Hertfordshire Waste Partnership

Annual Report – 2016/17



























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Foreword



Cllr Terry Hone (Chairman)

Executive Member for Community Safety & Waste Management Hertfordshire County Council



Cllr Helen Bromley (Vice Chairman)

Executive Member for Environment Welwyn Hatfield Borough Council During 2016/17 the Hertfordshire Waste
Partnership achieved further improvements in
performance as a result of ongoing changes
to waste and recycling services provided by a
number of the Partner Authorities. These included
alterations to kerbside recycling services for dry
recyclates and organic wastes as well as changes
at the Household Waste Recycling Centres.
3

As result by March 2017 the HWP's overall recycling rate (including re-use and composting) had risen to **52.2%** the highest ever achieved by the Partnership. In addition the full year effect of a number of interim waste disposal contracts, which see unrecycled residual wastes sent to energy recovery, also saw the HWP's overall recovery rate increase to **88.5%** compared to the **81.4%** achieved during 2015/16.

This means that out of every 100 tonnes of household waste produced in Hertfordshire *only 11½ tonnes* was sent to landfill with the rest re-used, recycled, composted or processed to produce energy thereby contributing to the nation's energy needs.

Whilst these further improvements are to be welcomed the HWP is also grappling with a range of significant risks ranging from ongoing reductions in Government funding; to the potential impacts of Brexit including especially how this may impact on the ability to trade recyclables in the global market place; to an expansion of the Partnership's remit which has seen it take on responsibility for co-ordinating the County's response to the menace of fly tipping.

As always we hope you enjoy reading our annual report and would encourage you to feedback and comment on any aspect of the work undertaken by the HWP...see page 33 for contact details.

Hertfordshire Waste Partnership – Annual Report 2016/17

1. Background

The Hertfordshire Waste Partnership, (HWP) was formed in 1992 bringing together the ten borough and district councils in their capacity as waste collection authorities and the county council as the waste disposal authority (herein referred to as the 'Partners') and is one of 50 such partnerships throughout the UK.

Collectively, the HWP dealt with approximately 512,000 tonnes of local authority collected waste during 2016/17 at a cost of approximately £82.47 million. Of this £43.1 million was spent on waste treatment and disposal with the remainder spent on collection services.

The Partnership is overseen by the HWP Member group which is made up of elected councillors from each of the Partners who hold the relevant portfolio for waste management. The Member group is supported by two senior officer groups - the Directors group and the Heads of Waste group.

The HWP has no authority over individual services and instead considers matters of strategic importance and opportunities for joint working. It makes recommendations about the long-term development of waste services in pursuit of targets detailed in the 2007 Joint Municipal Waste Management Strategy, objectives and principles detailed in the Hertfordshire Waste Partnership Agreement signed in January 2012 and in response to legislative changes. The HWP unit is jointly funded by the Partners and employs a Partnership Development Manager and a WasteAware Co-ordinator.

WasteAware is the public face of the HWP and concentrates on changing 'waste behaviour' by focusing on the 4Rs, reduction, re-use, recycling and recovery. With particular emphasis on actions before waste is generated the HWP hopes to reduce the amount of waste that needs to be recycled or disposed of.









2. Summary

2.1 Performance 'At a glance' (green represents improvement, red indicates deterioration)

| Boroughs & Districts | 2015/16 | 2016/17 | Change | Trend |
|---------------------------------|---------|---------|---------|---------|
| Dry recycling | 97,112 | 102,358 | 5,246 | |
| Re-use | 307 | 255 | -52 | + |
| Composting | 108,671 | 113,087 | 4,416 | |
| Residual waste | 219,869 | 209,092 | -10,777 | + |
| Total | 425,959 | 424,792 | -1,167 | + |
| Combined Borough Recycling Rate | 48.4% | 50.8% | 2.4% | |

| County Council | 2015/16 | 2016/17 | Change | Trend |
|---|---------|---------|--------|----------|
| Dry recycling | 33,378 | 33,377 | -1 | + |
| Re-use | 998 | 1,168 | 170 | |
| Composting | 8,123 | 7,931 | -192 | + |
| Residual waste | 25,103 | 27,403 | 2,300 | |
| Total | 67,602 | 69,879 | 2,277 | |
| Household Waste Recycling Centre Recycling Rate | 62.9% | 60.8% | -2.1% | + |

| HWP Totals | 2015/16 | 2016/17 | Change | Trend |
|-----------------------------|---------|---------|---------|---------|
| Dry recycling | 130,490 | 135,735 | 5,245 | |
| Re-use | 1,305 | 1,423 | 118 | |
| Composting | 116,794 | 121,018 | 4,224 | |
| Residual waste – EfW | 153,131 | 179,586 | 26,455 | |
| Residual waste – landfill | 87,962 | 52,907 | -35,055 | + |
| Residual waste – other | 2,722 | 3,890 | 1168 | |
| Non Compostable Wastes | 1,155 | 112 | -1,043 | + |
| Total | 493,559 | 494,671 | 1,112 | |
| HWP overall recycling rate | 50.4% | 52.2% | 1.8% | |
| HWP landfill diversion rate | 81.4% | 88.5% | 7.1% | |

2.2 Waste Minimisation

The HWP recognised some time ago that the need to minimise / reduce waste long term would be key in measuring the impact of waste reduction messages and other behavioural change activity funded by the partners. For this reason each year the

HWP tracks total waste per household. Long term success measured by this indicator is overall waste levels falling with an increasing percentage recycled. Table 1 below looks at total waste per household over the last seven years.

Table 1: Total household wastes (kilograms per household)

| Year | Broxbourne | Dacorum | East Herts | Hertsmere | North Herts | St Albans | Stevenage | Three Rivers | Watford | Wel / Hat | Herts CC | H W |
|---------|------------|---------|------------|-----------|-------------|-----------|-----------|--------------|---------|-----------|----------|--------|
| 2016/17 | 923 | 895 | 889 | 904 | 872 | 868 | 861 | 907 | 859 | 821 | 145 | 1,024 |
| 2015/16 | 907 | 895 | 910 | 912 | 875 | 869 | 886 | 927 | 858 | 871 | 141 | 1,031 |
| 2014/15 | 930 | 887 | 906 | 920 | 866 | 869 | 890 | 950 | 855 | 931 | 157 | 1,055 |
| 2013/14 | 919 | 898 | 902 | 923 | 856 | 877 | 857 | 953 | 845 | 962 | 158 | 1,056 |
| 2012/13 | 925 | 898 | 888 | 898 | 869 | 865 | 842 | 929 | 828 | 930 | 125 | 1,013 |
| 2011/12 | 957 | 912 | 913 | 946 | 894 | 874 | 846 | 975 | 861 | 955 | 151 | 1,063 |
| 2010/11 | 951 | 901 | 907 | 926 | 901 | 879 | 861 | 948 | 843 | 1028 | 149 | 1,062 |

source: WasteDataFlow – includes updated figures for previous years where available)

Table 1 shows that total household waste declined in 7 out of the 11 partner authorities during 2016/17 with increases in 3 and no change in 1 authority. However, importantly collectively total household waste per household declined again during 2016/17 to its second lowest level in the last seven years. Reductions were particularly evident in East Herts, Stevenage, Three Rivers and Welwyn Hatfield.

Whilst such reductions per household are to be welcomed, longer term the HWP has to plan for the projected increase in the number of households across the County as a whole. Since the 2015/16 annual report the official number of households has increased by 4270. Similar increases over the next two decades will be equivalent to waste arisings for an entire new district underlining the importance of taking difficult decisions to ensure the County's waste management infrastructure and services are fit for purpose going forward.

2.3 Recycling & Composting

The percentage of household waste recycled (including composting) is a national indicator which the community recognise as a measurement of success and one which features heavily in national and European statistics when it comes to judging the efficacy of regional and national waste management strategies.

Under this context 2016/17 saw all but one of the HWP's partner authorities improve overall levels of recycling with significant increases noted in St Albans and Welwyn Hatfield. In July 2016 St Albans implemented significant changes to their kerbside waste and recycling services which, in common with a number of other Hertfordshire Authorities, saw the provision of smaller 180 litre bins for residual waste together with a new weekly food waste collection service as well as an enhanced service for mixed dry recyclables.

These changes resulted in St Albans showing the biggest improvement in recycling performance during 2016/17 with the full year effect likely to push St Albans to 60%+ recycling by March 2018.

Table 2: Changes in recycling and composting 2016/17

| Authority | 2015/16 | 2016/17 | Change |
|--------------|---------|---------|--------|
| Broxbourne | 40.3% | 41.1% | +0.8% |
| Dacorum | 49.1% | 51.1% | +1.9% |
| East Herts | 48.6% | 51.2% | +2.6% |
| Hertsmere | 42.1% | 43.4% | +1.6% |
| North Herts | 57.6% | 58.9% | +1.3% |
| St Albans | 52.2% | 57.5% | +5.4% |
| Stevenage | 39.4% | 39.8% | +0.4% |
| Three Rivers | 59.4% | 61.9% | +2.5% |
| Watford | 40.1% | 42.9% | +2.8% |
| Wel / Hat | 48.5% | 53.0% | +4.5% |
| Herts CC | 62.8% | 60.8% | -2.4% |
| HWP | 50.4% | 52.2% | +1.8% |

(source: Hertfordshire Waste Partnership)

Based on the current national reporting framework the impact of these changes is noted in the updated table and graph below with the overall HWP recycling performance now increasing for the fourth year in a row rising to the highest ever achieved by the Partnership.

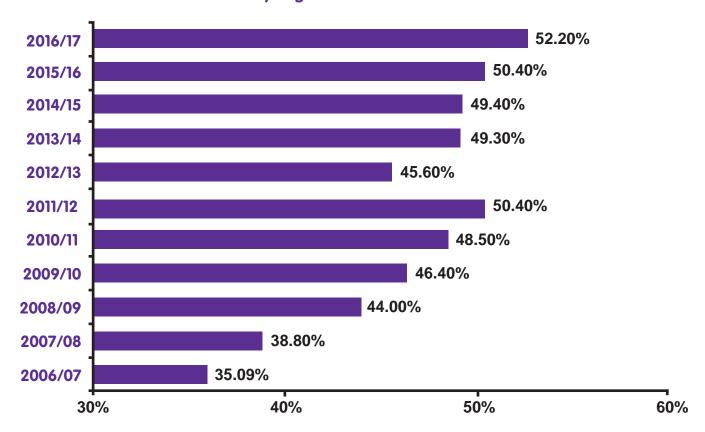
Table 3: Partner Authority and HWP recycling percentages

| Year | Broxbourne | Dacorum | East Herts | Hertsmere | North Herts | St Albans | Stevenage | Three Rivers | Wafford | Wel / Hat | Herts CC | HWP |
|---------|------------|---------|------------|-----------|-------------|-----------|-----------|--------------|---------|-----------|----------|------|
| 2016/17 | 41.1 | 51.1 | 51.2 | 43.4 | 58.9 | 57.5 | 39.8 | 61.9 | 42.9 | 53.0 | 60.8 | 52.2 |
| 2015/16 | 40.3 | 49.1 | 48.4 | 42.1 | 57.6 | 52.2 | 39.4 | 59.4 | 40.1 | 48.5 | 62.8 | 50.4 |
| 2014/15 | 35.0 | 46.3 | 49.5 | 43.3 | 58.5 | 50.4 | 38.2 | 63.2 | 41.7 | 48.0 | 57.5 | 49.4 |
| 2013/14 | 35.0 | 46.2 | 48.5 | 43.2 | 57.3 | 47.7 | 37.4 | 62.4 | 40.6 | 46.6 | 61.2 | 49.3 |
| 2012/13 | 34.3 | 46.8 | 46.6 | 40.5 | 47.3 | 41.6 | 36.8 | 62.0 | 39.7 | 43.8 | 53.0 | 45.5 |
| 2011/12 | 39.6 | 46.7 | 48.4 | 46.7 | 49.5 | 48.3 | 40.0 | 60.5 | 41.2 | 49.9 | 67.9 | 50.4 |

(source: WasteDataFlow – includes updated figures for previous years where available)

The same data from a HWP perspective can be seen in the graph below:

HWP Recycling Rate - 2006/07 to 2016/17



2.4 Residual Waste

Economic growth, which the UK continues to enjoy, normally sees growth in residual wastes. However, in 2016/17 Hertfordshire saw a continuation of recent trends with a further drop in the amount of residual waste per household collected by the Boroughs and Districts.

Residual household waste is now at its lowest level for the last seven years and for the first time went below 450 kilograms per household. There were particularly significant reductions in East Herts, St Albans, Three Rivers and Welwyn Hatfield.

Table 4: Residual waste per household (kgs)

| Year | Broxbourne | Dacorum | East Herts | Hertsmere | North Herts | St Albans | Stevenage | Three Rivers | Watford | Wel / Hat | Herts CC | A W | WCA Average |
|---------|------------|---------|------------|-----------|-------------|-----------|-----------|--------------|---------|-----------|----------|--------|----------------|
| 2016/17 | 544 | 438 | 434 | 512 | 358 | 369 | 519 | 346 | 491 | 386 | 57 | 489.68 | 440 |
| 2015/16 | 541 | 455 | 467 | 528 | 371 | 416 | 534 | 377 | 514 | 449 | 52 | 511.75 | 465 |
| 2014/15 | 604 | 476 | 458 | 522 | 359 | 431 | 550 | 350 | 499 | 484 | 67 | 534.47 | 473 |
| 2013/14 | 597 | 483 | 465 | 524 | 367 | 459 | 536 | 358 | 502 | 514 | 60 | 535.67 | 480 |
| 2012/13 | 608 | 477 | 474 | 535 | 458 | 505 | 532 | 353 | 500 | 523 | 47 | 542.33 | 496 |
| 2011/12 | 578 | 486 | 471 | 504 | 451 | 451 | 508 | 385 | 506 | 478 | 49 | 528.64 | 482 |
| 2010/11 | 578 | 471 | 469 | 533 | 450 | 438 | 524 | 466 | 504 | 653 | 46 | 548.39 | 509 |

(source: WasteDataFlow – includes updated figures for previous years where available)

The reduction in residual waste per household translates into a drop in annual tonnage of over 8400 tonnes. At an average cost of £96.79 per tonne (2016/17) this equates to savings in the region of £813,000 which neither have to be raised from Council Tax or potentially diverted from other services.

Looking at this another way 8400 tonnes spread evenly across Hertfordshire's 482,960 households equates to a reduction of only 17.4kgs per household per annum. This underlines the immense value in households across the County making small simple changes that together can have a very significant impact on the cost of managing the County's household waste.

2.5 Diversion from landfill

In addition to recycling and composting the Partnership also makes extensive use of a number of 'out-of-county' energy from waste plants ranging from Edmonton, North London to Ardley in Oxfordshire.

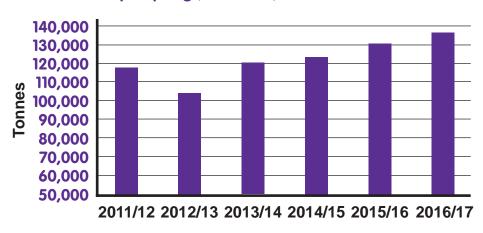
2016/17 saw the full year impact of the interim waste disposal contracts initiated in 2015/16 which delivered further increases in the amount of residual waste sent to energy recovery as noted below:

Table 5: Diversion from landfill

| Tonnes | 2015/16 | 2016/17 | Change |
|-------------------------|---------|---------|---------|
| Recycled | 130,490 | 135,735 | +5,245 |
| Composted | 116,794 | 121,018 | +118 |
| Re-used | 1,305 | 1,423 | +4,224 |
| Energy recovery | 153,131 | 179,586 | +26,455 |
| Landfill | 87,962 | 52,907 | -35,055 |
| Residual waste (other) | 2,722 | 3,890 | 1,168 |
| Non-compostables | 1,155 | 112 | -1,043 |
| Totals | 493,559 | 494,671 | 1,112 |
| Landfill diversion rate | 81.4% | 88.5% | 7.1% |

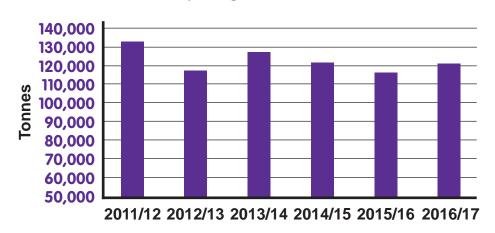
(source: Hertfordshire Waste Partnership)

Dry recycling (inc. re-use) 2011/12 - 2016/17



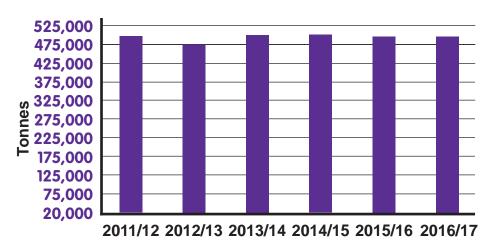
2016/17 continued the trend of recent years with a steady increase in the tonnage of dry recyclables collected for reprocessing. The new St Albans service implemented in July 2016 along with gains in most other HWP Partner Authorities resulted in over 5200 tonnes of additional material being collected. However, at the same anecdotal evidence indicates there is still significant dry recyclables in Hertfordshire's residual waste stream needlessly being sent to either energy recovery or landfill.

Composting 2011/12 - 2016/17



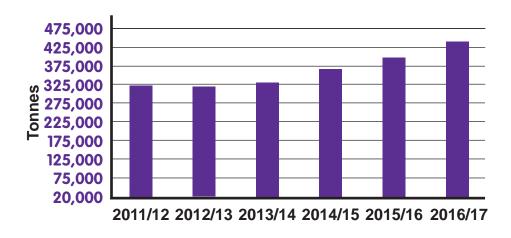
During 2016/17, and reflective of the weather conditions experienced, the amount of organic material (garden waste and food waste) increased. This is especially significant as 2016/17 also saw Three Rivers become Hertfordshire's first Partner Authority to charge for the collection of garden wastes. Two more Hertfordshire Authorities have since followed suit (see 3.1).

Total household waste 2011/12 - 2016/17



As noted above whilst total household waste per household declined, overall tonnages were slightly up on 2015/16 increasing from 493,559 tonnes during to 494,671 tonnes during 2016/17. It should be remembered that these numbers also include tonnages re-used, recycled, composted and recovered. However, they also represent significant net cost to the tax payer underlining the need for an increasing focus on preventing waste in the first place.

Diversion from landfill 2011/12 - 2016/17



In addition to the HWP achieving its highest ever recycling rate 2016/17 also saw further significant increases in the amount of non-recycled residual waste sent for energy recovery; 87,962 tonnes compared to 52,907 tonnes during 2015/16. Together with recycling (135,735 tonnes) and composting (121,018 tonnes) this means that the HWP's overall recovery rate rose to 88.5%. Going forward the HWP needs to focus on diverting as much as possible to recycling and composting.

3. Highlights - 2016/17

3.1 Three Rivers – chargeable garden waste collections

As part of the public sector waste management services provided by Hertfordshire's local authorities are not immune to the impact of on-going reductions in Central Government funding. Yet at the same time the HWP's Partner Authorities are still expected to contribute to national and European waste targets that have to be achieved by 2020.

During 2016/17 these opposing pressures resulted in Three Rivers District Council becoming Hertfordshire's first local authority to introduce charges for the collection of garden waste, having previously implemented separate weekly collections for fully commingled dry recyclables and food wastes.

Having previously consulted with residents, in July 2016, the Authority implemented a £35 per annum charge for the fortnightly collection of garden wastes, discounted in the first year. Although not universally supported, the Three Rivers subscription service has ultimately proved popular with 74% of the applicable households subscribing during 2016/17.

7



Three Rivers new chargeable garden waste service has proved very popular whilst also delivering significant savings for the Authority

One of the important factors behind the success of the implementation was a decision by Three Rivers not to remove bins from non-subscribers straight away. Instead by leaving bins in situ residents were given the chance to explore alternative options for dealing with the garden waste. These ranged from home composting to use of their local HWRC. As such residents were able to form a judgement with respect to the relative merits, convenience and costs associated with each choice with a significant number ultimately deciding to participate in the new service. Consequently Three Rivers experienced a number of 'follow up' surges in the number of residents joining the new service.

As a result of these changes the loss of garden waste tonnage during 2016/17 was minimal with the Authority still sending 10,690 tonnes of garden waste to composting compared to 10,995 tonnes during 2015/16, a reduction of only 2.85%. This potentially indicates that the majority of garden wastes recycled by an individual Authority are likely to come from only 40% – 50% of households. This idea will be further tested when quarter 1 results for 2017/18 become available for Broxbourne and Welwyn Hatfield who implemented similar subscription services in April 2017.

3.2 St Albans – a new waste, recycling and street cleansing service

One of the strengths of the Hertfordshire Waste Partnership is the ability of Partner Authorities to pursue individual approaches to delivering locally agreed recycling targets in excess of current national and European targets.

In 2016/17 this included St Albans City & District Council letting a new contract for waste, recycling and street cleansing services. Although St Albans was already one of the HWP's higher performing partner authorities their new contract is predicated on bringing forward plans to achieve 60% recycling.

As such following extensive pre-tender research and as well as consultation with residents the new service prioritised recycling and composting over residual waste collection as demonstrated in the graphic below:

Variant Option C (Recommended Option)



A sack/reusable bag/box collection service will be offered at properties currently unable to accommodate wheeled bins.

St Albans new waste and recycling service including smaller bins for residual waste, partially commingled dry recyclables plus a dedicated weekly service for food waste.

Specifically the approach involved reducing the size of the residual waste collection receptacle to 180 litres per fortnight whilst providing a brand new weekly collection service for food waste thus addressing major concerns by residents with respect to food waste needing to be collected weekly. At the same time the collection service for dry recyclables was simplified into a partially commingled system with cans, plastics and glass collected in one stream and paper and card in the other. The new approach resulted in the following changes in 2016/17.

Table 6 - Quarterly changes in 2016/17 compared to 2015/16

| Waste stream | Qtr 1 | Qtr 2 | Qtr 3 | Qtr 4 | 2016/17 |
|----------------|-------|-------|-------|-------|---------|
| Residual waste | +138 | -660 | -1295 | -824 | -2641 |
| Dry Recycling | -58 | -122 | +818 | +297 | +935 |
| Organics | +97 | +532 | +795 | +579 | +2004 |

3.3 Scrutiny of Hertfordshire Waste Partnership

As noted previously the HWP is a Partnership with 11 local authority Partners including Hertfordshire's Boroughs and Districts in their capacity as waste collection authorities and the County Council in its capacity as Hertfordshire's Waste Disposal Authority.

Together as a 'waste partnership' during 2016/17 the HWP spent £82.47 million providing waste collection, processing and disposal services to the residents of Hertfordshire. In turn as one would expect, with a level of expenditure only surpassed by services such as education and social services, the County's 'waste budget' comes under regular scrutiny from both inside and outside the HWP. 2016/17 was no exception with the County Council's Overview & Scrutiny Committee (OSC) electing to undertake its own review of the HWP.

Specifically the aim of the review was to understand and test the current service delivery model for waste management under the context of current and future challenges. To do this the OSC posed a number of specific questions with evidence sought from the Partner Authorities at both officer and Members levels. In addition a number of external stakeholders were also invited to give evidence and included organisations such as the **Environmental Services Association as** well as Improvement East which is part of the Local Government Association. In recognising the progress made by the HWP the OSC noted that for the most part waste management services provided by individual authorities were still being developed in isolation resulting in the potential for joint procurement, efficiencies, savings and the upwards equalisation of standards through joint working being lost. Consequently the OSC concluded that the HWP has not sufficiently evolved and therefore was missing opportunities to deliver better services based on whole service cost thinking.



Independent scrutiny of the HWP is always welcome

Specifically the OSC noted:

- There are undoubtedly barriers to overcome to ensure more effective working. As such the OSC suggested a commitment from all the HWP authorities to develop a fresh approach based on pursing net overall savings for the Hertfordshire taxpayer.
- The OSC were not aware that shared contracts could be sufficiently flexible to respond to the local priorities of the participating authorities. Members regarded this as a key finding of the scrutiny.
- The OSC noted that the HWP had developed a number of joint working initiatives and suggested that these should be developed into case studies to assist partners think through options for future arrangements.

However, the OSC also noted that difficult decisions would require solid Member support to carry them through. General concern was expressed that previous reviews were not embraced by the HWP and the information was not adequately shared with Members outside of the Partnership. It was therefore difficult for local members to challenge existing arrangements without clear and impartial information. In light of the findings the review also recommended that the Herts Leaders Group consider enhancing the role and structure of the HWP Member Group to formalise their involvement in all future procurement and management activity linked to the provision of waste collection, recycling and disposal services.

3.4 Supporting Hertfordshire Fire & Rescue and the Firefighters Charity

In early 2013 the HWP was asked to review the operation of a textile bank network operated by the Firefighters Charity that was raising money from textiles recycled at a number of fire stations across the County.

At the time the review concluded that the income derived could be significantly increased if their operation was integrated into the HWP's existing textile consortium which provides textile recycling banks at approximately 140 sites across the County. The new arrangements were implemented in April 2013. By the end of March 2017 the total amount of money raised over the preceding 4 years had risen to over £20,000 and as of August 2017 had risen to over £23,000.

The Firefighters Charity was originally formed during the Second World War to support the bereaved families of firefighters who had died during the Blitz. In 2015/16 the Charity supported 5,107 individuals – three per cent more than in 2014/15. This figure is rising year on year and the Charity is committed to supporting as many beneficiaries as it possibly can at its centres and within local communities across the UK. However, in order to do this it is essential that their income each year - from voluntary donations and fundraising – matches the cost of delivering the vital services the Charity provides. For those wishing to help you can recycle your unwanted clothes and textiles at the following fire stations:



Firefighters Charity representative, Mr Kevin Biles, receiving a cheque for £20,000 from Commander Steve Holton Hertfordshire Fire & Rescue with FRS colleagues from Baldock & Letchworth

- Baldock & Letchworth
- · Bishops Stortford
- Borehamwood
- Hatfield
- Hemel Hempstead
- Hitchin
- · Potters Bar
- Redbourn
- Rickmansworth
- St Albans
- Ware
- Watford
- Welwyn
- Welwyn Garden City
- Tring

3.5 Brexit – what could this means for Hertfordshire's Waste Management Services

The vast majority of the rules and regulations that govern the UK's waste management operations originate in the European Union.

In addition to basic requirements concerning protection of the public health most relevant to the services provided by the HWP's Partner Authorities are European laws and directives concerning waste, recycling, composting, recovery and disposal. These legislative drivers have resulted in the adoption of stringent targets for reducing reliance on landfill as well as improving recycling.

Against this backdrop and in common with their European counterparts, through the 2000s, the UK's local authorities put together new waste strategies which showed how they intended to address targets arising from the legislation. In response, and supported by mechanisms such as the private finance initiative and landfill tax escalator, the UK's waste management sector invested heavily in new facilities ranging from composting plants to materials recycling facilities to energy from waste plants. Such developments helped the UK to start moving from its historic over reliance on landfill. As illustrated in section 2 of this report the HWP rose to the challenge and 2016/17 posted its best ever results with respect to recycling at 52.2% compared to an UK / EU target of 50% by 2020, which in turn contributed to an overall landfill diversion rate of 88.5%, again the best ever achieved by the HWP.

However, with the UK due to leave the EU the Partnership is currently working with other UK, waste partnerships as well as various technical and professional bodies to both understand and influence what the UK government intends to put in place as a framework which will give the sector the confidence to channel further significant investment in pursuit of improving environmental performance.

Key among the sectors considerations will be what influence and impact the EU's Circular Economy Directive might have on the UK, especially as part of any Brexit deal linked to a longer term trading relationship.

The need for transition from historical and wasteful linear economic models towards more circular constructs is a principle now well understood. As such whilst wide ranging with respect to its potential implications, it is anticipated that the EU's Circular Economy Directive could result in significant new targets for recycling in general, and more specifically food waste and litter.

The Directive has and continues to be the subject of significant debate in both European Council and separately the European Parliament. Both institutions have reached different perspectives with respect to what the final Directive should include.

Consequently in line with the normal EU legislative process both are now engaged in the trilogue stage which will result in the differing positions being reconciled prior to a final Directive emerging towards the end of 2017. Taking the above into account the UK Government expects formal adoption by 2018. Following adoption by the EU, and of course subject to the impact of Brexit, transposition is anticipated to take up to 2 years



Brexit is presenting difficult challenges for the UKs waste management sector

Therefore remembering that there are range of unknowns to potentially deal with Table 7 below summarises the key potential targets and what this could mean for the Partnership and the services provided to Hertfordshire's residents:

Table 7 - EU Circular Economy Directive – summary of main issues

| | Leonomy Directive – Sommary of main issues |
|--|--|
| Circular Economy Directive (CED) | HWP Commentary |
| | The European Council and European Parliament have suggested new recycling targets ranging from 60% to 70% by 2030; with the Parliament favouring the higher end of the scale. It would also appear that the targets will continue to be weight based despite a number of stakeholders suggesting the need for carbon based targets. |
| 1. 60% - 70% recycling target by 2030 | The CED is also supposed to finally resolve long standing issues with respect to how EU Member states calculate recycling rates. 4 methods are currently used across the EU with 2 based on municipal waste and 2 based on household waste. Which method is finally chosen could have a significant impact on the levels of recycling reported. |
| luigel by 2000 | Subject to the final targets, method of calculation, and relative to the HWP's performance in 2016/17 the CED could require new initiatives to capture between 38,000 – 88,000 tonnes of additional waste for recycling and composting (baseline 2016/17). |
| | To achieve such targets the HWP's Partner Authorities would need to consider developments such as smaller bins for residual waste emphasising the need to prevent waste in the first place; comprehensive weekly recycling services; and separately weekly collections for food waste. |
| | In 2016/17, through its extensive recycling, composting and energy from waste programmes the HWP diverted 88.5% of household waste from landfill. Therefore ostensibly a 10% landfill target by 2030 should not present much of an issue for the Partnership as a whole. |
| 2.Reducing landfill to 10% by 2030 | However, in addition to the HWP's current and extensive range of recycling and composting services the Partnership's current use of energy from waste is based on a number of interim contracts using facilities based outside the County. As such it is no means certain whether or not capacity could be secured long term should the County Council's plans for an 'in-County' solution not come to fruition. |
| 3. Separate collection of 'bio-waste' by | On average 30% of the average residual waste bin in Hertfordshire is food waste. At current prices this is costing tax payers in excess of £6.5 million per annum to dispose of compared to lower cost alternatives that can contribute to both energy generation needs as well as landfill diversion. |
| 2020 | With similar issues across most of the EU the CED is being seen as an opportunity to tackle this by introducing new requirements for the introduction of bio waste collection services and could result in a statutory requirement to provide dedicated food waste collections. |

3.6 Broxbourne - new separate weekly food waste collection service

One of Broxbourne's corporate objectives is to reduce residual waste and divert more waste to recycling. In keeping with this aim, in March 2017 the Authority introduced separate weekly food waste collections as part of its core kerbside service provision.

Residual tonnages significantly reduced following a change to the waste service in October 2015, whereby 180 litre black wheeled bins were introduced on a fortnightly collection frequency replacing a weekly sack collection service. At the same time residents were issued with an additional 55 litre recycling box for mixed paper and cardboard recycling. The kerbside offer now includes:

Week 1: Food waste (from a 23 litre caddy), paper and cardboard, plastics and cans and mixed glass (from three 55 litre kerbside boxes) and residual waste (from a 180 litre wheeled bin).



Broxbourne's new food waste collection service in operation

Week 2: Food waste (from a 23 litre caddy) and green waste collection (from a 240 litre wheeled bin - chargeable service).

Broxbourne improved the waste collection service it offers which is available to 32,000 of its residents in 2016/17 by introducing a weekly food waste collection service. Food waste is collected in a 23 litre brown kerbside caddy. It was initially anticipated that at least 2,000 tonnes of recyclable food waste per annum would be collected however this target is being exceeded at the time of writing.

It is projected over 2,000 tonnes of Broxbourne's food waste will be processed at Agrivert's Anaerobic Digestion plant in Colney Heath, Hertfordshire. The methane gas produced from the food waste will power on-site generators to feed electricity into the National Grid. Combined with food waste from other councils, this process will generate enough green electricity to meet the needs of 6,000 households. The process also creates a nutrient rich fertiliser which will be used by local farmers in Hertfordshire. The full weekly service commenced on 3 April 2017 and after circa six months of



Broxbourne is now one of 4 Hertfordshire Authorities to provide dedicated weekly collections for food waste

weekly food waste collections 1,485 tonnes of food waste has been collected which is an average of circa 60 tonnes per week.

From April 2017, Broxbourne will introduce an annual charge for its green waste collection service. In accordance with Controlled Waste Regulations 2012 (Schedule 1;(4)) the Council is not obliged to offer a free service for the collection of green waste. However, rather than withdrawing the green waste collection service, the Council has decided to follow the example of many other authorities and will offer residents the opportunity to pay a small charge for the service. Residents who do not wish to use the service can, home compost, or take their green waste to one of the Household Waste Recycling Centres in the Borough (Turnford or Hoddesdon) free of charge.

4. WasteAware Campaign – 2016/17

4.1 Waste Electrical & Electronic Equipment – take back events

2016/17 began with the launch of a series of waste electrical and electronic equipment (WEEE) take back events across Hertfordshire. The initiative was made possible as a result of a successful bid to a special innovation fund setup by the Department for Business, Innovation & Skills to test different ways to re-use and recycle WEEE. The bid, involving both Hertfordshire and Cambridgeshire County Councils as well as the boroughs and districts from both areas, resulted in an award of £91,000.

The first step was the creation of a joint project team made up of officers from each of the 17 Partner Authorities working together to organise a series of take back events that had to be co-ordinated across both areas.

These were supported by relevant communications material, promotional activity and equipment. 14 events were held across Hertfordshire from April to October, collecting over 59 tonnes of electrical items.

Cambridgeshire held a total of 6 events collecting over 9 tonnes.

Residents attending events were pleased to be able to bring their unwanted WEEE to a location that was more convenient to them and many requested that they become a regular event. The inclusion of re-use for working items also appeared to by a motivating factor for a number of residents.

Ultimately some events were more successful than others. It was noted that more than one factor appeared to influence the success of the events such as proximity to a Household Waste Recycling Centre or events held in more rural locations. The vagaries of the British weather also impacted on a number of events.



Out of the 68 tonnes collected just over 1 tonne was successfully repaired and reused. Whilst this was much lower than expected, analysis showed that the majority of items brought by residents were obsolete, broken, in poor condition or did not come up to modern safety standards meaning that reuse was not viable in the majority of cases.

However, on a more positive note a selection of reused items including Dyson vacuum cleaners, televisions and steam irons were donated to two charities operating in Hertfordshire. These included FReScH in Welwyn Garden City and Nine Lives in Rickmansworth. The two charities, both furniture recycling schemes, sell good quality second hand furniture and electrical items. This includes to customers on means tested benefits who receive a discount which hugely helps people who are struggling financially to obtain the furniture and electrical items they need at low cost.



Cllr Richard Thake, Chairman of the HWP during 2016/17 at one of the take back events in Hemel Hempstead

Going forward social media will be the main avenue for raising awareness on prevention and recycling of WEEE particularly at key times of the year such as in November (Black Friday) and January when residents might be getting rid of items following the festive season.

4.2 Schools WEEE Collections

The free collections for Hertfordshire schools, offered through our partner organisation European Waste Platform (ERP) continued to be extremely popular during 2016/17. In association with ERP, WasteAware, which is the public face of the HWP, arranged for anything with a plug or battery to be collected free of charge from schools in Hertfordshire; so long as there were 10 or more items offered for collection.

Over the 6 years that collections have taken place 40,822 items have been collected totalling 321.15 tonnes which is the same weight as just over 26 route master buses! In September 2016 alone, 115 schools booked collections, with a total of 4090 electrical items collected weighing in at 28.42 tonnes: a 14.43% increase on the amount collected when the event was last run in March 2015.

This suggests schools are becoming more familiar with the items accepted through these collections and wish to take advantage of something that could otherwise result in significant waste disposal costs being incurred. At the time of writing a change in funding criteria outside the control of the HWP has resulted in the scheme being put on hold whilst the Partnership explores alternative ways to deliver the initiative.

4.3 HWP Social Media

Recognising the increasing growth of social media 2016/17 saw more emphasis placed on utilising and experimenting with HWP social media platforms. Followers and 'likes' of both our Facebook page and Twitter account continued to grow throughout the year as a result of boosting posts, competitions, piggy backing off national campaigns and establishing improved links with community groups a nd borough and district councils.

The table overleaf summarises activity of the HWP's Facebook and Twitter feeds during 2016/17 with the 'reach' of both platforms being particularly important. The HWP's use of social media is becoming increasingly more sophisticated as it adapts to target specific audiences and locations through boosted posted as well as techniques such as 'web seeding'.

Table 6: HWP Social Media – Reach & Engagement

| | | Facebook | | | Twitter | |
|-----------|--------|----------|----------------------------|---------|---------|------------------------------|
| | Reach | Engaged | End of Month 'Likes' | Reach | Engaged | End of Month 'Follows' |
| April | 8,725 | 258 | 253 (+33) | 13,900 | 300 | 1480 (+11) |
| May | 1,407 | 91 | 272 (19) | 8,943 | 309 | 1487 (+7) |
| June | 986 | 57 | 273 (+1) | 8,625 | 322 | 1507 (+20) |
| July | 1,119 | 96 | 276 (+3) | 4,189 | 153 | 1512 (+5) |
| August | 1,148 | 85 | 281 (+5) | 4,534 | 174 | 1516 (+4) |
| September | 768 | 46 | 282 (1) | 2,427 | 161 | 1527 (+11) |
| October | 1,269 | 99 | 293 (+11) | 4,578 | 342 | 1532 (+5) |
| November | 1,615 | 138 | 296 (+3) | 25,400 | 613 | 1551 (+19) |
| December | 14,125 | 588 | 388 (+92) | 33,100 | 815 | 1562 (+11) |
| January | 3,837 | 167 | 391 (+3) | 9,573 | 427 | 1577 (+15) |
| Frebruary | 7,369 | 347 | 409 (+18) | 6,386 | 9 | 1586 (+9) |
| March | 12,746 | 422 | 424 (+15) | 17,600 | 360 | 1588 (+2) |
| TOTAL | 55,114 | 2,394 | 424 (+204) | 139,255 | 3,985 | 1588 (119) |

Whilst the results show increases in the reach across both Facebook and Twitter compared to the previous year, at 37% and 27% respectively, Facebook has been the more successful with a 58% increase in 'likes' of the page.

Even though the HWP has more followers on Twitter it is worth noting, that as the 'average life' of a 'Tweet' is 20 minutes, this platform is more appropriate for short sharp messages designed for the 'here and now' such as providing important information such as changes to collection services during inclement weather to disruption at the Household Waste Recycling Centres. Facebook is used for longer lasting messages and therefore is more appropriate for engagement and delivery of campaigns

The Facebooks reach, engagement and 'likes' increases seen in April, December,



Social media is a vital part of the HWP's communications toolkit.

February and March are as a result of using paid boosting and links to national weeks / themes. Likewise, competitions / giveaways are a notable success for 2016/17 providing a vehicle for followers to engage with our messages and take action - total reach for all three competitions run for Christmas, Valentines Day and National Book Week was 19,111 gaining a total of 75 new likes on the page, equating to 36% of the total of new page likes for the year. Levels of engagement (measured by, likes, post clicks,

shares and comments) rose by 30% on Facebook since last year demonstrating that our followers are increasingly responding and reacting to our messages. Increased engagement leads to wider reach and greater impact. Competitions / giveaways are also a useful tool for obtaining new content ideas and using entries / suggestions for posts as shown below.

Social media has become a crucial aspect of any campaign, especially as it is cheaper and provides better value for money than other more traditional methods. It is an invaluable tool in targeting campaigns at specific audiences which are trackable. It also invites engagement in a more informal way which reflects a channel shift in how our residents. access information, contact us and give feedback. Whilst this is a positive development it brings with it added pressures on resources, and at times, is a challenge in managing resident's expectations.

The fact that there are around 36 million Facebook users and over 14 million Twitter users in the UK means that social media must continue to be integrated into all future campaigns. The HWP will continue to expand and innovate in its use of social media during 2017/18 by providing engaging content.



The HWP supporting the Great British Spring Clean

4.4 Real Nappies

The real nappy starter kit launched in 2015 continues to be popular for new and expectant parents with 2016/17 seeing a 30% rise in applications. Across the same period claims for the real nappy reward have reduced by 40%.

This highlights the relative ease of applying for a kit with promotional materials that are geared towards the starter kit encouraging prospective parents to 'try before you buy'. The real nappy claim on the other hand is designed as a thank you for those who have already bought real nappies.

| Table 8 | Real nappy reward claims | Starter Kit | Total |
|---------|--------------------------------|-------------|-------|
| 2011/12 | 208 | n/a | 208 |
| 2012/13 | 199 | n/a | 199 |
| 2013/14 | 198 | n/a | 198 |
| 2014/15 | 201 | n/a | 201 |
| 2015/16 | 131 | 229 | 360 |
| 2016/17 | 78 | 310 | 388 |

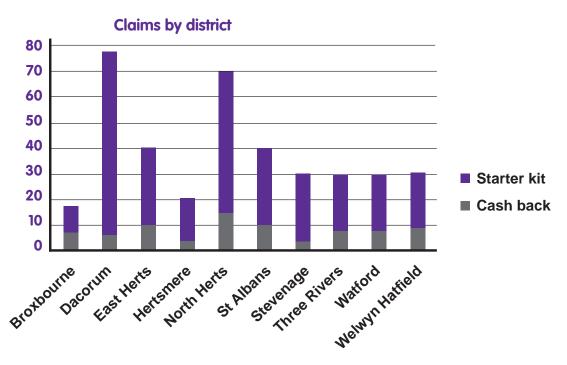
Applications vary from district to district, with applications largely dependent on how pro-active local promotion is. The highest number of applications were received from

Dacorum and North Herts with 77 and 70 applications respectively. North Herts has an active nappy library and Dacorum is proactive in promotion of the scheme with appropriate target groups such as pregnancy yoga classes.

Although the number of applicants for the starter kit has increased, it was recognised during 2016/17, that a survey would be useful for feedback and evaluation of the scheme as well as help to inform future communications.

Significantly the results from the survey revealed that over half of respondents had been considering using real nappies with the starter kit ultimately convincing them to try. This is a significant number of families, who without the starter kit, may have ended up using disposables.

In addition twice as many considered real nappies during pregnancy, than those who considered it after the baby was born. Many said they were using real nappies in conjunction with disposables and some said they had given up as they were struggling with washing. The survey was a useful exercise with the results being used during 2017/18 to:



- Target promotions to pregnancy groups and classes to promote real nappies before birth.
- Use Facebook to target demographics with eco interests that fit with the use of real nappies such as breast feeding, Doula's, pregnancy yoga, baby slings, baby massage, and those involved in National Childbirth Trust activities.
- Promote the message that using real nappies does not have to be an all or

- nothing choice; instead using disposables when out and about for convenience and real nappies at home but also emphasising each time you chose real nappies its saves waste from landfill.
- Improve sign posting to those who need advice.
- Carry out a review of the scheme including research into other options such as offering vouchers.

4.5 School Education Visits

As part of the County Council's Household Waste Recycling Centre contract, the service provider Amey PLC provides an education officer tasked with visiting schools across Hertfordshire to discuss issues related to recycling and the wider environment.

During 2016/17 37 such visits took place delivering whole school assemblies and class workshops on waste education. Children are taught about the value of resources and how they can do their bit by carrying out the 3 R's - reducing, reusing and recycling. The workshops are hands on and interactive and children are encouraged to carry on their recycling expertise into the home, as well as recycling what they can at school.

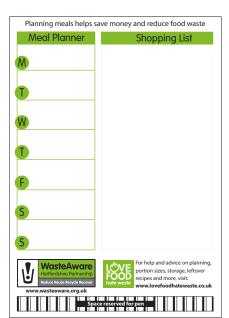


A primary school visit by Amey's education officer

4.6 WasteAware at the Herts County Show

Topical as ever, 2016/17 saw food waste gaining coverage nationally with companies such as Tesco and Sainsbury's and TV celebrities such as Hugh Fearnley-Whittingstall helping to increase the profile and impact of food waste reduction messages.

Utilising this momentum, Love Food Hate Waste (LFHW) messages formed the theme and backdrop for the WasteAware stand at the 2016/17 county show stall providing interaction with the public through a bean bag throwing game, survey and LFHW giveaways including rice scoops, spaghetti measurers and a magnetic shopping list



The HWPs combined meal planner and shopping list is magnetised for sticking on your fridge



2016/17's Every Tea Bag counts campaign. Small changes make a big difference

and meal planner. The giveaways were particularly popular and designed to help residents actively engage with these messages and make changes in their routines at home.

Whilst food waste prevention messages remain a priority, statistics published by WRAP during 2016/17 highlighted that 7.3 million tonnes of food from households was still being thrown away with only 0.5 million tonnes recycled. This, coupled with the statistics taken from a Hertfordshire wide compositional analysis carried out in May 2015, that showed over 30% of the contents of residual bins being food waste, made it clear that food waste recycling had

to be tackled. Launched with an advert in the November edition of Horizons the campaign focussed on an 'Every Tea Bag' counts message recognising that even small amounts of food waste can make a difference, this was supported by posts on social media and a campaign page on the WasteAware website.

Although engagement with these messages achieved good results the group started to consider a broader scope to the campaign to cover a range of messages and assets that could be used locally to promote food waste recycling – more about this in next year's review!

5. Fly Tipping in Hertfordshire

5.1. The Hertfordshire Fly Tipping Group

By early 2016 the issue of fly tipping had been firmly re-established as a key priority for both national and local government. As a consequence the HWP Member Board, which consists of the Cabinet Members with responsibility for waste management services and the wider environment in each of the Partner Authorities, agreed that the HWP should assume responsibility for the Hertfordshire Fly Tipping Group (FTG).

The aim of the FTG, which meets quarterly, is to reduce and prevent fly tipping across Hertfordshire by bringing all relevant agencies together. It seeks to adopt an approach which is both strategic whilst also supporting frontline enforcement action against fly tippers

The Group's objectives are:

- To provide a policy forum for development and review of fly tipping issues.
- To ensure there are clear reporting processes between local authorities, housing authorities, the Police and the Hertfordshire Fire and Rescue Service.
- To encourage private land owners to report fly tipping to their local authority.
- To encourage timely, accurate and appropriate information sharing between partners tackling fly tipping.

- To ensure good communication between agencies to progress investigations in a timely manner.
- To co-ordinate opportunities to capture and analyse data to inform problem profiling and strategic needs assessments.
- To initiate and support opportunities for joint agency operations.
- Sharing and co-ordinating crime prevention opportunities.
- Assisting in sharing good practice and national updates.
- To develop and maintain a media plan for the FTG to raise awareness of the problem, to promote the initiatives and successful prosecutions, to reassure the public that the crime of fly-tipping is being addressed and to act as a deterrent to perpetrators.

The Group is facilitated and chaired by the HWP's Partnership Development Manager and includes Hertfordshire's borough and district councils, the county council, the Hertfordshire Constabulary, the Office of the Police & Crime Commissioner, Hertfordshire Fire & Rescue, the Environment Agency, the National Farmers Union and M25 Connect. The group is also regularly supported by Keep Britain Tidy.

5.2 Fly Tipping in numbers

During 2015/16 there were 14,710 reported instances of fly tipping in Hertfordshire. By the end of 2016/17 this number had grown to 15,216 However, whilst portrayals in the media give the impression that fly tipping is as a result of deliberate actions by rogue traders, which do of course take place; approximately two thirds of the fly tipping across the County is actually domestic in nature and stems from actions taken by

individuals who mostly do not consider what they are doing to be fly tipping.

Table 9 below shows reported fly tipping numbers in Hertfordshire from the last 3 years broken down into nationally set reporting categories which have been analysed in percentage terms to reflect their contribution to each year's total:

Table 9 - Fly Tipping

| | 2014/15 | 2015/16 | 2016/17 |
|---------------------------|---------|---------|---------|
| Animal Carcass | 0.32% | 0.12% | 0.04% |
| Green | 3.70% | 2.85% | 2.58% |
| Vehicle Parts | 0.81% | 0.97% | 0.85% |
| White goods | 4.59% | 6.35% | 6.72% |
| Other electrical | 1.73% | 2.13% | 2.07% |
| Tyres | 3.04% | 1.29% | 1.19% |
| Asbestos | 0.93% | 0.54% | 0.41% |
| Clinical | 0.14% | 0.05% | 0.04% |
| Constr / Demo / Exc | 10.50% | 9.68% | 8.91% |
| Black bags – commercial | 0.75% | 0.45% | 1.14% |
| Black bags – household | 17.15% | 18.80% | 17.30% |
| Chemical drums, oil, fuel | 0.49% | 0.41% | 0.51% |
| Other household waste | 45.13% | 49.55% | 50.81% |
| Other commercial waste | 3.04% | 2.81% | 2.16% |
| Other (unidentified) | 7.67% | 4.02% | 5.26% |
| Total percentage | 100.0% | 100.0% | 100.0% |
| Total number of incidents | 12,481 | 14,716 | 15,216 |
| Total domestic | 62.29% | 68.35% | 68.11% |

Taking the numbers noted above and the fact that 60% – 70% of the annual totals are shown to be domestic in nature indicates that the majority of fly tipping takes place when domestic waste 'leaks' from established waste management systems including domestic refuse collections, bulky household waste collections or Household Waste Recycling Centres.

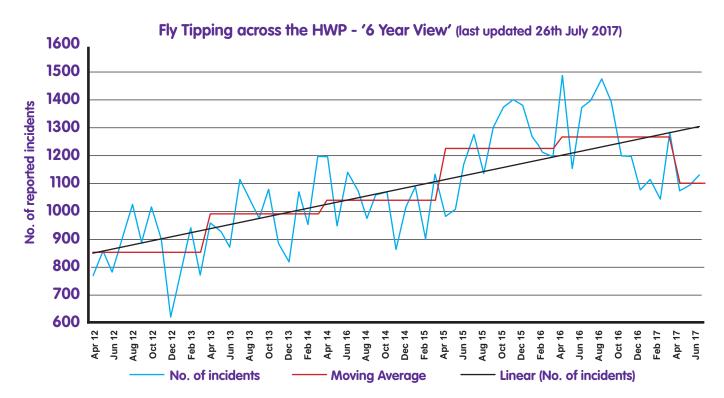
In response to this towards the end of 2016/17 the HWP's Partner Authorities in association with Keep Britain Tidy initiated a research project to examine why fly tipping takes place by looking at people's 'waste behaviours' and contributing factors that explain the numbers being recorded. Once finalised the research should then lead to a second project that will concentrate on identifying appropriate interventions to prevent such behaviours taking place in the first place.

5.3. The Historic Trend

In common with the rest of the UK, borough and district councils in Hertfordshire have a duty to deal with fly tipping. This includes the submission of monthly reports to the Government's Wastedataflow database. These reports break down fly tipping numbers into type and size.

However, no such reporting requirements exist for fly tipping on private land. Such incidents can be included in the borough and district submissions, but only if private landowners are able to provide the relevant information. Therefore the most accurate record we have of fly tipping in Hertfordshire

are the numbers submitted by the boroughs and districts. Based on these the historic picture in Hertfordshire is shown below:



The graph shows recorded fly tipping incidents from April 2012 to June 2017. Whilst the long term linear trend reflects an increase in numbers there has been an encouraging start to 2017/18 with fly tipping reports significantly below the numbers recorded in 2016. In fact in the 9 months from October 2016 to June 2017 fly tipping reduced in all but 1 month. Further analysis will be included in next year's annual report.

5.4. Working with Hertfordshire's Police & Crime Commissioner

Since the introduction of the National Crime Recording guidelines the Constabulary has seen an increase in the number of crimes recorded for fly tip offences, particularly in some areas. The Police and Crime Commissioner's Police and Crime Plan highlights fly tipping as one of the '... challenges that blight rural communities...' and at least one local policing team has fly tipping as a local priority.

However, even though the FTG is now part of the wider Hertfordshire Waste Partnership it has no dedicated revenue funding or full time staff to facilitate the work of the group. Instead the work of the group is carried out by individuals from a range of organisations who recognise the value of working together to address a county wide problem.

This Partnership approach has been recognised by Hertfordshire's Police & Crime Commissioner (PCC) as a potential delivery mechanism for channelling new investment to tackle fly tipping. This has meant support for initiatives that otherwise had no alternative means of funding.

Following discussions in early 2016 working with the PCC's office as well as the Hertfordshire Constabulary a total of £82,261 of funding was provided to the FTG which then attracted £33,000 of match funding from the boroughs and districts. The money was channelled into a series of projects designed to enhancing the County's overall approach to fly tipping as shown in Table 10 below:

| Table 10: PCC funded fly tipping projects in 2016/17 | Project Total | Description | |
|--|---------------|--|--|
| Broxbourne | £40,000 | CCTV Cameras at NRC hotspots | |
| East Herts (1) | £20,440 | Crime Not To Care campaign | |
| East Herts (2) | £3,995 | CCTV cameras | |
| Hertsmere & St Albans | £1,000 | Low light ANPR CCTV Camera | |
| North Herts | £28,837 | Enforcement Academy | |
| Three Rivers (1) | £1,847 | Awareness Campaign | |
| Three Rivers (2) | £14,066 | Enforcement capability – hand held devices | |
| Welwyn Hatfield | £5256 | Hard landscaping to prevent fly tipping | |
| Sub total | £115,441 | | |

(source: Hertfordshire Fly Tipping Group)

The projects noted above range from the purchase of new equipment; to the funding of new local awareness / behavioural change programs; through to a bespoke training for environmental enforcement officers to improve the quality of enforcement action. Further funding from the PCC's office has been secured during 2017/18 and will be reported on next year.



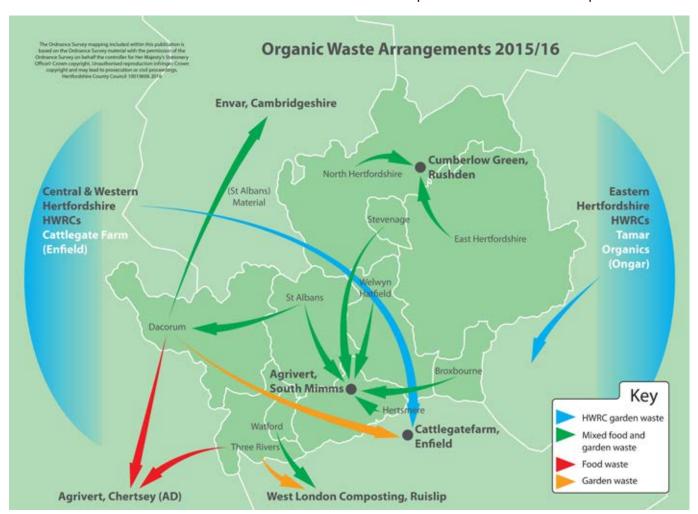
6. End Destinations – where does our waste go?

6.1 Summary

Whilst the HWP continues to utilise both national and international markets for its dry recyclables 2016/17 was about consolidation of the Partnership's organic and residual waste streams. This allowed the HWP to increase the use of energy recovery facilities for non-recycled residual wastes as well as stream line organic waste flows to make sure more material was composted closer to Hertfordshire therefore reducing transportation costs and associated environmental impacts.

6.2 Organic Waste

Building on developments started last year 2016/17 saw separate food wastes from Dacorum and Three Rivers, which originally were going to an anaerobic digestion facility (AD) in Chertsey, redirected to the 'in-County AD' at Coursers Farm near St Albans. This latest addition to the range of facilities used by the HWP began operations in late 2016 with additional tonnages from new separate food wastes collections in St Albans and Broxbourne. As such the Coursers Farm plant represents an important strategic development for the Partnership.



Consolidation and new 'routes' for separate food waste were key themes in 2016/17.

In addition to these changes, via a sub letting arrangement, garden wastes from Dacorum and St Albans, which had previously been sent to Envar near Huntingdon in Cambridgeshire, were redirected to the Cattlegate Farm composting site in Enfield. Whilst this is still outside the County

boundary it is much closer to where the organic waste arises. In turn, together with a number of forth coming contractual changes, this sets the Partnership up for further consolidation of the organic waste stream going forward.

6.3 Residual Waste

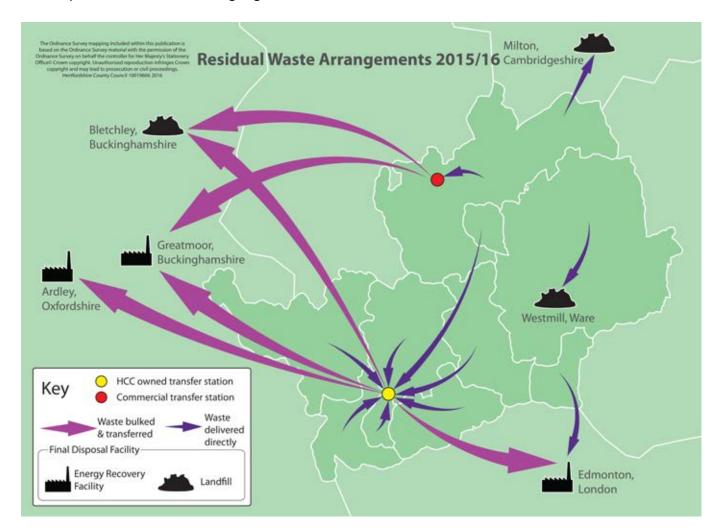
2016/17 was a continuation of the previous 12 months with the Partnership increasing the amount of non-recycled residual waste diverted from landfill into one of a number of existing energy from waste facilities used by the Partnership.

These changes in combination with the HWP's recycling and composting programmes resulted in overall diversion rising to 88.5%. This level of performance exceeds not only existing national and European targets for landfill reduction but also puts the Partnership in a good position to achieve new targets currently being considered as part of the EU's Circular Economy Directive, the targets from which may still apply to the UK as part of any Brexit deal. Whilst the HWP achieved its highest ever diversion from landfill during 2016/17 the map shown above also highlights the

Partnership's reliance on the use of 'out-of-county' solutions.

However, the contracts for each of the energy from waste facilities shown above are due to come to an end in the next few years and it is by no means certain that similar levels of capacity will be available in the future.

This underlines the need for Hertfordshire to develop its own long term energy recovery solution to not only address the current need but also with one eye on dealing with the substantial levels of residual waste already existing with respect to Hertfordshire's commercial and industrial sector as well as the thousands of new households due to be built across the county in years to come.



The majority of the HWP's residual waste is processed at plants outside the County

6.4 Recycling

Last year's annual report noted that the HWP's dry recyclables are sent to reprocessing plants both here in the UK and abroad to international destinations including Europe and the Far East. The situation in 2016/17 is much the same with HWP materials continuing to be traded both on national and international markets.

Of key concern going forward will the impact of Brexit as well as related issues such as relative strength of the pound to other major currencies that underpin the international trade in both virgin commodities and secondary raw materials.

At the same time the HWP is also mindful that a number of the major developing nations are reaching the stage where they are starting to source more secondary materials from domestic markets as they develop their own national recycling programmes. The logical progression of this trend will likely see a reduction in demand for secondary materials from international sources such as the UK.

As a result we can expect more turbulence in the market place as international trade adjusts to the new reality. However, at the same time such developments may lead to longer term opportunities to 'repatriate' the processing of dry recyclables in support of UK manufacturing; especially if supported by appropriate macro- economic policies from central government with a view to supporting a large scale move towards the circular economy.



7. So far in 2017/18...

In common with previous years change is a constant theme with a number of important issues and projects being addressed so far in 2017/18...



At the start of the 2017/18 the HWP initiated reviews of the Alternative Financial Model and Transport Subsidy payments. Both are important funding mechanisms which support borough and district waste and recycling operations. Both reviews are due to conclude by March 2018 and may have significant implications.



In August 2017 Keep Britain Tidy published their final report from a research project that looked at why people in Hertfordshire fly tip. The findings from the report show that a significant proportion of the incidents logged each month could be avoided if residents had a better understanding of their responsibilities under the Duty of Care. The findings are now being used to design interventions to tackle this major source of flying tipping



2017/18 saw the culmination of 2 years of work with East Herts and North Herts 'going to out to tender' for Hertfordshire's first joint waste, recycling and street cleansing contract. The joint service, which is due to commence in May 2018, is set to generate significant savings for the tax payer.



2017/18 will also hopefully see significant developments in the plan for long term waste disposal needs to deal with non-recycled residual wastes. Veolia's planning application for an energy from waste facility at Rye House in Broxbourne is due to be considered by the County Council's Development Committee towards the end of 2017. If planning permission is granted the new facility could be operational by 2021.



In early 2017/18 and in common with a growing number of local authorities across the Country two more Hertfordshire Authorities, Broxbourne and Welwyn Hatfield implemented charges for the collection of garden waste. Broxbourne also implemented a new weekly service for food waste. This means that 3 of Hertfordshire's Partner Authorities have now implemented charges for garden waste. A number of authorities also now charge for the provision of second garden waste bins.

8. How to contact us

If you have any questions about this report or any other matter relating to the Hertfordshire Waste Partnership please contact us via:-

Tel 01992 556150

Email duncan.jones@hertfordshire.gov.uk

Web www.wasteaware.org.uk

Facebook www.faceboook.com/WasteAwarePartnership

Youtube www.youtube.com/HertsWasteAware

Twitter @HertsWasteAware

Alternatively you can write to:

Mr Duncan Jones – Partnership Development Manager Hertfordshire Waste Partnership c/o Waste Management Unit Ground Floor – North East Block County Hall Pegs Lane Hertford, SG13 8DN

9. Co-Authors

The 2016/17 Annual Report co-authors include:

- Mr Duncan Jones Partnership Development Manager, HWP
- Ms Ruth Young Contract Monitoring Officer / WasteAware Co-ordinator, Watford & HWP
- Ms Jennie Probert Environmental Strategy Manager, Three Rivers District Council
- Mr Joe Tavernier Waste, Street Scene & Markets Manager, St Albans District Council
- Mr Kevin Basford Interim Environmental Services Manager, Stevenage Borough Council
- Ms Clare Haworth Waste Management Project Officer, Hertfordshire County Council
- Mr Mark Simpkins Contract Delivery Manager, Hertfordshire County Council
- Mr James Holt Waste Manager Contract Development, Hertfordshire County Council

10. Glossary

Action Plan(s) refers to the action plan published as part of the 2007 Joint

Municipal Waste Management Strategy for Hertfordshire;

Anaerobic Digestion is a collection of processes by which microorganisms break

down biodegradable material in the absence of oxygen.

The process is used for industrial or domestic purposes to

manage waste and/or to produce fuels.

Composting means a biological process in which biodegradable wastes,

such as garden and food wastes, are decomposed in the presence of air to produce compost or soil conditioner;

Disposal means any waste management operation serving or carrying

out the final treatment and disposal of waste;

EPA means the Environmental Protection Act 1990:

Food Waste biodegradable waste derived from food materials typically

consisting of cooked and uncooked fruit and vegetables, meat and fish scraps, excess or spoiled prepared food, and other

discards from domestic kitchens;

Green Waste biodegradable waste such as green catering waste (i.e. raw

fruit and vegetables), vegetation and plant matter (includes trimmings, leaves, shrubs, plants, grass, and trees etc.) from household gardens, local authority parks and gardens, and

commercial landscaping;

Household Waste as defined in the Controlled Waste Regulations 1992 and

includes wastes from household collection rounds, street cleansing, bulky household waste collections, household

hazardous waste and clinical waste;

Hertfordshire Waste
Partnership Agreement/

HWPA

means the agreement signed by the county Council and the

10 boroughs and districts in January 2012.

HWP means the Hertfordshire Waste Partnership which includes

Hertfordshire County Council as the waste disposal authority and the 10 district and borough waste collection authorities;

HWRCs Household Waste Recycling Centres;

HWRS Household Waste Recycling Service;

In Vessel Composting

generally describes a group of methods that which confine the composting materials within a building, container, or vessel. In-vessel composting systems can consist of metal or plastic tanks or concrete bunkers in which air flow and temperature can be controlled, using the principles of a "bioreactor". Generally the air circulation is metered in via buried tubes that allow fresh air to be injected under pressure, with the exhaust being extracted through a biofilter, with temperature and moisture conditions monitored using probes in the mass to allow maintenance of optimum aerobic decomposition conditions.

Joint Municipal Waste Management Strategy/ JMWMS

means the Joint Municipal Waste Management Strategy for Hertfordshire agreed by the Partners in 2007;

Landfill

a landfill (also known as a tip, dump, rubbish dump or dumping ground) is a site for the disposal of waste materials by burial and is the oldest form of waste treatment;

Local Government Association

the LGA works with councils to support, promote and improve local government. It is a politically-led, cross-party organisation that works on behalf of councils to ensure local government has a strong, credible voice with national government;

Materials Recycling Facility

a materials recycling facility is a specialized plant that receives, separates and prepares recyclable materials for marketing to end-users:

Member (Councillor)

an elected Member from one of the HWP's partner authorities;

Open Windrow Composting

is the production of compost by piling organic matter or biodegradable waste, such as animal manure and crop residues, in long rows (windrows). This method is suited to producing large volumes of compost. These rows are generally turned to improve porosity and oxygen content, mix in or remove moisture, and redistribute cooler and hotter portions of the pile. Windrow composting is a commonly used farm scale composting method.

Organic Waste

Food waste and / or green waste collected by the WCAs pursuant to section 45 of the EPA;

Partner(s) or Party

means a party or partners to the Hertfordshire Waste Partnership Agreement;

Peer Review

a process to evaluate the work of an organisation or individual conducted by one or more people of relevant competence.

Recovery means (i) the recovery of waste by means of recycling or,

> re-use or any other process with a view to extracting secondary raw materials; or (ii) the use of waste as a source of energy;

means the collection and separation of selected materials and Recycling

subsequent processing to produce marketable products;

Reduce means the reduction of waste at source, by understanding and

changing processes to reduce and prevent waste;

Residual Waste waste other than that collected for re-use, composting or

recycling;

Re-Use the use of waste items for their original or for another purpose

without reprocessing;

Revised Waste

means EU Directive 2008/98/EC which sets a framework **Framework Directive** for waste management in the EU, promoting both reuse and recycling, including energy recovery as a recovery activity

within the revised waste hierarchy;

Waste Collection Authority or WCA

means a waste collection authority pursuant to section 30(3)(a)

of the EPA:

means the online "WasteDataFlow" scheme established by WasteDataFlow

> the Department for Environment Food & Rural Affairs for the collation of the information returns (www.wastedataflow.org);

Waste Disposal Authority or WDA means a waste disposal authority pursuant to section 30(2)(a)

of the EPA;

Waste Resources Action

Programme or WRAP

WRAP is a registered charity. It works with businesses, individuals and communities to achieve a circular economy through helping them reduce waste, develop sustainable

products and use resources in an efficient way.