Infrastructure Delivery Plan

Draft

Planning and Building Control August 2010



Table of Contents

1.0	Introduction & Context	3
2.0	Methodology	6
Ar	mount and level of growth	
3.0	Physical Infrastructure	13
Er	nergy	13
IC	ST / Digital – work in progress, not yet available	15
M	inerals	15
Tr	inerals ransport	16
	'aste	
W	ater	22
4.0	Social & Community Infrastructure	25
Co	ommunity Services	25
	Libraries	
	mergency Services – work in progress, not yet available	
	ducation – work in progress, not yet available	
	ealth – work in progress, not yet available	
5.0		29
G	reen Infrastructure and Outdoor Leisure	
6.0		
NΛ	anchester Airport Strategic Site	
	Appendices – work in progress, not yet available	
	Appointion work in progress, not yet available	

1.0 Introduction & Context

At the time of publishing the draft Infrastructure Delivery Plan (IDP) is a live document and reflects current information available to date. The Government's current comprehensive spending review may impact on elements of the IDP, but this is the current position.

Contact Details

Comments are invited from Wednesday 4th August 2010 – Wednesday 15th September 2010, and can be made:

By email to planningstrategy@manchester.gov.uk

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This Infrastructure Delivery Plan (IDP) seeks to provide a coherent Framework for all the separate existing infrastructure investment plans, to show that they are deliverable relative to planned-for development. It would also identify how any gaps may be bridged.

There are two parts to this document:

- Part One: Is a document explaining the infrastructure requirements arising from the proposed growth in the Core Strategy.
- Part Two: Is a detailed schedule of infrastructure projects within Manchester.

The purpose of the IDP is not to create a freestanding, detailed document that would duplicate the function of existing and bespoke infrastructure investment plans, and which Infrastructure Providers would not be bound to deliver. Instead, it is a mechanism to ensure that infrastructure providers - individually and collectively - are planning for broadly the correct level of future development. It is also important that mechanisms are in place to ensure that good communication between developers, local authorities, funding partners and infrastructure providers exist to monitor development as it is brought forward and in particular to discuss the development of strategic sites.

The IDP forms an important part of the evidence base for the Core Strategy and Development Plan Documents and will cover the plan period. The IDP is a 'living document' and will be periodically reviewed and monitored.

Planning Policy Statement (PPS12) sets out what is required from an IDP and states that;

"The core strategy should be supported by evidence of what physical, social and green infrastructure is needed to enable the amount of development proposed for the area". (PPS12, s4.9)

PPS12 advises that the IDP should identify as far as possible;

- Infrastructure needs and costs;
- Phasing of development;
- Funding sources and;
- Responsibilities for delivery.

For the purpose of this document the definition of infrastructure is "Facilities and systems to serve the City's population and to support future development". This reflects that there is a degree of overlap between what should be contained within the Core Strategy and what should be contained within the Infrastructure Plan.

Using this definition and the guidance contained in PPS12 - Local Spatial Planning, table 1.1 sets out the categories and sub categories that have been chosen for inclusion within this plan.

Table 1.1: Infrastructure categories and subcategories

PHYSICAL	
Transport	Strategic Road, Local Road (inc. Public Transport, Walking,
	Cycling and Car Parking), Rail, Metrolink.
Energy	Centralised and Decentralised Electricity Supply, Gas Supply,
	CHP
Water	Water Supply, Wastewater Treatment & Disposal, Flood Risk
	Management
Waste	Recycling and Disposal
Minerals	Minerals supply
ICT / Digital	Broadband, Wireless
SOCIAL &	
COMMUNITY	
Education	Higher Education, Further Education / Training, Secondary and

	Primary and Nursery Schools				
Health	Hospitals, GPs, Dentists, Health centres				
Community	Libraries, Social Services, Local Services, Provisions and				
Services	Offices, Public Indoor Leisure Facilities, non-grass Sport				
	Pitches and Courts, Children Facilities, Special needs and				
	disability, Cemeteries and Crematoria.				
Emergency	Ambulance, Police and Fire Services				
Services					
GREEN					
	Open Spaces; Allotments; Gardens; Green Sports Pitches and				
GREEN	Open Spaces; Allotments; Gardens; Green Sports Pitches and Courts; Parks; Green Public Realm; River and Canal Corridors;				
GREEN Green					
GREEN Green	Courts; Parks; Green Public Realm; River and Canal Corridors;				

2.0 Methodology

The following methodology was adopted for the IDP:

Stage 1: The Identification of Key Infrastructure Providers

The first task involved identifying the key infrastructure providers for each of the three categories (physical, social & community and green) and sub categories, by referring either to the Local Development Framework (LDF) contact databases or by contacting each of the providers to identify a relevant contact.

Stage 2: Liaising with the Providers

Stage 2a: Pro-Forma and Strategic Site/Locations

Once the relevant consultees and contacts were identified an e-mail or letter was sent to each of the infrastructure service providers to inform them of the Infrastructure Delivery Plan and its relevance to the LDF process and the Core Strategy.

Along with the e-mail/letter a pro-forma and a map of the Strategic Sites Locations as identified in the Core Strategy Proposed Option was sent to each of the providers to identify:

- Whether the existing capacity is able to meet the future growth planned through the Core Strategy;
- If not, whether future capacity provided through infrastructure provider's service plans and delivery mechanisms will address the infrastructure requirements of this growth and;
- Whether it is likely that there will be further gaps in the infrastructure provision, and how these can be addressed.

Meetings were arranged with each of the infrastructure service providers to discuss in more detail each of the sites and scale of development and to answer any questions that the providers had of the IDP process.

Stage 2b: Identification of plans and strategies

A desk based exercise was undertaken to identify strategic plans for each of the providers where available. This helped not only to inform discussion but also to identify existing or proposed schemes that would have an impact on the City.

Stage 2c: Identification of delivery mechanisms, risks and contingency

PPS12 states that the IDP should identify costs and who is responsible for delivery of infrastructure projects/objectives. Where funding is unknown PPS12 advises that contingency planning showing how the objectives will be achieved under different scenarios especially in circumstances where

provision is uncertain. During the discussion and correspondence with service providers, projects and objectives where discussed identifying as far as possible delivery mechanisms, the risks associated and contingencies.

Stage 3: Preparation of the IDP and re-consulting with Service Providers

All the information collated on the individual schemes for each category has been inputted into a schedule of information. The schedule recorded:

- Responsible agencies;
- Sources of funding;
- When the infrastructure would be required in the short (2010 2015), medium (2016-2021) or long term (2022 – 2027);
- And the risks of not proceeding including if applicable a contingency measure.

The information included in this schedule is correct at the date of publishing. However the projects/programmes may be affected by the Government Comprehensive Spending Review (CSR). A matrix was devised to assess the status / risk of different components within the schedule. Security of funding and importance to the IDP were assessed and Red Amber Green classifications were used. The CSR may impact on this classification system once completed.

Infrastructure providers were re-consulted with a draft schedule for them to inspect and provide comment before this version was published.

Consultees

The following key infrastructure providers have been consulted or are planned to be consulted:

Table 1.2: Infrastructure Delivery Plan Consultees

PHYSICAL							
Transport	Greater Manchester Passenger Transport Executive						
	Highways Agency						
	Manchester City Council						
	 Transport Policy Unit 						
	 Highways Authority* 						
	 NCP Manchester (Joint Venture)* 						
	Network Rail						
	Manchester Airport						

Energy	Electricity North West
	 United Utilities
	National Grid Electricity
	National Grid Gas
Water	United Utilities*
	Environment Agency
Waste	Greater Manchester Waste Disposal Authority
	Greater Manchester Geological Unit
Minerals	Greater Manchester Geological Unit
ICT / Digital	Manchester Digital Development Agency*
SOCIAL &	
COMMUNIITY	
Education	Manchester City Council
	 Children Services Department
	Manchester College*
	 Manchester Metropolitan University*
	University of Manchester*
4	
Health	National Health Service
	Manchester Primary Care Trust
	Manchester City Council Joint Health Unit
Community	Manchester City Council
Services	 Neighbourhood Services
	Manchester Library & Information Service
	Sport England*
Emergency	Greater Manchester Fire and Rescue Service
Services	Greater Manchester Police
	North West Ambulance Service Primary Care Trust
GREEN	
Green	Environment Agency
Infrastructure	Natural England*
	Manchester City Council

- Neighbourhood Services
- Sport England*

Consulted

To be consulted*

Other relevant Infrastructure Providers will be contacted in due course.



Amount and level of growth

The Core Strategy sets out the vision for the City of Manchester in 2027. The City aims to deliver approximately 60,000 new dwellings and approximately 200ha of employment land during the lifetime of the plan. The new development is concentrated within Strategic Locations as defined on the Core Strategy Key Diagram. New employment will be focused in the Regional Centre. The majority of new residential development will be in sites in the North and East of the City.

The IDP focuses on the new development and the services and facilities required by the resultant increase in residents and employees across the City.

Population Projections

The residential population and number of employees are expected to increase during the lifetime of the Core Strategy. The 2009 version of the Greater Manchester Forecasting Model (GMFM) indicates that the City's residential population will increase by 84,900 and employees by 66,000 by 2027. (Tables 2.1 & 2.2).

The GMFM is an integrated economic, population and household forecasting model focused on the Manchester City Region (the 10 Greater Manchester local authorities and prior to local government reorganisation in 2009, the districts of Macclesfield, Congleton, and Vale Royal; Warrington and High Peak are also part of the functioning City Region). The model was originally conceived to inform the Manchester/ Salford Housing Market Pathfinder initiative but was designed from the outset to provide forecasts for the whole of Greater Manchester, and has been subsequently advanced to provide detailed forecasts for the whole City Region.

Table 2.1 GMFM (2009) Residential Projections

2010	2016	2022	2027	
473.3	507.3	540.2	558.2	

Table 2.2 GMFM (2009) Total Employees Projections

2010	2016	2022	2027
297.1	325.4	394.5	363.1

Residential growth by Strategic Regeneration Framework Area

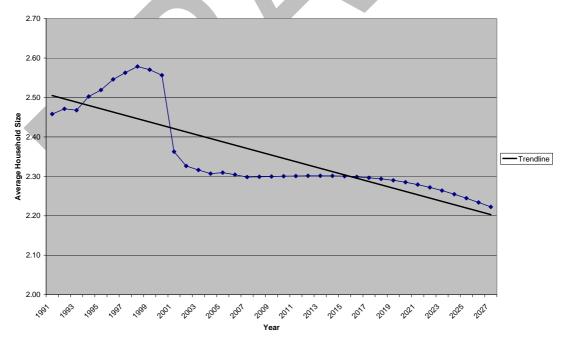
An exercise was undertaken internally to identify the number of new residents that would result from 62,000 units built during the plan period. To calculate the number of residents for each site within the strategic locations, the average household size for each SRFA (Table 2.3) was multiplied by the number of housing units. It should be noted that according to the 2009 GMFM the average household size for the City is predicted to decline from

2.30 people per household in 2009 to 2.22 people per household in 2027 (Figures 2.1 and 2.2). However for the purpose of this exercise we have used 2009 household size figures as it was felt that this reflected the maximum and therefore the most robust approach for the purposes of the IDP.

Table 2.3 Average Household Size and Residential Population across the Strategic Regeneration Framework Areas

			Area						
		City Wide	City Centre	Central	East	North	South	Wythenshawe	
Average Household Size		2.13	1.22	2.42	2.16	2.3	2.44	2.25	
Residential	Units	62,000	17,360	8,060	19,840	11,780	3,100	1,860	
	People	122,381	21,179	19,505	42,854	27,094	7,564	4,185	

Figure 2.1 GMFM (2009) Average Household Sizes 1991 – 2027



Employment by Strategic Regeneration Areas

The working population for each of the sites within the strategic locations was calculated by converting the site area in hectares to floor space in square metres using the same plot ratios as the emerging 'Manchester Economy and Employment Space Study' and the retail floorspace derived from the

'Quantitative Retail Needs Study' (2006). The final part of the calculation involved converting floorspace (sqm) into employees, this was achieved by using employment densities from the 'Employment Densities: A Full Guide – Final Report for English Partnerships & the Regional Development Agencies' and as contained within the Manchester Economy and Employment Space Study.

The Core Strategy seeks to allocate 200 ha (this includes a 20% flexibility factor which was added to the original figure of 166ha) of employment land for B1, B2, B8 and retail uses by 2027. This translates into over 50,000 new employees with the City Centre projected to have the greatest increase in new employees (table 2.4).

Table 2.4 Total employees for Commercial and Retail Sectors

		Area						
		City Wide	City Centre	Central	East	North	South	Wythenshawe
Commercial	Area (ha)	166.3 ¹	25	7.31	88.05	5.88	2.19	37.88
	Floorspace (Sqm)	1,065,200	500,000	29,520	352,200	23,500	8,750	151,500
	Workers	50,463	26,316	1,539	14,764	1,237	461	6,146 ²
Retail	Floorspace (Sqm)	57,965	31,843		2,081	0	21,917 [±]	10,721
	Workers	4,607	1,592		104	0	1,095 [±]	536
Total Commercial & Retail	Floorspace (Sqm)	1,123,165	526,316	29, 520	354,281	23,500	30,667	162,221
	Workers	55,070	33,075	1,539	14, 868	1,237	1556	6,682

12

¹ Does not include flexibility factor

² This does not include Manchester Airport Masterplan job growth figures

[±] Includes Central SFRA retail figures

3.0 Physical Infrastructure

Introduction

Then following section addresses the physical infrastructure needs for:

- Energy
- ICT / Digital
- Minerals
- Transport
- Waste
- Water

Energy

(Centralised and Decentralised Electricity Supply, Gas Supply, Combined Heat and Power (CHP))

Introduction

The majority of Manchester's energy (power and heat) supply comes from centrally generated and distributed sources – power stations, national grid, distribution networks (Electricity North West (ENW) owns the distribution network which covers Greater Manchester), through to customers. This is supplemented by micro-renewables. Heating for the City generally comes from centralised electricity and gas supplies; however there are a number of decentralised district heating networks within the City alongside CHP generators.

The UK gas and electricity markets are regulated by Ofgem, which governs what investment private companies who generate, transmit and distribute heat and power can make in their infrastructure, and consequently the prices they can charge their customers. In addition to the costs of generation / transmission / distribution energy markets for non - renewable sources are also concerned with fuel supplies, and the investment required to search for, and to extract these.

Energy supply is a complex issue involving a number of distinct stages and spatial scales, variable demand at different times of day and seasonally, involving different companies and often spanning administrative boundaries. In light of climate change obligations and security of supply issues there have been changes in emphasis in terms of how energy is supplied in the UK; a greater focus on renewable energy and decentralised networks is likely to continue.

Infrastructure Requirements

At the present time there is sufficient energy to serve the City of Manchester. Under the aegis of Ofgem, the various generation / transmission / distribution companies are planning investment in their infrastructure (including the provision of new facilities) to ensure that this continues, in light of planned growth. Developers generally pay for heat / power supply infrastructure within their sites and often contribute to the costs of connecting to the wider networks, including the provision of sub-stations.

Decentralised energy generation and distribution currently supplements the Centralised system. Due to issues around security of supply, the need to reduce carbon emissions and the need to use traditional energy sources as efficiently as possible, Manchester is likely to use a combination of energy sources for the foreseeable future – centralised and de-centralised, renewable and finite sources.

Strategies Plans and Programmes

As part of the regulatory process Ofgem requires companies involved in the energy supply process to submit five-yearly Business Investment Plans, which set out what investment is required by them to continue to meet their Energy supply obligations to their customers. Stakeholders, including local authorities, are engaged by utility companies as part of this process, and the scale, spatial distribution and phasing of planned development are considered. These utility investment plans are produced with regard to the issues raised by stakeholders, within the context of longer term strategies (such as ENW's Strategic Direction Statement 2010-2035), and with the knowledge of the existing infrastructure's capacity and maintenance requirements, before being assessed by Ofgem. The regulator may make changes to the amount of investment required (and consequently the prices that can be charged) over the five year period; ENW's latest business investment plan covers the period 2010 - 2015.

In order to facilitate an increase in the use of low / zero carbon, decentralised and renewable energy technologies Manchester has set out areas of opportunity for these technologies in its Core Strategy. These are the regional centre, district centre, strategic housing and employment locations and the airport strategic site. The use of low and zero carbon, decentralised and renewable energy will be encouraged across Manchester but particularly in these areas. The use of Energy Proposals Plans in these areas will be considered as part of the framework for bringing in low carbon energy solutions in a way which increases investor confidence. A programme for bringing these forward is still to be considered.

Committed and Planned Projects

The impact of new development is currently being assessed and will be updated in due course.

ICT / Digital - work in progress, not yet available

Introduction

Infrastructure Requirements

Strategies Plans and Programmes

Committed and Planned Projects

Minerals

Introduction

The geology of Greater Manchester is such that it cannot provide the high specification of minerals required for the development activity likely to come forward. In addition the extent of constraints, such as the urban area, reduces the development potential for primary minerals extraction. As a result of this Greater Manchester has historically relied upon imports of minerals from elsewhere, and this is expected to continue in future years.

Following the abolition of the Greater Manchester Council in 1986, planning and other functions transferred to the 10 Unitary Authorities that replaced it. The Minerals Planning function was also transferred, creating 10 Mineral Planning Authorities in Greater Manchester, including the City of Manchester. The Greater Manchester Geological Unit (GMGU) was created to retain a central service with technical expertise in Mineral (and Waste) Planning issues for each of the 10 Unitary Authorities. GMGU is now preparing a Joint Minerals Development Plan Document (GMJMDPD or "the Minerals Plan") covering all 10 authorities to provide a co-ordinated sub-regional approach to minerals planning. The Minerals Plan will detail planning policies for managing mineral development, identifying potential sites for minerals developments, and identifying minerals locations requiring safeguarding from other forms of development.

Infrastructure Requirements

Development within the City of Manchester has historically involved the importation of aggregates from quarries and workings outside of Greater Manchester, and this is expected to continue. At the present time, and similar to most large urban areas within the country, it is not anticipated that there will be significant issues with Minerals supply, including recycled materials and new deposits, in Manchester for the plan period. The secure supply of Minerals necessary for the sustainable growth of Greater Manchester will be

informed by the process of developing the Minerals Plan, and with regard to relevant national policy.

Strategies Plans and Programmes

The Minerals Plan will cover all 10 Greater Manchester Authorities and is being prepared by GMGU to provide a co-ordinated sub-regional approach to minerals planning. The Minerals Plan is scheduled to be adopted as part of each of the 10 Local Development Frameworks in 2012 and will provide a clear guide to minerals operators and the public about:

- The locations where mineral extraction and other mineral development including processing/treatment may take place;
- The safeguarding of mineral resources with potential for future extraction; and
- All aspects of environmental and resource protection including the sustainable transportation of minerals.

The Minerals Plan will be Greater Manchester's approach to implementing the principles of Minerals Planning Statement 1: Planning for Minerals.

Committed and Planned Projects

New primary minerals extraction sites are unlikely to be identified within the City of Manchester through the Minerals Plan.

However, there are significant minerals developments currently operating within the City of Manchester which have contributed to the growth of the City in recent years. Future minerals development requirements for the City and the City Region, including safeguarding existing and allocating new sites, will be progressed through the Minerals Plan preparation process.

Transport

Introduction

Manchester is at the heart of an extensive sub-regional transport system connecting residents with jobs and services. Bus, train and tram services are structured around the Regional Centre, but also serve town and district centres and Manchester Airport, whilst the extensive local highway network, footpaths and cycleways often span Local Authority boundaries. The Regional Centre and Manchester Airport are both well served by car parks. The City is also well served by the national motorway, trunk road and railway networks, and through Manchester Airport has excellent global transport links.

Greater Manchester Integrated Transport Authority (GMITA) is the body responsible for setting local public transport policy through the Local Transport Plan and for deciding how money is spent on supporting and improving Greater Manchester's transport networks. The Authority's decisions

are implemented by Greater Manchester Passenger Transport Executive (GMPTE). GMPTE is also the owner of the Metrolink light rail network. The local Highway Authority is responsible for the maintenance and operation of the local highway network and they receive funding through the Local Transport Plan to carry out this function, with the Highways Agency responsible for the strategic road network (motorways and major trunk roads); Network Rail is responsible for the heavy rail network, including within the City.

Infrastructure Requirements

As an established urban area, Manchester's transport system generally operates effectively, serving the needs of residents and the many people who commute into the City for work or leisure purposes, or to access services. Maintaining road, rail, and tram networks, alongside investment to expand public transport networks and services will enable the City's population and economy to grow, whilst improving connectivity and accessibility and reducing congestion. In addition, developers often pay for, or contribute towards the cost of, improvements to transport facilities that directly relate to their sites.

Strategies, Plans and Programmes

Transport is a broad topic, with different organisations responsible for different elements of transport infrastructure, and with different means of planning for future investment and for securing the required funding over different timescales. Some of the principal strategies / programmes are set out below:

The Greater Manchester Local Transport Plan is prepared collaboratively between GMITA and the 10 Greater Manchester authorities to inform future transport investment within the City Region over a five year period. There have been two Local Transport Plans produced so far, covering the period to 2010/11, with a third currently being prepared for submission in March 2011. The 3rd LTP will set out a 10-15 year strategy for investment and network management and will be accompanied by a Manchester City Council investment plan (which will also form the Manchester Transport Strategy) which will support the delivery of the City's economic and spatial priorities. This covers an initial three-year period but also contains a longer-term 10-15 year plan.

The **Greater Manchester Transport Fund** (GMTF) is the primary mechanism to support a range of transport schemes within Greater Manchester with its programme of works expected to be completed by 2016/17; within Manchester, extensions to the Metrolink network, improvements to bus services and park and ride facilities are proposed.

The GMTF is £1,512 million, funded from a range of sources, including the Regional Funding Allocation; top-slice funding from the Local Transport Plan, grants from central Government, prudential borrowing by GMITA and local / third party contributions.

The **Manchester Transport Strategy** will form both Manchester's district implementation plan for the LTP and the Action Plan for the Manchester Transport Board. It will consist of a one-year funding plan; a three-year implementation plan; and a 10-15 year forward strategy (in line with the Greater Manchester LTP).

Given planned employment growth in the City Centre, a consequent increase in peak time trips, and in order to retain essential labour market connectivity, the main thrust of the **Transport Strategy for Manchester City Centre** aims to maintain access to the City Centre by all modes and to strengthen public transport capacity and quality, together with improving conditions for cyclists and pedestrians. This additional capacity will allow an increasing number of people to switch to more sustainable modes of transport, a process that will be encouraged through a package of measures to promote Smarter Travel and behavioural change.

As part of the strategy, road traffic that does not need to travel through the City Centre will be redirected via a more efficient, better signed strategic main road within the M60. This, in turn, will help ease the pressure on the Inner Ring Road and allow it to play a more effective role as a City Centre access and distributor route.

The strategy stresses the need to continue to pursue measures to develop transport infrastructure to ensure that anticipated growth is not constrained or inhibited, and to ensure better access to the new employment opportunities that will be created. The transport infrastructure investments and service improvements will bring a significant increase in public transport capacity, giving more sustainable travel choices to commuters, shoppers and visitors, and so help to tackle congestion. This improved public transport system will help to hold the number of cars entering the City Centre at around existing levels and so, in turn, give more opportunities to reduce the impact of traffic in the City Centre, increase the scope for public realm works, enhance pedestrian safety and deliver public transport improvements.

The **Future of Air Transport White Paper 2003** considered aviation growth nationally and forecast growth at each of the airports. Manchester Airport was forecast to grow to 50 million passengers per annum by 2030 partly due to the existing runway capacity being able to cater for this figure. The forecasts for growth have been revised down to 45 million passengers per annum to take into account the impact of climate change policies and economic forecasts in the UK Air Passenger Demand and CO2 Forecasts January 2009. The Airport has identified a number of proposed additional areas to ensure this level of growth can be accommodated, ensuring that runway capacity is matched by operational capacity at the Airport, such as terminal expansions, new apron and piers and other essential uses which are displaced by growth.

The **Manchester Airport Masterplan** is a suite of documents published in 2007 to demonstrate how sustainable growth could be achieved. Included within the Masterplan is the **Manchester Airport Ground Transport Strategy** which addresses the surface access issues of Manchester Airport.

It upholds the vision of an integrated public transport plan for passengers, employees and service partners and reducing dependency on the private car, including by increasing capacity on key transport routes; extending the network of public transport services - both in frequency and destinations; improving service quality and facilities; and by proactively managing road traffic demand by passengers and staff.

The **Northern Hub** (formerly known as the Manchester Hub) is a large rail infrastructure project to improve capacity on the central Manchester heavy rail network which will unlock benefits for the whole of the North of England. This will be constructed (subject to funding) over a 10-year period and will increase line speeds, reduced journey times and improve access to Manchester Airport. It will also provide additional capacity for freight.

Finally, a protocol has been created which sets out the agreed arrangements for joint working through regular liaisons on the preparation of Local Development Frameworks (LDFs) and the supporting transport evidence between the following parties:

- Association of Greater Manchester Authorities
- Greater Manchester Integrated Transport Authority
- Greater Manchester Passenger Transport Executive and;
- The Highways Agency

The protocol recognises that planned interventions which address the transport impacts of the LDF 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 the issues identified through the Greater Manchester transport modelling, particularly in relation to public transport.

During the latter phases of the Core Strategy plan period medium term (5-10 years) and long term (10-15 years) the protocol will ensure that further work is undertaken to determine future transport requirements and feasible interventions. In particular it will be important to consider the impact of the Highways authority planned schemes on the Strategic Road Network (SRN).

Committed and Planned Projects

The following section highlights some of the major transport infrastructure schemes affecting Manchester, at the date of publishing.

<u>Bus</u>

The creation of the Leigh-Salford-Manchester Busway, the development of new Cross-City bus routes, and the expansion of the free City Centre Metroshuttle bus service. The development of Park and Ride linked to the Metrolink and Rail network is also planned.

Metrolink

The Phase 3a extension comprises work on three lines within Manchester. The East Manchester line will link Manchester Piccadilly Station with Droylsden in Tameside by 2012, with five new tram stops within the City. The Oldham / Rochdale line will link Manchester Victoria Station with Oldham and Rochdale by 2012, with three new tram stops within the City. The South Manchester line branches off from the existing Altrincham line in Trafford and will reach Chorlton in 2011, with two new stops within the City.

The Phase 3b extension, within Manchester, comprises work on the South Manchester line linking Chorlton to Didsbury, and along a separate route, Chorlton to Wythenshawe and Manchester Airport, with work to be undertaken in phases; a total of twenty-three tram stops will be provided within the City by completion in 2016. A second city centre crossing, also to be completed by 2016, will be provided to increase capacity and thereby facilitate the network's expansion.

Rail

Network Rail's CP4 Delivery Plan (2009-14) includes works to the rail system in and around Manchester including new rolling stock and station improvements.

Highways

A number of improvements will be made to the motorway / trunk road network serving the City including improvements to the M56 motorway and its junctions at Manchester Airport and between the M6 and M56. In addition to this there are proposals to introduce "controlled motorway" on the M60 and M62 which will increase capacity and reduce delay caused by collisions on this section of the network

On the local network capacity improvements to deliver better public transport will be made to a number of arterial routes through the Cross City Bus Programme. In addition, a programme is being developed to make best use of orbital routes around the city centre to remove through traffic and provide additional highway capacity for public transport and local servicing access. Improvements to the Urban Traffic Control system are also planned.

Waste

<u>Introduction</u>

Following the abolition of the Greater Manchester Council in 1986, planning and other functions transferred to the 10 Unitary Authorities that replaced it. The Waste Planning function was also transferred, creating 10 Waste Planning Authorities in Greater Manchester, including the City of Manchester. The Greater Manchester Geological Unit (GMGU) was created to retain a central service with technical expertise in Waste (and Mineral) Planning issues for each of the 10 Unitary Authorities. GMGU is now preparing a Joint

Waste Development Plan Document (GMJWDPD or "The Waste Plan") covering all 10 authorities to provide a co-ordinated sub-regional approach to waste planning.

The Greater Manchester Waste Disposal Authority (GMWDA) is responsible for the treatment and disposal of waste collected from nine of the ten Greater Manchester authorities, including the City of Manchester. The City Council is responsible for the collection of waste for treatment / disposal by GMWDA. The waste collected by the City Council is mainly from households across the City but also includes waste from council offices and grounds and also small businesses. All other wastes including commercial wastes are collected and recycled / disposed of by a range of private companies operating across Greater Manchester.

GMWDA has a range of waste management facilities across the nine authorities, to enable it to fulfil its function of treating and disposing of waste. The GMWDA has recently signed a twenty-five year Private Finance Initiative (PFI) Recycling and Waste Management contract with a private waste company (Viridor Laing Greater Manchester Ltd) which will involve the provision of new and upgraded existing waste facilities to meet future demands.

<u>Infrastructure Requirements</u>

GMWDA's existing facilities across the conurbation, together with the investment that is being undertaken as part of the twenty-five year PFI Recycling and Waste Management contract with Viridor Laing means that there is sufficient capacity to accommodate planned growth, whilst adhering to waste minimisation ambitions.

The remaining waste arisings in Greater Manchester will be dealt with through the policies and site allocations within the Waste Plan.

Strategies Plans and Programmes

The Greater Manchester Recycling and Waste Management PFI Contract that GMWDA signed with Viridor Laing in April 2009, is set within the context of the Greater Manchester Municipal Waste Management Strategy, together with relevant national policy and guidance.

GMGU is now preparing the Waste Plan covering all 10 authorities to provide a co-ordinated sub-regional approach to waste planning. The Waste Plan will form part of the Local Development Framework (LDF) for each of the 10 Greater Manchester Districts. The Plan seeks to safeguard existing sites, such as those identified through the GMWDA PFI contract for the processing of Local Authority collected wastes and set out the strategy for dealing with all other waste arising in Greater Manchester. The Waste Plan also makes provision for waste development across Greater Manchester including the identification of sites and areas suitable for recycling, waste treatment, energy

recovery, residual waste disposal. Once adopted, scheduled for 2012, the Waste Plan will replace the existing policies in each individual UDP.

Within the emerging Waste Plan, Ardwick Yards (20.77 hectares in East Manchester) is identified as a location suitable for enclosed built waste management facilities; it is one of a number of sites across Greater Manchester identified for different kinds of waste management facilities to meet expected future needs.

Committed and Planned Projects

As part of the Greater Manchester Recycling and Waste Management PFI Contract that GMWDA signed with Viridor Laing in April 2009 there will be works to waste management facilities across the nine authorities and beyond. All waste to be treated by GMWDA will be recycled and then processed within Greater Manchester at the new and upgraded facilities into a fuel for use by a chemicals company in Runcorn, Cheshire. The fuel will feed a new Combined Heat and Power plant which will produce electricity and steam to replace energy currently generated from non-renewable sources. There will be a small residual element of all the waste processed by GMWDA which can only be sent to landfill.

Within the City of Manchester the following enhancement works are being undertaken:

- Modernising the Household Waste Recycling Centres (HWRCs) at Sandfold Lane in East Manchester, Reliance Street in North Manchester and Longley Lane in South Manchester.
- Building a new Mechanical Biological Treatment (MBT) facility at Reliance Street and Longley Lane.
- Relocating and improving the existing waste handling facilities at Longley Lane.

Future waste development requirements for the City and the City Region, including the safeguarding of existing and the allocation of new sites, will be progressed through the Waste Plan preparation process; this also deals with Minerals recycling facilities.

Water

(Water Supply, Wastewater Treatment & Disposal, Flood Risk Management)

Introduction

Manchester's water supply and wastewater treatment & disposal infrastructure are provided by United Utilities (UU), the private company that serves all of Greater Manchester and the North West region. UU is regulated by Ofwat, which governs what investment they can make in their infrastructure

and consequently the prices that they can charge their customers. UU is also regulated by the Environment Agency (EA) in terms of water extraction and quality.

Flood Risk is a complex issue that often spans administrative boundaries, and a thorough assessment of risk is essential for effective Flood Risk Management, rather than simply investing in flood defence infrastructure. Flood defence infrastructure is fragmented in terms of ownership, operation and future investment mechanisms; organisations with flood defence infrastructure include UU, the EA, the Manchester Ship Canal Company, British Waterways and Local Authorities.

<u>Infrastructure Requirements</u>

At the present time there is sufficient water supply / wastewater treatment infrastructure to serve the City of Manchester. UU, through their Asset Management Plans (AMPs), are planning investment in their infrastructure to ensure that this continues, in light of planned growth and changing environmental regulations. Developers generally pay for water supply / wastewater treatment infrastructure within their sites and to connect to the wider networks.

Flooding is a risk, particularly during severe weather events, and in a heavily urbanised area such as Greater Manchester flood management infrastructure is complex and inter-connected, often in different ownerships and funded through different mechanisms. Generally speaking flood management infrastructure within the City is fit for purpose, and the risk of new developments flooding is considered through the Planning process. Investment in flood risk management infrastructure can further lower the risk of flooding, although care is needed to avoid displacing flooding to another location.

Strategies Plans and Programmes

As part of the regulatory process Ofwat requires UU to submit five-yearly Asset Management Plans (AMPs), which set out what investment is required by them to continue to meet their water supply / wastewater treatment and disposal obligations to their customers, whilst also meeting the requirements of relevant legislation such as that relating to the European Union's Water Framework Directive. AMPs are produced within the context of longer-term strategies for water supply and wastewater treatment and disposal (produced by UU), and the phasing, scale and spatial distribution of future planned development (produced by RPBs and LPAs). The AMP is assessed by Ofwat who may make changes to the amount of investment required (and consequently the prices that can be charged) over the five year period – the latest version is AMP 5, covering the period 2010 - 2015.

There are many strategies, plans and programmes produced by different organisations in relation to flood risk, including Strategic Flood Risk Assessments (SFRAs) such as the one produced jointly by Manchester,

Salford and Trafford Councils. These identify risk and provide the context for site-specific flood risk assessments (FRAs) produced by developers in relation to their sites. FRAs may point to the need for new flood defences, the augmentation of existing flood defences, maintaining and improving existing drainage infrastructure (including sewers, drains and rivers), and reducing the amount / intensity of water entering drainage infrastructure during storm events. UU, the EA, Local Authorities and other stakeholders are responsible for different components and plan their investment over different time periods The 2010 Flood & Water Management Act sets out new roles and responsibilities for organisations, recognising the range of different stakeholders involved, the different sources of flooding and the fact that they often interact.

The Core Strategy and associated Infrastructure Delivery Plan are both informed by Flood Risk issues, and inform and help to align future investment by relevant stakeholders, including developers. In addition, the City Council is working with the other Greater Manchester districts, with the EA, UU and other stakeholders, to develop effective flood risk management plans and to secure funding to deliver these.

Committed and Planned Projects

Through their AMP 5, UU plan to invest some £3.7 billion in their water supply and wastewater treatment and disposal infrastructure, between 2010 and 2015. Some projects included in this are building a water supply pipeline between Greater Manchester and Merseyside, cleaning the Manchester Ring Main, investing in waste water treatment facilities and networks so that they can meet future demands arising from population growth, and, completing work on storm water overflows, which would also have positive flood risk management implications.

In terms of flood risk, the Council has completed a SFRA with Salford and Trafford Councils and the EA, and is playing a leading role in the progression of Greater Manchester wide Surface Water Management Plan (SWMP), working with the EA and UU. Once completed, the SWMP can be used to attract and direct funding for flood defence works. Manchester is also part of the South Manchester Flood Risk Management Strategy, which will inform the EA's capital investment in flood defence works across southern Greater Manchester and north east Cheshire.

4.0 Social & Community Infrastructure

Introduction

Then following section addresses the physical infrastructure needs for:

- Community Services
- Emergency Services
- Education
- Health

Community Services

Libraries

Manchester and Library Information Service (MLIS) is responsible for delivering a range of leisure, cultural, learning and information services through a network of 24 community libraries, as well as a Central Library, 4 mobile libraries, home library and Prison Library services. MLIS also manages the Greater Manchester County Record Office on behalf of AGMA, and the City Archive Service. MLIS has over 123,500 active members, issues over 2.3m items and attracts more than 3.3m visitors per year. ICT and on-line services are a fast growing business area; as well as delivering nearly 750,000 public access computer sessions in libraries, nearly 45,000 on-line reservations and 263,000 on-line renewals. The web sites local studies pages alone registered nearly 350,000 page reviews.

Infrastructure Requirements

The library service estate is currently going through a 5 year programme of renewal. The infrastructure requirements during this period have been identified and planned to be met through the Library Strategy.

Strategies Plans and Programmes

The Library Strategy produced in January 2008 is a 5 year programme of modernisation, refurbishment or replacement delivered in 3 phases. The first phase involved the refurbishment of Chorlton and Withington libraries as well as 4 new libraries (Forum, North City. Clayton and East City libraries). Phases 2 and 3 are currently in progress and details of which can be seen in the section below.

Committed and Planned Projects

Phase 2

Phase 2 of the library strategy should be completed in the Autumn of 2010. Projects included the refurbishment of Moss Side Powerhouse, Longsight, Levenshulme, Burnage, Fallowfield and Didsbury libraries and the opening of two new libraries at Beswick and Brooklands and the new Avenue Library and Learning Centre to replace Higher Blackley Library.

Phase 3

Phase 3 involves the refurbishment of the Central Library including the Archive Centre and the creation of the City Library which will be located within the refurbished Town Hall Extension. Phase 3 is due to be completed in 2013.

Emergency Services – work in progress, not yet available

Ambulance

Introduction

Infrastructure Requirements

Strategies Plans and Programmes

•

Committed and Planned Projects

Fire & Rescue

<u>Introduction</u>

Infrastructure Requirements

Strategies Plans and Programmes

•

Committed and Planned Projects

Police

Introduction

Infrastructure Requirements

Strategies Plans and Programmes

•

Committed and Planned Projects

Education – work in progress, not yet available

Nursery / Primary / Secondary Education

Introduction

Infrastructure Requirements

Strategies Plans and Programmes

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Committed and Planned Projects

Further Education

Introduction

Infrastructure Requirements

Strategies Plans and Programmes

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Committed and Planned Projects

Higher Education

<u>Introduction</u>

<u>Infrastructure Requirements</u>

Strategies Plans and Programmes

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Committed and Planned Projects

Health – work in progress, not yet available

Manchester Primary Care Trust

<u>Introduction</u>

Infrastructure Requirements

Strategies Plans and Programmes

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Committed and Planned Projects

5.0 Green Infrastructure

Green Infrastructure and Outdoor Leisure

Introduction

A Greater Manchester Green Infrastructure strategy is currently being prepared by AGMA. It defines green infrastructure in Manchester as consisting of:

- Open spaces parks, woodlands, informal open spaces, nature reserves, lakes, historic sites and natural elements of built conservation areas, civic spaces and accessible countryside
- Linkages river valleys and canals, pathways, cycle routes, tram routes and railway lines - both used and disused
- Networks of "urban green" the collective resource of private gardens, pocket parks, street trees, verges, green roofs and green walls

<u>Infrastructure Requirements</u>

The City already has substantial formal and informal Green Infrastructure assets (such as parks, woodlands, gardens, river valleys, canals, street trees etc.) many of which are well used by residents, and which perform a range of different functions, such as recreation, bio-diversity, air quality, flood management etc. The City is also working to identifying unused or neglected incidental open space within those neighbourhoods where residential development is planned and remediate these into functional good quality green spaces, whilst ensuring that these are linked together by green corridors.

The development of the public realm within the City Centre has played a key role in the regeneration of the area and is now integral to the character of the City. Open space in the City Centre is used not just by residents but also by workers and tourists. The City Centre Strategic Plan recognises attractive green spaces for residents, visitors and workers at Sackville Park, St Johns Gardens, Parsonage Gardens, Piccadilly and Cathedral Gardens. Large open spaces, such as Hulme Park are also easily accessible. Canal basins and routes along waterways are also identified as providing additional opportunities for local residents as well as acting as routes in and out of the City Centre for visitor. The redevelopment of the Oxford Road Corridor to the south of the City Centre will address a range of issues and open space is central to the proposals in the area. There will be a concerted effort to improving both the quantity and quality of area's green infrastructure, making the area a more pleasant place to live and work.

It is recognised that the provision of new open space will be challenging in some parts of the City Centre. In these areas in particular, a key priority will

be to deliver new urban features such as green roofs and living walls together with more street trees, to increase and enhance green infrastructure, encouraging urban cooling and mitigating climate change. Furthermore, the provision of green spaces reduces flood risk and breaks up the urban landscape. Canals, towpaths and walkways in the City Centre provide an invaluable network of green corridors. This network ensures that residents are able to access open spaces outside of the City Centre through the use of green linkages.

The North and East SRF areas are well served with parks and open space with Phillips Park, the Medlock Valley and Velo park all having capacity for increasing visitor numbers. The key priority for these areas of the City is to ensure that opportunities are taken through increases in resident population to improve the quality and long term management of the existing green infrastructure and improving linkages between them.

Central Manchester SRF area has a very urban character, dominated by streets of terraced housing, often with small or no private gardens. The future strategy will focus on more innovative solutions, including green roofs, green walls and additional street tree planting. Access routes between open spaces are particularly important in this area if opportunities are to be maximised.

The Mersey Valley dominates the South Manchester SRF area, and the future focus for the provision of green infrastructure across South Manchester will be a balance of new provision, maintaining and improving the quality of existing provision where required and the creation of green linkages.

Wythenshawe has higher levels of green infrastructure in comparison to other areas of the City. While the quantity of green infrastructure is good, in parts of the area the distribution is uneven. The strategy for improvement of the areas green infrastructure will focus on increased provision in areas that are currently deficient, making qualitative improvements, improving access (in particular areas woodland, while also improving linkages between sites. Future planned development at Manchester Airport provides opportunities in particular to enhance the management of existing green infrastructure within the surrounding area.

Strategies Plans and Programmes

Green Infrastructure is a broad topic, with different organisations responsible for different elements, with different means of planning for future investment and for securing required funding, over different timescales. Some of the principal strategies / programmes are set out below:

Outdoor Leisure Capital and Asset Management Programmes to achieve the long term ambition for parks and recreational green spaces which is to:-

• improve all to Green Flag status which includes ratings for physical and horticultural attributes and biodiversity.

- introduce water back into parks including reservoirs to increase biodiversity and help combat heat islands and flooding.
- Manchester Open Space, Sport and Recreation Study (August 2009)

In line with Planning Policy Guidance Note 17 (PPG17), Manchester completed its City Wide Open Space Sport and Recreation Study in 2009. The study mapped all publicly accessible open space, sport and recreation facilities across the city, assessing quantity, quality and access. A survey of local people's and visitors views on provision and their aspirations for open space was also undertaken. Taking both the audit of current provision and the survey to understand local needs into consideration, standards were set for quantity, quality and accessibility for all types of open space, sport and recreation facilities across the City. The standards are a current benchmark for provision and will inform open space priorities into the future; they are not targets for the future. It was clear that a high priority for the City will be better quality and improved access for its open space, sport and recreation facilities. However there is also a need to provide extra provision in some areas if the opportunity arises. The priorities for open space in each area are outlined in the Core Strategy and in more detail in the Manchester City Council City Wide Open Spaces, Sport and Recreation Study.

Parks for all seasons

Over recent years Manchester has made great improvements to its parks and open spaces with 29 having attained Green Flag status by 2009.

Playing Pitch Strategy

Manchester's Playing Pitch Strategy 2003 - offers a 10-year vision for providing community opportunities for participating in pitch sports, and outlines how Manchester City Council can provide an appropriate number and range of high-quality playing pitches to meet this vision inclusive of latent demand. Recommendations are given that address issues of quality and capacity of facilities for playing fields, recreation grounds and sports clubs, which suggest that any quantitative shortfalls should be addressed by improvements to the quality and capacity of existing facilities.

 Towards a Green Infrastructure Framework for Greater Manchester (2008)

Committed and Planned Projects

The following section highlights some of the specific green infrastructure schemes within Manchester, at the date of publishing.

Ronald Johnson Playing Fields, Moston £1,370,000

Improvements to pitch, new changing facilities and a 3G artificial playing surface.

Fencing, infrastructure and CCTV, improvements to Green Infrastructure across the City, £240,000

Parks pathways refurbishment programme, across the City, £190,000

Wythenshawe Stables phase 2, Wythenshawe Park, £250,000



6.0 Strategic Sites

Manchester Airport Strategic Site

Core Strategy policy MA1 designates the area outlined in blue below as a strategic site for Manchester Airport Development. Development within the site will enable the Airport to accommodate 45 million passengers per annum by 2030. This will involve the expansion of the developed Airport area 1 into areas 2 to 5. The Green Belt boundary in this area has been amended to exclude any areas needed for airport development.

The final version of the IDP will include a map showing the Airport site and its components.

Infrastructure requirements for expansion

Infrastructure provision at Manchester Airport will be improved in order to support its expansion. The Airport published its Airport Masterplan in 2007 which included:-

- The Land Use Plan
- The Ground Transport Plan
- The Environment Plan
- The Community Plan

Many of the infrastructure requirements are covered in detail within the Masterplan and its supporting documents.

Ground Transport

Highways

Impacts on the Strategic Road Network by the growth at the Airport and any associated development were considered when planning permission was given for Manchester Airport's second runway. Conditions attached to the planning permission set triggers linked to passenger numbers requiring improvements to the network. These are critical infrastructure improvements which are subject to legally bound funding agreements.

Parking

Car parking is an essential element of the Airports operation and an appropriate level of short, medium and long stay parking needs to be provided on site. Managing the supply and demand for parking is part of the Airport's surface access strategy.

For passengers, demand management principally involves reducing the attraction of private car pick up and drop off. Controlling access to the forecourts and terminals is the central element of the Airport's strategy. All

pick up and drop off traffic is directed into short stay car parks, and a pricing policy set to promote the Airport's hierarchy of preferred transport choices:-

Public Transport
Parking on site
Taxi
'Kiss and Fly'/pick up/drop off

Minimum road traffic



Maximum road traffic

In 2007, 61% of passengers are 'picked up' or 'dropped off' ('kiss and fly') by private cars or taxis. This is the largest component of road traffic around the airport and the biggest contributor to congestion. If passengers are to be persuaded to switch away from 'kiss and fly' adequate parking needs to be provided on site at an appropriate price. Providing an appropriate level of short, medium and long stay parking on site is therefore critical to the development of the Airport.

Public Transport

The Airport's long term ambition is for 40% of passengers and 50% of staff to be using public transport. This is to be achieved thorough the development of public transport services and network capacity development. It should be noted that many of the public transport developments are not controlled directly by the Airport and as such will require action from other service operators and providers.

All public transport operations are integrated in a single complex at the centre of the site, 'The Station', located between Terminals 1 and 2. Over 300 trains, 100 coaches and 500 buses per day provide frequent links to destinations throughout the Airport's catchment area.

Rail

The Station provides direct links to Manchester and the West Coast Main Line via Crewe and it operates 24 hours a day. The Airport's aim is for 25% of passengers to travel to the Airport by rail by 2030 (approx 12 million). Infrastructure required to help achieve this aim is:-

- Action to Unlock the Manchester hub: Remove the capacity problems south of Piccadilly.
- Integrate the West Coast Main Line: Link the Airport to the Chester line and so enable through running, long distance services

Metrolink

Phase 3 of Metrolink includes an extension to the Airport. Metrolink will increase significantly the number of employees travelling by public transport and provide better access to jobs at the Airport for local people. Construction of the Metrolink to the Airport is due to start in 2010 and the first passengers are expected in 2016.

Coach

The Airport includes a coach station but at present, partly due to the success of the rail station, only 2.5% of passengers arrive or depart by coach. Long term plans for coach travel include:-

- Launch Air-link:Secure dedicated high-speed services to Merseyside, North Wales, Central and East Lancashire, West Yorkshire and Midlands.
- Gateway Programme: New interchanges at key modes on the motorway network with passenger facilities, parking and feeder services.

These schemes are important for increasing the percentage of passengers travelling by public transport and widening passenger choice.

Local bus services

The Airport is served by a network of bus services which provide an effective link to the core staff catchment areas. Around 10% of staff currently use a bus to travel to work. The Airports priorities for increasing bus travel by employees are:-

- Upgrade Skyline: Support Quality Bus Corridors on high volume routes with frequent, all day services and high quality vehicles, real time information and improved waiting facilities.
- Bus Partnerships: Develop a stable network of services in quality contracts with operators, specifying service patterns, fares and performance standards in return for financial support.
- Airport Shuttle: Encourage an innovative new network of 'demand responsive' services, tailored to the needs of smaller markets, such as in Cheshire. Work to provide feeder services to the rail and coach networks.

Cycling and walking

On the Airport site, a network of footpaths and cycleways link current and future developments to provide a safe and accessible network of routes for employees, passengers and the local community. The Manchester Airport Orbital Cycle Route provides safe and signed routes into the Airport from Greater Manchester, Cheshire and other cycle networks.

Energy

The Airport has set a target to be carbon neutral for its energy and fuel use by 2015. The Airports principal carbon emissions come from energy use in buildings and road vehicles. All new buildings and major refurbishment projects, will include a combination of ground source heat pumps, solar heating, PV cells, CHP and other low/zero carbon technologies. This is to achieve 10% of power demand or a level that is in line with Local Planning Authority requirements. The Airport intends to significantly increase the proportion of renewable energy it uses by 2015.

United Utilities have confirmed that the Airport has its own primary electricity network which will have capacity for all the planned future development.

Water

Water issues at the Airport will be addressed within the context of the overall approach to Water in the City and City Region.

Around 500,000m³ of water is used each year at the Airport. The main uses are toilet facilities, catering, construction and on aircraft. Almost all of this is mains 'potable' water and is returned to the main sewer for treatment at United Utilities Davyhulme treatment works. Rainwater run-off from the Airport is discharged into the River Bollin and several small streams that border the site. Control measures are in place to avoid contamination of the local watercourses.

Almost all of the Airport's water is supplied by United Utilities and distributed through a private local pipe network. There is detailed metering of major users and a water conservation programme is in place. These measures are intended to maintain average mains water per passenger to existing levels. It is intended that as a result of rainwater harvesting systems, mains water will only be used for potable and emergency uses.

Rainwater run off from the Airfield that is contaminated with winter anti-icing and de-icing chemical is diverted to balancing lagoons before discharge to the main sewer. The onsite containment system ensures that the discharge rates meet United Utilities' requirements.

Waste

Waste at Manchester Airport will be addressed within the context of the overall approach to waste in the City and City Region. In 2005, 79% of solid waste went to landfill but by 2015 the Airport aims to have kept both the total amount of waste and the amount going to landfill to less than 2005 levels and by 2030 to have reduced this waste going to landfill to zero. One of the main ways to reduce the amount of waste landfilled in the future is by a significant increase in recycling. However increasing waste segregation at source requires the co-operation and partnership of all business on the Airport site. Options are being reviewed for sorting waste off-site in order to recycle a greater proportion and to optimise the number of on-site containers and collections needed for recycling.

Current schemes to reduce waste and increase recycling include:-

- More recycling bins for passengers in the terminals;
- Introduction of shrink wrap recycling collections;
- Extension of existing office recyclables collections;
- A focus on recycling at the World Freight Terminal
- Working with airlines to increase on board waste segregation
- Working with retailers to improve the quality and quantity of waste segregated for recycling.

Proposals planned for the medium term, 2015, include:-

- The amount of waste landfilled will be kept less than 2005 levels (7400 tonnes).
- On and off-site waste segregation for recycling will be increased to 50%.
- Introduction of "pay-by-weight" charges for waste.

 Targets and requirements for recycling included in future contracts for waste and cleaning.

Emergency Services

Ambulance – work in progress, not yet available.

Fire

The Airport's licence includes a mandatory requirement to provide Fire and Rescue Services that are appropriate to the aerodrome and the types of aircraft that use it. The CAA set out this requirement and it includes the minimum levels for staffing and appliances. Airport Fire Stations must be located so that the Fire and Rescue Service can reach all parts of the airfield in two to three minutes. The site of the North Fire Station will be required for future taxiway/apron improvements, therefore, a site will be identified in the vicinity of the existing facility within the Operational Area for a new Fire Station. The Fire and Rescue Service must continue to meet the CAA's requirements, therefore, the new Fire Station is critical to Airport development.

Police

The policing of the Airport site is managed from the subdivisional HQ of Greater Manchester Police. The existing Police Station is located close to Terminal 3. This site is too small for the present and future operational demands of the Airport and cannot easily be extended. Some temporary accommodation has been provided for Greater Manchester Police, but a new Police Station will be required. This will need to be within the strategic site with access to the Terminals and the local road system. The Terminal 2 Phase 2 development and its associated road scheme may provide a site in the Thorley Lane / Runger Lane area, however detailed feasibility studies will be required. In the longer term, the current operational facility on the West Side will also require relocation as part of the redevelopment of that area.

Customs

Facilities and accommodation for the Control Authorities including UK Border Agency and Special Branch will continue to be provided, mainly within the terminals. This is to ensure the Airport continues to meet the regulatory and operational needs of the authorities. Security facilities will be provided within the terminals. In addition, Security Search Areas at various points around the site will be provided or extended as required to meet increasingly stringent security requirements.

Green Infrastructure

The Airport aims to limit its effects on nature conservation and landscape resources and seeks to create new facilities and enhance local ecological and landscape value. The Operational Area includes areas of structure landscape planting and some 350ha of ecologically managed land around the Second Runway.

The development of the airport does not require additional green infrastructure to be provided but areas of ecological importance need to be protected or mitigation provided where protection is not possible.

Manchester Airport strategic site borders part of a national Site of Special Scientific Interest (SSSI), Cotteril Clough. Although development will avoid the SSSI, any impact will need to be assessed.

The strategic sites include parts of two Sites of Biological Importance (SBI) which are:-

- Ponds near Manchester Airport Runway (Grade C SBI);
- Marl Pit near Cotteril Clough (Grade A SBI)
- Sunbank Woods SBI
- Cotteril Clough SBI

The Airport currently manages a large area of land to the west of the runway under its Landscape and Habitat Management Plan (LHMP). As part of the planned development the LHMP will be extended by 100 hectares to compensate for, and to mitigate any effects of, increasing the Operational Area of the Airport by working with the various landowners to enhance the ecological diversity within the area. The area identified for the extension lies either side of the Bollin Valley between the M56 and Castle Hill Farm. The Airport will undertake the mitigation works in advance of development taking place.

7.0 Appendices – work in progress, not yet available

