

# **Household Waste Recycling Centre Review 2015**

## **Waste Management Group**



## EXECUTIVE SUMMARY

This report updates the review of the Household Waste Recycling Centre (HWRC) service carried out in 2010. As a result of the 2010 HWRC review, there have been a number of developments to the HWRC service, including bringing the HWRCs in house, the letting of contracts to support the in house operation, reduction of opening hours at all HWRCs, the development of two new HWRCs built in the north of the county (Lower House Farm and Judkins), provision of on-site charity re-use shops at all HWRCs - including a contract with Age UK Warwickshire for operating the re-use shops, capital upgrades at many of the sites to improve operational functions e.g. expansion of the chemical facility at Lower House Farm and an increase in the number of materials accepted for recycling such as carpets and mattresses.

In 2013 as part of the update to Warwickshire's Municipal Waste Strategy, the Warwickshire Waste Partnership set itself a new HWRC target to 'provide an effective HWRC service aiming to reach re-use, recycling and composting levels of 75% across all sites by 2020, by reducing recyclables being put into the residual waste stream'.

To support a continuing effective and efficient HWRC service to residents and work towards the 2020 target WCC has decided to carry out a further HWRC review in 2015. Currently Warwickshire has 9 HWRCs across the County, of these sites 8 are operated in house and 1 is operated by a private contractor. The current HWRC opening times are 9.30am to 15.15pm on week days (with late night opening until 18.15 on a Wednesday in the summer) and 8.30am to 15.15 at the weekend in the winter (17.45pm in the summer).

The type of waste entering the HWRCs includes household waste, non-household waste and commercial waste. Due to variations in the sites, including size, operator and visitor numbers, different materials are accepted and sorted for recycling at different sites. The list of materials that can be recycled at the HWRCs is continuing to increase as cost effective markets are sourced for them.

Performance at the HWRCs has continued to improve and the present recycling rate for the HWRCs stands at 71.5%; this is an increase of 18.3% since 2011 when the service was brought back in-house, which is good progress towards our 2020 target of 75%. Savings of over £1 million have been achieved within a year of bringing the sites in house and satisfaction levels from the public have increased from 75% in 2010/11 to 97.71% in 2015.

The results of the most recent composition analysis carried out in 2015 indicate that much more can be done. The study showed that on average 53.42% of the residual waste analysed from our HWRCs is recyclable within our current kerbside and HWRC recycling systems. A further analysis is planned for 2016.

In addition data gathered during the review shows the HWRC service compares favourably with other local authorities in terms of cost and performance. Many local authorities are carrying out reviews of the HWRC provision with a view to reducing the overall service cost by reducing hours, closing sites or putting material/access restrictions in place.

The aim of this review was to provide a plan to enable the HWRC service to have a sustainable future that enhances the provision and accommodates for the extra demand due to predicted housing growth over the coming years. Population growth across the County has already increased by 2.4% since the last HWRC review and it will be vital to continue to adapt the HWRC service in the coming years in order to maintain a sustainable effective service that meets the needs of our customers, but is affordable to the council.

There are a number of options that could be considered to amend the existing HWRC provision now or in the future. An overview of these options is provided in the report and each of these options could a role to play in the future HWRC service, it is recommended that the following options are investigated now or in the future:

- **Increasing HWRC hours of opening – to meet future housing demands**  
The service enhancement should be implemented when funding becomes available and demand dictates the need to expand the opening hours. Current estimates are that an extra £2.4 million capital will be required to meet future service needs and extra annual cost of £1.22 million revenue to extend the hours and manage the extra waste to cater for increased demand.
- **Charging for non-household waste**  
The cost of disposing of non-household waste (plasterboard, wood, inert waste and asbestos) in 2015/16 is £192,725, savings could be made by charging for this material. A review would demonstrate if it would be feasible operationally and cost effective to implement this option.
- **Expansion of materials as they become viable**  
The monitoring of recycling markets should take place so materials that can be processed for re-use, recycling or recovery where cost effective.
- **Plan for a new site in the South of the County**  
A feasibility study should be carried out to see if there are any benefits for Stratford District Council and Warwickshire County Council in developing a co-located Household Waste Recycling Centre (HWRC), Waste Collection Authority (WCA) depot and waste transfer station (WTS) in Stratford.
- **Partnership working with neighbouring authorities**  
Continuing work with neighbouring authorities where appropriate, to move the HWRC service forward whilst continuing to provide an efficient service for the residents of Warwickshire.
- **Behaviour change**  
Behaviour change will continue to be an area of focus with a canvassing project planned for summer 2015 across all HWRCs will seek to educate and encourage residents to use the recycling facilities in their area.

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## Glossary

Commercial waste	Waste classed as arising from non-household sources according to the Controlled Waste Regulations
Composting	An aerobic (in the presence of air) biological process in which organic wastes, such as garden and kitchen waste, are converted into a stable material which can be applied to land to improve soil structure and enrich the nutrient content of the soil
Disposal	Means landfill and incineration without energy recovery
Duty of care	Anyone who produces, imports, keeps, stores, transports, treats or disposes of waste must take all reasonable steps to ensure that waste is managed properly. This duty of care is imposed under the Environmental Protection Act
Environment Agency	Environment Agency - Intended to promote a more integrated approach to waste management and consistency in waste regulation  The agency also conducts national surveys of waste arising's and waste facilities
Household waste	Waste classed as arising from household sources according to the Controlled Waste Regulations.  Covers: waste from household collections, street sweeping, bulky waste collections, hazardous household waste collections, litter collections, separate garden waste collections, waste from Civic Amenity Sites (HWRCs) and waste collected separately for recycling/composting schemes.
HWRC	Household Waste Recycling Centre - A facility provided by the Local Authority that is accessible to local residents for the deposit of household waste that is not collected by the normal household waste collection round.
Inert Waste	Waste which, when deposited into a landfill site, does not undergo any significant physical, chemical or biological transformation.

Landfill Sites	Land in which waste is deposited
Landfill tax	<p>A levy on landfill site operators with the explicit environmental objective of reducing the UK's reliance on landfill as a means of disposal</p> <p>The level of the tax is £82.60 a tonne during 2015/16 and rises each year. A lower rate of £2.60/tonne applies to waste which is inactive</p>
Local plan	Local Plans set out a vision and a framework for the future development of the area, addressing needs and opportunities in relation to housing, the economy, community facilities and infrastructure
Municipal Waste	Any waste controlled or directed by a Waste Collection Authority or a Waste Disposal Authority
NAWDO	NAWDO represents waste managers working in England its function is to advise on policy and share information and expertise between officers
Non Household Waste	Non Household is construction and demolition waste
Recovered	Includes anaerobic digestion, incineration with energy recovery, gasification and pyrolysis which produce energy (fuels, heat and power) and materials from waste sometimes referred to as "Treatment"
Recycle now	A national campaign which includes a range of free to use communication materials for local authorities and other organisations to coordinate recycling initiatives
Recycling	The segregation, collection and reprocessing of waste materials into the same products or different ones
Residual Waste	The elements of the waste stream that remain after recycling or compostable materials have been separated or removed
Re-use	Includes checking, cleaning, repairing or refurbishing of whole items or spare parts, so they can be used again.

	Householders can donate or purchase items at the County's re-use shops
Trade Waste	Waste classed as arising from non-household sources according to the Controlled Waste Regulations
Transfer Station	A facility where deposited bulked up and transported to a disposal or reprocessing point
Waste hierarchy	<p>The "waste hierarchy" ranks waste management options according to what is best for the environment.</p> <p>It gives top priority to preventing waste in the first place. When waste is created, it gives priority to preparing it for re-use, then recycling, then recovery, and last of all disposal (e.g. landfill).</p>
WCA	Waste Collection Authority is a local authority in the UK charged with the collection of municipal waste.
WCC	Warwickshire County Council
WDA	Waste Disposal Authority is a local authority responsible for facilitating the disposal of waste, providing HWRCs and developing and implementing plans to deal with municipal waste.
WDF	WasteDataFlow is the web based system for municipal waste data reporting by UK local authorities to government.
WEEE	Waste Electrical and Electronic Equipment
WRAP	Waste Resources Action Programme works in the space between Governments, businesses, communities, innovative thinkers and individuals – forging partnerships and developing ground-breaking initiatives to help the UK use resources more sustainably.



# 1 Introduction

## 1.1 Background to review

Long-standing legislation from the Civic Amenities Act 1967 to the Environmental Protection Act 1990 has required local authorities to provide free-to-use household waste recycling centres for their residents to dispose of household rubbish and recycling.

In early 2010 the Waste Management Group undertook a fundamental review of its HWRC provision. The aim of the study was to review all aspects of the current service, as well as gather information both on the current service and best practice across the county. This review was in light a 20% savings requirement for WCC Waste Management.

Key decisions arising from the 2010 review:

- Bringing the management and operation of Cherry Orchard, Grendon (now Lower House Farm), Princes Drive, Shipston, Stockton and Wellesbourne Household Waste Recycling Centres in-house when the contracts for the sites expired in November 2011.
- The letting of contracts and management of services required to support the in house operation of the HWRCs.
- Reducing the opening hours of all the Household Waste Recycling Centres.
- The letting of a design, build and operate contract resulting in a brand new HWRC facility (including a charity operated re-use shop) in Nuneaton and Bedworth Borough.

These changes to the HWRC service resulted in excess of £1 million savings per annum across the HWRC service. In addition the changes have allowed for increased flexibility over the waste management service, which has assisted the authority in introducing new re-use and recycling services.

With regards to the impact of the changes on the public, a consultation on the HWRC service was carried out in 2013 which was after changes took place. This showed that the overall satisfaction rating for HWRC services and facilities was 92.9% this has since increased to 97.71% in 2015.

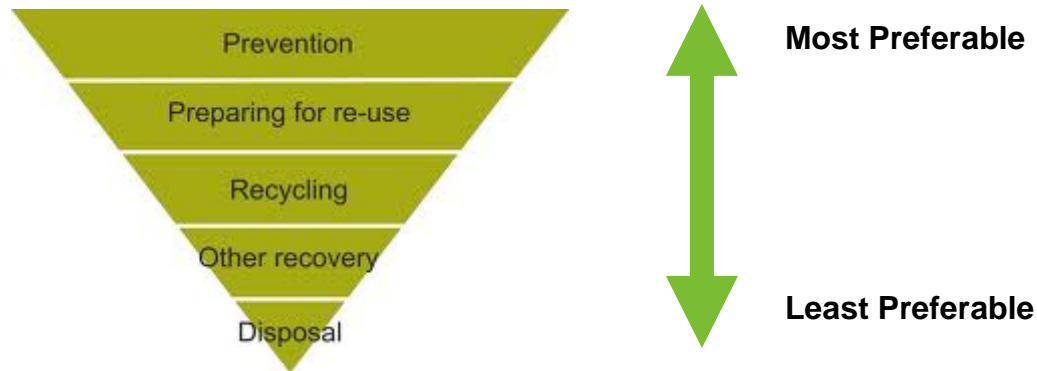
## 1.2 Waste Strategy 2013

The Warwickshire Waste Partnership updated the Municipal Waste Management Strategy for Warwickshire in December 2013.

The overarching theme of the newly updated strategy is the implementation of the waste hierarchy. The waste hierarchy sets out five steps for dealing with waste ranked according to environmental impact. The partnership includes representation

from WCC as the Warwickshire disposal authority as well as each of the five collection authorities. A diagram of the Waste Hierarchy is shown in Figure 1.

Figure 1 Waste Hierarchy



Local authorities will consider other factors when making decisions on waste, including social and economic impacts, and technical feasibility. These factors will vary in line with the range of materials handled and their location. The relevance of these factors will be considered on a case-by-case basis.

As part of the update process the Partnership renewed support for the following strategy objectives:

#### **Strategy Objectives**

1. To reduce the amount of waste generated in Warwickshire
2. To develop integrated, sustainable solutions for managing waste in Warwickshire
3. To meet and exceed national re-use, recycling and composting targets
4. Work in partnership with each other and other stakeholders to produce and implement the Strategy
5. Encourage public participation in the implementation and review of the Waste Strategy
6. Regularly review and update the Strategy and implementation programme

The Partnership set key targets within each of the strategy objectives, the target for the HWRC service sits within objective 3 and is as follows:

#### **HWRC Target**

Provide an effective HWRC service aiming to reach re-use, recycling and composting levels of 75% across all sites by reducing recyclables being put into the residual waste stream

### **1.3 Legislation overview**

Household waste and recycling centres (HWRCs) previously known as civic amenity sites, were originally set up under the Civic Amenities Act 1967. This stated in Part III (18) that the duty of a local authority was:

*‘to provide places where refuse, other than refuse falling to be disposed in the course of a business, may be deposited at all reasonable times free of charge by persons resident in the area of the authority and, on payment of such charges (if any) as the authority think fit, by other persons.’*

Since the 1967 Act there have been numerous legislative changes, to define the responsibilities of local authorities and influence the management and recycling requirements at HWRCs.

An overview of the applicable legislation for the HWRC service is provided in appendix 1.

The most recent change is the Local Authorities (Prohibition of Charging Residents to Deposit Household Waste) Order 2015, which came into force on 23<sup>rd</sup> April 2015. The order brings into law amendments to the 1990 Environmental Protection Act and the 1967 Civic Amenities Act and states:

A local authority must not, in exercise of the general power, charge persons resident in its area to:

- a) Enter into, or exit from, a household waste recycling centre; or
- b) Deposit household waste at a household waste recycling centre.

Since Warwickshire County Council does not charge for its HWRCs this does not affect the authority.

### **1.4 HWRC Review 2015**

To support a continuing effective and efficient HWRC service to residents WCC has decided to carry out a further HWRC review in 2015.

The review aims to look at Warwickshire’s current site provision, current waste materials provision, policies, current performance and data, public opinion, comparison with other local authorities and possible options for the future HWRC service.

## 2 Current site provision

The Waste Management Group, with the Economic Growth Business Unit manages Warwickshire County Council's obligation to provide sites for members of the public to dispose of their household waste. It currently carries out this function through the provision and management of nine Household Waste Recycling Centres (HWRCs) across Warwickshire.

Eight of these HWRCs are run directly by Warwickshire County Council and one of the HWRCs, the Judkins site in Nuneaton is run by a private company under the terms of an agreed contract. The contract with FCC Environmental began in April 2012.

Two of the eight HWRCs that are run by WCC, namely Stockton and Wellesbourne HWRCs, are operated on a day to day by Age UK Warwickshire, a local charity who also manage re-use shops on all 8 of the WCC run sites. The contract with Age UK Warwickshire began in November 2014.

One of the HWRCs, Lower House Farm, in North Warwickshire, although operated by Warwickshire County Council is jointly funded by Staffordshire County Council and is provided as a shared facility. Therefore residents of Staffordshire as well as Warwickshire are able to utilise the site. In addition due to the high use of the Shipston HWRC by Gloucestershire residents, a formal arrangement between WCC and Gloucestershire County Council is in place to allow for the use of this site by the residents of Gloucestershire.

### 2.1 Sites by district

The nine current HWRCs are spread across Warwickshire, with at least one site located in each district/borough area.

- North Warwickshire Borough – Lower House Farm HWRC (a joint WCC and Staffordshire County Council HWRC and Waste Transfer Station (WTS) facility opened in 2013 which replaced the former Grendon HWRC)
- Nuneaton and Bedworth Borough – Judkins HWRC
- Rugby Borough – Hunters Lane HWRC
- Stratford District – Burton Farm, Shipston, Stockton, and Wellesbourne HWRCs
- Warwick District – Cherry Orchard and Princes Drive HWRCs

## 2.2 Sites map

A map showing the location of the HWRCs in Warwickshire is provided below:

Map 1 Location of HWRCs



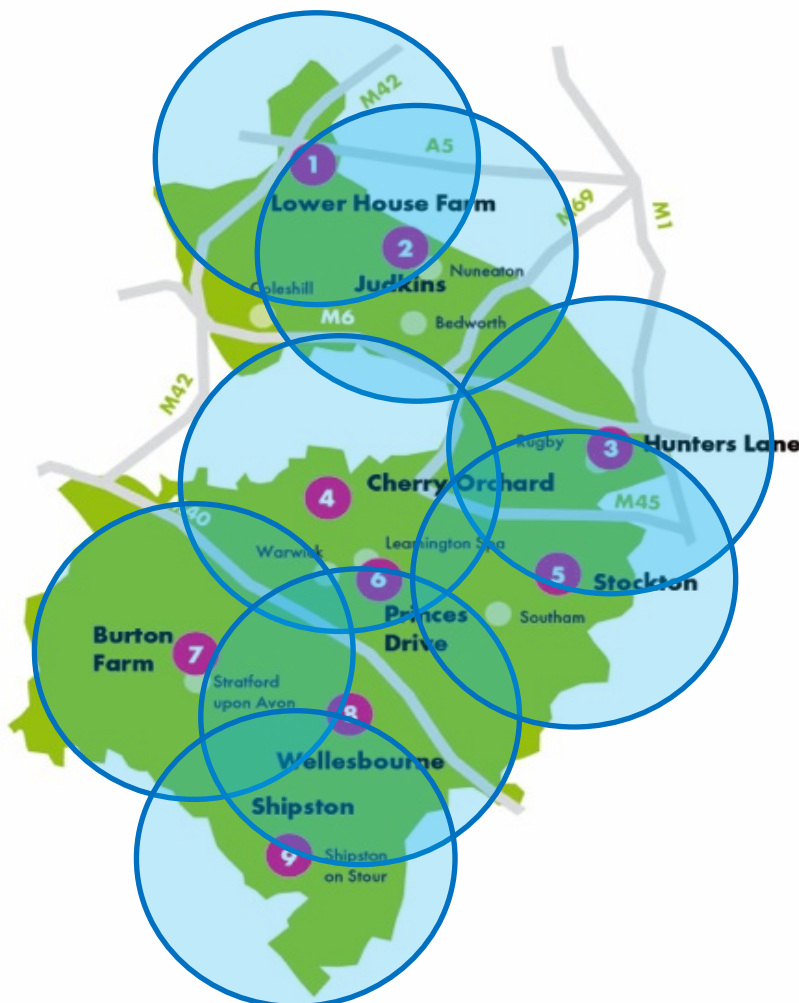
## 2.3 HWRC Provision

Minimum levels of HWRC provision have been suggested by Waste Resources Action Programme (WRAP) in their HWRC Guidance report (October 2012). The suggested levels are listed below.

- Maximum catchment area for a large proportion of the population: 3 to 5 miles (very rural areas: 7 miles).
- Maximum driving times for the great majority of residents in good traffic conditions: 20 minutes (very rural areas: 30 minutes).
- Maximum number of inhabitants per HWRC (in all but the most urbanised areas): 120,000.
- Maximum number of households per HWRC (in all but the most urbanised areas): 50,000.

Warwickshire currently meets these minimum levels of HWRC provision. For example the blue circles on map 2 show the areas of Warwickshire within 20 minutes' drive of each HWRC. Each circle shows a 10 mile radius, which equates to 20 minutes driving at 30 mph. The map shows the great majority of Warwickshire are within 20 minutes' drive of a HWRC

Map 2 Areas of Warwickshire within 20 minutes' drive of a HWRC



## 2.4 Operating times

All of the HWRCs in Warwickshire are open 7 days a week with the exception of Stockton. The opening times vary by season (summer and winter), as well as by weekday and weekends.

Table 1 Summary of opening times of HWRCs

Winter times 1 <sup>st</sup> Oct – 31 <sup>st</sup> Mar	Summer times 1 <sup>st</sup> April – 30 <sup>th</sup> Sept
Mon to Fri – 9.30 to 15.15*	Mon, Tues, Thurs, Fri – 9.30 to 15.15* Wed – 9.30 to 18.15*/***
Sat to Sun – 8.30 to 16.15**	Sat to Sun – 8.30 to 17.45**

\*Apart from Stockton which only opens on Mondays and weekends

\*\*Apart from Shipston which closes at 12:15

\*\*\*Apart from Shipston which closes at 15:15

With the exception of Stockton and Shipston all of the HWRCs are open for 52 hours per week in the summer and 46 hours per week in the winter. At Stockton the total summer opening hours are 25 while at Shipston it is 35. At Stockton the total winter opening hours are 22 while at Shipston it is 34.

The opening hours were standardised and reduced at many sites in December 2013 as a result of the previous review of HWRCs undertaken in 2010 and the resulting overview and scrutiny committee work.

On the weekends Shipston is only open Saturday and Sunday morning this is due to limitations in the permission on the site as a result of the closeness of neighbouring houses.

## 2.5 Sites by operator

The following sites are directly run by Warwickshire County Council

Table 2 WCC Operated sites

Site	Location	Site Owner
Burton Farm HWRC	Stratford upon Avon	Leased from a local land owner over 25 years. The lease expires Dec 2026.
Hunters Lane HWRC & Transfer Station	Rugby	WCC
Cherry Orchard HWRC	Kenilworth	WCC
Lower House Farm HWRC	Atherstone	Land owned by WCC. Buildings/assets jointly owned with Staffordshire County Council and North Warwickshire Borough Council
Princes Drive HWRC and Transfer Station	Leamington Spa	WCC
Shipston HWRC	Shipston	WCC

The following sites are operated by contractors:

Table 3 Contractor Operated sites

Site	Site Owner	Contractor	Contract Length
Stockton HWRC	WCC	Age UK Warwickshire for operation WCC for management	Nov 2014 to Nov 2019 with a possible 5 year extension
Wellesbourne HWRC	WCC	Age UK Warwickshire for operation WCC for management	Nov 2014 to Nov 2019 with a possible 5 year extension
Judkins HWRC in Nuneaton	FCC Environmental	FCC Environmental	April 2012 to March 2027 with a possible 5 year extension

## 2.6 Transfer stations

Princes Drive in Leamington Spa, Hunters Lane in Rugby and Lower House Farm HWRC in Atherstone also act as waste transfer stations. The transfer station at Lower House Farm, although co-located is a separate facility operated by Biffa on behalf of the Authority. As such they handle more waste streams than the standard HWRCs from both members of the public and also from Waste Collection Authorities (WCAs). Once tipped at the site by the Waste Collection Authorities (WCAs) the



Waste is then bulked up and transported to a disposal point, either together with waste from the HWRC operation or separately.

The transfer station at Princes Drive has recently had its compactor unit replaced with a new unit and a further new unit will be installed in 2015. Once the compactor has been installed this transfer station will act as a contingency facility, should the usual waste disposal facilities available to Warwick District Council and Stratford District become unavailable, thus enabling materials to be moved on to other facilities outside the area.

Princes drive transfer station currently handles around 1,000 tonnes of commercial waste a year, and a further 11,000 tonnes of waste a year, from Stratford District Council and Warwick District Council. Other Warwickshire WCAs, however, also use Princes Drive as a tipping point for items such as clinical waste (for further details see section 3.3).

The Hunter's Lane transfer station currently handles around 300 tonnes per annum of commercial waste and a further 800 tonnes per annum of waste from Rugby Borough Council.

The transfer station at Lower House Farm is operated under contract by Biffa. The contract began in January 2014 and runs for 5 years with an additional extension period of 5 years.

*Photo 1 Lower House Farm Waste Transfer Station (licensed to hold 80, 000 tonnes per year)*



## 2.7 HWRC upgrade works

The HWRCs have been upgraded and in some cases have been redeveloped in order to meet the needs of the service safely and improve performance.

Detail on the two redeveloped sites is provided below:

- Lower House Farm HWRC opened in June 2013 as a replacement of the former Grendon HWRC. The project was a joint venture with Staffordshire County Council and the site serves both Warwickshire and Staffordshire residents. The site is co-located with a transfer station facility (which began operating in January 2014). The transfer station is used for transferring residual waste from two Warwickshire WCAs; North Warwickshire and Nuneaton & Bedworth and two Staffordshire WCAs; Tamworth and Lichfield WCAs, to the Energy from Waste Facility (W2R) at Four Ashes in Staffordshire.

*Photo 2 Lower House Farm HWRC*



- A 15 year contract for the design, build and operation of a HWRC in Nuneaton and Bedworth was awarded in April 2012. As part of the rebuild the site has a purpose built re-use shop on site operated by a third sector organisation.

Other specific improvements at the HWRCs include the installation of a new weighbridge, weighbridge office, bailer and compactor at Princes Drive.

Re-use shops were installed at 4 of the smaller HWRCs (Cherry Orchard, Shipston, Stockton and Wellesbourne) in 2012. There is now a re-use shop at every HWRC in Warwickshire.

The signage at the sites has been improved by adopting the national 'recycle now' branding.

*Photo 3 Example of recycle now signage at Lower House Farm HWRC*



The layout at the sites has been developed to incorporate additional material streams such as carpets and mattresses. A map showing the site layout is now included on the HWRC webpages.

In addition traffic calming and pedestrian separation has been implemented or planned where appropriate.

WCC recently commissioned a consultant to review CCTV systems across all of the HWRCs with a view to upgrading where appropriate, to protect valuable materials stored on the site and assist with implementation of safety policies. Funding has been secured to upgrade some of the sites and a further programme will hopefully be implemented in future years.

The WCC webpages for the HWRCs<sup>1</sup> have been upgraded to provide a more customer friendly experience. The new pages also include information on what happens to the recycling from the HWRCs.

<sup>1</sup> <http://www.warwickshire.gov.uk/HWRC>

### **3 Current waste materials provision and policies**

The various types of wastes entering the HWRCs can be broadly categorised as follows:

- Household waste
- Non-household waste and
- Commercial waste

Due to variations in the sites, including size, operator and visitor numbers, different materials are accepted and sorted for recycling at different sites. The list of materials that can be recycled at the HWRCs is continuing to increase as cost effective markets are sourced for them. The latest examples include carpet and mattresses.

Services are also being expanded where possible and space allows, such as the provision of chemicals now being accepted at Lower House Farm and paint is now being accepted at both Lower House Farm and Stockton.

Some materials are defined as 'household' in nature whilst others are defined as 'non-household' even though they are produced by members of the public in their own homes.

Tables 4 and table 5 in the sections 3.1 and 3.3 show which household and non-household materials are accepted at each HWRC. Please note that wood is comprised of both household e.g. free standing furniture and non-household elements e.g. fence panels.

#### **3.1 Household waste accepted at HWRCs**

As can be seen from table 4 most HWRCs accept the majority of non-hazardous household waste streams. Other waste types such as hazardous chemicals, are restricted to a smaller number of HWRCs, for example hazardous chemicals can only be accepted at Princes Drive and Lower House Farm.

The contractor for the Judkins HWRC has advised WCC that they will be rolling out new recycling services over the coming months for example carpet and mattress recycling.

Table 4 Household Waste accepted

Material - Household	Burton Farm	Cherry Orchard	Lower House Farm	Hunters Lane	Judkins	Princes Drive	Shipston	Stockton	Wellesbourne
Aluminium Foil (in scrap metal)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Automotive batteries	✓	✓	✓	✓	✓	✓	✓	✓	✓
Books (for re-use or in cardboard)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cardboard	✓	✓	✓	✓	✓	✓	✓	✓	✓
Carpet (for recycling)	✓	✓	✓	✓		✓	✓		
Cardboard beverage packaging	✓	✓	✓	✓	✓	✓	✓	✓	✓
Chemicals			✓			✓			
Chipboard and MDF	✓	✓	✓	✓	✓	✓	✓	✓	✓
Engine Oil	✓	✓	✓	✓	✓	✓	✓	✓	✓
General Household Waste	✓	✓	✓	✓	✓	✓	✓	✓	✓
Glass (bottles and jars)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Green garden waste	✓	✓	✓	✓	✓	✓	✓	✓	✓
Household batteries	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ink and toner cartridges	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mattresses (for recycling)	✓	✓	✓	✓		✓	✓		
Mixed cans (in scrap metal)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mobile phones	✓	✓	✓	✓	✓	✓	✓	✓	✓
Other scrap metal	✓	✓	✓	✓	✓	✓	✓	✓	✓
Paint			✓			✓		✓	
Paper	✓	✓	✓	✓	✓	✓	✓	✓	✓
Plastic (soft - pots, tubs, trays)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Plastic (hard – toys)	✓	✓	✓	✓		✓	✓		
Textiles & footwear	✓	✓	✓	✓	✓	✓	✓	✓	✓
Vegetable oil	✓	✓	✓	✓	✓	✓	✓	✓	
WEEE – Cathode ray tubes	✓	✓	✓	✓	✓	✓	✓	✓	✓

Material - Household	Burton Farm	Cherry Orchard	Lower House Farm	Hunters Lane	Judkins	Princes Drive	Shipston	Stockton	Wellesbourne
WEEE – Fluorescent tubes and other light bulbs	✓	✓	✓	✓	✓	✓	✓	✓	✓
WEEE – Fridges and freezers	✓	✓	✓	✓	✓	✓	✓		
WEEE- Large domestic app	✓	✓	✓	✓	✓	✓	✓		
WEEE – Small domestic app	✓	✓	✓	✓	✓	✓	✓	✓	✓
Wood - household	✓	✓	✓	✓	✓	✓	✓	✓	✓

### 3.2 Duty of care

Warwickshire County Council has a duty of care to ensure that the materials collected for re-use, recycling or composting at the HWRCs are taken to a licensed facility and are processed correctly. The authority carries out site visits to new contractors to ensure its compliance.

*Photo 4 Site visit to recyclables destination for paper/card collected at the HWRCs*



### 3.3 Non-household waste accepted at HWRCs

Asbestos is accepted free of charge at the Lower House Farm, Hunters Lane, Judkins and Princes Drive HWRCs but only in small amounts. A resident may take up to three small pieces a month, wrapped and sealed to these sites. Anyone with more than this must make their own disposal arrangements via a private contractor.

Tyres and gas bottles are not accepted free of charge at any HWRC. They are not deemed to be household waste, and as such, it is recommended that they are taken back to garages or returned to place of purchase. Tyres and gas bottles are accepted as commercial waste for a charge at Princes Drive and Lower House Farm, whilst gas bottles are accepted for a charge at Hunters Lane (see section 3.5 for more detail on the commercial waste).

We cannot offer the full range of materials at all sites due to restrictions with space and licensing.

Table 5 Non Household Waste accepted

Material – Non Household	Burton Farm	Cherry Orchard	Lower House Farm	Hunters Lane	Judkins	Princes Drive	Shipston	Stockton	Wellesbourne
Asbestos			✓	✓	✓	✓			
Gas bottles/Cylinders			✓	✓		✓			
Plasterboard	✓		✓	✓	✓	✓			
Rubble, soil and hardcore	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tyres			✓			✓			
Wood – non household	✓	✓	✓	✓	✓	✓	✓	✓	✓

### 3.4 Waste collection authority waste accepted at the HWRCs and transfer stations

The predominant waste type currently tipped at the transfer stations is street sweepings arising from the districts and boroughs road cleaning activities. The street sweepings material consists primarily of sand and soil generated during the routine cleaning of roadways, but may also contain some high levels of seasonal leaf and other miscellaneous wastes such as litter. Due to the techniques used by street sweeping vehicles, when this waste is tipped it often has a higher than average water content.

Although not available as a facility to the public, Burton Farm does have the facility to hold Gas bottles that are fly-tipped or found on site.

Table 6 WCA waste accepted at the HWRCs and transfer stations

Material	Burton Farm	Cherry Orchard	Lower House Farm - WTS	Lower House Farm - HWRC	Hunters Lane	Judkins	Princes Drive	Shipston	Stockton	Wellesbourne
Bulky			✓		✓		✓			
Road sweepings							✓			
Flytipping	✓		✓		✓		✓			
Fly tipped chemicals				✓			✓			
Street cleansing			✓				✓	✓		
Clinical				✓			✓			

### 3.5 Commercial waste

Both the Princes Drive and Hunters Lane HWRCs have been accepting commercial waste for a charge for many years.

In 2013/14 the Princes Drive HWRC handled 6,600 tonnes of commercial waste and the Hunters Lane HWRC handled around 620 tonnes.

In September 2014 a new commercial waste service was launched which extended both the range of services offered at the two existing HWRCs offering commercial services (Princes Drive and Hunters Lane) and the number of sites offering commercial services to support local businesses .

By November 2014 all 8 WCC run HWRCs were offering commercial waste services as described below:

- Commercial Recycling Permits – for a set number of recyclable materials such as paper, cardboard, and glass etc.
- Pre-paid Commercial Waste Sacks – for non-recyclable waste, and
- Pay-As-You-Throw service – for larger quantities of recyclable and non-recyclable waste such as soil & rubble and general waste. Princes Drive and Hunters Lane charge by weight whereas at the other 6 sites without weighbridges charge by vehicle type and waste type.

To date a total of 24 permits have been issued and 1 set of bags sold, which equates to 373 tonnes of waste over the course of the year.



### 3.6 Re-use shops

Warwickshire is leading authority in utilising on-site charity re-use shops. The purpose of the shops is to drive waste up the waste hierarchy and to divert waste away from disposal through the promotion of re-use, as well as to support the third sector with regards to their charitable purpose and local community benefit.

Photo 5 Example of items sold via HWRC re-use shops



In 2014 a competitive tender was run by WCC to operate all 8 of the WCC run HWRC re-use shops. The tender was made up of 4 different lots:

Table 7 Re-use shop lots

Lot	Service
1	Stockton HWRC and small re-use shop Wellesbourne HWRC and small re-use shop Cherry Orchard small re-use shop Shipston small re-use shop Princes Drive large re-use shop
2	Lower House Farm large re-use shop
3	Hunters Lane large re-use shop
4	Burton Farm large re-use shop

The winning bidder of all 4 lots was a charitable organisation and all eight re-use shops are now being operated by Age UK Warwickshire under a 5 year contract (with an option to extend by a further 5 years).

The added value of Age UK Warwickshire operating the re-use shops across the County is that all of the surplus revenue generated will be invested in services to support older people and their carers in Warwickshire.

*Photo 6 Lower House Farm re-use shop*



In addition to the 8 re-use shops at the WCC run HWRCs there is also a re-use shop in operation at the Judkins HWRC. The Judkins re-use shop is also run by a by the Second Chance charity.

### **3.7 Residual waste**

A key objective for WCC as the waste disposal authority for Warwickshire is to reduce the amount of residual waste from the HWRCs, in order to minimise disposal costs. Table 8 shows what happens to the residual waste from each HWRC.

Table 8 Residual Waste Destination

HWRC	Main residual waste destination
Burton Farm	Bubbenhall Landfill
Cherry Orchard	Bubbenhall Landfill
Lower House Farm	W2R Energy from Waste facility (via Lower House Farm waste transfer station)
Hunters Lane	Ling Hall Landfill
Judkins	FCC to arrange as per the contract
Princes Drive	Bubbenhall Landfill
Shipston	Bubbenhall Landfill
Stockton	Bubbenhall Landfill
Wellesbourne	Bubbenhall Landfill

As can be seen in table 8, of the HWRCs managed by WCC only the residual waste from Lower House Farm HWRC is sent to recovery via an energy from waste facility. The residual waste from the all other sites goes to landfill and incurs a landfill tax charge (£82.60 per tonne in 2015/16) in addition to the gate fee for disposal.

For disposal at an energy from waste plant the bulky waste element of residual waste from HWRCs would need to be shredded prior to treatment at an energy recovery facility. There could be an opportunity to separate residual waste at the HWRCs so that the non-bulky waste can be sent to the Coventry energy from waste facility with a potential for further future. There are no shredding facilities available at the Coventry energy from waste facility for bulky waste.

The Lower House Farm HWRC residual waste is sent to the Lower House Farm waste transfer station for separating into bulky/non bulky before being sent to the W2R energy from waste facility. The bulky waste is then shredded by the contractor operating the W2R facility before being processed.

### 3.8 Recyclable markets

All materials coming into HWRCs need to be re-used, recycled, recovered or disposed of appropriately. Decisions are taken on which route the material will go through based on a number of factors including but not limited to, operational requirements, quality of materials, potential cost or income to the authority, market conditions etc. The cost of disposal is a key factor in determining the processing of each material stream and as long as a material can be processed for re-use, recycling or recovery at a price that is cheaper than disposal or it is at least cost neutral then this will be the preferred option for that material.

Over the past few years we have seen a significant decline in the value generated by the sale of co-mingled and source separated recycling in the UK, this is due to a number of factors.

Demand for paper and card has declined in recent years due to advances in digital media and there is no indication of this trend being halted or reversed. On a national level the UK has reduced its consumption of newsprint by nearly 50% in the last ten years. The reduction in consumption has led to one of the key paper mills in the UK (Aylesford Newsprint) closing in February 2015. Another mill operated by UPM has reduced its capacity in Europe by 800,000 tonnes in the first quarter of 2015. WCC carried out an e-auction for its paper and card in March 2014, which resulted in WCC receiving a very competitive price for the paper and card arising at the HWRCs. The contract was recently extended for 1 year (prior to the changes in the market) and as a result WCC has been unaffected by the market changes to date. The market changes could have an impact when the Authority goes out to tender in 2016.

For plastic the falling oil price is leading users of recycled plastic to switch back to virgin polymers as the value of the material falls alongside the cost of oil. WCC carried out an e-auction for its plastic in March 2014, which resulted in WCC receiving a competitive price for the plastic arising at the HWRCs. The contract was recently extended for 1 year (prior to the changes in the market) and as a result WCC has been unaffected by the market changes to date. The market changes could have an impact when the Authority goes out to tender in 2016.

In the past month WCCs wood recycling contract with a local company came to an end. The company did not wish to extend and WCC had to source a new processing facility. Prices for the processing of wood have increased by 350% since the last contract was tendered meaning an extra processing cost of £337,000 per year for WCC. The reason for the price increase is mainly down to overcapacity in the market place.

Recent updates to the Waste Electrical and Electronic Equipment Regulations plus the reduced value of scrap metal reduced the income received by WCC for small electronic appliances (kettles, hair straighteners etc.) taken to the HWRCs by £179,000.

The recycling of new material types will hopefully increase, as new outlets are developed and new recyclers enter the market. WCC will continue to monitor the markets and will explore the potential incorporation of additional materials into existing services, as they become viable. An example of this has been the introduction of mattress and carpet recycling at the larger HWRCs. Mattresses and carpet made up a significant element of the non-recyclable waste collected at the HWRCs and diverting these materials to recycling markets has increased the recycling rate for those sites participating and WCC costs.

### **3.9 Vehicle restriction policy at HWRCs**

A vehicle restriction policy has been in force at HWRCs since 1998. The policy was formulated and implemented following the introduction of Landfill Tax.

The overarching aim of the policy is to stem unlawful deposits of trade and commercial waste at HWRCs which is not classed as Household Waste, and would otherwise incur additional annual disposal costs of more than £1 million for WCC.

In 1999 a small van permit system was introduced for households whose only vehicle in the family was a small car derived van or pick up (less than 2.2 tonnes gross vehicle weight). Permits were valid for one year and allowed an unrestricted number of visits. The vehicle restriction policy was revised by Cabinet in 2009 (with a minor revision in 2010) to accommodate owners of 4 X 4 twin cab pick-ups and streamline trailer restrictions in line with national best practice.

The small van permit scheme was revised again in 2014 to ascertain the scheme was fit for purpose. The annual permit scheme for small, car-derived vans was replaced with an entitlement to six vouchers for disposal of household waste in a permitted vehicle up to six times a year; part of this review was to consult with these users. Valid van permits have been honoured until expiry. The new voucher scheme commenced on 1 July 2014 and there have been no complaints to date regarding this change.

A recent change in legislation (laid out in section 1.3) states that a local authority must not, charge persons resident in its area to:

- c) Enter into, or exit from, a household waste recycling centre; or
- d) Deposit household waste at a household waste recycling centre.

The waste management team has sought legal advice on whether the vehicle restriction policy complies with this legislation. The advice is that this does not affect the present policy, as WCC is still allowing access free of charge.

### 3.10 Current material restrictions

There are restrictions in place at the HWRCs for certain material types.

Table 9 Material restrictions

Material	Restriction
Inert waste (soil, tiles, bricks etc)	3 x 25 kg bags per household per month
Plasterboard	Maximum of 3 sheets of plasterboard per household per month is accepted at Lower House Farm, Judkins, Hunters Lane, Princes Drive and Burton Farm
Household chemicals and paint	All visits must be pre-booked via a chemical waste disposal form.  Only small amounts of household chemicals and paint can be accepted at Lower House Farm and Princes Drive.  Paint can also be accepted at Stockton.
Asbestos	3 pieces of asbestos are accepted from householders at Lower House Farm, Judkins, Hunters Lane and Princes Drive.

## 4 Current performance and data

The recycling rates and waste throughput for each site, as well as progress towards the waste strategy HWRC target are laid out in this section.

### 4.1 HWRC Recycling rates

The recycling rates for the HWRCs in 2014/15 are shown below in table 10. The overall recycling rate has been calculated using the total waste managed (household, non-household and commercial) by the HWRC from members of the public, traders and charities; excluding any waste being brought in by the district or borough councils (waste entering the HWRC as a transfer station).

As can be seen from the data during 2014/15 the recycling rate varied across the sites. The large variation between the “Site Recycling Rate” and the “NI192 Recycling Rate”, in the main, is due to inert waste such as soil and rubble. Soil and rubble is not classed as household waste. The NI192 rate only refers to waste which is classed as Household waste by the Controlled Waste Regulation 1992.

Table 10 Recycling rates at HWRCs in 2014/15

	Burton Farm	Cherry Orchard	Lower House Farm	Hunters Lane	Judkins	Princes Drive	Shipston	Stockton	Wellesbourne
Site Recycling (including non-household e.g. soil and rubble)	73.60%	73.50%	73.70%	72.70%	61.70%	67.10%	74.20%	72.50%	74.70%
NI 192 Recycling Rate	65.78%	68.24%	64.43%	72.14%	55.19%	67.29%	73.33%	66.30%	70.55%
Dry Recycling	49.52%	45.35%	53.25%	50.77%	43.68%	36.56%	53.05%	46.89%	49.82%
Composting Rate	15.33%	21.44%	8.49%	18.70%	10.37%	28.71%	17.88%	15.26%	18.88%
Re-use Rate	0.93%	1.45%	2.69%	2.67%	1.14%	2.02%	2.40%	4.15%	1.85%

The average site recycling rate across all HWRCs in 2014/15 was 71.5%.

The highest performing site in 2014/15 was Wellesbourne. The lowest performing site was Judkins in Nuneaton. Historically this site has always been poor performing, due to a combination of poor facilities, and the large amount of inert waste passing through the site. However a new facility opened in 2014 and it is hoped this will improve the performance in the long term. Since 2010 all HWRCs have recycled

inert materials with the exception of Judkins. FCC has commenced the recycling of inert waste from August 2014.

If progress continues then WCC will be on track to meet the waste strategy target to achieve re-use, recycling and composting levels of 75% across all sites by 2020.

## 4.2 Waste throughput at HWRCs

### 4.2.1 HWRC tonnage data for 2014/15

Table 11 and graph 1 show the amount of waste that each HWRC deals with over 12 months varies considerably.

Table 11 Tonnage passing through HWRCs in 2014/15

	Burton Farm	Cherry Orchard	Lower House Farm	Hunters Lane	Judkins	Princes Drive	Shipston	Stockton	Wellesbourne
Re-use (inc re-used inerts)	1,156	741	815	885	92	2,121	244	128	199
Recycling	2,513	1,874	2,477	2,694	3,522	2,370	1,015	384	541
Composting	778	886	463	992	836	1,861	342	125	205
Inert and soil (landfilled)	0	0	0	0	228	0	0	0	0
Disposal	1,736	1,312	1,587	1,478	3,386	2,121	510	276	338
<b>Total HWRC</b>	6,183	4,813	5,342	6,049	8,064	8,473	2,111	913	1,283
Transfer station waste	90	0	33,868	1,135	0	13,015	0	0	0
<b>Grand Total</b>	6,273	4,813	39,210	7,184	8,064	21,488	2,111	913	1,283

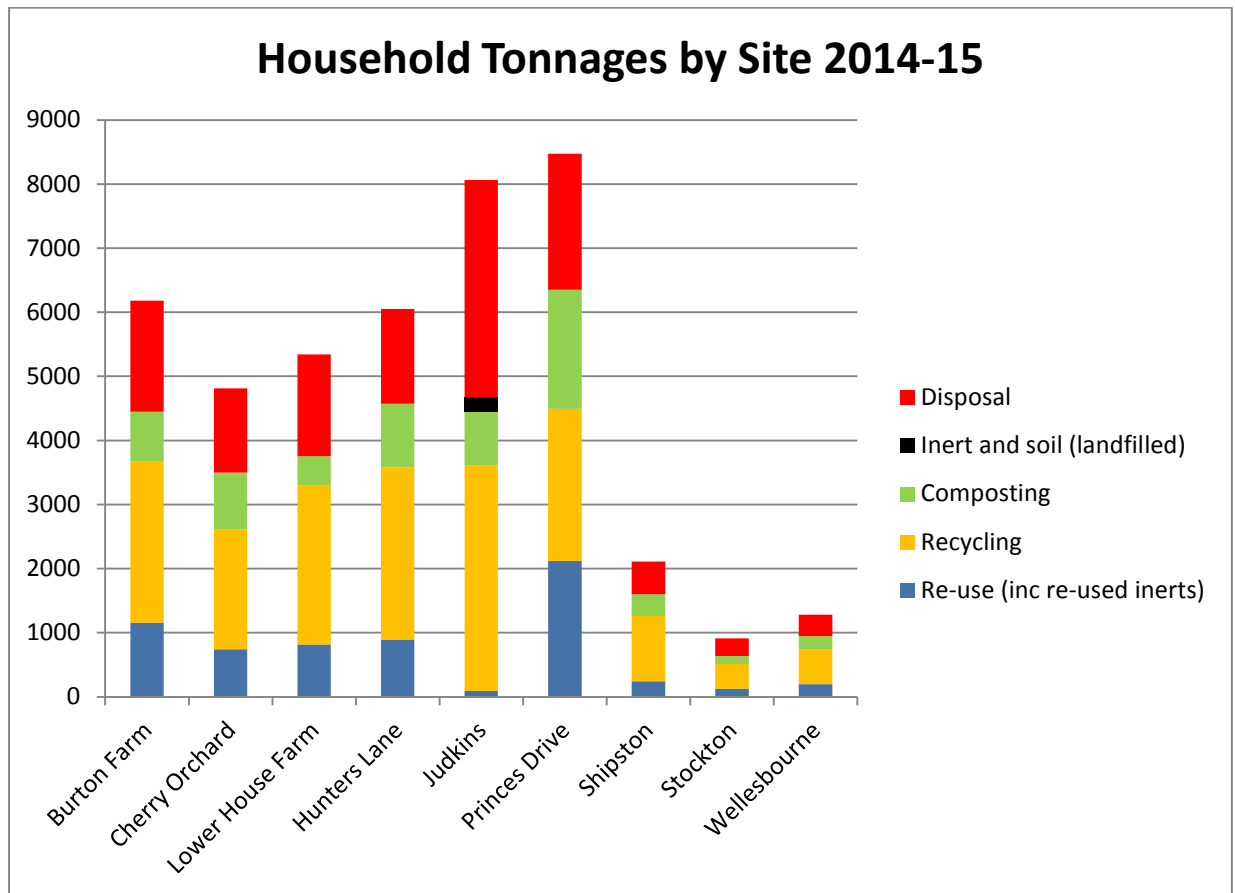
The sites can be split into three categories

- Primary Sites – Those with a throughput of over 7,000 tonnes a year i.e. Lower House Farm, Hunters Lane, Judkins and Princes Drive.
- Secondary Sites – Those with a throughput of between 4,500 and 6,999 tonnes a year i.e. Burton Farm and Cherry Orchard
- Tertiary Sites – Those sites with a throughput under 3,000 tonnes a year i.e. Shipston, Stockton and Wellesbourne

The Primary sites have on average a 10 times greater throughput than the average tertiary site.



Graph 1 Total tonnage passing through HWRCs in 2014/15



## 4.2.2 Year on year HWRC tonnage and performance

The year on year HWRC tonnage and performance (based on waste diverted from landfill) is provided below:

Table 12 Tonnage passing through HWRCs and recycling rate in 2014/15

Year	Burton Farm	Cherry Orchard	Lower House Farm	Grendon	Hunters Lane	Judkins	Princes Drive	Shipston	Stockton	Wellesbourne	Total tonnes & average performance
2009/10	6,397 48.8%	5,622 52.4%	N/A	4,660 53.4%	6,729 61.0%	10,548 37.2%	10,354 64.8%	2,735 48.8%	1,118 45.5%	1,838 48.7%	50,001 51.2%
2010/11	6,371 58.4%	5,319 50.8%	N/A	4,385 55.2%	6,500 71.5%	8,741 43.2%	10,567 51.3%	2,621 48.1%	1,113 43.4%	1,638 47.1%	47,255 52.1%
2011/12	6,005 68.7%	5,054 51.1%	N/A	4,200 55.6%	6,288 68.6%	7,944 47.2%	10,359 51.4%	2,454 49.9%	1,078 40.0%	1,580 45.9%	44,962 53.2%
2012/13	5,868 70.6%	4,601 63.8%	N/A	3,619 58.0%	5,899 72.5%	7,754 44.4%	10,230 62.8%	2,183 63.8%	991 64.4%	1,384 64.3%	42,529 62.7%
2013/14	6,087 69.5%	4,814 68.0%	3,368 69.6%	N/A	5,993 72.8%	8,077 42.5%	9,978 67.6%	2,159 72.1%	1,026 67.1%	1,370 68.3%	42,872 66.4%
2014/15	6,183 73.6%	4,813 73.5%	5,342 73.7%	N/A	6,049 72.7%	8,064 61.7%	8,473 67.1%	2,111 74.2%	913 72.5%	1,283 74.7%	43,231 71.5%

This shows that the overall tonnage has in general been steadily decreasing whilst the recycling performance has increased from 53.2% in 2009/10 to 71.5% in 2014/15, a 25.6% increase.

### 4.2.2.1 Improvements in HWRC performance

The improvement in performance at the HWRCs is due in the main to:

- The introduction of new material recycling streams, made possible due to the increased flexibility of running the HWRCs in-house.
- Behaviour change campaigns including 'sort and save'
- Development of a new HWRC site in Nuneaton and Bedworth borough including on site re-use shop
- Development of a new HWRC in North Warwickshire borough including an onsite re-use shop
- Development and enforcement of site polices such as DIY and vehicle restrictions

## 4.3 Waste Analysis

Warwickshire County Council has been monitoring waste composition annually at the HWRCs since 2012/13. A further analysis will be carried out in 2016.

The HWRC surveys have focused on the weight and composition of residual waste disposed of at Warwickshire's four largest sites Grendon/Lower House Farm HWRC in North Warwickshire, Hunters Lane HWRC in Rugby, Princes Drive HWRC in Leamington and Burton Farm HWRC in Stratford.

The data from the waste analysis is used to plan and target future behaviour change campaigns.

An overview of the data is provided in this section and a full breakdown of HWRC composition data for 2015 is provided in Appendix 2.

### 4.3.1 Waste analysis methodology

Residual waste was sampled at weekends and during the week depending on location; this was carried out to give a good overall impression of the residual waste collected at the HWRCs.

Black sacks that were thought to be for the disposal of general household waste were removed from the overall pile. The total amount of this bagged material was weighed and the contents sorted separately. The waste was then combined to give an overall composition of residual waste being disposed of at the HWRCs.

### 4.3.2 Recyclability of combined HWRC residual waste

On average 58.83% of weekday and 48.01% of weekend residual waste is potentially recyclable (utilising current Kerbside and HWRC recycling services), this gives an average of 53.42% overall. In 2015 this equates to a potential 10,209 tonnes of material that could have been recycled, but was instead sent for recovery (via the energy from waste facilities at Coventry and W2R) or disposal (via landfill at Bubbenhall or Linghall).

Table 13 Recyclability of combined HWRC residual waste

	2012/13 %	2014 %	2015 %
Kerbside recyclable	26.26	30.09	26.16
Site recyclable	39.99	18.67	27.26
Total recyclable	66.25	48.76	53.42

Of the 27.26% site recyclable materials present, 32% are due to recyclable wood and furniture, 25% are due to textiles and shoes, 13% are due to recyclable paper and card with 10% from rubble and plasterboard.

#### 4.3.2.1 Main materials from combined HWRC residual waste

The main materials making up combined HWRC residual waste for the last three years are shown in table 14, along with the actual percentage from the composition data and the estimated annual tonnage.

The previous year's waste analysis data has been included for a comparison, however it should be noted that the overall residual tonnage for 2015 has reduced and the effect of this on the data has been to increase some of the percentages of the main materials listed below, even though the tonnage for that material may not have increased.

For example misc. non-combustible has reduced from 1,241 tonnes in 2014 to 1,109 tonnes in 2015, but the percentage has increased from 5.74% in 2014 to 13.20% in 2015.

*Table 14 Main materials making up combined HWRC residual waste with estimated tonnage for 2014/15 and actual percentage*

<b>HWRC Waste (inc black sacks composition)</b>	<b>2012/13 Est tonnage and Percentage</b>	<b>2014 Est tonnage and Percentage</b>	<b>2015 Est tonnage and Percentage</b>
Misc. combustible	11,065 tonnes 47.68%	5,892 tonnes 27.24%	7,333 tonnes 38.37%
Paper and card	2,949 tonnes 12.71%	1,678 tonnes 7.76%	2,167 tonnes 11.34%
Misc. non combustible <sup>2</sup>	2,397 tonnes 10.33%	1,241 tonnes 5.74%	1,109 tonnes 13.20%
Dense plastic	1,763 tonnes 7.60%	4,683 tonnes 21.65%	2,109 tonnes 11.04%
Textiles	1,747 tonnes 7.53%	2,137 tonnes 9.88%	2,379 tonnes 12.45%
Food and garden	1,469 tonnes 6.33%	2,178 tonnes 10.07%	1,064 tonnes 5.57%
Glass	478 tonnes 2.06%	2,005 tonnes 9.27%	152 tonnes 0.80%

A breakdown of the materials contained in the miscellaneous combustible category is outlined in table 15.

<sup>2</sup> Includes rubble and plasterboard

### **Miscellaneous combustibles**

Miscellaneous combustibles make up the largest proportion of combined HWRC residual waste. The composition break down for this category is provided below:

Table 15 Materials making up miscellaneous combustibles

<b>Misc. Combustible (inc black sacks composition)</b>	<b>2012/13 Est tonnage and Percentage</b>	<b>2014 Est tonnage and Percentage</b>	<b>2015 Est tonnage and Percentage</b>
Disposable nappies	253 tonnes 1.09%	194 tonnes 0.90%	94 tonnes 0.49%
Shoes	211 tonnes 0.91%	244 tonnes 1.13%	134 tonnes 0.70%
Untreated wood	162 tonnes 0.70%	0 tonnes 0%	359 tonnes 1.88%
Treated wood	589 tonnes 2.54%	778 tonnes 3.60%	451 tonnes 2.36%
Carpet	2,457 tonnes 10.59%	1680 tonnes 7.77%	1,499 tonnes 7.85%
Other flooring	253 tonnes 1.09%	34tonnes 0.16%	344 tonnes 1.80%
Kitchen units	155 tonnes 0.67%	0 tonnes 0%	410 tonnes 2.15%
Furniture	4,267 tonnes 18.39%	1,988 tonnes 9.19%	2,008 tonnes 10.51%
Mattresses	1,703 tonnes 7.34%	0 tonnes 0%	248 tonnes 1.30%
Pet bedding	104 tonnes 0.45%	309 tonnes 1.43%	427 tonnes 2.24%
Other combustibles	909 tonnes 3.92%	661 tonnes 3.06%	1,359 tonnes 7.11%

### 4.3.2.2 Bagged HWRC residual waste

Results from the surveys showed that a proportion of residual waste being disposed of at the HWRCs is bagged household waste.

Table 16 Bagged household waste

Bagged Household Waste	2012/13 %	2014 %	2015 %
Weekday	21.33	12.05	6.72
Weekend	12.63	23.67	9.79
Average	16.98	17.86	8.26

As can be seen from the data the proportion of bagged household waste has reduced over the three year period. The reason for this could be the 'sort and save' campaign which has taken place at the HWRCs asking members of the public to sort their waste and which sees the site staff splitting open black bags and sorting the contents.

Compositionally black sacks were seen to be different to that of the rest of the residual waste. The materials with some of the highest percentages are provided in table 17:

Table 17 Materials making up bagged household waste

Bagged Household Waste	2012/13 %	2014 %	2015 %
Food	19.40	39.67	19.91
Paper and card	20.40	15.33	25.43
Textiles	11.34	7.42	8.08
Misc. non combustible	11.06	0.59	3.79
Misc. combustible	10.73	9.02	9.38
Dense plastic	9.87	9.04	9.99

## 4.4 Visitor numbers

At the end of May 2010 vehicle counting equipment was installed at seven of the HWRCs. The vehicle counts have enabled us to gain a snap shot of the vehicles passing through the site each day within hour time slots. There have been a few technical issues with the counters since the installation, so some figures are estimated.

#### 4.4.1 Estimated yearly visits

Due to a lack of complete data it has been necessary to estimate the number of visitors to some of the HWRCs. The estimated yearly visits and other data in table 18 have been worked out using the methods described below:

The car count data for Princes Drive and Cherry Orchard was available for the whole year (2014/15).

For Hunter's Lane, Burton Farm, Shipston and Stockton the car count data for 2014/15 was limited. An annual estimate for each site was produced using the data that was available.

For Judkins, Lower House Farm and Wellesbourne there was no car count data available for the year 2014/15, so the estimates were worked out by using the average waste per visit from the 2010 HWRC review and then dividing it into the total waste throughput for each site in 2014/15.

Table 18 Visitor numbers 2014/15

Site	Visitor Numbers 2014/15	Visitor Numbers 2010/11	Difference between 2010/11 and 2014/15 visitor numbers	Average Weight deposited per visit 2014/15 (kg)	Average Weight deposited per visit 2010/11 (kg)	Wk end usage	Wk day usage
Burton Farm	191,295	210,221	-18,926	32.8	34.0	39%	61%
Cherry Orchard	177,737	198,160	-20,423	27.1	28.0	41%	59%
Lower House Farm	205,462	172,000	+33,462	26.0	N/A	36%	64%
Hunters Lane	196,288	199,453	--3,165	36.3	46.0	40%	60%
Judkins	175,304	300,000	-124,696	44.7	46.0	37%	63%
Princes Drive	327,554	325,043	+2,511	25.9	46.0	41%	59%
Shipston	74,025	78,161	-4,136	28.5	37.0	25%	75%
Stockton	25,896	37,652	-11,756	35.3	31.0	26%	74%
Wellesbourne	36,656	51,297	-14,640	35.0	35.0	30%	70%
<b>Total</b>	<b>1,410,218</b>	<b>1,571,987</b>	<b>-161,769</b>	<b>32.4</b>	<b>37.9</b>	<b>35%</b>	<b>65%</b>

The busiest sites are Princes Drive and Judkins which concurs with the tonnages passing through the sites.

The least busy site is Stockton with less than 1.8% of all HWRC traffic passing through this HWRC. Due to the site only being open Saturday to Monday the weekend/weekday usage ratio is skewed.

#### 4.4.2 Visits per hour

As laid out in section 2.5, the sites have a variety of opening times; this will affect which days and times they are at their busiest.

Table 19 Busiest and quietest HWRC times

Site	Busiest Day	Busiest Hour	Quietest Day	Quietest Hour
Burton Farm	Saturday	11.00 – 12.00	Wednesday	13.00 to 14.00
Cherry Orchard	Saturday	11.00 – 12.00	Wednesday	13.00 to 14.00
Lower House Farm	Saturday	11.00 – 12.00	Wednesday	13.00 to 14.00
Hunters Lane	Saturday	11.00 – 12.00	Wednesday	13.00 to 14.00
Judkins	Saturday	11.00 – 12.00	Wednesday	13.00 to 14.00
Princes Drive	Saturday	12.00 – 13.00	Wednesday	13.00 to 14.00
Shipston	Monday	10.00 – 11.00	Sunday	11.00 to 12.00
Stockton	Saturday	11.00 – 12.00	Monday	14.00 to 15.00
Wellesbourne	Saturday	11.00 – 12.00	Monday	13.00 to 14.00

In the main (across the sites) the busiest time is 11:00 to 12:00.

With the exception of Shipston, which only opens in the morning on the weekend, Saturday is the busiest day of the week.

The sites are generally the quietest at lunchtime on a Wednesday between 1pm and 2pm, with the exception of Shipston and Stockton.

The quietest day at most of the sites is Wednesday, with the exceptions being Shipston (Sunday) and Stockton and Wellesbourne (both Monday). It should be noted that Shipston is only open until 12.15 pm on a Sunday.



## 4.5 Cost of HWRC service

The current budgeted cost of the HWRC service is £1,838,148, not including the residual disposal from the sites, or costs relating to staff based in the Barrack Street office. In total the HWRCs account for around 13% of the Waste Management budget.

### 4.5.1 Expected Site Costs in 2015/16

The table below sets out the 2015/16 budgeted expenditure and income for each HWRC.

Expenditure includes employee costs, management fee, premises costs, transport costs, haulage, supplies and services and recycling payments.

Income includes sale of materials, contribution from others (shops or councils), residual waste rebate and trade waste.

Table 20 Budgeted 2015/16 costs by HWRC

Budget breakdown	Burton Farm	Cherry Orchard	Lower House Farm	Hunters Lane	Judkins	Princes Drive	Shipston	Stockton	Wellesbourne
Expenditure	£366,568	£214,700	£326,666	£331,770	<i>Commercially sensitive</i>	£776,430	£213,448	£39,504	£47,226
Income	£182,880	£66,300	£270,736	£208,509	<i>Commercially sensitive</i>	£409,931	£57,343	£11,000	£25,500
<b>Total cost to WCC</b>	£183,688	£148,400	£55,930	£123,261	<i>Commercially sensitive</i>	<b>£366,499</b>	£156,105	£28,504	£21,726

The total cost of running the HWRCs has decreased by around £1m per year since 2010/11 when they were brought back in-house with shorter opening hours.

## 5 Public Opinion

### 5.1 Customer satisfaction survey 2015

Warwickshire County Council commissioned market research company Osiris to undertake this year's customer survey work at its nine household waste recycling centres. The work was undertaken from the end of February through to the end of March 2015.

Running in parallel with this work an on-line survey was also available via the Warwickshire County Council website.

In total the surveys resulted in 1939 responses; 1321 face to face interviews and 618 on-line responses.

#### 5.1.1 Combined on-line and face to face survey results

By adding together the number of people satisfied via the on-line survey with those from the on-site survey the total number of responders that are satisfied with the sites overall is 97.71%.

The table below shows the combined satisfaction rates for each of the areas surveyed and a comparison with the 2013 data:

Table 21 Satisfaction rate

	Combined satisfaction rate 2013	Number satisfied from 2015 survey	Number completed question in 2015 survey	Combined satisfaction rate 2015
Site opening times	82.7%	1655	1888	87.66%
Traffic queue times	83.6%	1823	1881	96.92%
Signage and information	91.3%	1848	1877	98.45%
Tidiness and cleanliness	93.3%	1865	1882	99.10%
User friendliness	92.4%	1829	1886	96.98%
Staff approachability & helpfulness	94.4%	1818	1876	96.91%
Overall rating of service and facilities	92.9%	1838	1881	97.71%

The combined survey results for each of these survey areas, broken down by HWRC, are available in Appendix 3.

## 5.1.2 On-line survey results

There were 618 responses to the on-line consultation regarding customer satisfaction with the HWRCs, although not all of the responders answered all of the questions. The survey was promoted on the WCC website with a 'web banner' on the main waste webpage and via a press release. The survey was accessed via the WCC website.

Table 23 shows which HWRC the responder normally uses and shows that over a third of the responders use the Princes Drive HWRC and nearly a quarter use Cherry Orchard HWRC.

Table 22 Online 2015 survey usage

HWRC	Number	Percentage
Burton Farm	21	3.62%
Cherry Orchard	144	24.83%
Lower House Farm	30	5.17%
Hunters Lane	79	13.62%
Judkins	30	5.17%
Princes Drive	199	34.31%
Shipston	15	2.59%
Stockton	23	3.97%
Wellesbourne	39	6.72%
<b>Total</b>	<b>580</b>	

The overall satisfaction rate for the on-line users was 92.92%. The lowest satisfaction rating for the seven areas surveyed was 'site opening times' although more than three quarters of all responders were satisfied. A full summary for each of the areas surveyed are shown in table 23.

Table 23 Online 2015 survey

Facilities	Online HWRC satisfaction levels
Site opening times	77.27%
Traffic queue times	91.68%
Signage and information	97.15%
Tidiness and cleanliness	98.76%
User friendliness	91.56%
Staff approachability and helpfulness	92.21%
Overall rating of services and facilities	92.92%

### 5.1.2 Face-to-Face survey results

A total of 1,321 customers were surveyed across the whole network of HWRCs. A breakdown of which site the customer was using at the time of the survey shows an even spread across the HWRCs, see Table 24 below

Table 24 Face to face 2015 survey results

HWRC	Number of interviews per site	Percentage Interviews by Site
Burton Farm	133	10.10%
Cherry Orchard	145	11.00%
Lower House Farm	172	13.00%
Hunters Lane	154	11.70%
Judkins	147	11.10%
Princes Drive	158	12.00%
Shipston	136	10.30%
Stockton	158	12.00%
Wellesbourne	118	8.9%
<b>Total</b>	<b>1321</b>	<b>100%</b>

The overall satisfaction rate for the on-site users was 99.8%. The lowest satisfaction rating for the seven areas was also for the site opening times although this was still at 92.20%. A full summary for each of the areas surveyed are shown in Table 25.

Table 25 Face to Face 2015 survey

Facilities	Face to face HWRC satisfaction levels
Site opening times	92.20%
Traffic queue times	99.20%
Signage and information	99.00%
Tidiness and cleanliness	99.20%
User friendliness	99.40%
Staff approachability and helpfulness	98.90%
Overall rating of services and facilities	99.80%

## 5.2 Satisfaction with HWRCs 2000 - 2015

The satisfaction levels with the HWRCs for the last 10 years are provided below. These are all taken from WCCs annual satisfaction survey.

Table 26 Annual satisfaction survey

Year	% Satisfied
2000/01	76.2%
2001/02	75.8%
2002/03	76.3%
2003/04	74.0%
2004/05	82.3%
2005/06	80.8%
2006/07	83.5%
2007/08	75.9%
2008/09	80.0%
2009/10	74.0%
2010/11	75.3%
2012/13	92.9%
2014/15	97.71%

Source: Best value user satisfaction surveys/ WCC public satisfaction surveys/ Place survey / Partnership survey

As the table 26 shows, the level of customer satisfaction increased in recent years this reflects the time period since the centres were brought back in house. The 2012/13 survey was based on 1,200 responses through a mixture of speaking to customers at the various sites and also on-line responses.

## 6 Comparisons with other local authorities

### 6.1 Opening hours

One of the key decisions made by Members following the fundamental review of the HWRCs in 2010 was the reduction of opening hours across all HWRCs. The hours at the HWRCs were reduced in order to make cost savings within the HWRC service. The alternative was to close all the sites two days per week, however reducing hours was the preferred option chosen by the public in an online consultation.

The HWRC opening times changed in January 2012, the current HWRC opening times are 9.30am to 15.15pm on week days (with late night opening until 18.15 on a Wednesday in the summer) and 8.30am to 15.15 at the weekend in the winter (17.45pm in the summer).

Please note Shipston and Stockton have different hours – see table 1 in section 2.4 of this report for full details.

The HWRC's opening hours pre-2012 are provided below:

Table 29 Pre 2012 Opening hours at the HWRCs

	Burton Farm	Cherry Orchard	Lower House Farm	Hunters Lane	Judkins	Princes Drive	Shipston	Stockton	Wellesbourne
<b>Winter</b>									
Monday - Friday	8am to 4.30pm	9am to 4.30pm	9am to 4.30pm	8am to 4.30pm	8am to 4.30pm	8am to 4.30pm	9am to 4.30pm	9am to 4.30pm	8am to 4.30pm
Saturday	8am to 4.30pm	9am to 4.30pm	9am to 4.30pm	8am to 4.30pm	8am to 5.30pm	8am to 4.30pm	9am to 12.30pm	9am to 4.30pm	9am to 4.30pm
Sunday	9am to 4.30pm	9am to 4.30pm	9am to 4.30pm	9am to 4.30pm	9am to 4pm	8am to 4.30pm	9am to 12.30pm	9am to 4.30pm	9am to 4pm
<b>Summer</b>									
Monday - Friday	8am to 6pm	9am to 6.30pm	9am to 4.30pm	8am to 6pm	8am to 6.30pm	8am to 6.30pm	9am to 4.30pm	9am to 4.30pm	8am to 4.30pm
Saturday	8am to 6pm	9am to 6.30pm	9am to 4.30pm	8am to 6pm	8am to 5.30pm	8am to 6.30pm	9am to 12.30pm	9am to 4.30pm	9am to 4.30pm
Sunday	9am to 6pm	9am to 6.30pm	9am to 4.30pm	9am to 6pm	9am to 4pm	8am to 6.30pm	9am to 12.30pm	9am to 4.30pm	9am to 4pm

The implementation of the current HWRC opening hours went well.

The public satisfaction survey carried out in 2015 showed that 87.66% of respondents were satisfied with the opening hours.

Table 30 shows the total number of hours that the HWRCs in Warwickshire and some other neighbouring shire authority areas are open per week (where hours change between summer and winter an average has been taken).

Alongside this, table 30 shows the total number of households for each county and then, to provide a comparison, the number of households served 'per opening hour' that the HWRCs are open (if all the households visited in that week).

*Table 30 Opening hours of Warwickshire and neighbouring authorities HWRCs*

<b>Authority</b>	<b>Number of HWRCs in the area</b>	<b>Number of HWRC hours per week</b>	<b>Number of households</b>	<b>Number of household served per opening hour</b>
Leicestershire	14	735	281,400	383
Staffordshire	14	878	368,180	419
Warwickshire	9	408	241,890	593
Oxfordshire	7	441	275,920	626
Northamptonshire	10	400	305,310	763
Gloucestershire	5	324 <sup>3</sup>	275,230	

The data shows that Warwickshire is ranked third best in terms of the lowest number of households served per hour that the HWRCs are open at 593.

Leicestershire has the lowest number of households served per hour although it is known that Leicestershire are currently reviewing their HWRC provision in order to make £1.1m/year savings by the end of 2016/17. Reducing the opening hours of the HWRCs is one of the areas that are being considered.

Northamptonshire has the highest number of households served per hour. From 1<sup>st</sup> February 2015 the opening hours were reduced and all of the HWRCs have gone to 5 days out of 7 opening. One HWRC was also closed.

Appendix 4 provides an overview of the HWRC opening hours for neighbouring authorities.



## 6.2 Cost comparison

Table 28 shows the results of a survey carried out by the waste management team in 2013 to establish unit costs of running HWRC's.

The data shows that Warwickshire was the lowest cost overall in two categories and 2<sup>nd</sup> in the cost per site visit when compared with the responding authorities.

*Table 28 Cost comparison of HWRC provision*

<b>Authority</b>	<b>Cost of service per resident</b>	<b>Cost of service per household</b>	<b>Cost per site visit</b>
Warwickshire CC	£3.74	£8.53	£1.22
Hertfordshire CC	£4.27	£10.13	£1.18
Leicestershire CC	£4.91	£11.54	£1.60
Staffordshire CC	£4.03	£9.52	£2.45
Lincolnshire CC	£5.18	£11.34	N/A
East Sussex CC	£4.59	£10.43	£2.42
Herefordshire CC	£12.53	£28.08	N/A
Norfolk CC	£8.12	£17.43	£2.85
Devon CC	£6.12	£13.02	£3.50
Central Bedfordshire CC	£6.07	£16.86	£2.66
Lancashire CC	£3.03	£8.08	£1.62
Oxfordshire CC	£6.15	£14.81	£3.64
Kent County Council	£10.63	£25.02	£5.20
<b>Average</b>	<b>£6.17</b>	<b>£15.02</b>	<b>£2.47</b>

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<sup>3</sup> Plus access to 2 other HWRCs

## 6.3 HWRC performance benchmarking

The HWRC performance in Warwickshire and its neighbouring authorities for the year 2013/14 is shown in table 27. This data includes household recycling.

Table 27 HWRC performance in 2013/14

Local Authority	Recycling Rate
Worcestershire	73.17%
Oxfordshire	70.63%
Warwickshire	63.79%
Staffordshire	59.07%
Gloucestershire	58.97%
Leicestershire	56.77%
Northamptonshire	56.62%

Data taken from WDF but reporting differences by each authority may exist

The figure for HWRC performance for household waste in 2014/15 is estimated to be 66.4%. We are unable to provide an estimate for the other authorities as the data is not yet available.

## 6.4 Other HWRC trends

The national Government has driven a programme of sustained reductions in public spending in order to reduce the budget deficit since 2010. The reductions in public spending have led to organisations looking at new ways of delivering services. Key mechanisms to improve the efficiency of local services have included partnering with other sectors, benefiting from economies of scale, improving logistics and planning, using procurement wisely to benefit from the market and in some cases reducing non-essential services.

Over the last two years there has been a 5% decrease in the number of permanent HWRC sites nationally. Table 31 show the percentage of responding authorities that have either made changes to the level of HWRC provision and/or have specific mechanisms in place designed to monitor use of the sites. It should be noted that permitting schemes include permits for residents and/or permits for vans and large vehicles as well as materials changed for including 'DIY' waste, soils and hardcore, gas bottles and tyres.

Table 31 HWRC provision changes and site monitoring

Changes/Monitoring	Responding Authorities %
	2013/14
Reduced opening hours of HWRCs	5
Have resident only permits	15
Financial arrangement with a neighbouring authority in respect of cross-boundary movement of waste	15
Do charge for the disposal of chargeable waste	31
Automatic number plate recognition in place	42

Although WCC has made changes to the HWRC service it has managed to keep all of the HWRCs open seven days a week whilst still saving £1 million within 12 months of taking the service back in house (2011/12).

Appendix 4 shows more detail on the HWRC service provided by neighbouring authorities.

## 7 Future demand

### 7.1 Projected household changes in Warwickshire

The table below shows the projected household changes expected in Warwickshire up to 2031 and any future options for the HWRC service should take these expected increases into account.

Table 32 Predicted changes to Warwickshire households

2012 based household projections				
	2011	2031	Planned growth	Per annum
North Warwickshire	25,862	29,155	3,293	165
Nuneaton and Bedworth	52,808	61,716	8,908	445
Rugby	42,089	51,345	9,256	463
Stratford-on-Avon	52,099	61,404	9,305	465
Warwick	58,714	70,522	11,808	590
Total	231,572	274,142	42,570	2,128

### 7.2 Local plans

As part of the development of the Local Plans in each district or borough area, consultation has taken place with planning authorities on how to forecast and accommodate the expected increased demand in line with household projections.

Waste generated is based on the population of area, so for each extra person within the catchment extra waste and recyclables will be generated. Statistics show that approximately 1 tonne of waste and recyclables is generated per household per year.

WCC have been responding to each Local Plan and incorporating commentary about future waste disposal needs including infrastructure demands where appropriate.

#### 7.2.1 North Warwickshire

The only site in North Warwickshire is Lower House Farm. The site is shared with Staffordshire County Council. The most recent user survey showed 52% usage by Warwickshire residents and 48% usage by Staffordshire.

It is not foreseen that any extra capacity will be needed at Lower House Farm (except for extending opening hours) to accommodate the proposal to increase the number of homes in North Warwickshire borough by 3,293 and in Tamworth by 3,405. While it is expected that vehicle movements would increase by 3,405 per week (40,188 annually) and the amount of waste being managed would increase if

the number of household's increases as proposed, the site itself will be able to accommodate this increase. This is a relatively new facility and has been designed with the flexibility to increase capacity to cater for future extra demand.

WCC estimates (using current costs based on average visits) that the revenue cost of the HWRC service will increase by around £207,000, including the processing and disposing of the extra waste and staff costs for extended hours (increasing opening hours to 6.30pm for 6 days) . Both the disposal and running costs would be shared between the WCC and Staffordshire County Council.

### **7.2.2 Nuneaton and Bedworth**

Judkins HWRC is the only site within Nuneaton and Bedworth. The site is provided by a private company on behalf of WCC. The company has a further 13 years on their contract, with the option to extend for a further 5 years.

It is not foreseen that any extra capacity will be needed at Judkins to accommodate the proposal to increase the number of homes in Nuneaton and Bedworth borough by approximately 9,000, except for possibly extending opening hours.

While it is expected that vehicle movements would increase by 1,028 per week (53,448 annually) and the amount of waste being managed would increase if the number of household's increases as proposed, the site itself will be able to accommodate this increase. Again, this is a new site with scope to increase capacity if required. Small alterations to storage facilities could be constructed if necessary.

The authority estimates (using current costs based on average visits) that the revenue cost of the HWRC service will increase by around £262,000, including the processing and disposing of the extra and staff costs for extended hours (increasing opening hours to 6.30pm for 6 days).

### **7.2.3 Rugby**

Hunters Lane is the only HWRC in Rugby. The facility was rebuilt in 2008 and was designed with an increased capacity when compared to the previous facility. In addition some residents use Stockton, which is located just outside the district in Stratford although Stockton is presently only open for three days per week, Saturday to Monday.

The proposal in Rugby borough is to increase homes by some 9,256. These extra homes would result in an extra 1,068 vehicle movements per week (55,536 per annum). The Hunter Lane site would be able to accommodate some of the extra demand without extending the opening hours into the evening, due to the reduced usage of this site by 25,000 visits since 2010.

The remaining extra visits could be covered by extending the opening days at Stockton to 7 days per week and refurbishing the facility. The refurbishment could be achieved by enlarging the facility onto the present closed landfill site. Estimated

cost to refurbish Stockton at present day prices is £408,456 based on the capital formula used for the Nuneaton HWRC.

The authority estimates (using current costs based on average visits) that the revenue cost for disposing of waste will increase to around £85,120 if the homes increase as predicted. Staffing costs for extended hours (increasing opening hours to 6.30pm for 6 days) at Hunters Lane and increasing the opening days to seven at Stockton, will further extend the revenue cost for both sites in the region of £156,000 (excluding capital costs of Stockton).

#### **7.2.4 Warwick**

There are two sites in the Warwick area these are Princes Drive, Leamington Spa and Cherry Orchard, Kenilworth. In addition some residents use Stockton, which is located just outside the district in Stratford.

With the proposal for 11,800 extra houses in Warwick district, it will be necessary to re-design both of the sites facilities to accommodate the 1,362 extra vehicle movements per week (70,848 per annum) and increase the opening hours of the sites.

At Cherry Orchard HWRC it could be necessary to extend onto the old landfill site to accommodate the increase in skip provision. The estimated cost of this extension is in the region of £241,000.

At Princes Drive an extra waste compactor would need to be installed at a cost of £235,000 (based on the cost of purchase in 2013) to accommodate the extra demand. The skip bays would also need to be re-designed the estimated cost of this would be in the region of £100,000.

#### **7.2.5 Stratford District Council**

There are four sites in the Stratford area these are Shipston, Wellesbourne, Stockton and Burton Farm near Stratford-upon-Avon. WCC owns Shipston, Wellesbourne and Stockton; the authority has a 25 year lease for the Burton Farm site that commenced in 2001.

The proposal for 9,305 extra homes in Stratford district is likely to result in an increase in vehicle movements in the region of 1074 per week (55,830 per annum). Based on these figures it will be necessary to refurbish two of the sites to support the extra demand. The Stockton site refurbishment is covered in section 7.2.3.

The Wellesbourne site could become a more strategic site for a much bigger HWRC (estimated capital investment expected to be in the region of £1.5 million). The strategic site could then replace Burton Farm when the lease expires in 2026. The site could also be used as a waste transfer site for Stratford District Council waste services if found to be financially beneficial to both parties. Overall this would result in a reduction of one facility, but the new site would be designed to accommodate

the increased demand would also reduce long term leasing costs in the future (estimated leasing charges £2 million).

WCC estimates (using current costs based on average visits) that the revenue cost of disposing of waste at Burton Farm will increase to around £246,240. Staff costs for extending hours to 6.30pm for 6 days at Burton Farm. Estimated cost for remaining sites would be in the region of £166,000. Shipston increased opening hours would only be able to be Monday to Friday due to planning conditions. Wellesbourne and Stockton estimate can be seen in section 7.2.3.

## **8 Potential options for the future HWRC service**

There are a number of options that could be considered to amend the existing HWRC provision now or in the future. An overview of these options is provided below.

### **8.1 Amend opening days or hours**

#### **8.1.1 Reduced days of opening**

A number of authorities have introduced reduced hours of opening across their HWRC service. Reduced opening works by rotating the days the sites are open across the service area. It should be noted that the sites are usually kept open over the weekend. Staffordshire County Council is one authority to operate five day opening across their sites.

WCC looked at this reduced hours of opening as part of the 2010 HWRC review and consulted the public. The result from the public consultation was that users stated a preference for shorter opening hours rather than a reduction in the days of opening.

In addition Burton Farm, Lower House Farm, Hunters Lane and Princes Drive HWRCs are used by the collection authorities to deposit bulky waste or street cleansing, the sites need to be staffed Monday to Friday to accept this material and as such savings are not possible from these sites.

The number of days opening at Cherry Orchard, Shipston and Wellesbourne (Stockton is only open 3 days a week) could potentially be reduced, however the saving would only relate to reduced staff costs and so would only be in the region of £24,000 pa for a one day reduction and £48,000 pa for a two day reduction.

It is not recommended that this option is taken forward for consideration as it would place extra pressure on the already short hours of opening and only has scope to make marginal savings.

#### **8.1.2 Reduced hours of opening**

The service already operates reduced opening hours Monday to Friday following a previous review and the need to operate waste management services on a reduced budget. Further reductions would result in half day closures and would not realistically achieve any financial benefit due to the shift working of staff.

In addition, household and population growth is expected to result in increased demand across the HWRC portfolio in future years. This option is not considered to be viable.



### **8.1.3 Increased hours of opening**

Providing additional HWRC service hours is likely to deliver best value for money in terms of enhancing HWRC provision to meet the demand from population increases when compared with extending the footprint of sites and the associated capital works.

In Warwickshire the HWRCs are generally open for 46 hours per week in winter (1<sup>st</sup> October to 31<sup>st</sup> March), and 52 hours per week in summer (1<sup>st</sup> April to 30 September), although some variations exist due to planning constraints. If the opening hours were extended to 8.30 to 4.30 seven days per week during the winter (56 hrs) and to 8.30 to 6pm seven days per week in the summer (66.5 hours), this would increase the current opening hours by 25%. The associated increase in staff costs would be in the order of £175,000 based on current prices.

The authority would need to work out when the extra hours would be required by considering the current HWRC provision and network density, visitor numbers per hour and satisfaction with service.

This option should be considered for implementation when the service becomes oversubscribed due to increased demand.

## **8.2 Charge for non-household waste**

Construction and demolition waste from households is not defined as household waste for the purposes of section 51 of the Environmental Protection Act 1990, which sets out the duty for waste disposal authorities (WDAs) to provide HWRCs to residents to dispose of their household waste.

Examples of construction and demolition waste from households include:

- doors and windows;
- fitted kitchens;
- fitted wardrobes;
- inert material such as rubble, concrete, bricks and roof tiles;
- plasterboard;
- soil from landscaping activities; and
- any other building materials.

In Warwickshire DIY waste such as soil, tiles, bricks etc. can be disposed of in small quantities of 3 x 25kg bags per household per month. The HWRCs also accept plasterboard at some sites at a maximum of 3 sheets per household per month. For quantities in excess of this commercial waste charges apply. There is also a charge for certain non-household items such as tyres and gas canisters.

WCC could introduce charges for other certain non-household materials such as door and windows, fitted kitchens, fitted wardrobes etc. The input of DIY material to the HWRCs in 2014/15 is provided in table 33. The costs shown are the actual costs of processing each material in 2014/15 with no overhead costs included.

Table 33 WCC non-household waste disposal costs

Waste Type	Total tonnes 2014/15	Disposal cost per tonne	Haulage cost per tonne based on 10 miles	Overall cost per tonne	Total annual cost
Plasterboard	541.41	£70.00	£10.90	£80.90	£43,800
Wood/ Chipboard	1,402.07	£52.50	£9.50	£62.00	£86,928
Inert (soil, rubble)	5,842.78	£4.73	£4.20	£8.93	£52,176
Asbestos	54.56	£180.00	£0	£180.00	£9,821
Total	7840.82				£192,725

Charging for non-household waste is an option worth considering particularly in light of recent significant increases in wood recycling.

## 8.3 Rationalisation of HWRCs

The HWRCs could be rationalised to provide larger strategic sites in more central locations. For example replacing Burton Farm (once the lease runs out) and other nearby sites or replacing Princes Drive and other nearby sites with a purpose built new site at a central location and also include facilities similar to those at the Lower House Farm site e.g. waste transfer station and WCA depot facilities. There may be potential for the 'old' sites to be developed for other uses.

A more detailed appraisal of options for rationalisation is recommended. There are potential benefits, including improved strategic locations and cost savings.

### 8.3.1 Recycling only centres

Stockton and Wellesbourne HWRCs are small sites and currently have a waste throughput of around 1000 tonnes per annum; these sites could be turned into recycling only sites. The benefit of this is that members of the public would have to sort their material before coming to the site if they wished to continue to use this facility. The downside with this option is that demand will drop to non-viable levels if the public do not respond to this different service offer.

Only a small saving would be achieved (c. £10,000), so this option is not considered worth pursuing.

## 8.4 Expansion of materials

The recycling of new material types will hopefully increase, as new outlets are developed and new recyclers enter the market. WCC will continue to monitor the markets and will explore the potential incorporation of additional materials into existing services, as they become viable. Our in-house provision of HWRCs means

that WCC retains the flexibility to add recycling streams and respond quickly to market developments and opportunities to support a vibrant local recycling market.

It is recommended that WCC continues to expand material streams as they become viable.

## **8.5 Plan for a new waste facility in the south of the county**

The basis of this project is to consider the feasibility of a co-located HWRC, Waste Collection Authority (WCA) depot and waste transfer station (WTS) in Stratford. The HWRC would need to be large enough to accommodate current and future population demand. The WCA depot located at the site should include space for the waste collection contract, offices, storage, general management etc. The waste transfer station would mainly be for transferring residual waste from Stratford to the disposal point.

The benefits of having the depot and the WTS co located is that the refuse collection vehicles could take their material to the WTS, bulk load onto an artic lorry for delivery to the disposal point. The benefits of this way of working are that there would be less downtime on the refuse collection vehicles, reduced haulage costs and reduced excess haulage payments.

The project would be a long term scheme, which may be phased in over a number of years depending on contract/lease timescales. The Burton Farm lease has 15 years remaining. The Stratford District Council collection contract has 7 years left to run.

It is recommended that a feasibility study is carried out to see if there are any benefits for Stratford District Council and Warwickshire County Council in pursuing this scheme.

## **8.6 Partnership working with neighbouring authorities**

As outlined in section 2 of this report WCC already shares two HWRCs with neighbouring authorities (Lower House Farm and Shipston) and this is working well. The Authority could extend joined up working with neighbouring authorities further and potentially share facilities close to boundaries in Rugby, Nuneaton and North Warwickshire.

Informal discussions have taken place already and it is recommended that the Authority investigates further with neighbouring authorities. A recent survey carried out shows the use of sites by non-Warwickshire residents, the detail can be seen in Appendix 5.

## **8.7 Behaviour change**

It is vital for residents to know where sites are located, opening times, which wastes can be recycled and whether there are any restrictions. It is also important to promote other messages such as the cost of waste disposal and landfill tax, feedback on recycling rates, thank you messages, myths busting on what can/cannot be accepted, as well as highlighting what happens to recycling once it is collected.

As part of the waste strategy update in 2013 it was agreed that the Partnership would aim to raise the profile of HWRC recycling and composting in Warwickshire.

The waste strategy implementation group has put together a plan for this work. As part of this plan HWRC canvassing will take place across the sites in summer 2015. Canvassing will also take place in 2016.

## **8.8 Changes to HWRC policies**

WCC could make a number of changes to current HWRC policies to change the service provision, including:

### **8.8.1 Charity permit**

WCC currently issues approximately 135 permits each year to charities and parish councils allowing these bodies to dispose of household and non-household waste at no charge.

The Authority could revoke these permits (and charge for non-household waste) however the tonnages are so small and the community benefit such that it is not recommended to take this option forward at the present time.

### **8.8.2 Vehicle restriction policy**

As covered in section 3.9 the vehicle restriction policy was reviewed in 2014 and as such no review or change is recommended at this time.

### **8.8.3 Resident permit**

Local authorities are obliged to provide HWRCs for residents to dispose of their household waste free of charge. The sites must be reasonably accessible and available at all reasonable times. Other wastes can be also accepted (household waste from non-residents or non-householders, or non-household waste) and charges may be levied for the disposal of these wastes.

WCC and its neighbouring authorities (with the exception of the Redditch HWRC operated by Worcestershire) have operated an open cross border policy whereby

residents in neighbouring areas have been able to use sites in Warwickshire and vice versa. This principle has worked satisfactorily in most areas and where there has been significant use by another authority WCC has worked in partnership to find a solution where possible. In addition there has been an acceptance by most authorities that some cross boundary movement of waste has taken place over the years and is indeed inevitable.

Some authorities are now considering the introduction of residency permits and if these are implemented it may be necessary to consider the introduction of a permit system across Warwickshire as a whole or on an area by area basis.

The recent customer satisfaction surveys show that 14 % of users come from outside the county boundary; most of users are from Staffordshire or Gloucestershire and both of these contribute to our HWRC costs. Appendix 5 shows a breakdown of out of county users.

#### **8.8.4 Hazardous waste policy**

WCC accepts small amounts of household chemicals and paint from members of the public free of charge at limited sites on specified days. All visits with chemicals, hazardous waste or paint need to be pre-booked. Household chemicals are only accepted at two sites these are Princes Drive in Leamington Spa and Lower House Farm in North Warwickshire. Paint is accepted at three sites including Princes Drive in Leamington Spa and Lower House Farm in North Warwickshire and Stockton HWRC.

The authority could amend the policy so that more sites can accept household chemicals and/or paint, however this work would need to be carefully planned and the potential cost worked out. The increase in cost for expanding this service would relate to the permit from the environment agency which would need to be reviewed and updated, the investment for correct storage for chemicals and/or paint and if space is available at the site<sup>4</sup>, the additional cost associated with having a trained chemist on site as well as the disposal charges.

It is not recommended that this service provision is extended at the present time due to the cost implications and financial pressure being put on the service from reduced recycling income and increases in disposal costs due to wood processing prices increasing.

### **8.9 Contract out HWRCs**

Officers have not investigated and would not recommend the contracting out of the HWRCs as part of this review, as since bringing the HWRCs back in-house Warwickshire County Council have seen a number of benefits.

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<sup>4</sup> Hunters Lane has been considered previously for paint acceptance, but there was no available storage space

The benefits include; savings of around £1m a year and a much greater level of flexibility of implementing changes without the need for negotiations with contractors. One example of this was the introduction of commercial waste services at all 8 of the 'in-house' HWRCs. Negotiations continue with the contractor to implement a similar service at the ninth HWRC facility.