## **Cheshire East HWRC Review**

Cheshire East Council January 2024





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## **Executive summary**

**Introduction:** Resource Futures were commissioned by Cheshire East Council to carry out a review of the long-term operation and management of their household waste recycling centres (HWRC). This report focuses on five scenarios, as set out in Table 1 below, and provides an update to benchmarking with neighbouring and similar authorities. In line with the aims set by the Council's corporate plan of being 'open, green and fair', this report also looks at the viability of a mobile HWRC service and cyclist/pedestrian access to its HWRCs. Analysis of this, and any potential cost savings and impacts on residents of each scenario will help to inform the Council when procuring a new contract in 2024.

**Baseline update:** Cheshire East's HWRC recycling rate is one of the highest in the region at 63% in 2021/22. The Council provides the second highest number of HWRCs per 100,000 population (1.76) out of its neighbouring authorities; Manchester provides just 0.7. This provision may relate to the borough also having one of the lowest annual throughputs per household (175kg) of comparable authorities. Whilst the introduction of DIY waste charges may contribute to lower throughput, the Government banned authorities from charging for DIY waste from January 2024.

**Impact on travel times and costs:** Scenario 1, the baseline, currently offers the best coverage in terms of ensuring most residents are within a 20-minute drive from a HWRC, as indicated in Table 1 below. However, scenario 2b offers almost the same coverage as the baseline, while scenario 2a, 3 and 4 all mean over 96% of residents can access a HWRC within a 20- minute drive. Scenario 5 offers the least residents a 20-minute drivetime. Of the 5 scenarios, number 3 provides the least overlap of provision and provides 83.4% of households access to an HWRC site within 15 minutes. Overall, the analysis shows that a reduction in the number of sites, whilst having a localised impact, does not present a problem for most residents.

Table 1: Proportion of households in each scenario within 15- & 20-minute drive time of a HWRC

Scenario	HWRCs to be closed /opened in the Scenario	% of HH within 20-minute drive time	% of HH within 15- minute drive time
Scenario 1	None	98.6%	95.3%
Scenario 2a	Close Poynton	97.3%	91.1%
Scenario 2b	Close Bollington	98.5%	95.2%
Scenario 3	Scenario 3 Close Bollington, Middlewich, Poynton		83.4%
Scenario 4	3 , 3 ,		80.0%
	Poynton. Opening a new site at Congleton		
Scenario 5 Close Alsager, Bollington, Middlewich,		93.9%	72.6%
	Poynton		

Scenarios 3 and 5 are financially preferable to the baseline. Each site closure would see an approximately 5% overall tonnage reduction across all sites which is accounted for in the savings from site closures amount in table 2 overleaf.

prepared to cope with an increased footfall and potential tonnage by 2030, and this should be considered when weighing up each scenario. Scenario 5 offers the second best financial outcome but poses significant operational risks due to a substantial increase in visitor numbers and tonnage at Macclesfield and Crewe.

Table 2: Summary of costings, risk and coverage for each scenario

	Scenario 1 (Baseline)	Scenario 2a	Scenario 2b	Scenario 3	Scenario 4	Scenario 5
	All HWRCs remain	Close	Close	Close Poynton, Bollington &	Close Poynton, Bollington, Middlewich & Alsager, open	Close Poynton, Bollington, Middlewich
Scenario detail	open	Poynton	Bollington	Middlewich	Congleton	& Alsager
Savings from site closures (£)	-					
Cost for improvements (£)						
Redeployed costs (£)	_					
Annualised capital - new site (£)	-	_	-	_	PRICE AWAITED	-
Change in tonnage costs (£)	-					
Operational risk rating*						
HWRCs per 100,000 HH	1.76	1.51	1.51	1.01	1.01	0.75
% HH within 20 mins drive	0.99	0.97	0.99	0.97	0.97	0.94

<sup>\*</sup>Traffic light risk rating: green = low - red = high

**Other improvements:** In all cases, coverage could be improved by a new mobile HWRC service which prioritises rural locations, those where a HWRC has been closed, and areas with high levels of deprivation. A cost-effective solution would be to use existing fleet to service six locations for half a day over three Saturdays per month, costing approximately £47,000 annually. For 8 locations over 4 Saturdays per month, this increases to £62,500.

Opening HWRC access beyond motor vehicles would increase accessibility to more people, enable lower-carbon travel, and benefit densely populated areas. However, to ensure on-site safety, the Council would need to either create segregated paths for cyclists and pedestrians or, schedule a window of time on certain days for this alternative access. The latter would be the quickest and most cost-efficient option. In both instances, clear signage would be needed throughout the site.

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#### 1 Introduction

#### 1.1 Cheshire East HWRC network

Cheshire East Council (CEC) is a unitary authority with a population of 398,800 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. In addition to Cheshire West and Chester on the west, it is bounded by the Manchester conurbation to the north and east, Warrington to the north-west and Staffordshire and Shropshire to the south.

The Council operates seven 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 who in turn subcontract the work to a number of 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 subcontract comes from the right to remove and sell this non-ferrous material and bric-a-brac.

The existing contract which was due to expire in March 2023 was extend for 18 months. The target for a new contract arrangement is therefore the end of 2024. It is the aim of CEC to procure this new contract with ANSA appointed as the managing agent.

Following a review carried out by Resource Futures in 2016, CEC made several changes to their HWRC operation and management including: closing Arclid HWRC, reducing operating hours from 10 to 8 hours per day, charging for rubble/construction waste and opening the opportunity for smaller traders to use the Council's sites. A second review was carried out by Resource Futures in 2020 to further review options, since then, the following has changed:

- Closing of Congleton HWRC due to the unavailability of the site.
- Completion of the Congleton link road, improving drive times for the borough.

## 1.2 Cheshire East Corporate Plan & Waste Strategy

In 2014, CEC published a Municipal Waste Management Strategy, identifying how it plans to manage waste up to 2030. In 2020 the Council carried out a review of the Strategy, considering the Government's Resources and Waste Strategy. Although this has not been updated since the last report, the aims remain the same in relation to HWRCs: to work towards the new national target of 65% recycling by 2035. HWRCs have a significant role to play in staying on track to reaching achieving this target recycling rate.

Cheshire East Council's Corporate Plan (published in 2021), sets out 20 priorities under the aims of open, fair, and green. In relation to HWRC provision, the Council is challenged with striking the balance between providing sufficient HWRC coverage for all constituents, whilst also providing a value for money service. It also relates to the type of access permitted at HWRC sites; currently only vehicle

access is permitted at CEC HWRCs. We have therefore provided insight in this report into how lower-carbon forms of transport, specifically bicycles and pedestrians, could be accommodated at HWRCs.

## 1.3 Aims and objectives of this review

Resource Futures has been commissioned to carry out an additional review on the long-term operation and management of household waste recycling centres (HWRC) within the Borough of Cheshire East, building on previous reports undertaken in 2020 and 2016. Since the last report, there have been changes in the area that will affect HWRCs; the Congleton HWRC closed in September 2021 and the Congleton link road completed in April 2021 has improved travel times to the north and west of the borough. The Council is seeking to understand which of the scenarios below will provide a fair and efficient HWRC service for its residents.

Key objectives are therefore:

- 1. Modelling the scenarios identified by Cheshire East Council. The scenarios include:
  - Scenario 1- Keeping all 7 HWRCs open.
  - Scenario 2a- Keeping 6 HWRCs open, closing Poynton.
  - Scenario 2b- Keeping 6 HWRCs open, closing Bollington.
  - Scenario 3- Keeping 4 HWRCs open, closing Bollington, Middlewich, and Poynton.
  - Scenario 4- 4 HWRCs: Keeping 3 HWRCs open, closing Poynton, Middlewich, Bollington and Alsager and opening a new one at Congleton.
  - Scenario 5- Keeping 3 HWRCs open, closing Alsager, Bollington, Middlewich, and Poynton.

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. It will also provide an indication if remaining sites require updating.

- 2. Provide an update to the benchmarking review of similar and neighbouring authorities carried out in 2020, including a comparison of the number of HWRCs offered.
- 3. Research viability and best practice for mobile HWRC provision, cross border arrangements and pedestrian & cycle access at HWRCs. For mobile site provision, we will provide a cost estimate for this service.
- 4. Examine the cross-border tipping issues particularly at Alsager, Congleton, Middlewich, and Poynton.

#### 2 Baseline – Scenario 1

This scenario is the baseline position that is currently delivered to residents through the seven existing sites. Figure 1 shows the areas covered by a 20-minute drive time and demonstrates the heavy overlap in the centre of the borough.

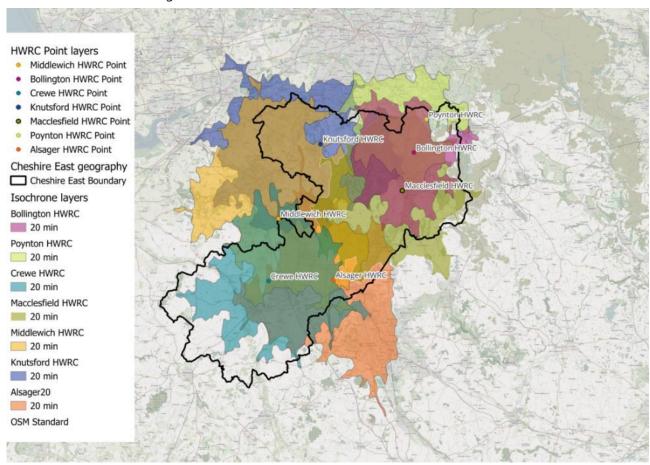


Figure 1: Scenario 1 (baseline) 20-minute drive time coverage

As shown in Table 1, under the current Cheshire East HWRC service, 99% of households can reach an HWRC within 20 minutes of driving.

Table 3: Scenario 1 (baseline) households within drive time area

Scenario 1	Households	% of HH within the area	% HH outside of the area
20-minute drive time	189770	99%	1%

Scenario 1 is the baseline from which all other scenarios are based. We assume a steady cost state, bar those identified in the 2022 'Feasibility Report, Improvement Works' by David Trowler Associates.

Table 4: Cost summary of current HWRCs shows the cost of works taken from the Feasibility Report, and the annual costs are extrapolated based on an 8-year depreciation at 5.34%<sup>1</sup> interest rates to provide a guide estimate of annualised capital and interest repayment costs. The baseline scenario is the current

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<sup>&</sup>lt;sup>1</sup> In line with the PWLB interest rate on 17 Jan 2024

annual cost of operation, plus the costs identified for improvement. In the following scenarios, these annualised costs are described as 'site improvement costs'.

Table 4: Cost summary of current HWRCs

HWRC	Cost of works		Α	Annual cos	
Alsager					
Bollington					
Crewe					
Knutsford					
Macclesfield					
Middlewich					
Poynton					
Total					

Table 5 shows the average numbers of visitors per day per peak month at each site. The visitors per day and per month were extrapolated from the data captured by CEC in September in 2023, this was then calibrated in relation to the average tonnages seen in that week compared with the seasonal variation that happen through the year, this therefore demonstrates the range in visitor numbers that can be seen at busy periods, such as Easter and Bank Holidays.

Table 5: Scenario 1 (baseline) average visitors per site per year and per month

HWRC	Tonnage	Average visitors per day	Average visitors in a peak month per day
Alsager	4,238	523	627
Bollington	2,442	301	362
Crewe	7,413	915	1,098
Knutsford	3,953	488	585
Macclesfield	5,448	672	807
Middlewich	2,067	255	306
Poynton	2,156	266	319

## 3 Benchmarking

CEC was benchmarked in 2020 against both neighbouring and similar authorities. We have provided an update using the same authorities for ease of comparison below.

## 3.1 Neighbouring authority review

The six neighbouring authorities selected for benchmarking based on their proximity to the border with CEC 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

Previously, the national HWRC directory was used to analyse HWRC recycling rates for each, but this no longer exists. We have therefore analysed HWRC recycling rates using 21/22 tonnages from Waste Data Flow (WDF) for CEC and the neighbouring authorities. The recycling rates are shown in Table 6 alongside total tonnage, throughput per household per year and number of HWRCs per 100,000 population.

Table 6: Neighbouring authority benchmarking including 21/22 HWRC recycling rates (including rubble)

Authority	Recycling & reuse rate	Total annual throughput tonnes	Annual throughput kg/hh	Number of HWRCs per 100,000 population
Warrington Borough Council	71%	17492.93	187	1.42
<b>Cheshire East</b>	63%	31430.73	175	1.76
Greater Manchester WDA (MBC)	58%	244843.37	224	1.55
Cheshire West and Chester	54%	38916.36	243	0.70
Derbyshire County Council	45%	79443.28	217	1.13
Shropshire	45%	39577.43	272	1.96
Staffordshire County Council	41%	82987.21	215	1.60

<sup>\*</sup> The tonnage and household values vary slightly to the data provided to us directly by CEC for 21/22, for consistency in comparison, we have used WDF figures for this analysis.

CEC had the second highest recycling rate of 63%, following Warrington (71%), this is the same as in 2020 although both recycling rates have fallen slightly. CEC's throughput per household is the lowest of all neighbouring authorities (175kg/hh/yr). Shropshire had the highest throughput per year at 272kg per household. With the closure of Congleton, CEC's provision of HWRCs per 100,000 population has decreased slightly from 2.1 to 1.76 sites but this is still one of the highest along with Cheshire West (1.96).

There have been some changes to key policies and operations, and we have provided an update on these authorities, detailed in Table 7. Notably, Cheshire West's separate trade waste site previously located next to their Chester HWRC closed in June 2022 and the authority was charging for DIY waste over a certain amount (3 bags for free). Staffordshire has also made changes to their trade waste policy; from June 2023, businesses registered in Staffordshire with a waste carriers' licence and proof of address can take trade waste to HWRCs for a fee. Staffordshire now accepts asbestos between specified hours at six of its HWRCs whereas before this was only possible at Leek.

All authorities continue to enforce vehicle restrictions relating to payload and length. Shropshire still enforces a similar permit scheme to CEC for vans and large vehicles, and Warrington still requires permits for multiple visits per day in large vehicles or for non-household waste. Cheshire West now requires proof of residency.

From January 2024, the UK Government banned local authorities charging for DIY waste when the amount of waste being delivered to a HWRC in a single visit is either:

- a) less than 100 litres and capable of being fitted into two 50 litre bags, or
- b) a single article of waste no larger than 2000mm x 750mm x 700mm in size; and
- c) the waste delivered to waste deposit sites does not exceed four single visits per household in any four-week period  $^{2}$ .

The ban on DIY waste charges could have a large impact on authorities like CEC that previously charged; the very likely increase in DIY wate tonnage will increase disposal costs. Implementing the permitted limits outlined above on the amount of DIY waste accepted will help CEC managed this additional cost.

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<sup>&</sup>lt;sup>2</sup> The Controlled Waste (England and Wales) (Amendment) (England) Regulations 2023, accessed Jan 24

Table 7: Neighbouring authority HWRC key policies and opening times

Authority	Vehicle restrictio ns	Residents Permit	Limits on non-household waste	Opening Times	Trade Waste Accepted?	DIY Charges prior to Jan 2024*
Cheshire East	Yes	Yes, for vans or trailers	Small DIY projects only, charges applicable. No gas cylinders or tyres. Asbestos at Pyms Lane Crewe or Danes Moss Macclesfield only.	Seven days a week; 8:30am- 5pm April-September, 8:30am-4pm October-March. (Congleton HWRC now closed)	Limited amounts for a fee	Hardcore/rubble/s oil/ceramic/glass & plasterboard = £3.70 per bag, per sheet or individual item.
Cheshire West & Chester	Yes	Proof of residency required. Neston requires a permit, due to location near council boundary.	Cannot accept asbestos, gas cylinders, tyres.  No cooking & engine at Frodsham either.  Tattenhall had very limited acceptance of different household wastes.	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 (TBC). Winter months 8am-4pm.	No. (The separate trade waste centre next to Chester Site closed in 2022)	Charge for 4 or more bags construction waste or ceramic items at £3.70 per bag (introduced in 2022).

Authority	Vehicle restrictio ns	Residents Permit	Limits on non-household waste	Opening Times	Trade Waste Accepted?	DIY Charges prior to Jan 2024*
Warrington Borough Council	Yes	Yes, for non-household waste, or when making more than one visit in a large vehicle or with a trailer.	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.	Gateworth 8am-6pm, Woolston weekdays 10am- 4pm, weekends 8am-6pm, Stockton same as Woolston shorter winter hours of 10- 4pm incl. weekends.	No	No (permits are free)
Greater Mancheste r WDA	Yes	No	Limit of 5 x sacks of hardcore & rubble per visit.  No asbestos, plasterboard (both to be taken to waste transfer facility) or food waste.	Seven days a week; 8am- 6pm	No	No but limit of 5 x sacks of hardcore & rubble per visit.
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 restrictio ns	Residents Permit	Limits on non-household waste	Opening Times	Trade Waste Accepted?	DIY Charges prior to Jan 2024*
Staffordshir e County Council	Yes	No	DIY wastes limited to certain sized items or 2 x 50l bags per visit and 4 visits/hh/month.  Cement bonded asbestos accepted a 6 HWRCs between 1-3pm- restricted to 4 sheets or 4 bags per household every six months.  Charges applicable to some items. No car parts (except tyres/batteries), animal carcasses, petrol or diesel.	Most open five days a week, 9am-5pm with midweek closing except Biddulph open 9am-4:30pm and Leek open 7 days a week 9am-5pm	Yes, from June 2023 trade waste from Staffordshire registered businesses will be accepted. Need waste carriers licence and business address and charges apply.	Charged for more than 2 bags of: Rubble/bricks/con crete/glass/gravel/ceramic/sand/slat e/soil/stone/tarma c/turf/tiles & fibreglass - £3 per bag or large item. Plasterboard - £4 per bag or sheet. Tyres - £4 per tyre.
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

<sup>\*</sup>DIY waste charges at HWRCs banned in Jan 2024.

## 3.2 Similar authority review

We have provided an update on the benchmarking with five similar authorities that were used for comparison in 2020. These authorities were identified at that time 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. For direct comparison, the local authorities are:

- Tewkesbury (Gloucestershire)
- Stroud (Gloucestershire)
- Monmouth
- Cheshire West & Chester
- Stafford (Staffordshire County Council)

As before, for authorities that are waste collection authorities only (Tewskesbury, Stroud and Stafford), HWRC data for the disposal authorities (Gloucestershire and Staffordshire) has been used. The summary of recycling and reuse rates, total throughput, and throughput her household per year is summarised for similar authorities in Table 8. Data from WDF has been used again for direct comparison.

CEC has the highest HWRC recycling and reuse rate of all similar authorities, excluding rubble. CEC's throughput per household (175kg/hh/yr) is second lowest after Gloucestershire (150kg/hh/yr). Monmouthshire continues to have the highest throughput per household of 259kg/hh/yr and provides almost double (3.25) the number of HWRCs per 100,000 population than CEC (1.76).

Table 8: Similar authority benchmarking including recycling rate (including rubble)

Authority	Recycling & reuse rate	Total annual throughput tonnes	Annual throughput kg/hh	Number of HWRCs per 100,000 population
Cheshire East	63%	31430.73	175	1.76
Monmouthshire CC	62%	10670.38	259	3.25
Cheshire West and Chester	43%	38916.36	243	1.96
Gloucestershire County Council	41%	44574.84	150	1.60
Staffordshire County Council	38%	82987.21	215	0.78

The similar authority benchmarking update is provided in Table 9. As the information on Cheshire West and Chester and Staffordshire is provided in section 3.1, it has not been repeated here.

There have been some changes to key policies and opening times in the similar authorities; Monmouthshire has reduced the number of days and hours they open since 2020 and Gloucestershire no longer accepted car tyres at its HWRCs. All authorities have restrictions on vans and trailers with Gloucestershire and Monmouthshire continuing the booking systems implemented during the Covid pandemic. CEC has the longest opening hours compared to similar authorities.

Table 9: Similar authority HWRC key policies and opening times

Authority	Vehicle restrictions	Residents Permit	Limits on non- household waste	Opening Times	Trade Waste Accepted?	DIY Charges prior to Jan 2024*
Cheshire East	Yes	Yes, for vans or trailers	Small DIY projects only, charges applicable. No gas cylinders or tyres. Asbestos at Pyms Lane Crewe or Danes Moss Macclesfield only.	Seven days a week; 8:30am-5pm April- September, 8:30am- 4pm October-March.	Small amounts for a fee	Hardcore/rubble/soil/ceramic/glass & plasterboard = £3.70 per bag, per sheet or individual item.
Gloucestershire County Council (Tewkesbury, Stroud)	Yes	Bookings must be made for any van, pick- up, large trailers, or minibuses/vans.	Cannot accept car parts including tyres, ammunition, flares, animal carcasses, 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). 10am- 4pm	No	No

Authority	Vehicle restrictions	Residents Permit	Limits on non- household waste	Opening Times	Trade Waste Accepted?	DIY Charges prior to Jan 2024*
Monmouthshire County Council	Yes	All vehicles must book a visit slot and show confirmation email. Vans & trailers book via a separate from.	No black bag unsorted waste. No car or vehicle parts, including tyres accepted.  DIY waste restricted to 5 bags or small car boot load per visit, with maximum of two visits per month.  Large white goods, gas cylinders, Asbestos not accepted at Mitchel Troy.	Five days a week (midweek closing); 8am-4pm.	No	No but restricted to 5 bags or small boot-load full.

<sup>\*</sup>DIY waste charges at HWRCs banned in Jan 2024

## 3.3 Benchmarking update findings

The findings of the benchmarking update with neighbouring and similar authorises suggests that:

- Most comparable authorities now require a form of residential permit for vans or trailers.
- CEC is still amongst the authorities which provide longer opening times. Two similar authorities both implement a mid-week closure.
- Most authorities, including CEC do not accept trade waste.
- CEC continue to provide one of the highest numbers of HWRCs per 100,000 population.
- There seems to be a correlation between higher tonnage per hh/year and higher number of HWRCs provided per 100,000 population.
- Despite most authorities implementing some form of DIY waste charges or restrictions in recent years, the Government banned blanket charges for DIY waste at HWRCs in January 2024.
   However, restrictions on the amount of DIY waste will still be permitted.<sup>2</sup>

## 4 Scenario analysis

## 4.1 Methodology for spatial analysis

Cheshire East Council provided Resource Futures with postcode and household numbers. Of the 10,949 postcodes provided 116 postcodes could not be geolocated and have been excluded from the analysis. A list of the postcodes excluded from the analysis is listed in the Appendix. The Cheshire East boundary area spatial data was acquired from the UK Government Ministry of Housing, Communities and Local Government's Local Authority District 2019 feature layer<sup>3</sup>. Table 10 below details the number of Cheshire East postcodes and households included in the spatial analysis.

Table 10: Total number of Cheshire East postcodes and households and proportion included in the analysis

Cheshire East postcodes included in the analysis		Total postcodes provided by CEC	Total HH numbers provided by CEC	% Geolocated
10,833	192,561	10,949	194,195	99%

## 4.2 Drivetime overview by HWRC

Drive time analysis was run for each HWRC individually. The results from the analysis are shown in Table 11. Crewe and Macclesfield have the most households within a 20-minute drive time of their HWRCs. Over 77% of residents in Cheshire East can visit the Crewe HWRC within 20 minutes driving and 71% of households can drive to Macclesfield HWRC within 20 minutes.

Table 11: Number of Cheshire East Households within 20-minute drive of each HWRC

HWRC	Households within 20 minutes	% of total CEC Households
Knutsford	66,872	35%
Poynton	75,882	39%
Middlewich	103,923	54%
Bollington	104,746	54%
Alsager	106,550	55%
Macclesfield	136,384	71%
Crewe	151,202	79%

#### 4.3 Site Closures

Each scenario within this report applies the closure of one or more HWRC. We have considered how tonnages as well as visitor numbers will change and impact other sites as a proposed of closures.

#### 4.3.1 The annual tonnage variation and the impact of closing Congleton

Estimates have been calculated to show where the tonnage and visitors from each site are likely to travel to for each scenario. With each HWRC closure, we have assumed a 5% loss in overall tonnage as

<sup>&</sup>lt;sup>3</sup>ARCGIS <u>Indices of Multiple Deprivation</u> (2019) accessed Jan 2024

per the Waste and Resources Action Programme (WRAP) HWRC Guidance, 2018<sup>4</sup>. This correlates with our analysis of associated data relating to the impact of the closure of Congleton on neighbouring sites. CEC provided two years' worth of tonnage data from all their HWRCs, covering the 12 months immediately before and after the closure of Congleton. Domestic waste tonnage is known to have increased significantly across the UK during the year preceding the closure (September 2020 to August 2021). This was due to the impact of covid lockdowns when the population spent more time at home and in their gardens. It was also an exceptionally good growing year, and garden waste tonnages were high.

Table 12: Tonnage change across all HWRCs before and after Congleton closure

Waste type	Before	After	Change	% Change
Total tonnage	33,389	29,213	-4176	-13%
Total residual waste (EfW & landfill)	11,884	10,316	-1568	-13%
Total recycled (garden and dry)	21,506	18,897	-2609	-12%
Garden waste	5,117	4,247	-871	-17%
Dry recycling	16,388	14,651	-1738	-11%

Table 12 shows the change in tonnages for both recycling and residual waste across all sites before and after the Congleton HWRC closed. Each waste stream tonnage decreased, with garden waste reduced at a significantly higher rate than other streams (-17%). The total tonnage decrease from all HWRCs was 4176 tonnes, of which 3929 tonnes (12%) could be attributed to the regional decrease in tonnage experienced that year (the annual tonnage variation). The remaining 247 tonnes equates to approximately 5% of the tonnage previously taken to Congleton that did not appear in the tonnages of other HWRCs. This 5% loss correlates with the WRAP guidance, and it is likely that these materials were put into domestic wheelie bins, composted, or otherwise managed differently.

Table 13 shows the changes in tonnage at each site 12 months before and after Congleton closed. The sites most likely to have been impacted by the closure of Congleton experienced the lowest drop in tonnage, (and in the case of Macclesfield a net increase of 11%). The reduction was not uniform across all sites; there was a variation of between +11% at Macclesfield and -15% at Poynton.

Table 13: Tonnage change at each HWRC before and after Congleton closure. Highlighted cells signify sites most likely to be impacted by the closure

HWRC	Before	After	Change	% Change
Alsager	4,624	4,327	-297	-6%
Bollington	2,741	2,510	-231	-8%
Crewe	8,007	7,928	-78	-1%
Knutsford	4,624	4,327	-297	-6%
Macclesfield	5,141	5,731	590	11%
Middlewich	2,501	2,176	-325	-13%
Poynton	2,690	2,285	-405	-15%

<sup>&</sup>lt;sup>4</sup> WRAP Household Waste Recycling Centre (HWRC) Guide (2018), accessed Dec 23

#### 4.3.2 Calculating visitor number changes

Visitor numbers are not habitually calculated at the HWRCs in CEC. A survey of visitor numbers was however conducted by Tracsis for one week in early September 2022 at all sites. This data has been used to calculate the kilograms (kg) that were brought per visitor to each site. Note that one week of visitor numbers has been collated against one month of tonnage, and there is no way of knowing whether this was a relatively busy or quiet week. Using some sensitivity analysis, a range of between 21-25kg was probable, and a mid-point of 23kg per visitor has been used in the modelling included within this report. Assumed visitor numbers can be seen in Table 5.

Note that it is probable that the average weight of a carload will change seasonally. However, as the survey was carried out in one of the busier months of the year, it is likely to be a reliable figure for the purposes of understanding the impact over the busier period of the year.

Attention has been paid to the visitor numbers in the peak periods. Approximately 10% of the total weight and visitors will be experienced in a single peak month. In the modelling this figure has been used to show the impact of increased visitor numbers over this peak month. However, it should be advised that peak days will see even higher tonnage arriving at the sites on weekends, bank holidays and in good weather.

Historical trends show that tonnages at the HWRCs have been much higher in the past. Figure 2 overleaf shows that prior to 2018, before the Council started to charge for hardcore (rubble) and gypsum (plasterboard), sites were taking in about a third more tonnage in total. Whilst this tonnage throughput was achieved prior to the closure of Congleton and Arclid HWRCs, it does indicate that there may be spare capacity at sites. Should there be an improvement in economic conditions, a strong increase in house numbers and/or population, the introduction of a charged for garden waste service, or the removal of any restrictions on non-household waste, it would be possible to see higher tonnages again.

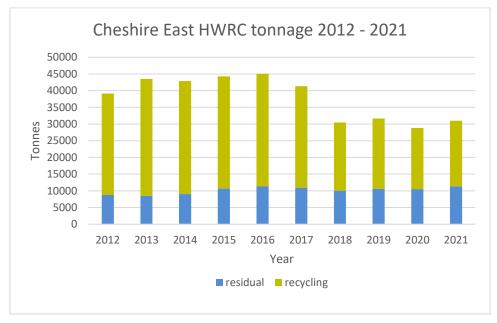


Figure 2: HWRC refuse & recycling tonnage change 2012-2021

## 4.4 Scenario 2a - Close Poynton

In scenario 2a, six of the seven HWRCs remain open, closing Poynton. Figure 3 below shows the coverage to households within a 20-minute drive time of a HWRC in scenario 2a.

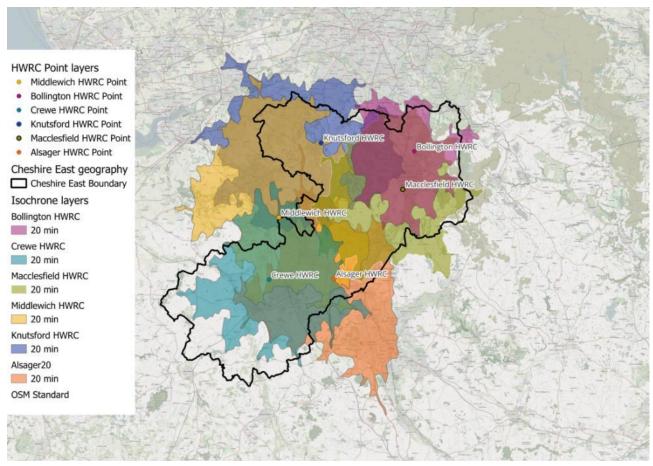


Figure 3: Scenario 2a 20-minute drive time coverage

#### 4.4.1 Impact on residents

WRAP national guidelines suggest that the maximum driving times to a site for the great majority of residents of 20 minutes in urban areas, and 30 minutes in rural areas<sup>5</sup>, in this scenario we have assumed that CEC considers itself an urban authority.

In scenario 2a, 97% of households within Cheshire East would be able to reach one of the six HWRC within 20 minutes, with just 3% of residents over a 20-minute drive away. The closure of the Poynton site would see a 2% percentage decrease from Scenario 1 (baseline) in households able to reach a HWRC site within 20 minutes. Table 14 below shows the results from the drive time analysis for 20 minutes.

Table 14: Scenario 2a households within 20-minute drive time

Scenario 2a	Households	% of HH within the area	% HH outside of the area
20-minute drive time	187,428	97%	3%

<sup>&</sup>lt;sup>5</sup> WRAP Household Waste Recycling Centre (HWRC) Guide (2018), accessed Dec 23

#### 4.4.2 Impact on tonnage and visitors

With the closure of Poynton, it is highly likely that residents would take most of their waste previously entering Poynton to Bollington, with a small amount reaching Knutsford. Table 15 shows the potential impacts of closing Poynton on the other HWRCs. Bollington is likely to see an increase of around 80% in its current tonnage and visitor numbers, making it the third busiest site after Crewe and Macclesfield. Tonnage and visitor numbers would be slightly higher than Alsager, which is a considerably larger.

HWRC	Current tonnage	New Tonnage	Change in tonnage	Current visitors per day	New visitors per day	Change in daily visitors	% increase in tonnes and visitors	Peak month - visitors / day
Alsager	4,238	4,238	-	523	523	-	0%	627
Bollington	2,442	4,387	1,946	301	541	240	80%	650
Crewe	7,413	7,413	-	915	915	-	0%	1,098
Knutsford	3,953	4,055	102	488	500	13	3%	600
Macclesfield	5,448	5,448	-	672	672	-	0%	807
Middlewich	2,067	2,067	-	255	255	-	0%	306
Poynton	2,156	-	2,156	266	-	266	-100%	-

#### 4.4.3 Site suitability

The Bollington HWRC was designed to be a small regional HWRC and while it would have some additional capacity, there is limited room for additional visitors and tonnage. By comparison, Bollington has space for 8 to 9 roll-on-roll-off (RORO) skips whilst Alsager has space for around 18 ROROs.

To its advantage, Bollington has a long entrance road that leads solely to the HWRC which would help with holding visitors on peak days. The expected 80% increase in traffic and tonnage is likely to cause operational and visitor issues and would have to be considered carefully. As the risks of additional tonnage and visitors are generic to all sites, these, along with ways this could be managed are discussed at section 4.10.

#### 4.4.4 Cost savings

Savings from site closures are largely from staff costs but include other site-specific operational costs that would no longer be incurred. This is then offset by other costs including:

- Site improvement costs as identified by David Trowler Associates, annualised, and applied to all sites not due for closure.
- Redeployment costs, which is the cost of providing additional staff and resources at sites most impacted by tonnage increases.
- Change in tonnage costs which is the estimated cost from a drop in recycling rates (at the sites which are expected to receive more than 20% additional tonnage), less the savings made from the anticipated 5% reduction in redistributed tonnage following a site closure.

Table 16 shows a summary of potential cost savings achieved by scenario 2a, this would represent a net cost of a second s

Table 16: Scenario 2a first year financial summary

Scenario 2a	Cost (£)	Savings (£)
Savings from site closures	-	
Site improvement costs		-
Redeployed costs		-
Change in tonnage costs		-
Sub Total		
Net savings (-ve = cost)		

## 4.5 Scenario 2b - Close Bollington

In scenario 2b, six of the seven HWRCs remain open, closing Bollington. Figure 4 shows the coverage to households within a 20-minute drive time of a HWRC in scenario 2b.

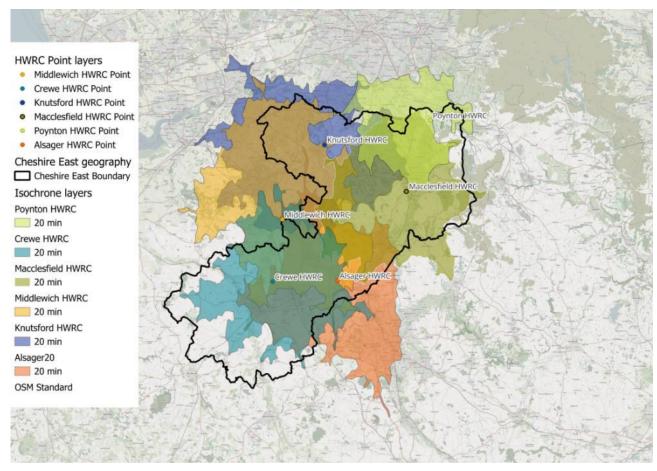


Figure 4: Scenario 2b 20-minute drive time coverage

#### 4.5.1 Impact on residents

In scenario 2b, 99% of residents would be within the WRAP HWRC guidelines of a 20-minute drive to a HWRC. Closing Bollington instead of Poynton increases the percentage of households within 20-minute drive from 97% in Scenario 2a to 99% in Scenario 2b. This scenario sees no percentage change of households within a 20-minute drive from Scenario 1 (baseline) as Scenario 2b has only 33 households

fewer within a 20-minute drive time than Scenario 1. Table 17 shows the results from the drive time analysis for 20 minutes.

Table 17: Scenario 2b households within 20-minute drive time

Scenario 2b	Households	% of HH within the area	% HH outside of the area
20-minute drive time	189,677	99%	1%

#### 4.5.2 Impact on tonnage and visitors

In scenario 2b, Bollington HWRC is closed. The two sites likely to receive the displaced tonnage are Macclesfield and Poynton, with a some being redirected to Knutsford. It is likely that Macclesfield will receive most of the tonnage given the proximity of the Bollington HWRC to North Macclesfield.

Table 18 summarises the estimated impact on other HWRCs if Bollington closes. The impact on Poynton is significant; the tonnage would increase by around 38%, though this is a significantly smaller rise than would be experienced at Bollington in scenario 2a. Macclesfield would remain the second busiest site and sees a significant increase in traffic and tonnage, with activity increasing by 26%.

Table 18: Scenario 2b impact on tonnage and visitors

HWRC	Current tonnage	New Tonnage	Change in tonnage	Current visitors per day	New visitors per day	Change in daily visitors	% increase in tonnes and visitors	Peak month - visitors / day
Alsager	4,238	4,238	-	523	523	-	0%	627
Bollington	2,442	-	(2,442)	301	-	(301)	-100%	-
Crewe	7,413	7,413	-	915	915	-	0%	1,098
Knutsford	3,953	4,069	116	488	502	14	3%	602
Macclesfield	5,448	6,840	1,392	672	844	172	26%	1,013
Middlewich	2,067	2,067	-	255	255	-	0%	306
Poynton	2,156	2,968	812	266	366	100	38%	439

#### 4.5.3 Site suitability

Poynton has space for 9 RORO skips, compared to Macclesfield and Knutsford which both have 12. Under this scenario, Poynton will be the fifth busiest site of those remaining, and with careful planning and good operation, should be able to cope with the additional visitor traffic and movement of materials. It should be noted that the entrance road to the site is very short and is likely to result in queues onto Anson Road during peak periods.

The Macclesfield HWRC also has space for 12 RORO skips, the same as Knutsford and fewer than both Crewe (16) and Alsager (18). While this is not the only determining factor in throughput, it is a good indicator of the range of materials that a site can carry and how quickly they can be taken off site. A site with a small number of skips and high tonnage will increase the risk of some recycle skips overflowing into a general waste skip. This scenario is likely stretch to Macclesfield during peak periods.

Macclesfield has a dedicated entrance road, which is 100 metres long between the site entrance and the busy Congleton Road. Some consideration would need to be given to managing traffic at peak times.

## 4.5.4 Cost savings

Compared to the baseline, scenario 2b would generate net costs of approximately per year. Table 19 shows a summary of estimated cost savings for scenario 2b.

Table 19: Scenario 2b cost savings

Scenario 2b	Cost (£)	Savings (£)
Savings from site closures	-	
Site improvement costs		-
Redeployed costs		-
Change in tonnage costs		-
Sub Total		
Net savings (-ve = cost)		

## 4.6 Scenario 3 – Close Bollington, Middlewich & Poynton

In scenario 3, Bollington, Middlewich, and Poynton would close, with Alsager, Crewe, Knutsford and Macclesfield remaining open. Figure 5 shows the coverage to households within a 20-minute drive time of a HWRC in scenario 3.

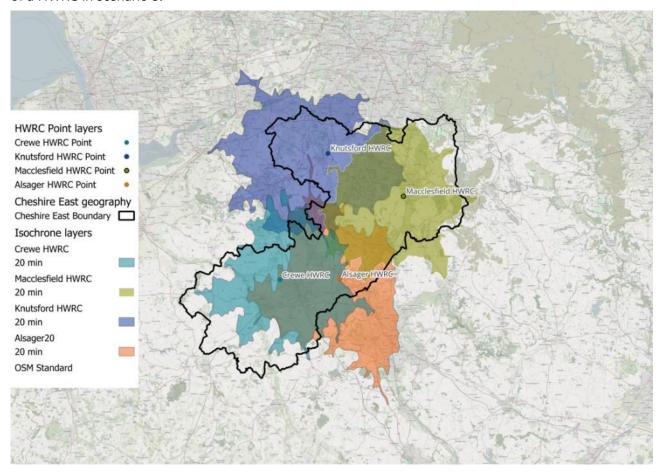


Figure 5: Scenario 3 20-minute drive time coverage

#### 4.6.1 Impact on residents

In scenario 3, 97% of households can reach an HWRC site within a 20-minute drive, as shown in Table 20. This scenario minimizes the overlap of catchment areas within the centre of the authority. Despite losing two more HWRCs from scenario 2 (Bollington and Middlewich), the percentage of households able to reach an HWRC sire within 20 minutes does not change between scenarios 2 and 3. The percentage of area coverage decreases by 1.3 percentage points.

Table 20: Scenario 3 households within a 20-minute drive time

Scenario 3	Number of households	% HH Within	% HH Outside	% area coverage
20-minute drive time	186,403	97%	3%	82.2

#### 4.6.2 Impact on tonnage and visitors

With the closure of Bollington, Middlewich, and Poynton, most of the tonnage from Bollington and Poynton is likely to move to the closest site, Macclesfield, with some from Poynton likely reaching Knutsford. Materials from Middlewich are most likely to be displaced to Crewe, while some may also move to Knutsford and Alsager.

Table 21 shows the estimated impact on the remaining HWRCs in this scenario. The impact on Macclesfield would be significant; it is likely to become the busiest of the remaining sites, with tonnage and visitors increasing by 68%. This is nearly 25% higher than Crewe's current tonnage.

Crewe and Knutsford tonnage and visitor numbers are likely to increase by around 21%. The busiest recent year Crew experienced was in 2021 when throughput was 8225 tonnes. This decreased by 11% to 7400 tonnes in 2022. In scenario 3, Crewe's throughput may increase to 9000 tonnes.

Table 21: Scenario 4	! impact on	tonnage	and visitors
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HWRC	Current tonnage	New Tonnage	Change in tonnage	Current visitors per day	New visitors per day	Change in daily visitors	% increase in tonnes and visitors	Peak month - visitors / day
Alsager	4,238	4,434	196	-	547	547	5%	657
Bollington	2,442	-	(2,442)	2,320	-	(2,320)	-100%	-
Crewe	7,413	8,985	1,571	-	1,109	1,109	21%	1,330
Knutsford	3,953	4,791	838	232	591	359	21%	709
Macclesfield	5,448	9,174	3,726	2,088	1,132	(956)	68%	1,358
Middlewich	2,067	-	(2,067)	-	-	-	-100%	-
Poynton	2,156	-	(2,156)	-	-	-	-100%	-

#### 4.6.3 Site suitability

Given the potential substantial tonnage increase at Macclesfield, scenario 3 may presents significant operational risks for this HWRC. Careful consideration to movement of visitors and waste would need to be given to ensure that it could manage. We understand that there may be an option to increase the size of the Macclesfield site as land adjacent to the site is owned by the Council. Given the tonnage expected at a site similar to Crewe with 16 ROROs and ample set down space for visitors would be more suitable.

Crewe also sees a significant increase in tonnage. It is one of the two largest HWRCs in CEC, with space for 16 ROROs and a very efficient traffic flow. Traffic queueing could be managed by opening the second existing entrance to avoid backup onto the busy Pyms Lane. It is also a very large site, and it would be possible to utilise this space sufficiently to manage such an increase.

Knutsford has 12 spaces for ROROs and the site has sufficient capacity for the increase in tonnage expected. The site layout for visitors is more challenging, with limited waiting/off-loading space. However, there is capacity for internal queueing before the entrance from the busy B5085 Mobberley Road. Carefully managed, Knutsford should be able to cope with the additional tonnage expected.

## 4.6.4 Cost savings

Compared to the baseline, scenario 3 could generate net savings of approximately per year. Table 22 shows a summary of estimated cost savings for scenario 3, it can be seen that the savings are generated by the closure of three sites.

Table 22: Scenario 3 cost savings

Scenario 3	Cost (£)	Savings (£)
Savings from site closures	-	
Site improvement costs		-
Redeployed costs		-
Change in tonnage costs		-
Sub Total		
Net savings (-ve = cost)		

# 4.7 Scenario 4- Open new Congleton, close Poynton, Middlewich, Bollington & Alsager

In scenario 4, Poynton, Middlewich, Bollington and Alsager close, with Crewe, Knutsford and Macclesfield remaining open and a new Congleton HWRC being built. Figure 6 shows the coverage to households within a 20-minute drive time of a HWRC in scenario 4.

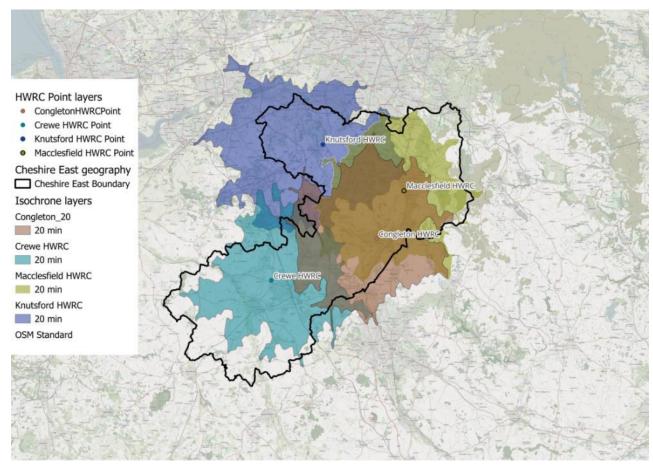


Figure 6: Scenario 4 20-minute drive time coverage

#### 4.7.1 Impact on residents

In this scenario, three of the current seven sites remain open with a new site in Congleton identified, developed and opened. For the purposes of the drive-time analysis, the new Congleton HWRC is assumed to be located at the old Congleton site location. Table 23 below shows the 20-minute drive times for households in scenario 4.

Table 23: Scenario 4 households within a 20-minute drive time

Scenario 4	Number of Households	% HH within	% HH outside	% area coverage
20-minute drive time	186,451	97%	3%	82.4

In scenario 4, 97% of households can reach an HWRC within a 20-minute drive. As this scenario provides the same number of HWRCs as scenario 3 (given there will be a new site opened in Congleton), the impact on the residents is the same. The area coverage increases by 0.2 percentage points from scenario 3's 20-minute drive time coverage.

#### 4.7.2 Impact on tonnage and visitors

The impact of the closure of Poynton, Middlewich, Bollington and Alsager HWRCs is estimated in Table 24. Without knowing where the potential new Congleton site will be located, we have used the old site location for these estimates. The 'current' tonnage for Congleton is also based on the tonnage received in the preceding 12 months before the previous site closed in September 2021, less the average annual tonnage variation relating to the following year, of 12%.

Note that replacing Alsager with a new site at Congleton will reduce the pressure on Macclesfield to some degree. Rather than traffic increasing by nearly 70%, traffic to Macclesfield increases by 46% and to Crewe by 37%. Tonnage and visitors may also increase at Knutsford by around 20%.

Table 24: Scenario	4 impact on to	onnage and	visitors

HWRC	Current tonnage	New Tonnage	Change in tonnage	Current visitors per day	New visitors per day	Change in daily visitors	% increase in tonnage and visitors	Peak month - visitors / day
Alsager	4,238	-	(4,238)	523	-	(523)	-100%	-
Bollington	2,442	-	(2,442)	301	-	(301)	-100%	-
Crewe	7,413	10,134	2,720	915	1,250	336	37%	1,500
Knutsford	3,953	4,791	838	488	591	103	21%	709
Macclesfield	5,448	7,980	2,532	672	985	312	46%	1,182
Middlewich	2,067	-	(2,067)	255	-	(255)	-100%	-
Poynton	2,156	-	(2,156)	266	-	(266)	-100%	-
Congleton	4,398	6,607	2,209	543	815	273	50%	978

#### 4.7.3 Site suitability

In scenario 4, Macclesfield and Crewe will see significant tonnage increases which will increase operational pressures and risks at these two key sites. With the closure of other sites nearby, notably Alsager, the tonnage at Congleton is likely to be approximately 50% higher than at the time of the previous site's closure. However, opening of a new site brings the opportunity to build it appropriately, with good traffic flow and space for around 16 ROROs to enable the site to accommodate populations growth in CEC.

#### 4.7.4 Review of proposed Congleton designs

This scenario involves building a new HWRC at Congleton to replace the one that operated there until September 2021. In order for this scenario to be developed further work will need to be undertaken between with Assets team to develop the associated costs, this will need to reflect the cost of site acquisition as well as design and build. This exercise is not included within this review.

We would recommend that as a minimum the site has a requirement of a minimum of 16 RORO containers as well as including a reuse shop, and while this will add a new and positive dimension and provide a valuable source of income on the site, the shop should be bigger. Greater consideration should be given to the scope and function of the shop and design it accordingly.

#### 4.7.5 Cost savings

Compared to the baseline, scenario 4 could generate net costs of per year, but it must be noted that this does not include the capital investment of a new HWRC.

Scenario 4	Cost (£)	Savings (£)
Savings from site closures	-	
Site improvement costs		-
Redeployed costs		-
Annualised capital costs - new site	NOT AVAILABLE	-
Change in tonnage costs		-
Sub Total		
Net savings (-ve = cost)		

25 shows a summary of estimated cost savings for scenario 4. It is critical at this stage that it is noted that this does not include the cost of developing and building a new site as this is not available currently.

Table 25: Scenario 4 cost savings

Scenario 4	Cost (£)	Savings (£)
Savings from site closures	-	
Site improvement costs		-
Redeployed costs		-
Annualised capital costs - new site	NOT AVAILABLE	-
Change in tonnage costs		-
Sub Total		
Net savings (-ve = cost)		

<sup>\*</sup>Includes the running costs of Congleton site

#### 4.7.6 Procurement viability

The current HWRC tender has been extended for 18 months and is due to expire at the end of September 2024. The tender is likely to be required to proceed in advance of a new site being fully secured. While this is not an insurmountable hurdle, it does add risk and complexity to the tender process and is likely that any operational uncertainty will be reflected in the cost of bids received. It is possible that bidding contractors will return a price allowing for a revenue premium due to the uncertainty of a new site coming on line.

## 4.8 Scenario 5 – close Alsager, Bollington, Middlewich & Poynton

In scenario 5, Alsager, Bollington, Middlewich, and Poynton close, with Knutsford, Macclesfield and Crewe remaining open. Figure 7 shows the coverage to households within a 20-minute drive time of a HWRC in scenario 5.

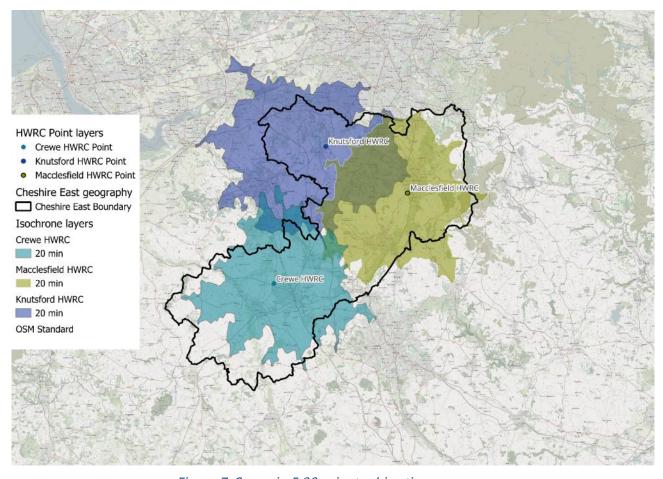


Figure 7: Scenario 5 20-minute drive time coverage

#### 4.8.1 Impact on residents

In scenario 5, three of the current HWRCs remain open, with Alsager, Bollington, Middlewich, and Poynton closing. In this scenario, 94% of CEC households would be a 20-minute from a HWRC. This is a three-percentage point decrease from scenarios 2, 3, and 4. This scenario predicts that by closing four HWRCs, 3% of residents would have to drive for longer than 20 minutes when compared to scenarios 2, 3, and 4, and 5% more residents than compared to scenario 1 (baseline). Table 26 shows the 20-minute drive times for households in scenario 5.

Table 26: Scenario 5 households within a 20-minute drive time

Scenario 5	Number of households	% HH within	% HH outside	% area coverage
20-minute drive time	180,911	94%	6%	80.3

From the initial drive time analysis, it was clear that by increasing the drive time from 20 minutes to 23 for Macclesfield and Crewe, many more households would be covered by scenario 5. Analysis of 23-minute drivetime coverage for these HWRCs is shown in Table 27. By adding the 3-minute extra drive time, the number of households able to reach an HWRC within a slightly extended time increases to 98%, 1% fewer households than are currently able to reach an HWRC in scenario 1 (baseline).

Table 27: Scenario 5 23-minute drive time analysis

Drive time	Number of households	% HH within	% HH outside
20 minutes Knutsford, 23-minutes Crewe and Macclesfield	189,414	98%	2%

## 4.8.2 Impact on tonnage and visitors

Scenario 5 involves closing four sites and leaving Crewe, Macclesfield, and Knutsford open. This is likely to nearly double traffic to Macclesfield and increase Crewe by nearly 60%. Knutsford is likely to increase by around 20%.

Table 28: Scenario 5 impact on tonnage and visitors

HWRC	Current tonnage	New Tonnage	Change in tonnage	Current visitors per day	New visitors per day	Change in daily visitors	% increase in tonnes and visitors	Peak month - visitors / day
Alsager	4,238	-	(4,238)	523	-	(523)	-100%	-
Bollington	2,442	-	(2,442)	301	-	(301)	-100%	-
Crewe	7,413	11,798	4,384	915	1,456	541	59%	1,747
Knutsford	3,953	4,791	838	488	591	103	21%	709
Macclesfield	5,448	10,583	5,135	672	1,306	634	94%	1,567
Middlewich	2,067	-	(2,067)	255	-	(255)	-100%	-
Poynton	2,156	-	(2,156)	266	-	(266)	-100%	-

## 4.8.3 Site suitability

Macclesfield and Crewe would be at risk of serious operational pressures, and we would not recommend this option for these reasons alone.

#### 4.8.4 Cost savings

Compared to the baseline, scenario 5 could generate net savings of approximately per year. Table 29 shows the summary of estimated cost savings for scenario 5.

Table 29: Scenario 5 cost savings

Scenario 5	Cost (£)	Savings (£)
Savings from site closures	-	
Site improvement costs		-
Redeployed costs		-
Change in tonnage costs		-
Sub Total		
Net savings (-ve = cost)		

## 4.9 Projected household increase

Cheshire East has committed to a significant housing growth development until 2030 and provided us with predicted household numbers found in Appendix B. These were analysed to provide insight into how each HWRCs footfall may be impacted by a growth in housing. The number of households were plotted to a central point of each area which is shown in Figure 8; Crewe and Macclesfield have the highest predicted housing growth.

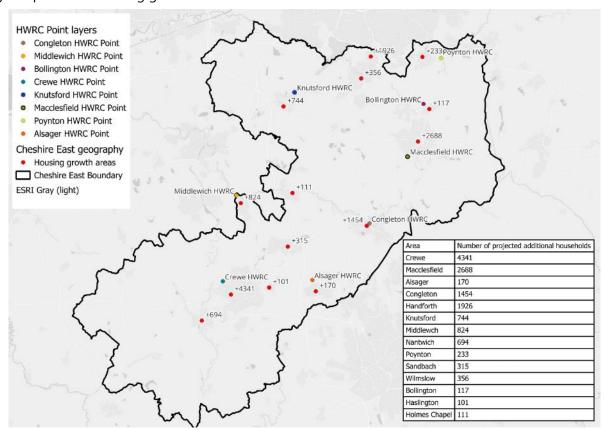


Figure 8: Projected household numbers (not postcode specific)

The total number of committed households across all areas is 15,501, for the purposes of this analysis, we only included areas with predicted growth of 100 households or more: resulting in 14,074 projected

households. Table 30 shows the distribution and percentage of the additional households within a 20-minute drive to each HWRC. Alsager and Crewe have the largest proportion of projected households within a 20-minute drive time zone which indicates these sites should be prepared to cope with increased throughput by 2030.

Each of the projected households within 20-minute drive time zone of the HWRCs have overlap with others. As it is likely that people would use their closest HWRC, we have provided further analysis of overlap for the areas with the most households in 20-minute driving distance (Alsager and Crewe) in Table 30.

Table 30: Distribution of project new households by area in Cheshire East

HWRC	Projected HH within 20 minutes	% of HH within 20 minutes
Knutsford	3,961	28%
Poynton	5,320	38%
Middlewich	2,265	16%
Bollington	5,320	38%
Alsager	8,010	57%
Congleton (new)	4,839	34%
Macclesfield	4,959	35%
Crewe	6,445	46%

Table 31 shows the other HWRCs that overlap with the 20-minute drive zone for Alsager, with Crewe and the potential new Congleton site seeing the largest increases.

Table 31 Areas of housing growth within Alsager HWRC 20-minute drive time

Areas within Alsager HWRC 20-minute drive time zone	Projected number of households by 2030
Crewe	4341
Alsager	170
Congleton	1454
Middlewich	824
Nantwich	694
Sandbach	315
Haslington	101
Holmes Chapel	111

Table 32 overleaf shows the other HWRCs that overlap with the 20-minute drive zone for Crewe HWRC; with Crewe and Alsager seeing the largest increases. Is it hard to predict which HWRC the projected households will use; however, Crewe will certainly see the largest household increase and therefore the site should be prepared to cope with additional footfall by 2030.

Table 32 Areas within Crewe HWRC 20-minute drive time

Areas within Crewe HWRC 20-minute drive time zone	Projected number of households by 2030
Crewe	4,341
Alsager	170
Middlewich	824
Nantwich	694
Sandbach	315
Haslington	101

## 4.10 Scenario summary

Figure 9 below shows the percentage of households within a 20-minute drive time for each of the scenarios evaluated. Scenario 2b, which sees Bollington close, provides almost the same coverage as the current baseline; 98.5% of households (189,677 hh) are within a 20-minute drive time of a HWRC. At the other end of the scale in Scenario 5, which sees four of the seven HWRCs close, 93.95% (180,911 hh) of residents are 20-minutes drive from a HWRC.

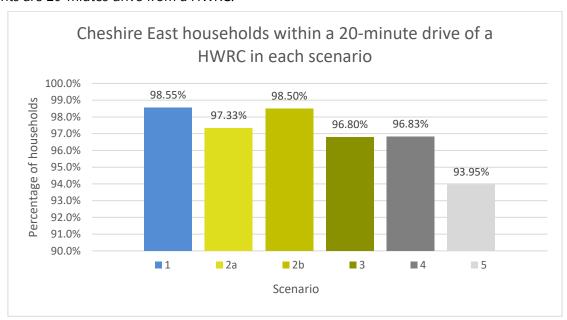


Figure 9. Percentage of households within a 20-minute drive of a HWRC in each scenario

Table 33 show the breakdown of the number and percentage of households that are within a 20-minute drive time of a HWRC in each of the scenarios. All the scenarios provide good coverage to the borough, with over 90% of households being able to reach a HWRC within 20-minutes. Scenario 2b, 2a and 3 provide the closest coverage to the current baseline.

Table 33 Comparison of proportion of households within each scenario at 20-minute drive time

Scenario	No. of HH within 20- minute drive time	% of HH within 20-minute drive time	No. of HH over 20- minute drive time	% of HH over 20- minute drive time
1 (baseline)	189,770	98.6%	2,791	1.4%
2a	187,428	97.3%	5,133	2.7%
2b	189,677	98.5%	2,884	1.5%
3	186,403	96.8%	6,158	3.2%
4	186,451	96.8%	6,110	3.2%
5	180,911	93.9%	11,650	6.1%

## 4.10.1 Cost summary

Table 34 summarises the estimated costs for year one, and the operational risk via a traffic light system: green = less risk, amber = medium risk, red = high risk.

Table 34: Summary of all costs for year 1 and operation risk

	Scenario 1 (Baseline)	Scenario 2a	Scenario 2b	Scenario 3	Scenario 4	Scenario 5
Scenario detail	All HWRCs remain open	Close Poynton	Close Bollington	Close Poynton, Bollington & Middlewich	Close Poynton, Bollington, Middlewich & Alsager, open Congleton	Close Poynton, Bollington, Middlewich & Alsager
Savings from site	Орен	l cynton	Domington.	- Wilder Wiell	Congleton	, usager
closures	-					
Cost for improvements*						
Redeployed costs**	-					
Annualised capital - new site	-	-	-	-	NOT AVAILABLE	-
Change in tonnage costs	_					
Net savings (+ve) or cost (-ve)						
Operational risk rating						

<sup>\*</sup>Site improvement costs identified by David Trowler Feasibility Report 2022

All scenarios are financially preferable to the baseline. The best financial outcome would be for scenario 5, though this is heavily caveated by the obvious operational risks associated with the substantial increase in visitor numbers and tonnage at Crewe and Macclesfield. The most obvious scenario from a

<sup>\*\*</sup>Includes Congleton running costs

financial perspective would be number 3, although the operational pressures predicted at Macclesfield (a potential 68% increase in tonnage) cannot be ignored.

### 4.10.2 Commentary on options

All scenarios involve putting one or more site under potential operational pressure in peak periods.

The recycling and reuse rates at busier HWRCs tend to suffer with the increased pressure placed on them by others closing. The graph in Figure 10 shows the existing correlation between higher throughput and lower recycling in CEC. On busier sites staff have a greater challenge ensuring that recyclables are kept out of general waste skips. There is also an issue with very small sites which are unable to provide the full range of skips for recyclables, and in this case the worst performing site, Middlewich is the quietest and smallest. Sites that are adequately sized for a full range of materials, and not be too busy will perform the best. It is notable that the best performing site (Bollington) has low tonnage and is a relatively well sized site, and the least well performing site is Crewe which is the busiest site. There may also be other factors at play, such as the effectiveness of direct site management and differences in materials brought to sites due to the demographic each site draws from.

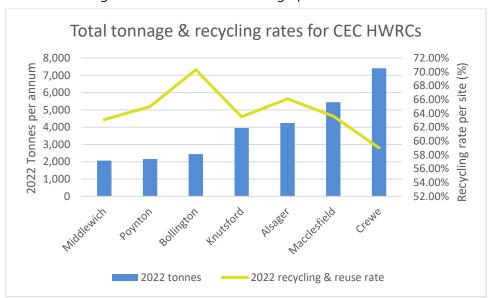


Figure 10: Correlation between higher tonnage and lower recycling rates

It should be noted that in the 12 months following the closure of Congleton, Macclesfield increased tonnage by 11% and the recycling and reuse rate did not change. We have only factored in an increased risk to sites that would be expected to receive over 20% additional tonnage.

The Council bares the cost of disposal of general household waste, which is almost entirely sent to an energy from waste (EfW) facility. Exact Cheshire East EfW contract prices are commercially confidential; however, market costs are generally in excess of £120 per tonne. We have used that figure, plus £10 per tonne in avoided haulage costs to provide an indicative estimate of changes in disposal costs.

We have also calculated the average cost and income from a tonne of 'average HWRC' materials ('basket value') that can be recycled. Items such as wood, garden waste, hardcore and gypsum have a cost associated with recycling them. Other items such as scrap metal, textiles and cardboard generate an income. We estimate that the average basket value income from the recyclable items to be

approximately £5 per tonne, based on our industry experience. Every tonne of recyclables disposed of into household waste costs the council approximately £120 per tonne in EfW charges and the contractor loses on average £5 per tonne.

One percentage point on the recycling rate (277 tonnes) at £125 per tonne is worth approximately £34,650. £33,250 of this is currently directly charged to the Council in EfW disposal costs. The average recycling and reuse rate in 2022 was 63.4% (inclusive of rubble), with a range of 59% Crewe, to 70%, Bollington. If the Council were to achieve all sites at 70% recycling rates, it would improve the financial position by approximately per year. Conversely, should the average recycling rate drop from 63.4% to the 59% experienced at Crewe, this would reverse the financial position by approximately per year.

Compared to neighbouring local councils, CEC is performing well on recycling and reuse rates. However, best performing councils in the UK achieve 80%. While this is done in part by capturing some expensive items for recycling such as hard plastics and carpets, there are a number of other steps that CEC could take to achieve better recycling rates and lower costs. Should the Council put in place a range of measures to increase the recycling rates and achieve 75%, this would be a 11.6 percentage point improvement and could generate a improvement in finances. Considering this, and in addition to any changes to reduce the number of HWRCs, we would advise the Council to consider two key objectives:

- Maximising the recycling and reuse at sites this fits the Council's green objectives and is also a cost reduction measure, this will also increase the Councils recycling rate in line with the Circular Economy Package requirements.
- Find additional ways to control tonnage to manage the concentration expected at the remaining sites.

#### 4.10.3 Options for improving recycling rates

All the HWRCs were visited by Resource Futures in early December 2023. They were observed as being well managed, with very little contamination in most skips. There were however signs of target and non-target recyclables in the general household waste skips. The following are options to improve recycling rates. The more of these that can be introduced, the better the recycling rate performance. This is reflected in the Household Waste Recycling (HWRC) Guidance document published by WRAP in 2018:

- Restrict access to the general household waste skip, by physically blocking or restricting access
  (as with the hardcore skips), and / or placing a 'goalkeeper' at these skips who intercepts
  anything that could be recyclable or sent for reuse.
- Only keep one general household waste skip live at any time. Some of the sites had several open, and while this is good to increase throughput, it makes it much harder to manage.
- Put the general household waste skip at the end of the line so that it is the last port of call.
   Many of the sites had them positioned near the beginning or at the heart of the sites.
- Include a 'no unsorted waste' policy. The general household waste skips included a large number of bags of mixed waste and recyclables.

- Provide a bag splitting area this is now common practise on many of the best performing UK sites. They are likely to be busy and unpopular in the first few months until householders become familiar with the policy. Once in place it will stop mixed bags entering the EfW skips.
- Carry out an analysis of the composition of the general household waste skips to establish what else can be recovered for recycling. It was clear from the visits that carpet could be added as a recyclable material, as could hard plastics (this was being trialled at Alsager). Others may become apparent.
- Scale up reuse significantly. At the moment the items being chosen are high end smaller items that are immediately and obviously saleable. Finding social enterprise and charity partners to take larger items of furniture and exploring the approach to salvaging items for upcycling and recovery from both recycling and waste streams should be attempted. Include as many niche reuse options as possible (e.g. spectacles for Oxfam, or power tools for a reuse operation) to drive home the message that this is a reuse operation first.
- Water based paint is deposited in general waste skips. Most of this can be recovered and given away through a Repaint initiative (<a href="https://communityrepaint.org.uk/">https://communityrepaint.org.uk/</a>).
- Improve the control of sites by the measures shown below. Reducing the volume of traffic
  increases the ability of staff to ensure that tonnage is recycled properly. Not only does this
  reduce the recyclable materials placed into general household waste skips, but it also reduces
  the risk of loads of recyclable materials being rejected, which in turn impacts on cost and
  recycling rates.
- Communicate the reason for recycling, the ambition, and results openly with the public.

### 4.10.4 Options to improve the control of sites

- Re-assess the significance of cross border visits. If it is a significant issue, then steps can be put in place to limit cross border traffic.
- Revisit the trade waste policy. While there was little evidence of trade waste being brought onto site, it would be worth reviewing how effective this is. The first step would be to introduce ANPR cameras at the entrance of each site to identify very frequent visitors. They are usually trade.
   Commercial vehicle or van policies and permits should be reviewed.
- Introduce a booking policy. This was a measure introduced by many HWRCs during Covid. While often considered an unpopular measure initially due to having to pre-book visits, many councils have opted to retain them following significant improvements and positive customer feedback from customers who no longer need to queue and find the onsite experience to be better. This approach does require some initial thought and minor costs to establish. Advantages that have been noted include:
  - o Queuing and congestion on sites are reduced.
  - Site safety improves.
  - Staff can provide greater assistance to customers.
  - Visitors tend to be more efficient; pre-booking means people tend to make fewer visits, increasing the average weight per car and reducing overall visits.
  - The time at sites is utilised much more evenly, cutting down on peak moments and smoothing the flow across opening times.

- Decisions can be made about the capacity usage of the sites and opening times can be tailored to fit demand. Hours and staff can be adjusted to demand at peak times, enabling resource efficiency.
- The booking process can be used to share key messages to householders and reinforce policies at the HWRCs. As householders are asked to stipulate what they are bringing, key preparation messages can be shared e.g. ensure waste is sorted, polystyrene removed from cardboard boxes.
- It has the capacity be used to control cross border traffic. The booking system can include a check on registration numbers to determine whether they are registered to a CEC address.

## 4.10.5 Introducing a high recycling rate policy

As this contract is due to go to tender within 18 months, it may be best to stipulate the outcomes that the Council wishes to see, i.e. minimum of 75% or 80% recycling rates, and put the onus on the contractor to stipulate how they will achieve this. Controls and contract mechanisms would need to be in place to ensure that the contract payment incentivises the achievement of the stated outputs. A soft market testing operation could be used in advance to test the appetite and capability of potential contractors to instigate such measures.

# 5 Cross border tipping issues

The previous HWRC traffic survey conducted by Tracsis was provided to us for analysis. The survey was conducted on 13 September 2023 across the current seven HWRCs via voluntary interviews with visitors who were asked for their post code on arrival.

Table 35: HWRC visitor postcode analysis on 13 September 2023

HWRC	Total visitors on 13/9/23	Total no. of postcodes not matching CEC data	No. of refusals	% of total postcodes not matching CEC data	% Refusals
Knutsford	317	6	3	2%	1%
Crewe	304	6	0	2%	0%
Macclesfield	359	23	21	6%	6%
Middlewich	143	4	0	3%	0%
Alsager	170	23	11	14%	6%
Bollington	177	4	1	2%	1%
Poynton	152	6	2	4%	1%
Average	232	11	5	5%	2%

Analysis of the visitor postcodes collected is shown in Table 35. It shows that overall, cross-border tipping at CEC's HWRCs is low, with an average 5% of visitor postcodes not matching with the database of CEC postcodes. Alsager had the highest cross-border visitors with 14% of those surveyed either refusing to give their postcode or giving a non-CEC postcode. Most of the non-CEC postcodes were from Stoke-on-Trent, which is expected due to its close proximity. Macclesfield had the highest number of visitors (21) that refused to disclose their postcode which may indicate they do not have a CEC postcode. With the closure of certain sites, this may reduce as sites will become busier and it may be further to travel for residents that currently cross the border.

The Tracsis report provides a snapshot of the issue of cross border visitors. Should CEC wish to pursue a cross-border arrangement with a neighbouring authority, a more detailed traffic analysis over a longer period is recommended utilising automatic number plate recognition (ANPR) for example.

# 5.1 Implementing cross-border HWRC agreements

Implementing a cross-border HWRC agreement with a neighbouring local authority may be useful where HWRCs are located close to authority borders. We researched authorities who already have cross-bored agreements in place, a summary of the key details is shown in Table 36.

All the other authorities have implemented a permit or booking system to support their cross-border arrangement, enabling them to keep track of usage by non-residents. Essex has partnered with Hertfordshire and Suffolk to provide their residents with free reciprocal access to certain HWRCs close to the borders. As they deem the usage to be fairly distributed between the three councils, they have agreed cost sharing is not necessary. On the other hand, Cambridgeshire, and Hertfordshire use ANPR along with their electronic permitting system to apportion associated operational and disposal costs that will be reconciled at the end of the year. As this arrangement was introduced recently, the usage and cost sharing were not yet available. Hampshire have a tripartite agreement with Portsmouth and

Southampton and another cross-border agreement with Dorset and West Sussex to enable free access to HWRCs on the borders, all of which are monitored via ANPR and a registration system.

As CEC do not currently have ANPR or conduct resident checks at any of their HWRC sites, some cross-border use is likely. Staffordshire currently has a similar approach to CEC; whilst non-residents are not allowed a van/trailer permits, they do not monitor cross-border use of their HWRCs and state that they recognise people will use the HWRC closest to them and that 'many [authorities] have a tacit understanding with their neighbouring authority which accepts this situation'. This is pertinent as the traffic analysis above shows the majority of CEC's HWRC visitors came from Staffordshire.

If CEC decide to peruse a cross-border agreement with a neighbouring authority, consideration should be given to the practicality and cost of vehicle monitoring approaches. Ideally, both authorities would utilise the same monitoring methodology e.g. booking system or ANPR. The suggested further traffic analysis over several days will help the Council's decide if costs need to be shared. Ample time should also be allocated to implementing and publicising cross-border proposals.

<sup>&</sup>lt;sup>6</sup> Policies for the usage of Household Waste Recycling Centres, May 2023. Accessed on 3/1/24

Table 36: Key details of cross-border HWRC arrangements in other local authorities

Local Authorities	Details	Monitoring process	Cost sharing	Timeframe	Usage
Essex, Hertfordshire & Suffolk	Hertfordshire residents need free permit & to book in advance to use Essex HWRCs. Essex residents need a digital permit and are permitted to use Bishops Stortford, Hoddesdon, Turnford and Ware Recycling Centres.	Online booking system, ANPR at some sites. Staff check confirmation of booking on arrival. Where there are no reciprocal arrangements, proof of residency required.	No cost sharing. The impacts are considered reciprocal without financial impacts.	Approximately three months.	Not available.
Hampshire County Council	Residents of Portsmouth, Southampton, Dorset or West Sussex can access all Hampshire HWRCs free of charge. They need to register their cars. Other non-Hampshire residents will be charged £5 per visit and cannot obtain a van or trailer permit.	Registration of cars, booking system and ANPR	Hampshire provide 24 HWRCs in Hampshire, with another 2 provided by Portsmouth and Southampton City Councils. Costs for these are shared under a tripartite agreement. There are cross-border agreements in place with 2 neighbouring authorities to Hampshire to allow their residents to access our sites free of charge.	Developed over several years and are regularly reviewed.	Less than 2% of all HWRC users originate from outside of Hampshire's borders.
Cambridgeshire & Hertfordshire	Only cars. Royston HWRC in Hertfordshire and Thriplow HWRC in Cambridge may be used by residents from either LA.	Must obtain a free annual permit, issued electronically, and checked by staff on arrival. ANPR also in place for cost apportionment.	Costs are calculated quarterly based on site running costs and the percentage of site users coming from the other county based on monitoring results.	March 23- December 23	As of Dec 23, 46 permits in place for Hertfordshire residents to use Thriplow but only a single visit recorded.

### 6 Mobile HWRCs

Mobile HWRCs are offered by some local authorities as a way of supplementing the coverage provided by their permanent HWRCs. Mobile HWRC provisions vary but usually consist of one to three staffed collection vehicles that visit public spaces, such as supermarket carparks, on a rotating schedule; Figure 11 shows an example mobile HWRC set up.



Figure 11: Mobile HWRC example set up

Mobile sites offer the flexibility to offer HWRC services to residents in more rural locations and those in areas of higher deprivation who may not have easy access to permanent HWRCs. The information gathered from local authorities who already offer a mobile HWRC service is summarised in Table 37, these authorities were not selected for their similarity to CEC.

The mobile services researched vary in their approach and were initiated for different reasons including to reduce fly tipping and as a mitigating measure when introducing four-weekly refuse collections. All the mobile HWRC services will require a permit or permit exemption from the Environment Agency (EA). Most of the authorities we questioned were operating under the waste exemption: Non-Waste Framework Directive (NWFD) 4 temporary storage at a collection point<sup>7</sup> and the Regulatory Position Statement (RPS) 223: Temporary community waste collection points<sup>8</sup>. This means that the authorities were exempt from requiring a permit to run the mobile HWRCs. However, we advise checking with the EA directly to confirm what permit requirements would be required in CEC.

<sup>&</sup>lt;sup>7</sup>Environment Agency guidance, <u>Waste exemption: NWFD 4 temporary storage at a collection point</u> (Nov 2023), accessed Dec 2023

<sup>&</sup>lt;sup>8</sup> Environment Agency guidance, <u>Temporary community waste collection points: RPS 223 Temporary community waste collection points: RPS 223 (Feb 2023)</u>, accessed Dec 2023

Table 37: Key aspects of mobile HWRC services provided by other local authorities

Local Authority	Materials accepted	No. of locations	Frequency	Opening times	Provision	Tonnage	Permit type
Blackpool – Rover Mobile recycling unit	Most standard HWRC wastes.  No green waste, general waste, hazardous waste or large items.	85 (average 16 per day)	Once a week	20 mins each location from 9am – 3:20pm	7.5t Luton box van used 1 driver and 1 operative	Up to 600kg a day on average	Unknown
Birmingham	Recycling including paper, cardboard, glass, plastic, tins, TetraPak, and clothes. Garden waste and wood. Bulky items, including furniture are collected with household rubbish that cannot be reused.	550- locations depend on number of elected members in the ward, fly- tipping reports and the tonnage collected	20 different locations per week	7am- 12:30pm	1 RCV for refuse, 1 Kerb-sort vehicle for recycling, 1 driver + 1 loader in each vehicle, Total= 8 vehicles and 16 staff	5149.5 tonnes between Sept 21-Oct 23	RPS 223, NWFD 4
Conwy	No DIY (as charged for at HWRCs)	3	One Saturday per month in each location	9-11am with booking system	1 x RCV for green waste, 1 x box van for reusable items and 1 x walk in skip for everything else. Total= 3 x vehicles, 3 x staff	1.5-2 tonnes per session/site	RPS 223

# **6.1 Costings & recommendations**

The cost of running a mobile HWRC will depend upon the number of locations, frequency, and timing of services. The most cost-effective solution is to utilise existing fleet by providing collection services on Saturdays. CEC could implement up to 8 monthly half days collection points. While staffing may be more expensive due to weekend rates, there would be no requirement to purchase additional vehicles. If CEC were to implement 8 half-day Saturday mobile site locations served by 3 x vehicles and 3 x staff over 4 Saturdays per month, it would cost approximately £62,500 annually. This would be reduced to around £47,000 if provided to six sites over 3 Saturdays per month. Table 38 below shows a breakdown of the estimated annual costs for providing each mobile HWRC service.

Table 38: Mobile HWRC costings for 8 and 6 locations

Item	8 half days	6 half days
Staff	£30,500	£23,000
Fuel	£17,000	£12,750
Advertising	£5,000	£3,750
Management	£10,000	£7,500
Total	£62,500	£47,000

The locations of mobile HWRCs should be led by the areas which have least coverage in terms of travel time analysis; the rural south of the borough has less HWRC coverage in all scenarios so may benefit from a mobile HWRC location for example, at Audlem. Should any of the current HWRCs be closed, then a mobile provision could help alleviate the strain on the remaining sites and lessen the impact on residents.

# 7 Pedestrian and cycle access

Some authorities in the UK now allow HWRC access to pedestrians, cyclists and/or mobility scooters. Densely populated areas may benefit most from pedestrian access as often residents living in flats don't have space for a car or bike. Enabling alternative access is unlikely to supplement the closure of HWRCs but opening HWRC access beyond vehicles makes them more accessible to more of the population and enables lower-carbon travel to sites, all of which aligns with CEC's aims of providing a fair, open and green service. However, allowing this type of HWRC access requires careful forethought to ensure the safety of all visitors.

Research was undertaken into the current best practice amongst authorities already offering non-vehicle access to their HWRCs which is summarised in Table 39. Most authorities only allow pedestrian access at specific HWRCs where separate entrances and walkways have been put in place, in the case of Bristol and Keynsham, the cost of this was absorbed within the total cost of building a new HWRC. Where pedestrian access has been allowed at existing HWRCs, either a specific window of time is allocated for those on foot while vehicles are not permitted (Hampshire) or public footpaths were already in place to make it safe (Herefordshire). The simplest and safest way to allow pedestrian access would be to implement Hampshire's method of allocating a time slot for alternative access. Their approach to treating cyclist the same as vehicles may also work well for CEC's HWRCs but would increase on site risks.

As only residents who live within a 20-minute cycle or walk to a HWRC are likely to utilise this type of access, it may only be necessary at HWRCs in densely populated areas such as Macclesfield and Crewe. The current pedestrian walkways at Crewe (Figure 12) have the potential to be expanded for cyclists but Macclesfield's existing pedestrian walkways are tighter (Figure 13). Adjustment to entrances and pathways up to the skips would be required, along with clear signage and maps throughout the site. Although this is feasible, an alternative recommendation would be to require cyclists to dismount at the entrance and walk push their bikes to the existing pedestrian sections.



Figure 12: Crewe HWRC pedestrian route



Figure 13: Macclesfield HWRC pedestrian route

Table 39: Key aspects for pedestrian and/or cyclist access to HWRCs

Local Authority	Cyclist and/or pedestrian	Changes made	Booking	ID	Extra Costs?	Number of visits by foot/bike
Herefordshire	Cyclist all, Pedestrian at Kington, Ledbury and Ross-on- Wye	Public footpaths up to the site gateways already in place.	Y	Υ	None.	Unknown.
Bristol (Hartcliffe Way)	Both	A pedestrian gate entrance. Shared cycle lane and pedestrian route. A map by the entrance & signage throughout the site. Designated areas for cyclists and pedestrians were designed into new HWRC.	N	Y	New build so can't separate our costs. Highway infrastructure had already been installed by council. Bike trailers £300 + £150/year servicing.	Unknown.
Keynsham	Both	The new Reuse and Recycling Centre is accessed via World's End Lane, which has been widened to a two-way road with a dedicated cycle path and footpath.	N	Y	Unknown.	Unknown.
Hampshire	Cyclists access at all.  Pedestrian (and mobility scooter) between 9-10am at Hedge End Thursday & New Alresford  Thursday and Saturday.	Cyclists queue and park in a bay. Advised to wear high-vis. Cars not allowed on site during pedestrian time window. New walkways, barriers, and reverse parking policy. No access for residents who drive, park outside and attempt to walk in.	Y	Υ	Amount unknown but split between Veolia and Council	Few pedestrian site visits per week. Cyclists made up 0.01% of bookings last financial year.

# 8 Concluding remarks

The review presented in this document analyses the current HWRC network provision (Baseline - scenario 1) in comparison to four key scenarios identified by Cheshire East Council. The report also benchmarks Cheshire East Council's HWRC provision against that of neighbouring and similar authorities. The analysis shows that scenarios 3 and 5 are likely to provide some cost savings compared to the current provision. The current provision offers the best coverage in terms of ensuring most residents are within a 15-or 20-minute drive from a HWRC but scenario 2b (closing Bollington) also offers almost the same coverage as the baseline. Scenario 2a, 3 and 4 all place over 96% of residents within a 20-minute drive of a HWRC. Overall, the analysis shows that a reduction in the number of sites, whilst having a localised impact, does not present a problem for most residents.

Scenario 3, closing Bollington, Middlewich & Poynton, presents the best financial savings ( ) and minimises coverage overlap whilst placing over 96% of households within a 20-minute drive of a HWRC. However, this option is likely to place considerable strain on the Macclesfield HWRC which would likely require expansion to cope.

Whereas scenario 5, closing Alsager, Bollington, Middlewich & Poynton, presents the second most savings ( ), it also poses operational risks at Crewe and Macclesfield due to substantial increases in visitor numbers and tonnage. Furthermore, the 2030 projections for new households are highest in Crewe and Macclesfield areas, which could increase footfall and therefore tonnage at these HWRCs.

If cost-efficiency is a priority for the Council, then aiming for a 70% recycling rate could improve their financial position by approximately per year. Cheshire East's current recycling rate is one of the highest in the region (63.4% in 2022/23 inclusive of rubble) but other UK authorities have achieved 80%. The Council continues to provide the second highest number of HWRCs per 100,000 population (1.76) out of its neighbouring authorities (Manchester provides just 0.7) and this may relate to also having one of the lowest annual throughputs per household (169kg) of comparable authorities.

Cross-border tipping issues were analysed from the traffic monitoring data provided. Although this represents a snapshot of a single day's use, it shows that on average 5% of HWRC visitors did not match to Cheshire East postcode. Neighbouring authorities' approach to cross-border use is relaxed however, should the Council wish to pursue an agreement to share cross-border tipping costs, further traffic analysis over a longer time period is recommended to ascertain if such an agreement is necessary.

A mobile HWRC service would be a cost-efficient way to limit the impact of any current HWRC closures whilst also providing coverage to those in the rural south of Cheshire East. This report presents modelled costings for 8 and 6 locations for half days each on Saturdays. By using existing fleet, the cost would be £62,500/year for 8 locations or £47,000/year for 6.

Alternative access to HWRCs, specifically bicycle and pedestrian, will enable lower-carbon travel to sites and benefit those who don't have access to a vehicle. This type of access may not be necessary at all HWRCs and would benefit densely populated areas the most. To ensure safety on site, Cheshire East Council would either need to create segregated paths for cyclists and pedestrians or assign a window of time on certain days for pedestrian/cyclist access when vehicles are not permitted. The latter option would be quickest and cheapest to implement. In any instance, a thorough risk assessment and clear signage throughout the sites would be essential.

**Appendix A** 

Appendix A				
POSTCODES	Number of Households			
CW1 4LR	18			
CW1 4ST	19			
CW1 4UP	9			
CW1 4UQ	4			
CW1 5AP	23			
CW1 5BH	17			
CW1 5BJ	9			
CW1 5BN	5			
CW1 5BP	20			
CW1 5BS	13			
CW1 5BU	16			
CW1 5BW	2			
CW1 5BY	23			
CW1 5DB	4			
CW1 5DH	13			
CW1 5SW	11			
CW10 0RU	42			
CW10 0RX	10			
CW10 0RZ	10			
CW10 9RL	50			
CW11 1LJ	12			
CW11 1LL	12			
CW11 3TY	8			
CW11 3TZ	20			
CW11 3UA	23			
CW12 1GU	2			
CW12 2QU	26			
CW12 2QW	15			
CW12 2RA	12			
CW12 2RB	11			
CW12 2RH	20			

CW12 2RS	1
CW12 2RZ	5
CW12 2SF	1
CW12 3UN	4
CW12 3UP	19
CW2 5UT	12
CW2 5XQ	21
CW2 5XR	5
CW2 5XS	6
CW2 5XT	14
CW2 5XU	53
CW2 5XX	45
CW4 7GQ	56
CW4 7GR	1
CW4 7GS	23
CW4 8GP	8
CW5 6XX	12
CW5 6XY	6
CW5 6YA	9
CW5 6YB	14
CW5 6YD	37
CW5 6YQ	9
CW5 6YR	7
CW5 6YS	20
CW5 6YU	41
CW5 6YW	5
CW5 6YX	24
CW5 6YY	20
CW5 6YZ	51
CW5 6ZD	22
CW5 6ZE	20
CW5 6ZF	23

CW5 6ZG	19
CW5 8FZ	12
CW5 8GB	10
CW6 9YS	7
CW6 9YT	3
CW6 9ZE	7
CW6 9ZF	5
CW6 9ZG	4
SK10 1GJ	15
SK10 1GL	6
SK10 1GN	6
SK10 1GP	5
SK10 1GQ	4
SK10 1GR	10
SK10 1GS	4
SK10 1GT	4
SK10 1GW	5
SK10 1GX	4
SK10 1GZ	12
SK10 1JB	8
SK10 3FY	11
SK10 4ZJ	5
SK10 4ZP	8
SK10 5GJ	4
SK11 0AU	43
SK11 0AX	33
SK11 OBP	14

SK11 OBT	8
SK11 0EY	6
SK11 0FW	2
SK11 7ZF	17
SK11 7ZG	17
SK11 7ZH	18
SK11 9GJ	1
SK9 2TZ	7
SK9 3DD	42
SK9 3FS	19
SK9 3FX	4
SK9 3GD	19
SK9 3GE	5
SK9 3GH	8
SK9 4GA	16
SK9 5GG	4
SK9 6GL	4
ST7 2ZP	18
ST7 2ZQ	41
ST7 3FF	5
WA14 4ZG	5
WA16 0GS	2
WA16 0XN	7
WA16 0XP	1
WA16 0XQ	13
WA16 9GL	4
116	1634

# **Appendix B**

LPS housing and employment monitoring (Provided by Cheshire East).

This Appendix illustrates the distribution of housing and employment land across the Borough as set out in the LPS, for each settlement in the Principal Towns and Key Service Centres tiers of the settlement hierarchy, as well as the total figures for Local Service Centres and the Other Settlements and Rural Areas. It updates the figures in LPS Appendix A 'Proposed growth distribution'.

The figures are up-to-date as of 31 March 2023 and will be updated yearly through the AMR.

#### Housing growth distribution

Table 13.1 to Table 13.5 illustrate the distribution of housing growth across the Borough as set out in the LPS, for each settlement in the Principal Towns and Key Service Centres, as well as the total figures for Local Service Centres and Other Settlements and Rural Areas.

Table 13.1 Housing distribution: Principal Towns

Area (expected level of development)	Type (site allocations and other sites)	Completions to 31/3/23	Commitments at 31/3/23	Remainder of allocation (without permission)	Total
Crewe	LPS 1 Central Crewe (400)			108	108
Crewe	LPS 2 Basford East (850)		774	76	850
Crewe	LPS 3 Basford West (370)	370			370
Crewe	LPS 4 Leighton West (850), and LPS 5 Leighton (500) combined to reflect planning applications		1,650		1,650
Crewe	LPS 6 Crewe Green (150)		146		146
Crewe	LPS 7 Sydney Road (including extended site) (525)	133	361		494
Crewe	LPS 8 South Cheshire Growth Village (650)			650	650
Crewe	LPS 9 The Shavington / Wybunbury Triangle (400)	253	187	0	440
Crewe	LPS 10 East Shavington (275)	214	61		275
Crewe	LPS 11 Broughton Road (175)		236		236
Crewe	Other Sites	3,422	926		4,348
Crewe (7.700)	Crewe subtotal	4,392	4,341	834	9,567
Macclesfield	LPS12 Central Macclesfield (500)			132	132
Macclesfield	LPS 13 South Macclesfield Development Area (1050)	87	1,013		1,100

Macclesfield	LPS 14 Land East of Fence Avenue (250)	2	298		300
Macclesfield	LPS 15 Land at Congleton Road (300)			300	300
Macclesfield	LPS 16 Land South of Chelford Road (200)		216		216
Macclesfield	LPS 17 Gaw End Lane (300)		306		306
Macclesfield	LPS 18 Land between Chelford Road and Whirley Road (150)	3	162		165
Macclesfield	Other Sites	1,893	693		2,586
Macclesfield (4,250)	Macclesfield subtotal	1,985	2,688	432	5,105
All Principal Towns (11,950)	Principal Towns total	6,377	7,029	1,266	14,672

Table 13.2 Housing distribution: Key Service Centres

Area (expected level of development)	Type (site allocations and other sites)	Completions to 31/3/23	Commitments at 31/3/23	Remainder of allocation (without permission)	Total
Alsager	LPS 20 White Moss Quarry (350)		0	350	350
Alsager	LPS 21 Twyfords and Cardway (550)	226	112	212	550
Alsager	LPS 22 Former MMU Campus (400)	414	31		445
Alsager	Other Sites	850	27		877
Alsager (2,000)	Alsager subtotal	1,490	170	562	2,222
Congleton	LPS 26 Back Lane / Radnor Park (750)	444	456		900
Congleton	LPS 27 Congleton Business Park Extension (625)		154	471	625
Congleton	LPS 28 Giantswood Lane South (150)	131			131
Congleton	LPS 29 Giantswood Lane to Manchester Road (500)		454		454
Congleton	LPS 30 Manchester Road to Macclesfield Road (450)	502	27		529
Congleton	LPS 31 Tall Ash Farm (225)	131	105		236
Congleton	LPS 32 Lamberts Lane (225)	152	87		239
Congleton	Other Sites	1,616	171		1,787

Congleton (4,150)	Congleton subtotal	2,976	1,454	471	4,901
Handforth	LPS 33 North Cheshire Growth Village (1500)		1,499		1,499
Handforth	LPS 34 Land between Clay Lane and Sagars Road (250)	121	103		224
Handforth	Other Sites	178	324		502
Handforth (2,200)	Handforth subtotal	299	1,926	0	2,225
Knutsford	LPS 36 Land North of Northwich Road (175)	53	137		190
Knutsford	LPS 36 Land West of Manchester Road (75)		60		60
Knutsford	LPS 36 Land East of Manchester Road (250)		275		275
Knutsford	LPS 37 Parkgate Extension (200)	27	209		236
Knutsford	LPS 38 Land South of Longridge (225)			225	225
Knutsford	Other Sites	65	63		128
Knutsford (950)	Knutsford subtotal	145	744	225	1,114
Middlewich	LPS 42 Glebe Farm (525)	58	416		474
Middlewich	LPS 43 Brooks Lane Strategic Location (200)		114	86	200
Middlewich	LPS 45 Land off Warmingham Lane (Phase 2) (235)		235		235
Middlewich	SADPD MID 1: East and west of Croxton Lane (50)			50	50
Middlewich	SADPD MID 2: Centurion Way (75)			75	75
Middlewich	Other Sites	761	59		820
Middlewich (1,950)	Middlewich subtotal	819	824	211	1,854
Nantwich	LPS 46 Kingsley Fields (1100)	699	401		1,100
Nantwich	LPS 47 Car Park, St Annes Lane, Nantwich	0	31		31
Nantwich	Other Sites	1,185	262		1,447
Nantwich (2,050)	Nantwich subtotal	1,884	694	0	2,578
Poynton	LPS 48 Land adjacent to Hazelbadge Road (150)		133		133
Poynton	LPS 49 Land at Sprink Farm (150)	65	83		148
Poynton	LPS 50 Land South of Chester Road (150)	126	0		126

Poynton	SADPD PYT 1: Poynton		0	80	80
Poynton	Sports Club (80) SADPD PYT 3: Land at Poynton High School (20)		0	20	20
Poynton	SADPD PYT 4: Former Vernon Infants School (50)		0	50	50
Poynton	Other Sites	151	17		168
Poynton (650)	Poynton subtotal	342	233	150	725
Sandbach	LPS 53 Land Adjacent to J17 of M6, south east of Congleton Road (450)	404	17	0	421
Sandbach	Other Sites	2,476	298		2,774
Sandbach (2,750)	Sandbach subtotal	2,880	315	0	3,195
Wilmslow	LPS 54 Royal London (175)		174		174
Wilmslow	LPS 56 Little Stanneylands (200)	141	41		182
Wilmslow	LPS 57 Heathfield Farm (150)	161	0		161
Wilmslow	Other Sites	554	141		695
Wilmslow (900)	Wilmslow subtotal	856	356	0	1,212
All Key Service Centres (17,600)	Key Service Centre total	11,691	6,716	1,619	20,026

Table 13.3 Housing distribution: Local Service Centres

Area (expected level of development)	Type (site allocations and other sites)	Completions to 31/3/23	Commitments at 31/3/23	Remainder of allocation (without permission)	Total
Alderley Edge	Other Sites	96	59		155
Alderley Edge	Alderley Edge subtotal	96	59	0	155
Audlem	Other Sites	218	7		225
Audlem	Audlem subtotal	218	7	0	225
Bollington	Other Sites	228	117		345
Bollington	Bollington subtotal	228	117	0	345
Bunbury	Other Sites	71	34		105
Bunbury	Bunbury subtotal	71	34	0	105
Chelford	Other Sites	200	4		204
Chelford	Chelford subtotal	200	4	0	204
Disley	Other Sites	224	14		238
Disley	Disley subtotal	224	14	0	238
Goostrey	Other Sites	12	1		13
Goostrey	Goostrey subtotal	12	1	0	13
Haslington	Other Sites	381	101		482
Haslington	Haslington subtotal	381	101	0	482

Holmes Chapel	Other Sites	763	111		874
Holmes Chapel	Holmes Chapel subtotal	763	111	0	874
Mobberley	Other Sites	10	2		12
Mobberley	Mobberley subtotal	10	2	0	12
Prestbury	Other Sites	66	18		84
Prestbury	Prestbury subtotal	66	18	0	84
Shavington	Other Sites	287	61		348
Shavington	Shavington subtotal	287	61	0	348
Wrenbury	NP Wrenbury HOU01 New Road Wrenbury (10)	0	0	10	10
Wrenbury	Other Sites	84	45		129
Wrenbury	Wrenbury subtotal	84	45	10	139
All Local Service Centres (3,500)	Local Service Centre total	2,640	574	10	3,224

Table 13.4 Housing distribution: Other Settlements and Rural Areas

Area (expected level of development)	Type (site allocations and other sites)		Commitments at 31/3/23	Remainder of	Total
	LPS 61 Alderley Park Opportunity Site (300)	191	78	31	300
Other Settlements	NP Calveley A Station Road, Calveley (8)	9	0		9
Other Settlements and Rural Areas	NP Calveley B Land adjacent to The Mount, Calveley (6)		0	6	6
Other Settlements and Rural Areas	NP Calveley C Station House, Nantwich Road, Calveley (4)		4		4
Other Settlements and Rural Areas	NP Hankelow A: The Nook, Audlem Road, Hankelow			4	4
Other Settlements and Rural Areas	NP Hankelow B: Land off Monks Lane, Hankelow		2		2
Other Settlements and Rural Areas	Other Sites	2,275	1,098		3,373
Other Settlements and Rural Areas (2,950)	Other Settlements and Rural Areas total	2,475	1,182	41	3,698

Table 13.5 Housing distribution: All areas

IIEVELOT	Type (site allocations and other sites)	Completions to 31/3/23	Commitments at 31/3/23	Remainder of allocation (without permission)	Total
All areas (36,000)	All areas total	23,183	15,501	2,936	41,620