

## Review of Cheshire East Council HWRC network

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**Cheshire East Council**  
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## Executive Summary

### Introduction

Resource Futures was commissioned to carry out an update to a previous review and consider the options available to the Council for the future shape of the household waste recycling centre contract. With the contract ending in early 2023 the Council sought independent expert advice on the ways forward. CEC is aware that the current contract cannot simply be replicated and that national and international changes in the waste sector need to be considered. The volatility of the recycling market has severely impacted the planned income from these materials, and therefore future contracts may incur higher costs. The Council is seeking to understand the best contract model.

### Contract procurement options

A comparison of the performance of the current contract alongside neighbouring and similar authorities recognised the range of contracts that are available; an evaluation of some working options was carried out. It is important to acknowledge that any contract options are going to be affected by the recent government Resources and Waste Strategy and the legislation which will result from it. The legislative environment means that the conditions within the waste management sector will be uncertain until at least 2023, when the majority of the initiatives are due to be implemented. Additionally, the situation on the international material markets means that the prices of materials are currently low. This suggests that the contractors bidding for any HWRC contract will be cautious while Local Authorities will need to build flexibility into contracts, which is likely to result in additional costs to operate services.

The analysis of the options available to the Council reveals that there are a number of key points that officers will need to consider before commencing the procurement process including appetite for risk, utilising the LA owned company, partnership work with the neighbouring authorities and the investment in infrastructure needed. The different operating models all have pros and cons so it is not possible to recommend one over another. In any case, it will be crucial to ensure that any future procurement exercise and contract documents (specification, payment mechanisms and incentives/penalties) are clearly set out to ensure best value is achieved for the Council.

### Comparing the current service

To provide an informed understanding of the current service provision and its performance, a comparison was made with neighbouring authority sites and authorities that are similar to Cheshire East. On many of the measures used the provision is clearly highly rated and compares favourably, however with the contract due for renewal there is a need to ensure that the service is fit for purpose. The previous review revealed that the service provision was generous and therefore in order to determine the most efficient combinations of sites, Resource Futures was tasked with modelling four different scenarios that involved the closure of some sites. Could the Council operate more effectively by operating fewer improved sites and still deliver the same level of service?

Table E 1 below shows the scenarios modelled.

Table E 1 Network options scenarios

Site	Current	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Alsager	✓		✓	✓	✓
Bollington	✓			✓	✓
Congleton	✓				
Crewe	✓	✓	✓	✓	✓
Knutsford	✓	✓	✓	✓	✓
Macclesfield	✓	✓	✓	✓	✓
Middlewich	✓				✓
Poynton	✓				

### Impact on distance and travel times

The current provision offers the best coverage in terms of the shortest drive times for residents, as indicated in the table below, however both scenario 3 and 4 offer 96% of all properties less than a 20-minute drive to their nearest HWRC. In scenario 3 and 4, only 4% of households are required to drive for more than 20 minutes to reach their nearest site and in scenario 4, the majority (96%) are able to reach their nearest HWRC within 20 minutes by car.

Table E 2 Proportion of households in each of the drive time bands for each scenario

Scenario	Proportion of Households				
	Less than 5 minutes	Less than 10 minutes	Less than 15 minutes	Less than 20 minutes	More than 20 minutes
Current	22%	63%	91%	98%	2%
Scenario 1	11%	37%	68%	88%	12%
Scenario 2	13%	43%	78%	93%	7%
Scenario 3	15%	48%	82%	96%	4%
Scenario 4	17%	52%	86%	96%	4%

The analysis shows that a reduction in the number of sites, whilst having a localised impact, does not present a problem for the vast majority of residents. This understanding informs the preparation of the contract procurement since there may need to be flexibility within the contract to accommodate a reduction in sites if this is shown to be the most effective means of delivering a high-quality service. It is unlikely that the number of sites is a factor in how attractive the contract is to the market. The key considerations in the short term will be connected to the material markets and how this will impact the affordability of the contract.

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## 1 Introduction

### 1.1 Cheshire East HWRC network

Cheshire East Council (CEC) is a unitary Authority with a population of 370,100 and an area of 116,638 hectares. The Borough was created in April 2009 when Cheshire County Council and all borough councils within the County ceased to exist and was replaced by Cheshire East and Cheshire West and Chester Unitary authorities.

The Council operates 8 Household Waste Recycling Centres (HWRC). The delivery of the HWRC service is currently managed on behalf of Cheshire East Council by ANSA Environmental Services, a company wholly owned by Cheshire East Council, with site operations being undertaken under contract by HW Martin Ltd and the subcontracted Site Managers. The Site Managers are responsible for employing and managing site staff, provision of adequate Certificate of Technical Competence cover on site, site security and site cleanliness. The individual site managers are also responsible for the provision of suitable containers for the collection and storage of non-ferrous metal and reusable bric-a-brac, and a significant part of their payment for operating the sub contract comes from the right to remove and sell this non-ferrous material and bric-a-brac. HW Martin retain responsibility for ensuring the HWRC are operated in line with contract requirements, and for providing outlets for all material deposited at the site, bar the aforementioned reusable material, non-ferrous metal, and non-recyclable material, (which HW Martin are paid to haul to disposal sites operating under the Council's primary waste disposal contract). This contract is in place until March 2023.

In 2016 Resource Futures was commissioned to carry out a review of the service and as a result of this work the Council implemented the following changes to the service provision:

- Site closure (Arclid)
- Reducing hours at all sites from an average of 10 to 8 hours per day
- Introducing a rubble/construction waste charge that has resulted in total throughput at sites dropping by 25%
- The opportunity for smaller traders to deposit rubble at the Council's sites

### 1.2 Cheshire East Municipal Waste Management Strategy

In 2014 CEC published a Municipal Waste Management Strategy, identifying how it plans to manage waste up to 2030. The Strategy included a recommendation to undertake a review of the HWRC network and identified that less than 20% of the borough's household waste is taken to the HWRCs. An objective of the Strategy was to maintain the role of HWRCs in collecting bulkier wastes and maximising the recycling and re-use of these items. It also indicated that CEC *"will examine the use of Third Sector Organisations as potential off takers for the re-use of bulky waste and WEEE collected at HWRCs"*. The Strategy also suggested that CEC investigates the management of commercial and industrial waste through provision of a dedicated commercial waste recycling centre in order to meet CEC's aspirations of serving the business community and improving overall waste management. Re-use and commercial waste were therefore considered within the 2016 review resulting in the acceptance of rubble/construction waste from small traders at all sites. This was deemed to be a more cost effective action than creating a single site dedicated to trade.

In 2020 the Council carried out a review of the Waste Management Strategy, taking into account the Government's Resources and Waste Strategy. The review was due to be consulted with the public, but this is currently put on hold due to the Covid-19 pandemic.

The review included two updated targets which are particularly pertinent to HWRCs:

- *Having exceeded the national targets for recycling of 50% by 2020, to work towards the new national target of 65% by 2035.* HWRCs will need to contribute to achieving this target.
- *To utilise waste that cannot be reused or recycled as a resource for energy generation.* The sites are separating the residual material delivered by the residents to ensure that the bulky waste items can be shredded and sent for energy recovery.

### 1.3 Aims and objectives of this review

Resource Futures was commissioned to carry out an update to the previous review and consider the options that are available to the Council for the future shape of the HWRC contract. With the contract ending in early 2023 the Council sought independent expert advice on the ways forward. CEC is aware that the current model has been superseded by others, whose contracts are not based on the income from commodities as a key element. This is an important change as the volatility of the recycling market has severely impacted the planned income from these materials, and therefore future contracts are likely to incur higher costs. The Council is seeking to understand the best contract model based on the scenarios below.

Key objectives are therefore:

1. Modelling the scenarios identified by Cheshire East Council. The scenarios include:

- Scenario 1 - Keeping 3 key sites open. Crewe, Macclesfield and Knutsford and therefore closing Congleton, Poynton, Bollington, Alsager and Middlewich
- Scenario 2 – Keeping 4 sites open. Crewe, Macclesfield, Knutsford and Alsager
- Scenario 3 - Keeping 5 sites open. Crewe, Macclesfield, Knutsford, Bollington and Alsager
- Scenario 4 – Keeping 6 sites open, closing Poynton and Congleton

The analysis of the scenarios will help the Council understand the impact on the remaining sites in terms of throughput and traffic, the impact on residents in terms of site provision and drive times as well as any legislative or statutory implications.

Additionally, the review will help the Council understand how the services compare with the geographic and demographic neighbours. The review will identify how services could be improved and the potential for increased income.

2. Determining viable contract options from the analysis included in the review. This will assist the Council in assessing the future market and legislative situation and the impact of these on services as well as the contracts and procurement options.

## 2 Baseline

### 2.1 Current HWRC provision levels

The Council has a statutory duty to provide sites at which residents can deposit their household waste free of charge and that are reasonably accessible to residents. The legislation does not specify how many sites



an authority should provide and therefore the responsible authority is able to determine what is reasonably accessible based on local circumstances.

The Waste and Resources Action Partnership (WRAP) published an HWRC Guide in 2012, which identified guidance for the level of provision of HWRCs, these were:

- Maximum catchment for a large proportion of the population of 3-5 miles (7 miles in very rural areas)
- Maximum driving times for the great majority of residents in good traffic conditions of twenty minutes (30 minutes in very rural areas)
- Maximum number of inhabitants per HWRC of 120,000
- Maximum number of households per HWRC of 50,000

In Cheshire East, there are currently eight sites at Alsager, Bollington, Congleton, Crewe, Knutsford, Macclesfield, Middlewich and Poynton. This equates to one site for approximately 24,000 households and one site for every 47,600 inhabitants. 76% of residents are within 5 miles of an HWRC and over 98% can reach a site within 20 minutes in normal traffic. Taking account of the guidelines above, CEC currently has a sufficient provision of HWRCs to fulfil its statutory duty.

## 2.2 Current performance

The following Figure 1 shows the performance of the HWRC network between 2017 and 2020. The impact of the introduction of the rubble charges in January 2018 can be clearly seen in the significant decrease in the quantity of the material presented at the HWRC network. This therefore led to a decrease in the recycling rate (incl. rubble). However further analysis of the data (removing rubble from the calculation as shown by the dark blue line) shows a more general decline in the recycling rates across the network from 65% in 2016/17 to 61% in 2019/20.

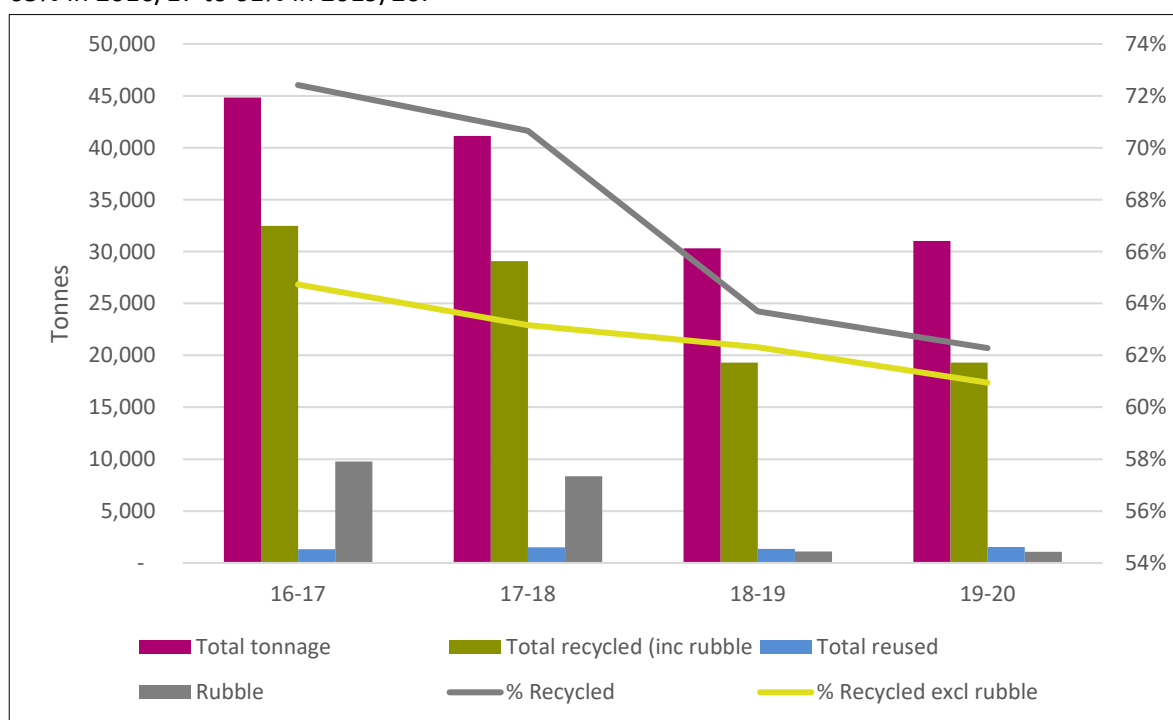


Figure 1 HWRC network performance between 2016/17 and 2019/20

## 2.3 Users

A user count was carried out in May and June 2020 following the reopening of sites, after the pandemic restrictions had been lifted. The results are shown in Table 1 below. Crewe, Knutsford, Macclesfield and Alsager had the highest footfall.

*Table 1 Average users per day per site*

Site	Average no of users per day
Alsager	304
Bollington	175
Congleton	186
Crewe	419
Knutsford	325
Macclesfield	303
Middlewich	172
Poynton	206
<b>Total</b>	<b>2,090</b>

## 3 Benchmarking

CEC was benchmarked with both neighbouring and similar authorities with the results provided below. Further detail is referenced in the following section and provided in Appendix A.

### 3.1 Neighbouring authorities

HWRC sites in six neighbouring local authorities were selected for benchmarking based on their proximity to the border with CEC. The neighbouring authorities are:

- Cheshire West and Chester
- Warrington Borough Council
- Greater Manchester WDA (incl. Manchester, Stockport, Trafford)
- Derbyshire County Council (incl. High Peak Borough Council)
- Staffordshire County Council (incl. Staffordshire Moorlands, Newcastle-under-Lyme Borough Council)
- Shropshire

According to the 2018/19 national HWRC directory CEC has the second highest HWRC recycling rate excluding rubble (66.7%), following Warrington (71.0%). In terms of throughput, CEC has the second lowest annual tonnage, coinciding with a 25% drop from the previous year. Throughput per household is middle of the range (180kg/hh/yr.); with Shropshire and Greater Manchester residents producing the most HWRC waste (276 kg/hh/yr.). Both CEC and Cheshire West and Chester have the highest number of sites per 100,000 population (2.1 sites), when compared with the neighbouring authorities.

A summary of key policies and opening times are detailed in Table 2. All authorities enforce vehicle restrictions, largely related to vehicle payload and length. Shropshire enforces a similar permit scheme to CEC for vans or larger vehicles, while Warrington issues permits either for vans with large amounts of

household waste, or where non-household waste is being disposed of. Both Greater Manchester and Warrington allow only a certain number of visits per year, with the former restricting frequency based on vehicle type. Only Staffordshire requires residents to pay for disposal of rubble, plasterboard and soil type wastes, though most authorities state that only small DIY projects can be accepted. Greater Manchester and some sites in Staffordshire cannot accept plasterboard and asbestos.

HWRC opening times are varied across the authorities. Cheshire West and Chester, Warrington, Greater Manchester, and Derbyshire all provide at least one site with opening times similar to or greater than CEC. The Chester, Ellesmere Port and Winsford recycling centres, within Cheshire West, provide 12-hour opening times during weekdays in the summer months.

Table 2 HWRC policies and opening times of neighbouring authorities

Authority	Vehicle restrictions	Residents Permit	Limits on non-household waste	Opening Times	Trade Waste Accepted?	DIY Charges
Cheshire East	Yes	Yes, for vans or trailers	Small DIY projects only, charges applicable. No gas cylinders or tyres. Asbestos at Pym's Lane Crewe or Danes Moss Macclesfield only.	Seven days a week; 8:30am-5pm April-September, 8:30am-4pm October-March.	Yes, limited quantities of rubble from small traders	Hardcore/rubble/soil/ceramic/glass & plasterboard = £3.60 per bag, per sheet or individual item.
Cheshire West & Chester	Yes	No except for Neston, due to location near council boundary.	Cannot accept asbestos, gas cylinders, tyres.	3x sites open seven days a week: Summer months 8am-8pm weekdays, 8am-6pm weekends. Winter months 8am-4pm every day. 4x sites open five days a week (midweek closing). Summer months 9am-5pm. Winter months 8am-4pm.	No – separate centre allocated for trade waste next to Chester Site.	No
Warrington Borough Council	Yes	Yes, for non-household waste, or when using van for large amounts of household waste.	Requires permit with list of items, regardless of vehicle. Up to three visits in 12-month period. Can't accept car tyres or vehicle parts, fire extinguishers, gas bottles, hazardous or flammable liquids or chemicals, pallets.	Gatewarth: Seven days a week; 8am-6pm Stockton Heath / Woolston: Seven days a week; 10am-4pm weekdays, 8am-6pm weekends (Stockton Heath: 8am-4pm weekends in winter months).	No	No
Greater Manchester WDA	Yes	No	No asbestos, plasterboard (both to be taken to waste transfer facility) or food waste.	Seven days a week; 8am-6pm	No	No
Derbyshire County Council	Yes	No	No car parts except tyres (max 4), large tree branches, large items of fitted furniture, greenhouses, sheds, fencing, decking, Christmas cards or wrapping paper. Plasterboard – max. 50kg per visit per week, whole sheets not accepted. Asbestos – 2x roofing sheets or 2m downpipe.	Seven days a week; 8:30am-6pm	No	No

Authority	Vehicle restrictions	Residents Permit	Limits on non-household waste	Opening Times	Trade Waste Accepted?	DIY Charges
Staffordshire County Council	Yes	No	<p>DIY only. Charges applicable to some items. No car parts (except tyres/batteries), animal carcasses, petrol or diesel. No plasterboard at Cheadle or Newcastle. No engine oil at Newcastle.</p> <p>Although usually accepted at Leek, asbestos is not currently permitted. Restricted to 4 sheets or 4 bags per household every six months.</p>	<p>Newcastle-under-Lyme: Five days a week (midweek closing), 9am-5pm. In summer months, 9am-6pm weekdays.</p> <p>Staffordshire Moorlands - Biddulph: Five days a week (Mon/Tue closed), 9am-6pm. In winter months, 9am-4:30pm. Leek: Seven days a week, 9am-5pm (in summer months, 9am-6pm weekdays). Cheadle: Five days a week (midweek closing), 9am-5pm (in summer months, 9am-6pm weekdays).</p>	No	<p>Rubble/bricks/concrete/glass/gravel/ceramic/sand/slate/soil/stone/tarmac/turf/tiles &amp; fibreglass - £3 per bag or large item.</p> <p>Plasterboard - £4 per bag or sheet.</p> <p>Tyres - £4 per tyre.</p>
Shropshire	Yes	Yes, for cars with large trailers, vans and 4x4s with goods body, long-term hire commercial vehicles.	Small DIY only. Asbestos requires notification prior to visit.	Seven days a week; 9am-5pm	No	No

### 3.2 Similar authorities

In order to benchmark the current CEC HWRC operation we have identified five target authorities using Office of National Statistics (ONS) area classification data which uses 59 key variables of demographic and socio-economic factors to rank the similarity of local authorities across the UK. The most similar authorities to CEC are identified as:

- Cheshire West & Chester
- Tewkesbury
- Stroud
- Stafford
- Monmouth

For authorities that are waste collection authorities only (Tewkesbury, Stroud and Stafford), HWRC data for the disposal authorities (Gloucestershire and Staffordshire) has been used.

According to the 2018/19 National HWRC Directory, CEC has the highest HWRC recycling rate excluding rubble when compared to the similar authorities. CEC's throughput per household is second lowest amongst the group (180kg/hh/yr.), following Staffordshire (175kg/hh/yr.). Monmouthshire in comparison, had a throughput per household of 492kg/hh/yr., and provides double the amount of sites per 100,000 population (4.2.) when compared to CEC (2.1 sites).

A summary of key policies and opening times are detailed in Table 3. Gloucestershire and Monmouthshire normally use a similar permit scheme to CEC for vans and trailers, though both are currently enforcing a pre-booking system in light of Covid-19 restrictions. Both Gloucestershire and Staffordshire will accept tyres and batteries but not car parts, and also mention that they will not accept petrol or diesel. All authorities accept plasterboard, rubble and soil, as long as it is for DIY only and not trade waste, with only Staffordshire charging for the disposal of these items. Monmouthshire explicitly states that DIY waste is restricted to five bags or one small car boot load per visit, with a maximum of two visits per month.

The majority of sites have shorter opening times compared to CEC, with Gloucestershire, Monmouthshire and some Cheshire West sites opening for five or six days per week.

Table 3 HWRC policies and opening times of similar authorities

Authority	Vehicle restrictions	Residents Permit	Limits on non-household waste	Opening Times	Trade Waste Accepted?	DIY Charges
Cheshire East	Yes	Yes, for vans or trailers	Small DIY projects only, charges applicable. No gas cylinders or tyres. Asbestos at Pym's Lane Crewe or Danes Moss Macclesfield only.	Seven days a week; 8:30am-5pm. April-September, 8:30am-4pm October-March.	Yes, limited quantities of rubble from small traders	Hardcore/rubble/soil/ceramic/glass & plasterboard = £3.60 per bag, per sheet or individual item.
Cheshire West & Chester	Yes	No except for Neston, due to location near council boundary.	Cannot accept asbestos, gas cylinders, tyres.	3x sites open seven days a week: Summer months 8am-8pm weekdays, 8am-6pm weekends. Winter months 8am-4pm every day. 4x sites open five days a week (midweek closing). Summer months 9am-5pm. Winter months 8am-4pm.	No – separate centre allocated for trade waste next to Chester Site.	No
Gloucestershire County Council (Tewkesbury, Stroud)	Yes	Normally for vans. Booking system now in force for all visits due to Covid-19.	Cannot accept ammunition, flares, animal carcasses, car parts (except tyres/batteries), clinical waste, petrol or diesel, invasive or poisonous plant species, large items such as septic or heating tanks. Asbestos must be pre-booked.	Six days a week (mid-week closing). 9am-5pm.	No	No
Staffordshire County Council (Stafford)	Yes	No	DIY only. Charges applicable to some items. No car parts (except tyres/batteries), animal carcasses, petrol or diesel. Although usually accepted, asbestos is not currently permitted due to Covid-19. Restricted to 4 sheets or 4 bags per household every six months.	Seven days a week; 9am-5pm. In summer months, 9am-6pm weekdays.	No	Rubble/bricks/concrete/glass/gravel/ceramic/sand/slate/soil/stone/tarmac/turf/tiles & fibreglass - £3 per bag or large item. Plasterboard - £4 per bag or sheet. Tyres - £4 per tyre.
Monmouthshire County Council	Yes	Normally for vans. Booking system now in force for all visits due to Covid-19.	DIY waste restricted to five bags or small car boot load per visit, with maximum of two visits per month. No asbestos.	Six days a week (midweek closing); 8am-5pm. Covid: Key worker times: 8am-9am.	No	No

### 3.3 Benchmarking findings

The findings of the benchmarking with neighbouring and similar authorities suggest that:

- In terms of rubble/construction type wastes, only Staffordshire charges residents for disposal similar to CEC. Monmouthshire and Derbyshire do provide limits on the amount of waste that can be disposed, but most authorities are less explicit, asking only that small DIY wastes be brought to recycling centres.
- Most of the comparable authorities require some form of residential permit for vans, but not all.
- The majority of authorities accept asbestos but impose either limit to the amount that can be disposed or ask that site visits are pre-booked. Safe handling and bagging or wrapping of materials is advised in all cases.
- CEC is amongst the authorities which provide longer opening times. There are however three sites within Cheshire West which are open for 12 hours each weekday during the summer.

## 4 Scenario spatial analysis showing drive times and distances for residents

Spatial analysis has been completed to understand the distance residents need to travel to the nearest HWRC and the drive times for residents within Cheshire East. A number of scenarios were modelled to consider the impact of closing two or more sites. All calculations assume that residents are likely to visit their closest site in Cheshire East. The analysis does not include HWRCs outside the Cheshire East boundary.

*Table 4 Sites included within each scenario (✓ denotes site remains open in the scenario)*

Site	Current	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Alsager	✓		✓	✓	✓
Bollington	✓			✓	✓
Congleton	✓				
Crewe	✓	✓	✓	✓	✓
Knutsford	✓	✓	✓	✓	✓
Macclesfield	✓	✓	✓	✓	✓
Middlewich	✓				✓
Poynton	✓				

The scenarios were chosen by CEC to represent different levels of HWRC provision, ranging from just two site closures in scenario 4, to a network of only three sites. Detailed results of the spatial analysis are included in Appendix B with the key points discussed below.

At present, with eight HWRCs, 98% of households can reach a site within twenty minutes. Analysis indicates that more than 78% of all households could drive to an HWRC in less than fifteen minutes in all of the scenarios modelled, (with the exception of the scenario whereby only the core sites of Crewe, Knutsford and Macclesfield remain open). This suggests that there is a potential over provision of sites



within the authority and closure of up to three sites would not have a significant impact upon the majority of the population. Reducing the number of HWRCs to only three sites would mean that approximately 12% of households would have to drive more than 20 minutes to reach a HWRC. CEC may deem this to be acceptable given the WRAP guidance suggest that the great majority of residents are twenty minutes (30 minutes in very rural areas) away.

Drive time analysis has been used as a proxy for which sites a householder is most likely to use. Of course, convenience and preference will also play a role. However, assuming householders use their nearest sites, 67% of CEC households use Alsager, Crewe, Knutsford or Macclesfield. 7% of households use Poynton HWRC, 8% use Middlewich HWRC and both Bollington and Congleton are used by 9% of households. Previous analysis has shown that the proximity of sites within neighbouring authorities means that approximately 8% of households are closer to a site outside of CEC. The map below shows the locations of the HWRCs and the current overlap of 15-minute drive times.

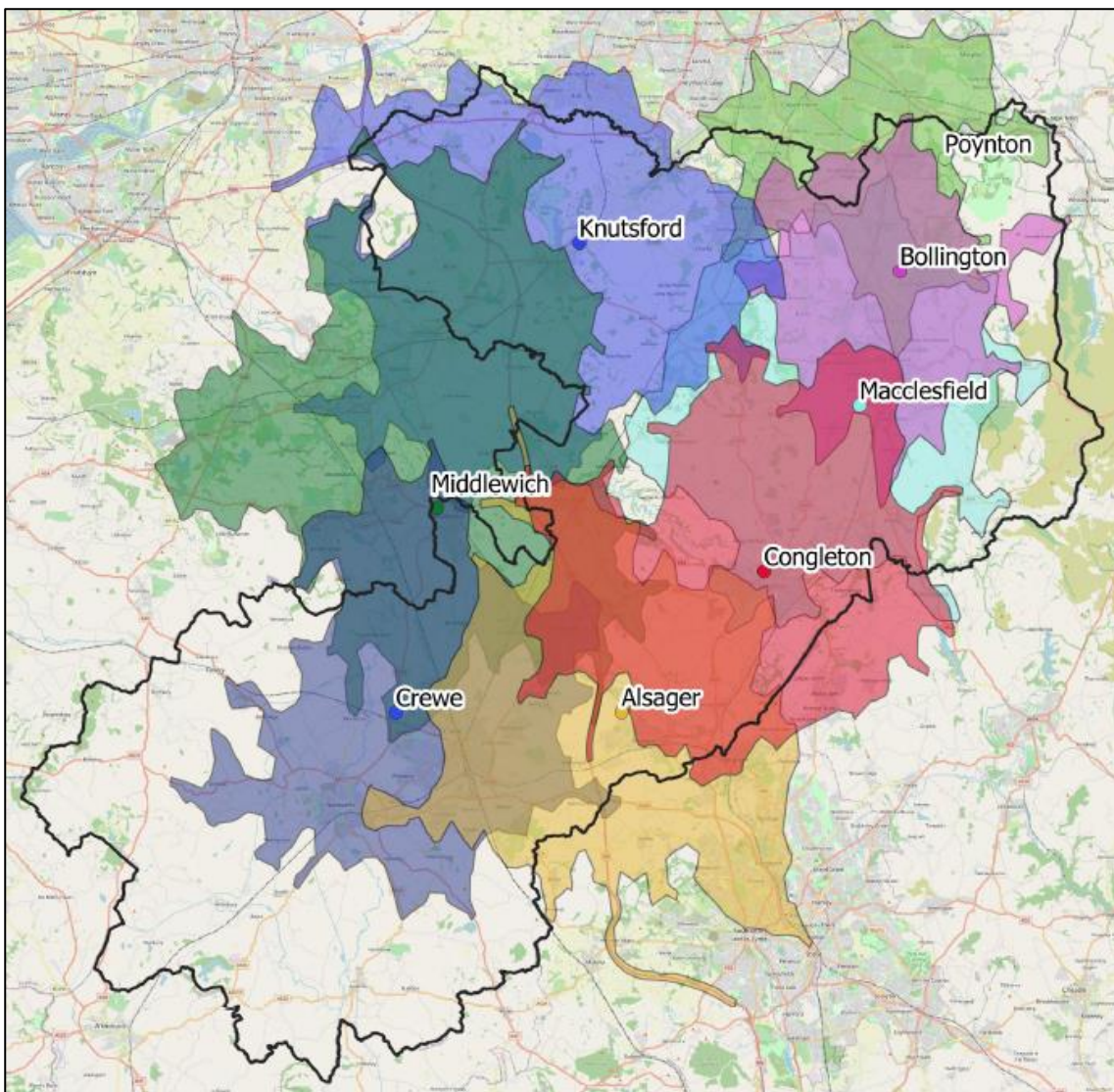


Figure 2 Current HWRC network and 15-minute drive times

#### 4.1 Scenario 1 – Macclesfield, Crewe and Knutsford open

If five of the eight sites were to close, Macclesfield would be the closest site for another 21% of the population. Crewe would be the closest site of another 16% of the population. Therefore, both sites would require redevelopment or renewal to accommodate this additional throughput of site users and tonnage. Indeed, all three sites would also require investment to ensure they could accommodate the additional throughput whilst maintaining high recycling rates.

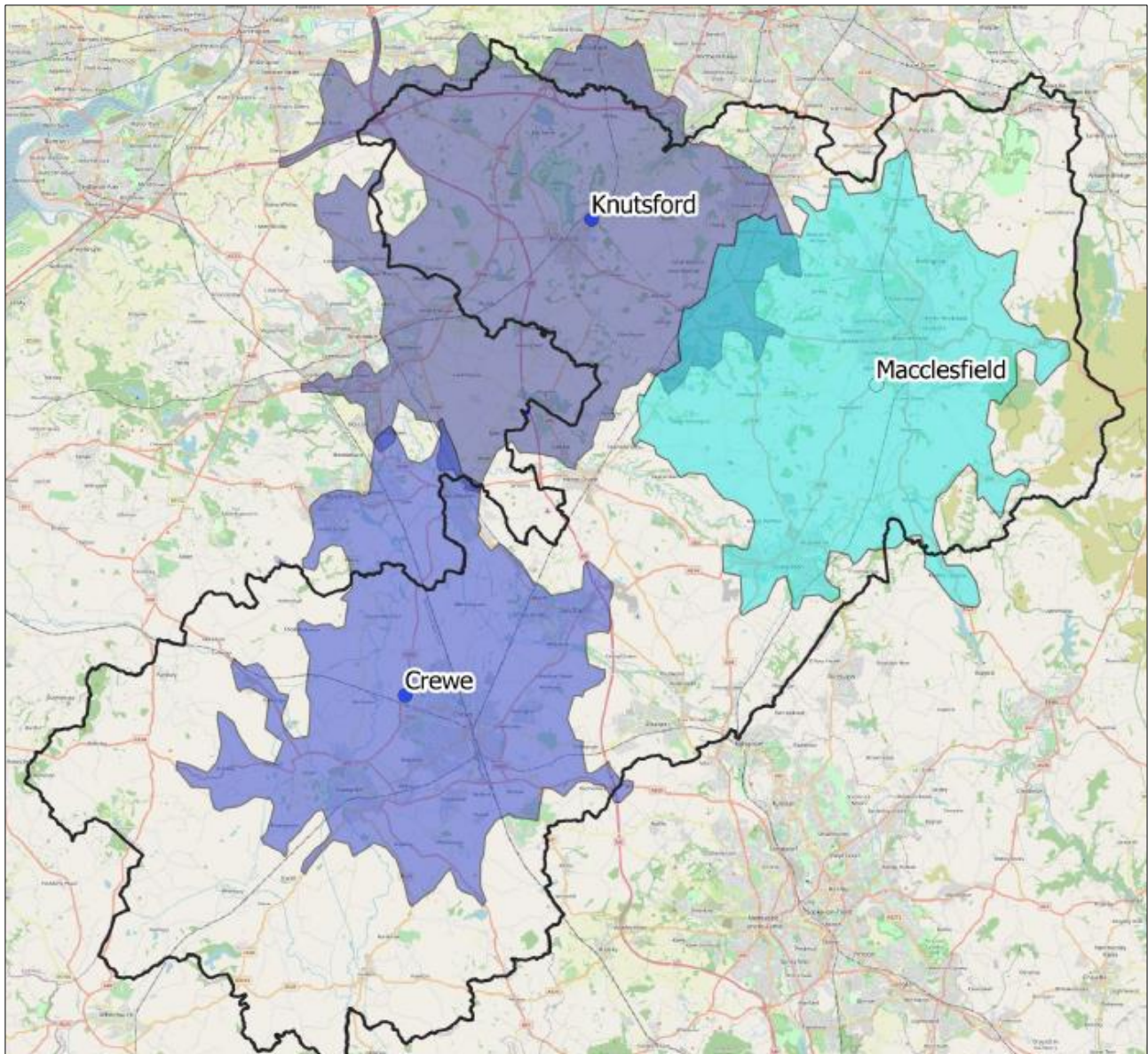


Figure 3 Scenario 1 and 15-minute drive times



## 4.2 Scenario 2 – Macclesfield, Crewe, Knutsford and Alsager open

A scenario that sees Bollington, Congleton, Middlewich and Poynton close (as the four sites with the smallest throughput) would minimise the overlap of HWRC catchments in the centre of the authority. There would be areas in the north around Colshaw Farm and Poynton and in the South in Wrenbury and Audlem where residents would be expected to drive for more than 15 minutes to reach their nearest HWRC within Cheshire East. However, based on WRAP guidelines, 93% of households would still receive acceptable levels of provision because they could reach a site within twenty minutes. In this scenario there would be a noticeable impact on Macclesfield HWRC with 37,000 more properties in the Macclesfield catchment area, compared with the current provision.

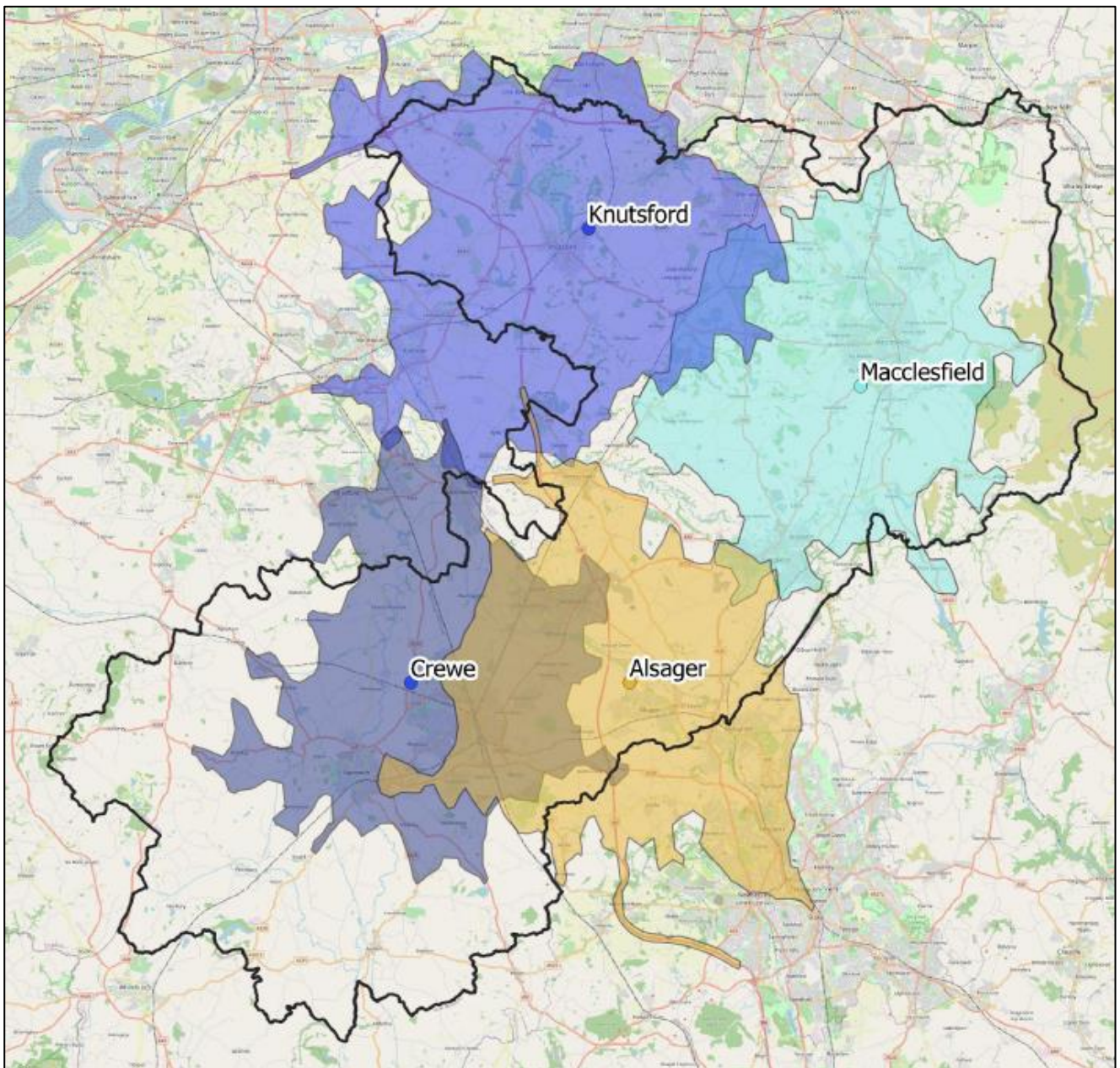


Figure 4 Scenario 2 and 15-minute drive times



### 4.3 Scenario 3 – Macclesfield, Crewe, Knutsford, Alsager and Bollington open

If Congleton, Middlewich and Poynton close, and assuming they are not replaced, the spatial analysis forecasts that Macclesfield and Bollington will see increased use. 9% more households will go to Macclesfield and 7% more households will go to Bollington. 96% of households will still receive acceptable levels of provision because they could reach a site within twenty minutes.

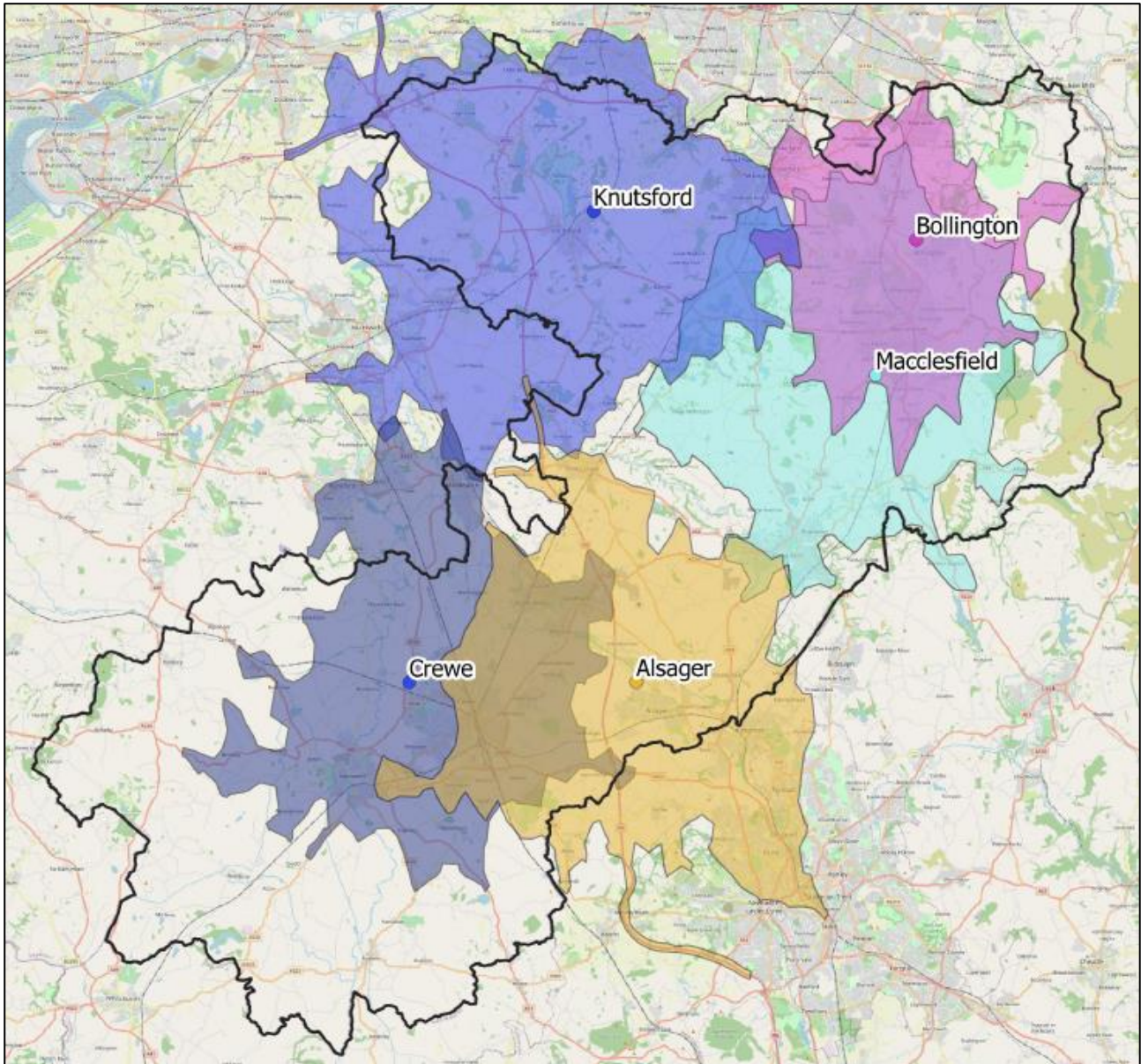


Figure 5 Scenario 3 and 15-minute drive times



#### 4.4 Scenario 4 – Macclesfield, Crewe, Knutsford, Alsager, Bollington and Middlewich open

If Congleton and Poynton close, and assuming they are not replaced, the spatial analysis forecasts that Bollington and Macclesfield will see similarly increased use as in scenario 3. Middlewich will have the same number of households closest to it. As in scenario 3, 96% of households would still receive acceptable levels of provision because they could reach a site within twenty minutes.

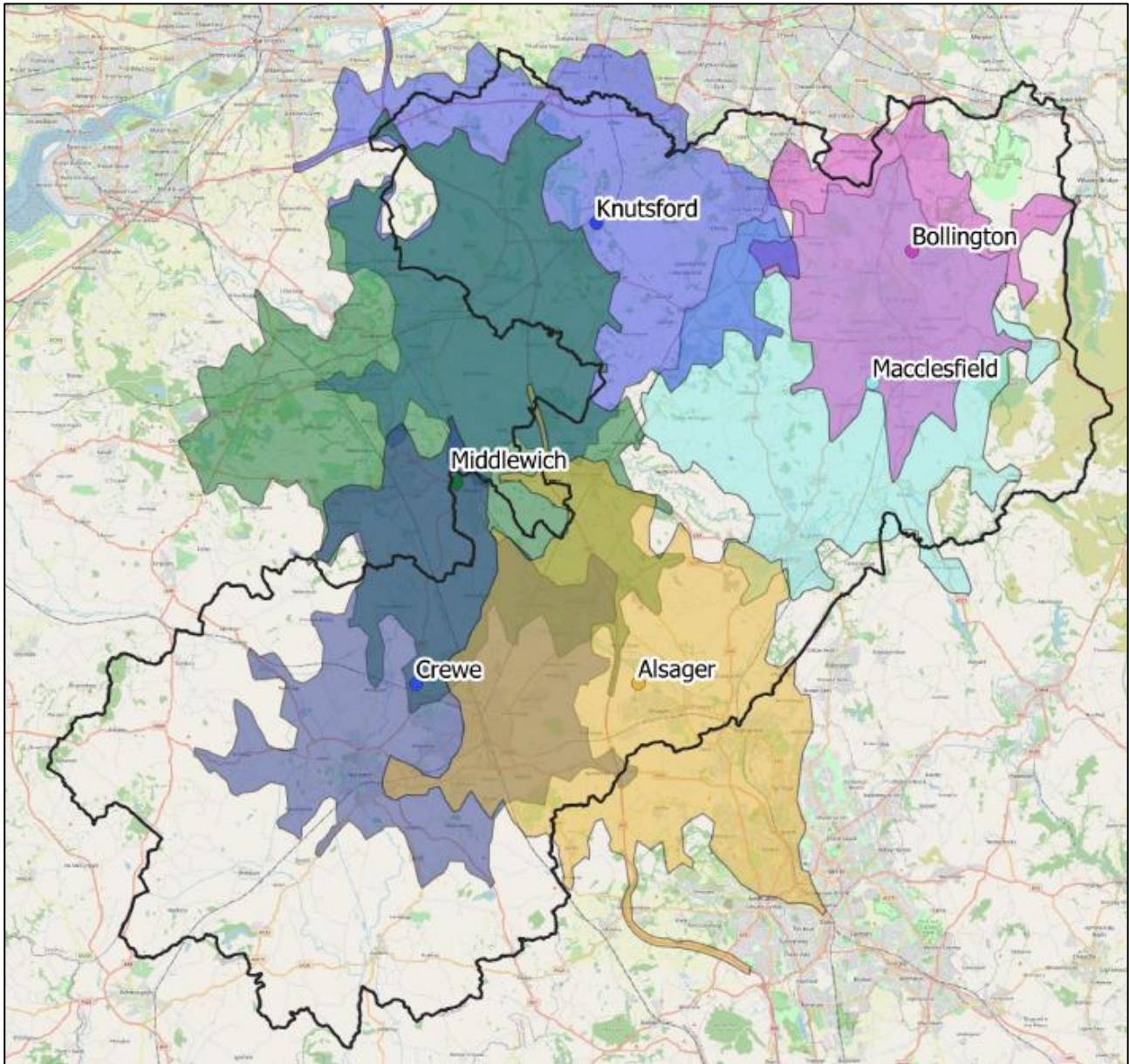


Figure 6 Scenario 4 and 15-minute drive times

## 5 Network Options

Cheshire East Council, with its responsibility to manage public finances in a sustainable manner, is reviewing the HWRC network to ensure the operation of the service is the best it can be.

CEC designed a range of scenarios to assess the associated impact on the residents. The analysis was based on current costs and tonnages with key assumptions including:

- A small decrease in tonnages of 4% for closure of Congleton and Poynton. This was based on the decrease in tonnages year on year in the three months Arclid was closed before rubble charges were introduced.
- The remaining tonnages are unlikely to decrease with the effect of tonnage reductions stopping after the two small sites are closed.
- An allocation of management fee proportional to current tonnage throughput on sites
- Reduction of management fees by 50% for each site closure with the rest having to be reallocated (in terms of staff, equipment and contractor overheads across the network)

Table 5 below shows the scenarios and the associated savings alongside estimated annual contract cost.

*Table 5 Theoretical savings and network cost in the first year (without indexation) for the four scenarios*

Scenario	Sites to close	Potential savings in the first year (without indexation)	Estimated annual cost of network in the first year (without indexation)
Scenario 1	Congleton, Poynton, Bollington, Alsager and Middlewich	£406,025	£2,057,958
Scenario 2	Congleton, Poynton, Bollington and Middlewich	£287,634	£2,176,349
Scenario 3	Congleton, Poynton and Middlewich	£213,131	£2,250,852
Scenario 4	Congleton and Poynton	£143,138	£2,320,845

The savings modelled for site closures are very similar to those reported in the 2016 study with the network cost dropping to just over £2million should only three sites remain open. However, as the estimates are based on the terms of the current contract which comes to term in 2023 it is difficult to say how the savings associated with site closures will translate to actual savings for the new contract. The material market conditions and the new contract specifications (including the material prices, the risks and income sharing mechanisms and the employment situation for example the minimum wage) will have a significant effect on the future costs of the HWRC network. It is therefore important to take the figures with caution and treat them as a way to offset any increases in the costs as opposed to a significant cost saving opportunity.

The analysis of the redistribution of the tonnages across the network for the different scenarios used the spatial analysis and assumed that the residents would use the site closest to them in terms of drive times. The results of this analysis should be treated with caution as this is not always the residents' main motivation for using a particular site. This is particularly well demonstrated by the analysis of current tonnages and the closest sites to households which is considerably different for some of the sites

(including Crewe and Macclesfield which are to remain open in all scenarios). This analysis however is at this current time the best approximation available. It is recommended that the Council considers on site user surveys with a question about the residents' postcode (even just partial) to collect better data on the users and where they travel from in the County. Table 6 below shows the results.

*Table 6 Tonnage redistribution based on drive time analysis and current tonnages for the four scenarios*

Site	Total throughput 19/20	Total throughput apportioned by closest site by drive time	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Alsager	3,906	3,567		4,576	4,576	3,941
Bollington	2,664	2,942			4,875	4,874
Congleton	2,783	2,913				
Crewe	8,183	9,787	14,696	10,921	10,921	9,722
Knutsford	3,948	3,544	5,745	5,427	4,096	3,572
Macclesfield	4,918	3,886	10,367	9,884	6,341	6,304
Middlewich	2,350	2,354				2,394
Poynton	2,256	2,017				
<b>Total</b>	<b>31,009</b>	<b>31,009</b>	<b>30,808</b>	<b>30,808</b>	<b>30,808</b>	<b>30,808</b>

The increase in tonnages across the three sites in Scenario 1 are significant with all of the sites having to accept around double the material they are currently accepting. This would require significant improvements including a potential redevelopment of the sites and considering how the sites would be accessed by increased numbers of residents as well as the need to service these sites (number of haulage vehicles etc.). We note from the site plans that this would require the extension of the site into the adjoining land (with potential purchase of industrial or farmland required). In Knutsford this may be difficult due to the proximity of residential properties. We also note that this increase in throughput would result in significant increases in vehicle movements both of residents visiting the site and service vehicles. It appears from previous site plans and assessments that there is limited space for queuing and the queues could end up on public highways.

It is difficult to estimate the cost of site redevelopment with a wide range of costs reported across the industry. However, the recently redeveloped Chester site cost in the region of £900,000<sup>1</sup>.

Early estimates of site options for a potential new replacement for Congleton (due to the fact that the site is leased, and the landlord has indicated they may shortly require vacant possession), would be around £4m.

Scenario 4 (providing the least number of site closures) shows an estimated increase in throughput ranging from 1% for Alsager to 28% in Macclesfield. In this scenario Bollington is likely to experience an increased

<sup>1</sup> <https://www.hwmartin.com/news/chester-residents-and-businesses-get-new-recycling-centres/>

throughput (almost doubling) because most of the tonnage from Poynton would be absorbed there. However, we cannot be sure how much of an outlier this may be. It would be important to survey the residents in the nearest site in Poynton to understand the split between Bollington and Macclesfield. In either case, both sites would require some improvement works. Bollington is surrounded by farmland and has an extended access road. Macclesfield is adjacent to the Council waste site so the potential for redevelopment could be carefully considered.

The savings associated with land sale could be used to fund site development and improvement. Table 7 shows the estimated land sale value based on 2017 Government estimated land values<sup>2</sup> of industrial land (which is the most recent available data set). The example costs have been calculated as an average for the two data points in the proximity to Cheshire East (Warrington and Chester) but the high and low estimate based on the highest and lowest estimated land value is also provided for interest and to demonstrate the range.

Scenario 4 would result in only small savings due to Congleton site being leased so the income would only be generated through the closure of Poynton.

*Table 7 Estimated revenues from sale of land for the four scenarios*

Site	Site size (SqM)	Potential revenue from sale of land	Comments	Scenario 1	Scenario 2	Scenario 3	Scenario 4
Alsager	6,240	£397,800		£397,800			
Bollington	4,701	£299,670		£299,670	£299,670		
Congleton	1,642	£0	Land leased	£0	£0	£0	£0
Middlewich	1,587	£101,171		£101,171	£101,171	£101,171	
Poynton	1,858	£118,422		£118,422	£118,422	£118,422	£118,422
<b>Total estimated potential income</b>				<b>£917,063</b>	<b>£519,263</b>	<b>£219,593</b>	<b>£118,422</b>
High				£1,442,421	£880,821	£457,758	£167,184
Low				£601,009	£367,009	£190,733	£69,660

## 5.1 Impact on recommended site provision levels

Although there are no statutory levels of HWRC provision, WRAP HWRC guidance recommends that the maximum number of inhabitants per HWRC is 120,000 and the maximum number of households per HWRC is 50,000. The following table shows the levels for the scenarios considered alongside the current situation.

The analysis shows that all but Scenario 1 would provide the recommended level of HWRC provision by households and inhabitants.

<sup>2</sup> <https://www.gov.uk/government/collections/land-value-estimates>



*Table 8 Household and inhabitants per site for the four scenarios*

Scenario	Households per site	Inhabitants per site
WRAP recommended	50,000	120,000
Current	23,979	47,599
Scenario 1	63,943	126,930
Scenario 2	47,958	95,198
Scenario 3	38,366	76,158
Scenario 4	31,972	63,465

## 6 Other service efficiency and cost improvement measures

Cheshire East Council has already implemented several best practice initiatives across the HWRC network including bag splitting (currently suspended due to Covid-19 pandemic) or accepting trade waste rubble on sites. The following section summarises additional measures that could be considered.

### 6.1 Improving the user experience and site aesthetics

It is well established that site performance is influenced by site aesthetics and user experience. This includes signage, site cleanliness and how the traffic is managed.

*Following the 2016 HWRC review, the Council planned and costed a wide range of improvements for the sites.*

Table 9 shows the breakdown of the measures and costs. Note that no improvements to Congleton site were planned.

*Table 9 Planned site improvements and the associated costs*

Site improvements	Signage	Traffic	Infrastructure	Welfare	Re-use	Total
Alsager	£17,100	£1,500	£21,600	£25,500	£0	£65,700
Bollington	£11,740	£0	£8,150	£45,000	£0	£64,890
Crewe	£17,100	£14,000	£20,400	£55,500	£0	£107,000
Knutsford	£8,610	£0	£53,850	£66,000	£0	£128,460
Middlewich	£11,365	£0	£28,500	£30,000	£0	£69,865
Macclesfield	£15,240	£1,935	£33,715	£27,000	£25,500	£103,390
Poynton	£9,945	£0	£35,625	£25,500	£0	£71,070

However, the work is currently on hold and there is potentially a saving associated with prioritising the improvements to sites that are earmarked for staying open indefinitely. Table 10 shows the potential savings for the four scenarios considered in this report.

Table 10 Potential savings from site improvements works for the four scenarios

Scenario	Sites to close	Potential savings
Scenario 1	Congleton, Poynton, Bollington, Alsager and Middlewich	£271,525
Scenario 2	Congleton, Poynton, Bollington and Middlewich	£205,825
Scenario 3	Congleton, Poynton and Middlewich	£174,460
Scenario 4	Congleton and Poynton	£71,070

## 7 Resources and Waste Legislation and Policy Impacts

A range of environmental measures have been proposed in recent years that could have far reaching impacts, such as the Drinks Return Scheme (DRS), consistency framework for household waste collections, and reform of the Extended Producer Responsibility (EPR) requirements. The measures are in different stages of development, consultation and implementation and key aspects are currently being debated for many of these policies. Three landmark policy and strategy documents outline the key policies and are analysed below for their potential impact on HWRCs:

- The Resources and Waste Strategy, 2018<sup>3</sup>
- The Environment Bill, Draft 2018<sup>4</sup>
- EU Ecodesign Implementing Regulations, 2019<sup>5</sup>

The measures in these three documents are discussed in the sections below. Based on this analysis, Table 11 lists key policies and indicates the nature of their impact on HWRCs. The table illustrates the large number of policies recently announced that have the potential to significantly impact operations at HWRCs.

The predominant impacts are expected to be on the quantity of the waste received and the nature of the waste, e.g. by diverting specific waste streams or products to other waste management systems or altering the products placed on market in terms of their design, materials, durability and repairability. The waste treatment options available are also likely to change. For example, EPR reform could incentivise recycling of difficult to recycle products such as carpets and mattresses. At a national level, economies of scale could be gained enabling new facilities to be opened to process these waste streams. EPR and DRS are anticipated to present funding opportunities if producers engage with Councils and HWRC services and pay for treatment of their waste products, and Councils could be reimbursed for handling deposit-bearing items not captured by the DRS return points and arriving as waste at the HWRC.

Interestingly, many of the policies could require more sophisticated data monitoring and reporting. Such data systems would allow Councils to interface with emerging waste systems such as EPR and DRS and

<sup>3</sup> HM Government (2018), *Our waste, our resources: a strategy for England*, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/765914/resources-waste-strategy-dec-2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/765914/resources-waste-strategy-dec-2018.pdf)

<sup>4</sup> Environment Bill, Bill 003 2019-20 (as introduced), <https://publications.parliament.uk/pa/bills/cbill/2019-2020/0003/20003.pdf>

<sup>5</sup> Regulation laying down ecodesign requirements 1 October 2019, <https://ec.europa.eu/energy/en/regulation-laying-down-ecodesign-requirements-1-october-2019>

access the associated funding mechanisms. Several of the policies also imply the need for improved performance in waste management, and HWRCs are likely to have a pivotal role in delivering this.

*Table 11: Summary of key policies and their impacts on HWRCs*

	Quantity of waste	Nature of waste	Waste treatment options	Funding	Data and reporting	Performance requirements
Extended Producer Responsibility	✓	✓	✓	✓	✓	✓
Drinks Return Scheme	✓	✓		✓	✓	
Ecodesign	✓	✓	?			
Right to repair	✓	✓	✓			
Addressing barriers to re-use at HWRCs					✓	✓
Tackling waste crime			✓			
Single-use plastics bans	✓	✓				
Single-use plastics charge	✓	✓		?		
Waste collection consistency	✓	✓				
Net-zero carbon emissions by 2050	✓	✓	✓		✓	✓
Mandatory electronic tracking of waste					✓	

✓ = Yes, ? = Impact is less certain

## 7.1 Potential future changes

The policy landscape is fast developing, and it is worth considering further measures that may be brought in to support those discussed above. We highlight two specific policy topics below.

The UK recycling rate has flat-lined in recent years. The 2020 municipal recycling rate target is likely to be missed, and subsequent targets will prove even more challenging. It is conceivable that individual targets will be set for local authorities and perhaps even targets for HWRCs. The emphasis and planned systems for waste data collection and reporting would support targets for re-use, recycling and waste reduction, and the new Office for Environmental Protection would be set to monitor progress and intervene where deemed necessary. Meeting higher targets will be bound with the funding impact of EPR and objectives around the collection and processing of food waste. Government has consistently said it will support local authorities with costs attached to these higher objectives and ensure that industry pays the full cost of EPR for packaging and that this accrues to councils in line with the desire for efficient, high-quality packaging collections. While the impact of EPR for packaging may not be the biggest factor in the evolution of HWRCs

it is still a factor to account for and may well lead to funding support for well collected packaging. The EPR for other items and especially for bulky items ending up in HWRC, such as furniture and mattresses, has not yet been discussed but will be an important consideration and an issue many organisations from the public sector and producers will need to be aware of.

To meet the environmental objectives, including carbon impacts, it is likely that further measures will be taken to influence the full product life cycle including design, production, supply, use and disposal. The initial focus could look to improve primary, secondary and tertiary packaging and transport of goods.

Beyond this, there may be potential impacts from other areas of policy development, outside the resources and waste arena that need to be considered in the development of new HWRCs and modernisation of existing sites. For example, growing demand for active travel and safe cycling is forecast. As infrastructure improves and demand increases, the opportunity to incorporate safe access to HWRCs by bicycles (including cargo bikes) may provide an innovative and timely accessibility improvement to the service that would prove popular and chime with Climate Emergency actions. Government has recently announced new funds<sup>6</sup> for safe cycling infrastructure and access to these funds should be monitored and prove especially relevant for new site developments.

Further analysis of the implications of the new legislation and national strategy can be found in Appendix C.

## 8 Innovation within the HWRC sector

Local Authorities across the UK are looking at ways to run the services more efficiently while improving the recycling, reuse and diversion rates. The innovative ideas recently employed within the HWRC sector can be grouped into the following categories:

- Site operations
- Site design
- Contracts

### 8.1 Site operations

#### 8.1.1 ANPR and CCTV

ANPR and CCTV have recently been used and requested in contracts by LA. The technology can be used for administering the permit systems, managing trade abuse and in some places, limiting the number of visits on a “fair usage” case (for example in Herefordshire County Council there is 12 fair usage visits per annum). The systems could also be used to monitor traffic flows, collecting data on numbers of visitors and using this to potentially communicate live updates to residents. This has been successfully employed by Bristol Waste Company where live CCTV footage of the HWRC queues can be accessed via their website<sup>7</sup>.

<sup>6</sup> <https://www.sustrans.org.uk/our-blog/news/2020/february/government-pledges-5bn-to-improve-bus-and-cycling-services-our-response/>

<sup>7</sup> <https://www.bristolwastecompany.co.uk/hrrc-queue-camera/>

### 8.1.2 Further material separation

Further steps can be made to separate materials for recycling where multi-material furniture (e.g. sofas, beds, mattresses) are unsuitable for re-use. A site in Wales has set up a system where the items are stripped down by hand on site and then separated into various components. Initially only the wood and metal were recycled, but negotiations are ongoing with reprocessors to recycle additional materials such as flock and foam. Existing site staff are utilised to undertake the work which is carried out on a rotational basis depending on how busy the site is. Material stripping activities are attributed to an estimated 2-3% increase in the recycling rate. Cost benefits include increased revenue from the sale of recyclate and savings in landfill tax and gate fees. Additionally, staff motivation and happiness increase as targets are met and staff efficiency is maximised by utilising 'down time' to strip materials. An additional staff member is employed using revenue generated by the process.

### 8.1.3 Community recycling centres

With cuts to resources some local authorities have considered site closures and network rationalisation. One creative way to limit the site closures while at the same time realising savings is changing the function of the waste and recycling centres to recycling and reuse. In Lancashire one of the smaller sites was renamed as a Community Reuse and Recycling Centre and accepts a limited range of materials excluding residual waste, wood, rubble, chemicals and asbestos while retaining the reuse shop onsite.<sup>8</sup> The Centre, which operates in a different way from the other sites, has a focus on selling recycled items, alongside a limited waste and recycling service.

There are also several innovative operations internationally where the recycling sites' focus has shifted further up the waste hierarchy. An example of this recently has been the Reuse centre in Ljubljana<sup>9</sup> which operates as a reuse or resource hub where items are repaired and upcycled.

## 8.2 Site design

Whilst requiring a considerable amount of engineering work, a move from a more traditional site design to the introduction of modular and flexible solutions has been a key innovative design solution. A modular design allows the site to be reconfigured as needed with the minimum of difficulty and expense. One construction firm comments<sup>10</sup>:

*We offer a prefab concrete modular system for the construction of split-level household waste recycling centres that helps achieving higher recycling rates enhances safety and customer satisfaction and is future proof because of its flexibility. The modular construction can easily be expanded or adapted and could even be relocated. Construction time is very short; only 1-2 weeks, depending on the size of the platform.*

Figure 7 below shows the modular HWRC design used in Cardiff. The infrastructure is constructed from prefabricated blocks. Visitors drive up the ramp, park next to the waste bays and deposit materials into skips on the lower level. The site can be expanded by placing additional prefab blocks, or even moved

<sup>8</sup> <https://www.lancashire.gov.uk/waste-and-recycling/recycling-centres/garstang/>

<sup>9</sup> <https://www.vokasnaga.si/en/reuse-centre>

<sup>10</sup> <https://governmentbusiness.co.uk/company-focus/modulo-beton-modular-hwrc%E2%80%99s-%E2%80%93-construction-conscience>

and/or combined with other sites. The space under the platform can be used for storage; a re-use shop, offices, a tool library, repair shop etc. and the red bins on the top level are linked via chutes to the space below allowing for safe disposal of small waste streams such as batteries.

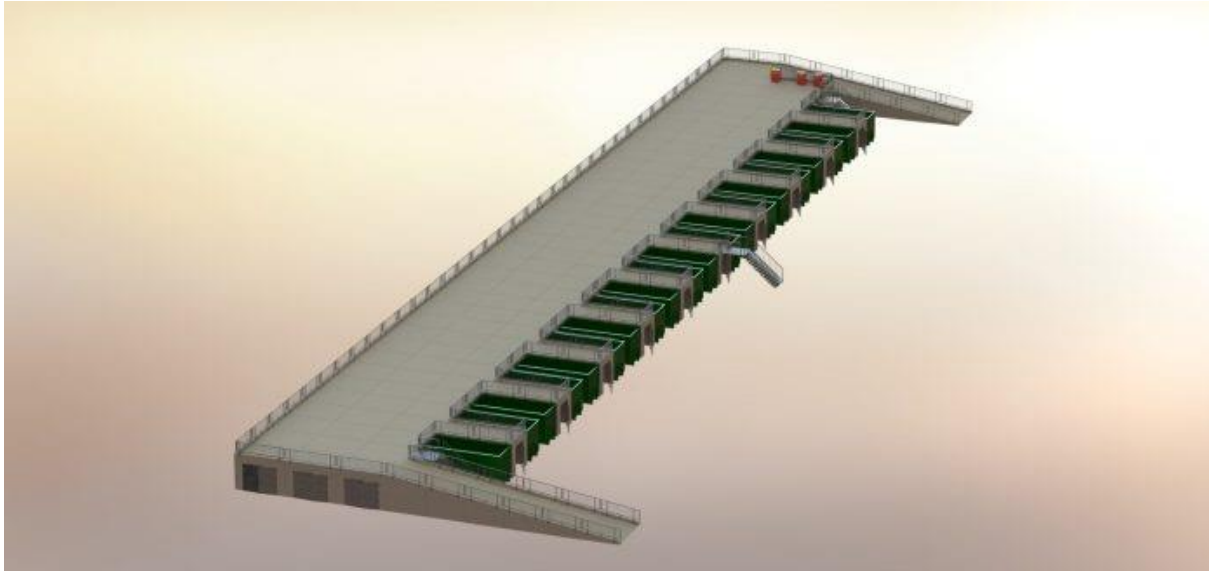


Figure 7: Plan of modular design in Cardiff HWRC<sup>11</sup>

### 8.3 Contracts

There are several methods that contracts for operating HWRC sites and networks can be set up to drive efficiency and performance. This includes contract length and size, risk and income sharing, contract incentives and penalties.

Similarly, there are a number of options that the LA can consider in terms of the contract characteristics but the factors behind these decisions are likely to include:

- whether other waste and recycling services are included within the same contract;
- the number of sites within the network and whether they are to be managed as one contract or several;
- investment requirements;
- the local authority's attitude to risk;
- the strategy for contracting with local businesses and third-sector organisations;
- the level of flexibility required.

#### 8.3.1 Contract length and size

The overall contract cost and the structure will often be dependent on the length of the contract. Traditionally the length of the contract would align with the life span of equipment or assets so between 5 and 11 years. This is still common practice in the industry. However, some LAs are entering into much longer-term contracts for example where significant investment is required. For example, Somerset Waste

<sup>11</sup> <https://www.modulo-beton-environment.com/realization/uk-united-kingdom/>

Partnership is currently under contract with Viridor which had the initial term of 16 years, recently (2019) extended by 9 years to 2031.

There are a number of options where the contract for operating the HWRC networks have been included within a wider service provision making it a more integral part of the overall waste management solutions within the LA are and generating some potential savings through the economies of scale. This however has to be carefully considered to ensure that all elements of a contract are delivered to the required quality. Drafting of the specification would require significant time and expertise and a transparent way of evaluating the financial viability of the contract would be required during the procurement process. The potential bidders for such a contract would include the large, national and multinational waste management companies.

On the other hand splitting the contract into smaller lots (by location or function such as haulage, site operation, material brokering etc.) may be beneficial if specialist services are required and the LA has a clear procurement strategy that encourages participation of smaller businesses or local third sector organisations. In such instances it would be important to consider the contract interfaces (for example vehicles operated by one contractor needing access to sites that are operated by another contractor) and how the contracts will be coordinated day to day.

### 8.3.2 Income and risk sharing

The material markets have been significantly affected by international events in recent times, with the likes of China imposing very tight controls on the materials that can enter their economy from abroad and the price of oil falling. Additionally, national policy decisions have a direct impact on how material is traded. For example, the Environment Agency is investigating waste wood to determine whether the material is hazardous or not. The methods will have an impact on the overall wood recyclers market and ultimately price for disposing of the material. Furthermore, there is continuing uncertainty associated with the Resources and Waste Strategy with its risks and opportunities for market development.

It is therefore important for the LA to consider how much risk it is willing to take on the price of the materials as any risk the contractor will need to take will be costed in to the proposed contract during the tender stage.

There are a number of mechanisms that the LA can choose to include during the procurement process these would be up for discussion during the competitive dialogue sessions. These could include: a percentage split of income or cost, additional limits on the maximum costs of income the contractor can claim, open book contracting<sup>12</sup> or set review periods. Such mechanisms should be considered in detail with qualified legal and accounting advisors and should take into account the additional costs and required expertise associated with managing more complex contracting arrangements.<sup>13</sup>

<sup>12</sup> *Open Book Contract Management (OBCM) is a structured process for the sharing and management of charges & costs and operational and performance data between the supplier and the client. The aim is to promote collaborative behaviour between client and supplier through financial transparency. The outcomes should be a fair price for the supplier, value for money for the client and performance improvement for both over the contract life.*

<sup>13</sup> <https://www.nao.org.uk/naoblog/open-book-contracting/>

### 8.3.3 Incentives and penalties

There are specific incentives and penalties associated with recycling, diversion and reuse or waste prevention targets. These can generally be described as:

- Specific bonuses or financial penalties for meeting or not meeting specified target or stretch targets or banding
- Incentives or penalties associated with the saving or incurring costs for disposal of the material. It is important to note that if the contractor is responsible for disposal costs any savings are likely to be retained by the contractor
- Specific mechanisms for managing performance and the delivery against Key Performance Indicators (for example the delivery of regular reports and the consequences of non-delivery)

The LA will need to consider the key metrics for the contracts whether that would be focused on the recycling targets, diversion from residual waste or customer service and design the mechanisms to ensure these are met. The design of such mechanisms would require expertise from legal and financial advisors and the complexity of managing such mechanisms would need to be considered for the life of the contract. Specific examples of incentives and penalties focussed on recycling and diversion used by LAs can be found in Appendix D.

## 9 Assessment of procurement options

CEC's HWRC network is currently operated by HW Martin under a contract which finishes its term in 2023. The contract is managed on behalf of the Council by ANSA Environmental Services, a company wholly owned and controlled by the Council (a Teckal company<sup>14</sup>). Additionally, the sites are managed by individual site managers subcontracted to HW Martin. The Council is currently considering the options available to it for how a new contract could be operated. The contract would need to provide improved performance control and flexibility because of the impact, in the medium term, of the Government's Resources and Waste Strategy. The following table explores the issues and questions the Council will need to consider in greater detail ahead of any procurement exercise. This qualitative analysis provides an assessment of the potential impact on the costs of the service and operations of the HWRC network and highlights where each of the service delivery and contracting models has particular benefits or drawbacks. The assessment is based on our broad experience of working with the local authorities and waste operators.

<sup>14</sup> <https://www.cipfa.org/policy-and-guidance/articles/teckal-the-basics-explained>



Table 12 Legend for Table 13



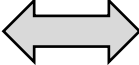
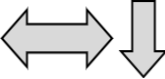
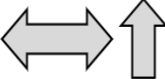



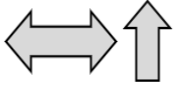









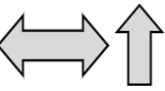
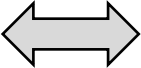


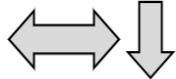


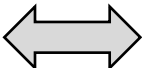


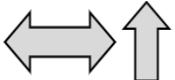
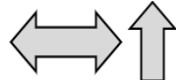
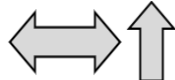
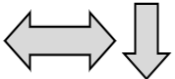


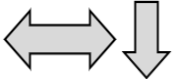


Change	Impact level
Negative impact/ cost increase	
Greater negative impact/ cost increase	
Status quo	
No immediate negative impact/ costs but potential over time	
No immediate positive impact but potential over time	
Positive impact/ reduced costs	
Greater positive impact/ reduced costs	




Table 13 HWRC operating models and the potential benefits and disbenefits

Risk/ Opportunity	Current contract HW Martin and subcontracted site managers	In house operated by ANSA, the Teckal company	Outsourced to a single private contractor	Commentary/ evidence
<b>Emerging policy – local</b>				The current service has limited flexibility to respond to local issues, with ANSA potentially being able to build this into a co-ordinated approach that prioritises local needs. In order to respond to local issues an In house service will need to ensure that it is tuned in to issues locally and can respond accordingly. There may be a danger that out-sourced contracts are less likely to be able to change and adapt.
<b>Emerging policy national</b> –				Reduced ability to respond to the opportunities and impacts posed by EPR/ DRS without an integrated approach and in the bounds of the current contract. A Council owned company would be able to respond to policy requirements as required by the Council. Contract drafting of out-sourced delivery is key to maintaining the ability to respond over time.
<b>Fleet management (vehicles, grapple vehicles etc.)</b>				Benefits of buying in-house potentially balanced by private sector access to wider purchasing agreements – if CEC owns the HWRC service vehicles this is less of an issue.
<b>Vehicle maintenance</b>				Some positive impact likely from integration with the other waste services operated by ANSA. As long as the contracts clearly specify responsibilities the right contractor may benefit from some buying power.

Risk/ Opportunity	Current contract HW Martin and subcontracted site managers	In house operated by ANSA, the Teckal company	Outsourced to a single private contractor	Commentary/ evidence
<b>Infrastructure</b>				The current contractor has access to a well-located waste transfer station which serves CEC and the nearest neighbours. It is unlikely the LA would be able to procure a WTS meaning there may be a need to invest or use the services from the contractor who was not awarded the contract. Any other contractor would have to consider this issue in the response, and it would depend on the local presence and infrastructure they already have in the area. This would be expected to add costs to the contract.
<b>Flexibility and resilience in service delivery</b>				Individual site managers driven only by managing their site with limited involvement in the wider issues and services. Flexibility enhanced by integration. However, the current contractor managed all streams and is able to respond to the demands because of that. In house and outsourced similar on balance – internal flexibility due to greater control balanced against support available from other private-sector contracts / national agreements.
<b>Service consistency</b>				The ability for the in-house company to respond to the priorities of the Council ensuing that these are applied consistently. As long as the specification is well drawn out a private contractor is likely to apply the same approach across the contract. Greater control over staff as opposed to sole agents site managers

Risk/ Opportunity	Current contract HW Martin and subcontracted site managers	In house operated by ANSA, the Teckal company	Outsourced to a single private contractor	Commentary/ evidence
<b>Rationalisation of the HWRC network</b>				Previous rationalisation of the network aligned with the renegotiation of terms which meant the savings were not realised as estimated. A contract that is operating less sites and less waste should theoretically result in savings. However, should radical changes (such as Scenario 1 and 2 in section above) be made capital investment will be required. This would be expected to include significant redevelopment of sites or building of new sites. The less radical scenarios 3 and 4 would require less investment. All site closures may generate income from land sale.
<b>Staffing costs and management costs</b>				The current contract has issues with staffing partially funded by the material sales. Due to market collapse this has been difficult. Potential greater saving with outsourced due to regional/ national management and support functions and potentially reduced pension liability.
<b>Materials value</b>				Private sector service providers are likely to have greater experience in material marketing & greater access to markets. ANSA could already have the skills and staff capable of managing the material to extract the best value.

Risk/ Opportunity	Current contract HW Martin and subcontracted site managers	In house operated by ANSA, the Teckal company	Outsourced to a single private contractor	Commentary/ evidence
<b>Procurement costs</b>	↑	↑↑	↓	Extension of the current contract could save CEC some costs and resources which would be required to go out to open tender. The LA could choose to appoint their wholly owned company to take the contract on with limited procurement costs required. However legal advice would be required and the company is still subject to EU Procurement Regulation.
<b>Buying power</b>	↔	↑	↑↑	Both in house (due to integration with other CEC waste services) and outsourced could have greater buying power - subject to potential market saturation.
<b>Responding to growth</b>	↔↓	↑↑	↑	Limited flexibility in the current contract. An in-house service would enable a cohesive internal response to growth. With an out-sourced service model the contract drafting would be critical.
<b>Commercial waste/ non-HH waste</b>	↔↓	↑	↓	Potential incentive for ANSA to generate more income for the company and support other services. Potentially competitive pricing as the company is Council owned and not profit driven. Out-sourced – contract drafting is important in order to provide incentivisation to grow service.

Risk/ Opportunity	Current contract HW Martin and subcontracted site managers	In house operated by ANSA, the Teckal company	Outsourced to a single private contractor	Commentary/ evidence
<b>Reputation</b>				In-house service has greater ability to enhance reputation through communicating savings and responding to local needs. With out-sourcing careful contract drafting would be required to maintain service standards and good control of communications/ public interface would be required. Protecting CEC's reputation through ensuring any service transfer is as good as possible is very important.

The key consideration throughout this assessment was the balancing of cost savings and the Council's appetite for risk and significantly improving the service alongside retaining the flexibility to accommodate any changes resulting from the 2018 Strategy. One of the first important steps is to start a conversation with ANSA about this contract, as the option to take the service in house would mean significant growth which may or not be within the strategic plan for the company.

Should the outsourced model be preferable, the drafting of the specification and careful negotiation would require concerted effort from Council officers.

### 9.1 Attractiveness of the contract

The market conditions are an important consideration when tendering any services. Although it is difficult to assess how the waste management market will respond to any contract there are some key elements which may help with understanding the market situation.

It is important to note that the response of the market is dynamic. The response of the market will depend on who is operating other contracts in the region, and when they are up for retendering, the waste management companies and their strategic priorities, waste management companies bidding capacity and how the market perceives the current contract (for example if it is well known that the incumbent has competitive advantages or is a preferred bidder for the services). It is unlikely that the number of sites is a factor in how attractive the contract is to the market. The key considerations now will be connected to the material markets and how this will impact the affordability of the contract. As the prices of the materials are currently lower and are fluctuating the contractor will have to price in the risk associated with trading materials in uncertain conditions. As HWRC contracts tend to be procured through the competitive dialogue process the risk and income sharing mechanisms, as well as any incentives or penalties, will be the key issues discussed. Should the Council wish to close sites, redevelop sites or build new sites during the term of the contract this would have to be clearly stated in the invitation to tender documents and discussed at length during dialogue.

The following table shows the contractors and expected contract terms of the benchmarked authorities which sheds some light on the state of the HWRC contract market.

*Table 14 Benchmarked LA and the contract arrangement*

Local Authority	Contractor	End of term
Cheshire West and Chester	HW Martin	2023
Staffordshire	Amey	2022
Derbyshire	Renewi	2021
Greater Manchester	Suez	2026
Warrington	EWC	Unknown (last known extension request to Jan 2020)
Shropshire	Veolia	2034
Gloucestershire	Ubico	2026
Monmouthshire	Dragon Waste, contracted through Viridor	under renegotiation as permanent closure of Usk was intended for 31 March

The geographic and demographic neighbours' services are operated by a number of different waste management companies with the major players represented in this sample. It is particularly interesting that CECs closest neighbour, Cheshire West and Chester will be considering its options at the same time. It may be prudent to initiate conversations about partnership working which may result in savings to the operating costs of the contract for both authorities.

It is recommended that the council carries out a soft market testing exercise well in advance of any procurement document being prepared (at least two years in advance of the contract award). This will allow the market to express their views on the attractions of the contract in the comfort of private meetings with Council officers.

## 10 Concluding remarks

The review presented within this document analyses the current HWRC network provision as well as the potential impacts of the four scenarios for network rationalisation identified by Cheshire East Council.

The analysis shows that any site closures are anticipated to provide some savings in revenue costs associated with the operation of the sites. It will be important to ensure that these are reflected once the contract is retendered. However, the savings are not guaranteed as the contract price will ultimately depend on the conditions on the materials markets and the risks the Council will be willing to take for this contract. As the situation is currently very uncertain (with the prices of the material low and additional uncertainties associated with the changes in the legislation, the UK leaving the EU and Covid-19) the contractors are likely to price these risks in their costs to ensure affordability. It is also clear that in all of the scenarios some improvements will have to be considered to accommodate the redistributed tonnages from the sites. The north east sites, Macclesfield and Bollington, are the ones most likely to be affected by this change.

Table 15 Summary details

Scenario	Proportion of households less than 20 minutes from a site	Potential savings	Investment required	Estimated capital receipt from sale of land
Scenario 1	88%	£406,025	Substantial	£917,063
Scenario 2	93%	£287,634	Substantial	£519,263
Scenario 3	96%	£213,131	Moderate	£219,593
Scenario 4	96%	£143,138	Moderate	£118,422

The analysis identified potential savings through sale of land and the rationalisation of the planned improvement works but for the scenarios with fewer sites remaining, where considerable increases in tonnages are anticipated, there may be a need for the Council to make substantial capital investment in terms of increasing site footprints (purchase of land) and redevelopments. Such major works would need to be carefully planned to manage the impact on site users.

The impact on the residents is considered through the drive time analysis. Currently the residents are enjoying a network which minimises the driving times for them. The rationalisation will have some impact on the drive times to the nearest HWRC however these are not substantial, even for the most radical Scenario 1, with 88% of residents driving less than 20 minutes to the nearest site.

As the Council is considering the opportunities and risks associated with a new contract it will be crucial to build in flexibility to manage the impacts of the changing legislative and government strategy landscape. Drafting contract specification that ensures that the contractor can respond to the changes will be important. Another key consideration will be the situation on the material markets and managing the risks of the commodity price fluctuations. At the time of writing the values of the materials are low, and any contractor would be looking to buffer themselves from the fluctuations, passing these costs onto the Council. However, this may change once the government policies are implemented to develop national material markets and advance the circular economy.

We note from our analysis that limited data on site users is available and we would recommend an on-site user survey to understand the footfall and where the users travel from to access sites. A question to assess the sites the residents would prefer to use, following site closures, could be added to collect further insight. This would enable refinement of the tonnage redistribution analysis as well as the assessment of impact on residents.

Our review includes an assessment of the contract terms and current HWRC operators in neighbouring authorities which will help the Council understand the current market situation. We recommend that the Council carries out soft market testing well in advance of any specification drafting to help inform the decisions.



## Appendix A Benchmarking details

### A.1 Neighbouring authorities

Warrington Borough Council has three HWRCs in close proximity to Cheshire East; Stockton Heath, Gatewarth and Woolston. Greater Manchester also has three HWRCs close to Cheshire East; Altrincham, Longley Lane and Adswold Road. Staffordshire has two; Biddulph and Newcastle. Cheshire West, Shropshire and Derbyshire all have one HWRC in close proximity to Cheshire East; these are Northwich, Whitchurch and Waterswallows.

#### Vans and Permits

Most authorities specify a gross vehicle weight limit of 3.5 tonnes and height restriction of 2 metres. Greater Manchester limits the amount of visits allowed to site per year by the type of vehicle; 52 visits for cars and cars with single axle trailers, 18 visits for cars with a double axle trailer or vans under 3.5 tonnes, and any larger vehicles to 12 visits per year. Staffordshire also requires all trailers to be single axle but adds that specifically adapted vehicles for blue badge holders will be accommodated for. Shropshire requires a permit for vans, 4x4s with a goods body or for cars with trailers, while a residents' permit is required for Neston recycling centre in Cheshire West due to its location near the county border.

Warrington's permit system is unlike the others, in that permits are required if residents need to visit more than once in a van to dispose of a larger amount of household waste, or for non-household waste regardless of vehicle. Non-household waste must be listed on the permit prior to visiting, and visits are limited to three per year.

#### Restrictions on rubble/construction waste

In most cases, authorities do not restrict the number of items or amount of non-household waste but advise that small DIY only will be accepted. All authorities state that they cannot accept trade waste, with Cheshire West and Greater Manchester providing directions to nearby waste transfer stations for these items. Staffordshire is the only other authority to charge per item. This includes a £3 charge per bag or large item of rubble, bricks, soil, concrete, stone, fibreglass and ceramics, and £4 per bag or sheet of plasterboard. Warrington does not issue charges for non-household waste, but items must be listed on a permit prior to the visit. Derbyshire includes a restriction of 50kg plasterboard per visit per week (no whole sheets), 50kg of rubble, concrete or soil.

Asbestos is accepted at Warrington, Derbyshire, the Leek site at Staffordshire, and with prior notice at Shropshire sites. Plasterboard is not accepted at Greater Manchester, or at Cheadle or Newcastle sites in Staffordshire. Derbyshire permits a maximum of either 2x roofing sheets or 2m downpipe of asbestos, while Staffordshire permits either 4 sheets or 4 bags per household every six months.

#### Opening hours

All authorities provide at least one site which is open seven days a week, and it is only Cheshire West and Staffordshire where the majority of sites are open five days per week. Greater Manchester, Derbyshire, and Shropshire do not state any seasonal variation, with Derbyshire providing the longest opening hours of 8:30am-6pm. The largest seasonal variation can be seen at the Chester, Ellesmere Port and Winsford recycling centres, within Cheshire West, which are open 8am-8pm on weekdays and 8am-6pm on weekends in the summer months, compared to opening hours of 8am-4pm throughout the week in winter.

**Materials accepted**

Cheshire West and Warrington do not accept gas cylinders or tyres, similarly to CEC; however the other neighbouring authorities seem to do so. Staffordshire accept tyres but implement a charge of £4 each, to a maximum of four. Derbyshire does not accept large items of furniture, nor does it accept any waste resulting from the demolition or replacement of gardens sheds, greenhouses, fencing, or decking, and recommend hiring a skip for garden renovations. Greater Manchester also states that food waste cannot be accepted.

**Coronavirus restrictions**

Each authority includes detailed information on their website regarding specific site rules due to Coronavirus. In the main, this includes adhering to social distancing measures, avoiding the site for all but essential journeys and having a maximum of one passenger per car. All authority websites state that staff members cannot help to unload vehicles and reminds visitors to behave respectfully and appropriately on site. Derbyshire and Greater Manchester introduced a number plate system to restrict traffic flow on site; however, Greater Manchester has since relaxed this measure. Some materials that are normally accepted have been temporarily suspended, such as asbestos at Staffordshire and Shropshire sites, and clothing, textiles and shoes in Greater Manchester.

Warrington has temporarily closed its Stockton Heath site, while vans are only permitted at its Gatewarth site with 48 hours' notice. A valid form of I.D. is also required at each site.

Table 16 Neighbouring authorities HWRC data from the 2018/19 National HWRC Directory<sup>15</sup>

Authority	Authority type	No. HWRCs 2018/19	No. HWRCs per 100,000 population	Land area per HWRC, sq. miles	Average site catchment radius, miles	Total HWRC tonnage throughput		HWRC arisings, kg/hh/yr.			HWRC Recycling Rate including rubble		HWRC Recycling Rate excluding rubble	
						2018/19	Difference with previous year	All HWRC throughput	HWRC residual	HWRC recycling, excluding rubble	2018/19	Difference with previous year	2018/19	Difference with previous year
Cheshire East	UA	8	2.1	56	4.2	30,073	-10,895	180	58	116	67.9%	-6.4%	66.7%	-1.0%
Cheshire West and Chester	UA	7	2.1	51	4.0	39,001	-23	268	83	125	68.8%	-0.1%	60.0%	-0.5%
Warrington Borough Council	UA	3	1.4	23	2.7	15,202	-1,153	166	45	110	73.0%	1.8%	71.0%	2.3%
Greater Manchester WDA (MBC)	WDA	20	0.8	21	2.6	291,653	29,917	276	131	96	52.6%	8.2%	42.3%	2.2%
Derbyshire County Council	WDA	9	1.1	109	5.9	68,309	1,933	196	80	103	59.2%	-6.2%	56.3%	-6.3%
Staffordshire County Council	WDA	14	1.6	72	4.8	65,109	2,810	175	89	78	49.1%	3.8%	46.7%	4.0%
Shropshire	UA	5	1.6	247	8.9	37,950	3,002	276	94	127	66.1%	1.4%	57.5%	1.4%

<sup>15</sup> WRAPs national HWRC directory compiled by Resource Futures and updated in 2020 as part of their series of HWRC guidance documents. Figures used in this data set were returned from Waste Data Flow.

## A.2 Similar authorities

Five local authorities were selected for benchmarking based upon their similarity to CEC in terms of certain demographic data. To measure similarity between authorities, ONS uses the squared Euclidean distance (SED), which is based on 59 variables used in the area classification of local authorities. Variables include statistics based on demographic structure, household composition, housing, socio-economic factors and employment. The five authorities chosen were Cheshire West and Chester, Tewkesbury, Stroud, Stafford and Monmouth.

### Vans and Permits

Similar to CEC, both Gloucestershire and Monmouthshire require permits for vans. Staffordshire specify small single axle trailers of no more than 6ft x 4ft in size, while Cheshire West and Chester require trailers of fewer than 3.5 metres in length. Monmouthshire do not permit double-axle trailers, and ask that residents only bring what they can unload within a 15 minute period. Gloucestershire specify that vans or pick-ups pulling a trailer may only present waste in either the van or trailer, but not both. All authorities, except for Monmouthshire, impose a 3.5 tonne gross vehicle weight limit.

### Restrictions on rubble/construction waste

Rubble and construction waste is accepted at all sites, provided it is not trade waste, but Staffordshire is the only other authority to charge per item. This includes a £3 charge per bag or large item of rubble, bricks, soil, concrete, stone, fibreglass and ceramics, and £4 per bag or sheet of plasterboard. Only Monmouthshire provides an explicit limit on the amount of non-household waste that will be accepted; either five bags or one small car boot load per visit, and no more than two visits per month.

As with CEC, Cheshire West and Monmouthshire do not accept asbestos. Staffordshire restricts the amount to four sheets or bags per household every six months, while Gloucestershire asks that residents pre-book any asbestos disposal.

### Opening hours

Opening hours are varied amongst the authorities, but CEC is among those which offer the longest opening periods. Cheshire West has three sites open for seven days a week and four sites open five days a week. Of the sites that are open for seven days, opening hours extend to 8am-8pm during summer weekdays. In winter, all sites are open 8am-4pm. The Stafford site in Staffordshire is open seven days a week between 9am-5pm, with an extra hour added during summer weekdays. Gloucestershire and Monmouthshire sites are open six days per week, with midweek closing, and are open from 9am-5pm and 8am-5pm respectively.

### Materials accepted

Gloucestershire and Staffordshire will accept a maximum of four tyres, with the latter charging £4 per tyre. Both authorities include a more comprehensive list of what cannot be brought to site on their websites, including animal carcasses, petrol and diesel. Gloucestershire also specifies that invasive or poisonous plant species are not brought to site. Only Cheshire West and Chester will not accept gas cylinders, similar to CEC. Monmouthshire mention that black bags will not be accepted with food waste or recyclables inside, as these items are covered in the kerbside collection service.

### Coronavirus restrictions

Each authority includes detailed information on their website regarding specific site rules due to Coronavirus. These include keeping to social distancing measures, avoiding the site if you or a household

member has symptoms, and practicing good hygiene measures such as washing hands or wearing gloves. Monmouthshire sites at Mitchel Troy and Usk remain closed, while its remaining two sites have an online booking system in place, limiting visits to one per week. Trailers will only be accepted within the 4pm-4:30pm booking slot due space restrictions, while the first hour of each day is reserved for key workers. Gloucestershire also has a pre-book system in place on their website, but limits residents to one visit per day. Staff are unable to help unload cars, except for blue badge holders in Gloucestershire, and there are limits to the number of people in cars, one or driver plus one. Staffordshire and Monmouthshire ask that only one person leave the vehicle to unload, and therefore remind residents that only items that can be carried by a sole person should be brought to site.

Table 17 Similar authorities HWRC data from the 2018/19 National HWRC Directory<sup>16</sup>

Authority	Authority type	No. HWRCs 2018/19	No. HWRCs per 100,000 population	Land area per HWRC, sq. miles	Average site catchment radius, miles	Total HWRC tonnage throughput		HWRC arisings, kg/hh/yr.			HWRC Recycling Rate including rubble		HWRC Recycling Rate excluding rubble	
						2018/19	Difference with previous year	All HWRC throughput	HWRC residual	HWRC recycling, excluding rubble	2018/19	Difference with previous year	2018/19	Difference with previous year
Cheshire East	UA	8	2.1	56	4.2	30,073	-10,895	180	58	116	67.9%	-6.4%	66.7%	-1.0%
Cheshire West and Chester	UA	7	2.1	51	4.0	39,001	-23	268	83	125	68.8%	-0.1%	60.0%	-0.5%
Gloucestershire County Council (Tewkesbury, Stroud)	WDA	5	1.0	201	8.0	56,233	-5,616	256	112	131	56.3%	-11.4%	54.0%	-9.2%
Staffordshire County Council (Stafford)	WDA	14	1.6	72	4.8	65,109	2,810	175	89	78	49.1%	3.8%	46.7%	4.0%
Monmouthshire County Council	UA Wales	4	4.2	82	5.1	19,534	171	492	184	240	62.6%	0.5%	56.5%	0.9%

<sup>16</sup> WRAPs national HWRC directory compiled by Resource Futures and updated in 2020 as part of their series of HWRC guidance documents. Figures used in this data set were returned from Waste Data Flow.

## Appendix B Spatial analysis

The current provision offers the best coverage in terms of the shortest drive times for residents, as indicated in Table 18, however both scenario 3 and 4 offer 96% of all properties less than a 20-minute drive to their nearest HWRC. In scenario 3 and 4, only 4% of households are required to drive for more than 20 minutes to reach their nearest site and in scenario 4, the majority (86%) are able to reach their nearest HWRC within 15 minutes by car.

*Table 18 Proportion of households in each of the drive time bands for each scenario*

	Proportion of Households				
Scenario	Less than 5 minutes	Less than 10 minutes	Less than 15 minutes	Less than 20 minutes	More than 20 minutes
<b>Current</b>	22%	63%	91%	98%	2%
<b>Scenario 1</b>	11%	37%	68%	88%	12%
<b>Scenario 2</b>	13%	43%	78%	93%	7%
<b>Scenario 3</b>	15%	48%	82%	96%	4%
<b>Scenario 4</b>	17%	52%	86%	96%	4%

The figure below presents the modelled data in terms of cumulative coverage, whereby the proportion of the population served is plotted with each minute driving time from their closest site. The scenario with the left-most cumulative percentage offers the best provision to households and the right-most the least preferable, in terms of drive time. However, it should be noted that the analysis does not account for road works or areas of peak-time congestion.

As can be seen from the graph, the current scenario offers the best provision, followed by scenario 4 and scenario 3. Scenario 1 offers the least provision

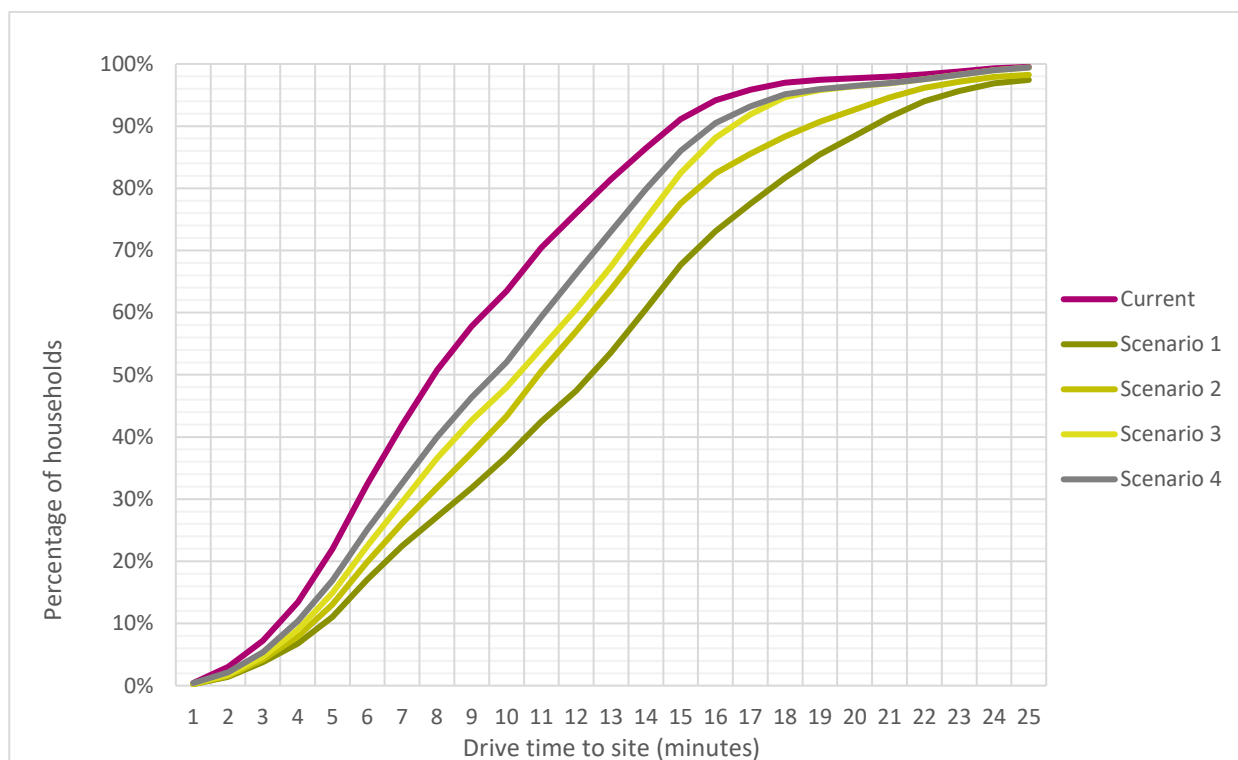


Figure 8 Cumulative drive time for HWRC scenarios

The following table shows the analysis of the distance between residents and their nearest HWRC site. It can be seen that the distance for the majority of residents is less than 8km (equivalent to 5 miles) for three of the four scenarios.

Table 19 Distance from the nearest HWRC

Scenario	Proportion of Households				
	Less than 2 km	2 to 4 km	4 to 6 km	6 to 8 km	More than 8 km
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Current	15%	32%	15%	14%	24%
Scenario 1	7%	18%	13%	8%	54%
Scenario 2	7%	21%	15%	12%	45%
Scenario 3	9%	23%	15%	11%	42%
Scenario 4	11%	25%	15%	13%	36%

## Appendix C Detailed legislation assessment

### C.1 The Resources and Waste Strategy

The Resources and Waste Strategy (RWS) sets out a broad range of measures that will affect HWRCs and the waste sector in general. The overarching expectation is for a shift to full alignment with the waste hierarchy through prevention and re-use.

The means to deliver this evolution described in the RWS include revised and expanded EPR and minimum requirements through Ecodesign and are expected to fundamentally alter the amount of waste generated, the nature of that waste, and how waste management systems are operated and funded.



Five priority areas are outlined for EPR, three of which will have direct impacts upon HWRCs:

- **Textiles** – Including at least all clothing, as well as other household and commercial textiles such as bed linens;
- **Bulky waste** – Including mattresses, furniture and carpets; and
- **Vehicle tyres** – Including tyres from cars, motorcycles, commercial and goods vehicles, and heavy machinery.

The EU Circular Economy Package sets minimum requirements for EPR schemes specifying, amongst other things, that producers must bear at least 80% of the costs of separate waste collection, transport and treatment necessary to meet EU targets<sup>17</sup>. Furthermore, EPR fees will be modulated to incentivise improvements to product durability, reparability, re-usability and recyclability and the presence of hazardous substances, thereby encouraging a life-cycle approach to production. The RWS goes further with regards to packaging, ensuring that producers pay the full net cost of managing the waste at end of life, i.e. 100% of the cost, and that full net cost recovery will underpin the Government framework for EPR as applied to other products. With regards to EPR, the RWS states that the Government will ensure that local authorities are resourced to meet new net costs arising from the policies in the RWS, including upfront transition costs and ongoing operational costs.

While EPR in the forms being debated for consultation and eventual implementation have derived from the EU Circular Economy Package, there may be questions about the likelihood of the UK Government maintaining regulatory alignment with the EU on packaging legislation now that the UK has left the European Union. At this moment, it is envisaged that packaging legislation may well stay aligned (or very closely aligned) as pan-European and global packaging producers operating across the EU will seek this assurance, and UK Ministers have repeatedly indicated their desire to even deliver stronger policy than that of the EU. This will need monitoring throughout the passage of the Environment Bill and in the subsequent detailed consultation on EPR options, expected in the autumn.

EPR reform is likely to:

- Change the amount of waste entering HWRCs vs. other waste systems;
- Create new waste management systems, e.g. takeback schemes, re-use networks, remanufacturing and repair centres, and specialist recycling centres;
- Change the design of products to enable longer product lifetimes, re-use, repair, modularity, and recyclability;
- Change the nature of waste entering HWRCs as product design changes and some end of life products are diverted to new waste management systems;
- Change how waste management is funded as producers will be liable to pay for waste management, presenting a revenue opportunity for Councils managing EPR product waste; and
- Require detailed data management for reporting and cost-recovery purposes on the part of actors managing EPR product waste.

The waste streams relevant to HWRCs that are most likely to be affected first are:

- Textiles
- Bulky waste
- Vehicle tyres
- Packaging

<sup>17</sup> Different rules apply to EPR schemes for ELV, Batteries and WEEE. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L0851&from=EN>

- WEEE
- Batteries and accumulators

These changes are expected to be implemented by 2023.

Carbon-based targets and natural capital accounting are proposed, moving away from weight-based targets, and inevitably driving different waste management choices. This will undoubtedly be used to support the Government commitment to reach net zero emissions by 2050, outlined in the Environment Bill below.

The RWS dedicates Chapter 2 to “Helping consumers take more considered action”, addressing consumption and disposal behaviour with aims to:

- Incentivise consumers to purchase sustainably
- Provide consumers with better information on the sustainability of their purchases
- Ban plastic products where there is a clear case for it and alternatives exist
- Address barriers to re-use
- Support the market for remanufactured goods
- Encourage appropriate disposal of used products
- Lead by example through procurement and the Greening Government Commitments

Specific actions include:

- Addressing barriers to re-use at Household Waste Recycling Centres and consulting on further measures to boost re-use, including reporting and re-use targets;
- Investigating amending the recycling credit system used by two-tier authorities;
- Reviewing the Controlled Waste Regulations and Household Waste Recycling Centres to ensure they are delivering value for money;
- Extending product lifetimes through warranties and disclosure;
- Supporting the market for remanufactured goods, including by developing quality assurance schemes to boost consumer confidence;
- Supporting large-scale re-use and repair through national planning policy;
- Introducing a DRS for single-use drinks containers, subject to consultation;
- Banning the most problematic plastic products, such as plastic drink straws, where there is a clear case for it and alternatives exist; and
- Producing consumer guidance for the recycling, resale, re-use and disposal of consumer internet-connected devices.

These actions reflect the emphasis on re-use, repair and waste prevention that runs throughout the RWS.

The DRS may also provide a potential funding stream for deposit-bearing items collected at HWRCs.

Furthermore, Chapter 4 of the RWS sets out measures to tackle waste crime, which will be supported by sophisticated digital waste tracking systems as mandated in the Environment Bill described below. Recent media exposés of illegal waste sites abroad treating UK exports of municipal waste have caused public outcry. Stricter monitoring of exports and waste supply chains is likely to improve environmental outcomes, potentially closing some treatment routes or increasing costs as a result of avoiding malpractice.

Ecodesign legislation is also discussed, with ambition to exceed the EU’s Ecodesign standards where economically practicable, expanding the scope to cover more resource intensive product groups such as textiles and furniture. The availability of spare parts to facilitate repair, and the presence of harmful chemicals and their impact on recycling are highlighted as key issues.

## C.2 The Environment Bill

The Environment Bill<sup>18</sup> currently in Parliament, but temporarily delayed as a result of the COVID-19 emergency, will be subject to scrutiny and amendment at Committee Stage<sup>19</sup> and Third Reading, noting that the Committee Stage was suspended but is now scheduled to report by 29<sup>th</sup> of September. No further information on scheduling the bill is available at the time of writing but it is important to remember that this flagship legislation will need to be approved by the end of 2020 when the UK leaves the European Union.

It is the legislation that will enact many of the measures outlined in the RWS above. In addition, it sets out:

- A commitment to net zero greenhouse gas emissions by 2050;
- Charges to minimise the use and impacts of single use plastics;
- Mandatory electronic tracking of waste; and
- A new public body, the Office for Environmental Protection, to be an independent watchdog to hold government and other public bodies to account on fulfilling their obligations on the environment.

Waste will be a key policy area in environmental legislation going forwards, particularly in relation to carbon targets due to the considerable amount of emissions associated with waste management and the opportunity to cut emissions through waste prevention, re-use and recycling. The Environment Bill also addresses air quality, which may influence decisions around waste treatment methods, waste transport distances and even HWRC site design and traffic, particularly when sited in urban areas.

## C.3 EU Ecodesign implementing Regulations

EU regulations, published on the 1<sup>st</sup> of October 2019, set out Ecodesign requirements for the following product groups<sup>20</sup>:

- Household refrigerators
- Light sources
- Electronic displays
- Dishwashers
- Washing machines and washer-driers
- Motors
- External power supplies
- Refrigerators with a direct sales function
- Power transformers
- Welding equipment

A key component of the Ecodesign requirements centres on the 'right to repair'. Specific requirements are set out under resource efficiency detailing spare parts and repair and maintenance information that must be made available to professional repairers and end-users. The regulations intend to support prolonged

<sup>18</sup> <https://www.gov.uk/government/publications/environment-bill-2020/30-january-2020-environment-bill-2020-policy-statement>

<sup>19</sup> Environment Bill 2020 Second Reading, Hansard 26 February 2020 <https://hansard.parliament.uk/commons/2020-02-26/debates/684530F9-0440-45F3-8768-E0E208082739/EnvironmentBill>

<sup>20</sup> Regulation laying down ecodesign requirements 1 October 2019, <https://ec.europa.eu/energy/en/regulation-laying-down-ecodesign-requirements-1-october-2019>

product lifetimes, repair and re-use, thereby reducing consumption and waste. If the market responds accordingly, it may also present opportunities for sale of spare parts from products brought to HWRCs. The new regulations also include requirements for repairability and recyclability, contributing to circular economy objectives by improving the life span, maintenance, re-use, upgrade, recyclability and waste handling of appliances<sup>21</sup>.

## C.4 Impact of Covid-19

Local authorities and their waste contractors have responded to the pandemic in creative ways, with very few negative news stories about waste management. The industry's profile has been enhanced and the fact that it is designated "key" has been such an important recognition.

Waste Disposal Authorities and their contractors have managed to respond to varying demands; they have been flexible in the face of staffing shortages, assisting collection authorities through staff re-deployment from Household Waste Recycling Centres (HWRCs); incorporated the changing health and safety guidance into safe systems of work and responded to the change in public expectation of service provision; opening as many services as possible as quickly as possible.

### Priorities and planning

The length of time from most HWRCs being closed to most being re-opened has been around a month. Discussions with local authority waste managers have shown that some authorities managed to re-open some HWRC sites *in less than a week from the decision being made*. Those that have managed to re-open in such a short time had been working on plans with their contractors for two or three weeks beforehand and had kept a watching brief on developments at all times.

There are a multitude of aspects to be considered before re-opening, not least the management of demand; so, whilst not discounting the importance of off-take, markets for recyclables and disposal the measures and systems that local authorities have put in place to manage demand effectively whilst also adhering to social distancing guidelines. Examples have included:

1. Prioritising the opening of larger sites, where social distancing can be maintained.
2. Implementing booking systems, with access being through Council websites, call centres and phone apps.
3. Managed queueing systems, with increased communication between site staff and site users.

### Booking systems

Authorities have implemented booking systems that can be accessed on-line only or by 'phone and other systems as well. Many authorities have focussed on only allowing domestic vehicles to be booked in, at least initially, to cope with the domestic demand and because they take less time to empty than larger vans and trailers. The booking slots have varied in length, from 15 minutes to an hour. Some allow a longer "window" so that, if the site user is delayed for any reason, they will still have chance to use the site; others are more time-specific. Authorities allow differing number of vehicles on site during those slots depending on the size of the site and the number of site staff. This booking slot can easily be changed to allow increases or decreases in numbers depending on staff availability and even fluctuations in the local severity of the pandemic. Using booking systems, means greater restrictions and control can be applied should

<sup>21</sup> [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_19\\_5895](https://ec.europa.eu/commission/presscorner/detail/en/IP_19_5895)

there be upsurges in Covid-19 which could affect site users, those operating the site and associated off-takers and sub-contractors.

The implementation of booking systems has improved the flow of site users within the sites and helped them to use the sites more effectively; this has also prevented site-staff being inundated at peak periods and has enabled much greater communication between the site staff and site users. The add-on benefits have been increased sorting of materials for recycling and re-use and some reported decrease in residual waste. The booking system can also help to reduce abuse of the site from unauthorised use, such as commercial vehicles, and there is less likelihood of abuse towards site staff if users have to register to use the site.

Most authorities spoken to are intending to keep their booking system going forwards, with adaptations made to numbers on site as lockdown lifts, with additional expansion of the booking categories to allow more vans and trailers, giving those vehicles with larger loads to deposit, a longer time slot or having fewer vans and trailers within each time slot.

It has been reported by HWRC staff, both site staff and council officers, that site users have also been positive about the introduction of booking systems, as queueing is reduced and more assistance is available; they seem to be in favour of the system continuing post-Covid.

### **Limiting the types of materials accepted**

Some authorities, at least initially, limited the types of materials they were accepting; firstly allowing excess black bag waste and then expanding the range/size of materials as throughput decreased following the initial rush - some authorities not allowing larger items, such as furniture and white goods or DIY waste, until recently.

The initial control of the type of waste accepted, often in combination with booking systems and other site access systems, has helped authorities to manage off-take and has allowed the off-takers themselves time to restart their own processes. It has been apparent that a difficult area to re-start has been that of re-use, with site re-use facilities and shops and charity off-takers being hard-hit by the pandemic. This has included schemes like Community RePaint, the paint drop-off and collect re-use system. However, recently, re-use has gradually re-started at HWRCs<sup>22</sup>.

Furloughing has affected all parts of the waste management system and infrastructure, yet careful, staged re-opening has helped local authorities source destinations for all the waste and material streams.

Limiting the types of materials accepted on site may be another control measure that could be quickly adapted should there be any resurgence of the pandemic; priority materials could still be accepted, always taking into account the impact on the waste and recycling chain downstream, such has been the case, with the knock-on effects on supply of wood-waste to biomass and off-take of WEEE.

### **Controlled queueing**

Some authorities were unable to implement booking systems for various reasons. This included those where reciprocal agreements between neighbouring authorities were in place - for allowing each other's residents on site - but where they had different systems, or different demands and where other authorities' sites weren't re-opening. Cross-border site use had to be considered. Others found it difficult to set up a

<sup>22</sup> <https://www.letsrecycle.com/news/latest-news/councils-tentative-steps-open-reuse-shops/>

booking system in the time available as they didn't have any existing system in place that they could adapt or add to.

In these cases, queueing systems have been well-managed by local authorities, with few reported incidents of frustration leading to aggression. Authorities have employed traffic control experts and have liaised with local police forces and highway authorities to enable traffic signs, cones and routes to be clearly laid out and well-managed.

Site staff have been only allowing an agreed number of vehicles on site at any one time and have been ensuring good and regular communication along the queue of vehicles – telling people how long they are going to have to wait. At an agreed time prior to site closure, staff or traffic managers have been warning those queueing that they might not have time to access the site and that it's their choice whether to risk staying in the queue and the site closing or leaving and visiting another day.

Now that local authorities have tried and tested ways of introducing managed queueing at sites, this is another form of control that could be re-implemented if necessary.

### **Benefits of the measures for dealing with the Covid-19 pandemic at HWRCs**

The measures implemented to manage HWRC may have many positive aspects, including:

- It allows local authorities and their contractors to control site demand and have a smoother flow of inputs and outputs from the sites.
- It has potential to reduce abuse of staff on site and at access points.
- It has created tried and tested systems to control site use, for if there is a resurgence of the pandemic or other emergency situations.
- It has enabled the collation of increased information and data on site use.
- It is helping with increased segregation of materials for recycling and reuse and reduced residual waste.
- It promotes increased interaction between site staff and site users and can enable increased education opportunities, helping to inform the public, with positive behaviour-change as a result.

Ultimately, users of HWRCs, who have a positive, well-managed experience, might take the time to think more about the stuff they bring and that it might have a value.

## **Appendix D    Contract incentives and penalties examples**

**Devon County Council:** Devon County Council created a residual waste diversion target-based contract with their waste contractor. The contractor is not obliged to meet the target, but a bonus is given when it is achieved, and a penalty awarded if not. The target was introduced around 15 years ago and was increased by a percentage every year (by 0.25%) to boost performance. Once the sites achieved a high-performance level (70-80%) continued increases became unsustainable. At this point the diversion rate was set at 80%, with only 20% going to disposal.

Bonus payments replicated the avoided disposal costs (£100 per tonne). Bonuses were originally based on recycling performance alone but now include recycling and recovery to focus on residual waste reduction. The target is more difficult now as the EA is more restrictive on recycling activities. For example, many uses of recycled wood, such as animal bedding, are no longer permitted and so the only viable option for poor quality wood is biomass. Penalties were set higher at £120 per tonne and provide an important measure to

prevent poor performance. Use of this system rather than a contractual minimum performance targets helps prevent contract breaks and renegotiation or an expensive re-procurement exercise.

A separate re-use target is also written into the waste contract to incentivise re-use. This is set at 0.75% of total site throughput. Re-use revenue is shared evenly between DCC and the contractor. The bonus equates to equally shared revenue from re-use between DCC and Suez. The penalty for not meeting the target is set at £200 per tonne.

**Dorset Waste Partnership:** A target and bonus system is in place to minimise waste whilst promoting better segregation of materials, based around those material streams the Council pays for (green waste, wood and residual). Where targets are met the Partnership shares 30% of the avoided gate fees as a bonus. The contract also includes a clause that ensures the payment is shared with site staff as further incentive. Whilst this results in a relatively small loss to the contractor it translates to a good incentive for individual members of staff.

If performance falls 5% below the target a contract-default situation is triggered, so that the Partnership is protected if expectations are not met. A default escalator is applied to the recycling target each year to year to drive continued performance. However, targets are agreed annually together to remain realistic.

The two-part incentive system drives high performance, reduced costs and avoids unintended consequences. A recycling rate target alone may not incentivise a contractor to strictly enforce charging for non-household waste streams such as plasterboard that would otherwise inflate recycling figures. The system has flexibility to adapt to external influences that affect waste arisings and recycling rates such as unexpected weather patterns. A recycling target of 71.5% is set across whole HWRC network.

**Durham County Council:** Durham has 12 HWRCs with an additional one mobile site for rural Upper Weardale. The high-performance rates achieved on these HWRCs are attributed mainly to having had a well-defined and executed procurement process. It ensured that written into the specifications of the contract was a minimum of 70% recycling rate and 90% total diversion of waste from landfill.

The total diversion rate currently sits at 82% including rubble and material sent to RDF. The total recycling rate across all sites excluding rubble was 66% in 2017/18. The diversion rate had been higher but due to the loss of mattress and carpet recycling facilities it has declined in recent years and a new target of 80% (including rubble) was agreed. The effectiveness of the council's relationship with their contractor means that despite these challenges HWRCs are still able to maintain strong recycling rates.

**Luton Borough Council:** The current contract here is managed through a public-private partnership with a waste contractor until 2021. The partnership is based on a 'unitary' rate, with financial rewards for recycling performance to ensure recycling rates on site continue to increase. A 60% minimum recycling rate is specified in the contract with contractual conditions in place to penalise the waste contractor if the target is not achieved. The target is continually increased and initially started at 45%. The minimum contracted rate has resulted in reduced complaints from the public and a general improvement in recycling rates, with a recycling rate of over 70% currently being achieved.

**Merseyside Recycling and Waste Authority:** Merseyside is under a Waste Management and Recycling Contract which includes operation of 14 HWRCs and two Material Recovery Facilities. The contract recycling rate target is 53%, which due to use continuous improvements and positive incentive mechanisms has been exceeded (70%). The lower contract target reflected the HWRC performance at the time of contracting in 2009. There is a commitment to improve recycling performance and move up the waste hierarchy wherever possible, however it is acknowledged that this becomes more challenging as the easy



wins have been achieved, and due to financial constraints. Waste disposal costs are levied (under the EPA powers) from the Waste Collection Authorities. Levy costs are based on tonnage and population in each council area. An additional 24,000 tonnes were recycled above target in 2017/18, giving savings of circa £150,000 due to cost-effectiveness improvements. 2017/18 was the highest performing year since 2009 despite the highest tonnage throughput.

**Nottingham City Council:** Nottingham City Council has one HWRC, with an additional four HWRCs run by Nottingham County Council. The City Council currently has the highest HWRC recycling rate in England. The existing contract includes a target and bonus system with financial rewards available where the contractor exceeds an 85% recycling and diversion rate, meaning no more than 15% can be landfilled. Bonuses are linked to the avoided landfill cost currently equating to £69/tonne. The contract includes a bonus scheme to incentivise the contractor and their staff.