

Leeds Waste Strategy Review Sustainability Appraisal

Draft Sustainability Appraisal Report

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Sustainability Appraisal (SA) is a process that assesses the environmental, social and economic consequences of a Plan and its policies, and seeks to identify ways of achieving a sustainable balance between these considerations.

Jacobs Babtie was appointed by Leeds City Council to undertake a Sustainability Appraisal of the Leeds Integrated Waste Strategy Review (WSR). This Sustainability Appraisal also incorporates the requirements of the EU Strategic Environmental Assessment Directive and the Environmental Assessment of Plans and Programmes Regulations 2004. In doing so, this appraisal seeks to provide a high level of protection of the environment and contribute to the integration of environmental considerations into the preparation of the WSR.

Leeds City Council has now produced a Draft Integrated Waste Strategy Review for consultation. Sustainability Appraisal has formed a key part in developing this strategy, the results of which are documented in this report. The report explains the background to the process and the methodology adopted in appraising the WSR. A non-technical summary has also been produced to highlight the main issues and findings of that report.

This SA was undertaken by consultants Jacobs Babtie in partnership with Leeds City Council between July 2005 and February 2006.

1.1 Background to the Leeds Integrated Waste Management Strategy

The first Integrated Waste Management Strategy 2003/06 was published in 2003 and covers the period to a review date in 2006. As part of the process of reviewing this Strategy, a draft Integrated Waste Management Strategy Review (WSR) has been produced and will be subject to extensive stakeholder consultation before being published.

The WSR reflects the need to develop a sustainable, integrated waste management service that is both responsive and flexible, but within the constraints of cost legislation and practicality. The Integrated Waste Management Strategy sets out the Council's approach to managing waste in line with the 'waste hierarchy': reduce, reuse, recycle, recover and dispose.

The WSR focuses primarily on municipal waste, as the management of this waste is within the control of Leeds City Council. However, municipal waste is only a part of the overall waste generated in the City, and the Strategy also recognises that the Council has a key role in encouraging businesses and communities to manage all waste more sustainably. Some of the activities detailed in the Strategy therefore relate to areas within the direct control of the Council, while others are dependent on businesses and local communities accepting their responsibilities in this area, with the Council acting in its role as community leader.

Government guidance setting out what is expected from English waste disposal authorities and waste collection authorities when preparing and updating Municipal Waste Management Strategies is set out in 'Guidance on Municipal Waste Management Strategies' 2005. This document has been considered in conjunction with other guidance relating to government policies for sustainable waste management and alongside Government statements on national planning policy,

particularly, Planning Policy Statement 10, 'Planning for Sustainable Waste Management'.

The 'Guidance on Municipal Waste Management Strategies' document identifies a set of waste decision making principles that should be applied when local authorities are preparing their strategies. These principles have been addressed when carrying out the Waste Strategy Review SEA and state that:

- *Individuals, communities and organisations should take responsibility for their waste,*
- *In taking decisions there should be consideration of alternative options in a systematic way,*
- *Engagement with the local community and key stakeholders should be an important and integral part of the decision making process,*
- *The environmental impacts of possible options should be assessed looking at both the long and short term,*
- *Decisions should seek to deliver the environmental outcomes that do most to meet the Government's:*
 - *commitment to sustainable development,*
 - *waste strategy aims to change the way waste is managed,*
 - *policy to break the link between economic growth and the amount of waste produced, and*
 - *drive to the management of waste up the waste hierarchy of reduction, re-use, recycling and composting, and energy recovery.*

and in doing, so take account of what is feasible and what is an acceptable cost.

This SA is linked to previous studies that have been carried out as background work to the development of the WSR and the procurement of waste management recovery solution. The studies that have supported the production of this document are described below:

- *Analysis of the current and projected profile of municipal waste growth in Leeds.*
- *Waste flow model considering potential, optimised recycling collection and education initiatives to increase recycling levels in Leeds, together with realistic capture rates for each material type.*
- *analysing a broad representative range of the available technology options for the long-term management of residual municipal waste in order to establish their relative performance levels in terms of recycling, landfill diversion and cost over a twenty-eight year contractual period.*
- *Evaluation of the various technical options against an agreed range of weighted 'benefit' criteria. The benefit criteria (and weightings) are summarised below::*
 - *Achieves sustainability in relation to social, economic and environmental impacts (25%),*
 - *Provides long-term and certain markets for outputs (10%),*
 - *Provides flexibility (i.e. to adapt to changes in waste volumes, composition, etc.) (15%),*
 - *Achieves landfill diversion (LATS) targets (25%),*
 - *Achieves long term statutory and local recycling and composting targets (15%),*
 - *Minimises impacts associated with land use and allows self-sufficiency (10%).*

- *Financial options appraisal involving modelling the costs of the technology options to provide Net Present Values (NPVs) over a theoretical 28 year contract period, which allow the costs to be compared on an equal basis.*
- *Risk assessment of the risks of deliverability for the various technology options, using a short list of the key risks that can actually be appraised at this stage, prior to the selection of a preferred option and the subsequent availability of detailed technology specifications.*

1.2 Vision Key Principles, Objectives and Key Themes

The WSR outlines the need for change and the sets out the vision and key principles for delivering integrated solutions for waste management over the next 25 to 30 years. It also describes the key themes and policies for taking the principles forward. The key themes and principles are illustrated in Figure 1.1.

The Council aspires for zero waste and its vision is '**of a zero waste city, where we reduce, re-use, recycle and recover value from all waste and where waste becomes a resource**'. The Council has adopted the following principles to assist in achieving the zero waste aspiration:

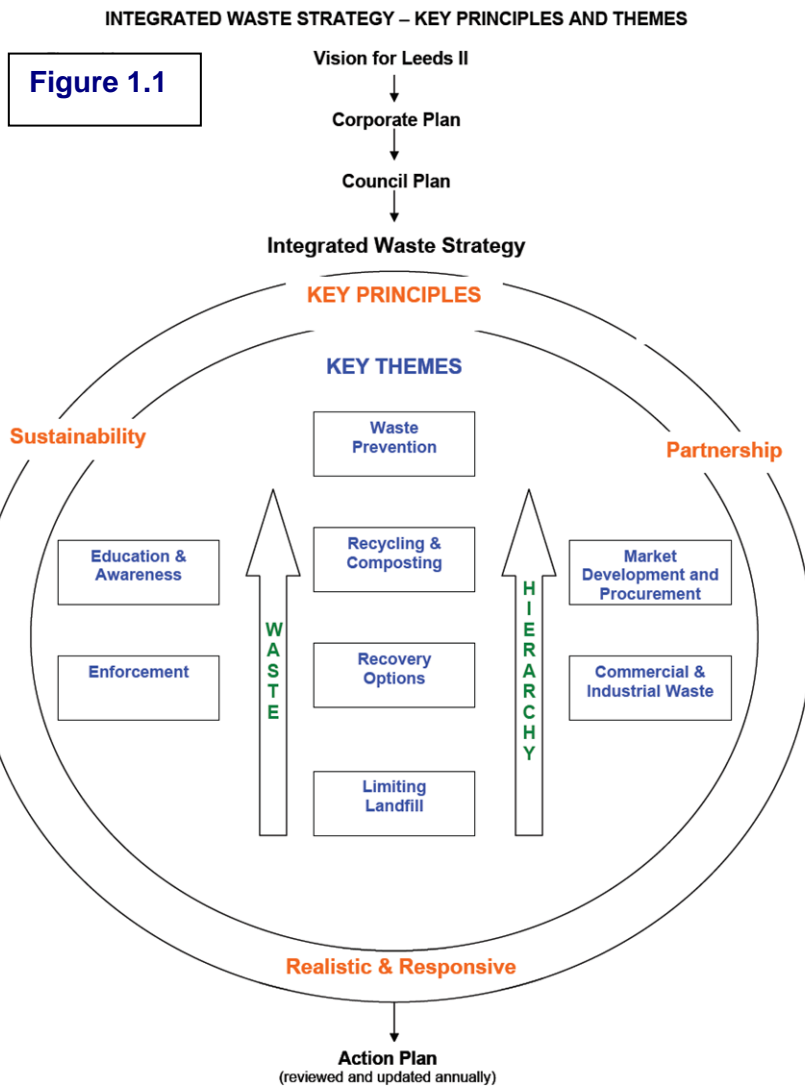
- reducing consumption;
- reducing the growth in waste per household;
- ensuring that products are made to be re-used, repaired, recycled or composted;
- maximising recycling; and
- minimising residual waste.

The Council aims to exploit every practicable opportunity to drive waste management up the waste hierarchy, with the reduction of growth in waste providing a primary focus. One of the key aims is to reduce annual growth in municipal waste in Leeds to 0.5% per household by 2016. The Council also aims to achieve a recycling rate of 40% by 2020 and recovering value from 90% of Leeds waste by the same year.

Strategy Principles

The key principles underpinning the waste strategy and reflected in the WSR are:

- **Sustainability** – to develop and promote sustainable waste management;
- **Partnership** – to work in partnership with communities, businesses and other stakeholders to deliver sustainable waste management; and
- **Realistic and responsive** – to ensure that the Strategy is realistic and responsive to future changes.



Strategy Objectives

The key objectives of the Strategy can be summarised as follows:

- **To move waste management up the waste hierarchy, with particular focus on reduction;**
- **To manage waste in ways that protect human health and the environment:**
 - **Without risk to water, air, soil, plants and animals;**
 - **Without causing a nuisance through noise or odours;**
 - **Without adversely affecting the countryside or places of special landscape, townscape, archaeological and historic interest;**
 - **Disposing of waste at the nearest appropriate installation, by means of the most appropriate methods and technologies.**
- **To develop integrated and sustainable waste management services, that are flexible and have optimal end-to-end efficiency;**
- **To exceed Landfill Allowance Trading Scheme (LATS) targets;**
- **To meet statutory and local 'stretched' recycling and composting targets;**
- **To provide a waste solution that is affordable and delivers best value;**
- **To stimulate long-term and certain markets for outputs in order to promote local and regional self-sufficiency.**
- **To increase community cohesion by recognising the links between crime and the environment and improving access to services based on local needs.**

Key Themes and Policies

The Waste Strategy sets out the key principles for delivering integrated solutions for waste management and describes the nine key themes for taking these principles forward, together with the policy framework for delivering sustainable waste management. These key themes are:

- **Education and awareness**
- **Waste Prevention (which includes minimisation and reuse)**
- **Market Development and Procurement**
- **Recycling and Composting**
- **Medium and Long Term Recovery Options**
- **Limiting Landfill**
- **Commercial and Industrial Waste**
- **Enforcement**
- **Planning**

1.3 Background to the Sustainability Appraisal

The Strategic Environmental Assessment (SEA) Directive for the assessment of the effects of certain plans and programmes was transposed into English law on the 20th July 2004 in the form of the Environmental Assessment of Plans and Programmes Regulations 2004 (referred to in this report as the 2004 Regulations). This means that the Directive applies to plans and programmes, and modifications made to them after this date. This has resulted in a mandatory requirement to

undertake SEA during the preparation of Leeds City Council's Waste Strategy Review.

The objective of the SEA Directive is *"to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans with a view to promoting sustainable development"*. The vehicle for achieving this aim is by means of the assessment of plans and programmes which are likely to have significant effects on the environment, the result of which are presented in an Environmental Report.

Paragraph 3.2 of the 'Guidance on Municipal Waste Management Strategies' document states *"Authorities should apply these principles as they develop their Strategies. As a minimum the Strategy should undergo a Strategic Environmental Assessment (SEA). Authorities should also undertake a thorough evaluation of social and economic factors. Authorities may therefore wish to consider undertaking a wider Sustainability Appraisal (SA) which will fulfil the requirements of SEA."*

Due to the publication of the 'Guidance on Municipal Waste Management Strategies', it is considered appropriate that the Leeds Waste Strategy SEA should address social and economic factors. Consequently all references to SEA will include social and economic factors as well as environmental. This will ensure the waste strategy is balanced and directed towards achieving sustainable development objectives wherever possible. Both the SEA and SA processes are incorporated into this document and will be referred to by the single term Sustainability Appraisal (SA).

The procedure for undertaking the SA for the Leeds Waste Strategy Review has included the following key steps, based on the latest ODPM Guidance on SEA 'a Practical Guide to the Strategic Environmental Assessment Directive, September 2005':

- Preparing a Sustainability Appraisal Report on the likely significant effects of the draft Waste Strategy Review;
- Carrying out consultation on the draft Waste Strategy Review and the accompanying Sustainability Appraisal Report;
- Taking into account the Sustainability Appraisal Report and the results of the consultation in decision making; and,
- Providing information when the plan is adopted and showing how the results of the SA have been taken into account.

It is clear from the above steps that the programme for reviewing the waste strategy is inextricably linked with the SA.

1.4 Compliance with the SEA Directive/Regulations

This Sustainability Appraisal encompasses the SEA requirements of the draft Leeds Waste Strategy Review. Table 1.1 below signposts where the SEA requirements are covered in this SA report.

Table 1.1 How SEA requirements have been taken on board

The SEA Directive's Requirements	Where covered in the SA Report
An outline of the contents, main objectives of the Waste Strategy and relationship with other relevant plans and programmes;	Section 1.2, Section 3.2
The relevant aspects of the current state of the environment and the likely evolution thereof without the implementation of the Waste Strategy;	Section 3.3
The environmental characteristics of areas likely to be significantly affected;	Environmental baseline in Section (3.3.1)
Existing environmental problems relevant to the Waste Strategy;	Section 3.4.1, Section 3.4.3
The environmental protection objectives, established at international, community or national level, which are relevant to the Waste Strategy and how they have been taken into account during its preparation;	Section 3.2, Appendix 1
The likely significant effect on the environment including on such issues as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage and the interrelationship between the above factors. These effects should include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects;	Chapter 5
The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programmes;	Chapter 6
An outline of the reasons for selecting alternatives dealt with, and a description of how the assessment was undertaken including any difficulties encountered in compiling the required information;	Section 5.4, Section 5.2
A description of measures envisaged concerning monitoring;	Chapter 7
A non-technical summary;	Provided as a separate document
The report shall include information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stages in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process to avoid duplication of assessment;	N/A
Consultation: statutory consultees/public	Section 2.6

1.5 Project Objective

The overall project objective is to ensure that Leeds City Council's WSR maximises its potential to support the delivery of social, economic and environmental objectives at the same time, with SA providing a systematic way for checking and improving the Strategy as it develops.

1.6 Purpose of this Report

As described in Section 1.3, there is a statutory requirement for producing the SA report and it should accompany the final WSR in 2006. The iterative nature of the SA process requires that SA is undertaken throughout the development of the Strategy. This report documents the assessment of the vision, objectives, and key themes that has been undertaken during the development of the draft WSR.

1.7 Structure of the Sustainability Appraisal report

This SA report is structured as follows:

- Section 1 provides the background to the Leeds Waste Strategy Review and the requirements for SEA and SA.
- Section 2 describes the study area, scope of the SA, timeframe and the stages of the SA process, including the approach to the impact assessment.
- Section 3 describes the relevant plans and programmes affecting and influencing the WSR. It also outlines the existing baseline conditions and includes the environmental and socio-economic context which has been used to identify the problems and opportunities facing Leeds, and on which the impact assessment has been based.
- Section 4 sets out the SA objectives, targets and indicators.
- Section 5 provides the findings of the impact appraisal and provides an outline of the methodology used. It also describes mitigation measures as appropriate.
- Section 6 outlines proposals for future monitoring.

2 Sustainability Appraisal Process

2.1 The Study Area

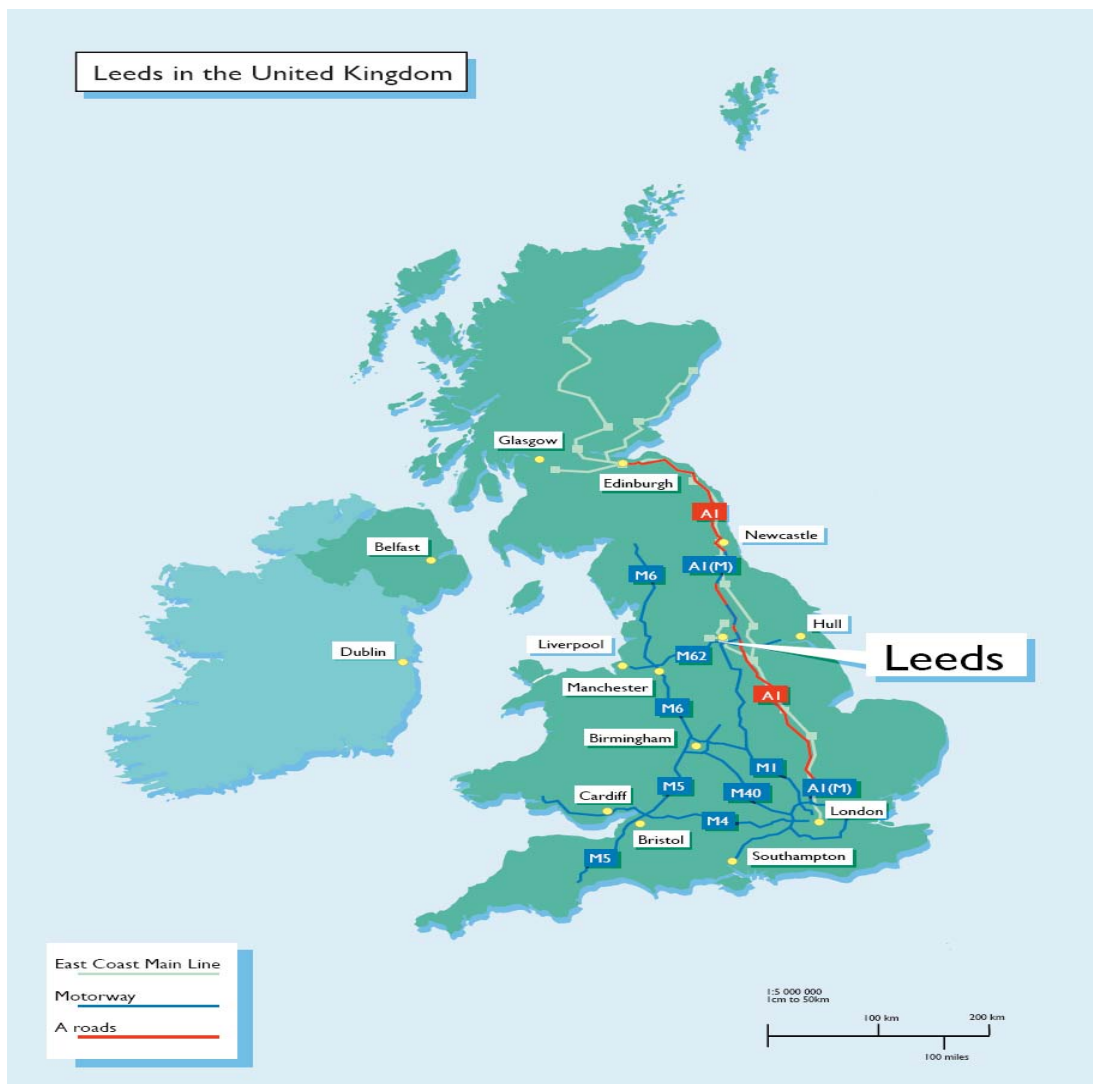
The study area for the SA of the WSR corresponds with the administrative boundary for Leeds.

Leeds covers 552 sq km, and is the second largest Metropolitan District in England with a population of 719,000.

Leeds is considered to be the regional capital of Yorkshire and the Humber and is located near the geographical centre of the UK at the end of the M1 in West Yorkshire. Neighbouring districts include: Bradford, Harrogate, Kirklees, Selby and Wakefield.

Maps 2.1 and 2.2 below show the geographical location of Leeds within the national and regional context.

Map 2.1 Leeds in the United Kingdom



Map 2.2 Leeds in Northern England



2.2 Timeframe

The temporal scope of the SA equates to that of the WSR and therefore covers the period from 2006 – 2036.

2.3 Technical Scope

The technical scope of the SA is governed by the requirements of the SEA Directive and the 2004 Regulations which require:

- a description of the baseline environment,
- links between the plan and other relevant policies, plans, programmes and environmental objectives,
- identification of existing environmental problems within the policy area,
- identification and discussion of the alternatives to be considered in the plan,
- the plan's likely significant effects on the environment,
- the mitigation measures envisaged, and
- the monitoring measures envisaged.

2.4 Stages of the SA

In keeping with the requirements of the 2004 Regulations, the SA for Leeds WSR is being undertaken in five key stages. These are:

- Stage A: Context, Objectives and Baseline
- Stage B: Scope
- Stage C: Assessment and Mitigation
- Stage D: Reporting and Consultation
- Stage E: Monitoring

Stages A – D of the process have been undertaken prior to production of the draft Sustainability Appraisal Report. It is anticipated, that stages C and D will be revisited in completion of the public consultation exercise and in preparing the final WSR.

2.4.1 Stage A: Context, Objectives and Baseline

The background information required for undertaking the SA was collected at the onset of the process to determine the state of the environment and to ensure that the Waste Strategy is considered within an accurate socio-economic and environmental context. This process also allowed any gaps in the baseline data to be identified at an early stage.

2.4.2 Stage B: Scope

The purpose of Stage B was to focus the SA, by identifying the issues which it will address and the way in which they will be assessed. The guidance recommends that the four statutory consultees, English Nature, English Heritage, Environment Agency and Countryside Agency, are consulted on “the scale and level of detail of the information which must be included in the Environmental Report”.

As a result, it is best practice to produce a scoping report for dissemination to the statutory environmental consultees at this stage. A Scoping Report for the Leeds WSR was produced in November 2005 and was issued to the statutory consultees for consultation.

The Scoping Report presented the context of the SA including an overview of other international, European, national, regional and local plans and programmes of relevance to waste management. Relevant policies, objectives and targets within these documents were documented and presented in the Scoping Report.

The Scoping Report also presented existing baseline conditions and future trends associated with Leeds, and identified environmental pressures and opportunities. This information was used as a basis for setting SA objectives that have guided the appraisal of the WSR. These are discussed in detail in Section 4 of this SA report.

Key uncertainties encountered during the scoping stage of the process was gathering sufficient up-to-date baseline data on waste and minerals. The majority of the baseline data regarding waste was in the process of being collated and has been incorporated into Section 3.

The process documented in the Scoping report was consulted on by Leeds City Council corporate SEA working group, who considered the methodology at each stage. The objectives were reviewed by Leeds City Council cross departmental waste strategy group and a Leeds City Council cross sector review was carried out by Leeds City Partnership Waste Task Group.

2.4.3 Assessment and Mitigation

The purpose of this phase of the SA has been to demonstrate that the likely sustainability effects of the plan have been considered, taking both the objectives of the SA and the geographical scope of the draft plan into account, and to propose measures to prevent, reduce or offset any significant effects.

As with the process of preparing the WSR, the SEA Directive places considerable emphasis on the consideration of reasonable alternatives. These have been

considered and their potential sustainability effects identified. The options considered and reasons for alternative selection or rejection are discussed in detail in Section 5 of this report.

The effects of the principles, objectives and key themes and policies of the WSR have also been appraised. Proposals for mitigation to prevent or reduce potential adverse effects have been proposed where relevant. The type of mitigation has included the refinement of certain measures or the inclusion of certain technical measures at the implementation stage. The results of the appraisal are provided in Section 5.

Proposals for monitoring the performance of the WSR over time against the SA objectives are presented in Section 7.

2.4.4 Stage D: Reporting and Consultation

The SA report is the key deliverable of the SA, the purpose of which is to illustrate the process undertaken to complete the SA, to allow consultation and to demonstrate compliance with the SEA Directive.

This SA report will be made available to the public for comment, alongside the WSR. The timing of this phase is therefore closely related to the completion of the WSR.

Following the consultation phase a further statement will be produced to demonstrate how the consultation responses have been taken into account and why and how any changes have been made to the WSR and/or the SA as a result.

2.4.5 Stage E: Monitoring

The environmental effects of the WSR will require regular monitoring to ensure that any significant environmental effects arising from the Strategy's implementation are identified and, where necessary, remedied at the earliest opportunity. This is presented in Section 7.

2.5 Sustainability Appraisal Methodology

In order to contribute towards the development of the draft WSR and its vision, objectives and key themes, as summarised in Section 1.2, the SA process has been undertaken in close consultation with the WSR team and key stakeholders to ensure that sustainability issues have been appropriately addressed.

The methodology for undertaking the impact assessment, together with a description of the environmental opportunities and problems facing Leeds and the draft SA objectives, was identified in the Scoping Report.

In order to satisfy the requirements of the SEA Directive the prediction of environmental effects of the WSR would involve:

- Identifying the changes to the environmental baseline, which are likely to arise from the plan, in comparison to the do-nothing situation.
- A description of their likely nature, timing and duration, as well as any secondary, cumulative or synergistic effects are predicted.
- An evaluation of the significance of the predicted environmental effects in relation to the SA objectives.

In order to satisfy the SEA Directive and the SA requirements the assessment has taken the following key steps, as identified in Figure 2.1.

Figure 2.1



In order to provide a means of determining to what extent the Waste Strategy Review achieves the SA objectives the first step in the assessment process was to develop a set of appropriate and measurable indicators and targets for each SA objective (Step 1).

The next step (Step 2) was to assess the alternatives against the SA objectives which included the do-nothing scenario (the situation without the Waste Strategy Review).

A strategic assessment of the vision and WSR objectives against the SA objectives was carried out for (Step 3). This provided a strategic overview of the overall predicted social, economic and environmental impacts of the WSR. This was supported by an in-depth assessment of the Key Themes of the WSR and the associated policies (Step 4), which included assessing the predicted impacts against the SA objectives and considering the significant secondary, cumulative and synergistic effects.

The results of the assessment of effects and the suggested mitigation are presented in Section 5 of this report (Step 5).

2.5.1 Presentation of the assessment

Given the complex nature of the SA appraisal process a clear and simple method for presenting the results of the appraisal has been produced in the form of a matrix. This provided a focus to the Sustainability Appraisal Report and the consultation process. The appraisal of each objective/key theme against the SA objectives is presented in Section 5 of this report and a diagrammatic summary of the appraisal of the WSR objectives and key themes in relation to their likely effect on the environmental objectives is presented alongside the main written sections of the report. The symbols used to illustrate the predicted effects in the matrix are described in Section 5.2.

2.6 Consultations

The objectives were reviewed by Leeds City Council cross departmental waste strategy group and a Leeds cross sector review was carried out by the Leeds Environment City Partnership Waste Task Group.

The scoping report was discussed internally to Leeds City Council corporate SEA working group, who considered the methodology at each stage. The scoping report was distributed externally to the statutory consultees for comment in November 2005. The responses from this stage of consultation have been taken on board and a summary of consultation responses and action taken is included in Table 2.1. Full copies of the consultee responses to the WSR scoping report are included in Appendix 3.

Table 2.1 Summary of Statutory Consultation Responses to the Sustainability Appraisal Scoping Report

Consultee	Key Issues Raised	How comments were taken on board
Environment Agency	Reference to BPEO should be deleted.	Reference has been deleted and reference made to PPS10.
	The United Kingdom Management Plan for Exports and Imports of Waste should be included in the review of relevant Plans and Programmes section.	The United Kingdom Management Plan for Exports and Imports was reviewed and is included in Appendix 1.
	The distances that waste is transported for treatment or disposal should be included in the sustainability assessment.	Overview provided in Table 3.3.
	It should be made clear what types of waste are covered by the Strategy.	Type of waste covered in the Strategy is described in section 1.1
	The baseline (flooding and waste data) should be updated and needs clarification and interpretation.	The baseline data section has been updated and clarification provided. Up to date data on waste is now provided and includes information on waste management methods, waste composition, waste growth and recycling performance. Flooding section has been updated and relevant statistics provided.

Consultee	Key Issues Raised	How comments were taken on board
Countryside Agency	Suggest inclusion of Rural Strategy 2004, The Future for Transport 2004, Countryside Character Areas Volume 3. Regional Environmental Enhancement Strategy for Yorkshire and Humber 2003 and the Rights of Way Improvement Plans (ROWIPs).	These documents, apart from 'The Future for Transport 2004', have been included in Appendix 1.
	Data on Green infrastructure corridors missing.	No data currently available.
	Consider inclusion of the following sub-objectives: <ul style="list-style-type: none"> • green infrastructure corridors that are able to connect green and open spaces and help give access to the surrounding countryside by both walking and cycling; • to ensure urban fringe and rural landscapes are protected and enhanced and degraded landscapes are improved and significant loss of landscape character and quality minimised; • linking of green spaces to create green infrastructure corridors; • % of greenfield and or green belt areas used for development and % of urban fringe land that is degraded or not managed that is brought back into productive or recreational use. 	Protection of rural areas through ensuring distinctiveness is maintained has been added in sub-objective 4 under SA10. Added a sub-objective under SA 13 'to ensure urban fringe and rural landscapes are protected and enhanced and degraded landscapes are improved and significant loss of landscape character and quality minimised'.
English Nature	The list of UK statutes should include the 1981 Countryside and Wildlife Act as amended.	This has been updated to include the 1981 Countryside and Wildlife Act as amended.
	Robust targets need to be in place.	Revised targets are provided in Appendix 2.
	List of LNRs is not complete.	List of LNRs has been updated.
English Heritage	Separate the natural environment and the historic environment into two separate SA objectives.	The broad objective of conserving and enhancing the built and natural environment is further supported by sub-objectives that address both aspects of the built and natural environment sufficiently.
	In the assessment criteria, include a category that covers areas where relationship is uncertain.	This is included in the assessment criteria and uncertainty is denoted by a ? symbol.
	Reference should also be made in the section on UK Statutes and Policy Statements to the Government statement The Historic Environment: a Force for Our Future (DCMS 2001).	Reference of this document is made in Appendix 1.
	The indicators for the historic environment would benefit from the following amendments:-The indicator relating to Listed Buildings should be changed to "The number of Listed Buildings and % of Listed Buildings on the Buildings at Risk Register". Its Target should be amended to read "To	Indicators and targets have been amended as suggested.

Consultee	Key Issues Raised	How comments were taken on board
	remove at least 10 BARs per year through positive management”.	
	There is one Registered Battlefield in Leeds. We would suggest the following Indicator “Loss or damage to the character or setting of the Registered Battlefield.	Indicator has been added under the ‘conserve and enhance the natural and built environment’ objective.

In addition, the ‘Guide to SA for the Leeds Local Development Framework’, on which the SA objectives have been based, has already been the subject of consultation. The feedback from this consultation exercise was taken into consideration during the preparation of this SA and has included amendments and additions to the SA objectives, as well as providing further baseline information. Consultation responses received from the statutory consultees on the SA objectives contained in the Leeds SA framework are included in Table 2.2 below.

Table 2.2 Summary of Statutory Consultation Responses to Leeds SA framework objectives

Consultee	Key Issues Raised
Environment Agency	<ul style="list-style-type: none"> ▪ SA objectives recognition, then protection/mitigation of brownfield sites of ecological interest ▪ The biodiversity objective should be widened to include all BAP species, not just Leeds’ 10 priorities – otters and voles present in Leeds and not acknowledged in Leeds BAP. ▪ Need additional objective relating to broad habitats (e.g. rivers & streams), networks of natural habitats and biodiversity within development. ▪ Add reference to Leeds designated SEGIs and LNAs. ▪ Need for inclusion of flood risk in Leeds and for Strategic Flood Risk Assessment. ▪ No reference to water resources and quality in natural resources SA objective. ▪ Amend wording of waste sub-objective to “will it promote re-use, recovery and recycling of waste close to source”. ▪ EA suggests that LCC needs a waste recycling facility to assist in meeting above proposed objective. ▪ Need to clarify definition of household waste – whether it refers to items taken to Civic Amenities site and/or doorstep collection.
Countryside Agency	<ul style="list-style-type: none"> ▪ Baseline should contain data on amount/length of PROW’s and cycle routes in the area and should identify areas of greenspace, natural habitat and green corridor ▪ The sub objectives do not match those identified in the Regional Sustainability Appraisal namely, supporting local distinctiveness and design, taking account of the geomorphology of the land, and encouraging reuse of buildings Will protect material assets
English Nature	<ul style="list-style-type: none"> ▪ No mention is made of the decline in protected species other than those identified in Leeds BAP
English Heritage	<ul style="list-style-type: none"> ▪ Landscape objective should state more explicitly that it is about ensuring that the distinctiveness of parts of the city is maintained/reinforced. ▪ Prefer the use of “preserve” rather than “conserve” the historic environment.

The consultation exercises that have been carried out to date have provided various opportunities for interested parties to contribute towards and influence the development of the Waste Strategy Review. These are summarised in Table 2.3.

Table 2.3 Waste Strategy Review Consultation

Date	Consultation Method	Involvement
Jun-Jul '05	Initial report taken to Area Committees across the city for discussion and feedback	Elected Members / General Public
Aug '05 – Sep '05	Elected Member visits to different waste processing plants in the UK	Elected Members / Council Officers
Aug '05 – Dec '05	Independent Scrutiny Inquiry conducted into technology options available for Leeds	Elected Members
Sept '05	Individual briefing meetings held with all political groups to present information and seek opinions	Elected Members
Sept '05	Four page supplement in Leeds City Council's 'About Leeds' newspaper on the future of recycling and waste in Leeds. Public feedback requested via freepost questionnaire. 1400 surveys returned	General Public
Sept '05	Online questionnaire published on Leeds City Council's website. 400 responses received	General Public
Sept '05	Online questionnaire published on Leeds City Council intranet (combined results with above exercise)	Leeds City Council Staff
Sept '05	Presentations and consultation at Leeds Environment City Partnership Waste Task Group meetings	Representatives from regional government, the private sector, universities, the Environment Agency, the voluntary sector and environmental organisations
Oct '05	Meeting with Groundwork UK to gauge opinions on options for Waste Management in Leeds	Voluntary Sector Organisations, representing Leeds Voice
Nov '05	Meeting with Leader Management Team, Senior Elected Members to consult over final recommendations	Elected Members (Leader Management Team)
Nov '05	Meeting with Friends of the Earth, Environmental Group to gauge opinions on options for Waste Management in Leeds	Environmental Organisation
Nov '05	Stakeholder workshop to discuss and evaluate the technology options available to Leeds	Elected Members, senior council officers, external advisors and representatives from community and environmental organisations

Over 1700 responses were received from the people of Leeds in response to the September 2005 questionnaire. This questionnaire sought public comment on the future of recycling and waste management in Leeds, and asked the public to identify the most important issues for consideration in arriving at the preferred Waste Solution for the City. Table 2.4 shows a summary of the results.

Table 2.4 Summary of the priorities for the Waste Solution for Leeds identified by the public

	Keeping cost down	Proven track record	Effects on environment	Minimising landfill	Maximising recycling	Generating energy from processing waste	Minimising sites needed for waste processing
Important	66%	84%	98%	97%	99%	91%	69%
Less important	34%	16%	2%	3%	1%	9%	31%

Maximising recycling, minimising landfill and minimising negative effects on the environment were found to be the most important priorities for the public. 91% of respondents felt that the ability to generate energy from waste was important, and 84% felt that the track record of the selected technical solution was important. Fewer respondents (although still a majority), considered that the issues of cost and minimising the number of sites required should be the most important priorities.

Following approval from the Leeds Executive Board in December 2005 the draft strategy was placed on consultation in January 2006. The consultation period is scheduled to conclude in May 2006. Further details of the planned consultation initiatives for the draft Waste Strategy review are provided in Table 2.5.

Table 2.5 Waste Strategy Consultation – Planned Initiatives

Date	Consultation Method	Involvement
Jan '06	Citizens' Panel Consultation	Citizens' Panel Members / General Public
Jan-Jun '06	Freepost address set up to receive general queries from members of the public about the Waste Strategy, a form of open and ongoing consultation	General Public
Jan – Jun '06	Waste Strategy Online feedback form and questionnaire to be posted on www.leeds.gov.uk	General Public
Jan – Jun '06	Waste Strategy Online feedback form and questionnaire to be posted on Leeds City Council Intranet	Leeds City Council Staff
Feb – Mar '06	Consultation of Community Forums in Leeds – use of Citizen's Panel as formal method of feedback	General Public
Mar – Apr '06	Consultation of Area Committees, to achieve sign off of consultation from Community Forums	General Public / Elected Members
Mar / Apr '06	Formal consultation of Race Equality Advisory Forum	REAF Members, as representatives of Ethnic Minority Communities in Leeds
Jan- Mar '06	Formal Consultation of Women Speak Out Network	Women Speak Out Network Members, representing the views of Women in Leeds
Jan- Mar '06	Formal Consultation of Access Advisory Group	Access Advisory Group Members, representing the views of disabled people in Leeds
Date to be confirmed	Formal Consultation of Leeds Youth Parliament	Members of the Leeds Youth Parliament, representing the views of Young People in Leeds

Date	Consultation Method	Involvement
Jan- Mar '06	Consultation of Leeds Voice Environmental Group	
Mar '06	Article in About Leeds	General Public
Jan – Feb 06	Formal Consultation of Statutory Consultees	English Nature, English Heritage, Countryside Agency, Environment Agency, DEFRA/Enviros
Jan – Feb 06	Letter inviting formal comments on waste strategy	Other Local Authorities, Regional Government
Mar '06	3rd Party Stakeholder workshop/open meeting	
Jan – Feb '06	Formal consultation of Waste Sector	

3.1 Introduction

This section provides the context for the SA which has been used to inform the identification of problems, opportunities and key issues affecting sustainable waste management in Leeds. This information also forms the basis of the appraisal as it has helped inform the formulation of SA objectives against which the performance of the WSR is tested.

This section consists of:

- A summary of the review of plans and programmes relating to and affecting the WSR; and
- A summary of the existing environmental baseline conditions which are relevant to the WSR including any future trends.

3.2 Relevant Plans and Programmes

A comprehensive review of all relevant plans, programmes and policies at international, European national, regional and local level has been carried out in order to identify how other plans and programmes may influence the approach and content of the WSR.

A list of plans programmes and policies that influence the WSR are included in Appendix 1. On occasions there may be conflict between these programmes. The SA intends to mediate between conflicting aims where there would be an impact on the eventual sustainability of a development as a result of the plan.

National policies steer much of the content of the plan. Currently national planning guidance is a combination of Planning Policy Guidance Notes (PPGs) and Planning Policy Statements (PPSs). In particular, the recently adopted PPS10, 'Planning for Sustainable Waste Management', provides advice about how the land-use planning system should contribute to sustainable waste management through the provision of the required waste management facilities in England and explains how this provision is regulated under the statutory planning and waste management systems. PPS10 reflects the recent changes to Waste Strategy 2000 which is also very significant to the SA of the WSR.

The Regional Spatial Strategy (RSS) for Yorkshire and the Humber (based on Selective Review of RPG12, 2004) and the Regional Waste Management Strategy (RWMS) are key documents which play an important role in the preparation of the WSR. The WSR will have to be consistent with the RSS and RWMS.

Many local strategies and policies are included in the list, as they often form part of the thinking behind city-wide policy development, or play an important role in putting spatial policies into operation.

3.3 Existing Baseline Conditions and Future Trends

This section describes the current environmental baseline for Leeds. The baseline data has been presented according to the topics listed in the ODPM practical guide to SEA.

Baseline data contained within the 'Guide to SA for the Leeds Local Development Framework' and the 'West Yorkshire LTP2 SEA Scoping Report' have been used as the starting point and then additional baseline data specific to the Waste Strategy Review has been collected. The information collected will provide a basis for both forecasting and monitoring environmental effects.

The level of detail of the baseline data collected for the SA varies depending on the topic under consideration but has been pitched at a level considered appropriate for considering the environmental and socio-economic effects of the Waste Strategy during the assessment process. In general this has been focussed at the Leeds local authority level in order to facilitate the identification of social, economic and environmental problems and opportunities facing Leeds that are relevant to the WSR. Where information is not available this has been identified and if data is only available at a regional level this has been included.

3.3.1 Environmental Baseline

Biodiversity, flora and fauna

Leeds supports a wide range of habitats and species. There are a number of designated sites in Leeds relating to biodiversity, flora and fauna. There are 17 Sites of Special Scientific Interest (SSSI) within the Leeds area. The two largest areas are at Fairburn Ings and Mickletown.

By 2004 Leeds City Council owned four SSSIs in an effort to enhance the value to biodiversity of the City Council's own land holdings. These SSSIs include Great Dib Wood, Townclose Hills, Breary Marsh and Fairburn Ings. Of these, three were reporting declining conditions (in part) in 2003 but are now improving.

According to Leeds Biodiversity Action Plan – Habitats and Species Action Plans there has been a decline in important habitats and species that need additional measures and protection. The top 5 priority habitats are:

- magnesian limestone grassland,
- reedbed,
- lowland wet grassland,
- hedgerow ,and
- field margin.

The top 6 priority species are:

- pasque flower,
- thistle broomrape,
- harvest mouse,
- pipistrelle bat,
- crayfish, and
- great crested newt.

The 2001 Biodiversity Action Plan for Leeds also identifies other habitats that are given special consideration including ponds and tree covered areas, all of which have been in decline until recently. The Forest of Leeds is a Leeds City Council initiative that is striving to enhance the woodlands, countryside and urban green spaces of Leeds. The initiative includes a planting programme covering rural and urban areas. The current woodland cover (of two or more hectares) for Leeds is 3,660 hectares, equivalent to 6.63% of the area of the district.

There are 6 local nature reserves (LNR) in Leeds:

- Kippax
- Meanwood Park
- Middleton Woods
- Fairburn Ings
- Breary Marsh
- Chevin Forest Park
- Townclose Hills

Source: Magic Website

There are also 33 sites of ecological or geological importance (SEGI) and 120 Leeds Nature Areas (LNA). Source: Leeds UDP August 2001.

Soil

Leeds has a history of success in industry. However this has had an effect on the landscape and soil qualities of the region through water and land pollution, landscape degradation and subsidence and this has created significant problems for Leeds. However, restoration solutions implemented in response to these problems have further benefited Leeds' landscape and natural habitats.

Flooding

The 1990's was the warmest decade in England since records began. This has had a knock-on effect on sea levels in Yorkshire and Humber. The sea levels have risen between 1 and 3mm per year over the last decades. In Leeds there are 10,883 properties at risk from flooding. The Environment Agency plans to have 1,500 domestic properties protected by flood alleviation schemes by 2013. The City has 407 flood defences with 2.5% of these in poor condition.

The numbers of properties at high risk of localised flooding could typically increase four-fold by 2080. (High risk means a 10% chance of flooding in any year). *Future Flooding Foresight Sept 2004.*

Water Resources

There are 3 major rivers in the Leeds area: the Aire, Calder and Wharf. The quality of the water in these rivers was reported in the Leeds State of the Environment Report 2003. The Wharf is generally of 'very good' biological and chemical quality where it flows through Leeds and supports otters and a thriving fish population. However, both the Aire and Calder flow through mainly urban and industrial areas and, although the quality of both rivers has seen significant improvements since 1990, 100% of the River Aire as it flows through Leeds was graded as 'poor' in 1990. In 2001 this reduced to 16.7%. Continuing contamination of the Aire and Calder is due to surface water run off, trade discharges, mine waters and industrial discharges and pesticides.

Air

Since the introduction of the National Clean Air Acts in the late 1950s there has been a general improvement in the standard of air quality in West Yorkshire. The improvement is mainly attributable to changes in the types of industry that dominate the region, and a switch away from coal and oil towards much cleaner fuels. Since the more visible types of pollution attributed to heavy industry have declined, other types of pollution have become more prevalent. Road transport emissions are now the major source of urban air pollution in West Yorkshire. As car ownership and total distance travelled have continued to grow over time, there has been an accompanying increase in emissions, particularly around areas of traffic congestion.

Air quality in Leeds has generally been improving over recent years with a reduction in the concentration of pollutants (see Table 3.1 below).

Table 3.1 Number of Moderate or High Pollution Days in Leeds

Pollutant	93	94	95	96	97	98	99	00	01	02
Carbon monoxide	0	0	0	0	0	0	0	0	0	0
Nitrogen dioxide	0	3	1	0	1	0	0	0	0	0
PM ₁₀ (particles)	42	42	37	47	49	13	12	1	6	6
Ozone	3	5	21	12	9	3	27	8	10	5
Sulphur dioxide	19	23	15	9	11	6	6	1	3	1

Source: Leeds City Council Air Quality Review

Climatic Factors

The Home Energy Conservation Act (HECA 1995) requires all local authorities in England to write plans detailing how they might achieve a 30% improvement in energy efficiency in housing within their area over the period 1996 to 2011. Leeds City Council supports Friends of the Earth’s target of a 30% reduction from 1990 levels of energy consumption across the city by 2005. Between 1996 and 2002 there was a 6.88% improvement in the energy efficiency of Leeds’s housing.

There is a range of renewable energy resources available in the Yorkshire and Humber region, including a number of sites producing landfill gas in Leeds. Currently only 1.5% of the regional electricity consumption is generated from renewable sources. A recent report suggests that the region could realistically generate 9.4% by 2010 and 22.5% by 2021.

Waste

Table 3.2 below shows the change in the amount of waste sent to landfill and recycled in Leeds between 1998 and 2004. In 2004/05 80% of household waste went to landfill, for which there is a declining capacity. The amount of municipal waste landfilled in Leeds has decreased by 9.1% between 2000/01 and 2004/05 and is predicted to continue to decrease. 80.3% of municipal waste went to landfill in 2004/5.

Recycling rates are increasing in Leeds, however the total amount of household waste increased to 19.6% in 2004/05 which is an increase of 5% on 2003/04. The main responsibility for separation, recycling and disposal remains with Leeds City Council, which has signed a Local Public Service Agreement to achieve recycling rates of 22.7% by 2005/06 (total recycling and composting).

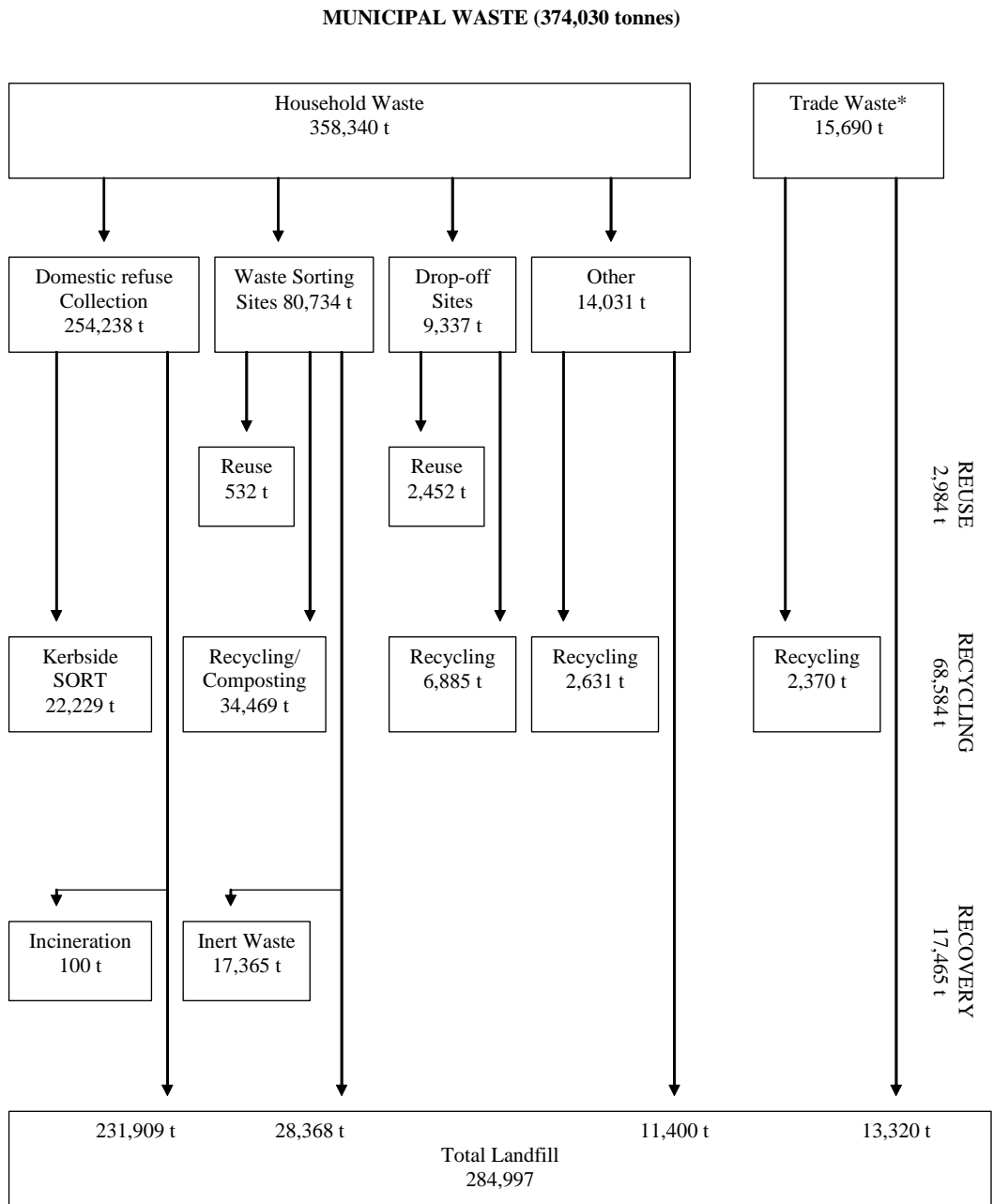
Table 3.2 Waste Management Methods

Households Waste Disposal	98/99	99/ 00	00/01	01/ 02	02/03	03/04	04/05
% of household waste sent to landfill	91.7	91.1	89.4	88.5	86.7	85.4	80.3
% of Household waste recycled (including composting)	7	8	10.6	11.9	12.7	14.5	19.6

Source: Leeds City Council

Figure 3.1 below is an extract from the WSR and provides a summary of the Council's waste management operations for 2004/05.

Figure 3.1 Leeds City Council Waste Management Operations 2004/05



* N.B. -Excludes stock adjustment of 399 t
 -From April 2003, the Council ceased collecting all but minimum amount of Trade Waste

Figures 3.2 and 3.3 below are extracts from the WMS and show the composition of municipal waste in Leeds for wheeled bins for both general (or residual) waste and recyclables.

Figure 3.2 Composition of residual waste in Leeds

Residual Waste (black wheelie bins)

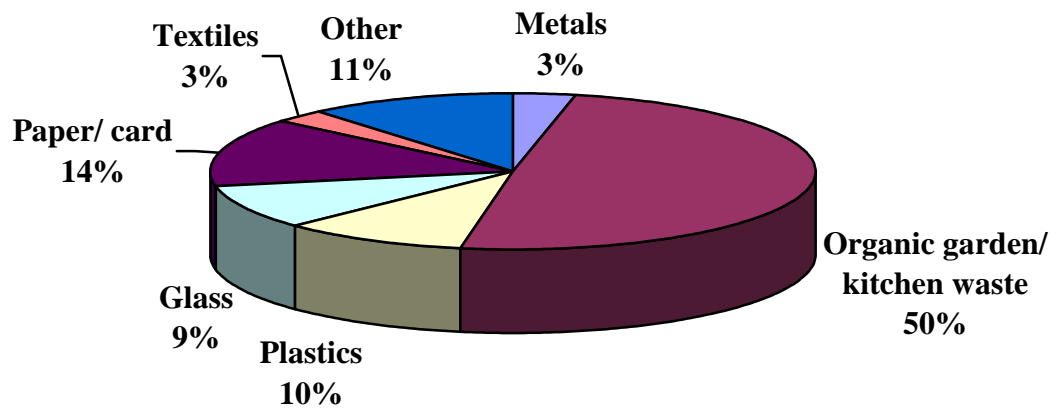


Figure 3.3 Composition of recyclables in Leeds

Recyclables (green wheelie bins)

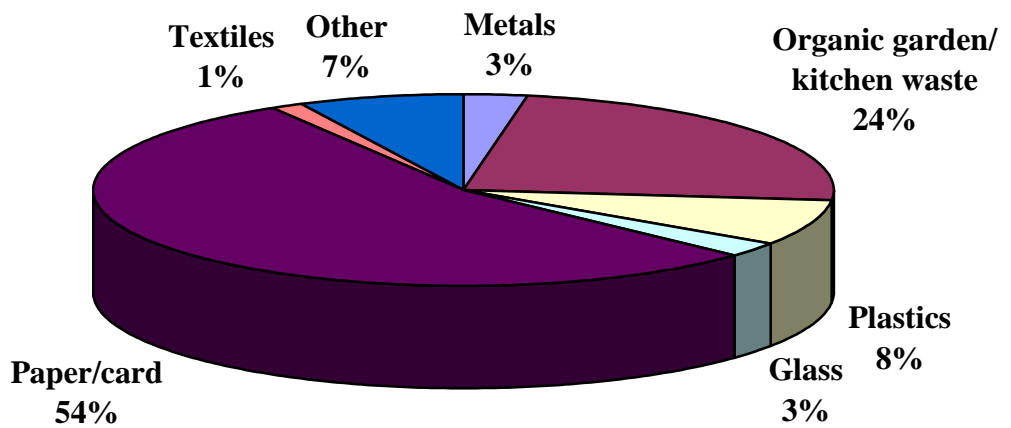


Figure 3.4 Annual Waste growth per household (kg)

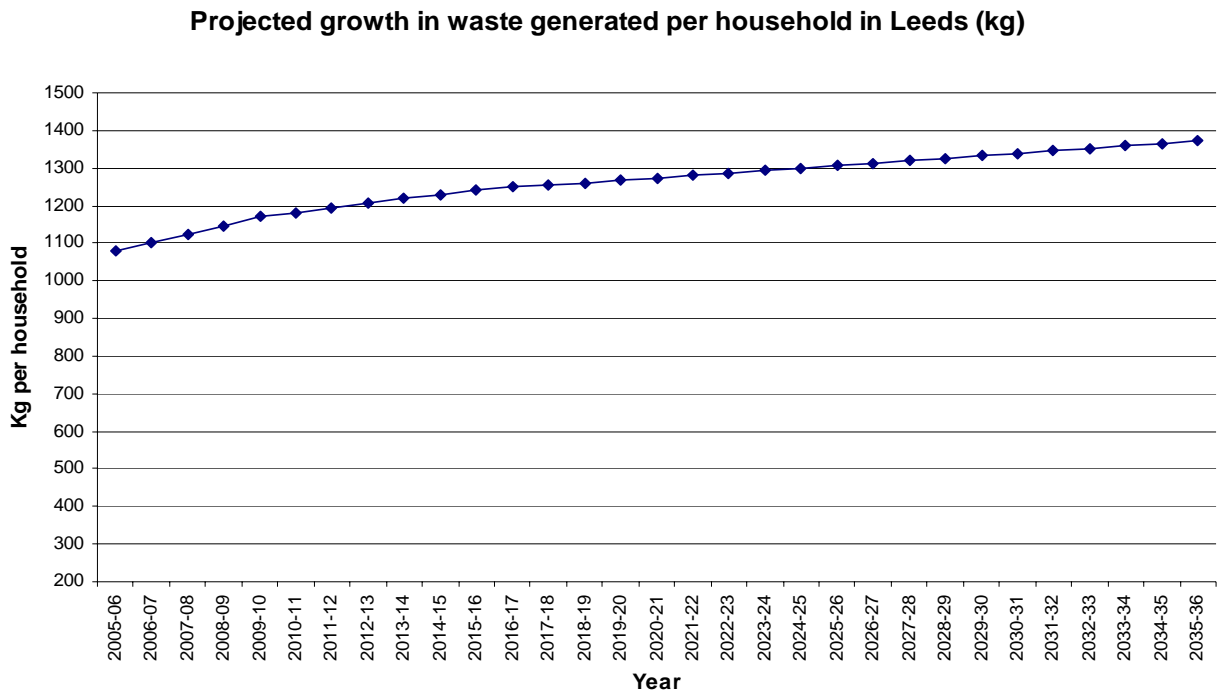
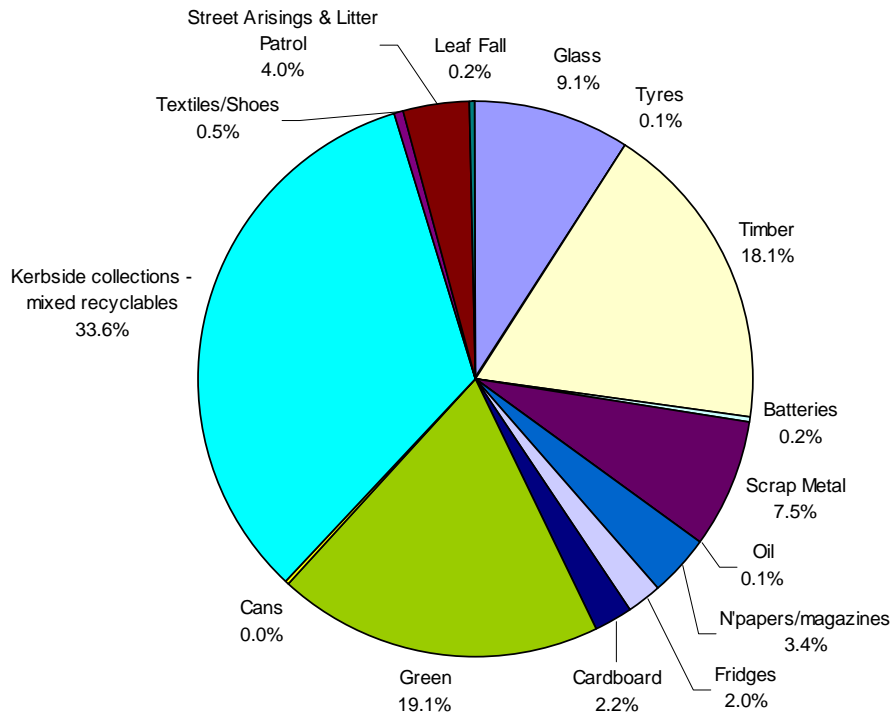


Figure 3.4 above shows expected annual waste growth per household in Leeds up to the year 2036. A number of scenarios were considered which incorporated a range of factors, including national and local historical trends, projected household growth and best data on predictions for waste growth per household. The targeted scenario shown in Figure 3.4 constitutes a reduction in projected waste generation of over 2.5 million tonnes by 2035, as compared to projections based on recent historical growth trends. There is considerable uncertainty about the extent to which the amount of waste will grow, and in forecasting growth the Council has made assumptions that there will be increased pressure through legislation to reduce packaging waste and a growing awareness of the need to change behaviour and attitudes to waste.

Leeds City Council currently offers kerbside recycling to over 88% of households in the City. Facilities are also available to flats using communal bins for co-mingled dry recyclables and glass. 8,500 households currently benefit from this scheme. Recycling facilities are also available at 11 household waste sites, in addition there are over 350 bring sites across the City, providing community based recycling banks. A breakdown of material recycled from household waste including street arisings is shown in the figure below. A total of 66,214 tonnes of waste was recycled.

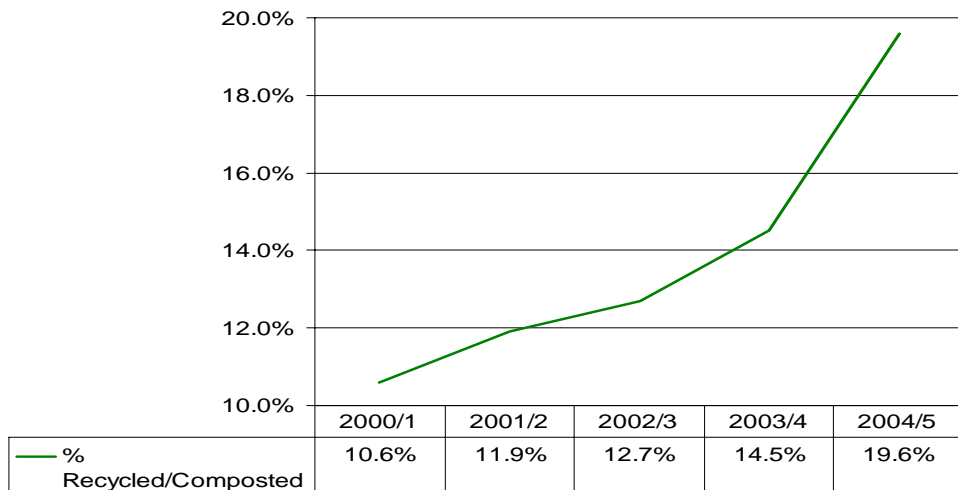
Figure 3.5 Leeds Household Waste Recycling in 2004/05

Leeds Household Waste Recycling in 2004/5 (total = 66,214 tonnes)



Leeds has been the best performing core city in recycling and won an award at the 2005 National Recycling Awards. In 2004/05, the Council achieved a combined recycling and composting rate of 19.6% and levels are expected to reach 22.4% in 2005/06. Recent performance is shown in figure 3.6 below.

Figure 3.6 Leeds Recycling Performance



Minerals

The major mineral deposits found in Leeds are coal, sand and gravel. In a typical year Leeds has 14 quarries, 2 opencast coal sites and 8 secondary aggregates sites. Currently minerals are being extracted from Methley, Arthington, Blackhill, Britannia, Highmoor, Howley Park, Moor Top, Odda Lane and Peckfield. Within the district, two principal areas exist for the extraction of sand and gravel – the Lower Aire valley and the Wharfe valley.

There is insufficient evidence to assess the likely environmental impacts of additional sand and gravel extraction and the ability of the aggregate producing areas concerned to absorb such impacts.

Leeds recycles 100% of used road stone products to reduce environmental impacts associated with quarrying.

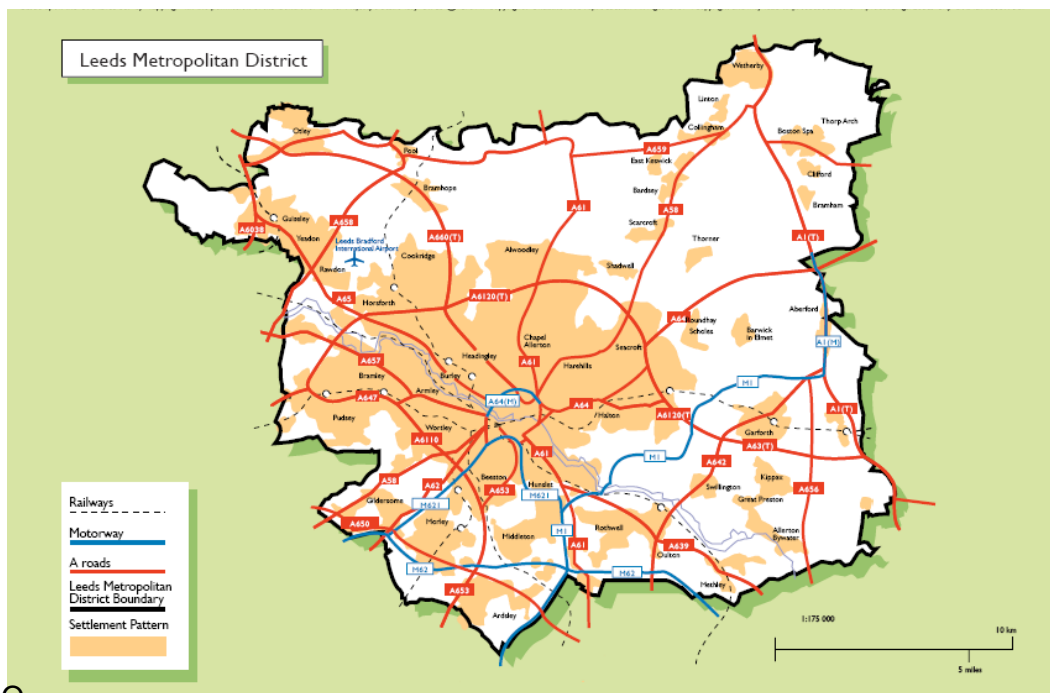
Sustainable Transport

Strategic transport links (as defined in the draft Regional Transport Strategy) to/from Leeds are provided by:

- the M1 and M62 motorways, and A1 and A64 trunk roads,
- East Coast Main Line, Trans-pennine and Leeds-Sheffield (forming part of a north-east-south-west link) rail services,
- Leeds-Bradford International Airport which handled over 2.3m passengers in 2004, and
- the Leeds-Liverpool canal, Aire and Calder navigation waterways.

The primary route network in Leeds is shown in Figure 3.7.

Figure 3.7 Primary Route network – Leeds



Overall traffic in Leeds grew by over 6% between 1991 and 2001, and by 2% between 2000 and 2004. *West Yorkshire Local Transport Plan Progress Report. Vision for Leeds 2004-2020*

Table 3.3 shows current trends in the destinations and distances that different waste types are transported for treatment or disposal. This is taken from the waste arisings at Kirkstall Road and East Leeds transfer stations and nine civic amenity sites within Leeds. The transfer stations handled approximately 38,000 tonnes of waste in April 2005 to January 2006.

The average approximate distance waste is transported for treatment or disposal is 65 kilometres. The wastes that currently travel the furthest are fridges and freezers which are disposed of in London, mobile phones and printer cartridges which are transported to Fife all of which are transported over 300 kilometres. The majority of waste that is not disposed of through landfill is managed outside of Leeds City Council boundary. Waste types that are currently treated or disposed with Leeds are residual, inserts, asbestos, general waste from black bins, scrap metal, wood, gas, stamps, furniture and bikes.

Table 3.3 Summary of destinations and distances that waste is transported for treatment or disposal

Waste Type	Destination	Approximate Distance (km)
Newspaper & Pamphlets	Sita - Kirklees	29
	Yorwaste - Scarborough	107
	Cutts - Doncaster	46 - 72
Mixed Paper	Sita -Kirklees	29
	Yorwaste - Scarborough	107
	Cutts - Doncaster	56
Card	Yorwaste - Scarborough	29
	Blackburns - Ravensthorpe	14 - 47
Steel	Yorwaste - Scarborough	29
Aluminium	Yorwaste - Scarborough	29
Plastic	Yorwaste - Scarborough	29
Residual	Skelton Grange	8 - 30
	Seamer Carr	41
	Sita Kirklees	29
Asbestos	Skelton Grange	12
Inerts	Skelton Grange	8 - 30
	Yorwaste - Rufforth	15 - 51
Scrap Metal	Morley Waste Traders	9 - 43
Fridges / freezers	EMR - London	308 - 334
Wood	Timberpak - Leeds	0.8 - 27
	Hexham	187
Batteries	Morley Waste Traders	9 - 43
	G & P - Darley Dale	100 - 127
Gas Cylinders	BOC - Leeds	6 - 30
	Flo Gas - Leeds	4 - 28
	Calor Gas - Leeds	6 - 42
Oil	OSS - Liverpool	109 - 148
Glass	Midland Glass - Nottingham	100 - 126
	Berrymans - Wakefield	30 - 64
Textiles	Oxfam - Huddersfield	26 - 65
	Yorkshire Air Ambulance - Halifax	28 - 67
	Planet Aid - Northampton	184 - 203
	Rosshoe - Manchester	67 - 105

Waste Type	Destination	Approximate Distance (km)
Green waste	S J Butterfields - Dewsbury	9 - 43
	Yorwaste - Rufforth	15 - 51
Cans	Solidcast - Cheshire	76 - 103
Books	Oxfam - Huddersfield,	28 - 65
	Rosshoe - Manchester	68 - 105
Mobile Phones	Redeem - Fife	344 - 382
Printer Cartridges	HFT - Redeem Fife	344 - 382
Tyres	Credential - Selby	51 - 74
Stamps	Guide Dogs - Headingley	1 - 27
TV's	ERC - York	15 - 50
Computers	ERC - York	15 - 50
Chemicals	Biffa Wakefield	12 - 48
	Bradford	7 - 39
Furniture	Leeds & Moortown - Leeds	2 - 27
	St Judes - Leeds	3 - 30
General Waste	Skelton Grange	8 - 30
Street Arisings	Yorwaste - Rufforth	40
Bikes	Meanwood Valley Urban Farm	0.6
General waste from black bins	Skelton Grange	Various as collected from around the City
Office paper	Sevenside - Cardiff	

Cultural Heritage

There is a variety of cultural heritage to be found in Leeds. There are no World Heritage Sites, but there are approximately 53 Scheduled Ancient Monuments (SAMs) in the city and 80 Class II archaeological sites. There are approximately 3,300 listed buildings and 63 designated Conservation Areas in Leeds City. Much of the character and quality of the conservation areas derives from the use of traditional materials. Conservation Areas range from the city centre suburbs such as Headingley and Roundhay to some towns and villages, including Otley, Wetherby and Pudsey. *Source: Leeds UDP Vol 2 Appendices August 2001, www.leeds.gov.uk and Overview document for Leeds State of the Environment Report 2003*

Landscape

The countryside around Leeds shows great diversity of landscape character. There are four natural areas that form the varied landscapes. These areas are:

- The Coal Measures Natural area: This area covers the major coalfields areas of south and west Yorkshire. In Leeds it covers Morley, Pudsey, the central Leeds conurbation and inner suburbs; Rothwell and Allerton Bywater;
- The Southern Magnesian Limestone Natural Areas: In Leeds, this area covers the eastern part of the district and includes Ledston, Ledsham, Kippax, Barwick, Bramham, Boston Spa, Thorp Arch and Walton;
- The Pennine Dales Fringe natural area: This area stretches from the northern outskirts of Leeds to north of Barnard Castle;

- The Southern Pennine Natural areas: This area in Leeds covers the Hawksworth Moor, the northern side of Guiseley and Otley, stretching to Pool in the east. It is an internationally important area special for its heather moorland and the variety and rarity of birds it supports.

Within these areas, the landscape character varies from strong and attractive in some areas to areas where the character has been seriously depleted. (Leeds UDP August 2001pp 79). The most attractive areas have been designated Special Landscape Areas. There are 18 Special Landscape Areas in the Leeds City Council area. Source: Leeds UDP August 2001.

3.3.2 Socio - Economic Baseline

Leeds has one of the fastest growing economies in the UK and is the driving force within the Yorkshire and Humberside regional economy. The city has major strengths in financial and legal services, being home to over 30 national and international banks and several law firms which now rank amongst the top ten firms in the UK. Its retail and media sectors are also very strong and the city is the UK's third major manufacturing centre.

Leeds is also the largest employment centre in the region and in terms of employment structure is the second most diverse of any major Great Britain city. Over the last 20 years, more jobs have been created in Leeds than in any other UK city outside London – a net increase of 91,000 jobs. The city is expected to generate a third (some 30,000 new jobs) of the region's total employment growth over the next decade. The city has had a sustained period of employment growth and low unemployment. Although Leeds has a strong and dynamic local economy, it is polarised. The two speed economy gap should be reduced by tackling unemployment and improving local skills. Rates of unemployment range from 1% in some wards to 12% in others with the average 4%. Source: *Neighbourhood Renewal Strategy*.

The stock of VAT registered companies in Leeds totals 18,230 with almost 26,000 business units, 28 PLCs. and a further 30 based elsewhere in West Yorkshire. Leeds is not dependent on a limited number of companies or sectors. It is a major employment provider for adjacent districts: estimated 70,000 net in-commuters in 2005, with an estimated 10, 000 increase over the next decade.

To manage the City's waste, the Council spends approximately £29.4m every year on refuse collection and waste management services; approximately £5m is spent on landfill tax alone.

Population and Human Health

According to the mid 2003 population estimates there were 715,300 people residing in Leeds of whom 48.4 percent were male and 51.6 percent were female. The population density of Leeds averaged 1,299 people per square kilometre, compared with an average of 323, for the region and 380 people per square kilometre for England overall. The average age of the population in Leeds was 37.6 years. This compared with an average age for England and Wales of 38.6 years. 68 per cent of the population in Leeds are generally in good health, 21 percent in fairly good health and 9 percent not in good health. 17 percent of the population was reported to be living with a limiting long- term illness.

Household Size

There has been a significant increase in the number of households in Leeds – from 295,100 in 1991 to 312,541 households in 2001, of which 301,614 are occupied. The average size of households in Leeds was 2.3 people compared with an average of 2.4 people in England and Wales. It is estimated that there will be 325,800 households in 2006 creating more pressure upon infrastructure and generating more waste.

Noise

Although at present there is little data available on background noise levels in the region, EC Directive (2002/49/EC) for the Assessment and Management of Environmental Noise proposes to introduce two noise indicators based on period average noise levels. ‘Annoyance’ will be indicated by the average noise level covering the day, evening and night (LDEN), and ‘sleep disturbance’ will be characterised by an LNIGHT indicator.

Member states will be required to publish their limit values in terms of LDEN and LNIGHT for road traffic noise, rail noise, aircraft noise around airports and industrial noise. The Directive also proposes to introduce the new process of noise mapping, which will audit existing levels of environmental noise against proposed limit values. Noise mapping will form the basis for the development of Action Plans and strategies at a local, national and EU level to combat the increasing problem of noise pollution. Each member state must identify all major roads, railways and airports and agglomerations with more than 250,000 inhabitants.

DEFRA is in the process of awarding contracts to consultants who will lead the noise mapping process for all local authorities across England. The initial noise mapping programme has been delayed due to a combination of technical & data collection problems. DEFRA maintains that noise mapping for all relevant agglomerations in England shall be completed by the end of the year 2005.

Recreation resources

Leeds UDP outlines the importance of greenspace for recreational purposes. It recognises the need for every individual to have access to greenspace especially children. Four of the City Council’s parks hold ‘green flag’ status.

The Green Flag Award scheme, managed by the Civic Trust, is the national standard for parks and green spaces. Sites must be judged to be welcoming, safe and well maintained with the strong involvement of the local community.

Public Awareness and Education

Through public awareness and education initiatives, the Council has launched a successful ‘real nappy’ project in partnership with Sure Start. Home composting is also supported through publicising the availability of low cost home composters. Although currently there is no quantifiable data on the success of these projects in terms of waste minimisation, the Council believes waste growth has slowed in Leeds in recent years.

Over 20,000 tonnes of potential waste in Leeds was re-used in 2004/05. This was done in partnership with local community based organisations and through charities such as Oxfam and Yorkshire Air Ambulance.

Social Deprivation and Crime

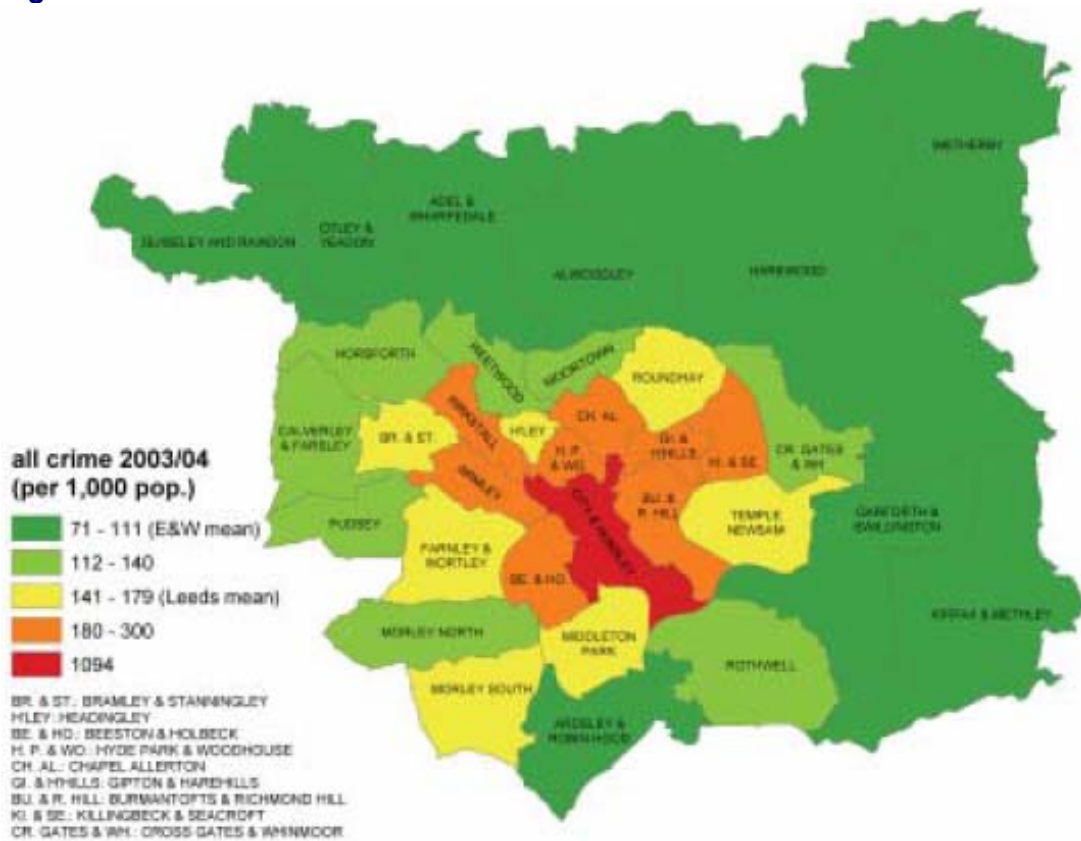
Some parts of Leeds are considered to be more deprived than they should be in a successful city according to ‘Vision for



Leeds'. Around 150,000 people in Leeds, almost 20% of the population, live in areas officially rated as amongst the most deprived in the country. While unemployment is low for the city as a whole, there are some areas in Leeds that experience unemployment that is more than double the city's average. There are similar inequalities in house prices, educational achievement, health and crime. (*Vision for Leeds 2004-2020, Leeds Initiative, 2004*).

Figure 3.8 below shows that while the outer wards have crime rates close to the England and Wales average, the inner city wards have much higher crime rates, as much as ten times more than the national average.

Figure 3.8 Crime rate



3.4 Social, Economic and Environmental Pressures and Opportunities

A number of pressures, opportunities and uncertainties have been identified through the collection and review of baseline data and the review of plans and programmes and other literature relevant to the study area. Many of these pressures and opportunities were identified in the West Yorkshire Local Transport Plan. In addition to the problems and opportunities identified through the baseline review, wider key sustainability issues facing Leeds were identified as part of the Leeds Sustainability Appraisal Guide and these have been incorporated where relevant. Additional pressures and opportunities facing the city have been identified following discussions with the waste management team at Leeds City Council. These pressures and opportunities identified have been taken into account when developing the WSR.

3.4.1 Pressures

- the lack of Waste Transfer Stations despite the size of the Authority,
- the need to transport waste outside Leeds for treatment and/or disposal,
- the low cost of landfill locally has meant fewer drivers for change compared to other regions,
- the impact of a diverse socio-economic profile of Leeds on waste generation, recycling, etc. alongside the mix of affluent/rural areas and areas of social deprivation,

- the impact of a high ethnic minority population on waste generation, recycling, etc. in terms of a need for targeted initiatives and education (e.g. overcoming language, cultural barriers),
- Leeds has relatively low rates of productivity compared with other European cities,
- crime and the fear of crime,
- access to local services is poor in some parts of the city and especially in rural areas,
- the need to change behaviour and attitudes to waste,
- the need to encourage greater recycling and composting of household waste to achieve sustainable waste management,
- the amount of renewable energy generation in West Yorkshire needs to be increased to meet sub-regional and regional targets,
- the increasing legislation being introduced to achieve sustainable waste management,
- meeting the targets set by government and the European Union,
- continuous improvement required to build on current good service delivery, and
- the uncertainty over growth trends.

3.4.2 Opportunities

- The ability to address climate change issues and increase renewable energy generation,
- potential to improve landscape and townscapes by redeveloping brownfield sites and encouraging good design,
- minimise waste arisings by educating people about waste,
- possible creation of jobs within the waste management industry which is likely to result from increased recycling and recovery activities,
- increase the amount and type of waste management facilities available as alternatives to landfill, and
- reduce the distance waste is transported.

4.1 SA Objectives

In order to provide a means, by which the environmental effects of the WSR could be described, analysed and compared SA objectives were developed. These are presented in Table 4.1 below.

The SA objectives are predominantly taken from 'A Guide to Sustainability Appraisal of the Leeds Local Development Framework'. The production of this document involved extensive review of environmental issues and constraints including international and national objectives relevant for an SA. This document was used to ensure consistency with the SA work carried out for Leeds City Council whether carried out internally or externally. Also this document has already been through an internal consultation process and was also submitted to the statutory consultees.

A summary of the comments received from the statutory consultees are presented in Table 2.2 in Section 2.6. The SA objectives have been extensively reviewed and discussed in the context of the WSR by Leeds City Council cross departmental waste strategy group and a Leeds City Council cross sector review was carried out by Leeds City Partnership Waste Task Group.

Consideration has also been given to the following documents:

- Environmental Assessment of Plans and Programmes Regulations 2004,
- regional sustainability framework,
- relevant social economic and environmental objectives resulting from the review of plans and programmes,
- consultation with Leeds City Council cross departmental Waste Strategy Group and Leeds Environment Partnership Waste Task Group.
- the pressures and opportunities, facing the authority that may be affected by the WSR, pressures and opportunities were identified from the baseline review in Sections 3.4.1 and 3.4.2, and
- Jacobs Bابتie best practice.

Table 4.1 SA Objectives

	SA Objectives
SA1	Maintain or improve the conditions which have enabled business success, efficient economic growth and investment.
SA2	Improve the social and environmental performance of the economy
SA3	To minimise the risks to human health deriving from waste management
SA4	Increase participation, awareness and education in relation to waste issues
SA5	Reduce overall rates of crime, and reduce the disparities in crime rates across Leeds.
SA6	Increase social inclusion, community cohesion and active community participation
SA7	Minimise the pressure on greenfield land by efficient land use patterns that make good use of derelict and previously used sites & promote balanced development
SA8	Conserve and enhance the natural and built environment
SA9	Reduce greenhouse gas emissions
SA10	Improve access to services and facilities whilst reducing motorised journeys.
SA11	Reduce the growth in waste generated and landfilled in Leeds.
SA12	Reduce pollution levels and improve cleanliness
SA13	Maintain and enhance landscape and townscape
SA14	Increase the efficient use of energy and natural resources and sustainable design

4.2 SA Sub Objectives

Table 4.2 sets out the sustainability appraisal sub-objectives that were used to inform the appraisal of the WSR. The sub-objectives reflect:

- other plans, strategies and programmes (Section 3);
- the problems and opportunities identified through the consideration of the baseline environmental information in Section 3.

4.3 SA Targets and Indicators

A comprehensive set of potential targets and indicators has been developed, once again, based on those contained in the guide to SA for the LDF. Using the targets and indicators set out in the guide to SA for the LDF ensures consistency between Leeds City Council SA and is also an efficient use of resources and reduces duplication of effort. These targets and indicators have been used to aid in the assessment of the WSR performance against each of the SA objectives. These, along with their sources are listed in Table 4.3.

This list of targets and indicators will be finalised once the WSR Action Plan has been produced.

This will need to be continuously reviewed and updated to ensure that the indicators are still relevant to developing the Waste Strategy and subsequently monitored.

Consideration will also need to be given to the monitoring programme for the WSR and the Regional Waste Strategy to ensure the data collected is available and relevant and it complements work already being carried and to save duplication of effort.

Table 4.2 SA Sub-Objectives

SA Objectives	SA Sub-Objectives
Economic	
Maintain or improve the conditions which have enabled business success, efficient economic growth and investment.	<ul style="list-style-type: none"> ▪ Will it support employment opportunities for local people? ▪ Will it encourage investment, in particular, in new and emerging technologies which provide or support sustainable products or services? ▪ Will it help to meet waste management needs generated by existing businesses and future business development? ▪ Will it improve productivity? ▪ Will it enhance competitiveness? ▪ Will it encourage indigenous business? ▪ Will it demonstrate value for money?
Improve the social and environmental performance of the economy	<ul style="list-style-type: none"> ▪ Will it support locally based businesses and/or local self- help / voluntary schemes? ▪ Will it support reduced resource use by business? ▪ Will it reduce environmental impact of economic activities? ▪ Will it provide flexibility to ensure long-term deliverability?
Social	
To minimise the risks to human health deriving from waste management	<ul style="list-style-type: none"> ▪ Will it promote healthy life-styles, and help prevent ill-health? ▪ Are suitable provisions included to mitigate impacts? ▪ Will it improve traffic management? ▪ Will it reduce noise, especially from traffic? ▪ Will it increase health and safety at waste facilities?
Increase participation, awareness and education in relation to waste issues	<ul style="list-style-type: none"> ▪ Will the strategy facilitate the improvement of public awareness of waste issues? ▪ Will the Strategy increase participation in waste initiatives? ▪ Will it help to achieve Waste Strategy initiatives through education and awareness? ▪ Will it encourage ICT links to connect isolated and disadvantaged communities to services and resources?
Reduce overall rates of crime, and reduce the disparities in crime rates across Leeds.	<ul style="list-style-type: none"> ▪ Will it help address illegal waste operations? ▪ Will it provide sufficient Civic Amenity sites and recycling points to reduce the incidences of fly-tipping? ▪ Will it help to provide sufficient waste facilities in areas in Leeds to reduce any disparities across Leeds? ▪ Will it contribute positively to factors linked to the fear of crime?
Increase social inclusion, community cohesion and active community participation	<ul style="list-style-type: none"> ▪ Will it provide more services and facilities that are appropriate to the needs of ethnic minorities, older, young and disabled people? ▪ Does it enable less-well resourced groups to take part? ▪ Does it take steps to involve difficult to reach groups? ▪ Will it increase financial inclusion (e.g. variable charging, pay by weight)? ▪ Will it give the community opportunities to participate in decisions (i.e. public consultation)? ▪ Will local community organisations be supported to identify and address their own priorities (i.e. cross-sector consultation)? ▪ Will it build community capital, capacity and confidence (e.g. through increased education and engagement)? ▪ Will it build better relationships across diverse communities and interests? ▪ Will it increase people's feelings of belonging? ▪ Will it encourage communities to value diversity? ▪ Could it create or increase tensions and conflict locally or with other communities?

SA Objectives	SA Sub-Objectives
	Environmental
Minimise the pressure on greenfield land by efficient land use patterns that make good use of derelict and previously used sites & promote balanced development	<ul style="list-style-type: none"> ▪ Does it make efficient use of land by promoting development on previously used land, re-use of buildings and high densities? ▪ Address existing problems of degradation or dereliction? ▪ Is the use of existing facilities maximised? ▪ Is it promoting development consistent with guidance and good practice? ▪ Will it minimise the loss of high quality agricultural land and soils? ▪ Will it prevent inappropriate development on floodplains and prepare for the likelihood of increased flooding in future ? ▪ Will it promote the effective and sympathetic restoration and after-use of sites
Conserve and enhance the natural and built environment	<ul style="list-style-type: none"> ▪ Will it minimise impact on/protect existing habitats, especially priority habitats identified in the UK and the Leeds Biodiversity Action Plan? ▪ Will it minimise impact on/protect protected and important species? (Important species are those identified in the UK and in the Leeds BAP.) ▪ Will it minimise impact on/protect existing designated nature conservation sites? ▪ Will it provide for appropriate long term management of habitats? ▪ Will it make use of opportunities to create and enhance habitats as part of development proposals? ▪ Will it minimise impact on/protect sites of geological interest? ▪ Will it protect / mitigate ecological interests on previously-developed sites? ▪ Will it minimise impact on/protect sites, features and areas of historical, archaeological and cultural value in urban and rural areas? ▪ Will it minimise impact on/protect listed buildings, conservation areas and other designated historic features and their settings? ▪ Does it protect the quality of controlled waters?
Reduce greenhouse gas emissions	<ul style="list-style-type: none"> ▪ Will it reduce greenhouse gas emissions from: <ul style="list-style-type: none"> - Municipal waste management? - Municipal waste management related transport? - Commercial and industrial waste related activities? ▪ Will it address Leeds' ability to adapt to climate change?
Improve access to services and facilities whilst reducing motorised journeys.	<ul style="list-style-type: none"> ▪ Will it increase access to key resources and services by means other than the car? ▪ Will it support local traders and suppliers? ▪ Will it ensure that essential services and resources to serve communities are within reasonable non-car based travelling distance? ▪ Will it support the vibrancy of the city centre and local centres? ▪ Will it reduce the number of journeys by personal motor transport? ▪ Will it make the transport/environment attractive to non-car users? ▪ Will it encourage sustainable transport methods (e.g freight transfer from road to rail and water)? ▪ Will it support the proximity principle and encourage the disposal of waste at the nearest appropriate installation and by the most appropriate method and technology?
Reduce the growth in waste¹ generated and landfilled in Leeds.	<ul style="list-style-type: none"> ▪ Will it reduce the growth in waste arisings? ▪ Will it drive the management of waste up the waste hierarchy? ▪ Will it provide facilities for recycling and recovering waste? ▪ Contribute to regional and sub-regional self-sufficiency of waste? ▪ Will it reduce the consumption and wasteful use of primary resources?

¹ Municipal and Non-Municipal Waste

SA Objectives	SA Sub-Objectives
	<ul style="list-style-type: none"> ▪ Will it encourage the development of alternatives to primary resources? ▪ Will it encourage the use of recycled and/or secondary materials? ▪ Reduce the growth in Hazardous wastes? ▪ Increase prevention, re-use, recovery and recycling of waste close to source.
<p>Reduce pollution levels and improve cleanliness</p>	<ul style="list-style-type: none"> ▪ Will it promote the clean-up of contaminated land? ▪ Will it reduce air, water, land, noise and light pollution? ▪ Will it reduce the potential for vermin? ▪ Will it reduce the risk of pollution incidents and environmental accidents? ▪ Will it promote neighbourhood cleanliness (litter, graffiti, eyesores)?
<p>Maintain and enhance landscape and townscape</p>	<ul style="list-style-type: none"> ▪ Will it maintain and enhance areas of high landscape value? ▪ Will it protect and enhance individual features such as hedgerows, dry stone walls, ponds and trees? ▪ Will it increase the quality and quantity of woodland features in appropriate locations and using native species? ▪ Will it protect and enhance the landscape quality of the City's rivers and other waterways? ▪ Will it ensure new development is well designed and appropriate to its setting? ▪ Will it ensure development is consistent with Leeds City Council design guidance for the built, natural and historic environment? ▪ Will it support local distinctiveness? ▪ Will it take account of the geomorphology of the land?
<p>Increase the efficient use of energy and natural resources and sustainable design</p>	<ul style="list-style-type: none"> ▪ Will it increase energy and water efficiency in all sectors? ▪ Will it increase energy from renewable resources? ▪ Will it increase efficiency in use of raw materials? ▪ Will it promote the energy, water and resource efficiency of buildings? ▪ Will it minimise the loss of high quality agricultural land and soils? ▪ Will it support reduced resource use by business?

Table 4.3 SA Targets and Indicators

SA Objective	Targets from other PPPs	Indicators from other PPPs	Examples of additional suggested /indicators
<p>Maintain or improve the conditions which have enabled business success, efficient economic growth and investment.</p>	<ul style="list-style-type: none"> • Increase the number of Leeds’ residents moving into work.(VFL2) • Create at least 50,000 new jobs (VFL2) • Reduce the difference between average earnings in Leeds and the national average. • Increase the number of people employed by companies which invest in developing skills (VFL2) • No ward in the city to have an unemployment rate 2.5% points higher than the city-wide average by 2005 (LNRS) • Increase the wealth created in Leeds and the region every year (VFL2) • Improve Leeds’ productivity performance by at least 15%; (VFL2) 	<ul style="list-style-type: none"> • % of people who are in work • Total employment • Unemployment rates (%) • Worklessness rates (those claiming job seeker’s allowance, income support, incapacity benefit) • Average gross weekly earnings for residents (£) • % of SOAs in the 20% most deprived nationally in the IMD employment domain • Difference in employment rates between the highest and lowest SOAs • Unemployment rates among BME groups (%) • Amount of land developed for employment by type • Gross Value Added (GVA) per capita • No. of VAT registered businesses • Employment land supply (ha) 	<ul style="list-style-type: none"> • Number of start up business in the waste industry • Number of new jobs created within Leeds as part of the PPP/PFI contract
<p>Improve the social and environmental performance of the economy</p>	<ul style="list-style-type: none"> • All public sector organisations and 50% of local businesses (with over 100 employees) are working towards adopting environmental management systems. (VFL2) 	<ul style="list-style-type: none"> • Number of adoptions of environmental/ energy management schemes amongst small and medium enterprises (Environmental statement, ref EM51) 	<ul style="list-style-type: none"> • Social audit of waste industry
<p>To minimise the risks to human health deriving from waste management</p>	<ul style="list-style-type: none"> • Reduce the number of people killed in road accidents by 40% and the number of children killed by 50% by 2010 compared with the average for 1994/98 (UK) • Reduce fatal and serious casualties by 20% between 1994/98 average and 2005 and by 40% by 2010. (WYLTP) • Reduce the number of children killed or seriously injured by 25% between 1994/98 average and 2005 and by 50% by 2010 (WYLTP) 	<ul style="list-style-type: none"> • Life expectancy • Mortality rates from coronary heart disease and cancer • % of people of working age population with limiting long-term illness • % of people whose health was not good • Estimate of obesity % • No of people on incapacity benefits and severe disability allowance • % of SOAs in the 20% most deprived nationally in the IMD Health deprivation & disability domain 	<ul style="list-style-type: none"> • The number of Air Quality Standard non-compliance incidents • Number of recorded HSE incidents at waste sites • Number of complaints received about pollution e.g. noise, odour within ?meters of a waste facility

SA Objective	Targets from other PPPs	Indicators from other PPPs	Examples of additional suggested /indicators
<p>Increase participation, awareness and education in relation to waste issues</p>	<ul style="list-style-type: none"> • Changes in attitude to waste prevention and recycling, measures by annual survey and increase in participation in recycling. (LCCWS) 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Number of households/businesses participating in recycling schemes
<p>Reduce overall rates of crime, and reduce the disparities in crime rates across Leeds.</p>	<ul style="list-style-type: none"> • Reduce city-wide crime levels and making sure that no individual community has crime levels more than twice as high as the city average (VFL2) • Reduce crime by 15% and further in high crime areas by 2007-8. (UK) • Make sure that no individual community has crime levels more than twice as high as the city average (VFL2) • 	<ul style="list-style-type: none"> • Crime survey trends in burglary and vehicle related thefts • Recorded crime (violent crime, robbery, domestic burglary, vehicle crime, criminal damage) • Fear of crime in residents surveys • % of SOAs in the 20% most deprived nationally in the IMD crime domain 	<ul style="list-style-type: none"> • Cost of clearing fly tipping • Number of CA sites and bring sites • Frequency and cost of bulky collection • Frequency and cost of collection and disposal • Number of prosecutions for environmental crime
<p>Increase social inclusion, community cohesion and active community participation</p>	<ul style="list-style-type: none"> • Include targets from Community Cohesion Action Plan when available • Increase voluntary and community engagement, especially amongst those at risk of social exclusion. (UK) 	<ul style="list-style-type: none"> • % of SOAs in the 20% most deprived nationally in the IMD Income deprivation domain • % of SOAs in the 20% most deprived nationally in the IMD Income deprivation affecting children index • % of SOAs in the 20% most deprived nationally in the IMD Income deprivation affecting older people index • Unemployment rates among BME groups (%) • Community participation • Civic participation - % who participated in civic affairs in the last 12 months • Turnout in local elections (%) 	<ul style="list-style-type: none"> • No. of community organisations formally identified and involved in the delivery of the Waste Strategy
<p>Minimise the pressure on greenfield land by efficient land use patterns that make good use of derelict and previously used sites & promote balanced development</p>		<ul style="list-style-type: none"> • % of land developed for employment which is on previously developed land • No. of planning permissions granted contrary to the advice of the Environment Agency on flood defence grounds • Numbers of properties at risk of flooding • Proportion of properties within indicative floodplain with appropriate flood warnings 	<ul style="list-style-type: none"> • % of waste development on Brownfield sites • Amount of Grade 1, 2 and 3a agricultural land lost to waste management sites • Area (Ha) of land for waste management facilities developed on the floodplain

SA Objective	Targets from other PPPs	Indicators from other PPPs	Examples of additional suggested /indicators
<p>Conserve and enhance the natural and built environment</p>	<ul style="list-style-type: none"> • Contribute to the targets for the priority species and habitats in the Leeds BAP • Reverse the decline in farmland birds by 2020 (UK) • Bring into favourable condition by 2010 95% of nationally important wildlife sites (UK) • The List of Habitats and Species of Principal Importance for the Conservation of Biological diversity in England issued by DEFRA under the CROW Act covers 47 habitats. • People living in towns and cities should have a Statutory Local Nature Reserves at a minimum level of one hectare per thousand population (EN) • Remove at least 10 listed buildings at risk per year. (BARSR) 	<ul style="list-style-type: none"> • Change in priority habitats by type • Areas designated for their intrinsic environmental value inc. sites of international, national, sub-regional or local significance (SSSIs, SEGIs, LNRs, LNAs) • Status/condition of SSSIs (favourable or recovering) (%) • No. of listed building of each grade, conservation areas, scheduled ancient monuments and historic parks and gardens • Loss or damage to the character or setting of the Registered Battlefield; • No. & % of listed buildings at risk • No. of listed buildings demolished • No. & % of conservation areas with appraisals • Areas of known significant archaeological interest of national, regional or local interest 	<ul style="list-style-type: none"> • Number of designated nature conservation sites, protected and important species lost to or adversely affected by waste sites • Number of sites with Environmental Management Programmes or monitoring schemes within close proximity to designated nature conservation sites, protected and important species lost to or adversely affected by waste sites • Number of SAMS and other archaeological sites lost to, or adversely affected by, waste management sites • Number of listed buildings and conservation areas lost to, or adversely affected by, waste management sites
<p>Reduce greenhouse gas emissions</p>	<ul style="list-style-type: none"> • 20% reduction in carbon dioxide emissions below 1990 levels by 2020 (UK, RPG & VFL2) • 60% reduction in carbon dioxide emissions by 2050 (EWP) • Reduce greenhouse gasses emissions by 12.5% from 1990 levels by 2010 (UK) 	<ul style="list-style-type: none"> • Estimated CO2 emissions (Total) • Estimated CO2 emissions (Industry/Commercial) • Estimated CO2 emissions (Road Transport) 	<ul style="list-style-type: none"> • Carbon dioxide emissions from waste management • Greenhouse gas emissions from waste management
<p>Improve access to services and facilities whilst reducing motorised journeys.</p>	<ul style="list-style-type: none"> • Reduce congestion on the inter-urban trunk road network and in large urban areas to 2000 levels by 2010 (UK) • Weekday traffic growth not to exceed 5% from 1999 to 2006 (WYLTP) • Stabilise morning peak inbound traffic into Leeds at 1999 levels. (WYLTP) • Increase the rail freight share of the market to 10% by 2010 (RPG) • Reduce the number of people killed in road accidents by 40% and the number of children killed by 50% by 2010 compared with the average for 1994/98 	<ul style="list-style-type: none"> • Traffic modal splits to centres • Traffic counts • Number of vehicles commuting into/out of urban centres during peak times • Number of transport-related accidents • Annual road injury statistics for road user groups • % of freight tonne kms in Leeds by sustainable mode (rail, water and pipeline) 	<ul style="list-style-type: none"> • Reduce the distance travelled to waste management facilities by car and HGV • Distance travelled per tonne of waste per year by transport mode • Average distance travelled to nearest waste management facility by type and postcode/ward/area

SA Objective	Targets from other PPPs	Indicators from other PPPs	Examples of additional suggested /indicators
	(UK) <ul style="list-style-type: none"> Reduce fatal and serious casualties by 20% between 1994/98 average and 2005 and by 40% by 2010. (WYLTP) Reduce the number of children killed or seriously injured by 25% between 1994/98 average and 2005 and by 50% by 2010. (WYLTP) 		
Reduce the growth in waste generated and landfilled in Leeds.	<ul style="list-style-type: none"> Meet government targets of 30% recycling / composting and 45% recovery by 2010 and 33% recycling and 67% recovery by 2016 (LIWS) Reduce growth in waste to 2% (2006-2010); 1% for (2011-2015) and 0.5% (2016-2020) (LIWS) 	<ul style="list-style-type: none"> Capacity of new waste management facilities by type in Leeds. Amount of municipal waste arising and managed by management type and the % of each management type represents of total waste managed Total household waste (kg per person) Number and capacity of landfill facilities (RPG) Quantity of biodegradable waste disposed to landfill facilities (RPG) Number and capacity of energy from Waste facilities (RPG) 	<ul style="list-style-type: none"> Tonnage of waste imported and exported out of Leeds
Reduce pollution levels and improve cleanliness	<ul style="list-style-type: none"> All parts of Leeds to meet national air-quality standards (VFL2) All rivers flowing through Leeds are rated as 'very good', 'good' or 'fair' (VFL2) All surface water and ground water bodies to achieve 'good' status by 2015 with the exceptions specified in the Water Framework Directive. (WFD) Restore polluted surface water and groundwater bodies to good status by 2015 with the exception specified in the Water Framework Directive Not exceed an annual average of 40µg/m3 NO2 in main urban areas in any given year. (WYLTP) 	<ul style="list-style-type: none"> Total area of contaminated land No. of days when air pollution is moderate or high Number of Air Quality Management Areas and areas of concern / no. of dwellings affected Water quality – length of rivers in good or fair chemical and biological quality% Satisfaction with cleanliness of streets 	<ul style="list-style-type: none"> Number of complaints received about noise, odour, air, litter and vermin relating to waste (location/complaint type etc)
Maintain and enhance landscape and	<ul style="list-style-type: none"> <i>Future PPPs to be monitored for targets</i> 	<ul style="list-style-type: none"> Amount of development taking place in areas of high landscape value 	<ul style="list-style-type: none"> Reduce the number of waste management facilities within Green

SA Objective	Targets from other PPPs	Indicators from other PPPs	Examples of additional suggested /indicators
townscape		<ul style="list-style-type: none"> • Area of woodland coverage • 	<p>Belt, Areas of High Landscape Value, historic battlefields, registered parks and gardens, etc</p> <ul style="list-style-type: none"> • Number of waste management facilities within Green Belt, Areas of High Landscape Value, historic battlefields, registered parks and gardens, etc
<p>Increase the efficient use of energy and natural resources and sustainable design</p>	<ul style="list-style-type: none"> • Support regional targets of electricity from renewable sources (VFL2) • At least 10% of energy generated from renewable sources by 2010 (RSS) • Reduce the amount of secondary/recycled aggregates used compared to virgin aggregates 	<ul style="list-style-type: none"> • Domestic water consumption (litres/day/household) • Use of SUDS and interceptor measures • Renewable energy capacity installed by type • Agricultural land classification • The production of secondary/recycled aggregates (tonnes) • The production of primary land won aggregates (tonnes) 	<ul style="list-style-type: none"> • The amount of water consumption. • The amount of energy consumption in Leeds year on year. • Energy generated from renewable sources (%) (CP) • The amount of electricity supplies procured through green sources.

A key to abbreviations used in Table 4.3 are given below:

- BARSR Buildings at Risk Strategy and Register
- EN English Nature
- EWP UK Energy White Paper
- LBAP Leeds Biodiversity Action Plan
- LIWS Leeds Integrated Waste Strategy
- RES Regional Economic Strategy
- RPG Regional Planning Guidance
- UK UK government national target
- WFD Water Framework Directive – EU 2002
- VFL2 Vision for Leeds 2
- WYLTP West Yorkshire Local Transport Plan

5.1 Introduction

The SEA Directive requires that the appraisal predict and evaluate any significant impacts that are likely to occur as a result of implementing the Waste Strategy. This section summarises the results of the appraisal of the Strategy against the SA objectives.

The appraisal is based on the vision and principles, objectives and key themes of the WSR. The appraisal of the principles and objectives provide a strategic overview of the overall predicted social, economic and environmental impacts of the WSR while appraisal of the key themes provides an in depth review.

5.2 Appraisal Methodology

The vision and principles, objectives and key themes were assessed against the SA objectives. Predicted impacts were evaluated and the results recorded using matrix tables. The matrix tables use a series of notations to describe the likely effect of the strategy against each SA objective. These are:

- ++ Score awarded where strategy is compatible and in line with the SA objective and is highly likely to have direct positive effects;
- + Score awarded where there is potential for positive effects either directly or Indirectly;
- Score attributed to aspects of the strategy that are insignificant to the SA objective
- Score awarded where strategy is likely to have some negative impacts on SA objective either directly or indirectly;
- Score awarded where strategy is incompatible with the SA objective and is highly likely to have adverse effects;
- D A 'D' in the matrix does not represent a failing in the strategy or a problem that needs to be addressed in progressing the strategy, but it helps to highlight areas where the potential impact will depend on how the strategy is implemented. However, general mitigation has been identified where necessary.
- ? Uncertain effect on SA objective

In keeping with the SEA Directive, when forming a judgement on whether a predicted effect will be significant, the probability, duration, time frame (short, medium and long term) and whether the impacts were secondary, cumulative or synergistic were taken into account.

A commentary on overall performance is provided under each of the assessed components of the WSR. Recommended measures for mitigation are also provided in the summary, where appropriate.

5.3 Assessment of Strategic Alternatives

The SEA Directive requires the assessment of the 'likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives

taking into account the objectives and the geographical scope of the plan or programme'.

The ODPM living draft Companion Guide to Planning Policy Statement 10: Planning for Sustainable Waste Management suggests types of options that the Waste Strategy could consider. These include:

- Need or demand: waste minimisation, ensuring the strategy has policies in place to promote or to deliver waste minimisation;
- Mode or process: technological options for managing the waste streams;
- Location: options for strategic approaches to locating facilities and apportionment options; and
- Timing and detailed implementation: may be set out in policies, but issues may also be implicit within technology options.

The type of options/alternatives to be considered depends on the spatial scale of strategy and its objectives. For the Leeds Waste Strategy, realistic options/alternatives were thought to be those concerned with need and demand, mode/process and timing and detailed implementation. Location related options were found not to be within the scope of the Waste Strategy but within the Waste Planning process and would be considered when developing the Waste Development Plan Document.

The background to identifying and evaluating options for the WSR was carried out in the waste treatment solution options work. A description of the work undertaken and how this work fed into the SA strategic options assessment is described below.

5.3.1 Social, economic and environmental assessment of waste treatment solution options for WSR

To identify the need for a potential waste treatment solution, a range of potential optimised recycling and collection and education initiatives to increase recycling levels in Leeds together with realistic capture rates for each material type were considered. The introduction of the optimised initiatives would yield a Best Value Performance Indicator (BVPI) recycling rate of 38%. The modelling work carried out showed that Leeds City Council would need an overall recycling rate of over 70% in order to meet Landfill Allowance Trading Scheme (LATS) targets through recycling alone. A range of further scenarios were analysed that introduced further recycling improvements above those already targeted in the waste flow model and the most ambitious scenario still showed a shortfall of nearly 64,000 tonnes of waste against the Authority's LATS targets in 2020. It was, therefore, acknowledge that without a significant change in public attitudes, major changes in legislation and/or considerable financial inputs, education and awareness and recycling alone will not enable the Council to achieve its LATS targets and avoid the subsequent financial penalties.

With this in mind, work was undertaken to identify a waste treatment solution that will enable the Council to manage the proportion of municipal waste that is not reused or recycled. This work also aims to ensure that any solution does not undermine the prevention or minimisation of waste, or other waste management options.

The strategic alternatives appraisal builds on the background work that fed into the preparation of the WSR. An evaluation of the various waste treatment solutions that were identified was carried out against an agreed range of weighted 'benefit' criteria. One of the benefit criteria was to 'achieve sustainability in relation to social, economic and environmental impacts'. To inform the benefit criteria a quantitative and qualitative assessment of the social, economic and environmental implications of the waste treatment solution options was carried out. The possible mixes of technologies evaluated are set out below:

DN	Do Nothing
DM	Do Minimum
Option 1	Autoclave + Advanced Thermal Treatment
Option 2	Autoclave + Landfill
Option 3	Energy from Waste (EfW)
Option 4	Mechanical Biological Treatment (MBT) + Advanced Thermal Treatment + In-Vessel Composting
Option 5	Mechanical Biological Treatment (MBT) + Landfill + In-Vessel Composting
Option 6	Mechanical Treatment + Anaerobic Digestion + Landfill

The options set out above, with the exception of 'do nothing', assume the introduction of the range of service improvements and enhancements to existing kerbside recycling services. Each of the waste treatment solution options modelled, again with the exception of the 'do nothing' scenario, also assumes the development of a Materials Recycling Facility and In-Vessel Composting facility as part of the solution. Additionally, assumptions have been made that there will be some economic development to create markets for the increased level of recycling materials.

The social, economic and environmental assessment of waste treatment solution options was largely based on ODPM guidance set out in 'Strategic Planning for Sustainable Waste Management', 2002 which is principally used as a tool for the application of best practicable environmental option (BPEO) assessment. This ODPM methodology involves the consideration of the social, economic and environmental aspects of waste management and is intended to provide greater transparency in decision-making as well as a robust and comprehensive strategic approach. This methodology was adapted to ensure it meets the needs of Leeds City Council and to overcome data limitations. In particular the SA objectives identified in the WSR scoping report were used where appropriate.

The process used to assess the social, economic and environmental impacts of waste treatment solution options meets many of the requirements of the SEA Directive. The principle differences between the technical options assessment and the requirements of the SEA directive are about process rather than analysis.

The social, economic and environmental assessment of waste treatment solution options addressed all of the environmental impacts that are required as part of the SEA Directive apart from some of the site-specific issues which cannot be carried out until specific sites are known. The main differences between the assessments are the presence of gaps in the waste treatment solution options assessment because of the requirements of the SEA Directive. The additional aspects that need to be considered are:

- direct and indirect effects, synergistic and cumulative and permanent and temporary effects,
- formal consultation, and

- the identification of mitigation measures.

These differences and gaps have been addressed by carrying out an assessment of the three strategic alternatives. This assessment uses the SA matrix tool applied to the assessment of the WSR objectives and key themes.

Detailed information on how each option performed against the objectives is presented in the 'Assessment of the Social, Economic and Environmental Impacts of Waste Management Technology Options', Jacobs Bابتie 2005 report.

5.3.2 Combined waste treatment solution options assessment

The findings of the 'Assessment of the Social, Economic and Environmental Impacts of Waste Management Technology Options' report were presented along with information to support the other benefit criteria at a stakeholder workshop held on the 3rd November 2005. This formed a key part of the overall waste treatment solution options appraisal process and involved Elected Members, senior Council officers, regional government officers, external advisors and representatives from community and environmental organisations in evaluating the technical options available to Leeds against the 'benefit' criteria.

The outcome of the stakeholder workshop was the ranking of Option 3 (Energy from Waste) as the best performing option against the 'benefit' criteria. The options involving Advanced Thermal Treatment rather than Energy from Waste were the next best performers, with the other technology options some way behind. The 'do minimum' and 'do nothing' options scored very poorly against the benefit criteria.

In addition to the benefit criteria assessment risk and cost were also assessed. The results from the combined assessments found Option 3 (Energy from Waste) as the best performing option. Option 3 achieved the highest ranking in terms of cost and 'benefit' criteria, and the highest ranking of all of the technological solutions in terms of risk ('do nothing' and 'do minimum' naturally presented lower risks of deliverability).

The clear recommendation from the waste treatment solution assessment was to pursue a waste solution to include a Materials Recycling Facility (MRF) and Energy from Waste facility. It is recommended that a Sustainable Energy Park be developed to incorporate both of the above elements, but also an education centre and business incubation units. The Energy from Waste facility could also have the potential to provide combined heat and power, and to link into district heating schemes. This waste solution has been incorporated into the WSR and forms a key aspect of the 'preferred' option.

5.3.1 Findings of the assessment of Strategic Alternatives

Three strategic alternatives have been appraised against the SA objectives. The development of strategic alternatives follows advice given in the ODPM Sustainability Appraisal Guidance which recommends testing options against the 'no plan' and 'business as usual' scenarios. For this SA, the 'no plan' scenario is referred to as the 'do nothing' and it has been compared against the 'do-minimum' and the 'preferred option' alternatives.

- 'Do nothing': This option involves retaining the existing Waste Strategy and maintaining all current activities without deterioration in current service;

- 'Do-minimum' option – This option focuses on waste prevention, optimising recycling, comprehensive education and enforcement strategies, dedicated focus on waste from other sectors and continued significant reliance on landfill for disposal of residual waste and is based on the meet targets scenario that was established for the technology options appraisal;
- 'Preferred ' option – This option focuses on waste prevention, optimising recycling, comprehensive education and enforcement strategies, dedicated focus on waste from other sectors, procurement of recovery solution (EfW) and aspiration towards 'zero' waste principles. The procurement of a recovery solution would help the Council to recover more waste through utilisation of technologies to process and treat MSW arisings diverting them away from landfill and moving the City's waste management up the waste hierarchy.

The findings of the assessment of Strategic Alternatives appraisal are presented in Table 5.1.

Table 5.1 Assessment Matrix – Strategic Alternatives

		Do Nothing	Do Minimum	Preferred Option
SA1	Maintain or improve the conditions which have enabled business success, efficient economic growth and investment.	N	+	+
SA2	Improve the social and environmental performance of the economy	N	+	+
SA3	To minimise the risks to human health deriving from waste management	-	-	+
SA4	Increase participation, awareness and education in relation to waste issues	+	++	++
SA5	Reduce overall rates of crime, and reduce the disparities in crime rates across Leeds.	N	+	+
SA6	Increase social inclusion, community cohesion and active community participation	+	+	+
SA7	Minimise the pressure on greenfield land by efficient land use patterns that make good use of derelict and previously used sites & promote balanced development	D	D	D
SA8	Conserve and enhance the natural and built environment	D	D	D
SA9	Reduce greenhouse gas emissions	-	-	+
SA10	Improve access to services and facilities whilst reducing motorised journeys.	N	+	+
SA11	Reduce the growth in waste generated and landfilled in Leeds.	-	+	++
SA12	Reduce pollution levels and improve cleanliness	-	+	+
SA13	Maintain and enhance landscape and townscape	D	D	D
SA14	Increase the efficient use of energy and natural resources and sustainable design	-	+	+

The ‘do-nothing’ approach would fail to meet Leeds future waste management needs as the option would continue to operate based on the existing Waste Strategy. This option would have negative impacts against SA3 on minimising risks against human health and SA9 on reducing greenhouse gas emissions. This is based on the findings of the Technology options assessment which revealed that the do nothing option is likely to have high potential for litter and vermin, high potential for emissions of dioxins, furans and dust and a high potential for emission of greenhouse gases. Most significantly, this option fails to help reduce the amount of Waste going into landfill.

Based on this information, this option was considered unrealistic and was therefore not assessed further.

The '**do-minimum option**' although focusing on waste minimisation, recycling and raising awareness still relies significantly on landfill. The appraisal of this option revealed that this option would not meet the requirements for diverting waste from landfill which is a key objective of waste management and for reducing negative environmental, social and economic effects associated with land filling. The do-minimum option is also likely to impact negatively on SA3 on minimising risk to human health and SA9 on reducing green house gas emissions as evidenced in the technology options assessment.

The '**preferred**' option aspires towards 'zero' waste and proposes procurement of a recovery solution in order to significantly reduce the amount of waste going to landfill. The 'preferred' option performs better than the 'do nothing' and 'do minimum' options against SA3 – minimising risks to human health. This is based on the results of the Technology options appraisal which revealed that the 'preferred' option would result in less waste requiring landfilling and consequently a reduction in risks to human health associated with landfilling. This option was also found to have less potential for litter and vermin, noise and odour production.

The preferred option will significantly reduce the amount of waste landfilled and this will lead to a reduction in green house gas emissions associated with landfill. Any emissions from the Energy from Waste facility within this option would have to meet strict emissions regulations of the EC Waste Incineration Directive and be monitored regularly. Strategically, this option was found to be more in line with Leeds waste management needs. It performs well against the SA objectives especially those related to minimising the amount of waste going to landfill and increasing the efficient use of energy and natural resources.

A 'D' score was awarded for all options against the following SA objectives:

SA7 - Minimise the pressure on greenfield land by efficient land use patterns that make good use of derelict and previously used sites & promote balanced development

SA8 - Conserve and enhance the natural and built environment

SA13 - Maintain and enhance landscape and townscape

This is because the likely impacts are locationally dependent and specific location of proposed sites would need to be known to assess how these objectives are affected. Proposals for waste management will be subject to EIA and these issues will be assessed in detail at this stage.

5.4 Assessment of Vision, Principles and Objectives

The Waste Strategy's vision, principles and objectives were assessed against the SA objectives and summary findings are presented below. Detailed performance scores are shown in Table 5.2.

5.4.1 Vision - Key Principles

Sustainability: This Principle is the cornerstone of the strategy. It is directly aimed at developing and promoting sustainable waste management in Leeds. The Principle was found to be in accordance with the SA objectives as it encompasses broader social, economic and environmental impacts of waste management.

Partnership: This Principle was found to be in general accordance with the SA objectives. It performs well against objectives related to increased participation and social inclusion as it is directly aimed at increasing awareness and joint working between the Council, householders and businesses. The appraisal revealed that the full benefits of partnership working would be felt in the medium to longer term as more householders and businesses became involved in sustainable waste management initiatives.

Realistic and Responsive: This Principle provides for a flexible approach which will ensure that the Strategy is responsive enough to adjust to change in the light of future developments. The Principle was found to be in general accordance with SA objectives.

5.4.2 Strategy Objectives

Overall, the WSR objectives were found to be consistent with the general principles of sustainability. They cover relevant aspects of sustainable waste management including strong emphasis on managing waste in ways that protect human health and the environment, moving waste up the waste hierarchy, enabling an integrated and efficient waste service, meeting LATS and other recycling and local targets, and providing a waste solution that is affordable and delivers best value.

However, the assessment revealed that while the objectives adequately addressed environmental and economic concerns, there was no objective addressing social issues relating to waste management.

In some instances, the effect of particular WSR objectives will depend on how the Strategy is implemented. In such instances, it was not possible to predict effects with certainty and the likelihood of effect occurring was denoted in the matrix as 'D'. For example, this was the case when assessing the effects of WSR objective 1 'Moving waste up the waste hierarchy' against SA objectives related to the built environment (e.g. SA7). The significance of effects would depend on the waste management techniques adopted in moving waste up the waste hierarchy, location of facilities and their relationship with the surrounding environment.

The assessment of the WSR objectives revealed that there is potential for some beneficial cumulative effects. Cumulative effects arise for example where an objective has a minor effect but combined with the effects of other objectives, this effect becomes more significant. For example, the effects of moving waste up the waste hierarchy together with exceeding LATS targets and meeting statutory and local targets will cumulatively lead to a significant reduction in greenhouse gas emissions and pollution levels. This is true for most objectives if implemented fully.

5.4.3 Recommendations

It was suggested that the Council introduce a specific objective aimed at increasing social inclusion and participation and ensuring equal access to waste management facilities to communities across Leeds.

The Council has since added a new objective to the WSR: *To increase community cohesion by recognising the links between crime and the environment and improving access to services based on local needs.*

To mitigate against negative effects on the built environment, EIA should be undertaken for any relevant waste management related development to ensure that the WSR objectives are consistent with sustainable waste management principles.

To achieve maximum social, environmental and economic benefits in waste management, it is important to recognise the interconnectivity of the different objectives and the likelihood of beneficial cumulative effects arising. The Council should therefore strive to ensure that all the objectives are fully implemented.

Table 5.2 Assessment Matrix - Vision (Key Principles) and Objectives

		VISION			OBJECTIVES							
		Prin 1	Prin 2	Prin 3	OBJ 1	OBJ 2	OBJ 3	OBJ 4	OBJ 5	OBJ 6	OBJ 7	OBJ 8
SA1	Maintain or improve the conditions which have enabled business success, efficient economic growth and investment.	++	++	++	+	o	++	D	+	++	++	+
SA2	Improve the social and environmental performance of the economy	++	++	++	+	+	+	+	++	++	++	+
SA3	To minimise the risks to human health deriving from waste management	+	o	o	D	++	++	+	-	D	+	o
SA4	Increase participation, awareness and education in relation to waste issues	o	++	D	D	o	++	o	++	o	++	++
SA5	Reduce overall rates of crime, and reduce the disparities in crime rates across Leeds.	+	+	o	D	++	+	o	+	o	D	++
SA6	Increase social inclusion, community cohesion and active community participation	+	++	D	D	+	+	o	+	o	+	++
SA7	Minimise the pressure on greenfield land by efficient land use patterns that make good use of derelict and previously used sites & promote balanced development	+	o	+	D	++	D	D	D	o	D	o
SA8	Conserve and enhance the natural and built environment	+	o	+	D	++	D	o	D	o	o	+
SA9	Reduce greenhouse gas emissions	+	+	+	+	++	+	++	+	o	+	o
SA10	Improve access to services and facilities whilst reducing motorised journeys.	+	+	+	D	++	+	o	+	D	++	++
SA11	Reduce the growth in waste generated and landfilled in Leeds.	++	++	+	++	+	D	+	++	o	++	+
SA12	Reduce pollution levels and improve cleanliness	+	+	+	+	++	+	+	D	o	D	+
SA13	Maintain and enhance landscape and townscape	+	o	+	D	++	D	o	D	o	o	o
SA14	Increase the efficient use of energy and natural resources and sustainable design	+	+	+	+	++	D	D	++	++	++	o



5.5 Assessment of Key Themes

The key themes are the substance of the WSR and are the vehicle through which the Council intends to deliver the objectives it has set to achieve sustainable waste management for Leeds.

Sections 5.5.1 to 5.5.9 summarise the findings of the assessment of policies within each Key Theme. The tables summarise how the policies perform when assessed against SA objectives. Where impacts are influenced by or are dependent on timing (short/medium/long-term) this is highlighted. Where there is potential for indirect, secondary or cumulative effects, this is also highlighted. Detailed assessment results are presented in Table 5.3.

5.5.1 Education and Awareness

Key Theme 1 – Education and Awareness	
<p>Aim - To change the culture and behaviour of the people of Leeds to make a positive step change in waste prevention and recycling.</p>	<p>EA1 – To encourage active participation EA2 – Provide feedback on how well we are doing EA3 – Integrate education and awareness into all waste services EA4 – Seek views to inform future decision making EA5 – Link into other strategies, plans and policies</p>
Assessment	
<p>Overall, the policies were found to have a positive effect on the SA objectives related to increasing participation, awareness and education which would indirectly have a positive effect on objectives related to minimising risks to human health, reducing crime, reducing green house gases, pollution levels and increasing the efficient use of energy.</p> <p>Maximum benefits would however be achieved in the longer term</p> <p>The policies had neutral effect on objectives related to economic growth and to land use and environmental conservation.</p>	

5.5.2 Waste Prevention

Key Theme 2 – Waste Prevention	
<p>Aim – To reduce the amount of waste produced and maximise the reuse of municipal waste materials.</p>	<p>WP1 – Empower consumers WP2 – Explore incentives for waste prevention WP3 – Minimise and reuse Leeds City Council’s waste WP4 – Reduce the annual growth in waste per household to 0.5% by 2016</p>
Assessment	
<p>The policies are directly targeted at preventing waste and score positively against objectives related to raising awareness and reducing waste growth and waste landfilled. These effects are likely to result in secondary positive effects, minimising risks to human health, reducing green house gases and pollution and increasing efficient use of energy and natural resources.</p> <p>The positive effects are likely to increase in the longer term following increased reduction in waste growth and waste landfilled. Combined with other policies (for example objective on reducing LATS and other targets), the effects of the waste prevention theme are likely to be cumulatively positive.</p> <p>Effects of policy WP3 will depend on specific measures adopted by the Council in minimising and reusing Leeds City Council’s waste.</p>	

5.5.3 Market Development and Procurement

Key Theme 3 – Market Development and Procurement	
<p>Aim – To work in partnership to develop local markets and encourage the development of secondary material industries.</p>	<p>MDP1 – Strive to stimulate new and emerging businesses to reuse items or reprocess materials and support existing businesses who want to move into this field. MDP2 – Increase the Council’s use of recycled materials MDP3 – Promote products made from reused, recycled or recovered materials MDP4 – Seek markets for the materials produced through the Council’s waste management service</p>
Assessment	
<p>These policies are aimed at developing local markets and encouraging development of secondary material industries in Leeds. They score positively against efficient economic growth and investment objectives as well as improving the social and environmental performance of the economy.</p> <p>These policies have a positive effect on raising awareness and promoting social inclusion, increasing efficient use of energy and natural resources.</p>	

5.5.4 Recycling and Composting

Key Theme 4 – Recycling and Composting	
<p>Aim – To maximise recycling and composting of municipal waste within the limits of practicality and affordability to complement our efforts to prevent waste.</p>	<p>RC1 – Provide appropriate, convenient and accessible collections of recyclables from every household in the City RC2 – Improve composting through household waste sites and explore kerbside collection services RC3 – Extend the range of materials collected RC4 – Strive to recycle and compost 40% of municipal waste by 2020</p>
Assessment	
<p>These policies are aimed at maximising recycling and composting of municipal waste in Leeds. They are likely to have a positive effect on increasing participation and social inclusion, reducing waste landfilled and increasing efficient use of energy.</p> <p>The effects of the policies on pollution, emission of green house gases, risks to human health and the built environment will depend on collection methods used and types of facilities used for composting and their location.</p> <p>When identifying new sites for waste management use risks to human health and the built environment should be considered.</p>	

5.5.5 Medium and Long Term Recovery Options

Key Theme 5 – Medium and Long Term Recovery Options	
<p>Aim – To meet our recovery targets over the medium and long term</p>	<p>R1 – Provide information on the recovery technology R2 – Deliver an Energy from Waste Recovery facility for municipal waste generated in Leeds R3 – Complete an Environmental Impact Assessment on the proposed Energy from waste facility R4 – Strive to recover 90% of municipal waste by 2020</p>
Assessment	
<p>Policy R1 is similar to policies in Theme 1 and scores well against the SA objectives related to raising awareness and promoting social inclusion.</p> <p>Policy R2 proposes an Energy from Waste (EfW) facility as the preferred waste recovery solution for dealing with Leeds municipal waste. A detailed technology options appraisal incorporating a social, environmental and economic assessment of technology options has been undertaken separately to inform decision making (Assessment of the Land-Use Requirements and the Social, Economic and Environmental Impacts of Waste Management Technology Options, Jacobs Babtie, 2005).</p> <p>When assessed against SA objectives, Policy R2 is likely to have positive effects on efficient economic growth, improving the social and environmental performance of the economy, and increasing awareness of the role of EfW in waste management. It is also likely to have significant positive effects on reducing waste landfilled and increasing the efficient use of energy and natural resources.</p> <p>The policy would also have positive effects on the movement of waste. This policy proposes a treatment facility within Leeds which would reduce the need for waste to travel outside Leeds for disposal and would help to meet the Waste Strategy 2000 objectives of self sufficiency and proximity.</p> <p>The likely impacts of the preferred technology on SA objectives related to land use and the natural and built environment will depend on the location and size of the proposed EfW facility and associated development.</p> <p>Policy 3 requires that the proposed EfW facility undergo a rigorous EIA to ensure that potential significant environmental impacts are identified and mitigation measures are put in place to minimise or eliminate any adverse effects. This policy is consistent with SA objectives related to conserving and enhancing the environmental conservation and land use.</p>	

5.5.6 Enforcement

Key Theme 6 – Enforcement	
Aim – To support the objectives and policies of the Strategy through enforcement where appropriate	EF1 – Develop waste specific enforcement policies EF2 – Use enforcement as a last resort after all efforts to educate and support have been pursued
Assessment	
This policy is aimed at achieving compliance and is in line with the Council's Environmental Enforcement Policy. These policies are in line with SA objectives related to reducing crime and reducing pollution. They are also likely to have a positive effect on environmental protection, raising awareness, reducing green house gases and minimising risks to human health.	

5.5.7 Limiting Landfill

Key Theme 7 – Limiting Landfill	
Aim – To limit the amount of waste disposed to landfill	L1 – Minimising our need for municipal waste landfill, with a long term aspiration of zero waste to landfill L2 – Landfill no more than 10% of municipal waste by 2020
Assessment	
Policy L1 is likely to be a key driver in reducing waste growth and waste sent to landfill. This policy is also likely to contribute to positive cumulative effects with other policies in the strategy. The policy has significant positive effects on SA objective related to reducing waste landfilled. This policy is likely to have secondary beneficial impacts on reducing pollution, conserving the environment, minimising risk to human health, reducing green house gas emissions and increasing the efficient use of energy and natural resources.	

5.5.8 Planning

Key Theme 8 – Planning	
Aim – To assist with meeting the requirements of sustainable waste management through the existing UDP and emerging LDF process	P1 – Assist with and influencing the contents of the Local Development Framework, particularly the waste Development Plan Document P2 – Identify sites and obtain planning permission for municipal waste facilities P3 – Explore the development of a Sustainable Energy Park.
Assessment	
These policies are generally in accordance with the SA objectives. They would contribute towards raising awareness of waste management issues through the local plan. Identification of sites is crucial in delivery of waste management facilities. Participating in identification of sites will ensure that the land use and environmental risks associated with sites are identified early and resolved early so as to facilitate deliverability of facilities. A sustainable energy park is largely in accordance with SA objectives and would help the Council reduce the amount of waste going into landfill, create jobs, stimulate business growth, raise awareness	

and incorporate energy efficiency. Detailed proposals should be subjected to a rigorous EIA process at the project stage.

The net effect of the implementation of Policy P3 on transport movements would be positive, because the strategy is proposing to introduce a MRF, EfW and composting facilities within Leeds. The development of these new facilities and potentially sites for reprocessors on a Sustainable Energy Park would further increase the positive benefits of reducing the distances waste is transported, meet the proximity principle and achieve local self sufficiency.

5.5.9 Commercial and Industrial Waste

Key Theme 9 – Commercial and Industrial Waste

<p>Aim – To drive commercial and industrial waste up the waste hierarchy.</p>	<p>CI1 – Partner with stakeholders to explore ways to promote sustainable management of commercial and industrial waste CI2 – Lobby for the prevention of waste CI3 – Leeds City Council as exemplar CI4 – Partner with the EA to improve our data on commercial and industrial waste</p>
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Assessment

The policies are aimed at pushing Commercial and Industrial (C&I) waste up the waste hierarchy. At the moment, the Council is seeking to identify funds to lobby businesses to generate less waste, re-use and recycle more. The effect of such lobbying would have beneficial effects in raising awareness and ultimately reducing amount of commercial and industrial waste, thus having indirect positive effects on the economy, reducing pollution, conserving the environment and minimising risks to human health.

Leeds City Council’s ambitions for the council to be a best practice model are considered to have positive effects on the SA objectives through the encouragement of participation among staff and this should have wider benefits by promoting the achievement to other businesses in Leeds. This will indirectly result in positive effects in relation to reduced waste growth, increased social inclusion, and increased efficient use of energy.

Improved data collection will have a positive effect in the longer term promoting better understanding of trends in waste management. This will have positive effects across the board in the longer term.

5.6 Summary of assessment

Overall, the WSR is considered to be consistent with the SA objectives. The assessment has identified areas where mitigation measures will need to be established especially in relation to provision of recycling and composting facilities and the development of the Council's recovery option (EfW).

Owing to the strategic nature of the assessment and the proposals in the WSR it has been difficult to determine specific mitigation measures without detailed information on location, type and scale of facilities for recycling and composting. The same applies to the council's recovery option. A detailed EIA is required at the planning application stage to ensure that key environmental and other sustainability issues are assessed rigorously. Section 6 outlines generic mitigation measures which can be adopted and refined at the EIA stage.

Table 5.3 Assessment Matrix – Key Themes

		KEY THEME 1 - EDUCATION AND AWARENESS				KEY THEME 2 - WASTE PREVENTION			KEY THEME 3 - MARKET DEVELOPMENT AND PROCUREMENT				KEY THEME 4 - RECYCLING AND COMPOSTING			KEY THEME 5 - MEDIUM AND LONG TERM RECOVERY OPTIONS			KEY THEME 6 - ENFORCEMENT		KEY THEME 7 - LIMITING LANDFILL	KEY THEME 8 - PLANNING			KEY THEME 9 - COMMERCIAL AND INDUSTRIAL WASTE			
		EA1	EA2	EA3	EA4	WP1	WP2	WP3	MDP1	MDP2	MDP3	MDP4	RC1	RC2	RC3	R1	R2	R3	EF1	EF2	I1	P1	P2	P3	CI1	CI2	CI3	CI4
SA1	Maintain or improve the conditions which have enabled business success, efficient economic growth and investment.	O	O	+	O	O	O	+	++	+	++	++	O	O	+	+	++	O	O	O	O	O	+	D	+	+	+	
SA2	Improve the social and environmental performance of the economy	O	O	+	+	O	O	++	++	+	++	++	O	O	+	O	++	+	+	+	++	+	O	+	D	+	+	+
SA3	To minimise the risks to human health deriving from waste management	+	+	+	D	+	+	+	+	+	+	+	+	D	+	O	+	+	+	+	++	+	+	+	D	+	+	O
SA4	Increase participation, awareness and education in relation to waste issues	++	++	++	++	+	++	+	+	+	+	+	++	D	+	+	+	O	+	++	+	+	+	+	D	+	+	+
SA5	Reduce overall rates of crime, and reduce the disparities in crime rates across Leeds.	++	++	++	+	O	O	O	O	O	O	O	+	D	+	O	O	O	++	++	O	+	O	O	D	O	O	O
SA6	Increase social inclusion, community cohesion and active community participation	++	++	++	++	+	+	O	+	O	O	O	+	D	D	+	+	O	+	+	O	+	+	+	D	O	O	O
SA7	Minimise the pressure on greenfield land by efficient land use patterns that make good use of derelict and previously used sites & promote balanced development	O	O	O	O	O	O	O	O	O	O	O	O	D	O	O	D	+	+	+	+	+	+	D	O	O	O	O
SA8	Conserve and enhance the natural and built environment	O	O	O	O	O	O	O	O	O	+	+	O	D	O	O	D	+	+	+	+	+	+	D	O	O	O	O
SA9	Reduce greenhouse gas emissions	+	+	+	D	+	+	+	+	+	O	O	+	D	+	O	+	+	+	+	+	+	O	+	D	+	+	O
SA10	Improve access to services and facilities whilst reducing motorised journeys.	+	+	+	D	O	O	O	+	O	O	+	+	D	+	O	++	+	O	O	D	+	+	++	O	O	O	O
SA11	Reduce the growth in waste generated and landfilled in Leeds.	++	++	++	D	+	++	+	++	+	+	+	+	D	+	O	++	O	+	+	++	+	O	++	D	+	+	+
SA12	Reduce pollution levels and improve cleanliness	+	+	+	D	+	++	+	O	+	+	+	+	D	+	O	D	+	++	++	+	+	+	D	D	+	+	O
SA13	Maintain and enhance landscape and townscape	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	D	+	+	+	O	+	+	D	O	O	O	O
SA14	Increase the efficient use of energy and natural resources and sustainable design	++	++	++	D	+	++	+	++	+	+	+	+	D	+	O	++	+	+	+	+	+	+	++	D	+	+	+

The following recommendations were made during the appraisal of the first draft of the Integrated Waste Strategy. These include mitigation measures aimed at preventing, reducing or offsetting any significant adverse effects of implementing the WSR.

The first draft of the Integrated Waste Strategy was the initial version of the strategy that the SA was appraised. This version of the strategy has now been updated following internal review and the SA and the revised version of the strategy, is referred to as the WSR.

6.1 Vision

The Council has reviewed the vision and included an aspiration for zero waste. This will encourage new innovation and efficiency and encourage more re-use, recycling and value recovery.

6.2 Strategy Principles and Objectives

The WSR objectives have been revised as a result of the SA process. Changes include re-wording objectives to make them more focused on the delivery of sustainable waste management. The following changes have been made as a result of the appraisal:

The number of objectives was reduced from 12 to 8. This has helped to keep the objectives focused and to ensure that they are deliverable.

Objectives that were duplicated or overlapping were revised and either deleted where appropriate or re-written.

A new objective on increasing community cohesion recognising links between environmental crime and improving access to services based on local needs has now been included. The following detailed changes were made:

- Objective 1: This objective has been tightened to focus on moving waste management up the waste hierarchy and focuses on waste reduction.
- Objective 2: Since this objective focuses on managing waste in ways that protect human health and the environment and outlines specific issues to be considered, it was felt land use issues relating to landscape, townscape archaeological and historic interest should be included.
- Objective 3: The concept of flexibility in developing waste management services has been integrated into this objective making it more responsive to future changes.
- Objectives 8 and 9 of the first draft of the Integrated Waste Strategy related to optimising sustainability of social, economic and environmental impacts and minimising impacts associated with land use. These two objectives were deleted as it was felt they duplicated other objectives and could be sufficiently addressed in other objectives.

- Objective 7 was amended to include the principle of local and regional self sufficiency.

6.3 Key Themes

Key theme 1 - Education and Awareness

Under policy 1 on active participation, the word residents was replaced with 'people' to capture the need to raise awareness to everyone in Leeds including businesses and visitors.

Key theme 2 - Waste Prevention

Policy WP1 on acting on the public as consumers was reworded 'Empowering consumers in Leeds'.

Key Theme 3 - Market Development and Procurement

Policy MDP1 was strengthened by including existing and new businesses in encouraging local market development

Key Theme 4 - Recycling and Composting

Policy RC4 on Usage and participation was deleted as it was felt awareness and education issues were adequately addressed under Key Theme 1. A new policy RC4 'Strive to recycle and compost 40% of municipal waste by 2020' was added. Development of recycling and composting facilities likely to have negative effects should be subject to EIA to ensure mitigation measures are in place to offset likely negative impacts.

Key Theme 5 - Medium and Long Term Recovery Options

Policy R2 on delivery of waste recovery solution now includes the Council's aim to deliver Energy from Waste facilities by 2013.

Policy R3 was reworded to say Environmental Impact Assessment as opposed to Strategic Environmental Assessment. Development proposals for an EfW plant should be subject to a rigorous environmental assessment to identify likely effects on the environment and propose mitigation measures to offset any negative effects.

A new policy R4 'Strive to recover 90% of municipal waste by 2020' has been included.

Key Theme 6 - Limiting Landfill

Policies in this section were re-written to capture the need to minimise the amount of waste going to landfill. A new policy L2: Landfill no more than 10% of municipal waste by 2020 has been included.

Key Theme 7 - Enforcement

No major changes to policies apart from rewording to focus on enforcement issues

Key Theme 8 - Planning

A new policy P3 – Sustainable Energy Park has been included. This policy proposes the development of a Materials Recycling Facility (MRF) and EfW facility including an education centre and business incubation units. Implementation of a Sustainable Energy Park will require further assessment in terms of land use requirements and any proposals for a MRF and EfW facility as well as the education and business unit will require detailed assessment at the project stage to identify potential adverse effects and propose mitigation measures as necessary.

Policy P3 –Identifying provision – Commercial and Industrial waste was deleted as C&I issues are covered under theme 9.

Key Theme 9 - Commercial and Industrial waste

Policies in this section have been re-worded to include for example 'partnering with stakeholders' under policy C11 in promoting sustainable management of C&I waste, and adding in 'partner with the Environment Agency to improve data collection' under policy C14. This highlights the importance of partnership working in dealing with commercial and industrial waste both with the industry and with regulators.

6.4 Mitigation of potential residual effects

The assessment has also identified areas where mitigation measures will need to be put in place at later stages of implementing the WSR. The proposed mitigation measures relate to provision of recycling and composting facilities and to developing the Sustainable Energy Park including the proposed EfW facility.

Owing to the strategic nature of the assessment and the proposals in the WSR it has been difficult to determine specific mitigation measures without detailed information on location, type and scale of facilities for recycling and composting. The same applies to the Council's recovery solution. However, Table 6.1 outlines generic mitigation measures which can be adopted and refined at the EIA stage.

A detailed EIA would be required at the planning application stage of a new waste management facility to ensure that key environmental and other sustainability issues are assessed rigorously and mitigation measures put in place where negative effects are likely to occur.

Table 6.1 Generic mitigation measures for consideration at project level

SA Objective	Mitigation measures
To minimise the risks to human health deriving from waste development	Include health impact assessments as part of any EIA to identify potential impacts on human health from waste management activities.
Minimise the pressure on greenfield land by efficient land use of derelict and previously used sites & promote balanced development	Seek to maximise the use of brownfield sites wherever possible.
Maintain and enhance biodiversity	Ensure potential impacts on biodiversity are identified and mitigation measures put in place. Opportunities for biodiversity enhancement should also be sought.
Reduce greenhouse gas emissions	Seek sustainable waste transport modes should be encouraged and the location of facilities should aim to reduce the distance travelled for waste management at the facility.
Improve Leeds' ability to adapt to climate change	Proposals should be seeking to move waste away from landfill.
Improve access to services and facilities whilst reducing motorised journeys.	Waste facilities should be located where they are easily accessible reducing the distance travelled.
Reduce the growth in waste generated and landfilled.	Proposals should be seeking to reduce the amount of waste going to landfill.
Reduce the consumption and wasteful use of primary resources, and encourage the development of alternatives to primary resources	Proposals should incorporate efficient use of energy wherever possible
Reduce pollution levels	Proposals should identify potential areas of pollution and propose mitigation measures where there is a likelihood of pollution
Maintain and enhance landscape and the quality, the cleanliness of the urban environment and reduce fly-tipping.	Likely impacts on landscape and the cleanliness of the environment should be assessed and negative effects mitigated.
Conserve and enhance the historic environment	The historic environment should be taken into account when assessing likely effects of developing waste management facilities and mitigation measures identified to offset any potential negative effects
Increase the efficient use of energy and natural resources and sustainable design	Efficient use of energy, natural resources and sustainable design should be encouraged
Promote the effective and sympathetic restoration and after-use of sites	Proposals should demonstrate how the site will be restored after waste management use.

7 Monitoring

Monitoring provides the means by which Leeds City Council can measure the performance of the WSR against the SA objectives and targets. Monitoring also provides the opportunity to determine whether the mitigation of significant social, economic and environmental effects identified during the sustainability assessment is being carried out, and allows any further significant effects that may arise during the life of the strategy, to be identified and addressed.

In terms of the Leeds WSR, effective monitoring can be used to manage and reduce uncertainty, improve knowledge about Leeds' environment, and enhance the City Council's accountability through transparent and accurate reporting.

7.1 Monitoring Proposals

For the completion of the Final Waste Strategy Review in 2006, Leeds City Council will be providing details of its Action Plan for implementing the WSR and the monitoring of it. It is anticipated that the requirements for monitoring the performance of the WSR against the SA objectives and targets will form part of this programme.

The monitoring of the WSR's social economic and environmental performance will be linked to the SA targets and indicators provided in Table 4.2. Given that information gaps have already been identified that would prevent the development of a full monitoring programme, work to address these information gaps will be initiated before the submission of the final WSR in order to reduce uncertainty on its implementation.

The framework for monitoring the performance of the WSR against the SA objectives and targets will be presented in a format similar to the example in Table 7.1 below.

Table 7.1 Example table for monitoring the WSR against the SA objectives and targets

Objective	Indicator	Target	Data provider /Method)	Mitigation frequency
Reduce the growth in waste generated and landfilled in Leeds.	Amount of municipal waste arising and managed by management type and the % of each management type represents of total waste managed	Meet government targets of 30% recycling / composting and 45% recovery by 2010 and 33% recycling and 67% recovery by 2016 (LIWS)		Annually

8 Conclusions

The purpose of this report has been to document the Sustainability Appraisal of the WSR and to document how the appraisal process has influenced the WSR.

The SA has ensured that environmental, social and economic factors have been considered in developing the Strategy review. In doing so, the report has set the context of the appraisal through reviewing relevant plans and programmes that affect or influence the WSR and presented baseline data that has helped in identifying opportunities and challenges facing Leeds City Council in managing its waste sustainably. This has helped inform the development of the SA objectives against which the performance of the WSR's principles, objectives, options and key themes have been assessed.

Overall, no significant adverse effects on the SA objectives are identified. However, mitigation measures are highlighted where there are proposals that might require the provision of waste management facilities. The development and operation of major waste facilities has the potential for negative effects especially on the natural and built environment. As a result, generic mitigation measures to highlight areas that need to be considered in the Environmental Impact Assessments for such developments have been highlighted.

The framework for monitoring the performance of the WSR against the SA objectives and targets will be completed once the details of WSR Action Plan have been produced.

Appendix 1 – Policies, Plans and Programmes

International and European

Kyoto Protocol 1997
The Convention on Wetlands of International Importance 1971 (amended 1981)
European Climate Change Programme (ECCP)
The Pan-European Biological and Landscape Diversity Strategy (1995)

EU directives

Waste Framework Directive
Landfill Directive
Water Framework Directive
Waste Incineration Directive
Waste Electrical and Electronic Equipment (WEE) Directive
Habitats Directive 1992/43/EEC
Strategic Environmental Assessment 2001 Directive
Council Directive 2002/49/EC on the Assessment and Management of Environmental Noise
Air Quality Framework Directive 1996/62/EC
Council Directive 1999/30/EC on Ambient Air Quality Limits
Wild Birds Directive 1979/409/EEC

UK statutes and government policy statements

Climate Change: The UK Programme
National Air Quality Strategy (2000)
Energy White Paper: Our Energy Future
The Countryside and Wildlife Act 1981
UK Biodiversity Action Plan (1994)
English Nature Natural Area Strategy
Rural Strategy (2003)
The Historic Environment: A Force for Our Future (2001)
The England Forestry Strategy: A new focus for England's woodlands
Our Countryside the Future: a fair deal for rural England (2000)
Strategy for Sustainable Farming and Food: facing the Future (2002)
Local Government Act 1999 (Best Value);
Waste & Emissions Trading Act 2003;
United Kingdom Management Plan for Exports and Imports of Waste (1996)
Landfill Allowance and Trading Scheme (England) Regulations 2004;
Landfill Regulations 2002;
Household Waste Recycling Act 2003;
Waste Minimisation Act 1998;
Animal By Products Regulations 2003;
Hazardous Waste Regulations (inc European Waste Catalogue Issues);
Producer Responsibility (Packaging Waste) Regulations.
Ozone Depleting Substances Regulation;
UK Strategy for Sustainable Development (1999)
UK Strategy for Sustainable Development: Securing the Future 2005
Waste Strategy 2000
Consultation draft Waste Strategy (2004)

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Habitats Regulations 1994
Hedgerow Regulations 1997
PPG2 - Green Belts (1995)
PPG3 - Housing (2000)
PPG4 - Industrial and commercial development and small firms (1992)
PPG9 - Nature conservations (1994)
PPG13 - Transport (2001)
PPG14 - Development on unstable land (2002)
PPG15 - Planning and the historic environment (1994)
PPG16 - Archaeology and planning (1990)
PPG17 - Sport and recreation (1991)
PPG18 - Enforcing planning control (1991)
PPG21 - Tourism (1992)
PPG24 - Planning and noise (1994)
PPG25 - Development and flood risk (2001)
PPS1: Delivering Sustainable Development
PPS7: Sustainable Development in Rural Areas (2004)
PPS11: Regional Spatial Strategies
PPS12: Local Development Frameworks
PPS22: Renewable Energy (2004)
PPS23: Planning and Pollution Control
PPS9: Biodiversity and Geological Conservation – Consultation draft (2004)
PPS10: Planning for Sustainable Waste Management (2005)

Regional

Regional Spatial Strategy for Yorkshire and the Humber to 2016 (based on selective review of RPG12) (2004)
Regional Spatial Strategy Consultation Draft Topic Papers
Regional Economic Strategy 2003-2006
Regional Housing Strategy (2003)
Advancing Together
Regional Sustainable Development Framework (2003)
Regional Cultural Strategy
Yorkshire and Humber Regional Waste Strategy (2003)
Environment Agency Strategic Waste Management Assessment
Countryside Character Areas Volume 3 Yorkshire and Humber 1999
Regional Environmental Enhancement Strategy for Yorkshire and Humber 2003

Local policy or guidance documents

Leeds UDP (2001)
Leeds UDP Review First deposit draft (June-August 2003)
Leeds UDP Review Revised deposit draft (February-March 2004)
Vision for Leeds 2004-2020
Leeds Economic Strategy (2000)
Closing the Gap - Leeds City Council Corporate Plan 2002-2005
Leeds City Council Plan 2004/2005
Leeds Air Quality Action Plan (2003)
Leeds Nature Conservation Strategy
Leeds Housing Strategy
Leeds Community Cohesion Action Plan
Leeds Integrated Waste Management Strategy
West Yorkshire Local Transport Plan 2001-2006

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Draft West Yorkshire Local Transport Plan 2 (2005)
Neighborhood Renewal Strategy
Health and Well-Being Strategy
State of the Environment Report (2003)
Leeds Biodiversity Action Plan
Leeds City Council Environmental Policy
Local Agenda 21 Strategy Statement and Action Plan
Leeds Economic Development Strategy
River Aire Catchment Flood Management Programme (CFMP) and the Aire
and Calder Catchment Abstraction Management Strategy (CAMS) (to be
consulted on in 2006 and published by 2007)
Rights of Ways Improvement Plans (ROWIPs)

Appendix 2 – Baseline Data Review

Detailed baseline information is presented in the table below and is linked to the SA objectives. The baseline information also relates to the following environmental topics as outlined in the SEA Regulations:

- Biodiversity, fauna and flora
- Population;
- Human Health;
- Soil;
- Water;
- Climatic Factors;
- Material Assets;
- Cultural Heritage; and
- Landscape.

The identification of potential data requirements is based on the following:

- The draft Scoping Report for West Yorkshire LTP2 SEA;
- The Leeds State of the Environment Report;
- The Leeds EMAS – Environmental Statement;
- A guide to Sustainability Appraisal of the Leeds LDF; and
- Jacobs Bartie best practice.

The baseline data identified in the table is 'work in progress' and will evolve during the assessment of International, European, national, regional and local plans, programmes and policies relevant to the SA of Leeds Waste Strategy Review.

Indicator	Local Data	Regional Data	National Data	Target	Comment
SA Objective : To conserve and enhance the natural and built environment					
Changes in populations of farmland and woodland birds	Data not available: further investigation needed	Farmland birds increased by 7% Woodland birds increased by 1% 1998-2002 <i>Source: Regional Quality of Life counts.</i>	Farmland birds increased by 5% Woodland birds declined by 2% 1998 -2002 <i>Source: UK SDS Progress Report 2003</i>	Reverse the decline in farmland and woodland birds by 2020 (UK)	Sources of local data need to be investigated.
Status/condition of SSSIs (favourable or recovering) %	Data not available	58.29 <i>Source: English Nature Website</i>	66.15 <i>Source: English Nature Website 2005</i>	Bring into favourable condition by 2010 95% of nationally important wildlife sites (UK)	Sources of local data need to be investigated.
Number of Local Nature reserves	<i>Source: Leeds UDP</i>				
Changes in status of priority species and habitats.	The ten Leeds BAP priority species and habitats are: Pasqueflower; Atlantic Stream Crayfish; Harvest Mouse; Pipstrelle; Great crested Newt, Thistle Broomrape; Hedgerow and field margins, reedbeds, lowland wet grassland; magnesium limestone grassland.	N/A	England 2002: <i>priority habitats</i> : Declining: Accelerating 9% Slowing 14% Fluctuating 2% Stable 16% Unknown 47% <i>Priority species</i> : Declining: Accelerating 17% Slowing 8% Fluctuating 1 Unknown 30% <i>Source: Biodiversity Strategy for England – measuring Progress</i> 0% Stable 19%		
SA Objective: Maintain and enhance landscape and townscape					
Landscape Character Areas		<i>Source: Countryside Agency</i>	<i>Source: Countryside Agency</i>	To protect and enhance the quality, integrity and distinctiveness of the landscape	
Areas of high landscape value	<i>Source: Leeds UDP</i>			To protect and enhance the quality, integrity and	
Important townscapes	<i>Source: Leeds UDP</i>			To protect and enhance the quality, integrity and	

Indicator	Local Data	Regional Data	National Data	Target	Comment
				distinctiveness of townscapes	
Area of Green Belt	<i>Source: Leeds UDP</i>				
Areas of recreation	<i>Source: Leeds UDP</i>			To protect resources valued for recreation	Protection of sports fields, parks and open spaces, and allotments Protection of areas of significance for tourism Protection of public rights of way network
Light pollution				To minimise light pollution	
Number of Listed buildings on the Buildings at Risk Register (BARS)	93 - <i>Source: Leeds Building at Risk Register</i>	N/A	N/A	Remove at least 10 BARS per year	
Scheduled Ancient Monuments	<i>Source: Leeds UDP and SMR data/ Archaeological Record Centre</i>	<i>Source: Archaeological Record Centre/SMR data</i>	<i>Source: English Heritage</i>		
Number of Conservation Areas	<i>Source: Leeds UDP</i>				
Historic Parks and Gardens	<i>Source: Leeds UDP, Archaeological Record Centre</i>	<i>Source: Archaeological Record Centre</i>	<i>Source: English Heritage</i>		
% of grade I and II buildings at risk	8 (2003) <i>Source: South Yorkshire Future RSS baseline</i>	3.7 (2002) <i>Source: South Yorkshire Future RSS baseline description</i>	?		Leeds has more listed buildings at risk than the regional and national average
SA Objective: To minimise the risks to human health deriving from waste management					
Population	<i>Source: Census 2001</i>	<i>Source: Census 2001</i>	<i>Source: Census 2001</i>		To secure improvements to health
Population aged 75+	<i>Source: Census 2001</i>	<i>Source: Census 2001</i>	<i>Source: Census 2001</i>	Above national average of 7.5%	To secure improvements to health
People assessing general health as not good	<i>Source: Census 2001</i>	<i>Source: Census 2001</i>	<i>Source: Census 2001</i>	Below national average of 9.2%	To secure improvements to health
Noise mapping data (eg L(DEN) criteria)	Specific noise monitoring projects <i>Source: Environmental Health</i>	Specific noise monitoring projects <i>Source: Environmental Health</i>	Noise Mapping contours <i>Source: Noise Mapping software</i>		To secure improvements to health
Areas of Tranquillity	Amount of parkland/green		Areas of Tranquillity		To secure

Indicator	Local Data	Regional Data	National Data	Target	Comment
	spaces Source: Leeds UDP		Source: CPRE, Countryside Agency		improvements to health
Number of transport related accidents		Transport accidents statistics Source: LTP Annual Progress Reports. West Yorkshire Road Injuries 2003 report.		Reduce the number of vehicular, pedestrian, and other transport-user casualties	
Mortality rates from coronary heart diseases and cancer	Cancer:201 Coronary heart disease and strokes: 192.8 per 100,000 (2002), Source: Public Health in Leeds	Cancer:241 Source: regional Trends 2004 Coronary heart disease and strokes: (comparative data being sought)	Cancer:234 Source: regional Trends 2004 Coronary heart disease and strokes: (comparative data being sought)	Reduce mortality from heart disease by at least 40% in the under 75s and cancer by at least 20% by 2010 (UK)	
SA Objective: Increase the efficient use of energy and natural resources and sustainable design					
Electricity generated from renewable sources (%)	Data not available: further investigation needed	1.5 Source: LSER	3.86 Source: DTI website		Will the Strategy contribute to a reduction in emissions of greenhouse gases? Does the Plan encourage consideration of this issue in respect of specific proposals?
SA Objective: Reduce pollution levels and improve cleanliness					
Number of AQMA's	Air quality models Findings of Air Quality Detailed Assessment Round 1 & 2, Declaration of AQMAs, Areas of air quality concern. Source: District Air Quality Management Teams.			Reduce by at least 205 below 1990 levels by 2010 and by at least 25% below 1990 levels by 2015 (RSS target).	Improve local/regional air quality
Changes in air quality for PM10 and NO2.	Number of days where air quality is classed moderate / high. Source: District Air Quality Monitoring.	Source: Regional Air Quality Study?	PM10 and NO2 air quality trends / compliance. Source: DEFRA air pollution bands.		
Climate change	Temperature increase Source: ?	Temperature increase Source: ?	Temperature increase Source: DEFRA?		
Water quality – length of rivers in good or fair chemical and biological	Data not available	Chemical: 90 Biological 90.1 Source: Progress in the	Chemical: 89 Biological 95 Source: Progress in the	100km of rivers to be improved by one quality grade by	

Indicator	Local Data	Regional Data	National Data	Target	Comment
quality (%)		Region 2004	Region 2004, DEFRA	2005 (RSS target).	
Development on floodplains	Development previously carried out on floodplains		Source: Environment Agency	To guard against increased risk of flooding, and achieve an overall reduction in flood risk	
% of land covered by floodplain.	Source: Leeds UDP		Source: Environment Agency		
Groundwater Quality			Source: Environment Agency		
Nitrate Vulnerable Zones and Nitrate Sensitive Areas			Location of areas identified as NVZ and NSA. Source: Environment Agency, www.magic.gov.uk		
Climate change	Temperature increase Source: ?	Temperature increase Source: ?	Temperature increase Source: DEFRA?		
SA Objective: Reduce greenhouse gas emissions					
Emissions of methane from landfill sites	Data not available- check with EA				
Carbon Dioxide emissions per head	Total emissions 3661 ('000 tonnes) 1993 Source: LSER	4,700 Regional Quality of Life Counts 2004.	2,300 Regional Quality of life Counts 2004.	20% reduction in carbon dioxide emissions below 1990 levels by 2020 (UK, RPG & VFL2) 60% reduction in carbon dioxide emissions by 2050 (EWP) reduce green house gasses emissions by 12.5% from 1990 levels by 2010 (UK).	
Carbon dioxide emissions from transport	1.46 million tones (modelled emissions 2005) Source: LSER	Data not available: further investigation needed.	Data not available: further investigation needed.		
SA objective: Minimise the pressure on green field land by efficient use of derelict and previously used sites and promote balanced development					
Loss of agricultural land and soils to development waste management facilities or development	% of development on Brownfield sites. Source: ?	% of development on Brownfield sites. Source: ?	% of development on Brownfield sites. Source: ?	60% of development on previously developed land	Avoid the wasteful use of land. Has the use of PDL/buildings (or of derelict/contaminated

Indicator	Local Data	Regional Data	National Data	Target	Comment
					land) been a consideration in site selection? Is the use of existing facilities maximised (e.g. Extending existing sites rather than opening up new ones)? Will proposals help to address existing problems of degradation or dereliction?
Amount of Grade 1, 2 and 3a agricultural land			Soil classifications Source: DEFRA/ Environment Agency.	Reduce the amount of agricultural land lost to development	
Area of woodland area				Increase woodland area	
Contaminated land	Extent of land contamination Source: District Land Contamination Officers.		Extent of land contamination Source: DEFRA / Environment Agency.		
Abstraction management			Catchments Abstraction Managements Strategies areas. Source: Environment Agency		
SA Objective: Reduce the growth in waste generated and landfilled in Leeds					
Resource supply efficiency in C & D waste		Source: RSS AMR?			
Total Household waste (kg per person)	479.4 Source: Leeds Waste Strategy	509 Source: Progress in the Region 2004	521 Source: Progress in the Region 2004	Reduce growth in waste to 2% 2006-2010); 1% for 2011-2015) and 0.5% (2016-2020) (LIWS).	Leeds appears to be producing less waste per capita than the regional and national average although this might be unreliable as sources are different
Household waste recycled /composted (%)	11.86 (2001/2 LSER)	6% of Waste recycled Source: Regional Waste Strategy	12% of waste recycled Source: UK SDS Progress Report 2003	Meet Government targets of 30% recycling/composting and 45% recovery by 2010 and 33%	The regional indicator is waste recycled per capita rather than the % of waste recycled.

Indicator	Local Data	Regional Data	National Data	Target	Comment
				recycling and 67% recovery by 2016 (LIWS)	Leeds is performing at about the national average and better than the regional average
Number and capacity of facilities to recycle/compost municipal waste	Source: UDP Annual Monitoring report? Waste Strategy	Source: Regional Waste Strategy		Meet Government Targets.	To secure the sustainable management of waste, minimise its production, and increase re-use, recycling and recovery rates
Waste arisings per sector	2002/03 Household waste(342,967 tonnes, Trade waste (58, 375 tonnes)				<ul style="list-style-type: none"> • Provision for BPEO • Contribution to regional and sub-regional self-sufficiency • Encouraging the adoption of techniques higher up the waste hierarchy
Amount of waste landfilled	2002/03 342,112 tonnes	Data not available		By 2010 reduce landfilling of biodegradable waste by 75% of 1995 figure, by 2013, 50% and by 2020 35% of 1995 figure.	
Number and capacity of landfills	Source: EA Strategic Waste Management Assessment				
Amount of biodegradable waste landfilled	Source: Leeds Waste Performance Data				
Number and capacity of Energy to Waste facilities in Leeds (% of energy generated?)					
Densities/accessibility of bring sites		Source: RSS AMR?			Proximity principle Improve recycling/re-use rates
Special/hazardous waste arising	Source: Leeds Waste Performance Data				
Waste growth (MSW)	Source: Leeds Waste Performance Data		3-4% every year in the UK.	3% growth to 2005 2% growth for the following 5 years (2006-2010) 1% growth for the next 5 years (2011-	Improve waste minimisation

Indicator	Local Data	Regional Data	National Data	Target	Comment
				2015) and 0.5% growth in the to 2020 <i>Source: Waste Strategy</i>	
Cost of waste management per household	£79 per household per year. <i>Source: Waste Strategy.</i>				
Tonnages of waste imported and exported out of Leeds	?				
Electricity generated from renewable sources in the Region expressed as: installed renewable energy capacity (MW), % of total electricity generated in the region, % of total electricity consumed in the region		<i>Source: RSS AMR?</i>		To minimise the requirement for energy use, promote energy efficiency, and increase the use of energy from renewable sources	Does the Strategy encourage consideration of these issues in respect of specific proposals? Does it encourage the use of new and clean technologies, or technologies that will help to generate energy from renewable sources?
Proportion of total aggregates from primary sources	<i>Source: Leeds UDP</i>			Protect primary mineral resources	
% of recycled aggregates	<i>Source: Leeds Waste Strategy?</i>			Encourage the use of recycled/secondary materials or aggregates	Include provision for the production of aggregate from C&D waste.
SA Objective: Maintain or improve good quality employment opportunities and the conditions which have enabled business success, economic growth and investment					
% of people who are in work	58.9 <i>Source: 2001 census</i>	58.9 <i>Source: 2001 census</i>	60.1 <i>Source: 2001 census</i>	Increase the number of Leeds residents moving into work (Vision for Leeds 2 VFL2).	
Unemployment rates (%)	3.3 <i>Source: 2001 census</i>	3.7 <i>Source: 2001 census</i>	3.4% <i>Source: 2001 census</i>		Unemployment rates in Leeds are lower than the regional and national rates and the trend is downwards.

Indicator	Local Data	Regional Data	National Data	Target	Comment
SA objective: Improve access to services and facilities whilst reducing motorised journeys					
<i>Reduce the need to travel</i>	Percentage of households resident in the Authority's area served by a kerbside collection of recyclables. (88.13% 04/05)				Locate sites close to, and with reasonable access to, points of demand. Ensure sites are in accordance with the proximity principle?
<i>Promote the use of sustainable transport modes</i>		Increase rail freight share of the market by 2010 (RSS)	Reduce congestion on inter urban trunk road network and in large urban areas to 2000 levels by 2010.		Have options for transport by rail, water, pipeline and conveyor been fully considered? Will the Strategy encourage walking, cycling and the use of public transport?
<i>Provision and accessibility of waste management facilities</i>	<i>Map showing waste facilities in Leeds?</i>				
SA Objective: To improve the social and environmental performance of the economy					
Social audit of waste industry					
Number of public sector organisations and local business (with over 100 employees who have adopted environmental management systems.	13 in 2003/04 ACORN Project			All public sector organisations and 50% of local business (with over 100 employees) to work towards adopting environmental management systems by 2020 (VFL2)	
SA Objective: To increase participation, awareness and education in relation to waste issues.					
Improvement of public awareness of waste issues					
Number of households/businesses participating in recycling schemes	BVPI –access to kerbside recycling (88.13% 04/05)			Target 88.5%	
SA Objective: Reduce overall rates of crime, and reduce the disparities in crime rates across Leeds					
Number of fly tipping prosecutions	9,397 (04/05)				

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Indicator	Local Data	Regional Data	National Data	Target	Comment
SA Objective: Increase social inclusion, community cohesion and active community participation					
Number of people involved in the waste strategy consultation.	1731 responses received during the Waste strategy review consultation.				
Number of local people who are satisfied with waste management facilities in the area.	BVPI 90a – Satisfaction with waste collection service – 89% (03/04) BVPI90b – Satisfaction with provision of recycling facilities 62% (03/04) BVPI 90c – Satisfaction with waste disposal - 88% (03/04).				



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Appendix 3 - Statutory Consultation Responses to the Sustainability Appraisal Scoping Report

From: Felicite Dodd [Felicite.Dodd@English-Nature.Org.UK]
Sent: 19 January 2006 16:20
To: Finch, Victoria
Subject: leeds Integrated Waste Management Strategy Review

Dear Victoria

Thank you for sending another copy of the above, I have a few comments to make;

Designated areas - will this include SSSI, LNR and SEGIs?
The list of LNR is not complete, contact the countryside dept 01132375324.
The list of SA sub-objectives appears thorough.
The list of UK statutes should include the 1981 COuntryside and Wildlife Act (as amended).
Robust targets need to be put in place for the targets and comments.
The sentence 'achieve conservation status of all SSSI sites by 2004' set against the Leeds Biodiversity Action Plan needs clarifying.

I hope that these comments help.

Yours sincerely

Felicité S Dodd (Mrs)
Conservation Officer West Yorkshire
English Nature
Humber To Pennines Team
Bullring House
Northgate
Wakefield
WF4 3JE

Direct dial 01924 334512
Fax 01924 334535
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Ms V Finch,
Senior Planner,
Jacobs Bapbtie,
1 City Walk,
LEEDS
LS11 9DX

Our Ref:

Your Ref:

Date:

Dear Ms Finch,

Leeds Integrated Waste Management Review Sustainability Appraisal Scoping Report

Thank you for consulting English Heritage about the above document.

We consider that the document has identified the majority of plans and programmes which are of relevance to the development of the Integrated Waste Management Review, that it has put forward a suitable set of objectives and that it has established an appropriate baseline against which to assess the Review's proposals. In general terms, therefore, we believe that it sets out the basis for the development of an appropriate framework for assessing the impact which the implementation of the Integrated Waste Management Review might have upon the historic environment.

There are, however, a small number of areas where it is considered you might like to give further thought in developing the next stage of the SEA. These are as follows:-

Page	Section	Comment
5-3	Table 5.1	In terms of assessing the likely impact of the key themes and proposals of the waste strategy and identifying potential significant effects, it would be better to separate the natural environment and the historic environment into two separate Sustainability Appraisal Objectives (each with their own set of sub-objectives). Whilst there are a number of overlapping areas between the natural and historic environment, equally, there are aspects where a positive impact on one may be regarded a negative impact upon the other. A large number of SEAs within the Region have separate Objectives for the natural and historic environment and for ease of use of the document, it is suggested that you might adopt the same approach.
5-7	Figure 5.1	It is not clear how " <i>potential conflict</i> " differs from " <i>potential for conflict or compatibility</i> ". Is one less severe than the other or is the latter meant to be " <i>uncertain</i> "? It would seem sensible for the assessment to include a category which covers areas where the relationship is uncertain.

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Page	Section	Comment
		It would also make it easier to understand if the key was arranged in order of the severity of the impact - i.e. from Compatible to Incompatible.
5-7	Figure 5.1	There would appear to be an uncertain relationship between SA7 (the more efficient use of brownfield sites) and SA8. In terms of the historic environment, the development of a previously developed site might actually improve the townscape quality of a Conservation Area; alternatively, it might destroy an archaeological site.
	Appendix 1	For completeness, reference should also be made in the section on UK Statutes and Policy Statements to the Government statement <i>The Historic Environment: a Force for Our Future</i> (DCMS 2001).
	Appendix 3	For the reasons detailed above, we consider that the natural and historic environment should be separated in to two Objectives. Notwithstanding this, it is not clear why the Sustainability Appraisal Objective to “ <i>Conserve and enhance the natural and built environment</i> ” contains no Indicators for the built environment.
	Appendix 3	<p>The Indicators for the historic environment would benefit from the following amendments:-</p> <ul style="list-style-type: none"> • The Indicator relating to Listed Buildings should be changed to “<i>The number of Listed Buildings and % of Listed Buildings on the Buildings at Risk Register</i>”. Its Target should be amended to read “<i>To remove at least 10 BARs per year through positive management</i>” • There is one Registered Battlefield in Leeds. We would suggest the following Indicator “<i>Loss or damage to the character or setting of the Registered Battlefield</i>” <p>On a more general note, it is not clear precisely how a number of the proposed Indicators will monitor the effect of the implementation of the waste Strategy. For example, merely recording the number of, say Historic Parks and Gardens, would not record a situation where a proposal in the Strategy has an adverse impact upon the character or setting of that asset. It may be better, therefore, to develop a suite of indicators that considers (in the case of the historic environment) the number of historic buildings, sites, areas (or their settings) affected either positively or negatively by waste proposals.</p>

English Heritage strongly advises that the conservation section of the City Council and the archaeological staff at West Yorkshire Archaeology Service are closely involved throughout the preparation of the SA of the document.

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They are best placed to advise on; local historic environment issues and priorities, including access to data held in the HER (formerly SMR); how the policy or proposal can be tailored to minimise potential adverse impacts on the historic environment; the nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of historic assets.

Finally, we should like to stress that this opinion is based on the information provided by you with your letter dated 18 November, 2005. To avoid any doubt, this does not reflect our obligation to provide further advice and, potentially, object to specific proposals which may subsequently arise (either as a result of this consultation or in later versions of the Plan) where we consider that, despite the SA/SEA, these would have an adverse effect upon the historic environment.

If you have any queries about this matter or would like to discuss anything further, please do not hesitate to contact me.

Yours sincerely,

Ian Smith
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Dear Ms. Finch

Leeds Integrated Waste Management Strategy Review Sustainability Appraisal/Strategic Environmental Assessment Scoping Request.

Thank you for consulting the Countryside Agency on the above document.

The Agency's role as a statutory consultee in the Sustainability Appraisal (SA) process embraces commenting on plans or programmes where our principle interests may be significantly affected, namely:

Landscape character and quality;
Visual amenity and enjoyment of the countryside as a whole;
Recreational opportunities;
Enjoyment of access land or a public right of way.

Overall Comments

Overall, we consider that the Scoping Reports are generally fit for purpose, closely following current Government advice on the structure, content and approach to Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA). The Reports are clearly set out and understandable.

Detailed Comments

We make the following comments on the consultation document; -

1. The Agency supports the general approach taken to the proposed SA/SEA. The process is set out clearly with the stages in plan making consistent with Government guidance from the ODPM's interim advice note.

2. Stage 3 Context & Appendix 1.

We would recommend that the following documents be included under National,
Rural Strategy (2004)
The Future of Transport (2004)

Regionally

Countryside Character Areas Volume 3 Y&H CA 1999
Regional Environmental Enhancement Strategy for Y&H 2003

Local

Rights of Way Improvement Plans (ROWIPs)

3. Baselines Appendix 2.

SA Objective: "Maintain and enhance landscape and townscape" below is some additional information source that may assist in this section of baseline data. The

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only specific baseline information that we feel is missing from this Section is Green infrastructure corridors which should link open space and public rights of way networks.

The State of the Countryside Reports. The national and regional version can be accessed through the national website: www.countryside.gov.uk

Countryside Character Volume 3, Yorkshire and Humber. This contains the countryside character areas and can be obtained from Countryside Agency Publications, PO Box 125, Wetherby, West Yorkshire, LS23 7EP. Tel: 0870 120 6466. Also through the national website.

'Planning Tomorrow's Countryside' (CA60) sets out our vision for rural areas and provides advice to local planning authorities to assist in achieving sustainable development. (soon to be amended to cover our CA LAR remit)

Countryside in and around towns. Countryside Agency and Groundwork Trust (CA207)

Countryside Quality Counts (www.countryside-quality-counts.org.uk) The CQC project has developed an indicator of change in the countryside quality based on landscape character. A set of Character Area Profiles for the Character Areas of England have been constructed which set out the key elements that give each area its sense of local distinctiveness, and the threats and opportunities facing those areas.

All publications can be obtained from Countryside Agency Publications, PO Box 125, Wetherby, West Yorkshire, LS23 7EP. Tel: 0870 120 6466, or through the national website.

4. Stage 5. SA objectives, sub objectives, targets and indicators.

We are pleased to see the identification of relevant sustainability objectives in the reports, and in particular we welcome the clear demonstration (by the use of tables) of the relationship between the objectives.

The Agency believes that in line with our current objectives, enhanced access to and enjoyment of the countryside, including nationally designated areas, rural landscapes and green spaces should be encouraged. The sustainability objectives, whilst addressing environmental, transport and access matters do not specifically identify enhanced access and recreation opportunities and the Council should consider whether this should be a Key Issue for the Authority.

We would recommend that SA sub Objectives under "Improve access to services and facilities whilst reducing motorised journeys" need to ensure the rural areas are not forgotten, as they can appear to be urban focused.

Other sub objective under this the Council should consider is:

- Green infrastructure corridors that are able to connect green and open spaces and help give access to the surrounding countryside by both walking and cycling, this will also benefit health and recreation activities for the residents of Leeds and bio-diversity.
- To ensure urban fringe and rural landscapes are protected and enhanced and degraded landscapes are improved for the benefits of all residents and visitors and significant loss of landscape character and quality is minimised.

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- The Green Infrastructure corridors could equally apply under the “Maintain and enhance landscape and townscape” sub objectives.

SA Objectives Indicators.

The Council should consider whether an additional or amended objectives and indicators is required under Sustainability Objectives. For example: -

- Cultural, leisure and recreation – linking of open/green space to create green infrastructure corridors.
- Quality of built environment - % of Greenfield and/or greenbelt areas used for development.
- % of urban fringe land that is degraded or not managed this is brought back into productive or recreational use.

The Countryside Quality Counts indicators should be able to assist the Council with a number of the above indicators and issues that we have raised in the consultation. Subject to the responses set out above, the Agency has no further comments relating to this stage of the SA/SEA process.

We trust that the above is helpful in assisting Leeds City Council and yourselves at this stage of the SA/SEA process and should you have any questions or require any further information please do not hesitate to contact me.

Yours sincerely

Mike Barningham
Yorkshire and the Humber
Positive Planning & Transport Team

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**The Environment Agency's Response to the Sustainability Appraisal Scoping
Request for Leeds Integrated Waste Management Strategy Review**

21 December 2005

Contents

1. Summary
2. Detailed Comments
 - 2.1 Details of other plans and programmes of relevance to the Waste Strategy Review SA.
 - 2.2 Information regarding relevant environmental problems and opportunities and future trends.
 - 2.3 Additional baseline data on existing waste arising and city council waste management operations.
 - 2.4 Additional environmental objectives that may not have been identified at this stage.

1. Summary

Key Comments

- We support the SA Objective “Reduce the growth in waste generated and landfilled in Leeds” as it is key to developing a sustainable waste strategy
- The remit of the strategy is not clearly defined, ie which types of waste will it deal with
- The SA should use the United Kingdom Management Plan for Exports and Imports of Waste as one of its relevant Plans and Programmes
- The distances that waste is transported for treatment or disposal must be included in any sustainability assessment
- The baseline data should be updated and needs clarification and interpretation

2. Detailed Comments

2.1 - Details of other plans and programmes of relevance to the Waste Strategy Review SA:

Key Comments

- PPS10
- United Kingdom Management Plan for Exports and Imports of Waste

In 1.1.1 you refer to “Best Practical Environmental Option”. This term is no longer relevant and you should be referring to **PPS10**’s requirement to carry out SEA.

A significant proportion of the UK’s waste that is recycled is exported abroad. A key document is therefore the - **United Kingdom Management Plan for Exports and Imports of Waste** (1996). This document is linked to the following legislation - Basel Convention May 1992, Waste Shipments Regulation EC 259/93, Transfrontier Shipment of Waste Regulations 1994.

The following Environment Agency plans are under preparation and may have a bearing on the Waste Strategy, **River Aire Catchment Flood Management Program (CFMP)** and **The Aire and Calder Catchment Abstraction Management Strategy (CAMS)** (to be consulted on in 2006 and published by 2007).

2.2 - Information regarding relevant environmental problems and opportunities and future trends:

Key Comments

- The distances that waste is transported for treatment or disposal must be included in any assessment sustainability
- Increased development on brownfield sites could increase certain types of waste

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As waste is driven up the waste hierarchy away from disposal to landfill and towards reuse and recycling it is important that this is done sustainably. It is essential that all the various methods of dealing with waste are assessed for their environmental impacts.

In line with the Governments Waste Strategy 2000 and its emphasis on the Proximity Principle and Self-Sufficiency (Section 4.5) it is important to assess the distances that waste is transported. Exporting waste outside of the authority is a significant issue for Leeds and could continue to play a large part of any future strategy. The environmental implications of this must be clearly acknowledged and assessed.

The government is encouraging development on brownfield sites (PPS3). This could create additional waste through the remediation and clean up of contaminated soils and material. It is essential that the most sustainable method of treating contaminated land is used. This should include a consideration of on site remediation. Where material has to be removed from the site there should be an assessment of the distance that the material will be transported as well as other factors such as threat to the environment.

In section 4.0 you outline what you consider the major pressures and opportunities relevant to the study area. We have the following comments to make:

4.2 "The need for increased transportation of waste"

It is not clear what this means. Is this need directly related to the point above regarding the "lack of waste management facilities within the Authority"? Where is the waste to be transported to? This point needs to be explained more fully.

An opportunity that should be listed in 4.3 is the possible creation of jobs within the waste management industry which is likely to result from increased recycling and recovery activities

We see waste minimisation through education as a very important element of any waste strategy.

2.3 - Additional baseline data on existing waste arising and city council waste management operations;

Key Comments

- **The remit of the strategy is not defined. We think it is therefore difficult to define the scope of the SA accurately**
- **The baseline has not used the most up to date data available**
- **The information included needs clarification and interpretation**

We have some concerns regarding your baseline data and would like to make the following points:

It is not clear what the remit of this strategy is. What types of waste does it cover?

It should be made clear which of the following types of waste are covered by the strategy:

1. Municipal
2. Commercial and Industrial
3. Construction and Demolition
4. Agricultural
5. Hazardous

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Until this has been clearly defined it is very difficult to comment on the scope of the SA or the appropriateness of the baseline data.

- 3.3.15 Flooding

This point appears to imply that severe climatic events in Leeds are the result of sea level rise. This is not the case, although the two may both be the result of climate change.

- 3.3.20 Waste

It is not clear what this information is illustrating. The terms you have used in this section need to be defined if they are to be used in a SA. For example we would like you to clarify the following:

What do you mean by "typical year"?

What is defined as a refuse tip?

Where are the 2 major waste incinerators?

- 3.3.23

The information used has been obtained from the Environment Agency's Strategic Waste Management Assessment 2000: Yorkshire and Humber. There is site deposit information on the Environment Agency's website for 2000-2001 <http://www.environment-agency.gov.uk>. There is also comprehensive waste arising and deposit information now available for 2002 and 2003. This information will be published on our website shortly, in the interim the information can be supplied on CD.

If you use this information in your baseline you should incorporate interpretation that shows why it is significant for this strategy.

- Figure 3.1 Leeds City Council Waste Management Operations

This diagram needs additional explanation and clarification of its relevance to this strategy.

2.5 - Additional environmental objectives that may not have been identified at this stage.

Key Comments

- We support the main SA Objective "Reduce the growth in waste generated and landfilled in Leeds" as it is key to developing a sustainable waste strategy

Objective / Indicator	Comment	Alternative or Addition
Reduce the growth in waste generated and landfilled in Leeds		

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Objective / Indicator	Comment	Alternative or Addition
Reduce the growth in waste generated and landfilled in Leeds	We would like to strongly support this objective.	
Tonnage of waste imported and exported out of Leeds	We support the use of this indicator as it supports our comments made in section 2.2.	The following objective should be used: Increase prevention, re-use, recovery and recycling of waste close to source ²
Reduce pollution levels and improve cleanliness		
Water quality – length of rivers in good or fair chemical and biological quality (%)	We support the inclusion of this indicator but would suggest the following rewording.	We suggest the wording of the indicator should be taken from the Water Framework Directive once the River Basin Management Plans are in place:- Restore polluted surface water and groundwater bodies to good status by 2015 with the exception specified in the Water Framework Directive –
Development on floodplains	This is an important indicator but should be reworded	Number of planning applications granted against Environment Agency advice (Information available on the Agencies website under Flooding HLT5) Numbers of properties at risk of flooding (Information available from Environment Agency) Proportion of properties within indicative floodplain with appropriate flood warnings (Information available from the Environment Agency)
Climate Change	It is important that indicators are included for this topic. We support the indicators in SA Objective Reduced greenhouse gas emissions.	

² In line with the Governments Waste Strategy 2000 and its emphasis on the Proximity Principle and Self-Sufficiency (Section 4.5)

Appendix 4 - Acronyms

AQS	Air Quality Standards
DEFRA	Department for Environment, Food and Rural Affairs
EA	Environment Agency
EH	English Heritage
EHO	Environmental Health Officer
EN	English Nature
ES	Environmental Statement
EU	European Union
FRIA	Flood Risk Impact Assessment
HGV	Heavy Goods Vehicle
IWMS	Leeds Integrated Waste Management Strategy 2003/06
LCC	Leeds City Council
LNR	Local Nature Reserve
NTS	Non-Technical Summary
ODPM	Office for the Deputy Prime Minister
PPG	Planning Policy Guidance
PPS	Planning Policy Statement
RSS	Regional Spatial Strategy
RWMS	Regional Waste Management Strategy
SA	Sustainability Appraisal
SEA	Strategic Environmental Assessment
SINC	Site of Importance for Nature Conservation Interest
SMR	Sites and Monuments Record
SSSI	Site of Special Scientific Interest
WSR	Leeds Integrated Waste Management Strategy Review