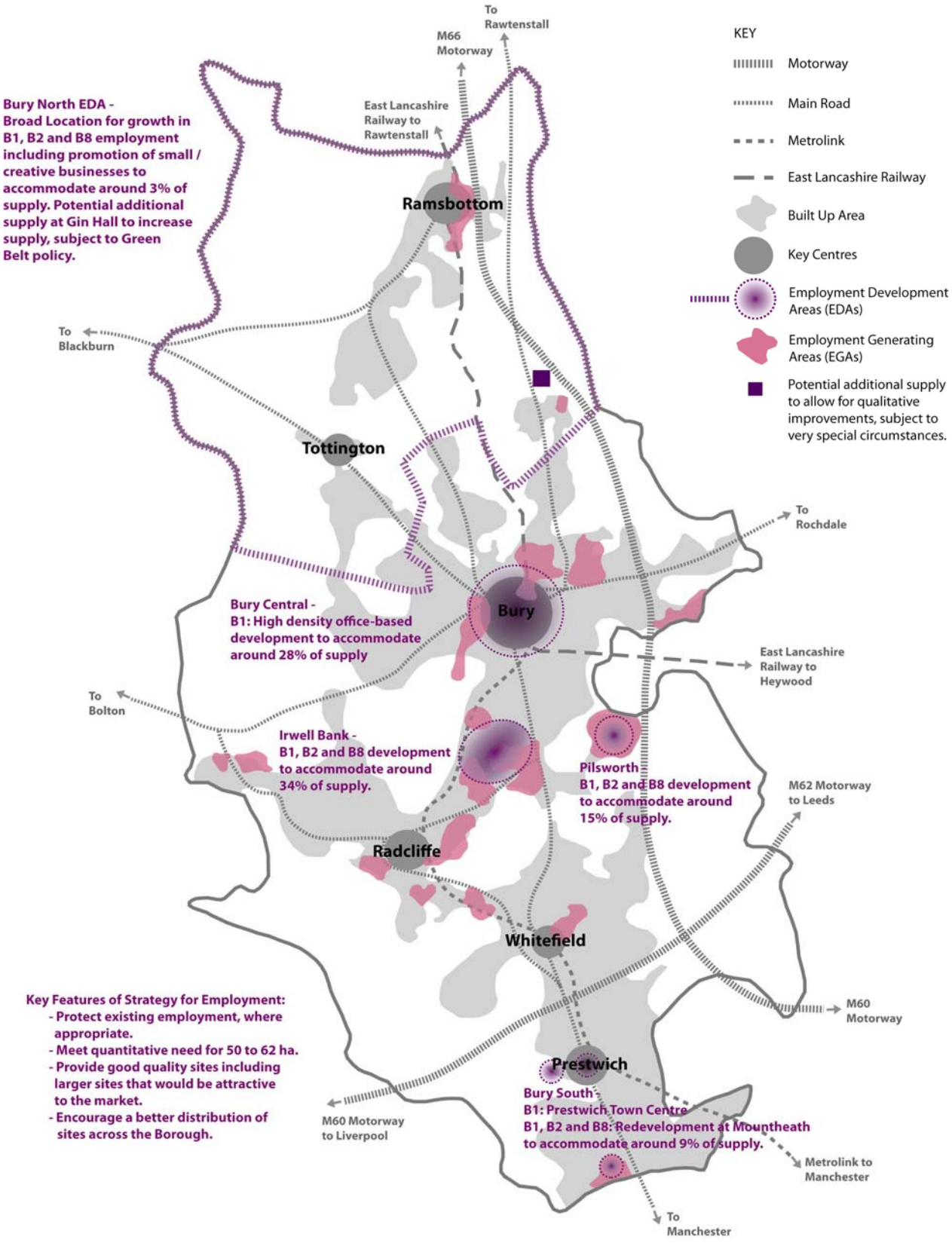
10.1.5 As illustrated by Figure 5 below, delivering the action plan will require actions by all stakeholders and partners. A great deal of progress has already been made through the Core Strategy production process. Our

priority is to strengthen existing partnerships, build new ones if necessary whilst remaining focussed on the actions already identified especially where these have been identified as critical or required.

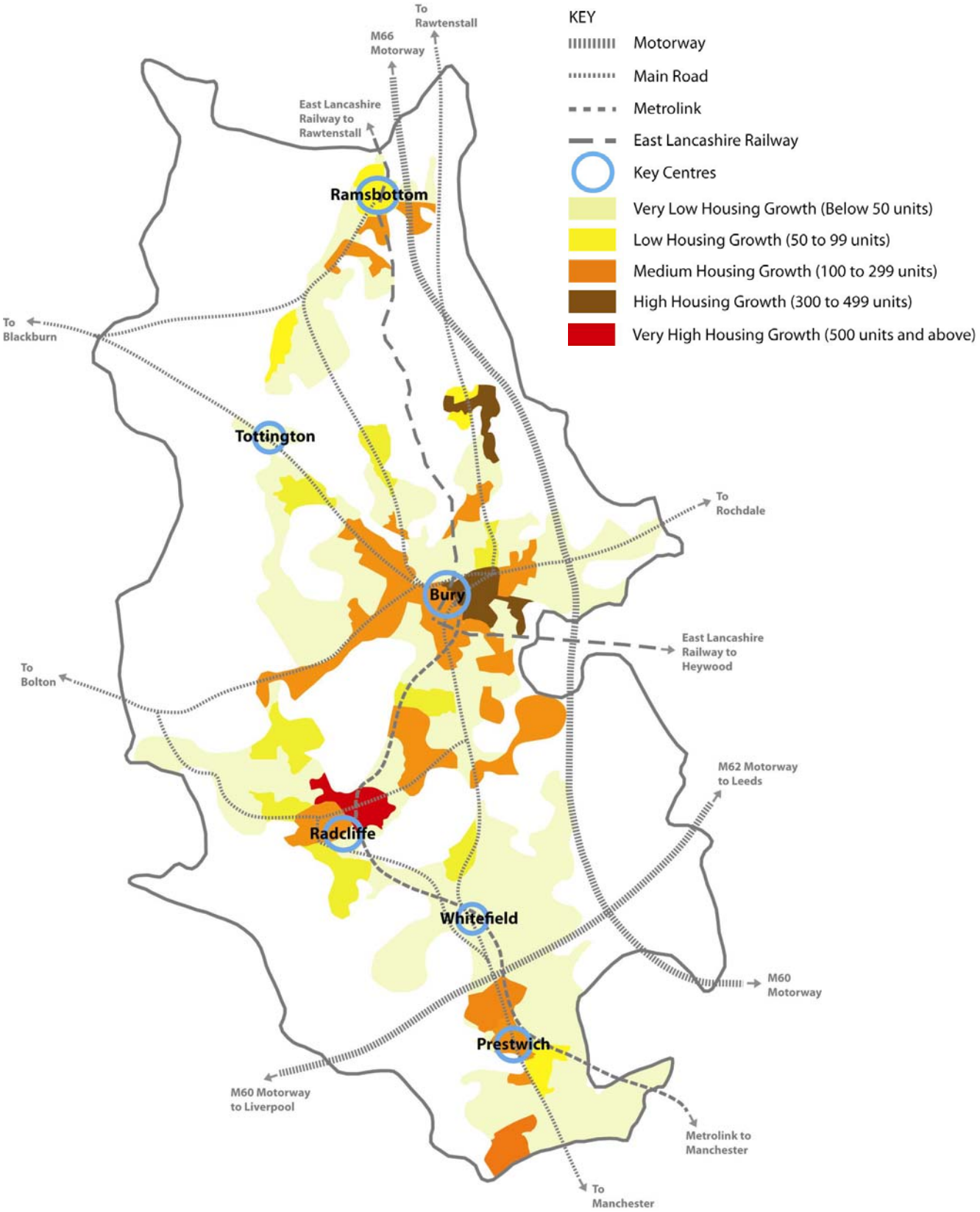
Figure 5. The Council's approach to infrastructure delivery.



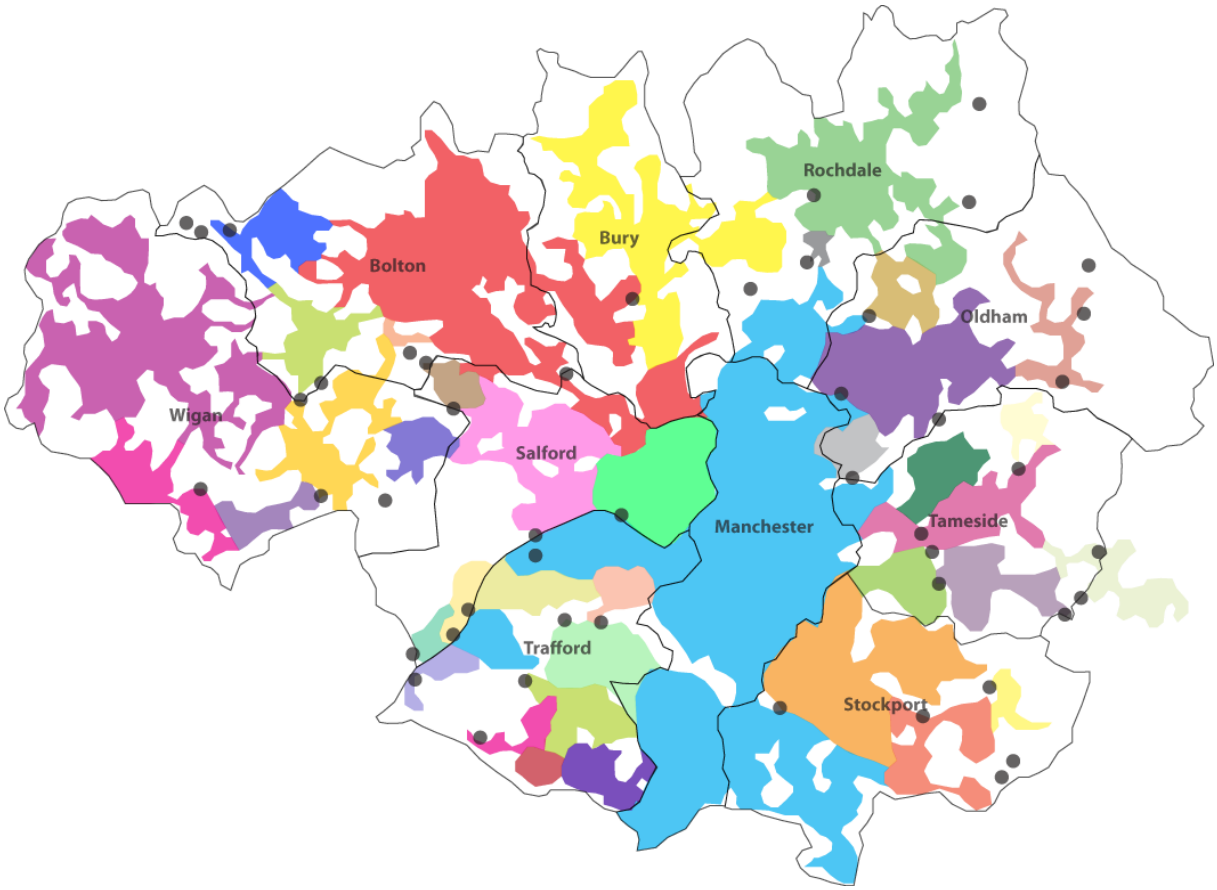
APPENDIX A - Employment Development Areas and Existing Employment Generating Areas



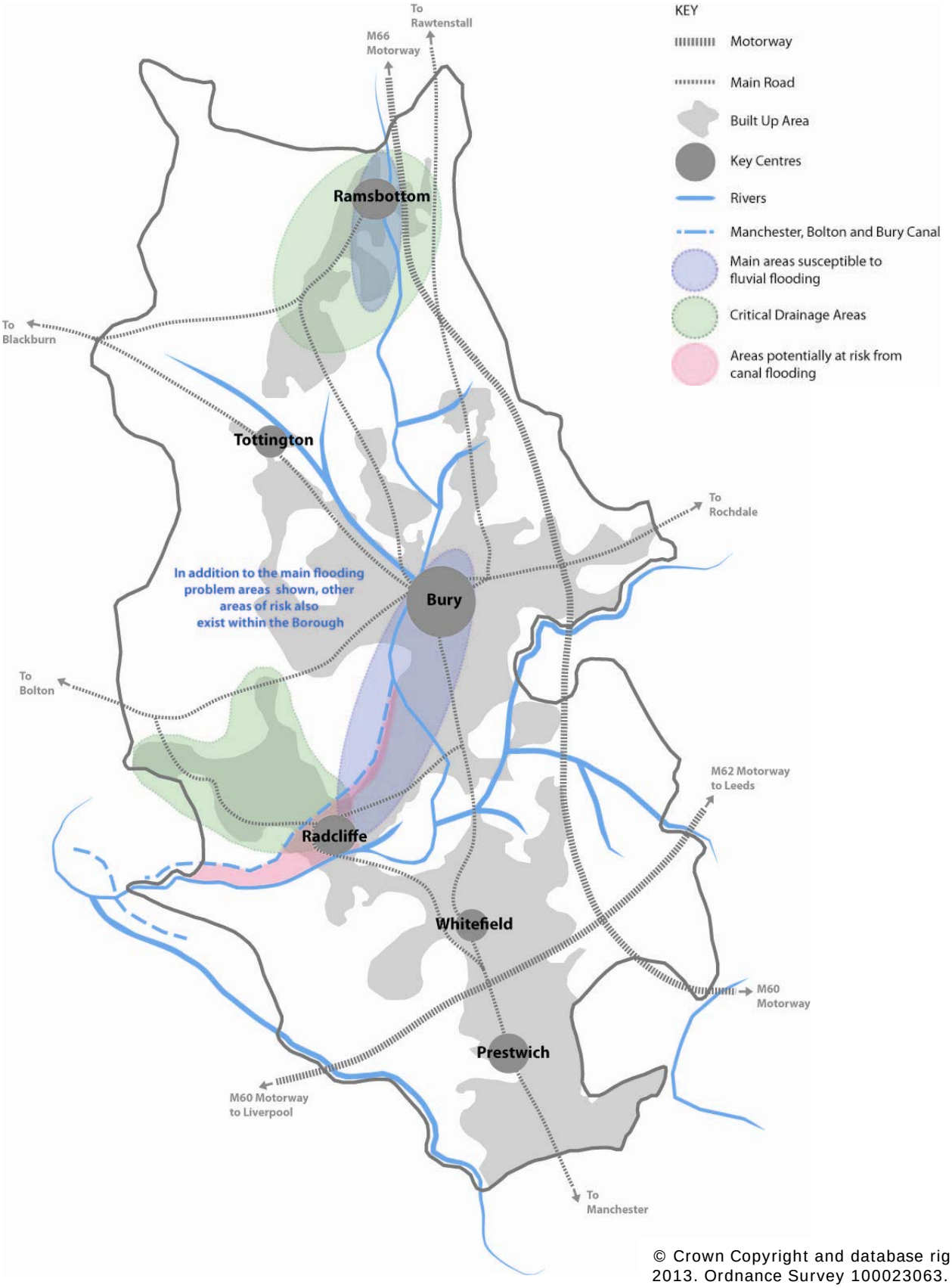
APPENDIX B – Anticipated Distribution of Housing Growth as at April 2013



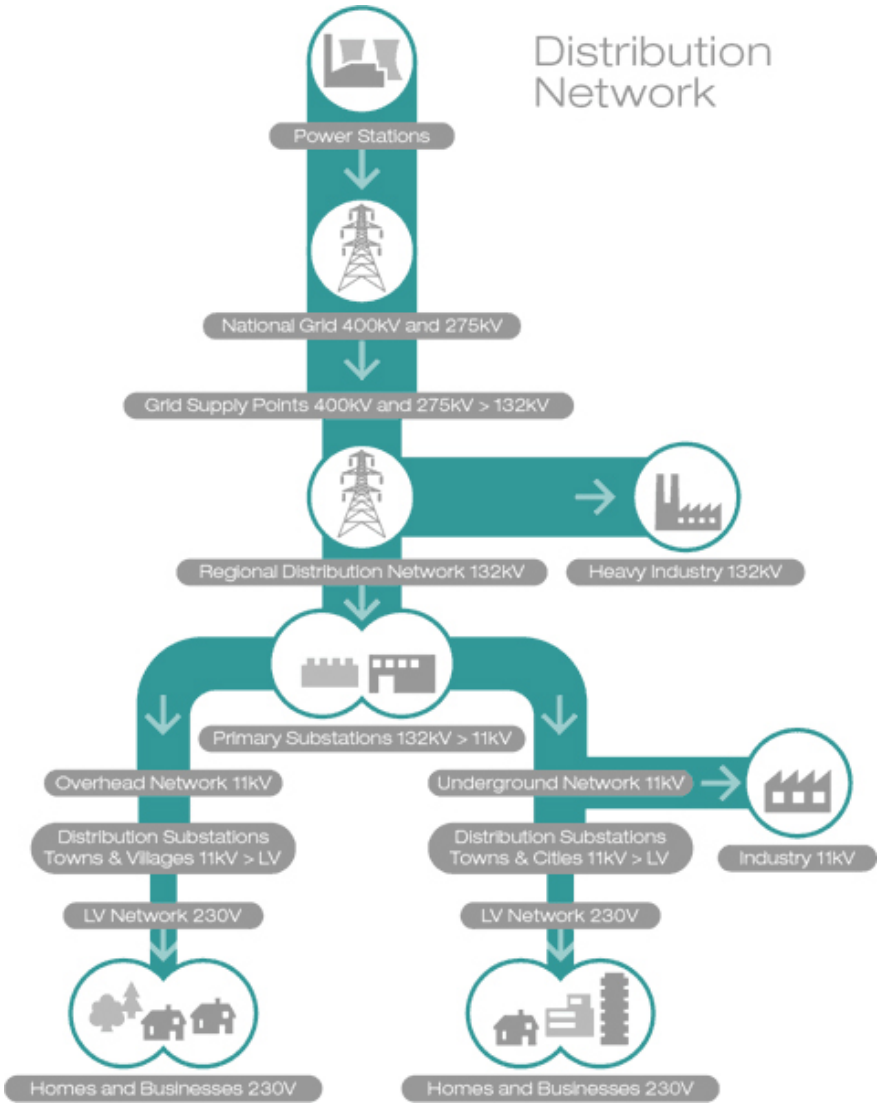
APPENDIX C - Waste Water Treatment Works and Catchments in Greater Manchester



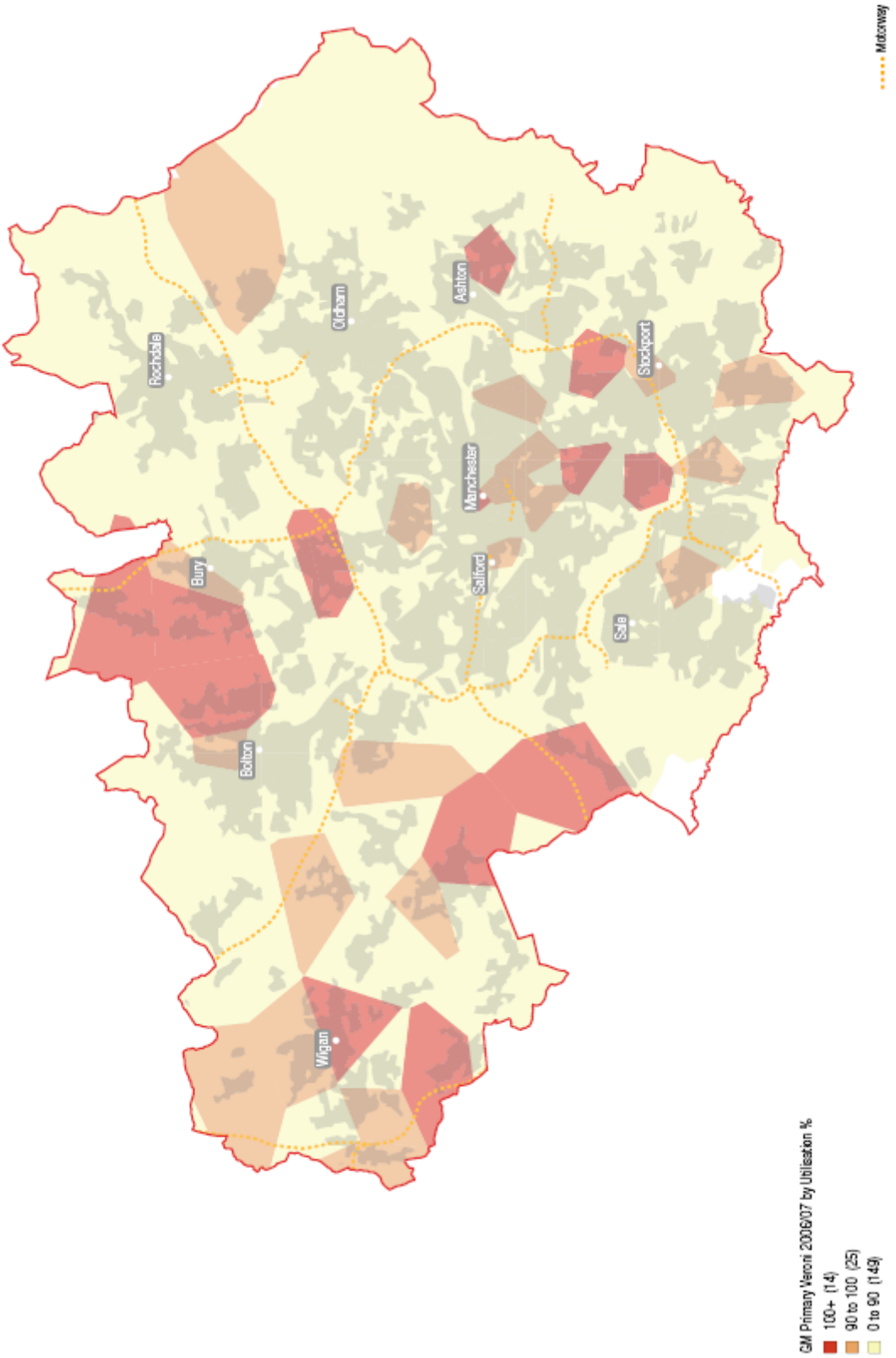
APPENDIX D - Flood Risk "Hot Spots" Within Bury



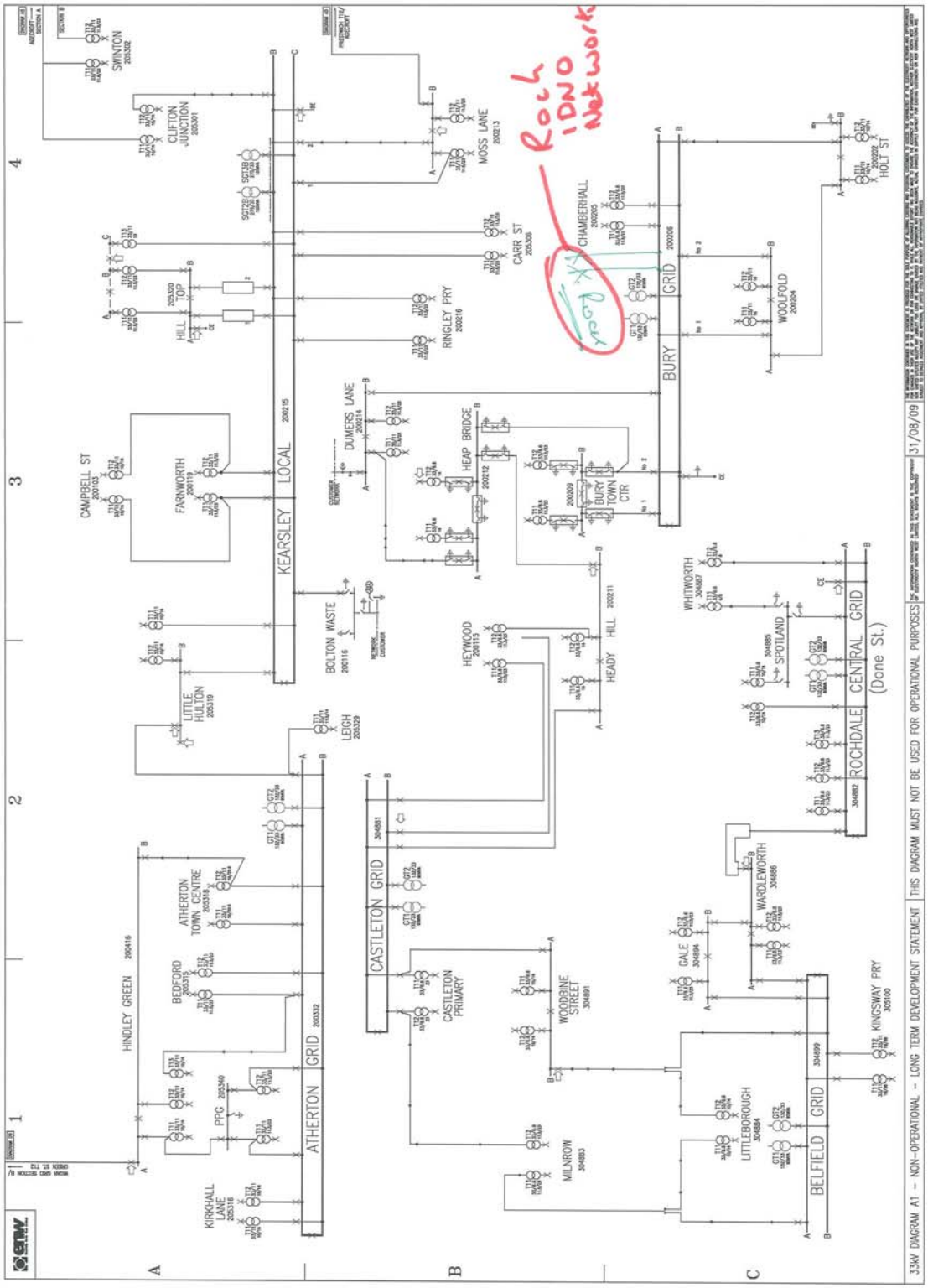
APPENDIX E - Electricity and Distribution Network



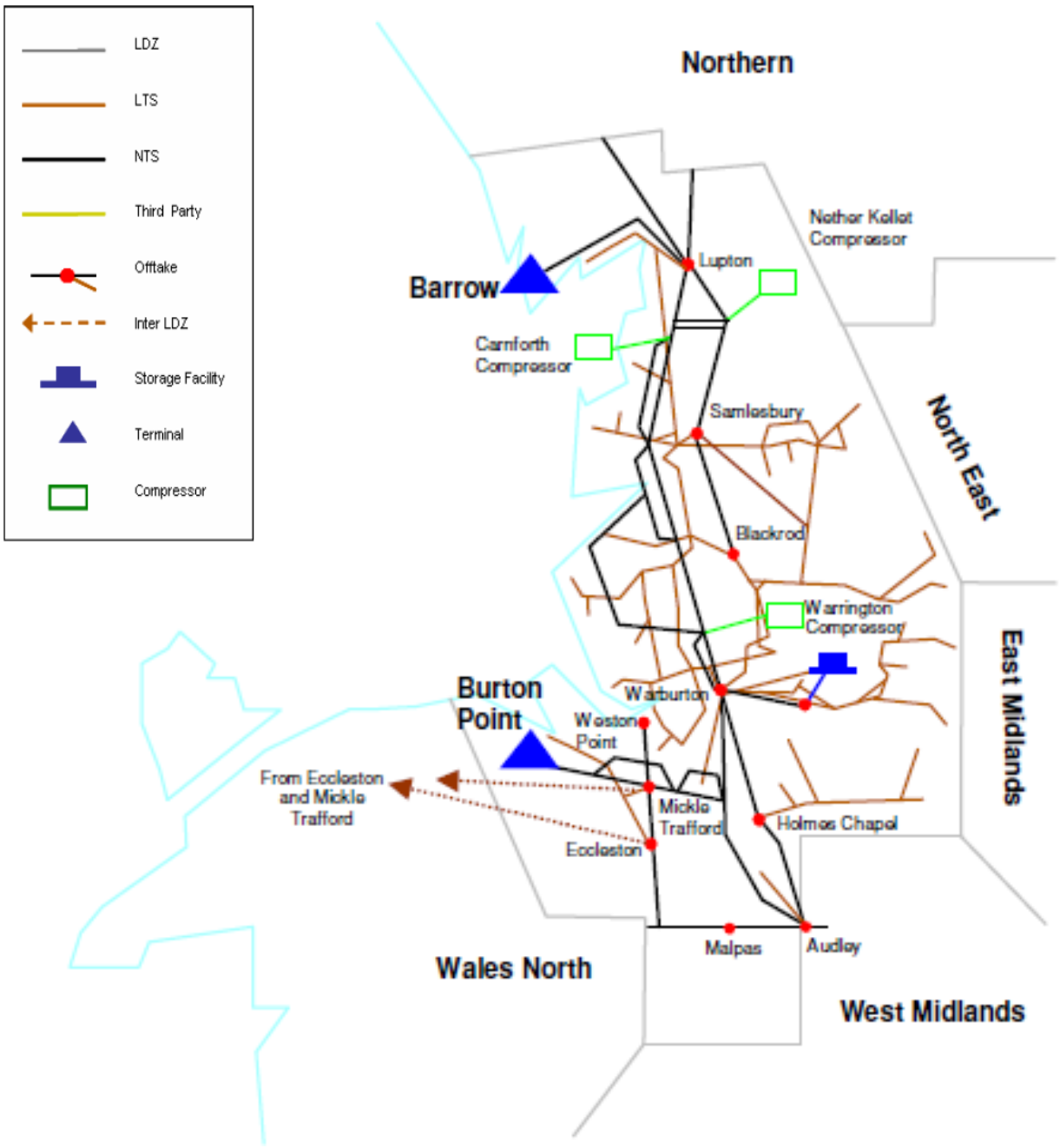
APPENDIX F - Greater Manchester - Electricity Utilisation



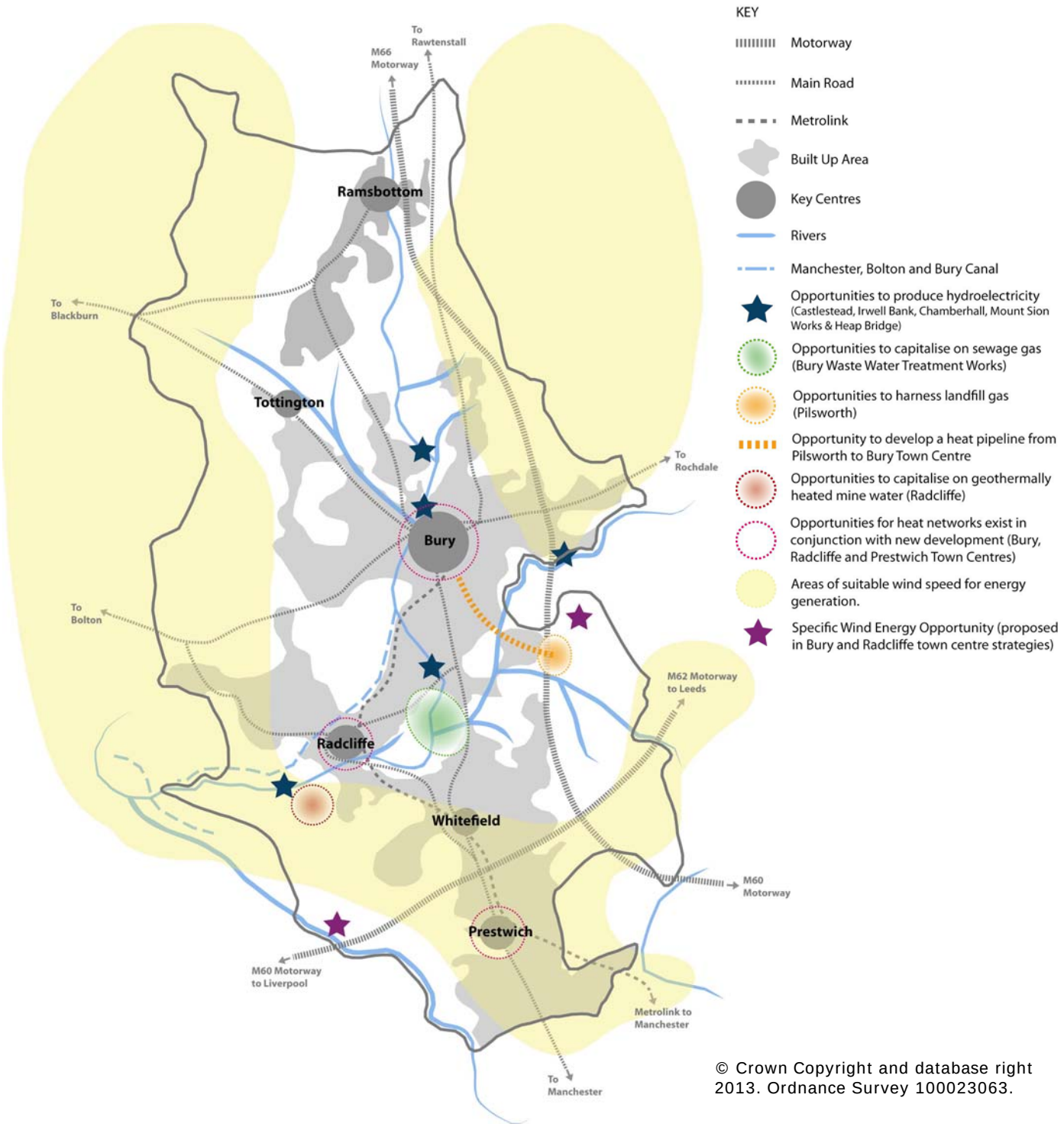
APPENDIX G - ENW Electricity Network (including The Rock IDNO network)



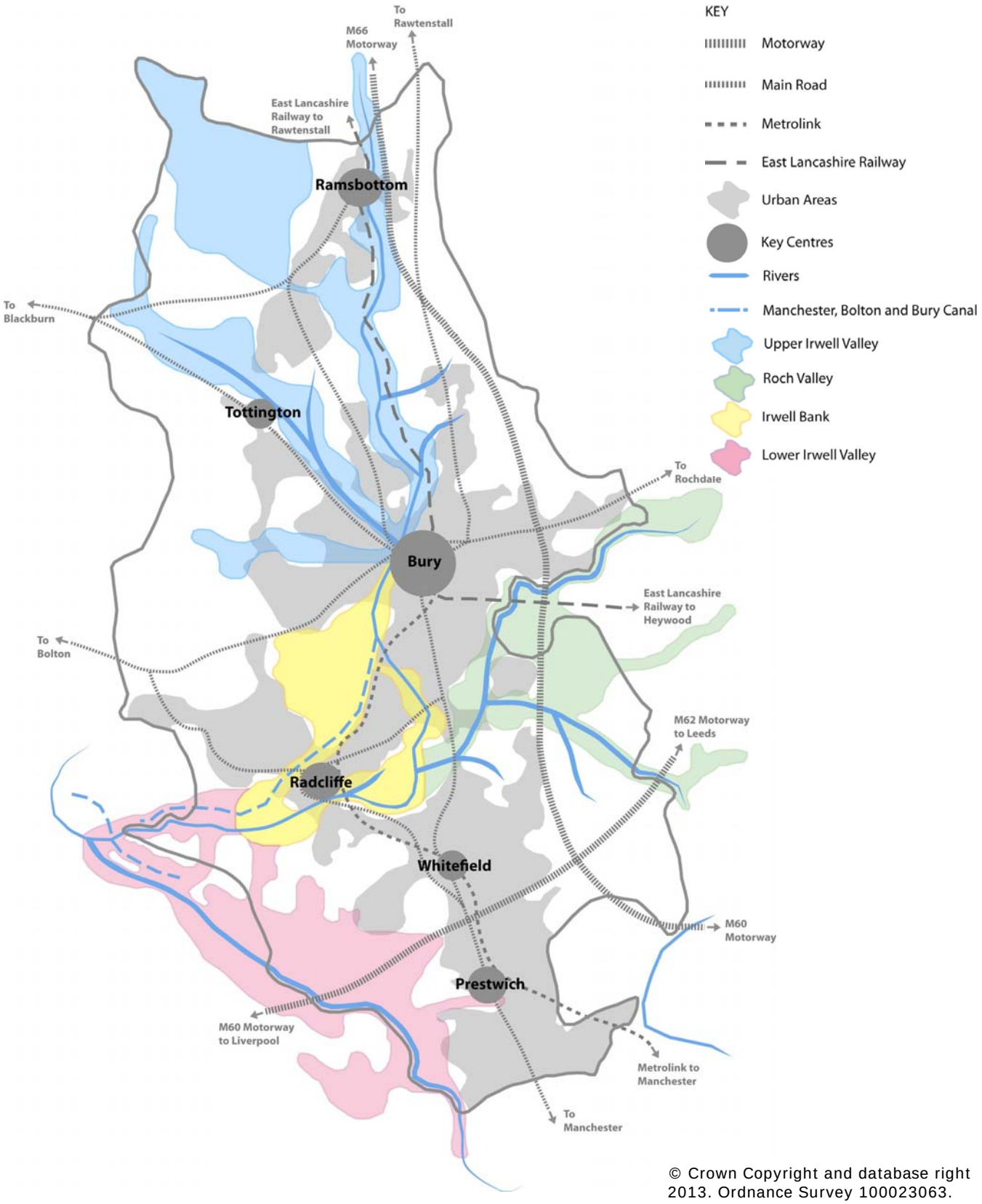
APPENDIX H - North West Gas Network



APPENDIX I - Energy Opportunities



APPENDIX J – Area of Strategic Green Infrastructure



APPENDIX K - Open Space Typologies

The table below shows the typologies and sub-categories of open space, sport and recreation covered in this section together with a description of their primary purpose.

Typology	Sub-category	Primary Purpose
Parks and gardens	Large Urban and Country Parks	Including formal urban and country parks that offer a wide range of facilities for both formal and informal recreation and events
	Neighbourhood Parks	Intermediate sized parks normally between 2 and 5 hectares, offering a range of facilities for formal and informal sport, play and recreation.
	Pocket Park/Recreation Grounds	Including small parks and recreation grounds that offer a limited range of facilities for formal and informal sport, play and recreation.
	Formal Gardens	Specifically laid out gardens, including memorial gardens, that include formal grassed areas, floral and permanent landscaping and seating.
Natural/semi-natural greenspace		Informal recreation sites including nature reserves, countryside and woodland and ecological assets.
Outdoor sports facilities	Non-pitch sport	Tennis courts, bowling greens and athletics tracks.
	Pitch sport	Playing fields/pitches (e.g. football, rugby, cricket),
Amenity Green Space	Informal Recreational Green Space	Grassed sites usually within residential areas that offer opportunities for informal play.
	Visual Amenity Green Space	Grassed areas that offer no recreational function but which are of benefit from a visual amenity perspective.
Provision for Children and Young People		Areas designed primarily for play and social interaction involving children and young people, such as equipped play areas, multi-use games areas, skateboard parks and trim-trails.
Allotments		Dedicated plots for those wishing to grow their own produce.

APPENDIX L - Protocols for Joint Working with the Environment Agency

Environment Agency Agreed 2009

Strategic Planning Draft Protocol for Joint Working between AGMA Local Authorities and the Environment Agency

Agreed objectives for joint working between AGMA Local Authorities and the Environment Agency

1. Introduction

1.1. This Protocol has been agreed between the Environment Agency (EA) and the Association of Greater Manchester Authorities (AGMA) member Local Authorities and has been written within the context of Greater Manchester's MAA, Growth Point Initiative, Local Development Frameworks (LDFs) and long term challenge of delivering sustainable growth and regeneration.

1.2. Communication between EA and AGMA Local Planning Authorities will be via the existing communication arrangements, i.e. through the EA Planning Liaison Team. Further consideration could be given in the future as to whether the protocol might be developed in order to incorporate other matters, such as the recommended practice arising from the Pitt Report recommendations.

1.3. Local Planning Authorities (LPAs) and other Government Agencies are under significant pressure to align future development with infrastructure provision and prepare and deliver Core Strategy Development Plan Documents (DPDs). This is to ensure that sustainable planning frameworks are in place to support new development during and beyond the current recession.

1.4. **The immediate focus of this protocol and urgent priority is Core Strategy preparation and discharging the conditions that were attached to Greater Manchester's New Growth Point status. LPAs are committed to PPS25 and provision of evidence that is robust and fit for purpose. However, we (AGMA and EA) recognise that this needs to be focussed, proportionate and that this is a living process. Certain issues (e.g. integration of pluvial flooding with sewer networks) and responses will be subject to continuing research and review.**

1.5. Objectives

a) To facilitate partnership and joint working on LDFs.
b) Working on both the local and conurbation wide level to understand any singular and cumulative impacts.
c) Ensure the conditions attached to Greater Manchester's Growth Point status are fulfilled.
d) Guide new development to areas which are safe and infrastructure capacity already exists or can be made available. Where this is not

possible then AGMA local planning authorities will review with EA how development can be phased alongside new infrastructure provision.

e) Enable opportunities for increasing the efficiency of resources, infrastructure investment and maintenance by identifying works at a strategic and local scale.
f) Deliver a co-ordinated approach to flood risk, water management and climate change adaptation.
g) Develop a step change in the delivery of Green Infrastructure across the conurbation through strategic and local planning decisions.
h) Meet the Water Framework Directive requirements and improve the ecological status of our river catchments and related water bodies.

2. Guiding Principles for Strategic Flood Risk Assessments and Core Strategies

2.1. Working collaboratively with the EA on flood risk assessments at all levels we (AGMA and EA) will jointly:

a) Commit to a programme for joint working over the next 2 years.
b) Identify areas where SFRA work and infrastructure planning requirements can be aligned with EA's NCPMS (National Capital Programme Management Service), FRM (Flood Risk Management) strategies and other initiatives to model catchments and assess assets.
c) Agree the brief for any consultancy work; steer the work and agree the adequacy of the assessment and its outputs.
d) Follow a consistent approach across GM authorities.
e) Adopt as an approach, the guiding principle of making the best use of the information available at an appropriate point in time, having regard to Core Strategy/NGP requirements and timetables, acknowledging that all the data ideally needed might not be available at that point in time.
f) Agree the criticality / significance of any data gaps; scope out the gaps and what is needed to address them; and what needs to be done by whom to have confidence that the risk arising from the data gap can be managed.
g) Agree an approach to identifying risk from surface water, in the first instance in the absence of data on sewer capacity and if /when this is available then agree how this information could be combined, presented and any issues addressed.
h) Agree an approach to identifying critical drainage areas and structure and production of SWMPs. Consider ways of incorporating the Pitt recommendations, possibly through a further protocol
i) If having followed the Sequential and Exceptions Tests, development will be allocated / focused within areas of risk then EA and AGMA will jointly agree on the necessary policy framework, the design of the new development and the nature, costs and delivery vehicle for any additional defensive Infrastructure. This will be in the form of Supplementary Planning Document on completion of the Strategic Flood Risk Assessment.
j) Discuss and agree the resultant position with GONW and PINs if necessary.

3. Joint Forum and Meetings

3.1 AGMA and the Environment Agency agree that joint working will benefit from regular joint and individual forums and will commit to being represented at

- Individual district planning liaison every 3 months. This is to discuss district level LDFs, Development Management procedures and individual planning applications;

- A regular joint forum every two months. This forum will led by the Flood Risk Management Project team (see Appendix A), individual districts where appropriate, EA and UU (United Utilities) representatives. This forum will be the conduit for raising and discussing relevant Greater Manchester wide issues. These will include but are not limited to:

  a) Sharing information on key contacts personnel and structures.

  b) Specific sub regional, catchment, cross boundary and local issues where either a local authority and/or EA has concerns about flood risk or water management issues or where local issues may have a cumulative impact on other local authorities.

  c) Preparation of local and sub-regional spatial strategies and infrastructure plans by AGMA Local Authorities. AGMA Local Authorities will use this forum to consult on the likely flood risks and other water management related matters resulting from the proposed strategy / allocation it proposes in a Development Plan Document (DPD).

  d) As a mechanism, for EA to inform AGMA of new legislation, policy, guidance, initiatives, research, plans or strategies that impact on the AGMA area.

  e) Any matters raised which are only relevant to one local authority or a sub-group of local authorities will be referred to a separate discussion between EA and the relevant authorities. These district(s) will then feedback to the forum to ensure that a consistent approach is maintained.

3.2 Review
The protocol will be reviewed annually.

APPENDIX M - Protocols for Joint Working with United Utilities

Draft Protocol for joint working between AGMA Local Authorities and United Utilities

Agreed overall objective of joint working between AGMA Local Authorities and United Utilities:

To work together collaboratively to create sustainable long-term infrastructure plans which match sustainable spatial development strategies.

1. Introduction

1.1. This Protocol has been agreed between United Utilities and the Association of Greater Manchester Authorities (AGMA) member Local Authorities to improve infrastructure planning in support of sustainable development for Greater Manchester.

1.2. AGMA coordinates activities for the ten local authorities in Greater Manchester where there are common interests and it is more effective to work together.

1.3. United Utilities provides water and wastewater utility services for all ten local authorities and recognises that a significant proportion (>40%) of regional development is taking place in the Greater Manchester conurbation.

1.4. Local authorities and utility companies have a high dependency on each other to share information on forward planning and investment priorities and programmes. By working together development can be guided to areas where utility capacity already exists or can be made available. Where this is not possible then development will be phased to coincide with new infrastructure provision.

1.5. The Manchester Multi Area Agreement sets out AGMA's proposals for how it wants to change the working relationship with United Utilities and other infrastructure providers. These include:

a) building a shared evidence base with the utility providers to better understand the scale, volume and nature of the infrastructure needs to meet Greater Manchester's economic development ambitions;
b) influencing the strategic investment plans of the utility providers at the sub-regional scale to ensure that Greater Manchester's objectives and infrastructure needs are incorporated into their Asset Management Plans (or equivalent), and into their next periodic price reviews;
c) working with utility providers to both reduce demand for power and water, and to support the development of low carbon/renewable energy infrastructure;
d) engaging with Government, regulators and other interested parties to understand how to effectively balance the objectives of promoting competition while ensuring that strategic infrastructure investment supports economic development.

1.6. In addition, Government policy is driving the need for a closer working relationship, e.g.:

a) The NW Regional Spatial Strategy policy DP4, DP7, DP9 and EM5.,
b) Planning Policy Statements, particularly PPSs 1, 12, 23 and 25; and
c) the recommendations in Sir Michael Pitt's review of the 2007 floods.

NB: links to these documents are listed at the end of this Protocol.

1.7. AGMA and United Utilities also wish to continue to improve their joint working relationship on initiatives such as developing Surface Water Management Plans and conducting Strategic Flood Risk Assessments.

2. Objectives

2.1. This protocol should assist AGMA and United Utilities to:

a) work together to identify and manage flood risk and support emergency planning;
b) support Local Authorities in their coordination in their forward planning and regeneration role;
c) encourage application of the principles of Integrated Urban Drainage in managing surface water;
d) encourage and enable informal/formal exchange of information where appropriate; and
e) enable joint working on encouraging retrofitting of sustainable water management devices in existing housing stock, (e.g. water saving devices and Sustainable Drainage Systems (SuDS).

3. Longer term / strategic planning matters

3.1. AGMA and United Utilities agree:

a) They will work together to ensure both parties are fully informed of relevant matters which may affect the other.

b) They will continue to work together to agree a method through which an agreed evidence base can be established to identify key issues, their spatial extent and mitigation options. This is to ensure that the long term strategic planning and delivery of development by AGMA Local Authorities can be co-ordinated and aligned with United Utilities' long term investment and infrastructure planning.

c) United Utilities will provide information to assist LAs in understanding where drainage capacity problems exist and what the implications are for future development. United Utilities and AGMA will also work together to integrate their data where appropriate and model, map and quantify surface water flood risk in a holistic and comprehensive manner.

d) Where it is agreed on both sides that where new strategic infrastructure is required United Utilities will make provision for this in its strategic long term investment strategies,. However implementation of these strategies will be subject to the funding being approved by the Regulator.

e) AGMA will provide data to United Utilities on the broad locations of future development (i.e. in advance of identifying specific sites and allocations). United Utilities will then identify key areas and locations where sewer capacity is constrained, supply AGMA Local Authorities with feedback on the flood risk (sewer capacity) and the likely impact on the potable water and wastewater networks resulting from these development options at the site specific (where known) and more strategic scale (e.g. area and catchment scale).

f) If possible, this sharing of data and information should utilise and feed into the evidence base AGMA Local Authorities are developing to inform their Local Development Frameworks (e.g. Strategic Housing/Employment Land Availability, Strategic Flood Risk and Green Infrastructure Assessments).

4. Planning applications and day-to-day planning matters

4.1. AGMA and United Utilities agree:

a) AGMA Local Authorities will consult United Utilities on all planning applications that are more than 10 properties or a quarter hectare in area.

b) United Utilities will provide comments within a timeframe of 21 days unless otherwise agreed. It will clearly state whether it supports or objects to the application and its reasons for the benefit of the applicant and the planning officer.

4.2. United Utilities will also provide AGMA Local Authorities with standard comments/clauses that apply to ALL applications regardless of size.

4.3. AGMA and United Utilities will also work together to encourage the use of sustainable drainage systems and water conservation and efficiency measures, including:

a) **Flood prevention**: The use of good site planning and design to prevent run-off and pollution (e.g. minimising paved areas);

b) **Source control**: Controlling run-off at or very near its source (e.g. using rainwater harvesting for outdoor uses, permeable pavements, green roofs or soakaways for individual houses); and

c) **Site and regional control** through swales, infiltration basins, detention ponds and wetlands.

5. A regular joint forum

5.1. AGMA and United Utilities agree:

a) They will hold a regular joint forum every three months for raising relevant issues. These should include but are not limited to:

b) Specific sub regional, catchment, cross boundary and local issues where either a local authority and/or UU has concerns about water or wastewater issues or where local issues may have cumulative impact on other local authorities.

c) Preparation of local and sub-regional spatial strategies and infrastructure plans by AGMA Local Authorities. AGMA Local Authorities will use this forum to consult on the likely flood risks and impacts on the water and wastewater networks resulting from the development it proposes in any spatial strategies.

d) Preparation of United Utilities' submissions to the water industry regulator as part of any Price Review Process. United Utilities will use this forum to seek feedback on its investment proposals which are relevant to Greater Manchester.

e) Any matters raised which are only relevant to one local authority or a sub-group of local authorities will be referred to a separate discussion between United Utilities and the relevant authorities. These district(s) will then feedback to the forum to ensure that a consistent approach is maintained.

6. Other joint working

6.1. AGMA and United Utilities agree they will identify and work together on other projects of mutual interest as required. Initially, these will include pilot projects on flood risk. These will focus on areas identified under item 3.1 (e).

7. Critical success factors

7.1. Evidence of informal/formal collaboration contacts with each of the AGMA Local Authorities.

7.2. Formal development control planning consultation should be at least the regional average (currently 10 consultations per month – 6 out of 10 AGMA authorities currently comply)

7.3. Local Development Framework consultation and responses and what has changed since adoption of the protocol.

8. Conclusion

8.1. This Protocol will be jointly reviewed by March 2010, and every 12 months thereafter.

Selected references

Future Water – The Government's water strategy for England
"Planning authorities will need to work particularly closely with the water companies and the Environment Agency on timing and numbers of new households in those areas likely to see the greatest growth"
http://www.defra.gov.uk/Environment/water/strategy/

Greater Manchester Authorities Strategic Flood Risk Assessment 2008
"The SFRA, as a living process provides the vehicle for AGMA, Greater Manchester districts, the Environment Agency and the relevant utility company (United Utilities) to not only comprehensively assess flood risk in a consistent and cross boundary manner but having done this, to work together in a collaborative manner to manage risk and deliver water management solutions."
http://www.agma.gov.uk/ccm/agma/ResandInt/SFRA.en

LANDFORM – Local Authority Network on Drainage and Flood Risk Management
http://www.ciria.org/landform/

Learning Lessons from the 2007 Floods: an independent review by Sir Michael Pitt
"We believe that local authorities, as part of their leadership role, should investigate these local flooding problems and work with the Environment Agency, water companies, the Highways Agency, internal drainage boards, riparian owners and other relevant parties to establish the source of problems and where the responsibility lies for addressing them".
http://www.cabinetoffice.gov.uk/thepittreview/final_report.aspx

North West of England Plan - Regional Spatial Strategy to 2021
http://www.nwrpb.org.uk/downloads/documents/oct_08/nwra_1222848815_Final_adopted_RSS_300908_Front.pdf

Planning Policy Statements
PPS 1: Delivering Sustainable Development
PPS: Planning and Climate Change - Supplement to PPS 1
PPS 3: Housing
PPS 6: Planning for Town Centres
PPS 12: Local Spatial Planning
PPS 23: Planning and Pollution Control
PPS 25: Development and Flood Risk

http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/

Sustainable Drainage Systems (SUDS): A guide for developers
http://publications.environment-agency.gov.uk/pdf/GEHO0308BNST-e-e.pdf

United Utilities Business Plan: Planning for the future (Anticipated November 2008)
http://www.unitedutilities.com/Planningforthefuture.htm

United Utilities – Strategic Direction Statement 2010-2035
http://www.unitedutilities.com/1711_3003_20SDS_20A4_20FINAL.pdf

United Utilities Water Resources Management Plan
"We expect there to be compound benefits by carrying out multiple activities in parallel to influence customer behaviour as well as the use of water saving devices. The activities would include, but may not be limited to:-
(a) Collaboration with the local authority, housing associations, and local interest groups."
http://www.unitedutilities.com/WaterResourcesPlan.htm

APPENDIX N - Protocols for Joint Working with Highways Agency

2010 Protocol for joint working on planning issues between AGMA Authorities and the Highways Agency

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 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 – see Appendix X.

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.

Separate attachments cover:

Appendix A – relevant contacts for AGMA, and for GM authorities.

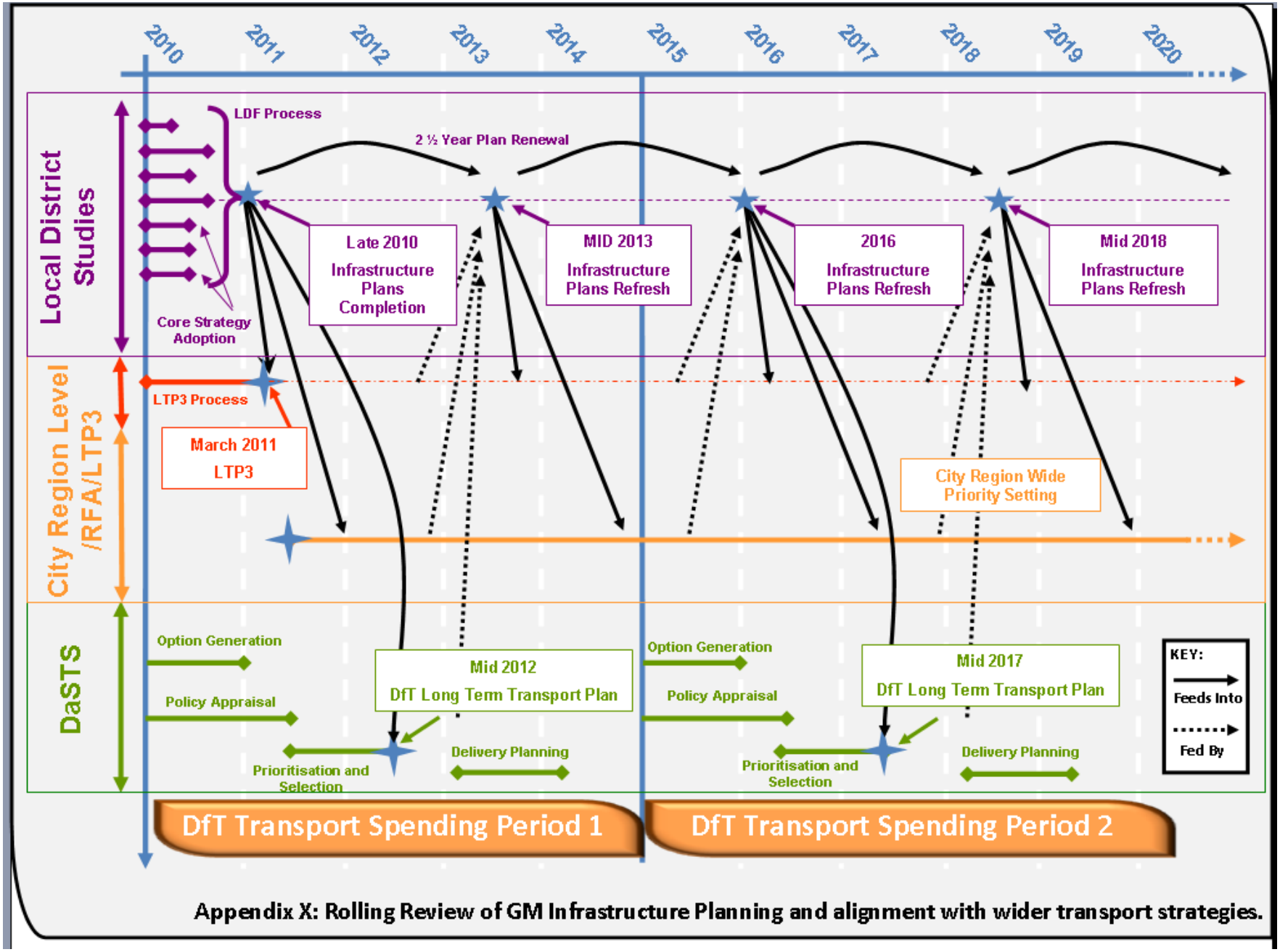
Appendix B – sets out HA contacts for LDF engagement and support.

Appendix C – GONW contacts for advice and support for LDF, LTP and HA.

Appendix D – initial assessment of key District issues (prepared by HA)

Appendix X – Two and Half Year/ Five Year Rolling Work Programme 2010 - 15

April 2010



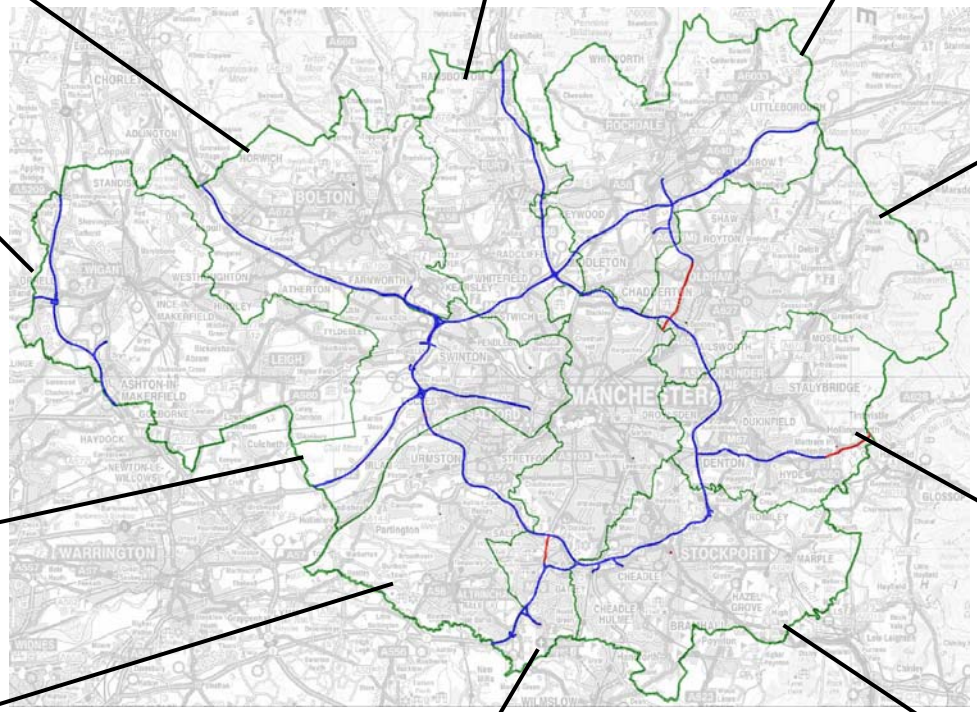
Appendix X: Rolling Review of GM Infrastructure Planning and alignment with wider transport strategies.

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 different parts of the PT network
- Air Quality Management Areas.

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).

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).

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



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).

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

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

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
- As the regional centre – far reaching impacts
- 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

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(July 2013)